

# STATE OF NEBRASKA CONTRACT AWARD

State Purchasing Bureau  
1526 K Street, Suite 130  
Lincoln, Nebraska 68508

Telephone: (402) 471-6500  
Fax: (402) 471-2089

**CONTRACT NUMBER**  
**14703 OC**

PAGE 1 of 2	ORDER DATE 12/27/19
BUSINESS UNIT 9000	BUYER CHRISTIE KELLY (AS)
VENDOR NUMBER: 504832	
VENDOR ADDRESS:  MURPHY TRACTOR & EQUIPMENT CO 6100 ARBOR RD LINCOLN NE 68517-3211	

AN AWARD HAS BEEN MADE TO THE CONTRACTOR NAMED ABOVE FOR THE FURNISHING OF MATERIALS AND/OR SERVICES AS LISTED BELOW FOR THE PERIOD:

**FEBRUARY 01, 2020 THROUGH JANUARY 31, 2021**

NO ACTION ON THE PART OF THE CONTRACTOR NEEDS TO BE TAKEN AT THIS TIME. ORDERS FOR THE MATERIALS AND/OR SERVICES WILL BE MADE AS NEEDED BY THE VARIOUS AGENCIES OF THE STATE.

THIS CONTRACT IS NOT AN EXCLUSIVE CONTRACT TO FURNISH THE MATERIALS AND/OR SERVICES SHOWN BELOW, AND DOES NOT PRECLUDE THE PURCHASE OF SIMILAR MATERIALS AND/OR SERVICES FROM OTHER SOURCES.

THE STATE RESERVES THE RIGHT TO EXTEND THE PERIOD OF THIS CONTRACT BEYOND THE TERMINATION DATE WHEN MUTUALLY AGREEABLE TO THE CONTRACTOR AND THE STATE OF NEBRASKA.

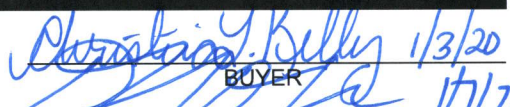

Original/Bid Document 5465 OF

Contract to supply and deliver Articulated All Wheel Drive Loader with Minimum 2.2 Cubic Yard Bucket to the State of Nebraska as per the attached specifications for the contract period February 1, 2020 through January 31, 2021. The contract may be renewed for one (1) additional one (1) year period when mutually agreeable to the vendor and the State of Nebraska.

Vendor Contact: Greg Kozisek  
Phone: 402-467-1300  
Fax: 402-467-1927  
E-Mail: gkozisek@murphytractor.com

This is the third renewal of the contract as amended. (mel 12/27/19)

Line	Description	Estimated Quantity	Unit of Measure	Unit Price
1	ARTICULATED ALL WHEEL DRIVE LOADER W/MIN 2.2 CY BUCKET  MAKE: JOHN DEERE MODEL: 524L  OPTIONS:	15.0000	EA	127,345.0000
2	DEDUCT FOR NO LOAD RIDE CONTROL OR BOOM SUSPENSION SYSTEM	10.0000	EA	-2,610.0000
3	QUICK HITCH WITH SPECIFIED BUCKET PRICE INCLUDES FORKLIFT ASSEMBLY  MAKE: JOHN DEERE MODEL: 2 BAR HYD COUPLER	15.0000	EA	6,417.0000

1-7-20  
  
 BUYER  
  
 MATERIEL ADMINISTRATOR

# STATE OF NEBRASKA CONTRACT AWARD

State Purchasing Bureau  
1526 K Street, Suite 130  
Lincoln, Nebraska 68508

Telephone: (402) 471-6500  
Fax: (402) 471-2089

**CONTRACT NUMBER**  
**14703 OC**

PAGE 2 of 2	ORDER DATE 12/27/19
BUSINESS UNIT 9000	BUYER CHRISTIE KELLY (AS)
VENDOR NUMBER: 504832	

Line	Description	Estimated Quantity	Unit of Measure	Unit Price
4	MULTI-PURPOSE BUCKET MAKE: TAG MODEL: P/Q 275 MP	10.0000	EA	13,656.0000
5	GRAPPLE FOR ATTACHMENT MAKE: GRAB TEC MODEL: GA905	16.0000	EA	7,567.0000
6	THIRD VALVE WITH LINES TO FRONT OF LOADER BOOM FOR ATTACHMENTS MAKE: JOHN DEERE MODEL: 3 FUNCTION JOY STICK	15.0000	EA	2,132.0000
7	AM/FM RADIO MAKE: JOHN DEERE MODEL: AM/FM/WB	15.0000	EA	419.1000
8	DEDUCT FOR EXTENDED WARRANTY AFTER THE BASIC 1 YEAR WARRANTY	10.0000	EA	-1,745.0000
9	DEDUCT FOR TRANSPORTATION COST CHARGES FOR THE EXTENDED WARRANTY	15.0000	EA	-1,125.0000
10	LOUP ELECTRONICS LOADLOG 8000T WHEEL LOADER SCALE SYSTEM MAKE: LOUP MODEL: LOAD LOG 8000T	10.0000	EA	7,249.0000
11	IN-CAB PRINTER FOR LOADLOG 8000I WHEEL LOADER SCALE SYSTEM MAKE: LOUP MODEL: ICP 300	10.0000	EA	811.0000

  
BUYER INITIALS

# NEBRASKA

Good Life. Great Service.

DEPT. OF ADMINISTRATIVE SERVICES

## CONTRACT RENEWAL

August 13, 2019

Mr. Greg Kozisek  
Murphy Tractor & Equipment Co  
6100 Arbor Rd  
Lincoln, NE 68517-3211

RE: Contract Number 14703 OC, Articulated All Wheel Drive Loader with Minimum 2.2 Cubic Yard Bucket

Dear Mr. Kozisek:


The above named contract for providing Articulated All Wheel Drive Loader with Minimum 2.2 Cubic Yard Bucket to the State of Nebraska, expires January 31, 2020.

It carries a provision for renewal when mutually agreeable to the Vendor and the State of Nebraska. The State of Nebraska wishes to renew this contract for an additional (1) year period, i.e. February 1, 2020 through January 31, 2021.

If this is agreeable with Murphy Tractor & Equipment Co. please sign and return as soon as possible, keeping one (1) copy for your files.

If no response is received within thirty (30) calendar days, the State of Nebraska will assume that Murphy Tractor & Equipment Co. does not intend to renew contract number 14706 OC and thus may begin the formal solicitation process to obtain Articulated All Wheel Drive Loader with Minimum 2.2 Cubic Yard Bucket.

Sincerely,

  
Rene Botts, Buyer State  
Purchasing Bureau

Murphy Tractor & Equipment Co. is agreeable to the renewal of 14703 OC for Articulated All Wheel Drive Loader with Minimum 2.2 Cubic Yard Bucket February 1, 2020 through January 31, 2021.

SIGNATURE: \_\_\_\_\_

TITLE: \_\_\_\_\_

DATE: \_\_\_\_\_

*Jay Reynel*

*Branch Manager*

*9-13-19*

*Price increase will be requested  
When determined by the  
manufacturer.*

Department of Administrative Services | MATERIEL DIVISION

1526 K Street, Ste. 130  
Lincoln, Nebraska 68508

OFFICE 402-471-6500  
FAX 402-471-2089

das.nebraska.org



# STATE OF NEBRASKA CONTRACT AMENDMENT

State Purchasing Bureau  
1526 K Street, Suite 130  
Lincoln, Nebraska 68508

Telephone: (402) 471-6500  
Fax: (402) 471-2089

**CONTRACT NUMBER**  
**14703 OC**

PAGE 1 of 2	ORDER DATE 03/14/19
BUSINESS UNIT 9000	BUYER RENE BOTTS (AS)
VENDOR NUMBER: 504832	
VENDOR ADDRESS:  MURPHY TRACTOR & EQUIPMENT CO 6100 ARBOR RD LINCOLN NE 68517-3211	

THE CONTRACT PERIOD IS:

**FEBRUARY 01, 2019 THROUGH JANUARY 31, 2020**

THIS CONTRACT HAS BEEN AMENDED PER THE FOLLOWING INFORMATION:

NO ACTION ON THE PART OF THE CONTRACTOR NEEDS TO BE TAKEN AT THIS TIME. ORDERS FOR THE MATERIALS AND/OR SERVICES WILL BE MADE AS NEEDED BY THE VARIOUS AGENCIES OF THE STATE.

THIS CONTRACT IS NOT AN EXCLUSIVE CONTRACT TO FURNISH THE MATERIALS AND/OR SERVICES SHOWN BELOW, AND DOES NOT PRECLUDE THE PURCHASE OF SIMILAR MATERIALS AND/OR SERVICES FROM OTHER SOURCES.

THE STATE RESERVES THE RIGHT TO EXTEND THE PERIOD OF THIS CONTRACT BEYOND THE TERMINATION DATE WHEN MUTUALLY AGREEABLE TO THE CONTRACTOR AND THE STATE OF NEBRASKA.

Original/Bid Document 5465 OF

Contract to supply and deliver Articulated All Wheel Drive Loader with Minimum 2.2 Cubic Yard Bucket to the State of Nebraska as per the attached specifications for the contract period February 1, 2019 through January 31, 2020. The contract may be renewed for two (2) additional one (1) year periods when mutually agreeable to the vendor and the State of Nebraska.

Vendor Contact: Greg Kozisek  
Phone: 402-467-1300  
Fax: 402-467-1927  
E-Mail: gkozisek@murphytractor.com

This is the second renewal of the contract as amended. (vc 12/31/18)

Amendment Two as attached. (vc 3/14/19)

Line	Description	Estimated Quantity	Unit of Measure	Unit Price
1	ARTICULATED ALL WHEEL DRIVE LOADER W/MIN 2.2 CY BUCKET  MAKE: JOHN DEERE MODEL: 524L  OPTIONS:	15.0000	EA	127,345.0000
2	DEDUCT FOR NO LOAD RIDE CONTROL OR BOOM SUSPENSION SYSTEM	10.0000	EA	-2,610.0000
3	QUICK HITCH WITH SPECIFIED BUCKET PRICE INCLUDES FORKLIFT ASSEMBLY	15.0000	EA	6,417.0000

3/15/19  
  
 BUYER  
  
 MATERIEL ADMINISTRATOR



# STATE OF NEBRASKA CONTRACT AMENDMENT

State Purchasing Bureau  
1526 K Street, Suite 130  
Lincoln, Nebraska 68508

Telephone: (402) 471-6500  
Fax: (402) 471-2089

**CONTRACT NUMBER**  
**14703 OC**

PAGE 2 of 2	ORDER DATE 03/14/19
BUSINESS UNIT 9000	BUYER RENE BOTTS (AS)
VENDOR NUMBER: 504832	

Line	Description	Estimated Quantity	Unit of Measure	Unit Price
	MAKE: JOHN DEERE MODEL: 2 BAR HYD COUPLER			
4	MULTI-PURPOSE BUCKET MAKE: TAG MODEL: P/Q 275 MP	10.0000	EA	13,656.0000
5	GRAPPLE FOR ATTACHMENT MAKE: GRAB TEC MODEL: GA905	16.0000	EA	7,567.0000
6	THIRD VALVE WITH LINES TO FRONT OF LOADER BOOM FOR ATTACHMENTS MAKE: JOHN DEERE MODEL: 3 FUNCTION JOY STICK	15.0000	EA	2,132.0000
7	AM/FM RADIO MAKE: JOHN DEERE MODEL: AM/FM/WB	15.0000	EA	419.1000
8	DEDUCT FOR EXTENDED WARRANTY AFTER THE BASIC 1 YEAR WARRANTY	10.0000	EA	-1,745.0000
9	DEDUCT FOR TRANSPORTATION COST CHARGES FOR THE EXTENDED WARRANTY	15.0000	EA	-1,125.0000
10	LOUP ELECTRONICS LOADLOG 8000T WHEEL LOADER SCALE SYSTEM MAKE: LOUP MODEL: LOAD LOG 8000T	10.0000	EA	7,249.0000
11	IN-CAB PRINTER FOR LOADLOG 8000I WHEEL LOADER SCALE SYSTEM MAKE: LOUP MODEL: ICP 300	10.0000	EA	811.0000

  
BUYER INITIALS

**AMENDMENT TWO**

14703 OC

Articulated All Wheel Drive Loader w/Min 2.2 CY Bucket- Low Acquisition for the State of Nebraska

Between

The State of Nebraska and Murphy Tractor & Equipment Co.

This Amendment (the "Amendment") is made by the State of Nebraska and Murphy Tractor & Equipment Co., parties to Contract 14703 OC (the "Contract"), and upon mutual agreement and other valuable consideration the parties agree to and hereby amend the contract as follows:

Lines 1, 3 – 7, and 10 of the contract are deleted and replaced, effective on April 1, 2019:

Line	Description	Unit of Measure	Unit Price
1	ARTICULATED ALL WHEEL DRIVE LOADER W/MIN 2.2 CY BUCKET  MAKE: JOHN DEERE MODEL: 524L	EA	\$127,345.0000
3	QUICK HITCH WITH SPECIFIED BUCKET PRICE INCLUDES FORKLIFT ASSEMBLY  MAKE: JOHN DEERE MODEL: 2 BAR HYD COUPLER	EA	\$6,417.0000
4	MULTI-PURPOSE BUCKET	EA	\$13,656.0000
5	GRAPPLE FOR ATTACHMENT MAKE: GRAB TEC MODEL: GA905	EA	\$7,567.0000
6	THIRD VALVE WITH LINES TO FRONT OF LOADER BOOM FOR ATTACHMENTS	EA	\$2,132.0000
7	AM/FM RADIO	EA	\$419.1000
10	LOUP ELECTRONICS LOADLOG 8000T WHEEL LOADER SCALE SYSTEM  MAKE: LOUP MODEL: LOAD LOG 8000T	EA	\$7,249.0000

This amendment and any attachments hereto will become part of the Contract. Except as set forth in this Amendment, the Contract is unaffected and shall continue in full force and effect in accordance with its terms. If there is conflict between this amendment and the Contract or any earlier amendment, the terms of this amendment will prevail.

IN WITNESS WHEREOF, the parties have executed this Amendment as of the date of execution by both parties below.

State of Nebraska

Contractor: Murphy Tractor & Equipment Co.

By: 

By: 

Name: Doug Carlson

Name: 

Title: AS Materiel Administrator

Title: Branch Manager

Date: 3/15/19

Date: March 12, 2019



# STATE OF NEBRASKA CONTRACT AWARD

State Purchasing Bureau  
1526 K Street, Suite 130  
Lincoln, Nebraska 68508

Telephone: (402) 471-6500  
Fax: (402) 471-2089

**CONTRACT NUMBER**  
**14703 OC**

**Low Acquisition Award**

PAGE 1 of 2	ORDER DATE 12/31/18
BUSINESS UNIT 9000	BUYER RENE BOTTS (AS)
VENDOR NUMBER: 504832	
VENDOR ADDRESS:  MURPHY TRACTOR & EQUIPMENT CO 6100 ARBOR RD LINCOLN NE 68517-3211	

AN AWARD HAS BEEN MADE TO THE CONTRACTOR NAMED ABOVE FOR THE FURNISHING OF MATERIALS AND/OR SERVICES AS LISTED BELOW FOR THE PERIOD:

**FEBRUARY 01, 2019 THROUGH JANUARY 31, 2020**

NO ACTION ON THE PART OF THE CONTRACTOR NEEDS TO BE TAKEN AT THIS TIME. ORDERS FOR THE MATERIALS AND/OR SERVICES WILL BE MADE AS NEEDED BY THE VARIOUS AGENCIES OF THE STATE.

THIS CONTRACT IS NOT AN EXCLUSIVE CONTRACT TO FURNISH THE MATERIALS AND/OR SERVICES SHOWN BELOW, AND DOES NOT PRECLUDE THE PURCHASE OF SIMILAR MATERIALS AND/OR SERVICES FROM OTHER SOURCES.

THE STATE RESERVES THE RIGHT TO EXTEND THE PERIOD OF THIS CONTRACT BEYOND THE TERMINATION DATE WHEN MUTUALLY AGREEABLE TO THE CONTRACTOR AND THE STATE OF NEBRASKA.

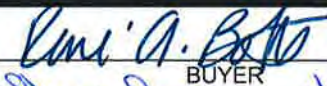
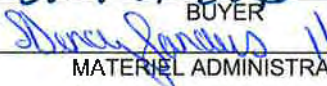
Original/Bid Document 5465 OF

Contract to supply and deliver Articulated All Wheel Drive Loader with Minimum 2.2 Cubic Yard Bucket to the State of Nebraska as per the attached specifications for the contract period February 1, 2019 through January 31, 2020. The contract may be renewed for two (2) additional one (1) year periods when mutually agreeable to the vendor and the State of Nebraska.

Vendor Contact: Greg Kozisek  
Phone: 402-467-1300  
Fax: 402-467-1927  
E-Mail: gkozisek@murphytractor.com

This is the second renewal of the contract as amended. (vc 12/31/18)

Line	Description	Estimated Quantity	Unit of Measure	Unit Price
1	ARTICULATED ALL WHEEL DRIVE LOADER W/MIN 2.2 CY BUCKET  MAKE: JOHN DEERE MODEL: 524 K II  OPTIONS:	15.0000	EA	122,444.0000
2	DEDUCT FOR NO LOAD RIDE CONTROL OR BOOM SUSPENSION SYSTEM	10.0000	EA	-2,610.0000
3	QUICK HITCH WITH SPECIFIED BUCKET PRICE INCLUDES FORKLIFT ASSEMBLY  MAKE: JOHN DEERE MODEL: 2 BAR HYD COUPLER	15.0000	EA	6,170.0000

1-3-19  
m  
  
 BUYER  
  
 MATERIAL ADMINISTRATOR  
 1/2/2019  
 1/3/19

# STATE OF NEBRASKA CONTRACT AWARD

State Purchasing Bureau  
1526 K Street, Suite 130  
Lincoln, Nebraska 68508

Telephone: (402) 471-6500  
Fax: (402) 471-2089

**CONTRACT NUMBER**  
**14703 OC**

PAGE 2 of 2	ORDER DATE 12/31/18
BUSINESS UNIT 9000	BUYER RENE BOTTS (AS)
VENDOR NUMBER: 504832	

Line	Description	Estimated Quantity	Unit of Measure	Unit Price
4	MULTI-PURPOSE BUCKET MAKE: TAG MODEL: P/Q 275 MP	10.0000	EA	12,969.0000
5	GRAPPLE FOR ATTACHMENT MAKE: GRAB TEC MODEL: GA 905	16.0000	EA	7,552.0000
6	THIRD VALVE WITH LINES TO FRONT OF LOADER BOOM FOR ATTACHMENTS MAKE: JOHN DEERE MODEL: 3 FUNCTION JOY STICK	15.0000	EA	2,050.0000
7	AM/FM RADIO MAKE: JOHN DEERE MODEL: AM/FM/WB	15.0000	EA	403.0000
8	DEDUCT FOR EXTENDED WARRANTY AFTER THE BASIC 1 YEAR WARRANTY	10.0000	EA	-1,745.0000
9	DEDUCT FOR TRANSPORTATION COST CHARGES FOR THE EXTENDED WARRANTY	15.0000	EA	-1,125.0000
10	LOUP ELECTRONICS LOADLOG 8000I WHEEL LOADER SCALE SYSTEM MAKE: LOUP MODEL: LOAD LOG 8000	10.0000	EA	7,249.0000
11	IN-CAB PRINTER FOR LOADLOG 8000I WHEEL LOADER SCALE SYSTEM MAKE: LOUP MODEL: ICP 300	10.0000	EA	811.0000

  
BUYER INITIALS



Good Life. Great Service.

**DEPT. OF ADMINISTRATIVE SERVICES**

**CONTRACT RENEWAL**

July 23, 2018

Mr. Greg Kozisek  
Murphy Tractor & Equipment Co  
6100 Arbor Rd  
Lincoln, NE 68517-3211

RE: Contract Number 14703 OC, Articulated All Wheel Drive Loader with Minimum 2.2 Cubic Yard Bucket

Dear Mr. Kozisek:

The above named contract for providing Articulated All Wheel Drive Loader with Minimum 2.2 Cubic Yard Bucket to the State of Nebraska, Nebraska Department of Transportation, expires January 31, 2019.

It carries a provision for renewal when mutually agreeable to the Vendor and the State of Nebraska. The State of Nebraska wishes to renew this contract for an additional one (1) year period, i.e. February 1, 2019 through January 31, 2020.

**IMPORTANT NOTICE:** Pursuant to Neb. Rev. Stat. § 84-602, all State contracts in effect as of January 1, 2014 will be posted to a public website beginning July 1, 2014. All information not specifically excluded by State Law **WILL BE POSTED FOR PUBLIC VIEWING.**

Contractor hereby grants permission to the State of Nebraska and/or its agencies to reprint or republish any and all copyrighted documents related to Contractor's response to this Invitation to Bid, and any and all figures, illustrations, photographs, charts, and other supplementary material on a website accessible by the public pursuant to Neb. Rev. Stat. § 84-602. This waiver does not apply to proprietary information properly submitted in a separate sealed, package clearly marked "Proprietary".

Contractor represents and warrants that the contents of this response to Invitation to Bid and all figures, illustrations, photographs, charts, and other supplementary material herein are original and do not libel anyone or infringe upon any patent, copyright, proprietary right, or any other right whatsoever of any other party. Contractor represents and warrants that Contractor has full power and authority to execute this Copyright Release and to grant the State of Nebraska and/or its agencies the right granted herein.

Contractor agrees to indemnify, defend, and hold harmless the State of Nebraska and/or its agencies against any and all claims, suits, and/or judgments, including costs, expenses, damages, and reasonable legal fees based upon and arising from Contractor's violation of the rights of others and/or by reason of a breach of any of the foregoing warranties.

If this is agreeable with Murphy Tractor and Equipment Co, please sign and return as soon as possible, keeping one (1) copy for your files.

David Zwart, Materiel Administrator

**Department of Administrative Services | MATERIEL DIVISION**

1526 K Street, Ste. 130  
Lincoln, Nebraska 68508

OFFICE 402-471-4114  
FAX 402-471-2089

[das.nebraska.org](http://das.nebraska.org)



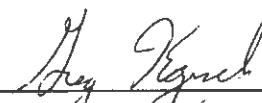
If no response is received within thirty (30) calendar days, the State of Nebraska will assume that Murphy Tractor & Equipment Co. does not intend to renew contract number 14703 OC and thus may begin the formal solicitation process to obtain Articulated All Wheel Drive Loader with Minimum 2.2 Cubic Yard Bucket.

Sincerely,



Rene Botts, Buyer  
State Purchasing Bureau

Murphy Tractor & Equipment Co is agreeable to the renewal of 14703 OC for Articulated All Wheel Drive Loader with Minimum 2.2 Cubic Yard Bucket February 1, 2019 through January 31, 2020.

SIGNATURE   
TITLE Branch Manager  
DATE 8-3-18

Price increase will be requested when available.  
Planning for this to be by the end of August.



# STATE OF NEBRASKA CONTRACT AWARD

State Purchasing Bureau  
1526 K Street, Suite 130  
Lincoln, Nebraska 68508

Telephone: (402) 471-6500  
Fax: (402) 471-2089

**CONTRACT NUMBER**  
**14703 OC**

**Low Acquisition Award**

PAGE 1 of 2	ORDER DATE 01/02/18
BUSINESS UNIT 9000	BUYER RENE BOTTS (AS)
VENDOR NUMBER: 504832	
VENDOR ADDRESS:  MURPHY TRACTOR & EQUIPMENT CO 6100 ARBOR RD LINCOLN NE 68517-3211	

AN AWARD HAS BEEN MADE TO THE CONTRACTOR NAMED ABOVE FOR THE FURNISHING OF MATERIALS AND/OR SERVICES AS LISTED BELOW FOR THE PERIOD:

**FEBRUARY 01, 2018 THROUGH JANUARY 31, 2019**

NO ACTION ON THE PART OF THE CONTRACTOR NEEDS TO BE TAKEN AT THIS TIME. ORDERS FOR THE MATERIALS AND/OR SERVICES WILL BE MADE AS NEEDED BY THE VARIOUS AGENCIES OF THE STATE.

THIS CONTRACT IS NOT AN EXCLUSIVE CONTRACT TO FURNISH THE MATERIALS AND/OR SERVICES SHOWN BELOW, AND DOES NOT PRECLUDE THE PURCHASE OF SIMILAR MATERIALS AND/OR SERVICES FROM OTHER SOURCES.

THE STATE RESERVES THE RIGHT TO EXTEND THE PERIOD OF THIS CONTRACT BEYOND THE TERMINATION DATE WHEN MUTUALLY AGREEABLE TO THE CONTRACTOR AND THE STATE OF NEBRASKA.

Original/Bid Document 5465 OF

Contract to supply and deliver Articulated All Wheel Drive Loader with Minimum 2.2 Cubic Yard Bucket to the State of Nebraska as per the attached specifications for the contract period February 1, 2018 through January 31, 2019. The contract may be renewed for three (3) additional one (1) year periods when mutually agreeable to the vendor and the State of Nebraska.

Vendor Contact: Greg Kozisek  
Phone: 402-467-1300  
Fax: 402-467-1927  
E-Mail: gkozisek@murphytractor.com

This is the first renewal of the contract as amended. (vc 1/2/18)

Line	Description	Estimated Quantity	Unit of Measure	Unit Price
1	ARTICULATED ALL WHEEL DRIVE LOADER W/MIN 2.2 CY BUCKET  MAKE: JOHN DEERE MODEL: 524 K II  OPTIONS:	15.0000	EA	122,444.0000
2	DEDUCT FOR NO LOAD RIDE CONTROL OR BOOM SUSPENSION SYSTEM	10.0000	EA	-2,610.0000
3	QUICK HITCH WITH SPECIFIED BUCKET PRICE INCLUDES FORKLIFT ASSEMBLY  MAKE: JOHN DEERE MODEL: 2 BAR HYD COUPLER	15.0000	EA	6,170.0000

1-7-18 Rene A. Botts 1/5/2018  
BUYER  
Douglas Wilken 11 JAN 18  
MATERIEL ADMINISTRATOR

# STATE OF NEBRASKA CONTRACT AWARD

State Purchasing Bureau  
1526 K Street, Suite 130  
Lincoln, Nebraska 68508

Telephone: (402) 471-6500  
Fax: (402) 471-2089

**CONTRACT NUMBER**  
**14703 OC**

PAGE 2 of 2	ORDER DATE 01/02/18
BUSINESS UNIT 9000	BUYER RENE BOTTS (AS)
VENDOR NUMBER: 504832	

Line	Description	Estimated Quantity	Unit of Measure	Unit Price
4	MULTI-PURPOSE BUCKET MAKE: TAG MODEL: P/Q 275 MP	10.0000	EA	12,969.0000
5	GRAPPLE FOR ATTACHMENT MAKE: GRAB TEC MODEL: GA 905	16.0000	EA	7,552.0000
6	THIRD VALVE WITH LINES TO FRONT OF LOADER BOOM FOR ATTACHMENTS MAKE: JOHN DEERE MODEL: 3 FUNCTION JOY STICK	15.0000	EA	2,050.0000
7	AM/FM RADIO MAKE: JOHN DEERE MODEL: AM/FM/WB	15.0000	EA	403.0000
8	DEDUCT FOR EXTENDED WARRANTY AFTER THE BASIC 1 YEAR WARRANTY	10.0000	EA	-1,745.0000
9	DEDUCT FOR TRANSPORTATION COST CHARGES FOR THE EXTENDED WARRANTY	15.0000	EA	-1,125.0000
10	LOUP ELECTRONICS LOADLOG 8000I WHEEL LOADER SCALE SYSTEM MAKE: LOUP MODEL: LOAD LOG 8000	10.0000	EA	7,249.0000
11	IN-CAB PRINTER FOR LOADLOG 8000I WHEEL LOADER SCALE SYSTEM MAKE: LOUP MODEL: ICP 300	10.0000	EA	811.0000

  
BUYER INITIALS



# STATE OF NEBRASKA CONTRACT AMENDMENT

State Purchasing Bureau  
1526 K Street, Suite 130  
Lincoln, Nebraska 68508

Telephone: (402) 471-6500  
Fax: (402) 471-2089

**CONTRACT NUMBER**  
**14703 OC**

PAGE 1 of 2	ORDER DATE 08/30/17
BUSINESS UNIT 9000	BUYER RENE BOTTS (AS)
VENDOR NUMBER: 504832	
VENDOR ADDRESS:  MURPHY TRACTOR & EQUIPMENT CO 6100 ARBOR RD LINCOLN NE 68517-3211	

THE CONTRACT PERIOD IS:

**FEBRUARY 01, 2017 THROUGH JANUARY 31, 2018**

THIS CONTRACT HAS BEEN AMENDED PER THE FOLLOWING INFORMATION:

NO ACTION ON THE PART OF THE CONTRACTOR NEEDS TO BE TAKEN AT THIS TIME. ORDERS FOR THE MATERIALS AND/OR SERVICES WILL BE MADE AS NEEDED BY THE VARIOUS AGENCIES OF THE STATE.

THIS CONTRACT IS NOT AN EXCLUSIVE CONTRACT TO FURNISH THE MATERIALS AND/OR SERVICES SHOWN BELOW, AND DOES NOT PRECLUDE THE PURCHASE OF SIMILAR MATERIALS AND/OR SERVICES FROM OTHER SOURCES.

THE STATE RESERVES THE RIGHT TO EXTEND THE PERIOD OF THIS CONTRACT BEYOND THE TERMINATION DATE WHEN MUTUALLY AGREEABLE TO THE CONTRACTOR AND THE STATE OF NEBRASKA.

Original/Bid Document 5465 OF

Contract to supply and deliver Articulated All Wheel Drive Loader with Minimum 2.2 Cubic Yard Bucket to the State of Nebraska as per the attached specifications for the contract period February 1, 2017 through January 31, 2018. The contract may be renewed for four (4) additional one (1) year periods when mutually agreeable to the vendor and the State of Nebraska.

Vendor Contact: Greg Kozisek  
Phone: 402-467-1300  
Fax: 402-467-1927  
E-Mail: gkozisek@murphytractor.com

AMENDMENT ONE as ATTACHED. (vc 08/30/17)

Line	Description	Estimated Quantity	Unit of Measure	Unit Price
1	ARTICULATED ALL WHEEL DRIVE LOADER W/MIN 2.2 CY BUCKET  MAKE: John Deere MODEL: 524 K II  OPTIONS:	5.0000	EA	122,444.0000
2	DEDUCT FOR NO LOAD RIDE CONTROL OR BOOM SUSPENSION SYSTEM	5.0000	EA	-2,610.0000
3	QUICK HITCH WITH SPECIFIED BUCKET Price Includes Forklift Assembly MAKE: John Deere MODEL: 2 Bar Hyd Coupler	5.0000	EA	6,170.0000

9/9/17 Rene A. Botts 9/5/2017  
PK BUYER  
Douglas Wilson 8/30/17  
MATERIEL ADMINISTRATOR

# STATE OF NEBRASKA CONTRACT AMENDMENT

State Purchasing Bureau  
1526 K Street, Suite 130  
Lincoln, Nebraska 68508

Telephone: (402) 471-6500  
Fax: (402) 471-2089

**CONTRACT NUMBER**  
**14703 OC**

PAGE 2 of 2	ORDER DATE 08/30/17
BUSINESS UNIT 9000	BUYER RENE BOTTS (AS)
VENDOR NUMBER: 504832	

Line	Description	Estimated Quantity	Unit of Measure	Unit Price
4	MULTI-PURPOSE BUCKET MAKE: TAG MODEL: P/Q 275 MP	5.0000	EA	12,969.0000
5	GRAPPLE FOR ATTACHMENT MAKE: Grab Tec MODEL: GA 905	11.0000	EA	7,552.0000
6	THIRD VALVE WITH LINES TO FRONT OF LOADER BOOM FOR ATTACHMENTS MAKE: John Deere MODEL: 3 function Joy stick	5.0000	EA	2,050.0000
7	AM/FM RADIO MAKE: John Deere MODEL: AM/FM/WB	5.0000	EA	403.0000
8	DEDUCT FOR EXTENDED WARRANTY AFTER THE BASIC 1 YEAR WARRANTY	5.0000	EA	-1,745.0000
9	DEDUCT FOR TRANSPORTATION COST CHARGES FOR THE EXTENDED WARRANTY	5.0000	EA	-1,125.0000
10	LOUP ELECTRONICS LOADLOG 8000I WHEEL LOADER SCALE SYSTEM MAKE: Loup MODEL: Load Log 8000;	5.0000	EA	7,249.0000
11	IN-CAB PRINTER FOR LOADLOG 8000I WHEEL LOADER SCALE SYSTEM MAKE: Loup MODEL: ICP 300	5.0000	EA	811.0000

  
BUYER INITIALS

AMENDMENT ONE

14703 OC

Articulated All Wheel Drive Loader 2/ Min 2.2 CY Bucket- Low Acquisition for the State of Nebraska  
Between

The State of Nebraska and Murphy Tractor & Equipment Co.

This Amendment (the "Amendment") is made by the State of Nebraska and Murphy Tractor & Equipment Co., parties to Contract 14703 OC (the "Contract"), and upon mutual agreement and other valuable consideration the parties agree to and hereby amend the contract as follows:

Contract contact is replaced and superseded in its entirety effective upon signature:

Vendor Contact: Greg Kozisek  
Phone: 402-467-1300  
Fax: 402-467-1927  
E-Mail: gkozisek@murphytractor.com

This amendment and any attachments hereto will become part of the Contract. Except as set forth in this Amendment, the Contract is unaffected and shall continue in full force and effect in accordance with its terms. If there is conflict between this amendment and the Contract or any earlier amendment, the terms of this amendment will prevail.

IN WITNESS WHEREOF, the parties have executed this Amendment as of the date of execution by both parties below.

State of Nebraska

Contractor: Murphy Tractor & Equipment Co.

By: Douglas Wilken

By: Greg Kozisek

Name: Douglas Wilken

Name: Greg Kozisek

Title: AS Materiel Administrator

Title: Area Sales Manager

Date: 8 Sept 17

Date: Aug 29, 2017

# STATE OF NEBRASKA CONTRACT AWARD

State Purchasing Bureau  
1526 K Street, Suite 130  
Lincoln, Nebraska 68508

Telephone: (402) 471-6500  
Fax: (402) 471-2089

**CONTRACT NUMBER**  
**14703 OC**  
**Low Acquisition Award**

PAGE 1 of 2	ORDER DATE 02/1/17
BUSINESS UNIT 9000	BUYER RENE BOTTS (AS)
VENDOR NUMBER: 504832	
VENDOR ADDRESS:  MURPHY TRACTOR & EQUIPMENT CO 6100 ARBOR RD LINCOLN NE 68517-3211	

AN AWARD HAS BEEN MADE TO THE CONTRACTOR NAMED ABOVE FOR THE FURNISHING OF MATERIALS AND/OR SERVICES AS LISTED BELOW FOR THE PERIOD:

**FEBRUARY 1, 2017 THROUGH JANUARY 31, 2018**

NO ACTION ON THE PART OF THE CONTRACTOR NEEDS TO BE TAKEN AT THIS TIME. ORDERS FOR THE MATERIALS AND/OR SERVICES WILL BE MADE AS NEEDED BY THE VARIOUS AGENCIES OF THE STATE.

THIS CONTRACT IS NOT AN EXCLUSIVE CONTRACT TO FURNISH THE MATERIALS AND/OR SERVICES SHOWN BELOW, AND DOES NOT PRECLUDE THE PURCHASE OF SIMILAR MATERIALS AND/OR SERVICES FROM OTHER SOURCES.

THE STATE RESERVES THE RIGHT TO EXTEND THE PERIOD OF THIS CONTRACT BEYOND THE TERMINATION DATE WHEN MUTUALLY AGREEABLE TO THE CONTRACTOR AND THE STATE OF NEBRASKA.

Original/Bid Document 5465 OF

Contract to supply and deliver Articulated All Wheel Drive Loader with Minimum 2.2 Cubic Yard Bucket to the State of Nebraska as per the attached specifications for the contract period February 1, 2017 through January 31, 2018. The contract may be renewed for four (4) additional one (1) year periods when mutually agreeable to the vendor and the State of Nebraska.

Vendor Contact: John Spellman  
Phone: 402-467-1300  
Fax: 402-467-1927  
E-Mail: jspellman@murphytractor.com

(cp 1/24/17)

Line	Description	Estimated Quantity	Unit of Measure	Unit Price
1	ARTICULATED ALL WHEEL DRIVE LOADER W/MIN 2.2 CY BUCKET  MAKE: John Deere MODEL: 524 K II  OPTIONS:	5.0000	EA	122,444.0000
2	DEDUCT FOR NO LOAD RIDE CONTROL OR BOOM SUSPENSION SYSTEM	5.0000	EA	-2,610.0000
3	QUICK HITCH WITH SPECIFIED BUCKET Price Includes Forklift Assembly MAKE: John Deere MODEL: 2 Bar Hyd Coupler	5.0000	EA	6,170.0000

*Rene A. Botts* 2-1-17 ksb/1/17  
BUYER  
2/2/17  
MATERIEL ADMINISTRATOR

# STATE OF NEBRASKA CONTRACT AWARD

State Purchasing Bureau  
1526 K Street, Suite 130  
Lincoln, Nebraska 68508

Telephone: (402) 471-6500  
Fax: (402) 471-2089

**CONTRACT NUMBER**  
**14703 OC**

PAGE 2 of 2	ORDER DATE 02/1/17
BUSINESS UNIT 9000	BUYER RENE BOTTS (AS)
VENDOR NUMBER: 504832	

Line	Description	Estimated Quantity	Unit of Measure	Unit Price
4	MULTI-PURPOSE BUCKET  MAKE: TAG MODEL: P/Q 275 MP	5.0000	EA	12,969.0000
5	GRAPPLE FOR ATTACHMENT MAKE: Grab Tec MODEL: GA 905	5.0000	EA	7,552.0000
6	THIRD VALVE WITH LINES TO FRONT OF LOADER BOOM FOR ATTACHMENTS  MAKE: John Deere MODEL: 3 function Joy stick	5.0000	EA	2,050.0000
7	AM/FM RADIO  MAKE: John Deere MODEL: AM/FM/WB	5.0000	EA	403.0000
8	DEDUCT FOR EXTENDED WARRANTY AFTER THE BASIC 1 YEAR WARRANTY	5.0000	EA	-1,745.0000
9	DEDUCT FOR TRANSPORTATION COST CHARGES FOR THE EXTENDED WARRANTY	5.0000	EA	-1,125.0000
10	LOUP ELECTRONICS LOADLOG 8000I WHEEL LOADER SCALE SYSTEM  MAKE: Loup MODEL: Load Log 8000;	5.0000	EA	7,249.0000
11	IN-CAB PRINTER FOR LOADLOG 8000I WHEEL LOADER SCALE SYSTEM  MAKE: Loup MODEL: ICP 300	5.0000	EA	811.0000

  
BUYER INITIALS



# State of Nebraska - INVITATION TO BID CONTRACT

Return to:  
State Purchasing Bureau  
1526 K Street, Suite 130  
Lincoln, Nebraska 68508

Telephone: 402-471-6500  
Fax: 402-471-2089

Date	11/4/16	Page	1 of 2
Solicitation Number	5465 OF		
Opening Date and Time	12/15/16	2:00 pm	
Buyer	RENE BOTTS (AS)		

**DESTINATION OF GOODS**  
MULTIPLE DELIVERY LOCATIONS  
PLEASE REFER TO DOCUMENTATION  
FOR DELIVERY ADDRESSES.

Per Nebraska's Transparency in Government Procurement Act, DAS is required to collect statistical information regarding the number of contracts awarded to Nebraska contractors. This information is for statistical purposes only and will not be considered for contract award purposes.

       NEBRASKA CONTRACTOR AFFIDAVIT: Bidder hereby attests that bidder is a Nebraska Contractor. "Nebraska Contractor" shall mean any bidder who has maintained a bona fide place of business and at least one employee within this state for at least the six (6) months immediately preceding the posting date of this ITB.

       I hereby certify that I am a Resident disabled veteran or business located in a designated enterprise zone in accordance with Neb. Rev. Stat. §73-107 and wish to have preference, if applicable, considered in the award of this contract.

Contract to supply and deliver Articulated All Wheel Drive Loader with Minimum 2.2 Cubic Yard Bucket to the State of Nebraska as per the attached specifications for a one (1) year period from date of award. The contract may be renewed for four (4) additional one (1) year periods when mutually agreeable to the vendor and the State of Nebraska.

(ka 11/2/16)

## INVITATION

Line	Description	Quantity	Unit of Measure	Unit Price	Extended Price
1	ARTICULATED ALL WHEEL DRIVE LOADER W/MIN 2.2 CY BUCKET  MAKE: <u>John Deere</u> MODEL: <u>524K II</u>  OPTIONS:	5.0000	EA	<u>\$122,441.00</u>	<u>\$612,222.00</u>
2	DEDUCT FOR NO MANUFACTURER'S FACTORY INSTALLED AIR CONDITIONER	5.0000	EA	<u>N/A</u>	<u>N/A</u>
3	DEDUCT FOR NO LOAD RIDE CONTROL OR BOOM SUSPENSION SYSTEM	5.0000	EA	<u>-\$2,610.00</u>	<u>-\$13,050.00</u>

### BIDDER MUST COMPLETE THE FOLLOWING

DISCOUNT PAYMENT TERMS: 100 % 30 DAYS

By signing this Invitation to Bid form the bidder guarantees compliance with the provisions stated in this Invitation to Bid, agrees to the terms and conditions unless otherwise agreed to (see Section III) and certifies that bidder maintains a drug free work place environment. Vendor will furnish the items requested within 95 days after receipt of order. Failure to enter Delivery Date may cause quotation to be REJECTED.

Sign John Spellman  
Here (Authorized Signature MANDATORY - MUST BE SIGNED IN INK)  
VENDOR# 504832  
VENDOR: Murphy Tractor + Equipment CO  
Address: 6100 Arbor Rd.  
Lincoln Ne, 68517

Enter Contact Information Below

Contact John Spellman  
Telephone 402-467-1300  
Facsimile 402-467-1927  
Email jspellman@murphytractor.com

# State of Nebraska - INVITATION TO BID CONTRACT

Return to:  
State Purchasing Bureau  
1526 K Street, Suite 130  
Lincoln, Nebraska 68508

Telephone: 402-471-6500  
Fax: 402-471-2089

Date	11/4/16	Page	2 of 2
Solicitation Number	5465 OF		
Opening Date and Time	12/15/16	2:00 pm	
Buyer	RENE BOTTS (AS)		

**DESTINATION OF GOODS**  
MULTIPLE DELIVERY LOCATIONS  
PLEASE REFER TO DOCUMENTATION  
FOR DELIVERY ADDRESSES.

## INVITATION

Line	Description	Quantity	Unit of Measure	Unit Price	Extended Price
4	QUICK HITCH WITH SPECIFIED BUCKET <i>Price- Includes Forklift Assembly - W</i>	5.0000	EA	<u>\$ 6,170.00</u>	<u>\$30,850.00</u>
	MAKE: <u>John Deere</u> MODEL: <u>Z-Bar Hyd Coupler</u>				
5	MULTI-PURPOSE BUCKET	5.0000	EA	<u>\$ 12,969</u>	<u>\$ 64,845.00</u>
	MAKE: <u>TAG</u> MODEL: <u>P/Q 275 MP</u>				
6	GRAPPLE FOR ATTACHMENT	5.0000	EA	<u>\$ 7,552.00</u>	<u>\$ 37,760.00</u>
	MAKE: <u>Grab Tec</u> MODEL: <u>GA 905</u>				
7	THIRD VALVE WITH LINES TO FRONT OF LOADER BOOM FOR ATTACHMENTS	5.0000	EA	<u>\$ 2,050.00</u>	<u>\$ 10,250.00</u>
	MAKE: <u>John Deere</u> MODEL: <u>3function Joystick</u>				
8	AM/FM RADIO	5.0000	EA	<u>\$ 403.00</u>	<u>\$ 2,015.00</u>
	MAKE: <u>John Deere</u> MODEL: <u>AM/FM/WB</u>				
9	DEDUCT FOR EXTENDED WARRANTY AFTER THE BASIC 1 YEAR WARRANTY	5.0000	EA	<u>- \$ 1,745.00</u>	<u>- \$ 8,725.00</u>
10	DEDUCT FOR TRANSPORTATION COST CHARGES FOR THE EXTENDED WARRANTY	5.0000	EA	<u>- \$ 1,125.00</u>	<u>- \$ 5,625.00</u>
11	LOUP ELECTRONICS LOADLOG 8000I WHEEL LOADER SCALE SYSTEM	5.0000	EA	<u>\$ 7,249.00</u>	<u>\$ 36,245.00</u>
	MAKE: <u>Loup</u> MODEL: <u>Load Log 8000i</u>				
12	IN-CAB PRINTER FOR LOADLOG 8000I WHEEL LOADER SCALE SYSTEM	5.0000	EA	<u>\$ 811.00</u>	<u>\$ 4,055.00</u>
	MAKE: <u>Loup</u> MODEL: <u>ICP 300</u>				



**Life-Cycle Cost Analysis - Invitation to Bid# 5465 OF**

**Item Description - EQUIPMENT DESCRIPTION**

State Agency Data Use for Calculations		
1	<b>Projected Number of Months in Service:</b>	<b>156</b> Provided by State Purchasing Bureau
2	<b>Projected Number of Hours of Operation per Month</b>	<b>25</b> Provided by State Purchasing Bureau
3	<b>Projected Total Number of Hours</b>	<b>3,900</b> Provided by State Purchasing Bureau
4	<b>Number of Maintenance Cycles Performed Per Year</b>	<b>2</b> Provided by State Purchasing Bureau
5	<b>Fuel Cost-per-Gallon:</b> (Data from U.S. Energy Information Administration the week of bid release.)	<b>\$2.443</b> Provided by State Purchasing Bureau

Net Cost		
6	<b>Bid Price (Listed on ITB Line # 1)</b>	<b>\$ 122,444.00</b> Bidder enters amount
7	<b>Projected Salvage Value</b> (Using Projected Total Hours & Projected Total Months) Salvage value will be based on documented sale price(s) of the same or comparable equipment within previous twelve (12) months. Vendor(s) should submit documentation from at least three (3) sales within the U.S. Midwest region with the Invitation To Bid. All documentation will be required prior to award.	<b>\$ 44,666.00</b> Bidder enters amount
8	<b>Net Cost (Line 6 - Line 7)</b>	<b>\$ 77,778.00</b> Total Net Cost

Operating Costs		
9	<b>Fuel</b> <b>Estimated Fuel Use Rate (Gallons Per Hour)</b> "Rated RPM Full Load" or Highest Consumption Rate Tested and Documented Bidder should supply manufacturers documentation with the Invitation to Bid and will be required prior to award.	<b>3</b> Bidder enters amount
10	<b>Projected Number of Hours</b>	<b>3900</b> Provided by State Purchasing Bureau
11	<b>Projected Total Gallons (Line 9 x Line 10)</b>	<b>11700</b>
12	<b>Fuel Cost-per-Gallon</b> (Data from U.S. Energy Information Administration the week of bid release.)	<b>\$2.443</b> Provided by State Purchasing Bureau
13	<b>Total Estimated Fuel Cost (Line 11 x Line 12)</b>	<b>\$ 28,583.10</b>
14	<b>Estimated Maintenance Cost for Parts (Labor not included)</b>	
14	<b>Total Maintenance Cost</b>	<b>\$10,727.36</b> Bidder enters amount from Maintenance Cost Work Sheet
15	<b>Total Operating Cost (Fuel + Maintenance)</b> (Line 13 + Line 14)	<b>\$39,310.46</b>
16	<b>Total Life-Cycle Cost</b> (Net Cost, Line 8 + Total Operating Cost, Line 15)	<b>\$117,088.46</b> Total Life-Cycle Cost
17	<b>(Total Life-Cycle Cost divided by Total Hours) (Line 16/Line 3)</b>	<b>\$30.02</b> Life-Cycle Cost Per Hour

In order to be considered for a Life-Cycle Cost Award, all Bidder fields must be completed. Additional supporting documentation may be requested.

In the event equipment performance does not meet the criteria as indicated, a Vendor Performance Report may be submitted by the purchasing agency and vendor suspension may occur.

Bidder Name: Murphy Tractor & Equip. CO.

I hereby certify the above to be true and accurate information.

Authorized Representative: [Signature] Date: 12.13.2016  
Signature

**Maintenance Cost Work Sheet**

Item No.	Total Maintenance Costs - Indicate parts necessary to perform a <u>complete change</u> ; that is, if the machine has two air filters, you must price both).	No. of Maint. Procedures Performed During Life Cycle of Unit	Vendor Supplied "Manufacturer's Suggested Retail Price" for Parts	Total Cost
1	Change Engine Oil and Filter(s)	26	\$ 105.78	\$ 2,750.28
2	Lube Chassis (grease all zerks complete)	26	\$ 3.99	\$ 103.74
3	Change Engine Fuel Filter(s)	13	\$ 81.61	\$ 1,060.93
4	Replace Transmission Filter(s)	13	\$ 51.52	\$ 669.76
5	Replace Engine Air Filter(s)	6	\$ 88.97	\$ 533.82
6	Replace Cab Air Filter(s)	6	\$ 32.28	\$ 193.68
7	Change Transmission Oil/Fluid	6	\$ 79.74	\$ 478.44
8	Change Hydraulic Oil/Fluid and Filter(s)	4	\$ 739.92	\$ 2,959.68
9	Change Differential/Final Drive Oil/Fluid	4	\$ 274.84	\$ 1,099.36
10	Replace Engine Coolant	4	\$ 95.16	\$ 380.64
11	Adjust Engine Valve Clearance	2	\$ 30.97	\$ 61.94
12	Replace Engine Belt(s)	3	\$ 89.41	\$ 268.23
	<b>Additional maintenance as mandated by the manufacturer for warranty compliance, if necessary:</b>			
9	DEF Header Suction Filter @ 2000Hr.	2	\$ 19.90	\$ 39.80
10	DEF Dosing Unit Filter @ 4000Hr.	1	\$ 96.95	\$ 96.95
11	DEF Tank Breather @ 4000Hr.	1	\$ 30.11	\$ 30.11
	<b>Total Life Cycle Maintenance Cost (To be entered in Line 14)</b>			<b>\$ 10,727.36</b>

## **Instructions for Life-Cycle Cost Analysis - Heavy Equipment Vendor Submission Form**

### **State Agency Data use for Calculations:**

Line #1 - Projected Number of Months in Service – Provided by State Purchasing Bureau

Line #2 - Projected Number of Hours of Operation per Month – Provided by State Purchasing

Line #3 - Projected Total Number of Hours – Anticipated hours at the time of disposal provided by State Purchasing Bureau

Line #4 - Number of Maintenance Cycles Performed Per Year - Provided by State Purchasing

Line #5 - Fuel Cost-per-Gallon – Provided by SPB (US Energy Information Administration)

### **Net Cost**

Line #6 - Bid price – Must match ITB (Invitation to Bid) Line 1 – Bidder enters amount

Line #7 - Projected Salvage Value – Bidder enters amount from documented sale price(s) of comparable equipment. Bidder shall supply documentation prior to award for pricing information from an independently owned published source.

Line #8 - Net Cost – Bid Price less the Projected Salvage Value (Line 6 - Line 7)

### **Operating Costs**

#### **Fuel**

Line #9 - Estimated Fuel Use Rate (Gallons per Hour) "Rated RPM Full Load" or Highest Consumption Rate Tested and Documented at SAE Standards – Bidder should supply manufacturer's documentation with the ITB and will be required prior to award

Line #10 - Projected Number of Hours – Provided by State Purchasing Bureau

Line #11 - Projected Total Gallons is the result of the estimated fuel use rate multiplied by the projected number of hours (Line 9 x Line 10)

Line #12 - Fuel Cost-per-Gallon Provided by State Purchasing Bureau

Line #13 - Total Estimated Fuel Cost is the result of the Projected Total Gallons multiplied by the Fuel Cost per Gallon (Line 11 x Line 12)

### **Estimated Maintenance Cost for Parts (Labor not included)**

Line #14 - Total Maintenance Cost – Bidder enters amount from Maintenance Cost Work Sheet.

Line #15 - Total Operating Cost is the sum Total Estimated Fuel Cost plus the Total Maintenance Cost (Line 13 + Line 14)

**Line #16 - Total Life-Cycle Cost is the Net Cost plus the Total Operating Cost (Line 8 + Line 15)**

**Line #17 - Life-Cycle Cost per Hour is the result of the Total Life-Cycle Cost divided by the Total Projected Hours (Line 16 / Line 3)**





## 1998 JOHN DEERE 544H Wheel Loader



Sold for 42500 USD on May 19, 2016 in Bozeman, MT, USA

Lot # 56



Make:	JOHN DEERE
Model:	544H
Year:	1998
Serial No.:	DW544HX56XXXX
Meter reads (unverified)	5669 Hr
Sold Price	42500 USD
Details:	Q/C bkt, A/C cab, 20.5x25

---

© 2016 Ritchie Bros. Auctioneers



## 1997 JOHN DEERE 544H Wheel Loader



Sold for 42500 USD on Jun 11, 2015 (Day 1 of 2) in Denver, CO, USA

Lot # 144A



Make:	JOHN DEERE
Model:	544H
Year:	1997
Serial No.:	DW544HX56XXXX
Meter reads (unverified)	11382 Hr
Sold Price	42500 USD
Details:	hyd Q/C 4-in-1 bkt, cab, 20.5/25



## 2000 JOHN DEERE 544H Wheel Loader



Sold for 49000 USD on Jun 11, 2015 (Day 1 of 2) in Denver, CO, USA

Lot # 144



Make:	JOHN DEERE
Model:	544H
Year:	2000
Serial No.:	DW544HX57XXXX
Meter reads (unverified)	17280 Hr
Sold Price	49000 USD
Details:	bkt, A/C cab, ride ctrl, 20.5R25

## Fuel Consumption

Measuring actual consumption on the same model (same emission Tier rating) in a similar application is the most accurate method of calculation. Severity of application, operator skill, fuel type, vehicle configuration, attachments, etc., affect consumption. If actual consumption is not known, the figure below is an estimate based on numerous field applications with measured data by model and severity of application. These figures are average, typical fuel consumption over extended periods of time (100-1000 hours), specific operations may have greater or less fuel consumption.

**Low:** Long Idle periods, light duty work, utility work or non-production work in light or loose materials; finish grading; light utility work; skidding light loads; light blading or piling of logs.

**Medium:** Production work in material of moderate weight and composition; frequent idling while working in heavy or hard materials; scarifying or moderate snow plowing; road maintenance; skidding or gate delimiting medium sized loads. Majority of applications fall in to this grouping.

**High:** Work in hard or rocky materials; heavy ripping; continuous cycle drawbar work or bank loading at full throttle; continuous cycling on surfaces with deep tire/track penetration; skidding or gate delimiting heavy loads; heavy snow plowing, limited idle time.

Model	Fuel (US Gal./hr)			Fuel (L/hr)		
	Low	Medium	High	Low	Medium	High
<b>Wheel Loaders</b>						
244J IT4 and Stage IIIA	0.8	1.2	1.6	3.0	4.5	5.9
204K IT4 and Stage IIIA	0.5	0.8	1.0	2.0	3.0	3.9
304K IT4 and Stage IIIA	0.6	1.0	1.2	2.4	3.6	4.7
324J IT4 and Stage IIIA	0.9	1.3	1.7	3.3	5.0	6.5
344K IT4, and Stage IIIA	1.0	1.5	2.0	3.8	5.8	7.4
444K Tier 3, and Stage IIIA	1.2	2.0	2.7	4.5	7.4	10.1
444K FT4 and Stage IV	1.3	1.8	2.3	5.1	6.9	8.6
524K Tier 3, and Stage IIIA	1.4	2.1	2.8	5.2	8.0	10.6
524K FT4 and Stage IV	1.6	2.4	3.0	6	9	11.3
544K Tier 3, and Stage IIIA	1.4	2.2	2.9	5.3	8.2	10.8
544K FT4 and Stage IV	1.6	2.4	3.1	6	9.2	11.8
624K Stage II	1.6	2.4	3.1	5.9	8.9	11.6
624K Tier 3, and Stage IIIA	1.4	2.2	2.9	5.3	8.2	10.8
624K FT4 and Stage IV	2.2	2.8	3.4	8.3	10.5	12.8
644K Stage II	1.5	2.3	3.0	5.7	8.6	11.2
644K Tier 3, and Stage IIIA	1.6	2.7	3.8	5.9	10.2	14.5
644K FT4 and Stage IV	2.5	3.3	4.1	9.5	12.5	15.4
644K Hybrid IT4 and Stage IIIB	1.8	2.7	3.3	7	10.1	12.4
724K Stage II	1.9	2.8	3.7	7.1	10.7	13.9
724K Tier 3, and Stage IIIA	2.0	3.1	4.3	7.5	11.8	16.2
724K FT4 and Stage IV	2.5	3.3	4.1	9.5	12.5	15.4
744K Stage II	2.3	3.6	4.7	8.8	13.6	17.9
744K Tier 3, and Stage IIIA	2.5	4.0	5.5	9.6	15.3	20.9
744K IT4 and Stage IIIB	2.6	4.2	5.8	9.8	15.9	21.9
744K FT4 and Stage IV	2.5	4.0	5.5	9.5	15.1	20.9
824K Stage II	3.2	4.8	6.3	12.1	18.3	23.8
824K Tier 3, and Stage IIIA	3.7	5.2	6.9	14.1	19.8	26.2
824K IT4 and Stage IIIB	3.3	5.2	7.1	12.6	19.8	27.0
824K FT4 and Stage IV	3.1	4.9	6.6	11.7	18.4	25.1
844K Series II Stage II	3.6	5.5	7.1	13.7	20.8	27.0
844K Series II Tier 3, and Stage IIIA	4.0	6.0	8.0	15.0	22.6	30.2
844K Series II IT4 and Stage IIIB	4.0	5.8	8.2	15.3	21.9	31.2
844K Series II FT4 and Stage IV	3.8	5.4	7.7	14.2	20.4	29.1
944K IT4 and Stage IIIB	6.7	9.2	12.0	25.4	34.8	45.4



Pete Ricketts, Governor

## ADDENDUM TWO, LIFE CYCLE COST SHEETS

Date: November 22, 2016  
 To: All Bidders  
 From: René Botts, Buyer  
 AS Materiel State Purchasing  
 RE: Addendum for Invitation to Bid Number 5465 OF  
 to be opened December 15, 2016 at 2:00 p.m. Central

### Life Cycle Cost

If bidding Life Cycle please complete and return with bid submission.

YES	NO	NO & PROVIDE ALTERNATIVE	1. LIFE CYCLE COST *NOTE: LIFE CYCLE COST WORKSHEET AND INSTRUCTIONS ARE ATTACHED
X			<p>A. Life-cycle cost information will be captured in a formula to allow a comparison between the price based on acquisition costs and the price based on life cycle costs.</p> <p>Vendors must provide a price based on acquisition costs according to specifications. Vendors will not be required to submit a price based on life-cycle costs. In order for a vendor submission to be considered on the basis of life cycle costs, the Bidder must supply the information requested on the Life-Cycle Cost Analysis for Heavy Equipment / Vendor Submission form provided by the State Purchasing Bureau. Life-cycle cost information considered for purposes of a bid will include only the life-cycle cost information as submitted with the bid by the Vendor. The State Purchasing Bureau will not add any additional information or stipulate to the creditability of any information provided and /or not provided in the form. If a Vendor fails to complete any of the information requested for a bid price based on life-cycle costs, the bid will be disqualified from further consideration for a contract based on life-cycle costs. The Vendor's bid based on acquisition costs will be considered if the requirements of that bid are met independently of the bid</p>



X			<p>based on life-cycle costs.</p> <p>Life-cycle cost comparisons will be based upon the Life-Cycle Cost per Hour, which will be calculated using information provided by the Bidders and the State as indicated in the Life Cycle Cost Analysis Form.</p>
X			<p><b>B. Life-Cycle Information Certification</b>  The Bidder or authorized representative will be required to sign the Life-Cycle Cost Analysis – Heavy Equipment Vendor Submission form and certify that the information is true and accurate. Additionally, the Bidder is informed on the form that a Vendor Performance Report may be submitted by the purchasing agency and possible suspension may occur if the data provided proves to be inaccurate throughout the life of the equipment bid.</p>
X			<p><b>C. Contract Awards</b>  State Purchasing Bureau may award multiple contracts meeting specification: one based on low acquisition cost and one based on life-cycle cost. If no life-cycle cost bid is submitted, the award will only be based on acquisition cost.</p>
X			<p><b>D. Contract Selection by Procuring Agency</b>  The procuring agency may select either contract: low acquisition cost contract or the life-cycle cost contract. The procuring agency will generate a purchase order from one of the contracts and include an attachment with a statement of explanation indicating the basis for the selection signed by the Agency Director.</p>
<p>NOTES/COMMENTS: 1. B. Life-Cycle Information Certification  The start of sales for the S&amp;K was the end of 2008 for delivery in 2009. Machine information for a machine, 156 months old would be the John Deere 544H</p>			

This addendum will become part of the proposal and should be acknowledged with the Invitation to Bid.

## TABLE OF CONTENTS

<b>GLOSSARY OF TERMS</b> .....	<b>iii</b>
<b>I. SCOPE OF THE INVITATION TO BID (ITB)</b> .....	<b>1</b>
<b>A. SCHEDULE OF EVENTS</b> .....	1
<b>II. PROCUREMENT PROCEDURES</b> .....	<b>2</b>
<b>A. PROCURING OFFICE AND CONTACT PERSON</b> .....	2
<b>B. GENERAL INFORMATION</b> .....	2
<b>C. COMMUNICATION WITH STATE STAFF AND EVALUATORS</b> .....	2
<b>D. WRITTEN QUESTIONS AND ANSWERS</b> .....	2
<b>E. SUBMISSION OF BIDS</b> .....	3
<b>F. IMPORTANT NOTICE LANGUAGE</b> .....	3
<b>G. DISCOUNTS</b> .....	3
<b>H. PRICE ADJUSTMENTS DURING CONTRACT TERM</b> .....	3
<b>I. PAYMENT</b> .....	3
<b>J. BID EXECUTION</b> .....	3
<b>K. BID OPENING</b> .....	3
<b>L. ELECTRONIC DOCUMENTS/FACSIMILE SUBMISSIONS</b> .....	4
<b>M. VALID BID TIME</b> .....	4
<b>N. ALTERNATE/EQUIVALENT BIDS</b> .....	4
<b>O. LATE BIDS</b> .....	4
<b>P. NO BID</b> .....	4
<b>Q. LUMP SUM OR ALL OR NONE BIDS</b> .....	4
<b>R. REJECTION OF BIDS</b> .....	4
<b>S. EVALUATION OF BIDS</b> .....	4
<b>T. BID TABULATIONS</b> .....	4
<b>U. MANDATORY REQUIREMENTS</b> .....	5
<b>V. REFERENCE CHECKS</b> .....	5
<b>W. RECYCLING</b> .....	5
<b>X. SECRETARY OF STATE/TAX COMMISSIONER REGISTRATION REQUIREMENTS</b> .....	5
<b>Y. RESIDENT BIDDER</b> .....	5
<b>Z. EVALUATION CRITERIA AND AWARD</b> .....	5
<b>AA. POLITICAL SUB-DIVISIONS</b> .....	6
<b>BB. VIOLATION OF TERMS AND CONDITIONS</b> .....	6
<b>III. INVITATION TO BID - TERMS AND CONDITIONS</b> .....	<b>7</b>
<b>A. GENERAL</b> .....	7
<b>B. DEBARMENT</b> .....	7
<b>C. SPECIFICATIONS</b> .....	8
<b>D. PERFORMANCE AND DEFAULT</b> .....	8
<b>E. DRUG POLICY</b> .....	8
<b>F. NE ACCESS TECHNOLOGY STANDARDS</b> .....	8
<b>G. COMPLIANCE WITH CIVIL RIGHTS LAWS AND EQUAL OPPORTUNITY EMPLOYMENT / NONDISCRIMINATION</b> .....	9
<b>H. PERMITS, REGULATIONS, LAWS</b> .....	9
<b>I. COOPERATION WITH OTHER CONTRACTORS</b> .....	9
<b>J. CONTRACTOR RESPONSIBILITY</b> .....	9
<b>K. CONTRACT CONFLICTS</b> .....	10
<b>L. FUNDING OUT CLAUSE OR LOSS OF APPROPRIATIONS</b> .....	10
<b>M. RIGHT TO AUDIT</b> .....	10
<b>N. CONFLICT OF INTEREST</b> .....	11
<b>O. BID PREPARATION COSTS</b> .....	11
<b>P. ERRORS AND OMISSIONS</b> .....	11
<b>Q. ASSIGNMENT BY THE STATE</b> .....	11
<b>R. ASSIGNMENT BY THE CONTRACTOR</b> .....	12
<b>S. GOVERNING LAW</b> .....	12
<b>T. ATTORNEY'S FEES</b> .....	12
<b>U. ADVERTISING</b> .....	12
<b>V. NOTIFICATION</b> .....	13
<b>W. EARLY TERMINATION</b> .....	13

X.	BREACH BY CONTRACTOR .....	14
Y.	ASSURANCES BEFORE BREACH.....	14
Z.	ACCEPTANCE AND PAYMENT OF GOODS .....	14
AA.	FORCE MAJEURE .....	15
BB.	PROHIBITION AGAINST ADVANCE PAYMENT .....	15
CC.	PAYMENT .....	15
DD.	INVOICES.....	15
EE.	TAXES.....	16
FF.	SEVERABILITY .....	16
GG.	PROPRIETARY INFORMATION.....	16
HH.	CERTIFICATION OF INDEPENDENT PRICE DETERMINATION/COLLUSIVE BIDDING .....	16
II.	PRICES .....	17
JJ.	ETHICS IN PUBLIC CONTRACTING .....	17
KK.	INDEMNIFICATION.....	18
LL.	ANTITRUST.....	19
MM.	EMPLOYEE WORK ELIGIBILITY STATUS.....	19
<b>IV.</b>	<b>SCOPE OF WORK .....</b>	<b>20</b>
A.	SCOPE .....	20
B.	AMENDMENT.....	20
C.	REVISIONS .....	20
<b>V.</b>	<b>INVITATION TO BID - TECHNICAL SPECIFICATIONS.....</b>	<b>21</b>
A.	BIDDER INSTRUCTIONS .....	21
B.	NON-COMPLIANCE STATEMENT .....	21
C.	ENGINE.....	21
D.	DRIVETRAIN .....	22
E.	TIRES .....	23
F.	BRAKES .....	23
G.	STEERING .....	23
H.	LOADER.....	24
I.	CAB .....	24
J.	INSTRUMENTS.....	25
K.	HYDRAULIC SYSTEM .....	25
L.	COUNTERWEIGHTS .....	26
M.	GENERAL.....	26
N.	NOISE LEVEL .....	26
O.	RADIO FREQUENCY SHIELDING – CAUTION!!!.....	27
P.	MANUALS .....	27
Q.	MISCELLANEOUS .....	28
R.	WARRANTY .....	28
S.	SPECIFICATION FORM.....	30
T.	TRAINING.....	30
U.	OEM BRAND INFORMATION.....	30
V.	QUICK HITCH WITH SPECIFIED BUCKET .....	31
W.	QUICK ATTACH FORKLIFT ASSEMBLY.....	32
Y.	GRAPPLE FORK ATTACHMENT .....	33
Z.	WHEEL LOADER SCALE SYSTEM.....	33
AA.	ANNUAL USAGE, ESTIMATED .....	34
BB.	USAGE REPORT .....	34
CC.	DELIVERY ARO .....	34
DD.	DELIVERY LOCATIONS/INSTRUCTIONS (BIDDER IS CERTIFYING THAT THEY CAN MEET THE DELIVERY LOCATIONS/INSTRUCTIONS).....	35
EE.	ORDERS .....	35
FF.	QUALITY .....	35
GG.	PRICES .....	35
HH.	AUTHORIZED DEALER & WARRANTY .....	36
II.	SUBSTITUTIONS .....	36
JJ.	SECRETARY OF STATE REGISTRATION REQUIREMENTS.....	37
	<b>Form A Bidder Contact Sheet .....</b>	<b>38</b>

## GLOSSARY OF TERMS

**Acceptance Test Procedure:** Benchmarks and other performance criteria, developed by the State of Nebraska or other sources of testing standards, for measuring the effectiveness of products or services and the means used for testing such performance.

**Addendum:** Something to be added or deleted to an existing document; a supplement.

**After Receipt of Order (ARO):** After Receipt of Order

**Agency:** Any state agency, board, or commission other than the University of Nebraska, the Nebraska State colleges, the courts, the Legislature, or any other office or agency established by the Constitution of Nebraska.

**Agent/Representative:** A person authorized to act on behalf of another.

**Amend:** To alter or change by adding, subtracting, or substituting.

**Amendment:** A written correction or alteration to a document.

**Appropriation:** Legislative authorization to expend public funds for a specific purpose. Money set apart for a specific use.

**Award:** All purchases, leases, or contracts which are based on competitive bids will be awarded according to the provisions in the Invitation to Bid. The State reserves the right to reject any or all bids, wholly or in part, or to award to multiple bidders in whole or in part. The State reserves the right to waive any deviations or errors that are not material, do not invalidate the legitimacy of the bid, and do not improve the bidder's competitive position. All awards will be made in a manner deemed in the best interest of the State.

**Bid/Proposal:** The offer submitted by a vendor in a response to written solicitation.

**Bid Bond:** An insurance agreement, accompanied by a monetary commitment, by which a third party (the surety) accepts liability and guarantees that the vendor will not withdraw the bid.

**Bidder:** A vendor who submits an offer bid in response to a written solicitation.

**Business:** Any corporation, partnership, individual, sole proprietorship, joint-stock company, joint venture, or any other private legal entity.

**Business Day:** Any weekday, except State-recognized holidays.

**Calendar Day:** Every day shown on the calendar including Saturdays, Sundays, and State/Federal holidays.

**Cancellation:** To call off or revoke a purchase order without expectation of conducting or performing it at a later time.

**Central Processing Unit (CPU):** Any computer or computer system that is used by the State to store, process, or retrieve data or perform other functions using Operating Systems and applications software.

**Change Order:** Document that provides amendments to an executed purchase order.

**Collusion:** An agreement or cooperation between two or more persons or entities to accomplish a fraudulent, deceitful, or unlawful purpose.

**Commodities:** Any equipment, material, supply or goods; anything movable or tangible that is provided or sold.

**Commodities Description:** Detailed descriptions of the items to be purchased; may include information necessary to obtain the desired quality, type, color, size, shape, or special characteristics necessary to perform the work intended to produce the desired results.

**Competition:** The effort or action of two or more commercial interests to obtain the same business from third parties.

**Confidential Information:** Unless otherwise defined below, "Confidential Information" shall also mean proprietary trade secrets, academic and scientific research work which is in progress and unpublished, and other information which if released would give advantage to business competitors and serve no public purpose (see Neb. Rev. Stat. §84-712.05(3)). In accordance with Nebraska Attorney General Opinions 92068 and 97033, proof that information is proprietary requires identification of specific, named competitor(s) who would be advantaged by release of the information and the specific advantage the competitor(s) would receive.

**Contract:** An agreement between two or more parties creating obligations that are enforceable or otherwise recognizable at law; the writing that sets forth such an agreement.

**Contract Administration:** The management of the contract which includes and is not limited to contract signing, contract amendments and any necessary legal actions.

**Contract Management:** The management of day to day activities at the agency which includes and is not limited to ensuring deliverables are received, specifications are met, handling meetings and making payments to the Contractor.

**Contract Period:** The duration of the contract.

**Contractor:** Any individual or entity having a contract or awarded purchase order to furnish commodities or services.

**Cooperative Purchasing:** The combining of requirements of two or more political entities to obtain advantages of volume purchases, reduction in administrative expenses or other public benefits.

**Copyright:** A property right in an original work of authorship fixed in any tangible medium of expression, giving the holder the exclusive right to reproduce, adapt and distribute the work.

**Critical Program Error:** Any Program Error, whether or not known to the State, which prohibits or significantly impairs use of the Licensed Software as set forth in the documentation and intended in the contract.

**Customer Service:** The process of ensuring customer satisfaction by providing assistance and advice on those products or services provided by a Contractor.

**Default:** The omission or failure to perform a contractual duty.

**Deviation:** Any proposed change(s) or alteration(s) to either the terms and conditions or deliverables within the scope of the written solicitation or contract.

**Evaluation:** The process of examining an offer after opening to determine the vendor's responsibility, responsiveness to requirements, and to ascertain other characteristics of the offer that relate to determination of the successful award.

**Evaluation Committee:** Committee(s) appointed by the requesting agency that advises and assists the procuring office in the evaluation of bids/proposals (offers made in response to written solicitations).

**Extension:** Continuance of a contract for a specified duration upon the agreement of the parties beyond the original Contract Period. Not to be confused with "Renewal Period".

**Free on Board (F.O.B.) Destination:** The delivery charges are included in the quoted price and prepaid by the vendor. Vendor is responsible for all claims associated with damages during delivery of product.

**Free on Board (F.O.B.) Point of Origin:** The delivery charges are not included in the quoted price and are the responsibility of the agency. Agency is responsible for all claims associated with damages during delivery of product.

**Foreign Corporation:** A foreign corporation that was organized and chartered under the laws of another state, government, or country.

**Installation Date:** The date when the procedures described in "Installation by Contractor", and "Installation by State", as found in the RFP, ITB (written solicitation) or contract are completed.

**Late Bid/Proposal:** An offer received after the Opening Date and Time.

**Licensed Software Documentation:** The user manuals and any other materials in any form or medium customarily provided by the Contractor to the users of the Licensed Software which will provide the State with sufficient information to operate, diagnose, and maintain the Licensed Software properly, safely, and efficiently.

**Mandatory/Must:** Required, compulsory, or obligatory.

**May:** Discretionary, permitted; used to express possibility.

**Module (see System):** A collection of routines and data structures that perform a specific function of software.

**Must:** See Shall/Will/Must.

**National Institute for Governmental Purchasing (NIGP):** National Institute of Governmental Purchasing – Source used for assignment of universal commodity codes to goods and services.

**OEM:** Original equipment manufacturer.



**Open Market Purchase:** Authorization may be given to an agency to purchase items above direct purchase authority due to the unique nature, price, quantity, location of the using agency, or time limitations by the AS Materiel Division, State Purchasing Bureau.

**Opening Date and Time:** Specified date and time for the public opening of received, labeled, and sealed formal bids.

**Operating System:** The control program in a computer that provides the interface to the computer hardware and peripheral devices, and the usage and allocation of memory resources, processor resources, input/output resources, and security resources.

**Outsourcing:** The contracting out of a business process which an organization may have previously performed internally or has a new need for, to an independent organization from which the process is purchased back.

**Payroll & Financial Center (PFC):** Electronic procurement system of record.

**Performance Bond:** An insurance agreement, accompanied by a monetary commitment, by which a third party (the surety) accepts liability and guarantees that the Contractor fulfills any and all obligations under the contract.

**Platform:** A specific hardware and Operating System combination that is different from other hardware and Operating System combinations to the extent that a different version of the Licensed Software product is required to execute properly in the environment established by such hardware and Operating System combination.

**Pre-Bid/Pre-Proposal Conference:** A meeting scheduled for the purpose of clarifying a written solicitation and related expectations.

**Product:** Something that is distributed commercially for use or consumption and that is usually (1) tangible personal property, (2) the result of fabrication or processing, and (3) an item that has passed through a chain of commercial distribution before ultimate use or consumption.

**Program Error:** Code in Licensed Software which produces unintended results or actions, or which produces results or actions other than those described in the specifications. A program error includes, without limitation, any Critical Program Error.

**Program Set:** The group of programs and products, including the Licensed Software specified in the RFP, plus any additional programs and products licensed by the State under the contract for use by the State.

**Project:** The total scheme, program, or method worked out for the accomplishment of an objective, including all documentation, commodities, and services to be provided under the contract.

**Proposal:** See Bid/Proposal.

**Proprietary Information:** Proprietary information is defined as trade secrets, academic and scientific research work which is in progress and unpublished, and other information which if released would give advantage to business competitors and service no public purpose (see Neb. Rev. Stat. § 84-712.05(3)). In accordance with Attorney General Opinions 92068 and 97033, proof that information is proprietary requires identification of specific named competitor(s) advantaged by release of the information and the demonstrated advantage the named competitor(s) would gain by the release of information.

**Protest/Grievance:** A complaint about a governmental action or decision related to an Invitation to Bid or resultant contract, brought by a vendor who has timely submitted a bid response in connection with the award in question, to AS Materiel Division or another designated agency with the intention of achieving a remedial result.

**Public Proposal/Bid Opening:** The process of opening correctly submitted offers at the time and place specified in the written solicitation and in the presence of anyone who wished to attend.

**Recommended Hardware Configuration:** The data processing hardware (including all terminals, auxiliary storage, communication, and other peripheral devices) to the extent utilized by the State as recommended by the Contractor.

**Release Date:** The date of public release of the written solicitation to seek offers

**Renewal Period:** Optional contract periods subsequent to the original Contract Period for a specified duration with previously agreed to terms and conditions. Not to be confused with Extension.

**Request for Information (RFI):** A general invitation to vendors requesting information for a potential future solicitation. The RFI is typically used as a research and information gathering tool for preparation of a solicitation.

**Request for Proposal (RFP):** A written solicitation utilized for obtaining competitive offers.

**Responsible Bidder:** A bidder who has the capability in all respects to perform fully and lawfully all requirements with integrity and reliability to assure good faith performance.

**Responsive Bidder:** A bidder who has submitted a bid which conforms to all requirements of the solicitation document.

**Shall/Will/Must:** An order/command; mandatory.

**Should:** Expected; suggested, but not necessarily mandatory.

**Software License:** Legal instrument with or without printed material that governs the use or redistribution of licensed software.

**Sole Source – Commodity:** When an item is available from only one source due to the unique nature of the requirement, its supplier, or market conditions.

**Sole Source – Services:** A service of such a unique nature that the vendor selected is clearly and justifiably the only practical source to provide the service. Determination that the vendor selected is justifiably the sole source is based on either the uniqueness of the service or sole availability at the location required.

**Specifications:** The detailed statement, especially of the measurements, quality, materials, and functional characteristics, or other items to be provided under a contract.

**System (see Module):** Any collection or aggregation of two (2) or more Modules that is designed to function, or is represented by the Contractor as functioning or being capable of functioning, as an entity.

**Termination:** Occurs when either party, pursuant to a power created by agreement or law, puts an end to the contract prior to the stated expiration date. All obligations which are still executory on both sides are discharged but any right based on prior breach or performance survives.

**Trade Secret:** Information, including, but not limited to, a drawing, formula, pattern, compilation, program, device, method, technique, code, or process that (a) derives independent economic value, actual or potential, from not being known to, and not being ascertainable by proper means by, other persons who can obtain economic value from its disclosure or use; and (b) is the subject of efforts that are reasonable under the circumstances to maintain its secrecy (see Neb. Rev. Stat. § 87-502(4)).

**Trademark:** A word, phrase, logo, or other graphic symbol used by a manufacturer or vendor to distinguish its product from those of others, registered with the U.S. Patent and Trademark Office.

**Upgrade:** Any change that improves or alters the basic function of a product of service.

**Vendor:** An individual or entity lawfully conducting business in the State of Nebraska, or licensed to do so, who seeks to provide goods or services under the terms of a written solicitation.

**Vendor Performance Report:** A report issued to the Contractor by State Purchasing Bureau when products or services delivered or performed fail to meet the terms of the purchase order, contract, and/or specifications, as reported to State Purchasing Bureau by the agency. The State Purchasing Bureau shall contact the Contractor regarding any such report. The vendor performance report will become a part of the permanent record for the Contractor. The State may require vendor to cure. Two such reports may be cause for immediate termination.

**Will:** See Shall/Will/Must.

**Work Day:** See Business Day.

**I. SCOPE OF THE INVITATION TO BID (ITB)**

The State of Nebraska, Administrative Services (AS), Materiel Division, State Purchasing Bureau (hereafter known as State Purchasing Bureau or SPB), is issuing this Invitation To Bid, Number 5465 OF for the purpose of selecting a qualified Contractor to provide Articulated All Wheel Drive Loader With Minimum 2.2 Cubic Yard Bucket.

A contract resulting from this Invitation To Bid will be issued approximately for a period of (1) year effective the date of award. The contract has the option to be renewed for four (4) additional one (1) year periods as mutually agreed upon by all parties.

**ALL INFORMATION PERTINENT TO THIS INVITATION TO BID CAN BE FOUND ON THE INTERNET AT:**  
<http://das.nebraska.gov/materiel/purchasing.html>

**A. SCHEDULE OF EVENTS**

The State expects to adhere to the tentative procurement schedule shown below. It should be noted, however, that some dates are approximate and subject to change.

ACTIVITY	DATE/TIME
Release Invitation To Bid	November 4, 2016
Last day to submit written questions	November 18, 2016
State responds to written questions through Invitation To Bid "Addendum" and/or "Amendment" to be posted to the Internet at: <a href="http://das.nebraska.gov/materiel/purchasing.html">http://das.nebraska.gov/materiel/purchasing.html</a>	November 22, 2016
Bid opening Location: State Purchasing Bureau 1526 K Street, Suite 130 Lincoln, NE 68508	December 15, 2016 2:00 PM Central Time
Review for conformance of mandatory requirements	TBA
Review period	TBA
Post "Letter of Intent to Award" to Internet at: <a href="http://das.nebraska.gov/materiel/purchasing.html">http://das.nebraska.gov/materiel/purchasing.html</a>	TBA
Contract finalization period	TBA
Contract award	TBA

## II. PROCUREMENT PROCEDURES

### A. PROCURING OFFICE AND CONTACT PERSON

Procurement responsibilities related to this Invitation To Bid reside with the State Purchasing Bureau. The point of contact for the procurement is as follows:

Name: René A. Botts  
Agency: State Purchasing Bureau  
Address: 1526 K Street, Suite 130  
Lincoln, NE 68508

### B. GENERAL INFORMATION

The Invitation To Bid (ITB) is designed to solicit bids from qualified vendors who will be responsible for providing Articulated All Wheel Drive Loader With Minimum 2.2 Cubic Yard Bucket at a competitive and reasonable cost. Bids that do not conform to the mandatory items as indicated in the Invitation To Bid will not be considered.

Bids shall conform to all instructions, conditions, and requirements included in the Invitation To Bid. Prospective Bidders are expected to carefully examine all documentation, schedules, and requirements stipulated in this Invitation To Bid, and respond to each requirement in the format prescribed.

In addition to the provisions of this Invitation To Bid and the awarded bid, which shall be incorporated by reference in the contract, any additional clauses or provisions required by the terms and conditions will be included as an amendment to the contract.

A fixed-price contract will be awarded as a result of this Invitation to Bid.

### C. COMMUNICATION WITH STATE STAFF AND EVALUATORS

From the date the Invitation To Bid is issued until a determination is announced regarding the contract award, contact regarding this project between potential Contractors and individuals employed by the State is restricted to only written communication with the staff designated above as the point of contact for this Invitation To Bid. Bidders shall not have any communication with, or attempt to communicate with or influence in any way, any evaluator involved in this ITB.

Once a Contractor is preliminarily selected, as documented in the intent to award, that Contractor is restricted from communicating with State staff until a contract is signed. The following exceptions to these restrictions are permitted:

- a. Written communication with the person(s) designated as the point(s) of contact for this Invitation To Bid or procurement;
- b. Contacts made pursuant to any pre-existing contracts or obligations; and
- c. State-requested presentations, key personnel interviews, clarification sessions or discussions to finalize a contract.

Violations of these conditions may be considered sufficient cause to reject a Bidder's bid and/or selection irrespective of any other condition. No individual member of the State or employee of the State is empowered to make binding statements regarding this Invitation To Bid. The Buyer will issue any clarifications or opinions regarding this Invitation To Bid in writing.

### D. WRITTEN QUESTIONS AND ANSWERS

Any explanation desired by a Bidder regarding the meaning or interpretation of any Invitation To Bid provision must be submitted in writing to the State Purchasing Bureau and clearly marked "ITB Number 5465 OF; Articulated All Wheel Drive Loader With Minimum 2.2 Cubic Yard Bucket.. Questions". It is preferred that questions be sent via e-mail to [as.materielpurchasing@nebraska.gov](mailto:as.materielpurchasing@nebraska.gov). Questions may also be sent by facsimile to 402-471-2089, and must include a cover sheet clearly indicating that the transmission is to the attention of René A. Botts, showing the total number of pages transmitted, and clearly marked "ITB Number 5465 OF Articulated All Wheel Drive Loader With Minimum 2.2 Cubic Yard Bucket Questions".

It is recommended that Bidders submit questions sequentially numbered and include the Invitation To Bid reference and page number.

Written answers will be provided through an addendum to be posted on the Internet at <http://das.nebraska.gov/materiel/purchasing.html> on or before the date shown in the Schedule of Events.

Question Number	ITB Section References	ITB Page Number	Question

**E. SUBMISSION OF BIDS**

The following describes the requirements related to bid submission, bid handling, and review by the State.

To facilitate the evaluation process, one (1) original of the entire bid should be submitted. Bids must be submitted by the bid due date and time. **A separate sheet must be provided that clearly states which sections, if applicable, have been submitted as proprietary or have copyrighted materials.** All proprietary information the Bidder wishes the State to withhold must be submitted in accordance with the instructions outlined in Section III, Proprietary Information. If a recipient phone number is required for delivery purposes, 402-471-6500 should be used. The Invitation To Bid number must be included in all correspondence.

**F. IMPORTANT NOTICE LANGUAGE**

Bid responses should include the completed Form A and Bidder Contact Sheet. Bids must reference the Invitation To Bid number and be sent to the specified address. Please note that the address label should appear as specified in Section II part A on the page of the calendar or bidder's bid response packet. Rejected late bids will return to the bidder unopened.

Pursuant to Neb. Rev. Stat. § 84-602.02, all State contracts in effect as of January 1, 2014 will be post to a public website beginning July 1, 2014. All non-proprietary or confidential information as defined by State Law WILL BE POSTED FOR PUBLIC VIEWING.

**G. DISCOUNTS**

Prices quoted shall be inclusive of ALL trade discounts. Cash discount terms of less than thirty (30) days will not be considered as part of the bid. Cash discount periods will be computed from the date of receipt of a properly executed claim voucher or the date of completion of delivery of all items in a satisfactory condition, whichever is later.

**H. PRICE ADJUSTMENTS DURING CONTRACT TERM**

Any request for a price adjustment must be submitted in writing to the State Purchasing Bureau, a minimum of thirty (30) days prior to proposed effective date of increase, and must show cause with supporting documentation (such as notification letter from manufacturer). Further documentation may be required by the State, to authenticate the increase (such as manufacturer invoices). Failure to supply any requested supporting documentation may be grounds to cancel the contract. The State further reserves the right to reject any proposed price increase(s), cancel the contract and re-bid if determined to be in the best interest of the State. The State will be given full proportionate benefit of any decrease for the term of the contract. No price increases are to be billed to any State Agencies without prior written approval by the State Purchasing Bureau. Contract supplier or suppliers may honor pricing and extend the contract to political sub-divisions, cities, and counties. Terms and conditions of the contract must be met by political sub-divisions, cities, and counties.

**I. PAYMENT**

Payment will be made by the responsible agency in accordance with the State of Nebraska Prompt Payment Act, Neb. Rev. Stat. §§ 81-2401 through 81-2408. The State may request that payment be made electronically instead of by state warrant.

**J. BID EXECUTION**

Bids must be signed in ink by the Bidder on the State of Nebraska's Invitation To Bid form. All bids must be typewritten or in ink on the State of Nebraska's Invitation To Bid form. Erasures and alternations must be initialed by the Bidder in ink. No telephone or voice bids will be accepted. Failure to comply with these provisions may result in the rejection of the bid.

**K. BID OPENING**

The sealed bids will be publicly opened and the bidding entities announced on the date, time, and location shown in the Schedule of Events. Bids will be available for viewing by those present at the bid opening. Vendors may also contact the State to schedule an appointment for viewing bids after the Intent to Award has been posted to the website.



**L. ELECTRONIC DOCUMENTS/FACSMILIE SUBMISSIONS**

The State Purchasing Bureau will not accept electronic responses to an Invitation To Bid for a commodity contract at any dollar amount. However, an exception applies to one-time purchase bids under \$25,000. These one-time purchase bids may be submitted by electronic means, but cannot exceed ten (10) pages.

Sealed responses to an Invitation To Bid that contain a two party bid, may include electronic pages transmitted between the two parties, but these documents cannot be submitted to the State Purchasing Bureau by electronic means. No direct electronic solicitation responses will be accepted for a commodity contract of any estimated value.

**M. VALID BID TIME**

Bids shall be firm for a minimum of sixty (60) calendar days after the opening date, unless otherwise stipulated by either party in the Invitation To Bid.

**N. ALTERNATE/EQUIVALENT BIDS**

Bidder may offer bids which are at variance from the express specifications of the Invitation To Bid. The State reserves the right to consider and accept such bids if, in the judgment of the State Procurement Manager, the bid will result in goods and/or services equivalent to or better than those which would be supplied in the original bid specifications. Bidders must indicate on the Invitation To Bid the manufacturer's name, number and shall submit with their bid, sketches, descriptive literature and/or complete specifications. Reference to literature submitted with a previous bid will not satisfy this provision. Bids which do not comply with these requirements are subject to rejection. In the absence of any stated deviation or exception, the bid will be accepted as in strict compliance with all terms, conditions and specification, and the Bidder shall be held liable therefore.

**O. LATE BIDS**

Bids received after the time and date of the bid opening will be considered late bids. Rejected late bids will be returned to the Bidder unopened. The State is not responsible for bids that are late or lost due to mail service inadequacies, traffic, or any other reason(s).

**P. NO BID**

If not submitting a bid, respond by returning the Invitation To Bid form explaining the reason in the space provided. NOTE: To qualify as a respondent, Bidder must submit a "NO BID" and it must be received no later than the stated bid opening date and time.

**Q. LUMP SUM OR ALL OR NONE BIDS**

The State reserves the right to purchase item-by-item, by groups or as a total when the State may benefit by so doing. Bidders may submit a bid on an "all or none" or "lump sum" basis, but should also submit a bid on an item-by-item basis. The term "all or none" means a conditional bid which requires the purchase of all items on which bids are offered and Bidder declines to accept award on individual items; a "lump sum" bid is one in which the Bidder offers a lower price than the sum of the individual bids if all items are purchased but agrees to deliver individual items at the prices quoted.

**R. REJECTION OF BIDS**

The State reserves the right to reject any or all bids, wholly or in part, or to award to multiple Bidders in whole or in part. The State reserves the right to waive any deviations or errors that are not material, do not invalidate the legitimacy of the bid and do not improve the Bidder's competitive position. All awards will be made in a manner deemed in the best interest of the State. The State reserves the right to reject any or all bids and re-advertise for bids; and further reserves the right to waive any informality or irregularity.

**S. EVALUATION OF BIDS**

All responses to this Invitation To Bid which fulfill all mandatory requirements will be evaluated for conformance to requested specifications. Elements that may also be considered include but are not limited to:

- a. The ability, capacity, and skill of the Bidder to deliver and implement the system or project, or provide the requested goods, that meet the requirements of the Invitation to Bid;
- b. The character, integrity, reputation, judgment, experience, and efficiency of the Bidder;
- c. Whether the Bidder can perform the contract within the specified time frame;
- d. The quality of Bidder performance on prior contracts; and
- e. Such other information that may be secured and that has a bearing on the decision to award the contract.

**T. BID TABULATIONS**

Bid tabulations are available on the website at: <http://www.das.state.ne.us/materiel/purchasing/bidtabs.htm>.

Bid tabulations will not be provided by telephone or facsimile. Bid files may be examined, after the evaluation period is over, during normal business hours by appointment.

**U. MANDATORY REQUIREMENTS**

The bids will first be examined to determine if all mandatory requirements listed below have been addressed to warrant further evaluation. Bids not meeting mandatory requirements will be excluded from further evaluation. The mandatory requirement items are as follows:

- a. Invitation To Bid for Commodity Contract form, signed in ink;
- b. The completed Invitation To Bid document; and
- c. Bidder should submit a copy of the manufacturer's written warranty with bid submission. If not submitted with ITB, bidder has five (5) business days to submit document upon request of State Purchasing Bureau.

**V. REFERENCE CHECKS**

The State reserves the right to check any reference(s), regardless of the source of the reference information, including but not limited to, those that may be identified by the company in the bid, those indicated through the explicitly specified contacts, those that are identified during the review of the bid, or those that result from communication with other entities involved with similar projects. The State may use a third party to conduct reference checks.

**W. RECYCLING**

As outlined in Neb. Rev. Stat. § 81-15,159, a preference shall be given to those Bidders that provide products, materials, or supplies which are manufactured or produced from recycled material or that can be readily reused or recycled after its normal use. Preference will also be given to purchases of corn-based biodegradable plastics and road deicers. No preference shall be given if such preference would result in the purchase of products, materials, or supplies that are of inadequate quality or of substantially higher cost.

**X. SECRETARY OF STATE/TAX COMMISSIONER REGISTRATION REQUIREMENTS**

All Bidders should be authorized to transact business in the State of Nebraska. All Bidders are expected to comply with all Nebraska Secretary of State Registration requirements. It is the responsibility of the Bidder to comply with any registration requirements pertaining to types of business entities (e.g. person, partnership, foreign or domestic limited liability company, association, or foreign or domestic corporation or other type of business entity). The Bidder who is the recipient of an Intent to Award will be required to certify that it has complied and produce a true and exact copy of its current (within ninety (90) calendar days), valid Certificate of Good Standing or Letter of Good Standing; or in the case of a sole proprietorship, provide written documentation of sole proprietorship. This must be accomplished prior to the award of the contract. Construction Contractors are expected to meet all applicable requirements of the Nebraska Contractor Registration Act and provide a current, valid certification of registration. Further, all Bidders shall comply with any and all other applicable Nebraska statutes regarding transacting business in the State of Nebraska. Bidders should submit the above certification(s) with their bid.

**Y. RESIDENT BIDDER**

Pursuant to Neb. Rev. Stat. §§ 73-101.01 through 73-101.02, a Resident Bidder shall be allowed a preference against a Nonresident Bidder from a state which gives or requires a preference to Bidders from that state. The preference shall be equal to the preference given or required by the state of the Nonresident Bidders. Where the lowest responsible bid from a resident bidder is equal in all respects to one from a nonresident bidder from a state which has no preference law, the resident bidder shall be awarded the contract. The provision of this preference shall not apply to any contract for any project upon which federal funds would be withheld because of the provisions of this preference.

**Z. EVALUATION CRITERIA AND AWARD**

The State of Nebraska reserves the right to evaluate bids in a manner, and utilizing methods, selected in the State of Nebraska's best interest and discretion. The State of Nebraska may waive informalities or irregularities in bids if the waiver is in the best interest of the State of Nebraska and such waiver does not prejudice other bidders in the State of Nebraska's discretion. After evaluation of the bids, the State of Nebraska may take, in the State's discretion, one or more of the following actions:

- Accept or reject a portion of or all of a bid;
- Accept or reject all bids;
- Withdraw the Invitation to Bid;
- Elect to rebid the Invitation to Bid;
- Award single lines or multiple lines to one or more bidders; or,
- Award one or more complete contracts.

The State of Nebraska reserves the right to make awards that are in the best interest of the State of Nebraska. The State of Nebraska may consider, but is not limited to, one or more of the following award criteria:

- Price;
- Location;

Quality;  
Delivery time; and,  
State contract management requirements or costs.  
[Additional criteria may be added]

By submitting a bid in response to this Invitation to Bid, the Bidder grants to the State the right to contact or arrange a visit in person with any or all of the Bidder's clients.

Once an Intent to Award decision has been determined, it will be posted to the Internet at:  
<http://das.nebraska.gov/materiel/purchasing.html/>

**AA. POLITICAL SUB-DIVISIONS**

The Contractor may extend the contract to political sub-divisions conditioned upon the honoring of the prices charged to the State. Terms and conditions of the Contract must be met by political sub-divisions. Under no circumstances shall the State be contractually obligated or liable for any purchases by political sub-divisions or other public entities not authorized by Neb. Rev. Stat. § 81-145, listed as "all officers of the state, departments, bureaus, boards, commissions, councils, and institutions receiving legislative appropriations." A listing of Nebraska political subdivisions may be found at the website of the Nebraska Auditor of Public Accounts.

**BB. VIOLATION OF TERMS AND CONDITIONS**

Violation of the terms and conditions contained in this Invitation To Bid or any resultant contract, at any time before or after the award, shall be grounds for action by the State which may include, but is not limited to, the following:

- a. Rejection of a bidder's proposal;
- b. Withdrawal of the Intent to Award
- c. Termination of the resulting contract.
- d. Legal action.
- e. Suspension of the bidder from further bidding with the State for the period of time relative to the seriousness of the violation, such period to be within the sole discretion of the State.


**III. INVITATION TO BID - TERMS AND CONDITIONS**

By signing the "Invitation To Bid" form, the Bidder guarantees compliance with the provisions stated in this Invitation To Bid, agrees to the Terms and Conditions unless otherwise agreed to, and certifies Bidder maintains a drug free work place environment.

Bidders are expected to closely read the Terms and Conditions and provide a binding signature of intent to comply with the Terms and Conditions; provided, however, a Bidder may indicate any exceptions to the Terms and Conditions by one (1) clearly identifying the term or condition by subsection, and two (2) including an explanation for the Bidder's inability to comply with such term or condition which includes a statement recommending terms and conditions the Bidder would find acceptable. Rejection in whole or in part of the Terms and Conditions may be cause for rejection of a Bidder's bid. Bidders must include completed Section III with their ITB response.

The State of Nebraska is soliciting bids in response to the ITB. The State of Nebraska will not consider bids that propose the substitution of the bidder's contract, agreements, or terms for those of the State of Nebraska's. Any License, Service Agreement, Customer Agreement, User Agreement, Bidder Terms and Conditions, Document, or Clause purported or offered to be included as a part of this ITB must be submitted as individual clauses, as either a counter-offer or additional language, and each clause must be acknowledged and accepted in writing by the State. If the Bidder's clause is later found to be in conflict with the ITB or resulting contract the Bidder's clause shall be subordinate to the ITB or resulting contract.

**A. GENERAL**

Accept (Initial)	Reject (Initial)	Reject & Provide Alternative within ITB Response (Initial)	NOTES/COMMENTS:
			

The contract resulting from this Invitation To Bid shall incorporate the following documents:

- a. Amendment to Contract Award with the most recent dated amendment having the highest priority;
- b. Contract Award and any attached Addenda;
- c. The Invitation To Bid form and the Contractor's Bid Response signed in ink
- d. Amendments to ITB and any Questions and Answers; and
- e. The original ITB document and any Addenda.


These documents constitute the entirety of the contract.

Unless otherwise specifically stated in a contract amendment, in case of any conflict between the incorporated documents, the documents shall govern in the following order of preference with number one (1) receiving preference over all other documents and with each lower numbered document having preference over any higher numbered document: 1) Amendment to Contract Award with the most recent dated amendment having the highest priority, 2) Contract Award and any attached Addenda, 3) the signed Invitation To Bid form and the Contractor's Bid Response 4) Amendments to ITB and any Questions and Answers, 5) the original ITB document and any Addenda.

Any ambiguity in any provision of this contract which shall be discovered after its execution shall be resolved in accordance with the rules of contract interpretation as established in the State of Nebraska.

Once bids are opened they become the property of the State of Nebraska and will not be returned.

**B. DEBARMENT**

Accept (Initial)	Reject (Initial)	Reject & Provide Alternative within ITB Response (Initial)	NOTES/COMMENTS:
			

The contractor, by signature to the Invitation To Bid, certifies that the contractor is not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded by any federal department or agency from participating in transactions (debarred). The contractor also agrees to include the above requirements in any and all

subcontracts into which it enters. The contractor also agrees to include the above requirements in any and all subcontracts into which it enters. The contractor shall immediately notify the Department if, during the term of this contract, contractor becomes debarred. The Department may immediately terminate this contract by providing contractor written notices if contractor becomes debarred during the term of this contract.

**C. SPECIFICATIONS**

Accept (Initial)	Reject (Initial)	Reject & Provide Alternative within ITB Response (Initial)	NOTES/COMMENTS:
<i>✓</i>			

Any manufacturer's names, trade names, brand names, information and/or catalog numbers listed in a specification are for reference and not intended to limit competition, but will be used as the standard by which equivalent material offered will be judged. The State Procurement Manager will be the sole judge of equivalency. The Bidder may offer any brands which meets or exceeds the specification. When a specific product is required, the Invitation to Bid will so state. Any item bid is to be the latest current model under standard production at the time of order. No used or refurbished equipment will be accepted, unless otherwise stated.

**D. PERFORMANCE AND DEFAULT**

Accept (Initial)	Reject (Initial)	Reject & Provide Alternative within ITB Response (Initial)	NOTES/COMMENTS:
<i>✓</i>			

The State reserves the right to require a performance bond from the successful Bidder, as provided by law, without expense to the State. Otherwise, in case of default of the Contractor, the State may procure the articles from other sources and hold the Contractor responsible for any excess cost occasioned thereby.

**E. DRUG POLICY**

Accept (Initial)	Reject (Initial)	Reject & Provide Alternative within ITB Response (Initial)	NOTES/COMMENTS:
<i>✓</i>			

Bidder certifies that it maintains a drug free workplace environment to ensure worker safety and workplace integrity. Contractor agrees to provide a copy of its drug free workplace policy at any time upon request by the State.


**F. NE ACCESS TECHNOLOGY STANDARDS**

Accept (Initial)	Reject (Initial)	Reject & Provide Alternative within ITB Response (Initial)	NOTES/COMMENTS:
<i>✓</i>			

Contractor shall review the Nebraska Technology Access Standards, found at <http://nitc.nebraska.gov/standards/2-201.html> and ensure that products and/or services provided under the contract are in compliance or will comply with the applicable standards to the greatest degree possible. In the event such standards change during the Contractor's performance, the State may create an amendment to the contract to request that contract comply with the changed standard at a cost mutually acceptable to the parties.




**G. COMPLIANCE WITH CIVIL RIGHTS LAWS AND EQUAL OPPORTUNITY EMPLOYMENT / NONDISCRIMINATION**

Accept (Initial)	Reject (Initial)	Reject & Provide Alternative within ITB Response (Initial)	NOTES/COMMENTS:
			


The Contractor shall comply with all applicable local, state, and federal statutes and regulations regarding civil rights laws and equal opportunity employment. The Nebraska Fair Employment Practice Act prohibits Contractors of the State of Nebraska, and their Subcontractors, from discriminating against any employee or applicant for employment, with respect to hire, tenure, terms, conditions, compensation, or privileges of employment because of race, color, religion, sex, disability, marital status, or national origin (Neb. Rev. Stat. §§ 48-1101 to 48-1125). The Contractor guarantees compliance with the Nebraska Fair Employment Practice Act, and breach of this provision shall be regarded as a material breach of contract. The Contractor shall insert a similar provision in all subcontracts for services to be covered by any contract resulting from this Invitation To Bid.

**H. PERMITS, REGULATIONS, LAWS**

Accept (Initial)	Reject (Initial)	Reject & Provide Alternative within ITB Response (Initial)	NOTES/COMMENTS:
			

The Contractor shall procure and pay for all permits, licenses, and approvals necessary for the execution of the contract. The Contractor shall comply with all applicable local, state, and federal laws, ordinances, rules, orders, and regulations.


**I. COOPERATION WITH OTHER CONTRACTORS**

Accept (Initial)	Reject (Initial)	Reject & Provide Alternative within ITB Response (Initial)	NOTES/COMMENTS:
			

The State may already have in place or choose to award supplemental contracts related to this Invitation To Bid or any portion thereof.

- a. The State reserves the right to award the contract jointly between two or more potential Contractors, if such an arrangement is in the best interest of the State.
- b. The Contractor shall agree to cooperate with such other Contractors, and shall not commit or permit any act which may interfere with the performance of work by any other Contractor.
- c. The State reserves the right to award multiple contracts or to award line by line contract.

**J. CONTRACTOR RESPONSIBILITY**

Accept (Initial)	Reject (Initial)	Reject & Provide Alternative within ITB Response (Initial)	NOTES/COMMENTS:
			

The Contractor is solely responsible for fulfilling the contract, with responsibility for all services offered and products to be delivered as stated in the Invitation To Bid, the Contractor's bid, and the resulting contract. The Contractor shall be the sole point of contact regarding all contractual matters.

**K. CONTRACT CONFLICTS**

Accept (Initial)	Reject (Initial)	Reject & Provide Alternative within RFP Response (Initial)	NOTES/COMMENTS:
<i>J</i>			

Contractor shall insure that contracts or agreements with sub-contractors and agents, and the performance of services in relation to this contract by sub-contractors and agents, does not conflict with this contract.

**L. FUNDING OUT CLAUSE OR LOSS OF APPROPRIATIONS**

Accept (Initial)	Reject (Initial)	Reject & Provide Alternative within ITB Response (Initial)	NOTES/COMMENTS:
<i>J</i>			

The State may terminate the contract, in whole or in part, in the event funding is no longer available. The State's obligation to pay amounts due for fiscal years following the current fiscal year is contingent upon legislative appropriation of funds for the contract. Should said funds not be appropriated, the State may terminate the contract with respect to those payments for the fiscal years for which such funds are not appropriated. The State will give the Contractor written notice thirty (30) calendar days prior to the effective date of any termination, and advise the Contractor of the location of any related equipment. All obligations of the State to make payments after the termination date will cease and all interest of the State in any related equipment will terminate. In no event shall the Contractor be paid for a loss of anticipated profit.

**M. RIGHT TO AUDIT**

Accept (Initial)	Reject (Initial)	Reject & Provide Alternative within ITB Response (Initial)	NOTES/COMMENTS:
<i>J</i>			

Contractor shall establish and maintain a reasonable accounting system that enables the State to readily audit contract. The State and its authorized representatives shall have the right to audit, to examine, and to make copies of or extracts from all financial and related records (in whatever form they may be kept, whether written, electronic, or other) relating to or pertaining to this contract kept by or under the control of the Contractor, including, but not limited to those kept by the Contractor, its employees, agents, assigns, successors, and Subcontractors. Such records shall include, but not be limited to, accounting records, written policies and procedures; all paid vouchers including those for out-of-pocket expenses; other reimbursement supported by invoices; ledgers; cancelled checks; deposit slips; bank statements; journals; original estimates; estimating work sheets; contract amendments and change order files; backcharge logs and supporting documentation; insurance documents; payroll documents; timesheets; memoranda; and correspondence.

Contractor shall, at all times during the term of this contract and for a period of five (5) years after the completion of this contract, maintain such records, together with such supporting or underlying documents and materials. The Contractor shall at any time requested by the State, whether during or after completion of this contract and at Contractor's own expense make such records available for inspection and audit (including copies and extracts of records as required) by the State. Such records shall be made available to the State during normal business hours at the Contractor's office or place of business. In the event that no such location is available, then the financial records, together with the supporting or underlying documents and records, shall be made available for audit at a time and location that is convenient for the State. Contractor shall ensure the State has these rights with Contractor's assigns, successors, and Subcontractors, and the obligations of these rights shall be explicitly included in any subcontracts or agreements formed between the Contractor and any Subcontractors to the extent that those subcontracts or agreements relate to fulfillment of the Contractor's obligations to the State.

Costs of any audits conducted under the authority of this right to audit and not addressed elsewhere will be borne by the State unless certain exemption criteria are met. If the audit identifies overpricing or overcharges (of any nature) by the Contractor to the State in excess of one-half of one percent (.5%) of the total contract billings, the Contractor shall reimburse the State for the total costs of the audit. If the audit discovers substantive findings related to fraud, misrepresentation, or non-performance, the Contractor shall reimburse the State for total costs of audit. Any adjustments and/or payments that must be made as a result of any such audit or inspection of the Contractor's invoices and/or records shall be made within a reasonable amount of time (not to exceed 90 days) from presentation of the State's findings to Contractor.

**N. CONFLICT OF INTEREST**

Accept (Initial)	Reject (Initial)	Reject & Provide Alternative within ITB Response (Initial)	NOTES/COMMENTS:
<i>[Handwritten Initial]</i>			

By submitting a bid, Bidder certifies that there does not now exist any relationship between the Bidder and any person or entity which is or gives the appearance of a conflict of interest related to this Invitation To Bid or project.

The Bidder certifies that it shall not take any action or acquire any interest, either directly or indirectly, which will conflict in any manner or degree with the performance of its services hereunder or which creates an actual or appearance of conflict of interest.

The Bidder certifies that it will not employ any individual known by Bidder to have a conflict of interest.

**O. BID PREPARATION COSTS**

Accept (Initial)	Reject (Initial)	Reject & Provide Alternative within ITB Response (Initial)	NOTES/COMMENTS:
<i>[Handwritten Initial]</i>			

The State shall not incur any liability for any costs incurred by Bidders in replying to this Invitation To Bid, including any activity related to bidding on this Invitation To Bid.

**P. ERRORS AND OMISSIONS**

Accept (Initial)	Reject (Initial)	Reject & Provide Alternative within ITB Response (Initial)	NOTES/COMMENTS:
<i>[Handwritten Initial]</i>			

The Bidder shall not take advantage of any errors and/or omissions in this Invitation To Bid or resulting contract. The Bidder must promptly notify the State of any errors and/or omissions that are discovered.

**Q. ASSIGNMENT BY THE STATE**

Accept (Initial)	Reject (Initial)	Reject & Provide Alternative within ITB Response (Initial)	NOTES/COMMENTS:
<i>[Handwritten Initial]</i>			

The State shall have the right to assign or transfer the contract or any of its interests herein to any agency, board, commission, or political subdivision of the State of Nebraska. There shall be no charge to the State for any assignment hereunder.

**R. ASSIGNMENT BY THE CONTRACTOR**

Accept (Initial)	Reject (Initial)	Reject & Provide Alternative within ITB Response (Initial)	NOTES/COMMENTS:

The Contractor may not assign, voluntarily or involuntarily, the contract or any of its rights or obligations hereunder (including without limitation rights and duties of performance) to any third party, without the prior written consent of the State, which will not be unreasonably withheld.

**S. GOVERNING LAW**

Accept (Initial)	Reject (Initial)	Reject & Provide Alternative within ITB Response (Initial)	NOTES/COMMENTS:

The contract shall be governed in all respects by the laws and statutes of the State of Nebraska. Any legal proceedings against the State of Nebraska regarding this Invitation To Bid or any resultant contract shall be brought in the State of Nebraska administrative or judicial forums as defined by State law. The Contractor must be in compliance with all Nebraska statutory and regulatory law.

**T. ATTORNEY'S FEES**

Accept (Initial)	Reject (Initial)	Reject & Provide Alternative within ITB Response (Initial)	NOTES/COMMENTS:


In the event of any litigation, appeal, or other legal action to enforce any provision of the contract, the Contractor agrees to pay all expenses of such action, as permitted by law, including attorney's fees and costs, if the State is the prevailing party.

**U. ADVERTISING**

Accept (Initial)	Reject (Initial)	Reject & Provide Alternative within ITB Response (Initial)	NOTES/COMMENTS:

The Contractor agrees not to refer to the contract award in advertising in such a manner as to state or imply that the company or its services are endorsed or preferred by the State. News releases pertaining to the project shall not be issued without prior written approval from the State.

**V. NOTIFICATION**

Accept (Initial)	Reject (Initial)	Reject & Provide Alternative within ITB Response (Initial)	NOTES/COMMENTS:
			


During the bid process, all communication between the State and a Bidder shall be between the Bidder's representative clearly noted in its bid and the buyer noted in Section II Part A., Procuring Office and Contact Person, of this ITB. Bidder is at all times to keep its point of contact updated with the most current information. After the award of the contract, all notices under the contract shall be deemed duly given upon delivery to the staff designated as the point of contact for this ITB, in person, or upon delivery by U.S. Mail, facsimile, or e-mail. Each Bidder should provide in its bid the name, title, and complete address of its designee to receive notices.

- a. Except as otherwise expressly specified herein, all notices, requests, or other communications shall be in writing and shall be deemed to have been given if delivered personally or mailed, by U.S. Mail, postage prepaid, return receipt requested, to the parties at their respective addresses set forth above, or at such other addresses as may be specified in writing by either of the parties. All notices, requests, or communications shall be deemed effective upon personal delivery or three (3) calendar days following deposit in the mail.
- b. Whenever the Contractor encounters any difficulty which is delaying or threatens to delay its timely performance under the contract, the Contractor shall immediately give notice thereof in writing to the State reciting all relevant information with respect thereto. Such notice shall not in any way constitute a basis for an extension of the delivery schedule or be construed as a waiver by the State of any of its rights or remedies to which it is entitled by law or equity or pursuant to the provisions of the contract. Failure to give such notice, however, may be grounds for denial of any request for an extension of the delivery schedule because of such delay.

Either party may change its address for notification purposes by giving notice of the change, and setting forth the new address and an effective date.

For the duration of the contract, all communication between Contractor and the State regarding the contract shall take place between the Contractor and individuals specified by the State in writing. Communication about the contract between Contractor and individuals not designated as points of contact by the State is strictly forbidden.

**W. EARLY TERMINATION**

Accept (Initial)	Reject (Initial)	Reject & Provide Alternative within ITB Response (Initial)	NOTES/COMMENTS:
			


The contract may be terminated as follows:

- a. The State and the Contractor, by mutual written agreement, may terminate the contract at any time.
- b. The State, in its sole discretion, may terminate the contract for any reason upon thirty (30) calendar days written notice to the Contractor. The Contractor shall not be relieved of warranty or other obligations incurred under the terms of the contract. In the event of cancellation the Contractor shall be entitled to payment, for those products received and accepted by the State.
- c. The State may terminate the contract immediately for the following reasons:
  - a. if directed to do so by statute;
  - b. Contractor has made an assignment for the benefit of creditors, has admitted in writing its inability to pay debts as they mature, or has ceased operating in the normal course of business;
  - c. a trustee or receiver of the Contractor or of any substantial part of the Contractor's assets has been appointed by a court;




- d. fraud, misappropriation, embezzlement, malfeasance, misfeasance, or illegal conduct pertaining to performance under the contract by its Contractor, its employees, officers, directors, or shareholders;
- e. an involuntary proceeding has been commenced by any party against the Contractor under any one of the chapters of Title 11 of the United States Code and (i) the proceeding has been pending for at least sixty (60) calendar days; or (ii) the Contractor has consented, either expressly or by operation of law, to the entry of an order for relief; or (iii) the Contractor has been decreed or adjudged a debtor;
- f. a voluntary petition has been filed by the Contractor under any of the chapters of Title 11 of the United States Code;
- g. Contractor intentionally discloses confidential information;
- h. Contractor has or announces it will discontinue support or provision of the deliverable;
- i. second or subsequent documented "vendor performance report" form deemed acceptable by the State Purchasing Bureau; or
- j. Contractor engaged in collusion or ones' actions which could have provided Contractor an unfair advantage in obtaining this contract.

**X. BREACH BY CONTRACTOR**

Accept (Initial)	Reject (Initial)	Reject & Provide Alternative within ITB Response (Initial)	NOTES/COMMENTS:
			


The State may terminate the contract, in whole or in part, if the Contractor fails to perform its obligations under the contract in a timely and proper manner. The State may, by providing a written notice of default to the Contractor, allow the Contractor to cure a failure or breach of contract within a period of thirty (30) calendar days (or longer at State's discretion considering the gravity and nature of the default). Said notice shall be delivered by Certified Mail, Return Receipt Requested, or in person with proof of delivery. Allowing the Contractor time to cure a failure or breach of contract does not waive the State's right to immediately terminate the contract for the same or different contract breach which may occur at a different time. In case of default of the Contractor, the State may contract the goods from other sources and hold the Contractor responsible for any excess cost occasioned thereby.

**Y. ASSURANCES BEFORE BREACH**

Accept (Initial)	Reject (Initial)	Reject & Provide Alternative within ITB Response (Initial)	NOTES/COMMENTS:
			


If any document or deliverable required pursuant to the contract does not fulfill the requirements of the Intent To Bid/resulting contract, upon written notice from the State, the Contractor shall deliver assurances in the form of additional Contractor resources at no additional cost to the project in order to complete the deliverable, and to ensure that other project schedules will not be adversely affected.

**Z. ACCEPTANCE AND PAYMENT OF GOODS**

Accept (Initial)	Reject (Initial)	Reject & Provide Alternative within ITB Response (Initial)	NOTES/COMMENTS:
			


In the event that the Contractor fails to provide the goods requested by the State, the State will not pay for such products until the same has been received and accepted by the State.

**AA. FORCE MAJEURE**

Accept (Initial)	Reject (Initial)	Reject & Provide Alternative within ITB Response (Initial)	NOTES/COMMENTS:
			


Neither party shall be liable for any costs or damages resulting from its inability to perform any of its obligations under the contract due to a natural disaster, or other similar event outside the control and not the fault of the affected party ("Force Majeure Event"). A Force Majeure Event shall not constitute a breach of the contract. The party so affected shall immediately give notice to the other party of the Force Majeure Event. The State may grant relief from performance of the contract if the Contractor is prevented from performance by a Force Majeure Event. The burden of proof for the need for such relief shall rest upon the Contractor. To obtain release based on a Force Majeure Event, the Contractor shall file a written request for relief with the State Purchasing Bureau. Labor disputes with the impacted party's own employees will not be considered a Force Majeure Event and will not suspend performance requirements under the contract.

**BB. PROHIBITION AGAINST ADVANCE PAYMENT**

Accept (Initial)	Reject (Initial)	Reject & Provide Alternative within ITB Response (Initial)	NOTES/COMMENTS:
			


Payments shall not be made until contractual deliverable(s) are received and accepted by the State.

**CC. PAYMENT**

Accept (Initial)	Reject (Initial)	Reject & Provide Alternative within ITB Response (Initial)	NOTES/COMMENTS:
			

State will render payment to Contractor when the terms and conditions of the contract and specifications have been satisfactorily completed on the part of the Contractor as solely determined by the State. Payment will be made by the responsible agency in compliance with the State of Nebraska Prompt Payment Act (See Neb. Rev. Stat. §§ 81-2401 through 81-2408). The State may require the Contractor to accept payment by electronic means such as ACH deposit. In no event shall the State be responsible or liable to pay for any goods provided by the Contractor prior to the Effective Date, and the Contractor hereby waives any claim or cause of action for any such claims.

**DD. INVOICES**

Accept (Initial)	Reject (Initial)	Reject & Provide Alternative within ITB Response (Initial)	NOTES/COMMENTS:
			

Invoices for payments must be submitted by the Contractor to the agency requesting the goods with sufficient detail to support payment. The terms and conditions included in the Contractor's invoice shall be deemed to be solely for the convenience of the parties. No terms or conditions of any such invoice shall be binding upon the State, and no action by the State, including without limitation the payment of any such invoice in whole or in part, shall be construed as binding or estopping the State with respect to any such term or condition, unless the invoice term or condition has been previously agreed to by the State as an amendment to the contract.

EE. TAXES

Accept (Initial)	Reject (Initial)	Reject & Provide Alternative within ITB Response (Initial)	NOTES/COMMENTS:
<i>[Handwritten Initial]</i>			

The State is not required to pay taxes of any kind and assumes no such liability as a result of this solicitation. Any property tax payable on the Contractor's equipment which may be installed in a state-owned facility is the responsibility of the Contractor.

FF. SEVERABILITY

Accept (Initial)	Reject (Initial)	Reject & Provide Alternative within ITB Response (Initial)	NOTES/COMMENTS:
<i>[Handwritten Initial]</i>			

If any term or condition of the contract is declared by a court of competent jurisdiction to be illegal or in conflict with any law, the validity of the remaining terms and conditions shall not be affected, and the rights and obligations of the parties shall be construed and enforced as if the contract did not contain the particular provision held to be invalid.

GG. PROPRIETARY INFORMATION

Accept (Initial)	Reject (Initial)	Reject & Provide Alternative within ITB Response (Initial)	NOTES/COMMENTS:
<i>[Handwritten Initial]</i>			

Data contained in the bid and all documentation provided therein, become the property of the State of Nebraska and the data becomes public information upon opening the bid. If the Bidder wishes to have any information withheld from the public, such information must fall within the definition of proprietary information contained within Nebraska's public record statutes. **All proprietary information the Bidder wishes the State to withhold must be submitted in a sealed package, which is separate from the remainder of the bid, and provide supporting documents showing why such documents should be marked proprietary.** The separate package must be clearly marked PROPRIETARY on the outside of the package. **Bidders may not mark their entire Invitation To Bid as proprietary.** Pricing submitted in Bidder's ITB may not be marked as proprietary information. Failure of the Bidder to follow the instructions for submitting proprietary and copyrighted information may result in the information being viewed by other Bidders and the public. Proprietary information is defined as trade secrets, academic and scientific research work which is in progress and unpublished, and other information which if released would give advantage to business competitors and serve no public purpose (see Neb. Rev. Stat. § 84-712.05(3)). In accordance with Attorney General Opinions 92068 and 97033, Bidders submitting information as proprietary may be required to prove specific, named competitor(s) who would be advantaged by release of the information and the specific advantage the competitor(s) would receive. Although every effort will be made to withhold information that is properly submitted as proprietary and meets the State's definition of proprietary information, the State is under no obligation to maintain the confidentiality of proprietary information and accepts no liability for the release of such information.

HH. CERTIFICATION OF INDEPENDENT PRICE DETERMINATION/COLLUSIVE BIDDING

Accept (Initial)	Reject (Initial)	Reject & Provide Alternative within ITB Response (Initial)	NOTES/COMMENTS:
<i>[Handwritten Initial]</i>			

By submission of this bid, the bidder certifies, that it is the party making the foregoing bid and that the bid is not made in the interest of, or on behalf of, any undisclosed person, partnership, company, association, organization, or corporation; that the bid is genuine and not collusive or sham; that the bidder has not directly or indirectly induced or solicited any other bidder to put in a false or sham bid, and has not directly or indirectly colluded, conspired, connived, or agreed with any bidder or anyone else to put in a sham bid, or that anyone shall refrain from bidding; that the bidder has not in any manner, directly or indirectly, sought by agreement, communication, or conference with anyone to fix the bid price of the bidder or any other bidder, or to fix any overhead, profit, or cost element of the bid price, or of that of any other bidder, or to secure any advantage against the public body awarding the contract of anyone interested in the proposed contract; that all statements contained in the bid are true; and further that the bidder has not, directly or indirectly, submitted the bid price or any breakdown thereof, or the contents thereof, or divulged information or data relative thereto, or paid, and will not pay, any fee to any corporation, partnership, company, association, organization, bid depository, or to any member or agent thereof to effectuate a collusive or sham bid.

**II. PRICES**

Accept (Initial)	Reject (Initial)	Reject & Provide Alternative within ITB Response (Initial)	NOTES/COMMENTS:
<i>[Handwritten Initial]</i>			

All prices, costs, and terms and conditions outlined in the proposal shall remain fixed and valid commencing on the opening date of the proposal until an award is made or the Request for Proposal is cancelled.

Prices quoted on the Cost Proposal form shall remain fixed for the first year of the contract period. Any request for a price increase subsequent to the first year must be submitted in writing to the State Purchasing Bureau a minimum of 30 days prior to the price increase taking effect, and be accompanied by documentation justifying the price increase. Further documentation may be required by the State to justify the increase. The State reserves the right to deny any requested price increase. No price increases are to be billed to any State Agencies prior to written amendment of the contract by the parties.

The State will be given full proportionate benefit of any price decrease during the term of the contract. Contractor represents and warrants that all prices for services, now or subsequently specified, are as low as and no higher than prices which the Contractor has charged or intends to charge customers other than the State for the same or similar products and services of the same or equivalent quantity and quality for delivery or performance during the same periods of time. If, during the term of the contract, the Contractor shall reduce any and/or all prices charged to any customers other than the State for the same or similar products or services specified herein, the Contractor shall make an equal or equivalent reduction in corresponding prices for said specified products or services.

Contractor also represents and warrants that all prices set forth in the contract and all prices in addition, which the Contractor may charge under the terms of the contract, do not and will not violate any existing federal, state, or municipal law or regulations concerning price discrimination and/or price fixing. Contractor agrees to hold the State harmless from any such violation. Prices quoted shall not be subject to increase throughout the contract period unless specifically allowed by these specifications.

**JJ. ETHICS IN PUBLIC CONTRACTING**

Accept (Initial)	Reject (Initial)	Reject & Provide Alternative within ITB Response (Initial)	NOTES/COMMENTS:
<i>[Handwritten Initial]</i>			

No Bidder shall pay or offer to pay, either directly or indirectly, any fee, commission compensation, gift, gratuity, or anything of value to any State officer, legislator, employee or evaluator based on the understanding that the receiving person's vote, actions, or judgment will be influenced thereby. No Bidder shall give any item of value to any employee of the State Purchasing Bureau or any evaluator.

Bidders shall be prohibited from utilizing the services of lobbyists, attorneys, political activists, or consultants to secure the contract. It is the intent of this provision to assure that the prohibition of state contact during the procurement process is not subverted through the use of lobbyists, attorneys, political activists, or consultants. It is the intent of

the State that the process of evaluation of bids and award of the contract be completed without external influence. It is not the intent of this section to prohibit Bidders from seeking professional advice, for example consulting legal counsel, regarding terms and conditions of this Invitation To Bid or the format or content of their bid.

If the Bidder is found to be in non-compliance with this section of the Invitation To Bid, they may forfeit the contract if awarded to them or be disqualified from the selection process.

**KK. INDEMNIFICATION**

Accept (Initial)	Reject (Initial)	Reject & Provide Alternative within ITB Response (Initial)	NOTES/COMMENTS:
✱			

a. **GENERAL**

The Contractor agrees to defend, indemnify, hold, and save harmless the State and its employees, volunteers, agents, and its elected and appointed officials ("the indemnified parties") from and against any and all claims, liens, demands, damages, liability, actions, causes of action, losses, judgments, costs, and expenses of every nature, including investigation costs and expenses, settlement costs, and attorney fees and expenses ("the claims"), sustained or asserted against the State, arising out of, resulting from, or attributable to the willful misconduct, negligence, error, or omission of the Contractor, its employees, Subcontractors, consultants, representatives, and agents, except to the extent such Contractor liability is attenuated by any action of the State which directly and proximately contributed to the claims.

b. **INTELLECTUAL PROPERTY**

The Contractor agrees it will, at its sole cost and expense, defend, indemnify, and hold harmless the indemnified parties from and against any and all claims, to the extent such claims arise out of, result from, or are attributable to, the actual or alleged infringement or misappropriation of any patent, copyright, trade secret, trademark, or confidential information of any third party by the Contractor or its employees, Subcontractors, consultants, representatives, and agents; provided, however, the State gives the Contractor prompt notice in writing of the claim. The Contractor may not settle any infringement claim that will affect the State's use of the Licensed Software without the State's prior written consent, which consent may be withheld for any reason.

If a judgment or settlement is obtained or reasonably anticipated against the State's use of any intellectual property for which the Contractor has indemnified the State, the Contractor shall, at the Contractor's sole cost and expense, promptly modify the item or items which were determined to be infringing, acquire a license or licenses on the State's behalf to provide the necessary rights to the State to eliminate the infringement, or provide the State with a non-infringing substitute that provides the State the same functionality. At the State's election, the actual or anticipated judgment may be treated as a breach of warranty by the Contractor, and the State may receive the remedies provided under this ITB.

c. **SELF-INSURANCE**

The State of Nebraska is self-insured for any loss and purchases excess insurance coverage pursuant to Neb. Rev. Stat. § 81-8,239.01 (Reissue 2008). If there is a presumed loss under the provisions of this agreement, Contractor may file a claim with the Office of Risk Management pursuant to Neb. Rev. Stat. §§ 81-8,829 – 81-8,306 for review by the State Claims Board. The State retains all rights and immunities under the State Miscellaneous (Section 81-8,294), Tort (Section 81-8,209), and Contract Claim Acts (Section 81-8,302), as outlined in Neb. Rev. Stat. § 81-8,209 *et seq.* and under any other provisions of law and accepts liability under this agreement to the extent provided by law.



**LL. ANTITRUST**

Accept (Initial)	Reject (Initial)	Reject & Provide Alternative within ITB Response (Initial)	NOTES/COMMENTS:
B			

The Contractor hereby assigns to the State any and all claims for overcharges as to goods and/or services provided in connection with this contract resulting from antitrust violations which arise under antitrust laws of the United States and the antitrust laws of the State.

**MM. EMPLOYEE WORK ELIGIBILITY STATUS**

Accept (Initial)	Reject (Initial)	Reject & Provide Alternative within ITB Response (Initial)	NOTES/COMMENTS:
B			

The Contractor is required and hereby agrees to use a federal immigration verification system to determine the work eligibility status of employees physically performing services within the State of Nebraska. A federal immigration verification system means the electronic verification of the work authorization program authorized by the Illegal Immigration Reform and Immigrant Responsibility Act of 1996, 8 U.S.C. 1324a, known as the E-Verify Program, or an equivalent federal program designated by the United States Department of Homeland Security or other federal agency authorized to verify the work eligibility status of an employee.

If the Contractor is an individual or sole proprietorship, the following applies:

- a. The Contractor must complete the United States Citizenship Attestation Form, available on the Department of Administrative Services website at <http://das.nebraska.gov/materiel/purchasing.html>  
The completed United States Attestation Form should be submitted with the Invitation To Bid response.
- b. If the Contractor indicates on such attestation form that he or she is a qualified alien, the Contractor agrees to provide the US Citizenship and Immigration Services documentation required to verify the Contractor's lawful presence in the United States using the Systematic Alien Verification for Entitlements (SAVE) Program.
- c. The Contractor understands and agrees that lawful presence in the United States is required and the Contractor may be disqualified or the contract terminated if such lawful presence cannot be verified as required by Neb. Rev. Stat. §4-108.

#### **IV. SCOPE OF WORK**

The Bidder must provide the following information in response to this Invitation To Bid.

##### **A. SCOPE**

It is the intent of this bid invitation to establish a contract to supply Articulated All Wheel Drive Loader With Minimum 2.2 Cubic Yard Bucket per the attached specifications from date of award for a period of one (1) year with the option to renew for an additional four (4) one year periods when mutually agreeable to the vendor and the State of Nebraska. The State reserves the right to extend the period of this contract beyond the end date when mutually agreeable to the vendor and the State of Nebraska.

All items bid shall be of the latest manufacture in production as of the date of the Invitation To Bid and be of proven performance and under standard design complete as regularly advertised and marketed. All necessary materials for satisfactory performance of the supplies shall be incorporated into the Articulated All Wheel Drive Loader With Minimum 2.2 Cubic Yard Bucket whether or not they may be specifically mentioned below.

Complete specifications, manufacturer's descriptive literature and/or advertising data sheets with cuts or photographs may be required prior to an award and should be included with the bid on the IDENTICAL items proposed. Literature should be complete and the latest published. Any information necessary to show compliance with these specifications not given on the manufacturer's descriptive literature and/or advertising data sheets should be supplied in writing on or attached to the bid document. If manufacturer's specifications sheets, descriptive literature, advertising data sheets or information necessary to show compliance with these specifications is not supplied in writing on or attached to the bid document, the Bidder will be required to submit requested information within three (3) business days of a written request. Failure to submit requested descriptive literature or advertising data sheets may be grounds to reject the bid.

##### **B. AMENDMENT**

This Contract may be amended at any time in writing upon the agreement of both parties.

##### **C. REVISIONS**

In the event any product is discontinued or replaced with a newer version during the contract period, the State of Nebraska reserves the right to amend this contract to include the new product.

**V. INVITATION TO BID - TECHNICAL SPECIFICATIONS**

**A. BIDDER INSTRUCTIONS**

Bidder must respond to each of the following statements. Specifications listed are minimum conditions that must be met in order for a Bidder to qualify for the award.

"YES" response means the Bidder guarantees they can meet this condition.

"NO" response means the Bidder cannot meet this condition and will not be considered.

"NO & PROVIDE ALTERNATIVE" responses should be used only with a narrative response in the NOTES/COMMENTS section explaining in detail any deviation from the Bidder's ability to meet the condition, and an explanation of how this would be determined to be an acceptable alternative to meeting the condition. Alternatives must be detailed in such a way that allows such deviations to be fully evaluated. The State of Nebraska shall determine at its sole discretion whether or not the Bidder's alternative is an acceptable alternative.

**B. NON-COMPLIANCE STATEMENT**

YES	NO	NO & PROVIDE ALTERNATIVE	
X			1. Read these specifications carefully. Any and all exceptions to these specifications must be written on or attached to quotation request. Any noncompliance may void your quotation. Non-compliance to any single specification can void your bid.
X			2. It is the responsibility of Bidders to obtain information and clarifications as provided below. The State of Nebraska is not responsible for any erroneous or incomplete understandings or wrongful interpretations of this Invitation to Bid by any Bidder.
X			3. No interpretation related to the meaning of bid specifications or other pre-bid documents will be made orally to any Bidder by the State of Nebraska. Any Invitation To bid interpretation must be put in writing and faxed by the Bidder to: the State Purchasing Bureau, Fax (402) 471-2089 or e-mailed to <b>AS Materiel Purchasing</b> <a href="mailto:as.materielpurchasing@nebraska.gov">as.materielpurchasing@nebraska.gov</a> by the last day to submit written questions that is specified in the Schedule of Events. (Inquiries received after the last day to submit written questions may not be addressed).
<b>NOTES/COMMENTS:</b>			

**C. ENGINE**

YES	NO	NO & PROVIDE ALTERNATIVE	
X			1. Diesel engine shall be a minimum of 5.7 Liter and meet final Tier 4 emissions.
X			2. Engine shall have minimum 135 net horsepower developed at SAE J1349 or ISO 9249 under standard conditions with all accessories.
X			3. Cold starting aid of either glow plugs or equivalent pre-heater or ether injection of Turner LP535-1 or equivalent with cartridge required.
X			4. Manufacturer's recommended muffler, alternator and starter.
X			5. Full flow, throw away type oil filter(s) required.

X			6. Turbo II or Centri brand pre-cleaner or equivalent OEM supplied rotary ejection style pre-cleaner required. Dual element air filtration is preferred.
X			7. Heavy duty radiator guard and crankcase guard is desired.
X			8. Engine housing side panels or tilt hood required.
X			9. Manufacturer's recommended type antifreeze protection to no less than 34 degrees below zero Fahrenheit required.
X			10. A 120 volt AC block heater with a sturdily-mounted, male receptacle with cover that is conveniently located will be furnished in all water-cooled units.
X			11. Counter-balanced rain cap for exhaust preferred. Exhaust elbow is acceptable.
X			12. Please state the following: a. Engine Brand: <u>John Deere</u> b. Engine Model: <u>Power Tech PW6068</u> c. Flywheel Horsepower: <u>141</u> d. Governed RPM: <u>1,700 rpm</u>
NOTES/COMMENTS:			

D. DRIVETRAIN

YES	NO	NO & PROVIDE ALTERNATIVE	
X			1. Torque converter/power shift with minimum three (3) speeds forward and two (2) reverse transmission. Hydrostatic transmission is also acceptable.
X			2. Inboard or outboard four wheel planetary final reduction.
X			3. Limited slip in front and/or rear differential required. Either front or rear differential lock-up will be acceptable. Please state what is to be provided: <u>Hydraulic Locking Front with Conventional Rear</u>
X			4. Minimum forward travel speed will be approximately 20 MPH.
NOTES/COMMENTS:			

E. TIRES

YES	NO	NO & PROVIDE ALTERNATIVE	
X			1. Four 20.5R25, Michelin XTLA, or 550/65R25 XTLA tubeless, steel belted radial will be furnished. Brand <u>Michelin</u> Model # <u>XTLA</u>
NOTES/COMMENTS:			

F. BRAKES

YES	NO	NO & PROVIDE ALTERNATIVE	
X			1. Brakes on all four wheels.
X			2. Brakes shall be boosted, full hydraulic type or air brakes. Please state type of brakes furnished: <u>Hydraulically actuated</u>
N/A			a. Air dryer of equivalent moisture remover required with air brakes.
X			3. Transmission drive or internal wet disk service brakes acceptable.
X			4. Parking brake required.
NOTES/COMMENTS: <u>2. a. The John Deere 524K-11 has No Air Brakes</u>			

G. STEERING

YES	NO	NO & PROVIDE ALTERNATIVE	
X			1. Articulated frame at wheel base center point. Brakes on all four wheels.
X			a. Turn to right and left of at least 35 degrees.
X			2. To be hydraulically assisted.
X			3. Turning radius at outside corner of bucket must not exceed 20 feet.
NOTES/COMMENTS:			



H. LOADER

YES	NO	NO & PROVIDE ALTERNATIVE	
X			A. Static full turn tipping load must be 16,500 pounds or greater.
X			B. Joystick control if available from manufacturer.
X			C. General Purpose loader bucket to be minimum 2.2 cubic yard struck SAE rated but not more than 3 cubic yard heaped SAE rated.
X			a. Bucket shall be minimum 96 inches wide but not less than the overall width of the machine. Bucket shall also be less than 102 inches overall in width.
X			b. Dump clearance at full lift with bucket at 45 degrees discharge shall be at least 9 feet, 2 inches. Addendum-1
X			c. Roll back at grade shall be minimum of 38 degrees.
X			d. Minimum 17,700-pound breakout force.
X			e. Digging depth of at least 1.8 inches below grade with bucket bottom approaching position parallel to grade.
X			f. Bucket level indicator or automatic pre-set to dig position and adjustable automatic lift kick out required.
X			g. Bucket shall have a bolt-on cutting edge.
X			4. Z-bar linkage or Torque parallel linkage will be furnished.
X			5. Loader shall be equipped with a suspension system for the loader boom cylinders. Ride Control/Suspension System to include any accumulators, valves, hydraulic lines and/or electrical circuits as required by manufacturer.
NOTES/COMMENTS:			

I. CAB

YES	NO	NO & PROVIDE ALTERNATIVE	
X			1. The ROPS cab shall be of steel construction.
X			a. Cab shall be fully and tightly enclosed with sound suppression.
X			b. Tinted safety glass windshield, windows and door(s) required.
X			2. Cab to be equipped with mounting ladder.
X			a. Electric windshield wipers with washers both front and rear.
X			b. Inside rear view mirror(s) and floor mat required.
X			c. Defroster fan and heater of adequate capacity for Nebraska required.
X			d. Unit shall have manufacturer's factory installed air conditioning.
X			e. Loader must be able to be operated with door(s) secured open.

X			3. Padded adjustable, cloth covered suspension seat with seat belt shall be provided.
NOTES/COMMENTS:			

J. INSTRUMENTS

YES	NO	NO & PROVIDE ALTERNATIVE	
X			1. The following gauges or digital displays are required.
N/A			a. Air pressure gauge if air brakes.
X			b. Torque converter or transmission oil temperature gauge.
X			c. Fuel gauge or indicator.
X			d. Oil pressure gauge.
X			e. Engine temperature gauge.
X			f. Voltmeter, ammeter or warning light for the 12 or 24 volt system.
X			2. Audible and visible alarm system for high engine temperature, low oil pressure and high transmission oil temperature.
X			3. An electronic, back-up alarm meeting OSHA requirements will be provided.
NOTES/COMMENTS: 1. a. The John Deere 524K-11. Has No Air Brakes.			

K. HYDRAULIC SYSTEM

YES	NO	NO & PROVIDE ALTERNATIVE	
X			1. Constantly driven, gear, piston or vane type pump required.
X			2. Replaceable system filter and pressure relief valve required.
X			3. System operation pressure shall not be in excess of 3,800 PSI.
NOTES/COMMENTS:			

L. COUNTERWEIGHTS

YES	NO	NO & PROVIDE ALTERNATIVE	
X			1. Standard equipment rear counterweights are required if normally furnished by manufacturer.
NOTES/COMMENTS:			

M. GENERAL

YES	NO	NO & PROVIDE ALTERNATIVE	
X			1. The overall length of the loader will not be greater than 24 feet, 4 inches, with loader bucket level on the ground.
X			2. The operation weight of loader with minimum 2.2 cubic yard bucket, ROPS cab and without optional accessories or calcium chloride in tires shall be a minimum of 24,000 pounds. Bidder should state loader weight as described with bid: <b>27,445</b> Pounds.
X			3. Four headlights (two at top of cab near corners and two at bottom of cab near each side) required.
X			4. One rear working light to be provided.
X			5. Combination stop/tail light and horn to be furnished.
X			6. Drawbar hitch with pin is required.
X			7. Turn signal and hazard flashing lights for front and rear must be furnished.
X			8. Manufacturer's front and rear fenders required.
X			9. A slow moving vehicle emblem shall be mounted on the rear of loader and displayed as required per Nebraska Statutes.
X			a. Emblem shall be mounted so as not to restrict airflow for cooling purposes.
NOTES/COMMENTS:			

N. NOISE LEVEL

YES	NO	NO & PROVIDE ALTERNATIVE	
X			1. Bidders should supply with bid the following decibel level per SAE standards.
X			a. Sound exposure work cycle rating: <b>75</b> dba. <b>Static Operator Level (ISO 6394)</b>
NOTES/COMMENTS:			

O. RADIO FREQUENCY SHIELDING – CAUTION!!!

YES	NO	NO & PROVIDE ALTERNATIVE	
X			1. The loader and/or installed components and equipment shall be compatible with use of NDOR mobile and/or two-way communications devices. Main communication radio operates in low band range of 47 MHz to 48 MHz, but all frequencies apply including low band, high band, UHF and VHF.
X			2. The loader and/or installed components and equipment shall be manufactured to meet all current SAE and/or ISO Standards applicable and/or relevant to Electromagnetic Compatibility.
X			3. NDOR will conduct testing of radio/two-way when installed in chassis. NDOR will notify vendor if normal operational parameters are not met due to degradation of signals caused by electromagnetic emissions from chassis or installed components and equipment. Vendor shall be required to work with NDOR personnel to reduce interference level to a point acceptable to NDOR normal radio operating parameters. Vendor shall have 30 days to resolve RFI issue.
X			4. Vendor and/or manufacturer will be responsible for any and all cost to replace and/or modify any parts found to cause radio frequency interference. If NDOR and vendor cannot resolve source of RFI the unit will be sent to an independent accredited lab for testing to ensure SAE and/or ISO Standards compliance. Testing shall be done to SAE and/or ISO Standards which were current at date of bid. Should the loader and/or installed components and equipment fail testing at the accredited lab, the vendor shall be responsible for all cost incurred for testing.
X			5. If after testing by NDOR and/or accredited lab, the vendor is unable or unwilling to incur the cost and correct the RFI issue to the satisfaction of NDOR, All orders and corresponding contract will be canceled.
NOTES/COMMENTS:			

P. MANUALS

YES	NO	NO & PROVIDE ALTERNATIVE	
X			1. Operator/s manual should accompany each unit when delivered.
X			2. Equipment shop repair manual or CD ROM. If available online the State of Nebraska must be able to access it free of charge for fifteen (15) years.
X			3. Engine shop repair manual or CD ROM. If available online the State of Nebraska must be able to access it free of charge for fifteen (15) years.
X			4. Equipment parts manual or CD ROM. If available online the State of Nebraska must be able to access it free of charge for fifteen (15) years.
X			5. Engine parts manual or CD ROM. If available online the State of Nebraska must be able to access it free of charge for fifteen (15) years.
X			6. All manuals must be furnished prior to payment and delivered to Fleet Management, Equipment Data Coordinator. Failure to deliver all manuals that are ordered may result in non-payment of ten percent of purchase order total until all manuals are delivered.

NOTES/COMMENTS:

**Q. MISCELLANEOUS**

YES	NO	NO & PROVIDE ALTERNATIVE	
X			1. The bidders should submit with their bid a list of any special tools they will furnish with each machine.
X			2. Dealer's decals, stickers or other signs shall not be affixed to units; manufacturer's nameplates, stampings and other similar signs are acceptable.
X			3. Dealer's pre-delivery service required.
X			4. Color: Manufacturer's standard yellow color.
X			5. Prior to the awarding of, or entering into any agreement or contract, it shall be the responsibility of the manufacturer and/or the successful bidder to warrant to the State of Nebraska, in writing, that it has factory authorized dealers in the State of Nebraska who will provide warranty/service and repair work without undue delay.

NOTES/COMMENTS:

**R. WARRANTY**

YES	NO	NO & PROVIDE ALTERNATIVE	
X			1. Manufacturer's usual warranty shall apply, and shall be in effect for at least one year from the date the equipment was placed in service by purchasing entity. Bidder should supply warranty information with proposal.
X			2. Bidder should submit a copy of the manufacturer's written warranty with bid submission. If not submitted with ITB, bidder has five (5) business days to submit document upon request of State Purchasing Bureau.
X			3. Manufacturer's warranty coverage shall not limit the number of hours of annual usage for equipment bid and supplied. Limitations on hours of annual usage may be a factor in evaluation and award.
X			4. Vendor shall be responsible for all repairs to include parts, labor and machine transportation cost for a minimum twelve (12) month warranty period.
X			5. The power train and engine shall be warranted for a minimum of additional five years.
X			a. These guarantees are in addition to the minimum twelve (12) month warranty and do not have any effect upon the standard warranty.
X			b. If the engine is not produced by the Loader manufacturer, the vendor will guarantee that the engine will be repaired by a certified and registered engine warranty dealer or distributorship.
X			6. The following power train components are warranted to be free from defects in workmanship and material during the extended warranty period.



X			a. Engine (excluding radiator, alternator, starter, compressor and other attachments).
X			b. Torque converter (if applicable), transmission.
X			c. Drive shafts and Universal joints.
X			d. Differential.
X			e. Transfer gear group.
X			f. Drive axles.
X			g. Drive pumps.
X			h. Drive motors.
X			i. Pinion and bevel gear.
X			j. Final drive gear train.
X			k. Computerized and electronic equipment.
X			7. This warranty is limited to repair or replacement (including both parts and labor) or inspected parts determined to have been defective in material or workmanship. All extended power train warranty repairs will be performed by manufacturer's authorized service personnel. All machine transportation cost to and from the nearest authorized vendor repair facility and travel time and mileage during the extended warranty period will be responsibility of the vendor and/or manufacturer. This warranty does not apply to normal maintenance service (such as engine tune-up) or normal replacement of service or wear items.
X			8. Any oil sampling or other necessary testing needed to implement this warranty must be included in writing with this bid. The Nebraska Department of Roads will do oil sampling if required by the manufacturer, but all materials must be furnished at no charge to the Department. A written report will be returned to Nebraska Department of Roads if sampling is required.
X			9. This extended coverage is subject to the following conditions and limitations:
X			a. Replacement parts provided are warranted for the remainder of the extended warranty period applicable to the product in which installed.
X			b. The machine may not be altered or modified in any manner which affects the mechanical operation as designed without written permission from the Nebraska Department of Roads.
X			10. The following limitations shall be applicable to all guarantees.
X			a. Parts ordering and machine repair requests will occur during dealer's normal working hours.
X			b. The parts and machine repair guarantees will not apply to machines which have been substantially damaged by collision, accident, flood, fire, vandalism or similar occurrence.
X			11. If machine cannot be repaired within thirty (30) days, a comparable loaner machine will be furnished to the State of Nebraska at no cost during the warranty period.
<b>NOTES/COMMENTS:</b>			

S. SPECIFICATION FORM

YES	NO	NO & PROVIDE ALTERNATIVE	
X			1. Successful bidder will be required to complete form to the fullest extent possible for each unit and must accompany each unit when delivered.
X			2. Forms will be supplied by Department of Roads to successful bidder after purchase order is awarded.
X			3. If vendor does not properly complete form for each unit, a sum of \$250.00 per unit will be deducted from purchase order amount.
NOTES/COMMENTS:			

T. TRAINING

YES	NO	NO & PROVIDE ALTERNATIVE	
X			1. Minimum of four hours per loader at various locations throughout Nebraska by a factory trained representative in the operation and maintenance of loader. Fleet Management will contact successful bidder on schedule and places for this training.
NOTES/COMMENTS:			

U. OEM BRAND INFORMATION

YES	NO	NO & PROVIDE ALTERNATIVE	
X			1. Bidder shall include all OEM approved service and repair locations within the State of Nebraska or within a four (4) hour response time. Please list below or attach a list: <u>Omaha, Lincoln, Grand Island</u> <u>North Platte, Gering, Sioux City Ia</u>
X			2. Please list all OEM parts stocking and sales locations in the State of Nebraska or within a four (4) hour response time: <u>Omaha, Lincoln, Grand Island, North</u> <u>Platte, Gering, Sioux City Ia.</u>

X			
X			<p>3. Please list approximate number and locations of all OEM trained and/or certified service technicians within the State of Nebraska or within a four (4) hour response time:</p> <p><u>Omaha, Lincoln, Grand Island, North Platte</u> <u>Gering, Sioux City Ia.</u></p>
X			<p>4. Please list response time (in hours) for service calls: <u>2 to 3 Hr.</u></p> <p>Note that NDOR has eight districts statewide, all of which will need to be responded to within in a four (4) hour response time for service calls. See attached district map (Attachment A).</p>
X			<p>5. The above listed information (A, B, C, and D.) may be a factor used in bid award consideration process. Consideration will be given based on coverage for parts stocking, service locations, and availability of qualified service technicians, and response time for service calls</p>
X			<p>6. Equipment bid shall be the latest current models in production as of the date of the invitation to bid and be of proven performance and under standard design, complete as regularly advertised and marketed and shall be delivered complete with all necessary parts, specified accessories, tools, and special features, whether or not they may be specifically mentioned below. Used, demonstrator, prototype, or discontinued equipment is not acceptable. Complete specifications, manufacturer's descriptive literature and/or advertising data sheets with cuts or photographs may be required prior to an award and should be included with the bid on the IDENTICAL equipment proposed. Literature should be complete and the latest published. Any information necessary to show compliance with these specifications not given on the manufacturer's descriptive literature and/or advertising data sheets should be supplied in writing on or attached to the bid document. Articulated All Wheel Drive Loader With Minimum 2.2 Cubic Yard Bucket bid must meet or exceed the requirements in this Invitation to Bid.</p>
NOTES/COMMENTS:			

**OPTIONAL COMPONENTS (Specifications V-Z)**

**V. QUICK HITCH WITH SPECIFIED BUCKET**

YES	NO	NO & PROVIDE ALTERNATIVE	
X			1. Quick hitch (coupler) system with bucket equivalent to bucket specified in Section 7 of main specifications.
X			2. The quick hitch and bucket will replace the loader manufacturer's

X			factory bucket.
X			3. Acceptable brands are JRB, ACS or loader manufacturer's model. Please specify which brand you are bidding: <u>John Deere</u>
X			4. Securing pins will hydraulically operate from loader's existing hydraulics with controls in cab.
X			5. Quick hitch and specified bucket manufacturer must recommend their unit for loader proposed.
X			6. Any operators and/or parts manuals available from manufacturer will be provided with each unit delivered.
NOTES/COMMENTS:			

**W. QUICK ATTACH FORKLIFT ASSEMBLY**

YES	NO	NO & PROVIDE ALTERNATIVE	
X			1. Forklift assembly to be quick attach style matching the above quick hitch as supplied in option #1. Quick hitch shall be JRB, ACS or loader manufacturer OEM supplied hitch.
X			2. Carriage width to be minimum 53 inches.
X			3. Tine lengths to be minimum 60 inches. _____
X			4. Manually adjustable tines of 2-1/2 inch x 6 inches.
X			5. Minimum Load Capacity of 10,000 pounds @ 24 inch Load Center.
NOTES/COMMENTS:			

**X. MULTI-PURPOSE BUCKET**

YES	NO	NO & PROVIDE ALTERNATIVE	
X			1. The multi-purpose bucket will replace the loader's factory furnished bucket.
X			2. The multi-purpose bucket shall be at least as heavy duty as the loader manufacturer's normally-furnished bucket.
X			3. Any additional valves, hydraulics, hoses, etc. will be furnished.
X			4. Bucket manufacturer must recommend their unit for loader proposed.
X			5. Any operators and/or parts manuals available from manufacturer will be provided with each unit delivered.
NOTES/COMMENTS:			

**Y. GRAPPLE FORK ATTACHMENT**

YES	NO	NO & PROVIDE ALTERNATIVE	
X			1. Grapple Fork to be GrabTec "GA" series or equivalent and be mounted to bucket specified in Section 7 of main specifications.
X			2. Grapple is to be delivered installed on bucket as stated above. Vendor is to be responsible for any transportation cost incurred to have the grapple fork mounted to the specified bucket.
X			3. Grapple Assembly to be of a Quick Attach Style.
X			a. Install weight of grapple assembly to be minimum 1,200 pounds.
X			b. Hydraulic cylinder bore to be a minimum 3 inches.
X			c. Hydraulic hoses of adequate length with couplers shall be provided. The hoses shall be coupled to the loader's auxiliary circuit (Third Valve).
X			d. Fork teeth material to be minimum 1 inch thick.
X			e. Teeth to be replaceable. Minimum of 5 teeth per assembly.
X			f. Clamping force of fork assembly to be approximately 10,000 pounds rated with cylinder pressure of 3750 psi.
X			g. Opening of forks measured from ground level to tip of teeth to be approximately 86 inches.
X			4. Any additional hydraulic valves hoses, etc will be furnished. The auxiliary third valve will be ordered on the loader; do not include this valve in pricing.
X			5. Any operators and or parts manuals available from manufacturer will be provided with each unit when delivered.
X			6. Attachment shall carry a one year warranty to be provided by the fork manufacturer or by the vendor.
<b>NOTES/COMMENTS:</b>			

**Z. WHEEL LOADER SCALE SYSTEM**

YES	NO	NO & PROVIDE ALTERNATIVE	
X			1. Scale system to be Loup Electronics Loadlog 8000i or equivalent. To be installed and calibrated on loader.
X			2. Optional in-cab printer.
X			3. Hydraulic pressure sensors.
X			4. Reference and direction sensor.
<b>NOTES/COMMENTS:</b>			

**AA. ANNUAL USAGE, ESTIMATED**

YES	NO	NO & PROVIDE ALTERNATIVE	
X			1. Annual usage figures provided are estimates and are not to be construed as either a minimum or maximum purchase quantity. The orders shall be for the actual quantities of each item ordered by or for any agency during the life of the contract. Vendor shall not impose minimum order requirements.
X			2. Estimated annual usage is five (5) units.
NOTES/COMMENTS:			

**BB. USAGE REPORT**

YES	NO	NO & PROVIDE ALTERNATIVE	
X			1. The vendor shall, upon request by the State of Nebraska, provide an annual usage report of this contract by state agencies. Information will include agency name or political subdivision, item, and dollar amount. Information may be requested at any time by the State Purchasing Bureau, but may typically be requested at the end of the contract period or upon renewal of the contract, or at other intervals (monthly, quarterly, etc.) as determined by the State.
NOTES/COMMENTS:			

**CC. DELIVERY ARO**

YES	NO	NO & PROVIDE ALTERNATIVE	
X			1. Delivery desired within (120) days after receipt of order(s).  At the time of delivery, a designated State of Nebraska employee will sign the "invoice/packing slip." This signature will only indicate that the order has been received and that the items actually delivered agree with the delivery invoice. This signature does not indicate all items were received in good condition and/or that there is not possible hidden damage.
NOTES/COMMENTS:			



**DD. DELIVERY LOCATIONS/INSTRUCTIONS (BIDDER IS CERTIFYING THAT THEY CAN MEET THE DELIVERY LOCATIONS/INSTRUCTIONS)**

YES	NO	NO & PROVIDE ALTERNATIVE	
X			1. Department of Roads, 5001 S 14 St, Lincoln, NE
NOTES/COMMENTS:			

**EE. ORDERS**

YES	NO	NO & PROVIDE ALTERNATIVE	
X			1. Orders will be placed either by, phone, fax, e-mail or Internet (if available and not to the exclusion of the other methods). All orders must reference a purchase order number and the purchase order number must be referenced on the packing slip, and invoice. Invoices are to be sent to the "Invoice to" address on the purchase order.
NOTES/COMMENTS:			

**FF. QUALITY**

YES	NO	NO & PROVIDE ALTERNATIVE	
X			1. Product quality must meet specifications and be consistent for the term of the contract. A guarantee of satisfactory performance by the supplier and meeting delivery dates are considered to be an integral part of the purchase contract resulting from this bid invitation. All materials must be of first quality, under standard production by the manufacturer and be of standard design, complete as regularly advertised and marketed and be of proven performance. Products are to be fully guaranteed and may be returned for full credit or replacement (at the State's option) for any reason during the initial warranty period with no additional charges for shipping or restocking.
NOTES/COMMENTS:			

**GG. PRICES**

YES	NO	NO & PROVIDE ALTERNATIVE	
X			1. Price quoted shall be unit price and shall be firm for one (1) year from date of an award and are to be net; including transportation and delivery charges fully prepaid by the Bidder F.O.B. Destination as specified. No additional charges will be allowed for packing, handling, fuel surcharge, or partial delivery costs. Any request for an increase must be submitted in writing to the State Purchasing Bureau a minimum of 30 days prior to proposed effective date of increase, and must show cause and be accompanied by supporting documentation (such as notification letter from manufacturer).

X			Further documentation may be required by the State, to authenticate the increase (such as manufacturer invoices). Failure to supply any requested supporting documentation may be grounds to cancel the contract. The State further reserves the right to reject any proposed price increase(s), cancel the contract and re-bid if determined to be in the best interest of the State. No price increases are to be billed to any State Agencies without prior written approval by the State Purchasing Bureau.
X			2. The State will be given full proportionate benefit of any decrease for the term of the contract.
X			3. Contract supplier or suppliers may honor pricing and extend the contract to political sub-divisions, cities, and counties. Terms and conditions of the contract must be met by political sub-divisions, cities, and counties.
NOTES/COMMENTS:			

**HH. AUTHORIZED DEALER & WARRANTY**

YES	NO	NO & PROVIDE ALTERNATIVE	
X			1. To the extent required by the manufacturer, the Bidder shall be an authorized dealer. Bidder may be required to substantiate that he/she is an authorized dealer. Proof, if required, must be submitted to the State Purchasing Bureau within three (3) days of the request and prior to the award of any contract. The terms of the original manufacturer's standard warranty shall apply to all equipment acquired from this solicitation for the entire warranty period.
NOTES/COMMENTS:			

**II. SUBSTITUTIONS**

YES	NO	NO & PROVIDE ALTERNATIVE	35. SUBSTITUTIONS
X			1. Vendor will not substitute any item that has been awarded without prior written approval of State Purchasing Bureau.
NOTES/COMMENTS:			

JJ. SECRETARY OF STATE REGISTRATION REQUIREMENTS

YES	NO	NO & PROVIDE ALTERNATIVE	*Prior to contract award and/or upon request of SPB, potential award recipient(s) will be asked to certify compliance with Nebraska Secretary of State Registration by providing a true and exact copy of current (dated within 90 days) valid Certificate of Good Standing or Letter of Good Standing.
			<p>Bidder is a SOLE PROPRIETORSHIP (in which case, no Letter of Good Standing/Certificate of Good Standing is required) If the Bidder is an Individual or Sole Proprietorship, the following applies:</p> <p>The Bidder must complete the United States Citizenship Attestation Form, available on the Department of Administrative Services website at <a href="http://das.nebraska.gov/materiel/purchasing.html">http://das.nebraska.gov/materiel/purchasing.html</a></p> <p>The completed United States Attestation Form should be submitted with the Invitation to Bid response.</p> <p>The Bidder indicates on such attestation form that he or she is a qualified alien, the Contractor agrees to provide the US Citizenship and Immigration Services documentation required to verify the Contractor's lawful presence in the United States using the Systematic Alien Verification for Entitlements (SAVE) Program.</p> <p>Bidder understands and agrees that lawful presence in the United States is required and the Contractor may be disqualified or the contract terminated if such lawful presence cannot be verified as required by Neb. Rev. Stat. §4-108.</p>
			Bidder is a GENERAL PARTNERSHIP (in which case, no Letter of Good Standing/Certificate of Good Standing is required)
X			Bidder is a FOREIGN or DOMESTIC CORPORATION or BUSINESS and a copy of current Letter of Good Standing/Certificate of Good Standing from the Nebraska Secretary of State <b>is provided</b> within bid submission documents.
			Bidder is a FOREIGN or DOMESTIC CORPORATION or BUSINESS and a copy of current Letter of Good Standing/Certificate of Good Standing from the Nebraska Secretary of State <b>will be provided</b> in a timely manner upon request prior to award.
NOTES/COMMENTS:			

**Form A  
Bidder Contact Sheet  
Invitation To Bid Number 5465 OF**

Form A should be completed and submitted with each response to this Invitation to Bid. This is intended to provide the State with information on the Bidder's name and address, and the specific person(s) who are responsible for preparation of the Bidder's response.

Preparation of ITB Contact Information	
Bidder Name:	Murphy Tractor & Equip CO.
Bidder Address:	6100 Arbor Rd. Lincoln Ne. 68517
Contact Person & Title:	John Spellman Branch Manager
E-mail Address:	jspellman@murphytractor.com
Telephone Number (Office):	402. 467. 1300
Telephone Number (Cellular):	402. 430. 9983
Fax Number:	402. 467. 1927

Each Bidder shall also designate a specific contact person who will be responsible for responding to the State if any clarifications of the Bidder's response should become necessary.

Communication with the State Contact Information	
Bidder Name:	Murphy Tractor & Equip CO.
Bidder Address:	6100 Arbor Rd. Lincoln Ne. 68517
Contact Person & Title:	John Spellman Branch Manager
E-mail Address:	jspellman@murphytractor.com
Telephone Number (Office):	402. 467. 1300
Telephone Number (Cellular):	402. 430. 9983
Fax Number:	402. 467. 1927

# STATE OF NEBRASKA

United States of America, } ss.  
State of Nebraska }

Secretary of State  
State Capitol  
Lincoln, Nebraska

I, John A. Gale, Secretary of State of the  
State of Nebraska, do hereby certify that

**MURPHY TRACTOR & EQUIPMENT CO., INC.**

**a Kansas corporation is authorized to transact business in Nebraska;**

**that no occupation taxes due from and assessable against the Corporation are  
unpaid and have become delinquent;**

**that no annual or biennial report required to be forwarded by the  
Corporation to the Secretary of State has become delinquent;**

**that a Certificate of Withdrawal has not been filed.**

*This certificate is not to be construed as an endorsement,  
recommendation, or notice of approval of the entity's financial  
condition or business activities and practices.*

In Testimony Whereof,



I have hereunto set my hand and  
affixed the Great Seal of the  
State of Nebraska on this date of

**December 1, 2016**

A handwritten signature in black ink that reads "John A. Gale".  
Secretary of State

## ADDENDUM ONE QUESTIONS and ANSWERS

Date: November 22, 2016  
 To: All Bidders  
 From: René Botts, Buyer  
 AS Materiel State Purchasing  
 RE: Addendum for Invitation to Bid Number 5465 OF  
 to be opened December 15, 2016 at 2:00 p.m. Central Time

### Questions and Answers

Following are the questions submitted and answers provided for the above mentioned Invitation to Bid. The questions and answers are to be considered as part of the Invitation to Bid. It is the Bidder's responsibility to check the State Purchasing Bureau website for all addenda or amendments.

<u>Question Number</u>	<u>ITB Section Reference</u>	<u>ITB Page Number</u>	<u>Question</u>	<u>State Response</u>
1.	H specification C. b	24	Dump clearance at full lift with bucket at 45 degrees discharge shall be at least 9 feet 2 inches. Will a loader with 9 feet 1 inches be acceptable? This machines meets or exceeds all of the other specifications listed.	Yes, 9'1" will be acceptable.
2.	Section W. Quick Attach Forklift Assm.		4. Manually adjustable tines 2-1/2 X6 inch Our Forks meet all the specs except are 2 ¼ thick is this acceptable?	Yes, 2 ¼" thick by 6" wide tine minimum dimensions are acceptable and the Quick Attach Forklift Assembly bid must meet all other requirements.
3.			"Lift Cycle Cost" Will they add this to the bid specifications?	Yes, See Addendum II, Life Cycle Attachments and Documents. If bidding Life Cycle please complete and return with bid submission.



## **STANDARD WARRANTY FOR NEW JOHN DEERE CONSTRUCTION, UTILITY, AND FORESTRY PRODUCTS – US & Canada**

- **Construction, Forestry & Commercial Worksite Products:** 12 months Full Machine Standard Warranty
- **C&E Series Pull-Type Scrapers:** 6 months Full Machine Standard Warranty
- **DC & DE Series Pull-Type Scrapers:** 12 months Full Machine Standard Warranty
- **Scraper Tractors:** 24 Months or 2000 Hours (whichever occurs first) Full Machine Standard Warranty
- **Forestry Attachments:** 12 Months or 2000 Hours (whichever occurs first) Full Machine Standard Warranty
- **Frontier Equipment:** 6 months Full Machine Standard Warranty (90 days in rental applications)

The "Standard Warranty" is part of the warranty protection package available from John Deere Construction & Forestry Company (John Deere Limited in Canada) ("John Deere") to purchasers of new John Deere products ("product"):

**STANDARD Warranty** is John Deere's standard new product warranty, described in this document, provided at no additional charge to the purchaser.

**EXTENDED Warranty** is a separate repair contract made available by John Deere for purchasers who wish to complement their Standard Warranty coverage. Complete Extended Warranty details, including coverage options and limitations, are set forth in the Application for Extended Warranty, which is available from authorized John Deere dealers.

**STRUCTURAL Warranty** applies to certain structural components as listed below and as described in this document.

**FACTORY-INSTALLED UNDERCARRIAGE Warranty** applies to certain undercarriage components as listed below and as described in this document.

### **A. STANDARD WARRANTY - GENERAL PROVISIONS**

John Deere will repair or replace, at its option, any parts (except those specified below) of a new John Deere product that, as delivered to the original retail purchaser(s), are defective in material or workmanship. Performance of this warranty will be free of charge for parts and labor/labour, except as otherwise stated below. Standard Warranty applies only to purchases from John Deere and authorized John Deere dealers and, except as otherwise provided in the next sentence and section L below, is extended only to the original retail purchaser of the product. Remaining Standard Warranty applicable to a used John Deere product is transferred to a subsequent purchaser of the product only if the subsequent purchaser requests a transfer from an authorized John Deere dealer before the product's Standard Warranty expires. Coverage begins on the date of delivery of the product to the original retail purchaser. For purposes of this warranty, a product that has been rented, used for demonstration purposes for 150 or more hours, or otherwise used prior to its original retail purchase has been "used" for the total duration of such use. Warranty statements required by law covering engine emissions-related parts and components are found on a separate written warranty certificate provided to the purchaser at the time of the original retail purchase.

### **B. WHAT IS COVERED BY STANDARD WARRANTY -**

All parts of a new John Deere product (except those noted in Sections D and E below) are covered during the Standard Warranty period set out above.

### **C. EXCLUSIVE REMEDY -**

The repair or replacement of covered parts or components that are defective, as provided in Sections A, B, D.2 and D.3 herein, shall be the purchaser's exclusive remedy for any defect in the product. However, if after repeated attempts such repair or replacement fails to correct the performance problem caused by the defect, the purchaser's sole remedy shall be a refund of the amount paid for the product (in exchange for a return of the product), excluding any transportation charges, license fees, taxes and insurance premiums, and less a reasonable allowance for use of the product prior to its return. In no event will the dealer, John Deere or any company affiliated with John Deere be liable for any incidental or consequential damages, including but not limited to loss of profits, rental of substitute equipment or other commercial loss. Correction of defects in the manner provided above shall constitute fulfillment of all liabilities of the Dealer, John Deere, or any company affiliated with John Deere to the purchaser or any other person, whether based upon contract, tort, strict liability, or otherwise. This limitation does not apply to claims for personal injury.

#### D. ITEMS COVERED SEPARATELY -

1. **Standard Warranty** does not apply to batteries, radios, tires, cameras, or to Cummins, MTU or Detroit Diesel Engines installed in John Deere products, which are covered by separate written warranties.
2. **Factory-Installed Undercarriage Warranty** covers all non-rubberized factory-installed undercarriage wear components for 3 years or 4,000 hours from the date of delivery to the original retail purchaser, whichever occurs first (unless terminated earlier under Section F, below). For purposes of this warranty, a product that has been rented, used for demonstration purposes for 150 or more hours, or otherwise used prior to its original retail purchase has been "used" for the total duration of such use. In addition to the items listed in section E below, **Factory-Installed Undercarriage Warranty** does not cover: failures due to wear, machine application, maintenance practices, or improper machine configuration; removal and installation labor/labour; transportation or hauling costs; unapproved parts; non-wear items; and rubberized undercarriage components such as rubber tracks. **Warranty claims will be pro-rated based upon wear of the failed component and whether track shoe width is approved by John Deere. Factory-Installed Undercarriage Warranty does not apply to Scraper Tractors.**
3. **StructurALL Warranty** for new John Deere Products (except Compact Excavators & Loaders, Skid-Steer Loaders, Compact Track Loaders, Scraper Tractors, Pull-Type Scrapers, and Forestry Attachments, which are not eligible for **StructurALL Warranty**) begins at the date of delivery to the original retail purchaser and ends (unless terminated earlier under Section F, below) after three (3) years, or 10,000 hours (whichever occurs first). For purposes of this warranty, a product that has been rented, used for demonstration purposes for 150 or more hours, or otherwise used prior to its original retail purchase has been "used" for the total duration of such use. **StructurALL Warranty applies only to the following structural components listed below as installed on the product at the time of original manufacture.** If a particular component is not listed below it is not covered by **StructurALL Warranty**.

Arm; Articulation Joint (incl. pins & bushings); Bin Frame; Boom; Carbody; C-Frame\*; Circle Frame; Coupler (John Deere built ONLY); Dipperstick; Draft Frame; Engine Frame; Equipment Frame; Grapple Arch and Grapple Boom; Loader Arm; Loader Frame; Mainframe; Moldboard Lift Arm; NeverGrease™ Pin Joints [Includes steering pin and bushing joints (standard equipment), roller elements (roller bearings) in bucket to boom joints and sliding elements (bushing) for boom and linkage joints (optional equipment)]; Rollover Protection Structure (ROPS); Side Frame; Swing Frame; Track Frame; Undercarriage Frame; X-Frame; Z-bar loader linkage (including bell crank and bucket driver link); Specialty booms and arms marketed as "heavy duty" by John Deere.

*Items Covered by StructurALL for Cut-to-Length Forestry Machines:* Front frame (welded assembly); Rear frame (welded assembly); Crane king post with basement; Middle joint frame; Cabin swing frame; Main Boom

**StructurALL Warranty does not apply to:**

1. Any product used primarily in extreme duty or severe duty applications such as but not limited to: demolition and wrecking, chemical plant (including fertilizer plants), salt mines, steel mill, land fill and transfer stations, scrap handling, scarifying and other applications that are similarly destructive or similarly heavy duty except specialty booms and arms as stated in Section D.3 above.
2. C-Frames on H-Series & J-Series Crawlers equipped with root rakes or used in forestry applications unless equipped with an "extreme duty" reinforcement package.
3. Cut-to-Length Forestry Heads and Slash Bundler Units.
4. Crawlers equipped with optional side booms.
5. Cut-to-Length Forestry, Excavator, and Log Loader swing bearings.
6. Motor Graders equipped with front- or rear-mounted snow wings.

#### **E. ITEMS NOT COVERED -**

John Deere is NOT responsible for the following:

1. Freight
2. Adjustments to compensate for wear, for periodic maintenance or adjustments that result from normal wear and tear.
3. Damage caused by unapproved adjustments (electronic or mechanical) to machine or machine components outside of published specifications including but not limited to engine, hydraulic components and relief valves.
4. Program updates, calibrations, and pressure adjustments.
5. Diagnostic Time
6. Additional Labor/Labour Time - Above SPG/Labor/Labour Rate
7. Additional Cleaning - Above SPG/Labor/Labour Rate
8. Rental Fees
9. Depreciation or damage caused by normal wear or application, lack of reasonable and proper maintenance, failure to follow operating instructions, misuse, negligence, collision or other accidents.
10. Premiums charged for Overtime Labor/Labour
11. Transportation to and from the dealership.
12. Travel time, mileage or service calls by the dealer.
13. Non-John Deere components or modifications, Rotobec grapples, and attachments installed aftermarket.
14. Shop supplies and maintenance items such as, but not limited to: filters, fuels, oil, hydraulic fluid, lubricants, coolants, conditioners, shop towels, cleaners and degreasers. Note: Reimbursement for refills of oils/coolants lost due to a warrantable failure is covered when a system failure occurs outside the boundaries of a normal oil change (within 25% of specified change interval as provided in the Operator's Manual).
15. Torn, cut, or worn hoses.
16. Wear items, such as, but not limited to: body liner, belts, blades, bulbs, lubricated joints (including pins and bushings), dry brakes, brake linings, dry clutch linings, saw blades, chains, skidder grapple shocks, color marking nozzles, and articulation bumpers.
17. Items such as cutting edge parts, delimiting knives, bucket teeth and rubber track are not warranted for depreciation or damage caused by normal wear, lack of proper maintenance, misuse, failure to follow operating instructions, the elements or accident.
18. Any defect in a non-covered component, or damage to or failure of a covered component caused by a defect in a non-covered component.
19. Secondary damage which occurs from continued operation of a product after recognition of the occurrence of a failure.
20. Parts supplied or modifications done by third party suppliers.
21. Topping off fluids when fluid levels fall in the range between low and full
22. Parts/Kits not ordered on machine and installed aftermarket. These parts will be covered by any applicable parts warranty.
23. Attachments installed aftermarket – i.e. Winch not installed at factory.
24. Custom options installed outside the factory – i.e. G.R. Manufacturing option packages.
25. Used Products (except as otherwise provided in section L below).

#### **F. TERMINATION OF WARRANTY-**

John Deere is relieved of its obligations under Standard Warranty, StructurALL Warranty, Factory-Installed Undercarriage Warranty and/or Extended Warranty if:

1. Service (other than normal maintenance and replacement of service items) is performed by someone other than an authorized John Deere dealer; or
2. The product is modified or altered in ways not approved by John Deere; or
3. Any unapproved or improperly sized attachment is installed on the product. Approval and attachment size shall be at John Deere's sole discretion. (Consult dealer prior to installing attachments or product modification).
4. The product is moved outside the US and/or Canada.

#### **G. PARTS REPLACED UNDER WARRANTY -**

Only new or remanufactured parts or components furnished or approved by John Deere, will be used if John Deere elects to repair the product. If any such part or component is defective in material or workmanship when installed in the product, John Deere will repair or replace, as it elects, such defective part or component, provided the defect is reported to an authorized John Deere dealer within 90 days of installation or before expiration of the applicable Standard Warranty, Factory-Installed Undercarriage Warranty and/or StructurALL Warranty whichever is later.

## H. TELEMATICS

*NOTICE: Products may be equipped with telematics hardware and software ("Telematics") that transmit data to John Deere/ Dealer. Purchaser may deactivate Telematics at [www.jdlink.com](http://www.jdlink.com).*

Notwithstanding Purchaser's right, title or interest in the Products, Purchaser agrees that John Deere and Dealer (their affiliates, successors and assigns), without further notice to Purchaser have the right to:

1. Access, use, collect and disclose any data generated by, collected by, or stored in, Products or any hardware or devices interfacing with Products ("Machine Data");
2. Access Machine Data directly through data reporting devices integrated within, or attached to, Products, including Telematics ("Data Reporting Systems"); and
3. Update the Data Reporting Systems software from time to time. Machine Data will only be used in accordance with John Deere's Machine Data Policy, located at [www.JohnDeere.com/MachineDataPolicy](http://www.JohnDeere.com/MachineDataPolicy).

## I. OBTAINING WARRANTY SERVICE -

To obtain warranty service, the purchaser must request warranty service from a John Deere dealer authorized to sell the product to be serviced. When making such a request, the purchaser must present evidence of the product's delivery date, make the product available at the dealer's place of business, and inform the dealer in what way the purchaser believes the product to be defective. Standard Warranty, Factory-Installed Undercarriage Warranty and/or StructurALL Warranty repairs may be made in the field if the purchaser and servicing dealer so desire. However, John Deere will not be responsible for any charges (such as dealer travel time, mileage or extra labor/labour) that would not have been incurred had the product been repaired at the dealer's place of business.

## J. NO IMPLIED WARRANTY, CONDITIONS OR OTHER REPRESENTATION -

Where permitted by law, neither John Deere nor any company affiliated with it makes any warranties, representations, conditions or promises, express or implied, as to the quality, performance, or freedom from defect of its products, other than those set forth in this document and **NO IMPLIED WARRANTY OF MERCHANTABILITY, CONDITIONS OR FITNESS IS MADE.**

## K. NO DEALER WARRANTY -

The selling dealer makes no warranty of its own on any item covered by this warranty, and makes no warranty on other items unless the dealer delivers to the purchaser a separate written warranty certificate specifically warranting the item. **The dealer has no authority to make any representation or promise on behalf of John Deere, or to modify the terms or limitations of this warranty in any way.**

## L. USED JOHN DEERE PRODUCTS ONLY -

John Deere will transfer remaining Standard Warranty, Factory-Installed Undercarriage Warranty and/or StructurALL Warranty to the purchaser of a used John Deere construction and/or forestry product that has been used for less than the full warranty period provided at the product's original retail purchase. This transfer is not effective until change of ownership is registered by a John Deere dealer. **ALL THE TERMS, INCLUDING LIMITATIONS AND EXCLUSIONS, OF THE JOHN DEERE STANDARD WARRANTY, FACTORY-INSTALLED UNDERCARRIAGE WARRANTY, AND/OR STRUCTURALL WARRANTY ORIGINALLY PROVIDED FOR THE PRODUCT REMAIN IN EFFECT AND APPLICABLE.**

Pete Ricketts, Governor

			<p>I see that you are not bidding the "Life Cycle Cost" on this bid. We have many Cities and Counties that use this off the State bid process as a better value than low bid. I have sent by request by the State, information on many Motor Graders and some 2.7 yard loaders that have been purchased off "Life Cycle Cost" by NE entities.</p> <p>SI hope they consider adding this to the bid.</p>	
--	--	--	--	--

This addendum will become part of the ITB and should be acknowledged with the Invitation to Bid.



# K-SERIES LOADERS

92–147 kW (124–198 net hp)



JOHN DEERE





PowerTech™ EPA Interim Tier 4/EU Stage IIIB diesels deliver impressive torque reserves that top out at a whopping 55 percent in the 624K. It's a K-Series advantage that helps maintain good boom and bucket speed in and out of the pile. For heaped loads, even in wet or hard-packed material.

K-Series Loaders ride on a wide stance that provides additional lateral stability for handling heavy loads and working on rough terrain. Overall balance is exceptional.

Same-side ground-level service access makes the daily routine quick and easy. Enhanced onboard diagnostics and extended service intervals further maximize uptime.

Z-Bar or Parallel Lift? If you can't decide which configuration is best for you, the patented design of the 544K and 624K Powerlift™ delivers the best of both.

For unsurpassed visibility to the coupler and material-handling finesse, choose the 624K with tool-carrier-style parallel-lift boom.



## Think. Again.

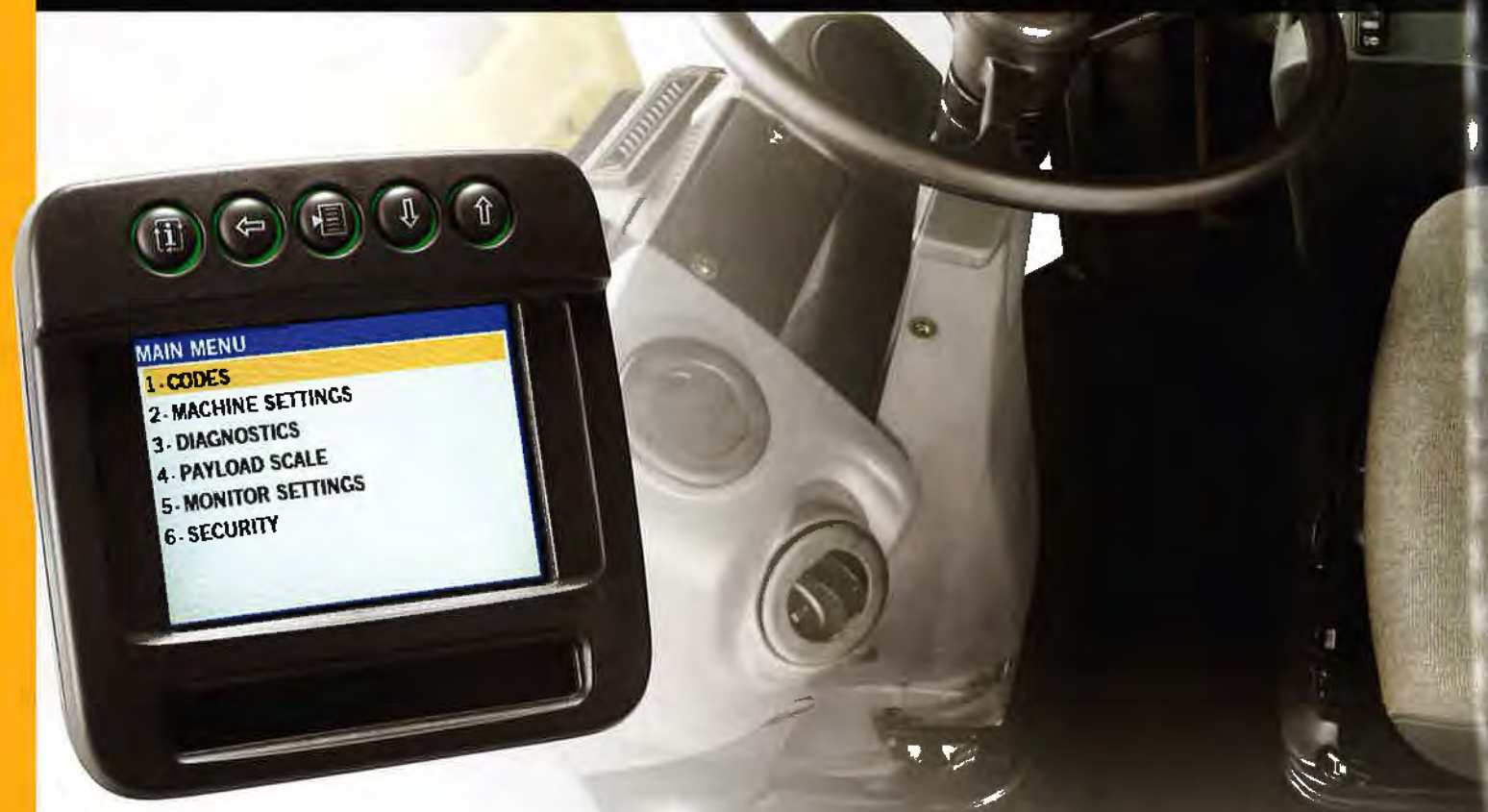
Quad-Cool™. Highly reliable solid-state electrical system and sealed-switch module. Smooth-as-silk SmartShift™ transmission. The J-Series Loaders introduced a lot of innovative thinking — and began a tradition that continues in the K-Series. Although they don't appear all that different from their standard-setting predecessors, these next-generation loaders are loaded throughout with even more customer-inspired enhancements. Spacious, quiet cabs with unsurpassed visibility. Secured keyless start. Easy-to-read LCD monitors with advanced onboard diagnostics. And IT4/Stage IIIB diesel engines. Numerous options, too, including NeverGrease™ loader boom pins and automatic diff-lock axles, to list just a couple. Exceptional productivity, long-term durability, unparalleled versatility — you get it all in our K-Series.

K-Series Specifications:	444K	524K	544K	624K
Peak Net Horsepower	124	141	163	186
Bucket Capacity	2.5 cu. yd.	2.75 cu. yd.	3.0 cu. yd.	3.5 cu. yd.
<b>Z-Bar:</b>				
Tipping Load	17,741 lb. 40-degree full turn	19,652 lb. 40-degree full turn	20,898 lb. 40-degree full turn	26,409 lb. 40-degree full turn
Breakout Force	17,570 lb.	20,267 lb.	23,951 lb.	28,266 lb.
Operating Weight	24,698 lb.	27,445 lb.	28,621 lb.	34,566 lb.
<b>Powerlift™:</b>				
Tipping Load	13,800 lb. 40-degree full turn	N/A	16,771 lb. 40-degree full turn	20,609 lb. 40-degree full turn
Breakout Force	13,352 lb.	N/A	18,968 lb.	23,719 lb.
Operating Weight	27,155 lb.	N/A	31,007 lb.	37,268 lb.
<b>Tool Carrier:</b>				
Tipping Load	N/A	N/A	N/A	24,426 lb. 40-degree full turn
Breakout Force	N/A	N/A	N/A	28,484 lb.
Operating Weight	N/A	N/A	N/A	34,956 lb.



# Hard work made easier.

What operator wouldn't be more productive in the high-back air-ride seat of a K-Series Loader? Up-front, an enhanced multifunction monitor displays operating, diagnostic, and maintenance info on a color LCD screen with easy-on-the-eyes clarity. Generous tinted glass and a low-profile console allow a commanding view of the work ahead. The spacious and quiet cab boasts plenty of legroom and fatigue-beating ergonomics, including convenience features such as seat-mounted loader controls. And sealed-switch module with keyless start and effortless push-button operation of numerous other machine functions. For more productivity without extra effort.



Multi-language color LCD monitor provides push-button access to a wealth of machine info and control:

- A. Vital and general operating information**, including transmission mode, gear, engine rpms, and ground speed.
- B. Enhanced onboard diagnostics** with speed, pressure, and temperature readings and real-time switch status.
- C. Customized machine settings** such as Quick Shift, Auto-to-1st, and Ride Control. Lets you match operating characteristics to specific jobs and conditions.
- D. Optional embedded payload scale** weighs each bucket load, helping fill trucks to the max.

1. Joystick steering (available on 544K and 624K) is ideal for V-pattern truck loading. Offering fatigue-beating comfort, it adapts to ground speed, delivering smooth control for load-and-carry applications, as well.

2. Keyless start security system requires a numeric pass code (when enabled). Helps prevent unauthorized machine operation.

3. Optional rearview camera and radar object-detection system provides "eyes-in-the-back-of-the-head" visibility, displaying the activity out back on the LCD screen. Emits an audible alert, too, for extra awareness in tight quarters and high-traffic areas.

Available premium heated air-ride armchair seat adjusts multiple ways for extra comfort and cushioning.

Spacious cab with a cooler compartment and beverage holder provides plenty of room to stow your stuff. Convenient 12-volt port powers cell phones and other electronic devices.

Brake and throttle pedals have been repositioned and the front console redesigned to make way for more legroom and comfort.

Adjustable automotive-style louvers provide effective airflow to keep the glass clear and pressurized cab comfortable.





# More power and control mean more productivity.

If you've got maximum productivity in mind, the K-Series Loaders should be at the top of your list. But it's not just their big torque reserves that make them such impressive performers. Single-lever joystick or two-lever fingertip controls provide smooth, near-effortless control. Excavator-style hydraulics sense the load and deliver the flow needed for smooth combined functions and fast work cycles. You won't find a smoother-shifting loader, either. The PowerShift™ torque-converter transmission employs SmartShift technology to continuously evaluate speed and load conditions, and adjusts clutch-pack engagement to suit.

SmartShift ensures that gear changes are smooth as silk, regardless of whether the bucket is empty or fully loaded.

Engine/hydraulic match maintains good boom and bucket power into and out of the pile. For big loads, even in wet or packed materials.

Optional spin control boosts productivity by improving traction in troublesome material or underfoot conditions. Reduces tire wear, fuel costs, and operator fatigue, too.

Responsive steering and full 80-degree articulation increase maneuverability in tight quarters, for faster cycle times and fewer three-point turns.

Hydraulic system provides only the power required, so there's no wasted horsepower or fuel.

Boom-height kick-out and return-to-carry functions help speed production in repetitive loading applications. On Powerllec-equipped loaders, the touchpad has two presets for added convenience when frequent attachment changeover is required.



1. Choose from single-lever joystick or two-lever fingertip pilot-operated hydraulic controls. Joystick F-N-R selector provides convenient direction and full-range gear changes. Both include innovative Quick-Shift feature for push-button gear changes, one gear at a time.
2. Backlit touchpad in the expanded sealed-switch module controls keyless start and 24 other machine functions. Enables the operator to adjust boom-height kick-out and return-to-carry, and activate return-to-dig from the seat.
3. Programmable clutch cutoff increases productivity in all kinds of terrain. Simply select the slope of your dumpsite — level, small, or steep. Depressing the brake pedal disconnects the transmission while maintaining engine speed for fast boom cycles.





# Parallel lift that's simply unparallelled.

Powerllec loaders deliver both powerful digging forces and parallel lift. Their innovative design allows load forces to work with, not against, the boom. For big breakout force, even in difficult digging. Impressive torque throughout the entire dump and rollback range enables Powerllec loaders to excel at a wide variety of material-handling tasks. But don't just look for these John Deere advantages in the numbers on a spec sheet. The best way to fully appreciate them is on your jobsite. Whatever the task, whatever the load, you'll discover parallel lift that's without parallel.

Powerllec's unique design separates the bell crank from the cross tube, attaching instead to the loader frame via a Y-shape link. This "free-floating" bell-crank design allows load forces to work with, not against, the boom. For powerful breakout in tough digging.

Coupler fastens the attachment close to the machine to optimize stability with heavy loads.

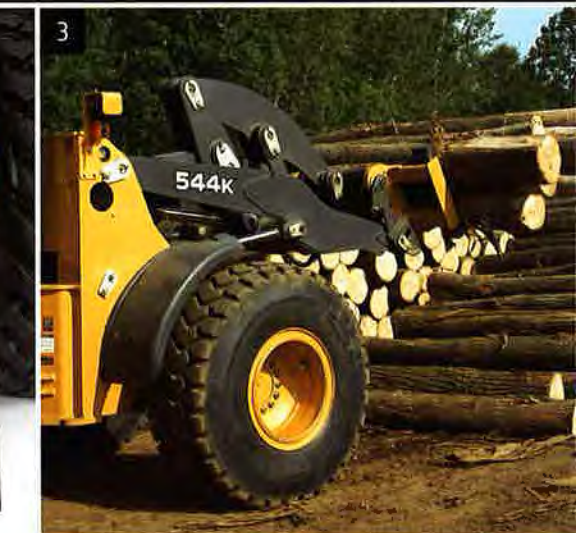
Unique Y-link, low-mounted boom cylinders, and Hi-Vis coupler provide clear visibility to the work tool and throughout the lift arc.

Tire and axle options let you equip your Powerllec loader for material-handling work on a wide variety of terrain.

1. If it's a traditional tool carrier you want, opt for a 624K with parallel-lift boom. Its linkage automatically levels the load throughout the lift cycle, and provides unrestricted visibility to the coupler.

2. Hi-Vis coupler lets you change attachments from the cab quickly and easily. Conforms to ISO23727, allowing it to pick up a broad range of John Deere and other attachments so you can do more with one machine.

3. Powerllec loaders deliver outstanding breakout throughout the entire bucket and angle range. To conquer tough tasks such as loading logs.





# Discover your options.

K-Series Loaders come equipped with plenty of production-boosting features to help you handle almost anything you throw their way. But if yours isn't just any application, we've got you covered with a wide variety of factory- or dealer-installed options. So you can equip your loader with exactly what you need to maximize your efforts and expand your opportunities.



1. With ride control, the lift cylinders act as shock absorbers, cushioning bumps to allow these loaders to navigate rough ground more quickly without losing their loads. Auto-actuation travel speed is adjustable between 3.2 and 24.1 km/h (2 and 15 mph).

2. Worksite Pro™ couplers increase versatility and make attachment switchover push-button easy. Hi-Vis coupler conforms to ISO23727, allowing it to pick up a broad range of John Deere and other attachments.

3. Automatic differential lock engages as soon as a tire begins to slip. It's ideal for inexperienced operators or applications requiring high traction, such as stockpiling silage, plowing snow, and handling pipe.

Embedded payload scale enables you to fill each truck to its limit for maximum productivity. It's available on all Z-bar and High-Lift loaders.

Powered cab pre-cleaner is a smart addition in high airborne-debris environments.

Heated mirrors prevent fog and ice from obstructing the view and affecting productivity.

Need to take productivity to another level? High-Lift option extends lift height up to 356 mm (14 in.).

JDLink™ lets you know where your loader is and how it's performing. This wireless communication system delivers location, performance, and maintenance data to your computer.

General-purpose or excavating buckets are available in pin-on or coupler configurations from 1.9–2.7 m³ (2.0–3.5 cu. yd). Or opt for the 1.5- or 2.29-m (60 or 90 in.)-wide forks with 1.22- or 1.52-m (48 or 60 in.) tines.

Full-tire front and rear fenders and flaps help keep the machine free of mud and debris.

Corrosion package shields electrical components and connections to help prevent corrosive materials from short-circuiting productivity.

Rear-axle disconnect disengages power when not needed. Reduces fuel consumption and tire wear, and helps smooth the ride during roading or transport.





Four steel plates support the loader tower, extending pin life and protecting the boom-cylinder hoses.

Sealed-switch module keeps out dust, moisture, and debris, and virtually never wears out. Proven marine-grade touchpad eliminates rocker switches and nearly 100 wires, and unsealed connections provide even longer life.

Standard features such as bypass-start protection, automatic park brake, convenient handholds, and slip-resistant steps help keep the operator out of harm's way.

Wet-sleeve engine liners provide uniform engine cooling for less oil breakdown and longer durability than cast-in-block designs.

500-, 2,000-, and 4,000-hour engine, transmission, and hydraulic oil and filter service intervals mean more uptime.

Wide-mouth fuel tank allows quick and convenient ground-level fill-ups. Generous capacity lets you work longer.

Electrical-distribution center employs highly reliable circuit-board technology and solid-state switches that eliminate numerous wiring harnesses, fuses, relays, and connectors. Sealed gold-pin electrical connectors resist corrosion for superior long-term integrity.

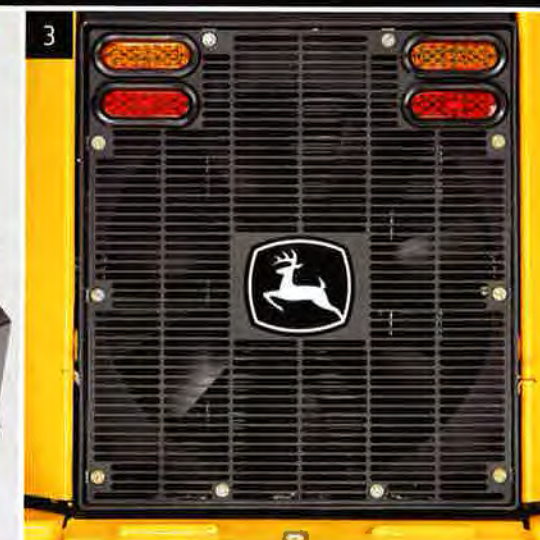
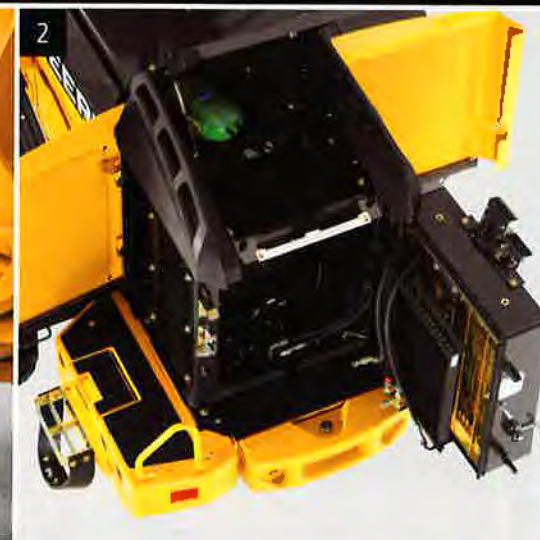
1. 524K, 544K, and 624K planetary final drives are mounted inboard. Hydraulic wet-disc brakes on all models self-adjust.

2. Quad-Cool places the radiator, air-conditioner condenser, intercooler, and hydraulic, transmission, and optional axle coolers in a unique boxed configuration that's isolated from engine heat. For increased efficiency and durability.

3. Optional programmable fan automatically reverses at predetermined intervals, ejecting debris from the radiator and cooler cores. Or choose your own cleaning cycles through the monitor.

# Nothing runs like a Deere.

It's all about uptime. So we gave the K-Series plenty of resources to help them succeed. All four loaders come equipped with traditional John Deere durability features. Such as heavy-duty wet-sleeve diesels, Quad-Cool, and solid-state electrical systems. Reinforced articulation joints with double-tapered roller bearings. Plus, booms and mainframes so tough they're warranted for three years or 10,000 hours. When you know how they're built, you'll run a Deere.





# Stretches your dollars, not your service techs.

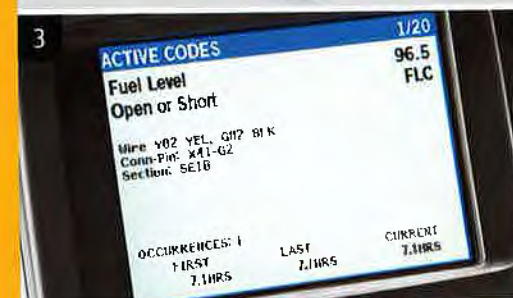
Controlling daily owning and operating costs shouldn't be a reach — and it's not on a K-Series Loader. Ground-level same-side service points make quick work of the daily routine. Unique Quad-Cool system provides wide-open access to both sides of the coolers for easy cleanout. Extended service intervals let you work longer between changes. And because no maintenance beats low maintenance, available NeverGrease loader pins, standard self-adjusting serpentine engine belts, and wet-disc brakes seldom, if ever, require attention. That's just for starters. The list of K-Series features that help minimize maintenance goes on and on. And so will the owning and operating cost savings you'll enjoy.



**1.** Vertical spin-on filters allow quick, no-spill changes. 500-, 2,000-, and 4,000-hour engine, transmission, and hydraulic oil service intervals help reduce operating costs.



**2.** NeverGrease joints eliminate numerous zerks and the daily attention they require. Available on the 544K and 624K, this exclusive option delivers consistent, extended pin life.



**3.** If something goes wrong, the easy-to-navigate LCD monitor displays diagnostic messages, and even offers possible solutions to help get you back up and running quickly.

**4.** Color-coded fluid-sample and diagnostic test ports help speed preventative maintenance and troubleshooting. Noninvasive design helps keep out contaminants.



**5.** Conveniently located, easy-to-read sight gauges and see-through reservoirs let you check transmission, hydraulic, coolant, and windshield washer fluid levels at a glance.

**6.** Lockable compartment swings open, offering convenient ground-level access to batteries and electrical-disconnect switch.

Greasing is less messy, with centralized lube banks providing easy access to difficult-to-reach zerks. Conveniently located periodic lube and maintenance chart ensures that nothing gets overlooked.

Hydraulically driven fan runs only as needed for efficient cooling. Helps conserve precious fuel, too.

Hydraulically driven fan runs only as needed for efficient cooling. Helps conserve precious fuel, too.

grouped on the left side for quick and convenient ground-level access.

Three-millimeter side-shield perforations block most airborne debris. Unlike stacked coolers, Quad-Cool cores resist plugging and are easily accessible from either side for quick and easy cleanout.

Auto-idle applies the brakes and automatically reduces engine speed to help conserve fuel after an operator-determined period of inactivity. Auto shutdown turns off the engine after extended inactivity.





Engine	444K Z-BAR / HIGH-LIFT / POWERLLEL™	
Manufacturer and Model	John Deere PowerTech™ PVX 4045	John Deere PowerTech™ E 4045H
Non-Road Emissions Standard	EPA Interim Tier 4/EU Stage IIIB	EPA Tier 3/EU Stage IIIA
Cylinders	4	4
Valves Per Cylinder	4	2
Displacement	4.5 L (276 cu. in.)	4.5 L (276 cu. in.)
Net Peak Power at 2,100 rpm (ISO 9249)	92 kW (124 hp)	95 kW (128 hp)
Net Peak Torque at 1,400 rpm (ISO 9249)	507 Nm (374 lb.-ft.)	515 Nm (380 lb.-ft.)
Net Torque Rise	34%	36%
Fuel System (electronically controlled)	High-pressure common rail	High-pressure common rail
Lubrication	Full-flow spin-on filter and integral cooler	Full-flow spin-on filter and integral cooler
Aspiration	Turbocharged, charge air cooled	Turbocharged, charge air cooled
Air Cleaner	Under-hood, dual-element dry type, restriction indicator in cab monitor for service	Under-hood, dual-element dry type, restriction indicator in cab monitor for service
Fan Drive	Hydraulically driven, proportionally controlled, fan aft of coolers	Hydraulically driven, proportionally controlled, fan aft of coolers
Electrical System	24 volt with 100-amp alternator (optional 130-amp alternator)	24 volt with 80-amp alternator (optional 100-amp alternator)
Batteries (2 – 12 volt)	950 CCA (each)	950 CCA (each)

Transmission	444K Z-BAR / HIGH-LIFT / POWERLLEL™	
Type	Countershaft-type PowerShift™	
Torque Converter	Single stage, single phase	
Shift Control	Electronically modulated, adaptive, load and speed dependent	
Operator Interface	Steering-column or joystick-mounted F-N-R and gear-select lever; kick-down button on hydraulic lever	
Shift Modes	Manual/auto (1st-D or 2nd-D); quick-shift button with 2 selectable modes: kick-down or kick-up/down; and 3 adjustable clutch-cutoff settings	
Maximum Travel Speeds (with 17.5 R 25 tires)	Forward	Reverse
Gear 1	7.3 km/h (4.5 mph)	7.6 km/h (4.7 mph)
Gear 2	12.1 km/h (7.5 mph)	13.0 km/h (8.1 mph)
Gear 3	23.1 km/h (14.4 mph)	25.3 km/h (15.7 mph)
Gear 4	36.0 km/h (22.4 mph)	N/A

Axles/Brakes	444K Z-BAR / HIGH-LIFT / POWERLLEL™	
Final Drives	Heavy-duty midboard-mounted planetary	
Differentials	Hydraulic locking front with conventional rear – standard; dual locking front and rear – optional	
Rear Axle Oscillation, Stop to Stop (with 17.5 R 25 tires)	24 deg.	
Brakes (conform to ISO 3450)	24 deg.	
Service Brakes	Hydraulically actuated, midboard final-drive carrier mounted, oil cooled, self-adjusting retractors, multi disc	
Parking Brake	Automatic spring applied, hydraulically released, driveline mounted, oil cooled, multi disc	

Tires/Wheels	444K Z-BAR / HIGH-LIFT / POWERLLEL™		
Choice of (with 3-piece rims)*	Tread Width	Width Over Tires	Change in Vertical Height
Michelin 17.5 R 25, 1 Star L-3	1900 mm (74.8 in.)	2415 mm (95.1 in.)	No change
Bridgestone 17.5 R 25, 1 Star L-3	1900 mm (74.8 in.)	2415 mm (95.1 in.)	No change
Michelin 17.5 R 25, 1 Star L-2	1900 mm (74.8 in.)	2425 mm (95.5 in.)	- 4 mm [- 0.2 in.]
Bridgestone 17.5 R 25, 1 Star L-2	1900 mm (74.8 in.)	2425 mm (95.5 in.)	- 4 mm [- 0.2 in.]
Titan 17.5 R 25, 1 Star L-2	1900 mm (74.8 in.)	2425 mm (95.5 in.)	- 4 mm [- 0.2 in.]
Firestone 17.5-25, 12 PR L-3	1900 mm (74.8 in.)	2406 mm (94.7 in.)	+ 6 mm [+ 0.2 in.]
Firestone 17.5-25, 12 PR L-2 <sup>1</sup>	1900 mm (74.8 in.)	2406 mm (94.7 in.)	+ 5 mm [+ 0.2 in.]
Titan 17.5-25, 12 PR L-2	1900 mm (74.8 in.)	2406 mm (94.7 in.)	+ 5 mm [+ 0.2 in.]
Firestone 20.5-25, 12 PR L-2 <sup>3</sup>	1950 mm (76.8 in.)	2539 mm (100.0 in.)	+ 66 mm [+ 2.6 in.]
Titan 20.5-25, 12 PR L-2 <sup>4</sup>	1950 mm (76.8 in.)	2539 mm (100.0 in.)	+ 66 mm [+ 2.6 in.]
Michelin 20.5 R 25, 1 Star L-2 <sup>5</sup>	1950 mm (76.8 in.)	2533 mm (99.7 in.)	+ 58 mm [+ 2.3 in.]
Bridgestone 20.5 R 25, 1 Star L-2 <sup>3</sup>	1950 mm (76.8 in.)	2533 mm (99.7 in.)	+ 58 mm [+ 2.3 in.]
Titan 20.5 R 25, 1 Star L-2 <sup>4</sup>	1950 mm (76.8 in.)	2533 mm (99.7 in.)	+ 58 mm [+ 2.3 in.]
Michelin 550/65 R 25, 1 Star L-2	1950 mm (76.8 in.)	2553 mm (100.5 in.)	+ 28 mm [+ 1.1 in.]

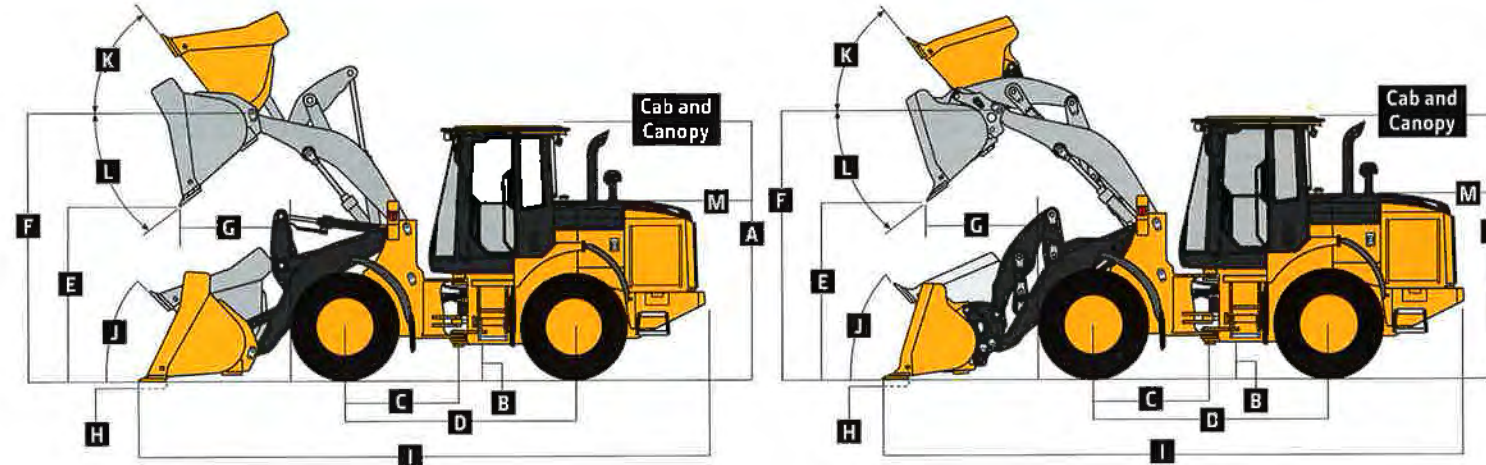
\*Based on Z-bar machine configuration; may change based on vehicle configuration, weight, or tire-pressure adjustments.  
<sup>1</sup>Equipped with 1-piece rims.  
<sup>2</sup>CaCl<sub>2</sub> not recommended.

Serviceability	444K Z-BAR / HIGH-LIFT / POWERLLEL™	
Refill Capacities	EPA Interim Tier 4/EU Stage IIIB	EPA Tier 3/EU Stage IIIA
Fuel Tank (with ground-level fueling)	242 L (64 gal.)	242 L (64 gal.)
Cooling System	21 L (22 qt.)	19 L (20 qt.)
Engine Oil with Vertical Spin-On Filter	14.5 L (15.3 qt.)	17.5 L (18.5 qt.)
Transmission Fluid with Vertical Filter	18.5 L (19.5 qt.)	18.5 L (19.5 qt.)
Axle Oil (front and rear, each)	22 L (23 qt.)	22 L (23 qt.)
Hydraulic Reservoir and Filters	91 L (24 gal.)	91 L (24 gal.)
Park Brake Oil (wet disc)	0.3 L (10 oz.)	0.3 L (10 oz.)

Hydraulic System/Steering	444K Z-BAR / HIGH-LIFT / POWERLLEL™	
Pump (loader and steering)	Variable-displacement, axial-piston pump; closed-center, pressure-compensating system	
Maximum Rated Flow at 6895 kPa (1,000 psi) and 2,350 rpm	140 L/m (37 gpm)	
System Relief Pressure (loader and steering)	24 821 kPa (3,600 psi)	
Loader Controls	2-function valve, joystick control or fingertip controls, hydraulic-function enable/disable, optional 3rd- and 4th-function valve with auxiliary lever	

Steering (conforms to ISO 5010)	444K Z-BAR / HIGH-LIFT / POWERLLEL™	
Type	Power, fully hydraulic	
Articulation Angle	80-deg. arc (40-deg. each direction)	
Turning Radius (measured to centerline of outside tire)	4.74 m (15 ft. 7 in.)	
Hydraulic Cycle Times	Z-Bar	High-Lift
Raise	5.9 sec.	5.3 sec.
Dump	1.0 sec.	1.1 sec.
Lower (float down)	2.4 sec.	1.9 sec.
Total	9.3 sec.	8.3 sec.

Dimensions with Standard Configuration	Z-BAR	HIGH-LIFT	POWERLLEL
	1.9-m <sup>3</sup> (2.5 cu. yd.) pin-on bucket	1.9-m <sup>3</sup> (2.5 cu. yd.) pin-on bucket	1.9-m <sup>3</sup> (2.5 cu. yd.) hook-on bucket with coupler
A Height to Top of Cab and Canopy	3.17 m (10 ft. 5 in.)	3.17 m (10 ft. 5 in.)	3.17 m (10 ft. 5 in.)
B Ground Clearance	393 mm (15.5 in.)	393 mm (15.5 in.)	393 mm (15.5 in.)
C Length from Centerline to Front Axle	1.37 m (4 ft. 6 in.)	1.37 m (4 ft. 6 in.)	1.37 m (4 ft. 6 in.)
D Wheelbase	2.76 m (9 ft. 1 in.)	2.76 m (9 ft. 1 in.)	2.76 m (9 ft. 1 in.)
E Dump Clearance	▲ (see page 19)	▲ (see page 19)	▲ (see page 19)
F Height to Hinge Pin, Fully Raised	3.60 m (11 ft. 10 in.)	4.00 m (13 ft. 1 in.)	3.67 m (12 ft. 0 in.)
G Dump Reach	▲▲ (see page 19)	▲▲ (see page 19)	▲▲ (see page 19)
H Maximum Digging Depth	105 mm (4.1 in.)	105 mm (4.1 in.)	119 mm (4.7 in.)
I Overall Length	▲▲▲ (see page 19)	▲▲▲ (see page 19)	▲▲▲ (see page 19)
J Maximum Rollback at Ground Level	41 deg.	41 deg.	43 deg.
K Maximum Rollback, Boom Fully Raised	55 deg.	50 deg.	51 deg.
L Maximum Bucket Angle, Fully Raised	50 deg.	45 deg.	50 deg.
M Hood Height	2.19 m (7 ft. 2 in.)	2.19 m (7 ft. 2 in.)	2.19 m (7 ft. 2 in.)

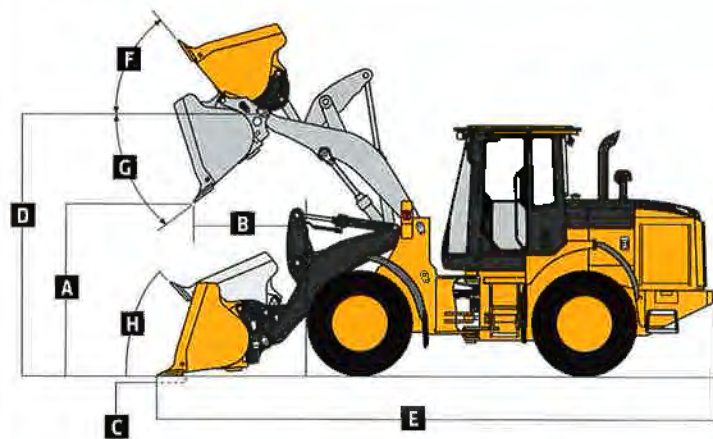


444K Z-BAR AND HIGH-LIFT LOADERS

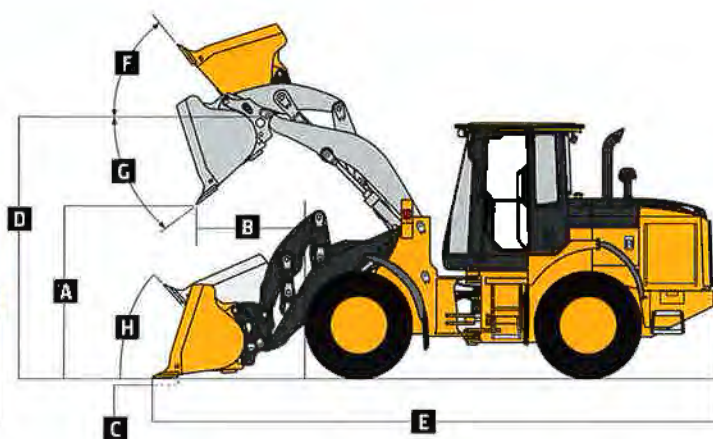
444K POWERLLEL LOADER



Dimensions with Quick-Coupler and Hook-On Bucket	444K Z-BAR	HIGH-LIFT	POWERLLEL
A Dump Clearance	▲ (see page 19)	▲ (see page 19)	▲ (see page 19)
B Dump Reach	▲▲ (see page 19)	▲▲ (see page 19)	▲▲ (see page 19)
C Maximum Digging Depth	139 mm (5.0 in.)	148 mm (5.8 in.)	119 mm (4.7 in.)
D Height to Hinge Pin, Fully Raised	3.60 m (11 ft. 10 in.)	3.98 m (13 ft. 1 in.)	3.67 m (12 ft. 0 in.)
E Overall Length	▲▲▲ (see page 19)	▲▲▲ (see page 19)	▲▲▲ (see page 19)
F Maximum Rollback, Boom Fully Raised	55 deg.	49 deg.	51 deg.
G Maximum Bucket Angle, Fully Raised	42 deg.	45 deg.	50 deg.
H Maximum Rollback at Ground Level	41 deg.	41 deg.	43 deg.

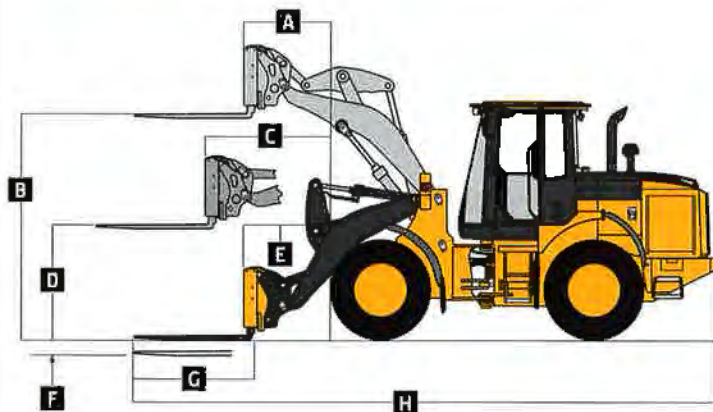


444K Z-BAR AND HIGH-LIFT LOADERS WITH QUICK-COUPLER AND HOOK-ON BUCKET

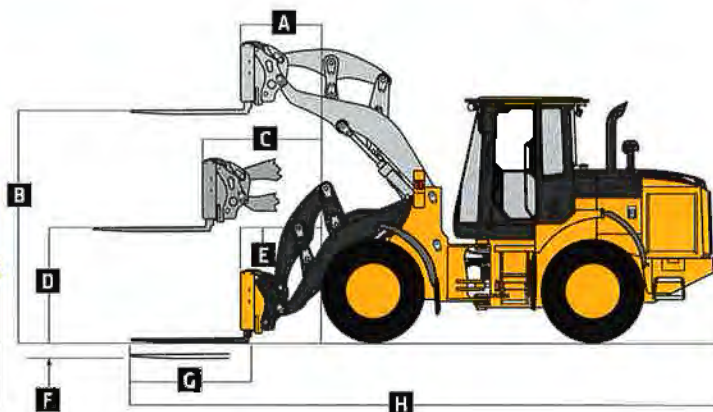


444K POWERLLEL LOADER WITH QUICK-COUPLER AND HOOK-ON BUCKET

Dimensions with Quick-Coupler and Hook-On Construction Fork	Z-BAR	HIGH-LIFT	POWERLLEL
A Reach, Fully Raised	0.86 m (34 in.)	0.86 m (34 in.)	0.86 m (34 in.)
B Fork Height, Fully Raised	3.44 m (11 ft. 3 in.)	3.79 m (12 ft. 5 in.)	3.51 m (11 ft. 6 in.)
C Maximum Reach, Fork Level	1.57 m (5 ft. 2 in.)	1.84 m (6 ft. 0 in.)	1.63 m (5 ft. 4 in.)
D Maximum Reach, Fork Height	1.69 m (5 ft. 6 in.)	1.70 m (5 ft. 7 in.)	1.73 m (5 ft. 8 in.)
E Reach, Ground Level	0.97 m (3 ft. 2 in.)	1.31 m (4 ft. 4 in.)	0.96 m (3 ft. 2 in.)
F Depth Below Ground	107 mm (4.2 in.)	16 mm (0.6 in.)	2 mm (0.1 in.)
G Tine Length	▲ (see page 19)	▲ (see page 19)	▲ (see page 19)
H Overall Length	▲▲ (see page 19)	▲▲ (see page 19)	▲▲ (see page 19)



444K Z-BAR AND HIGH-LIFT LOADERS WITH QUICK-COUPLER AND HOOK-ON CONSTRUCTION FORK



444K POWERLLEL LOADER WITH QUICK-COUPLER AND HOOK-ON CONSTRUCTION FORK

Dimensions with Full-On Bucket	444K Z-BAR	HIGH-LIFT	POWERLLEL
Bucket Type/Size	General-Purpose with Bolt-on Edge	General-Purpose with Bolt-on Edge	General-Purpose with Bolt-on Edge
Capacity, Heaped	1.9 m <sup>3</sup> (2.5 cu. yd.)	1.9 m <sup>3</sup> (2.5 cu. yd.)	1.9 m <sup>3</sup> (2.5 cu. yd.)
Capacity, Struck	1.6 m <sup>3</sup> (2.1 cu. yd.)	1.6 m <sup>3</sup> (2.1 cu. yd.)	1.6 m <sup>3</sup> (2.1 cu. yd.)
Bucket Weight	870 kg (1,919 lb.)	870 kg (1,919 lb.)	870 kg (1,919 lb.)
Bucket Width	2.54 m (8 ft. 4 in.)	2.54 m (8 ft. 4 in.)	2.54 m (8 ft. 4 in.)
Breakout Force	7970 kg (17,570 lb.)	7356 kg (16,217 lb.)	7356 kg (16,217 lb.)
Tipping Load, Straight	9233 kg (20,356 lb.)	7941 kg (17,507 lb.)	7941 kg (17,507 lb.)
Tipping Load, 40-deg. Full Turn	8047 kg (17,741 lb.)	6897 kg (15,205 lb.)	6897 kg (15,205 lb.)
Reach, 45-deg. Dump, 2.13-m (7 ft.) Clearance	1.44 m (4 ft. 9 in.)	1.74 m (5 ft. 9 in.)	1.74 m (5 ft. 9 in.)
▲▲ Reach, 45-deg. Dump, Full Height	1.04 m (3 ft. 5 in.)	1.04 m (3 ft. 5 in.)	1.04 m (3 ft. 5 in.)
▲ Dump Clearance, 45 deg., Full Height	2.67 m (8 ft. 9 in.)	3.03 m (9 ft. 11 in.)	3.03 m (9 ft. 11 in.)
▲▲▲ Overall Length, Bucket on Ground	6.86 m (22 ft. 6 in.)	7.20 m (23 ft. 7 in.)	7.20 m (23 ft. 7 in.)
Loader Clearance Circle, Bucket Carry Position	11.07 m (36 ft. 4 in.)	11.39 m (37 ft. 5 in.)	11.39 m (37 ft. 5 in.)
Operating Weight	11 203 kg (24,698 lb.)	11 362 kg (25,048 lb.)	11 362 kg (25,048 lb.)

Loader operating information is based on machine with identified linkage and standard equipment, PowerTech PVX 4045 (EPA Interim Tier 4/EU Stage IIIB) engine, ROPS cab, rear cast bumper/counterweight, transmission side-frame guards, bottom guards, standard tires, full fuel tank, and 79-kg (175 lb.) operator. This information is affected by changes in tires, ballast, and different attachments, and assumes no tire deflection per the standard ISO 14397-1 section 5.

Dimensions with Quick-Coupler and Hook-on Bucket	Z-BAR	HIGH-LIFT	POWERLLEL
Bucket Type/Size	General-Purpose with Bolt-on Edge	General-Purpose with Bolt-on Edge	General-Purpose with Bolt-on Edge
Capacity, Heaped	1.9 m <sup>3</sup> (2.5 cu. yd.)	1.5 m <sup>3</sup> (2.0 cu. yd.)	1.9 m <sup>3</sup> (2.5 cu. yd.)
Capacity, Struck	1.6 m <sup>3</sup> (2.1 cu. yd.)	1.2 m <sup>3</sup> (1.6 cu. yd.)	1.6 m <sup>3</sup> (2.1 cu. yd.)
Bucket Weight with Coupler	1250 kg (2,756 lb.)	1177 kg (2,594 lb.)	1250 kg (2,756 lb.)
Bucket Width	2.54 m (8 ft. 4 in.)	2.54 m (8 ft. 4 in.)	2.54 m (8 ft. 4 in.)
Breakout Force	6674 kg (14,713 lb.)	7446 kg (16,416 lb.)	6153 kg (13,565 lb.)
Tipping Load, Straight	8315 kg (18,332 lb.)	8480 kg (18,695 lb.)	7144 kg (15,750 lb.)
Tipping Load, 40-deg. Full Turn	7200 kg (15,873 lb.)	7354 kg (16,212 lb.)	6157 kg (13,573 lb.)
Reach, 45-deg. Dump, 2.13-m (7 ft.) Clearance	1.47 m (4 ft. 10 in.)	1.44 m (4 ft. 9 in.)	1.78 m (5 ft. 10 in.)
▲▲ Reach, 45-deg. Dump, Full Height	1.15 m (3 ft. 9 in.)	1.07 m (3 ft. 6 in.)	1.15 m (3 ft. 9 in.)
▲ Dump Clearance, 45 deg., Full Height	2.54 m (8 ft. 4 in.)	2.62 m (8 ft. 7 in.)	2.90 m (9 ft. 6 in.)
▲▲▲ Overall Length, Bucket on Ground	7.05 m (23 ft. 1 in.)	6.93 m (22 ft. 9 in.)	7.38 m (24 ft. 3 in.)
Loader Clearance Circle, Bucket Carry Position	11.19 m (36 ft. 9 in.)	11.13 m (36 ft. 6 in.)	11.47 m (37 ft. 7 in.)
Operating Weight	11 583 kg (25,537 lb.)	11 510 kg (25,375 lb.)	11 742 kg (25,887 lb.)

Loader operating information is based on machine with identified linkage and standard equipment, PowerTech PVX 4045 (EPA Interim Tier 4/EU Stage IIIB) engine, ROPS cab, rear cast bumper/counterweight, transmission side-frame guards, bottom guards, standard tires, full fuel tank, and 79-kg (175 lb.) operator. This information is affected by changes in tires, ballast, and different attachments, and assumes no tire deflection per the standard ISO 14397-1 section 5.

Specifications with Quick-Coupler and Hook-on Construction Fork	Z-BAR	HIGH-LIFT	POWERLLEL
▲ Tine Length	1.22 m (48 in.)	1.52 m (60 in.)	1.22 m (48 in.)
▲▲ Overall Length	7.45 m (24 ft. 5 in.)	7.77 m (25 ft. 6 in.)	7.79 m (25 ft. 7 in.)
Tipping Load, Straight (fork level, load centered and positioned at 50% tine length)	6150 kg (13,558 lb.)	5790 kg (12,765 lb.)	5561 kg (12,261 lb.)
Tipping Load, 40-deg. Full Turn (fork level, load centered and positioned at 50% tine length)	5344 kg (11,781 lb.)	5025 kg (11,077 lb.)	4814 kg (10,614 lb.)
Operating Weight	11 350 kg (25,022 lb.)	11 393 kg (25,117 lb.)	11 513 kg (25,381 lb.)

Loader operating information is based on machine with identified linkage and standard equipment, PowerTech PVX 4045 (EPA Interim Tier 4/EU Stage IIIB) engine, ROPS cab, rear cast bumper/counterweight, transmission side-frame guards, bottom guards, standard tires, full fuel tank, and 79-kg (175 lb.) operator. This information is affected by changes in tires, ballast, and different attachments, and assumes no tire deflection per the standard ISO 14397-1 section 5.



**Adjustments to Operating Weights and Tipping Loads with Buckets**

**444K Z-BAR / HIGH-LIFT / POWERLLEL**

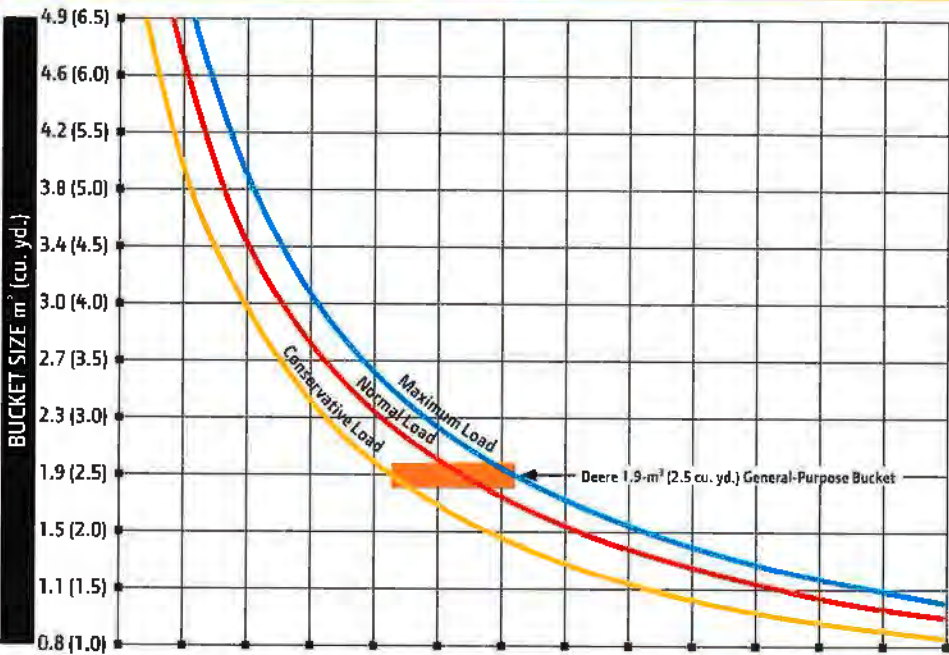
Adjustments to operating weights and tipping loads are based on Z-bar machine with pin-on 1.9-m<sup>3</sup> (2.5 cu. yd.) general-purpose bucket with bolt-on cutting edge, ROPS cab, rear cast bumper/counterweight, transmission side-frame guards, bottom guards, standard tires, full fuel tank, and 79-kg (175 lb.) operator\*  
 Add (+) or deduct (-) kg (lb.) as indicated for

	Operating Weight	Tipping Load, Straight	Tipping Load, 40-deg. Full Turn SAE
John Deere PowerTech PVX 4045	0 kg (0 lb.)	0 kg (0 lb.)	0 kg (0 lb.)
John Deere PowerTech E 4045H	+ 20 kg (+ 44 lb.)	+ 56 kg (+ 123 lb.)	+ 46 kg (+ 101 lb.)
Michelin 17.5 R 25, 1 Star L-3	0 kg (0 lb.)	0 kg (0 lb.)	0 kg (0 lb.)
Bridgestone 17.5 R 25, 1 Star L-3	+ 88 kg (+ 194 lb.)	+ 54 kg (+ 120 lb.)	+ 48 kg (+ 106 lb.)
Michelin 17.5 R 25, 1 Star L-2	- 100 kg (- 220 lb.)	- 62 kg (- 136 lb.)	- 55 kg (- 120 lb.)
Bridgestone 17.5 R 25, 1 Star L-2	+ 32 kg (+ 71 lb.)	+ 20 kg (+ 44 lb.)	+ 17 kg (+ 38 lb.)
Titan 17.5 R 25, 1 Star L-2	- 32 kg (- 71 lb.)	- 20 kg (- 44 lb.)	- 17 kg (- 38 lb.)
Firestone 17.5-25, 12 PR L-3	- 184 kg (- 406 lb.)	- 114 kg (- 251 lb.)	- 100 kg (- 221 lb.)
Firestone 17.5-25, 12 PR L-2 <sup>†</sup>	- 176 kg (- 388 lb.)	- 109 kg (- 240 lb.)	- 96 kg (- 212 lb.)
Titan 17.5-25, 12 PR L-2	- 156 kg (- 344 lb.)	- 96 kg (- 213 lb.)	- 85 kg (- 176 lb.)
Firestone 20.5-25, 12 PR L-2 <sup>†</sup>	+ 56 kg (+ 123 lb.)	+ 35 kg (+ 76 lb.)	+ 31 kg (+ 67 lb.)
Titan 20.5-25, 12 PR L-2 <sup>‡</sup>	+ 96 kg (+ 212 lb.)	+ 59 kg (+ 131 lb.)	+ 52 kg (+ 115 lb.)
Michelin 20.5 R 25, 1 Star L-2 <sup>‡</sup>	+ 204 kg (+ 450 lb.)	+ 127 kg (+ 279 lb.)	+ 111 kg (+ 245 lb.)
Bridgestone 20.5 R 25, 1 Star L-2 <sup>‡</sup>	+ 296 kg (+ 653 lb.)	+ 183 kg (+ 403 lb.)	+ 161 kg (+ 356 lb.)
Titan 20.5 R 25, 1 Star L-2 <sup>‡</sup>	+ 276 kg (+ 608 lb.)	+ 171 kg (+ 376 lb.)	+ 151 kg (+ 332 lb.)
Michelin 550/65 R 25, 1 Star L-2	+ 240 kg (+ 529 lb.)	+ 148 kg (+ 327 lb.)	+ 131 kg (+ 289 lb.)
CaCl <sub>2</sub> in 17.5-25 Rear Tires, 75% Fill <sup>§</sup>	+ 537 kg (+ 1,183 lb.)	+ 639 kg (+ 1,409 lb.)	+ 564 kg (+ 1,243 lb.)

\*May change based on vehicle configuration, weight, or tire-pressure adjustments.  
<sup>†</sup>Equipped with 1-piece rims.  
<sup>‡</sup>CaCl<sub>2</sub> not recommended.

**Bucket Selection Guides\***

**444K Z-BAR**



**444K Z-BAR LOADER WITH PIN-ON BUCKET**

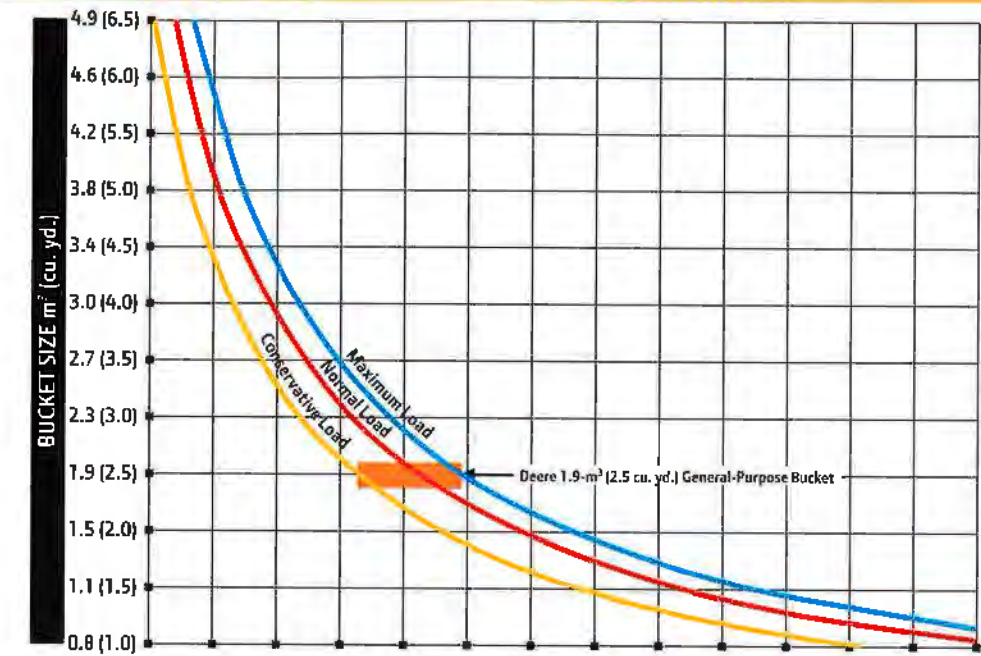
**LOOSE MATERIALS**

	kg/m <sup>3</sup>	lb./cu. yd.
Chips, pulpwood	288	486
Cinders (coal, ashes, clinkers)	673	1,134
Clay and gravel, dry	1602	2,700
Clay, compact, solid	1746	2,943
Clay, dry in lump loose	1009	1,701
Clay, excavated in water	1282	2,160
Coal, anthracite, broken, loose	865	1,458
Coal, bituminous, moderately wet	801	1,350
Earth, common loam, dry	1218	2,052
Earth, mud, packed	1843	3,105
Granite, broken	1538	2,592
Gypsum	2275	3,834
Limestone, coarse, sized	1570	2,646
Limestone, mixed sizes	1682	2,835
Limestone, pulverized or crushed	1362	2,295
Sand, damp	2083	3,510
Sand, dry	1762	2,970
Sand, voids, full of water	2083	3,510
Sandstone, quarried	1314	2,214
Shale, broken crushed	1362	2,295
Slag, furnace granulated	1955	3,294
Stone or gravel, 37.5 to 87.5-mm (1.5 to 3.5") size	1442	2,430
Stone or gravel, 18.75-mm (3/4") size	1602	2,700

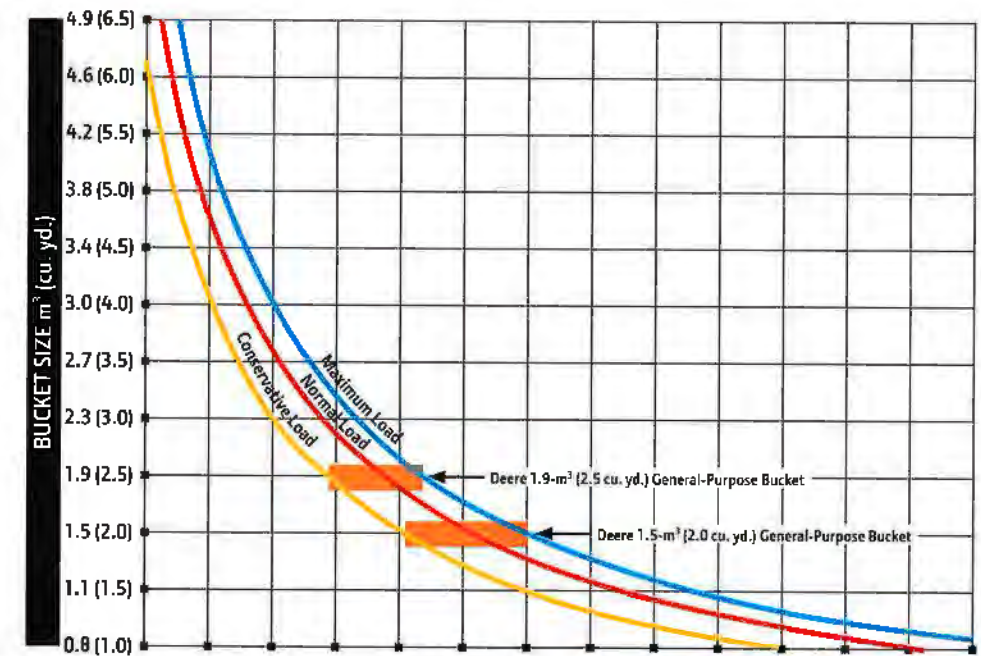
\*This guide, representing bucket sizes not necessarily manufactured by Deere, will help you in selecting proper bucket size for material density, loader configuration, and operating conditions. Optimum bucket size is determined after adding or subtracting all tipping load changes due to optional equipment. The "conservative load" line on this guide is recommended when operating in conditions such as soft ground and unlevel surfaces. The "maximum load" condition on this guide is sometimes utilized when operating on firm ground and level surfaces.

**Bucket Selection Guides (continued)\***

**444K HIGH-LIFT / POWERLLEL**



**444K HIGH-LIFT LOADER WITH PIN-ON BUCKET**



**444K POWERLLEL LOADER WITH QUICK-COUPLER AND HOOK-ON BUCKET**

**LOOSE MATERIALS**

	kg/m <sup>3</sup>	lb./cu. yd.
Chips, pulpwood	288	486
Cinders (coal, ashes, clinkers)	673	1,134
Clay and gravel, dry	1602	2,700
Clay, compact, solid	1746	2,943
Clay, dry in lump loose	1009	1,701
Clay, excavated in water	1282	2,160
Coal, anthracite, broken, loose	865	1,458
Coal, bituminous, moderately wet	801	1,350
Earth, common loam, dry	1218	2,052
Earth, mud, packed	1843	3,105
Granite, broken	1538	2,592
Gypsum	2275	3,834
Limestone, coarse, sized	1570	2,646
Limestone, mixed sizes	1682	2,835
Limestone, pulverized or crushed	1362	2,295
Sand, damp	2083	3,510
Sand, dry	1762	2,970
Sand, voids, full of water	2083	3,510
Sandstone, quarried	1314	2,214
Shale, broken crushed	1362	2,295
Slag, furnace granulated	1955	3,294
Stone or gravel, 37.5 to 87.5-mm (1.5 to 3.5") size	1442	2,430
Stone or gravel, 18.75-mm (3/4") size	1602	2,700

\*This guide, representing bucket sizes not necessarily manufactured by Deere, will help you in selecting proper bucket size for material density, loader configuration, and operating conditions. Optimum bucket size is determined after adding or subtracting all tipping load changes due to optional equipment. The "conservative load" line on this guide is recommended when operating in conditions such as soft ground and unlevel surfaces. The "maximum load" condition on this guide is sometimes utilized when operating on firm ground and level surfaces.

**LOOSE MATERIALS**

	kg/m <sup>3</sup>	lb./cu. yd.
Chips, pulpwood	288	486
Cinders (coal, ashes, clinkers)	673	1,134
Clay and gravel, dry	1602	2,700
Clay, compact, solid	1746	2,943
Clay, dry in lump loose	1009	1,701
Clay, excavated in water	1282	2,160
Coal, anthracite, broken, loose	865	1,458
Coal, bituminous, moderately wet	801	1,350
Earth, common loam, dry	1218	2,052
Earth, mud, packed	1843	3,105
Granite, broken	1538	2,592
Gypsum	2275	3,834
Limestone, coarse, sized	1570	2,646
Limestone, mixed sizes	1682	2,835
Limestone, pulverized or crushed	1362	2,295
Sand, damp	2083	3,510
Sand, dry	1762	2,970
Sand, voids, full of water	2083	3,510
Sandstone, quarried	1314	2,214
Shale, broken crushed	1362	2,295
Slag, furnace granulated	1955	3,294
Stone or gravel, 37.5 to 87.5-mm (1.5 to 3.5") size	1442	2,430
Stone or gravel, 18.75-mm (3/4") size	1602	2,700

\*This guide, representing bucket sizes not necessarily manufactured by Deere, will help you in selecting proper bucket size for material density, loader configuration, and operating conditions. Optimum bucket size is determined after adding or subtracting all tipping load changes due to optional equipment. The "conservative load" line on this guide is recommended when operating in conditions such as soft ground and unlevel surfaces. The "maximum load" condition on this guide is sometimes utilized when operating on firm ground and level surfaces.



Engine	524K Z-BAR / HIGH-LIFT	
Manufacturer and Model	John Deere PowerTech™ PVX 6068	John Deere PowerTech™ E 6068H
Non-Road Emissions Standard	EPA Interim Tier 4/EU Stage IIIB	EPA Tier 3/EU Stage IIIA
Cylinders	6	6
Valves Per Cylinder	4	2
Displacement	6.8 L (414 cu. in.)	6.8 L (414 cu. in.)
Net Peak Power (ISO 9249)	105 kW (141 hp) at 1,700 rpm	110 kW (146 hp) at 2,000 rpm
Net Peak Torque (ISO 9249)	623 Nm (459 lb.-ft.) at 1,200 rpm	607 Nm (448 lb.-ft.) at 1,600 rpm
Net Torque Rise	53%	47%
Fuel System (electronically controlled)	High-pressure common rail	High-pressure common rail
Lubrication	Full-flow spin-on filter and integral cooler	Full-flow spin-on filter and integral cooler
Aspiration	Turbocharged, charge air cooled	Turbocharged, charge air cooled
Air Cleaner	Under-hood dual-element dry type, restriction indicator in cab monitor for service	Under-hood dual-element dry type, restriction indicator in cab monitor for service
Fan Drive	Hydraulically driven, proportionally controlled, fan aft of coolers	Hydraulically driven, proportionally controlled, fan aft of coolers
Electrical System	24 volt with 100-amp alternator (optional 130-amp alternator)	24 volt with 80-amp alternator (optional 100-amp alternator)
Batteries (2 – 12 volt)	950 CCA (each)	950 CCA (each)

Transmission	524K Z-BAR / HIGH-LIFT	
Type	Countershaft-type PowerShift™	
Torque Converter	Single stage, single phase	
Shift Control	Electronically modulated, adaptive, load and speed dependent	
Operator Interface	Steering-column or joystick-mounted F-N-R and gear-select lever; quick-shift button on hydraulic lever	
Shift Modes	Manual/auto (1st-D or 2nd-D); quick-shift button with 2 selectable modes: kick-down or kick-up/down; and 3 adjustable clutch-cutoff settings	
Maximum Travel Speeds (with 20.5-25 tires)	Forward	Reverse
Gear 1	7.3 km/h (4.5 mph)	7.2 km/h (4.5 mph)
Gear 2	12.0 km/h (7.5 mph)	12.6 km/h (7.8 mph)
Gear 3	23.0 km/h (14.3 mph)	24.1 km/h (15.0 mph)
Gear 4	36.0 km/h (22.4 mph)	N/A

Axles/Brakes	524K Z-BAR / HIGH-LIFT	
Final Drives	Heavy-duty inboard-mounted planetary	
Differentials	Hydraulic locking front with conventional rear – standard; dual locking front and rear – optional	
Rear Axle Oscillation, Stop to Stop (with 20.5-25 tires)	24 deg.	
Brakes (conform to ISO 3450)	Hydraulically actuated, inboard sun-shaft mounted, oil cooled, self-adjusting, single disc	
Service Brakes	Automatic spring applied, hydraulically released, driveline mounted, oil cooled, multi disc	
Parking Brake	Automatic spring applied, hydraulically released, driveline mounted, oil cooled, multi disc	

Tires/Wheels	Tread Width	Width Over Tires	Change in Vertical Height
Choice of (with 3-piece rims)*			No change
Michelin 20.5 R 25, 1 Star L-3	1950 mm (76.8 in.)	2546 mm (100.2 in.)	– 5 mm (– 0.2 in.)
Bridgestone 20.5 R 25, 1 Star L-3	1950 mm (76.8 in.)	2541 mm (100.0 in.)	– 5 mm (– 0.2 in.)
Titan 20.5 R 25, 1 Star L-3	1950 mm (76.8 in.)	2541 mm (100.0 in.)	– 5 mm (– 0.2 in.)
Michelin 20.5 R 25, 1 Star L-2	1950 mm (76.8 in.)	2541 mm (100.0 in.)	– 5 mm (– 0.2 in.)
Bridgestone 20.5 R 25, 1 Star L-2	1950 mm (76.8 in.)	2541 mm (100.0 in.)	– 5 mm (– 0.2 in.)
Titan 20.5 R 25, 1 Star L-2	1950 mm (76.8 in.)	2541 mm (100.0 in.)	– 5 mm (– 0.2 in.)
Titan 20.5-25, 16 PR L-2	1950 mm (76.8 in.)	2544 mm (100.2 in.)	+ 3 mm (+ 0.1 in.)
Firestone 20.5-25, 16 PR L-2	1950 mm (76.8 in.)	2544 mm (100.2 in.)	+ 3 mm (+ 0.1 in.)
Firestone 20.5-25, 12 PR L-2	1950 mm (76.8 in.)	2544 mm (100.2 in.)	+ 3 mm (+ 0.1 in.)
Titan 20.5-25, 12 PR L-2	1950 mm (76.8 in.)	2544 mm (100.2 in.)	+ 3 mm (+ 0.1 in.)
Firestone 20.5-25, 16 PR L-3	1950 mm (76.8 in.)	2544 mm (100.2 in.)	+ 9 mm (+ 0.4 in.)
725/70-25, 16-Ply L-4T (Logger Style) <sup>‡</sup>	2050 mm (80.7 in.)	2802 mm (110.3 in.)	+ 109 mm (+ 4.3 in.)
Michelin 600/65 R 25, 1 Star L-3T <sup>‡</sup>	1950 mm (76.8 in.)	2633 mm (103.7 in.)	– 22 mm (– 0.9 in.)

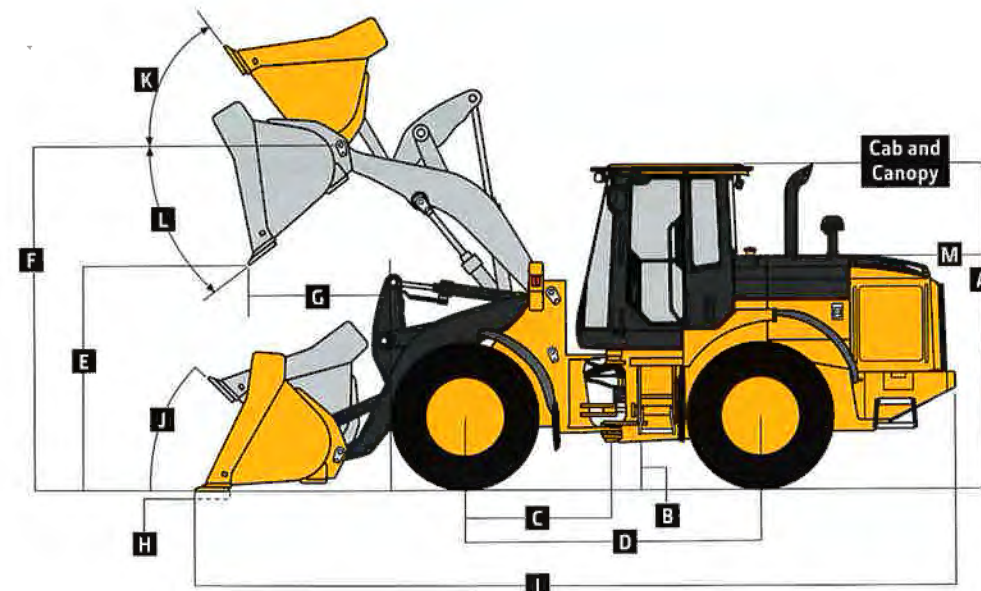
\*Based on Z-bar machine configuration; may change based on vehicle configuration, weight, or tire-pressure adjustments.  
<sup>‡</sup>CaCl<sub>2</sub>, not recommended.  
<sup>‡</sup>Equipped with 5-piece heavy-duty rims.

Serviceability	524K Z-BAR / HIGH-LIFT	
Refill Capacities	EPA Interim Tier 4/EU Stage IIIB	EPA Tier 3/EU Stage IIIA
Fuel Tank (with ground-level fueling)	242 L (64 gal.)	242 L (64 gal.)
Cooling System	26 L (27 qt.)	23 L (24 qt.)
Engine Oil with Vertical Spin-On Filter	19.5 L (20.6 qt.)	19 L (20.1 qt.)
Transmission Fluid with Vertical Filter	18.5 L (19.5 qt.)	18.5 L (19.5 qt.)
Axle Oil (front and rear, each)	17 L (18 qt.)	17 L (18 qt.)
Hydraulic Reservoir and Filters	122.8 L (32.5 gal.)	92 L (24.3 gal.)
Park Brake Oil (wet disc)	0.3 L (10 oz.)	0.3 L (10 oz.)

Hydraulic System/Steering	524K Z-BAR / HIGH-LIFT	
Pump (loader and steering)	Variable-displacement, axial-piston pump; closed-center, pressure-compensating system	
Maximum Rated Flow at 6895 kPa (1,000 psi) and 2,350 rpm	165 L/m (44 gpm)	
System Relief Pressure (loader and steering)	24 994 kPa (3,625 psi)	
Loader Controls	2-function valve, joystick control or fingertip controls, hydraulic-function enable/disable, optional 3rd- and 4th-function valve with auxiliary lever	

Steering (conforms to ISO 5010)	Power, fully hydraulic	
Type	80-deg. arc (40-deg. each direction)	
Articulation Angle	5.00 m (16 ft. 5 in.)	
Turning Radius (measured to centerline of outside tire)	5.00 m (16 ft. 5 in.)	
Hydraulic Cycle Times	Z-Bar	High-Lift
Raise	6.1 sec.	6.1 sec.
Dump	1.4 sec.	1.4 sec.
Lower (float down)	3.0 sec.	3.0 sec.
Total	10.5 sec.	10.5 sec.

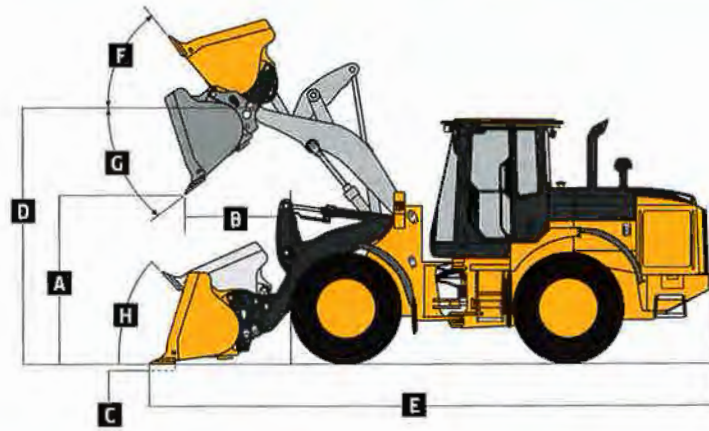
Dimensions with Standard Configuration	Z-BAR	HIGH-LIFT
A Height to Top of Cab and Canopy	2.1-m <sup>3</sup> (2.75 cu. yd.) pin-on bucket 3.25 m (10 ft. 8 in.)	2.1-m <sup>3</sup> (2.75 cu. yd.) pin-on bucket 3.25 m (10 ft. 8 in.)
B Ground Clearance	0.40 m (15.7 in.)	0.40 m (15.7 in.)
C Length from Centerline to Front Axle	1.45 m (4 ft. 9 in.)	1.45 m (4 ft. 9 in.)
D Wheelbase	2.93 m (9 ft. 7 in.)	2.93 m (9 ft. 7 in.)
E Dump Clearance	▲ (see page 25)	▲ (see page 25)
F Height to Hinge Pin, Fully Raised	3.77 m (12 ft. 5 in.)	4.12 m (13 ft. 6 in.)
G Dump Reach	▲▲ (see page 25)	▲▲ (see page 25)
H Maximum Digging Depth	97 mm (3.8 in.)	222 mm (8.7 in.)
I Overall Length	▲▲▲ (see page 25)	▲▲▲ (see page 25)
J Maximum Rollback at Ground Level	41 deg.	41 deg.
K Maximum Rollback, Boom Fully Raised	55 deg.	50 deg.
L Maximum Bucket Angle, Fully Raised	51 deg.	47 deg.
M Hood Height	2.30 m (7 ft. 7 in.)	2.30 m (7 ft. 7 in.)



524K Z-BAR AND HIGH-LIFT LOADERS

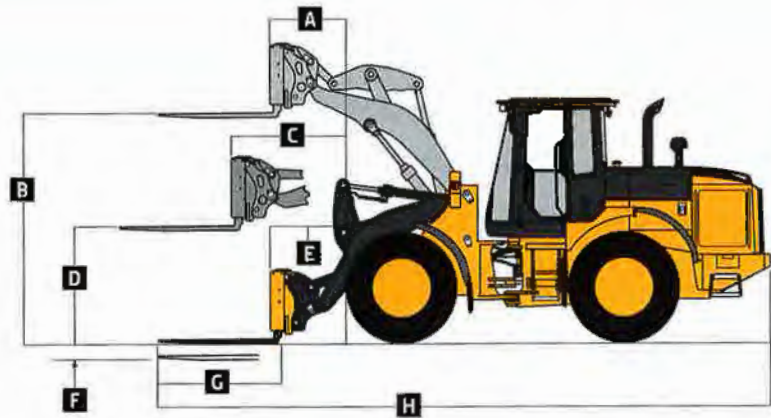


Dimensions with Quick-Coupler and Hook-On Bucket	524K Z-BAR	HIGH-LIFT
A Dump Clearance	▲ (see page 25)	▲ (see page 25)
B Dump Reach	▲▲ (see page 25)	▲▲ (see page 25)
C Maximum Digging Depth	146 mm (5.7 in.)	226 mm (10.3 in.)
D Height to Hinge Pin, Fully Raised	3.77 m (12 ft. 5 in.)	4.12 m (13 ft. 6 in.)
E Overall Length	▲▲▲ (see page 25)	▲▲▲ (see page 25)
F Maximum Rollback, Boom Fully Raised	54 deg.	48 deg.
G Maximum Bucket Angle, Fully Raised	48 deg.	48 deg.
H Maximum Rollback at Ground Level	40 deg.	45 deg.



524K Z-BAR AND HIGH-LIFT LOADERS WITH QUICK-COUPLER AND HOOK-ON BUCKET

Dimensions with Quick-Coupler and Hook-On Construction Fork	Z-BAR	HIGH-LIFT
A Reach, Fully Raised	0.80 m (31.3 in.)	0.81 m (31.9 in.)
B Fork Height, Fully Raised	3.55 m (11 ft. 8 in.)	3.90 m (12 ft. 9 in.)
C Maximum Reach, Fork Level	1.54 m (5 ft. 1 in.)	1.80 m (5 ft. 11 in.)
D Maximum Reach, Fork Height	1.72 m (5 ft. 8 in.)	1.72 m (5 ft. 8 in.)
E Reach, Ground Level	0.94 m (3 ft. 1 in.)	1.27 m (4 ft. 2 in.)
F Depth Below Ground	16 mm (0.6 in.)	95 mm (3.7 in.)
G Tine Length	▲ (see page 25)	▲ (see page 25)
H Overall Length	▲▲ (see page 25)	▲▲ (see page 25)



524K Z-BAR AND HIGH-LIFT LOADERS WITH QUICK-COUPLER AND HOOK-ON CONSTRUCTION FORK

Dimensions with Pin-on Bucket	524K Z-BAR	HIGH-LIFT
Bucket Type/Size	General-Purpose with Bolt-on Edge	General-Purpose with Bolt-on Edge
Capacity, Heaped	2.1 m <sup>3</sup> (2.75 cu. yd.)	2.1 m <sup>3</sup> (2.75 cu. yd.)
Capacity, Struck	1.7 m <sup>3</sup> (2.27 cu. yd.)	1.7 m <sup>3</sup> (2.27 cu. yd.)
Bucket Weight	991 kg (2,185 lb.)	991 kg (2,185 lb.)
Bucket Width	2.54 m (8 ft. 4 in.)	2.54 m (8 ft. 4 in.)
Breakout Force	9193 kg (20,267 lb.)	8504 kg (18,748 lb.)
Tipping Load, Straight	10 255 kg (22,609 lb.)	8803 kg (19,406 lb.)
Tipping Load, 40-deg. Full Turn	8914 kg (19,652 lb.)	7622 kg (16,804 lb.)
Reach, 45-deg. Dump, 2.13-m (7 ft.) Clearance	1.44 m (4 ft. 9 in.)	1.73 m (5 ft. 8 in.)
▲▲ Reach, 45-deg. Dump, Full Height	0.98 m (3 ft. 2 in.)	0.99 m (3 ft. 3 in.)
▲▲▲ Dump Clearance, 45 deg., Full Height	2.77 m (9 ft. 1 in.)	3.12 m (10 ft. 3 in.)
▲▲▲ Overall Length, Bucket on Ground	7.34 m (24 ft. 1 in.)	7.67 m (25 ft. 2 in.)
Loader Clearance Circle, Bucket Carry Position	11.60 m (38 ft. 1 in.)	11.90 m (39 ft. 1 in.)
Operating Weight	12 449 kg (27,445 lb.)	12 642 kg (27,871 lb.)

Loader operating information is based on machine with identified linkage and standard equipment, PowerTech PVX 6068 (EPA Interim Tier 4/EU Stage IIIB) engine, ROPS cab, rear cast bumper/counterweight, transmission side-frame guards, bottom guards, standard tires, full fuel tank, and 79-kg (175 lb.) operator. This information is affected by changes in tires, ballast, and different attachments, and assumes no tire deflection per the standard ISO 14397-1 section 5.

Dimensions with Quick-Coupler and Hook-on Bucket	Z-BAR	HIGH-LIFT
Bucket Type/Size	General-Purpose with Bolt-on Edge	General-Purpose with Bolt-on Edge
Capacity, Heaped	2.1 m <sup>3</sup> (2.75 cu. yd.)	1.9 m <sup>3</sup> (2.5 cu. yd.)
Capacity, Struck	1.7 m <sup>3</sup> (2.27 cu. yd.)	1.6 m <sup>3</sup> (2.1 cu. yd.)
Bucket Weight with Coupler	1369 kg (3,018 lb.)	1294 kg (2,853 lb.)
Bucket Width	2.54 m (8 ft. 4 in.)	2.54 m (8 ft. 4 in.)
Breakout Force	7567 kg (16,682 lb.)	8182 kg (18,038 lb.)
Tipping Load, Straight	9027 kg (19,902 lb.)	9177 kg (20,232 lb.)
Tipping Load, 40-deg. Full Turn	7795 kg (17,185 lb.)	7936 kg (17,495 lb.)
Reach, 45-deg. Dump, 2.13-m (7 ft.) Clearance	1.47 m (4 ft. 10 in.)	1.44 m (4 ft. 9 in.)
▲▲ Reach, 45-deg. Dump, Full Height	1.10 m (3 ft. 7 in.)	1.03 m (3 ft. 5 in.)
▲▲▲ Dump Clearance, 45 deg., Full Height	2.61 m (8 ft. 7 in.)	2.67 m (8 ft. 9 in.)
▲▲▲ Overall Length, Bucket on Ground	7.57 m (24 ft. 10 in.)	7.48 m (24 ft. 6 in.)
Loader Clearance Circle, Bucket Carry Position	11.77 m (38 ft. 7 in.)	11.72 m (38 ft. 6 in.)
Operating Weight	12 848 kg (28,326 lb.)	12 771 kg (28,156 lb.)

Loader operating information is based on machine with identified linkage and standard equipment, PowerTech PVX 6068 (EPA Interim Tier 4/EU Stage IIIB) engine, ROPS cab, rear cast bumper/counterweight, transmission side-frame guards, bottom guards, standard tires, full fuel tank, and 79-kg (175 lb.) operator. This information is affected by changes in tires, ballast, and different attachments, and assumes no tire deflection per the standard ISO 14397-1 section 5.

Specifications with Quick-Coupler and Hook-on Construction Fork	Z-BAR	HIGH-LIFT
▲ Tine Length	1.22 m (48 in.)	1.52 m (60 in.)
▲▲ Overall Length	7.88 m (25 ft. 10 in.)	8.18 m (26 ft. 10 in.)
Tipping Load, Straight (fork level, load centered and positioned at 50% tine length)	7126 kg (15,709 lb.)	6723 kg (14,822 lb.)
Tipping Load, 40-deg. Full Turn (fork level, load centered and positioned at 50% tine length)	6192 kg (13,651 lb.)	5836 kg (12,867 lb.)
Operating Weight	12 511 kg (27,581 lb.)	12 554 kg (27,676 lb.)

Loader operating information is based on machine with identified linkage and standard equipment, PowerTech PVX 6068 (EPA Interim Tier 4/EU Stage IIIB) engine, ROPS cab, rear cast bumper/counterweight, transmission side-frame guards, bottom guards, standard tires, full fuel tank, and 79-kg (175 lb.) operator. This information is affected by changes in tires, ballast, and different attachments, and assumes no tire deflection per the standard ISO 14397-1 section 5.



Adjustments to operating weights and tipping loads are based on Z-bar machine with pin-on 2.1-m<sup>3</sup> (2.75 cu. yd.) general-purpose bucket with bolt-on cutting edge, ROPS cab, rear cast bumper/counterweight, transmission side-frame guards, bottom guards, standard tires, full fuel tank, and 79-kg (175 lb.) operator\*

Add (+) or deduct (-) kg (lb.) as indicated for loaders with 3-piece rims and	Operating Weight	Tipping Load, Straight	Tipping Load, 40-deg. Full Turn SAE
John Deere PowerTech PVX 6068	0 kg (0 lb.)	0 kg (0 lb.)	0 kg (0 lb.)
John Deere PowerTech E 6068H	-19 kg (-42 lb.)	+48 kg (+106 lb.)	+34 kg (+75 lb.)
Michelin 20.5 R 25, 1 Star L-3	0 kg (0 lb.)	0 kg (0 lb.)	0 kg (0 lb.)
Bridgestone 20.5 R 25, 1 Star L-3	+44 kg (+97 lb.)	+28 kg (+61 lb.)	+24 kg (+54 lb.)
Titan 20.5 R 25, 1 Star L-3	-4 kg (-9 lb.)	-3 kg (-6 lb.)	-2 kg (-5 lb.)
Michelin 20.5 R 25, 1 Star L-2	-172 kg (-379 lb.)	-109 kg (-239 lb.)	-96 kg (-211 lb.)
Bridgestone 20.5 R 25, 1 Star L-2	-80 kg (-176 lb.)	-50 kg (-111 lb.)	-45 kg (-98 lb.)
Titan 20.5 R 25, 1 Star L-2	-100 kg (-220 lb.)	-63 kg (-139 lb.)	-56 kg (-123 lb.)
Titan 20.5-25, 16 PR L-2	-260 kg (-573 lb.)	-164 kg (-362 lb.)	-145 kg (-319 lb.)
Firestone 20.5-25, 16 PR L-2	-280 kg (-617 lb.)	-177 kg (-390 lb.)	-156 kg (-344 lb.)
Firestone 20.5-25, 12 PR L-2	-316 kg (-697 lb.)	-199 kg (-440 lb.)	-176 kg (-388 lb.)
Titan 20.5-25, 12 PR L-2	-280 kg (-617 lb.)	-177 kg (-390 lb.)	-156 kg (-344 lb.)
Firestone 20.5-25, 16 PR L-3	-252 kg (-556 lb.)	-184 kg (-405 lb.)	-162 kg (-357 lb.)
725/70-25, 16-Ply L-4T (Logger Style) <sup>§</sup>	+460 kg (+1,014 lb.)	+336 kg (+740 lb.)	+296 kg (+652 lb.)
Michelin 600/65 R 25, 1 Star L-3T <sup>§</sup>	+4 kg (+9 lb.)	+3 kg (+6 lb.)	+2 kg (+5 lb.)
CaCl <sub>2</sub> in 20.5-25, L-3 Rear Tires, 75% Fill	+825 kg (+1,820 lb.)	+1010 kg (+2,227 lb.)	+891 kg (+1,964 lb.)

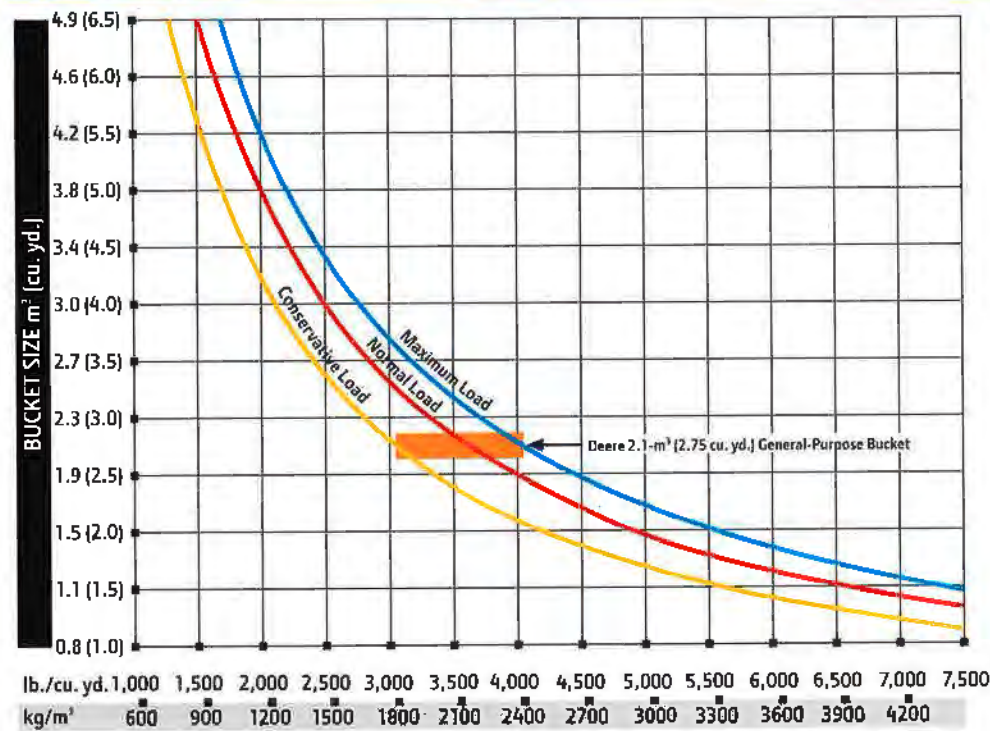
\*May change based on vehicle configuration, weight, or tire-pressure adjustments.

<sup>§</sup>CaCl<sub>2</sub> not recommended.

<sup>§</sup>Equipped with 5-piece heavy-duty rims.

Bucket Selection Guides<sup>§</sup>

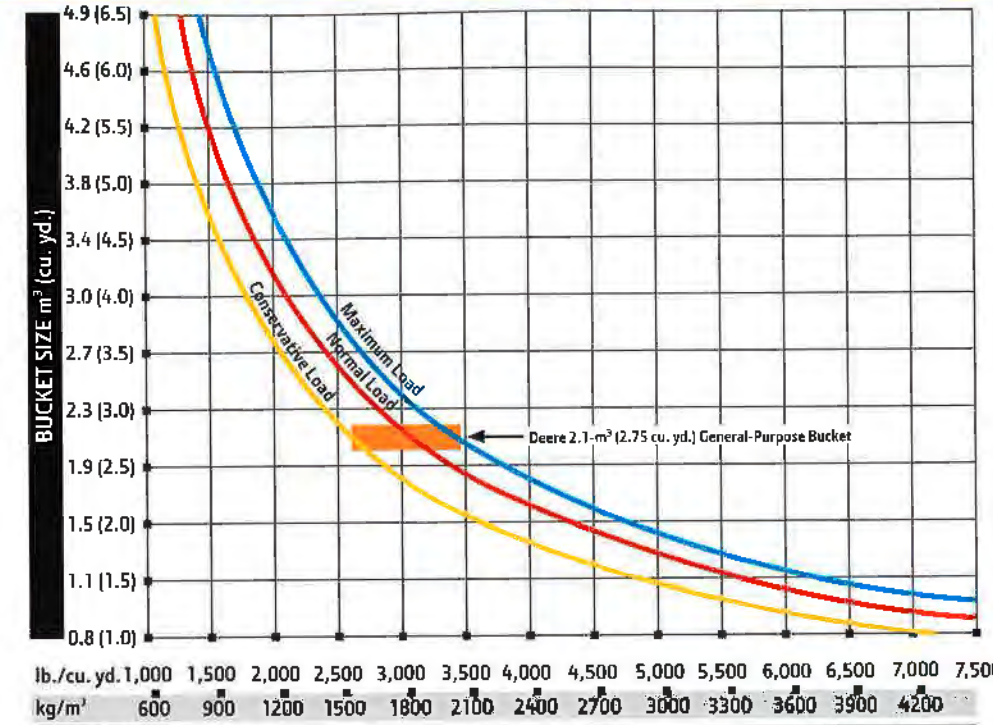
524K Z-BAR



524K Z-BAR LOADER WITH PIN-ON BUCKET

LOOSE MATERIALS	kg/m <sup>3</sup>	lb./cu. yd.
Chips, pulpwood	288	486
Cinders (coal, ashes, clinkers)	673	1,134
Clay and gravel, dry	1602	2,700
Clay, compact, solid	1746	2,943
Clay, dry in lump loose	1009	1,701
Clay, excavated in water	1282	2,160
Coal, anthracite, broken, loose	865	1,458
Coal, bituminous, moderately wet	801	1,350
Earth, common loam, dry	1218	2,052
Earth, mud, packed	1843	3,105
Granite, broken	1538	2,592
Gypsum	2275	3,834
Limestone, coarse, sized	1570	2,646
Limestone, mixed sizes	1682	2,835
Limestone, pulverized or crushed	1362	2,295
Sand, damp	2083	3,510
Sand, dry	1762	2,970
Sand, voids, full of water	2083	3,510
Sandstone, quarried	1314	2,214
Shale, broken crushed	1362	2,295
Slag, furnace granulated	1955	3,294
Stone or gravel, 37.5 to 87.5-mm (1.5 to 3.5") size	1442	2,430
Stone or gravel, 18.75-mm (3/4") size	1602	2,700

<sup>§</sup>This guide, representing bucket sizes not necessarily manufactured by Deere, will help you in selecting proper bucket size for material density, loader configuration, and operating conditions. Optimum bucket size is determined after adding or subtracting all tipping load changes due to optional equipment. The "conservative load" line on this guide is recommended when operating in conditions such as soft ground and unlevel surfaces. The "maximum load" condition on this guide is sometimes utilized when operating on firm ground and level surfaces.



524K HIGH-LIFT LOADER WITH PIN-ON BUCKET

LOOSE MATERIALS	kg/m <sup>3</sup>	lb./cu. yd.
Chips, pulpwood	288	486
Cinders (coal, ashes, clinkers)	673	1,134
Clay and gravel, dry	1602	2,700
Clay, compact, solid	1746	2,943
Clay, dry in lump loose	1009	1,701
Clay, excavated in water	1282	2,160
Coal, anthracite, broken, loose	865	1,458
Coal, bituminous, moderately wet	801	1,350
Earth, common loam, dry	1218	2,052
Earth, mud, packed	1843	3,105
Granite, broken	1538	2,592
Gypsum	2275	3,834
Limestone, coarse, sized	1570	2,646
Limestone, mixed sizes	1682	2,835
Limestone, pulverized or crushed	1362	2,295
Sand, damp	2083	3,510
Sand, dry	1762	2,970
Sand, voids, full of water	2083	3,510
Sandstone, quarried	1314	2,214
Shale, broken crushed	1362	2,295
Slag, furnace granulated	1955	3,294
Stone or gravel, 37.5 to 87.5-mm (1.5 to 3.5") size	1442	2,430
Stone or gravel, 18.75-mm (3/4") size	1602	2,700

<sup>§</sup>This guide, representing bucket sizes not necessarily manufactured by Deere, will help you in selecting proper bucket size for material density, loader configuration, and operating conditions. Optimum bucket size is determined after adding or subtracting all tipping load changes due to optional equipment. The "conservative load" line on this guide is recommended when operating in conditions such as soft ground and unlevel surfaces. The "maximum load" condition on this guide is sometimes utilized when operating on firm ground and level surfaces.



# 544K

Engine	544K Z-BAR / HIGH-LIFT / POWERLLEL™	
Manufacturer and Model	John Deere PowerTech™ PVX 6068	John Deere PowerTech™ E 6068H
Non-Road Emissions Standard	EPA Interim Tier 4/EU Stage IIIB	EPA Tier 3/EU Stage IIIA
Cylinders	6	6
Valves Per Cylinder	4	2
Displacement	6.8 L (414 cu. in.)	6.8 L (414 cu. in.)
Net Peak Power (ISO 9249)	121 kW (163 hp) at 1,800 rpm	125 kW (167 hp) at 1,900 rpm
Net Peak Torque (ISO 9249)	683 Nm (504 lb.-ft.) at 1,100 rpm	673 Nm (496 lb.-ft.) at 1,600 rpm
Net Torque Rise	37%	31%
Fuel System (electronically controlled)	High-pressure common rail	High-pressure common rail
Lubrication	Full-flow spin-on filter and integral cooler	Full-flow spin-on filter and integral cooler
Aspiration	Turbocharged, charge air cooled	Turbocharged, charge air cooled
Air Cleaner	Under-hood, dual-element dry type, restriction indicator in cab monitor for service	Under-hood, dual-element dry type, restriction indicator in cab monitor for service
Fan Drive	Hydraulically driven, proportionally controlled, fan aft of coolers	Hydraulically driven, proportionally controlled, fan aft of coolers
Electrical System	24 volt with 100-amp alternator (optional 130-amp alternator)	24 volt with 80-amp alternator (optional 100-amp alternator)
Batteries (2 – 12 volt)	950 CCA (each)	950 CCA (each)

Transmission	Countershaft-type PowerShift™	
Type	Single stage, single phase	
Torque Converter	Electronically modulated, adaptive, load and speed dependent	
Shift Control	Steering-column or joystick-mounted F-N-R and gear-select lever; kick-down button on hydraulic lever	
Operator Interface	Manual/auto (1st-D or 2nd-D); quick-shift button with 2 selectable modes: kick-down or kick-up/down; and 3 adjustable clutch-cutoff settings	
Shift Modes	Manual/auto (1st-D or 2nd-D); quick-shift button with 2 selectable modes: kick-down or kick-up/down; and 3 adjustable clutch-cutoff settings	
Maximum Travel Speeds (with 20.5 R 25 tires)	<i>Forward</i>	<i>Reverse</i>
Gear 1	7.2 km/h (4.5 mph)	7.2 km/h (4.5 mph)
Gear 2	11.9 km/h (7.4 mph)	12.6 km/h (7.8 mph)
Gear 3	22.8 km/h (14.2 mph)	24.1 km/h (15.0 mph)
Gear 4	35.7 km/h (22.2 mph)	N/A

Axles/Brakes	Heavy-duty inboard-mounted planetary	
Final Drives	Hydraulic locking front with conventional rear – standard; dual locking front and rear – optional	
Differentials	24 deg.	
Rear Axle Oscillation, Stop to Stop (with 20.5 R 25 tires)	24 deg.	
Brakes (conform to ISO 3450)	Hydraulically actuated, inboard sun-shaft mounted, oil cooled, self-adjusting, single disc	
Service Brakes	Automatic spring applied, hydraulically released, driveline mounted, oil cooled, multi disc	
Parking Brake		

Tires/Wheels	Tread Width	Width Over Tires	Change In Vertical Height
Choice of (with 3-piece rims)*			No change
Michelin 20.5 R 25, 1 Star L-3	1950 mm (76.8 in.)	2546 mm (100.2 in.)	-5 mm (-0.2 in.)
Bridgestone 20.5 R 25, 1 Star L-3	1950 mm (76.8 in.)	2541 mm (100.0 in.)	-5 mm (-0.2 in.)
Titan 20.5 R 25, 1 Star L-3	1950 mm (76.8 in.)	2541 mm (100.0 in.)	-5 mm (-0.2 in.)
Michelin 20.5 R 25, 1 Star L-2	1950 mm (76.8 in.)	2541 mm (100.0 in.)	-5 mm (-0.2 in.)
Bridgestone 20.5 R 25, 1 Star L-2	1950 mm (76.8 in.)	2541 mm (100.0 in.)	-5 mm (-0.2 in.)
Titan 20.5 R 25, 1 Star L-2	1950 mm (76.8 in.)	2541 mm (100.0 in.)	-5 mm (-0.2 in.)
Titan 20.5-25, 16 PR L-2	1950 mm (76.8 in.)	2544 mm (100.2 in.)	+3 mm (+0.1 in.)
Firestone 20.5-25, 16 PR L-2	1950 mm (76.8 in.)	2544 mm (100.2 in.)	+3 mm (+0.1 in.)
Firestone 20.5-25, 12 PR L-2	1950 mm (76.8 in.)	2544 mm (100.2 in.)	+3 mm (+0.1 in.)
Titan 20.5-25, 12 PR L-2	1950 mm (76.8 in.)	2544 mm (100.2 in.)	+3 mm (+0.1 in.)
Firestone 20.5-25, 16 PR L-3	1950 mm (76.8 in.)	2544 mm (100.2 in.)	+9 mm (+0.4 in.)
725/70-25, 16-Ply L-4T (Logger Style) <sup>‡</sup>	2050 mm (80.7 in.)	2802 mm (110.3 in.)	+109 mm (+4.3 in.)
Michelin 600/65 R 25, 1 Star L-3 <sup>†</sup>	1950 mm (76.8 in.)	2633 mm (103.7 in.)	-22 mm (-0.9 in.)

\*Based on Z-bar machine configuration; may change based on vehicle configuration, weight, or tire-pressure adjustments.

†CaCl<sub>2</sub>, not recommended.

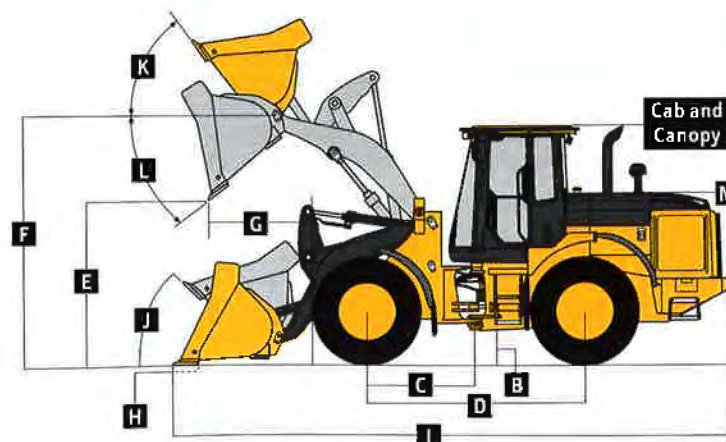
‡Equipped with 5-piece heavy-duty rims.

Serviceability	544K Z-BAR / HIGH-LIFT / POWERLLEL	
Refill Capacities	EPA Interim Tier 4/EU Stage IIIB	EPA Tier 3/EU Stage IIIA
Fuel Tank (with ground-level fueling)	325 L (86 gal.)	325 L (86 gal.)
Cooling System	26 L (27 qt.)	23 L (24 qt.)
Engine Oil with Vertical Spin-On Filter	19.5 L (20.6 qt.)	19 L (20 qt.)
Transmission Fluid with Vertical Filter	18.5 L (19.5 qt.)	18.5 L (19.5 qt.)
Axle Oil (front and rear, each)	17 L (18 qt.)	17 L (18 qt.)
Hydraulic Reservoir and Filters	122.8 L (32.5 gal.)	92 L (24.3 gal.)
Park Brake Oil (wet disc)	0.3 L (10 oz.)	0.3 L (10 oz.)

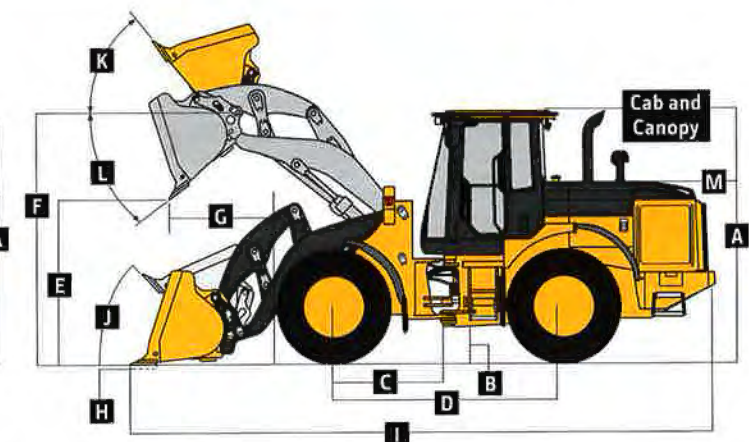
Hydraulic System/Steering	Variable-displacement, axial-piston pump; closed-center, pressure-compensating system	
Pump (loader and steering)	189 L/m (50 gpm)	
Maximum Rated Flow at 6895 kPa (1,000 psi) and 2,350 rpm	25 166 kPa (3,650 psi)	
System Relief Pressure (loader and steering)	2-function valve, joystick control or fingertip controls, hydraulic-function enable/disable, optional 3rd- and 4th-function valve with auxiliary lever	
Loader Controls		

Steering (conforms to ISO 5010)	Power, fully hydraulic	
Type	80-deg. arc (40-deg. each direction)	
Articulation Angle	5.00 m (16 ft. 5 in.)	
Turning Radius (measured to centerline of outside tire)		
Hydraulic Cycle Times	<b>Z-Bar</b>	<b>High-Lift</b>
Raise	5.8 sec.	5.8 sec.
Dump	1.2 sec.	1.2 sec.
Lower (float down)	3.2 sec.	3.2 sec.
Total	10.2 sec.	10.2 sec.

Dimensions with Standard Configuration	Z-BAR	HIGH-LIFT	POWERLLEL
	2.3-m <sup>3</sup> (3.0 cu. yd.) pin-on bucket	2.3-m <sup>3</sup> (3.0 cu. yd.) pin-on bucket	2.3-m <sup>3</sup> (3.0 cu. yd.) hook-on bucket with coupler
A Height to Top of Cab and Canopy	3.24 m (10 ft. 8 in.)	3.24 m (10 ft. 8 in.)	3.24 m (10 ft. 8 in.)
B Ground Clearance	0.40 m (15.7 in.)	0.40 m (15.7 in.)	0.40 m (15.7 in.)
C Length from Centerline to Front Axle	1.45 m (4 ft. 9 in.)	1.45 m (4 ft. 9 in.)	1.45 m (4 ft. 9 in.)
D Wheelbase	2.93 m (9 ft. 7 in.)	2.93 m (9 ft. 7 in.)	2.93 m (9 ft. 7 in.)
E Dump Clearance	▲ (see page 31)	▲ (see page 31)	▲ (see page 31)
F Height to Hinge Pin, Fully Raised	3.82 m (12 ft. 6 in.)	4.17 m (13 ft. 8 in.)	3.85 m (12 ft. 8 in.)
G Dump Reach	▲▲ (see page 31)	▲▲ (see page 31)	▲▲ (see page 31)
H Maximum Digging Depth	95 mm (3.72 in.)	221 mm (8.7 in.)	127 mm (5.0 in.)
I Overall Length	▲▲▲ (see page 31)	▲▲▲ (see page 31)	▲▲▲ (see page 31)
J Maximum Rollback at Ground Level	42 deg.	37 deg.	42 deg.
K Maximum Rollback, Boom Fully Raised	55 deg.	50 deg.	51 deg.
L Maximum Bucket Angle, Fully Raised	49 deg.	46 deg.	50 deg.
M Hood Height	2.30 m (7 ft. 7 in.)	2.30 m (7 ft. 7 in.)	2.30 m (7 ft. 7 in.)



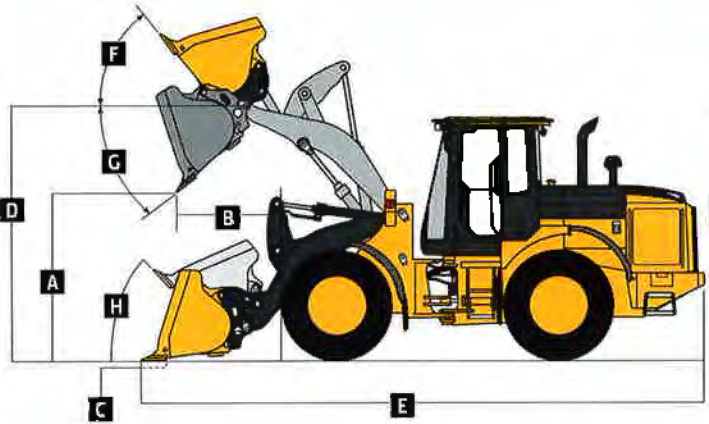
544K Z-BAR AND HIGH-LIFT LOADERS



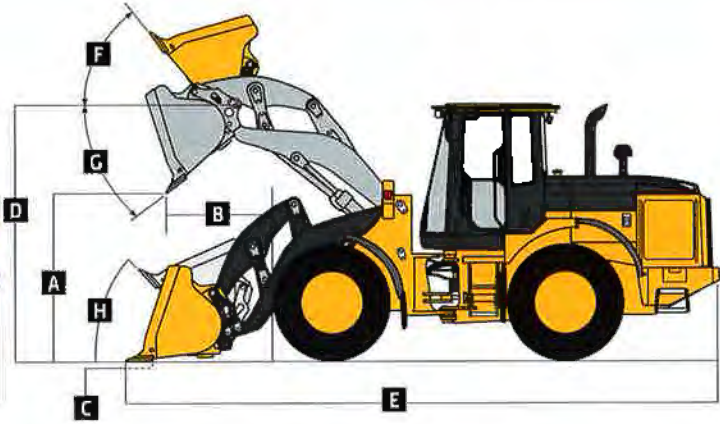
544K POWERLLEL LOADER



Dimensions with Quick-Coupler and Hook-On Bucket	544K Z-BAR	HIGH-LIFT	POWERLLEL
A Dump Clearance	▲ (see page 31)	▲ (see page 31)	▲ (see page 31)
B Dump Reach	▲▲ (see page 31)	▲▲ (see page 31)	▲▲ (see page 31)
C Maximum Digging Depth	138 mm (5.4 in.)	227 mm (8.9 in.)	127 mm (5.0 in.)
D Height to Hinge Pin, Fully Raised	3.81 m (12 ft. 6 in.)	4.13 m (13 ft. 7 in.)	3.85 m (12 ft. 8 in.)
E Overall Length	▲▲▲ (see page 31)	▲▲▲ (see page 31)	▲▲▲ (see page 31)
F Maximum Rollback, Boom Fully Raised	54 deg.	48 deg.	51 deg.
G Maximum Bucket Angle, Fully Raised	51 deg.	47 deg.	50 deg.
H Maximum Rollback at Ground Level	41 deg.	41 deg.	42 deg.

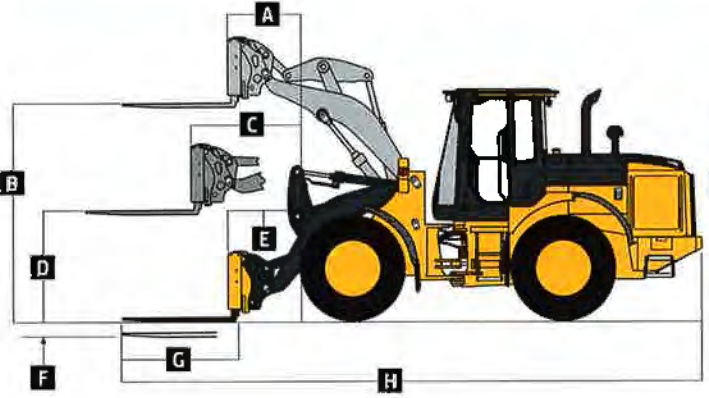


544K Z-BAR AND HIGH-LIFT LOADERS WITH QUICK-COUPLER AND HOOK-ON BUCKET

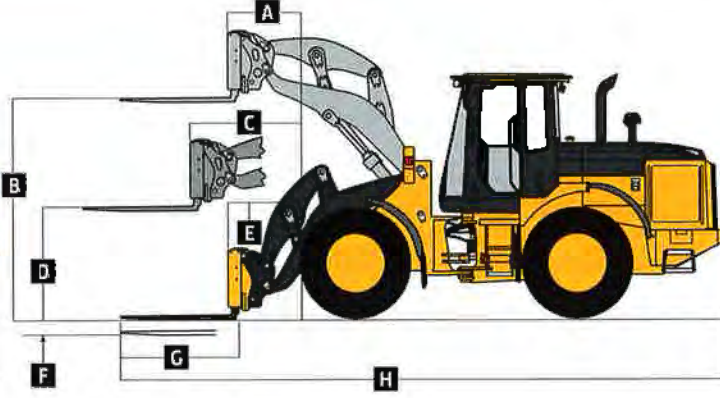


544K POWERLLEL LOADER WITH QUICK-COUPLER AND HOOK-ON BUCKET

Dimensions with Quick-Coupler and Hook-On Construction Fork	Z-BAR	HIGH-LIFT	POWERLLEL
A Reach, Fully Raised	0.75 m (29.5 in.)	0.75 m (29.5 in.)	0.79 m (31 in.)
B Fork Height, Fully Raised	3.59 m (11 ft. 9 in.)	3.94 m (12 ft. 11 in.)	3.64 m (11 ft. 11 in.)
C Maximum Reach, Fork Level	1.54 m (5 ft. 1 in.)	1.80 m (5 ft. 11 in.)	1.61 m (5 ft. 4 in.)
D Maximum Reach, Fork Height	1.72 m (5 ft. 8 in.)	1.72 m (5 ft. 8 in.)	1.75 m (5 ft. 9 in.)
E Reach, Ground Level	0.95 m (3 ft. 2 in.)	1.28 m (4 ft. 3 in.)	0.99 m (3 ft. 3 in.)
F Depth Below Ground	13 mm (0.5 in.)	96 mm (3.8 in.)	1 mm (0.04 in.)
G Tine Length	▲ (see page 31)	▲ (see page 31)	▲ (see page 31)
H Overall Length	▲▲ (see page 31)	▲▲ (see page 31)	▲▲ (see page 31)



544K Z-BAR AND HIGH-LIFT LOADERS WITH QUICK-COUPLER AND HOOK-ON CONSTRUCTION FORK



544K POWERLLEL LOADER WITH QUICK-COUPLER AND HOOK-ON CONSTRUCTION FORK

Dimensions with Pin-on Bucket	544K Z-BAR	HIGH-LIFT	POWERLLEL
Bucket Type/Size	Narrow	Wide	Narrow
Capacity, Heaped	2.3 m³ (3.0 cu. yd.)	2.3 m³ (3.0 cu. yd.)	2.3 m³ (3.0 cu. yd.)
Capacity, Struck	2.0 m³ (2.6 cu. yd.)	2.0 m³ (2.6 cu. yd.)	2.0 m³ (2.6 cu. yd.)
Bucket Weight	1046 kg (2,305 lb.)	1029 kg (2,267 lb.)	1046 kg (2,305 lb.)
Bucket Width	2.54 m (8 ft. 4 in.)	2.69 m (8 ft. 10 in.)	2.54 m (8 ft. 4 in.)
Breakout Force	10 110 kg (22,289 lb.)	10 864 kg (23,951 lb.)	9347 kg (20,606 lb.)
Tipping Load, Straight	10 878 kg (23,983 lb.)	10 935 kg (24,107 lb.)	9391 kg (20,703 lb.)
Tipping Load, 40-deg. Full Turn	9428 kg (20,784 lb.)	9479 kg (20,898 lb.)	8111 kg (17,881 lb.)
Reach, 45-deg. Dump, 2.13-m (7 ft.) Clearance	1.46 m (4 ft. 10 in.)	1.44 m (4 ft. 9 in.)	1.76 m (5 ft. 9 in.)
▲▲ Reach, 45-deg. Dump, Full Height	0.99 m (3 ft. 3 in.)	0.93 m (3 ft. 1 in.)	0.99 m (3 ft. 3 in.)
▲ Dump Clearance, 45 deg., Full Height	2.76 m (9 ft. 1 in.)	2.82 m (9 ft. 3 in.)	3.11 m (10 ft. 3 in.)
▲▲▲ Overall Length, Bucket on Ground	7.43 m (24 ft. 4 in.)	7.34 m (24 ft. 1 in.)	7.75 m (25 ft. 5 in.)
Loader Clearance Circle, Bucket Carry Position	11.65 m (38 ft. 3 in.)	11.72 m (38 ft. 5 in.)	11.96 m (39 ft. 3 in.)
Operating Weight	13 000 kg (28,660 lb.)	12 982 kg (28,621 lb.)	13 158 kg (29,009 lb.)

Loader operating information is based on machine with identified linkage and standard equipment, PowerTech PVX 6068 (EPA Interim Tier 4/EU Stage IIIB) engine, ROPS cab, rear cast bumper/counterweight, transmission side-frame guards, bottom guards, standard tires, full fuel tank, and 79-kg (175 lb.) operator. This information is affected by changes in tires, ballast, and different attachments, and assumes no tire deflection per the standard ISO 14397-1 section 5.

Dimensions with Quick-Coupler and Hook-on Bucket	Z-BAR	HIGH-LIFT	POWERLLEL
Bucket Type/Size	General-Purpose with Bolt-on Edge	General-Purpose with Bolt-on Edge	General-Purpose with Bolt-on Edge
Capacity, Heaped	2.3 m³ (3.0 cu. yd.)	1.9 m³ (2.5 cu. yd.)	2.3 m³ (3.0 cu. yd.)
Capacity, Struck	2.0 m³ (2.6 cu. yd.)	1.6 m³ (2.1 cu. yd.)	2.0 m³ (2.6 cu. yd.)
Bucket Weight with Coupler	1397 kg (3,080 lb.)	1294 kg (2,853 lb.)	1406 kg (3,099 lb.)
Bucket Width	2.69 m (8 ft. 10 in.)	2.54 m (8 ft. 4 in.)	2.69 m (8 ft. 10 in.)
Breakout Force	8989 kg (19,818 lb.)	8291 kg (18,277 lb.)	9055 kg (19,963 lb.)
Tipping Load, Straight	9678 kg (21,337 lb.)	9901 kg (21,828 lb.)	8381 kg (18,477 lb.)
Tipping Load, 40-deg. Full Turn	8338 kg (18,382 lb.)	8547 kg (18,844 lb.)	7188 kg (15,847 lb.)
Reach, 45-deg. Dump, 2.13-m (7 ft.) Clearance	1.46 m (4 ft. 10 in.)	1.44 m (4 ft. 9 in.)	1.77 m (5 ft. 10 in.)
▲▲ Reach, 45-deg. Dump, Full Height	1.05 m (3 ft. 5 in.)	0.99 m (3 ft. 3 in.)	1.05 m (3 ft. 5 in.)
▲ Dump Clearance, 45 deg., Full Height	2.66 m (8 ft. 9 in.)	2.72 m (8 ft. 11 in.)	3.01 m (10 ft. 1 in.)
▲▲▲ Overall Length, Bucket on Ground	7.57 m (24 ft. 10 in.)	7.48 m (24 ft. 6 in.)	7.90 m (25 ft. 11 in.)
Loader Clearance Circle, Bucket Carry Position	11.88 m (39 ft. 0 in.)	11.67 m (38 ft. 4 in.)	12.19 m (40 ft. 0 in.)
Operating Weight	13 372 kg (29,481 lb.)	13 287 kg (29,294 lb.)	13 530 kg (29,829 lb.)

Loader operating information is based on machine with identified linkage and standard equipment, PowerTech PVX 6068 (EPA Interim Tier 4/EU Stage IIIB) engine, ROPS cab, rear cast bumper/counterweight, transmission side-frame guards, bottom guards, standard tires, full fuel tank, and 79-kg (175 lb.) operator. This information is affected by changes in tires, ballast, and different attachments, and assumes no tire deflection per the standard ISO 14397-1 section 5.

Specifications with Quick-Coupler and Hook-on Construction Fork	Z-BAR	HIGH-LIFT	POWERLLEL
▲ Tine Length	1.22 m (48 in.)	1.52 m (60 in.)	1.22 m (48 in.)
▲▲ Overall Length	7.89 m (25 ft. 11 in.)	8.19 m (26 ft. 10 in.)	8.22 m (27 ft. 0 in.)
Tipping Load, Straight (fork level, load centered and positioned at 50% tine length)	7640 kg (16,842 lb.)	6941 kg (15,303 lb.)	6593 kg (14,534 lb.)
Tipping Load, 40-deg. Full Turn (fork level, load centered and positioned at 50% tine length)	6624 kg (14,603 lb.)	6013 kg (13,256 lb.)	5693 kg (12,551 lb.)
Operating Weight	12 994 kg (28,647 lb.)	13 037 kg (28,742 lb.)	13 195 kg (29,091 lb.)

Loader operating information is based on machine with identified linkage and standard equipment, PowerTech PVX 6068 (EPA Interim Tier 4/EU Stage IIIB) engine, ROPS cab, rear cast bumper/counterweight, transmission side-frame guards, bottom guards, standard tires, full fuel tank, and 79-kg (175 lb.) operator. This information is affected by changes in tires, ballast, and different attachments, and assumes no tire deflection per the standard ISO 14397-1 section 5.



Adjustments to Operating Weights and Tipping Loads with Buckets

Adjustments to operating weights and tipping loads are based on Z-bar machine with pin-on 2.3-m<sup>3</sup> (3.0 cu. yd.) general-purpose bucket with bolt-on cutting edge, ROPS cab, rear cast bumper/counterweight, transmission side-frame guards, bottom guards, standard tires, full fuel tank, and 79-kg (175 lb.) operator\* Add (+) or deduct (-) kg (lb.) as indicated for

	Operating Weight	Tipping Load, Straight	Tipping Load, 40-deg. Full Turn SAE
Loaders with 3-piece rims and			
John Deere PowerTech PVX 6068	0 kg (0 lb.)	0 kg (0 lb.)	0 kg (0 lb.)
John Deere PowerTech E 6068H	- 10 kg (- 22 lb.)	+ 69 kg (+ 152 lb.)	+ 50 kg (+ 110 lb.)
Michelin 20.5 R 25, 1 Star L-3	0 kg (0 lb.)	0 kg (0 lb.)	0 kg (0 lb.)
Bridgestone 20.5 R 25, 1 Star L-3	+ 44 kg (+ 97 lb.)	+ 28 kg (+ 61 lb.)	+ 24 kg (+ 54 lb.)
Titan 20.5 R 25, 1 Star L-3	- 4 kg (- 9 lb.)	- 3 kg (- 6 lb.)	- 2 kg (- 5 lb.)
Michelin 20.5 R 25, 1 Star L-2	- 172 kg (- 379 lb.)	- 107 kg (- 239 lb.)	- 96 kg (- 211 lb.)
Bridgestone 20.5 R 25, 1 Star L-2	- 80 kg (- 176 lb.)	- 50 kg (- 111 lb.)	- 45 kg (- 98 lb.)
Titan 20.5 R 25, 1 Star L-2	- 100 kg (- 220 lb.)	- 63 kg (- 139 lb.)	- 56 kg (- 123 lb.)
Titan 20.5-25, 16 PRL-2	- 260 kg (- 573 lb.)	- 164 kg (- 362 lb.)	- 145 kg (- 319 lb.)
Firestone 20.5-25, 16 PR L-2	- 280 kg (- 617 lb.)	- 177 kg (- 390 lb.)	- 156 kg (- 344 lb.)
Firestone 20.5-25, 12 PR L-2	- 316 kg (- 697 lb.)	- 199 kg (- 440 lb.)	- 176 kg (- 388 lb.)
Titan 20.5-25, 12 PR L-2	- 280 kg (- 617 lb.)	- 177 kg (- 390 lb.)	- 156 kg (- 344 lb.)
Firestone 20.5-25, 16 PRL-3	- 252 kg (- 556 lb.)	- 184 kg (- 405 lb.)	- 162 kg (- 357 lb.)
725/70-25, 16-Ply L-4T (Logger Style) <sup>§</sup>	+ 460 kg (+ 1,014 lb.)	+ 336 kg (+ 740 lb.)	+ 296 kg (+ 652 lb.)
Michelin 600/65 R 25, 1 Star L-3T <sup>§</sup>	+ 4 kg (+ 9 lb.)	+ 3 kg (+ 6 lb.)	+ 2 kg (+ 5 lb.)
CaCl <sub>2</sub> in 20.5-25, L-3 rear tires	+ 825 kg (+ 1,820 lb.)	- 1010 kg (- 2,227 lb.)	+ 891 kg (+ 1,964 lb.)

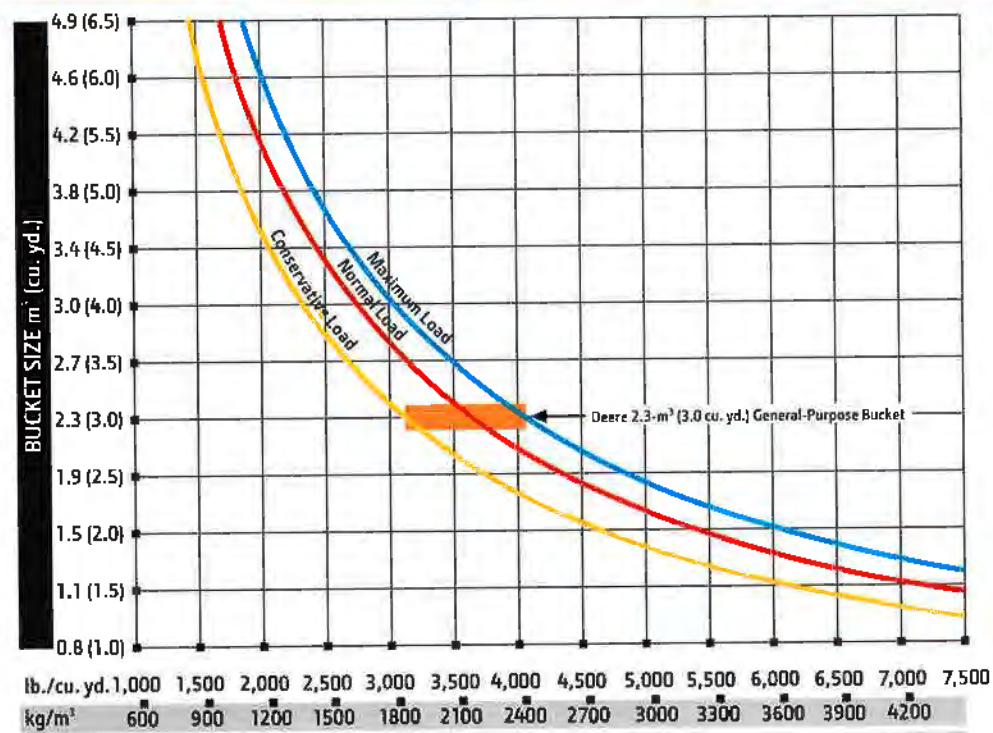
\*May change based on vehicle configuration, weight, or tire-pressure adjustments.

<sup>§</sup>CaCl<sub>2</sub> not recommended.

<sup>¶</sup>Equipped with 5-piece heavy-duty rims.

Bucket Selection Guides\*

544K Z-BAR

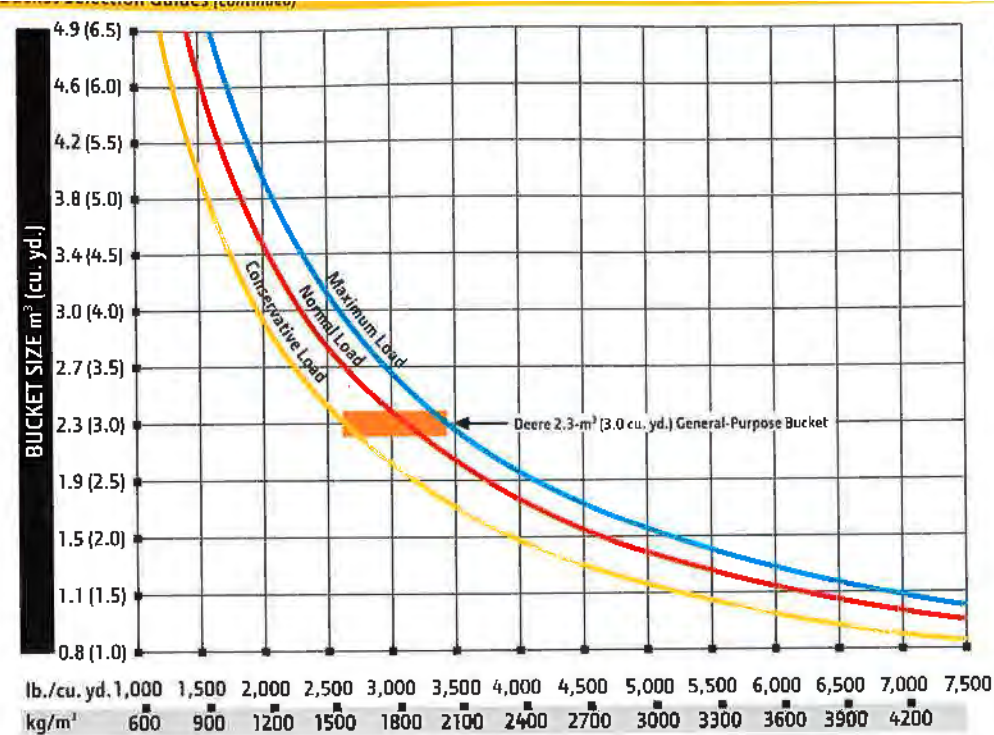


544K Z-BAR LOADER WITH PIN-ON BUCKET

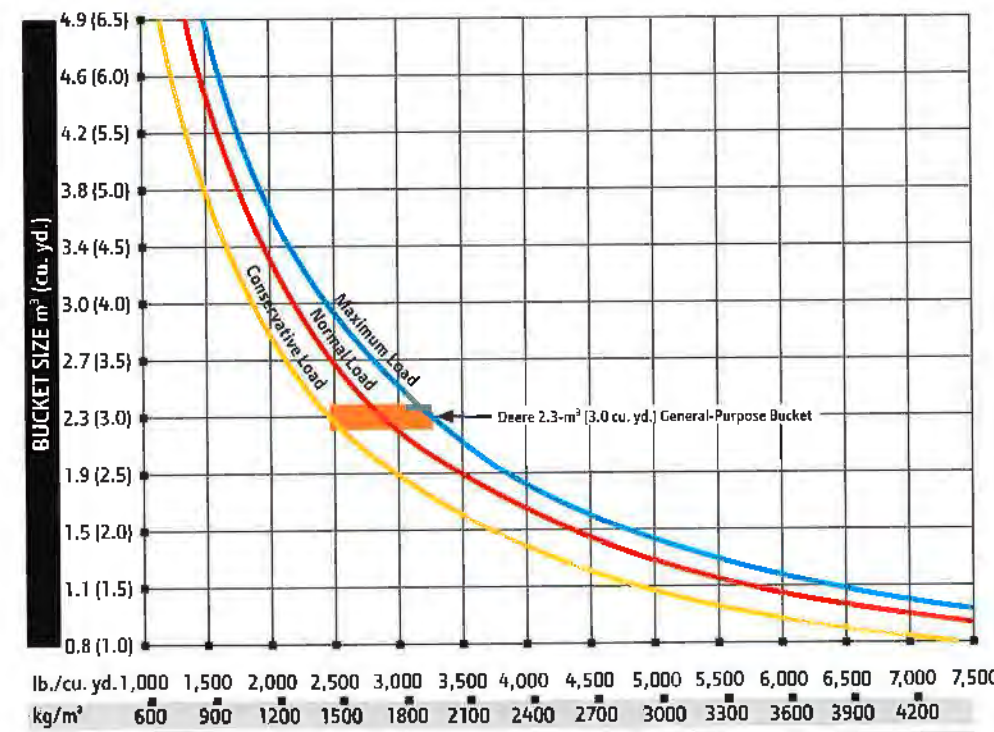
LOOSE MATERIALS kg/m<sup>3</sup> lb./cu. yd.

Chips, pulpwood	288	486
Cinders (coal, ashes, clinkers)	673	1,134
Clay and gravel, dry	1602	2,700
Clay, compact, solid	1746	2,943
Clay, dry in lump loose	1009	1,701
Clay, excavated in water	1282	2,160
Coal, anthracite, broken, loose	865	1,458
Coal, bituminous, moderately wet	801	1,350
Earth, common loam, dry	1218	2,052
Earth, mud, packed	1843	3,105
Granite, broken	1538	2,592
Gypsum	2275	3,834
Limestone, coarse, sized	1570	2,646
Limestone, mixed sizes	1682	2,835
Limestone, pulverized or crushed	1362	2,295
Sand, damp	2083	3,510
Sand, dry	1762	2,970
Sand, voids, full of water	2083	3,510
Sandstone, quarried	1314	2,214
Shale, broken crushed	1362	2,295
Slag, furnace granulated	1955	3,294
Stone or gravel, 37.5 to 87.5-mm (1.5 to 3.5") size	1442	2,430
Stone or gravel, 18.75-mm (3/4") size	1602	2,700

\*This guide, representing bucket sizes not necessarily manufactured by Deere, will help you in selecting proper bucket size for material density, loader configuration, and operating conditions. Optimum bucket size is determined after adding or subtracting all tipping load changes due to optional equipment. The "conservative load" line on this guide is recommended when operating in conditions such as soft ground and unlevel surfaces. The "maximum load" condition on this guide is sometimes utilized when operating on firm ground and level surfaces.



544K HIGH-LIFT LOADER WITH PIN-ON BUCKET



544K POWERLIFT LOADER WITH QUICK-COUPLER AND HOOK-ON BUCKET

LOOSE MATERIALS kg/m<sup>3</sup> lb./cu. yd.

Chips, pulpwood	288	486
Cinders (coal, ashes, clinkers)	673	1,134
Clay and gravel, dry	1602	2,700
Clay, compact, solid	1746	2,943
Clay, dry in lump loose	1009	1,701
Clay, excavated in water	1282	2,160
Coal, anthracite, broken, loose	865	1,458
Coal, bituminous, moderately wet	801	1,350
Earth, common loam, dry	1218	2,052
Earth, mud, packed	1843	3,105
Granite, broken	1538	2,592
Gypsum	2275	3,834
Limestone, coarse, sized	1570	2,646
Limestone, mixed sizes	1682	2,835
Limestone, pulverized or crushed	1362	2,295
Sand, damp	2083	3,510
Sand, dry	1762	2,970
Sand, voids, full of water	2083	3,510
Sandstone, quarried	1314	2,214
Shale, broken crushed	1362	2,295
Slag, furnace granulated	1955	3,294
Stone or gravel, 37.5 to 87.5-mm (1.5 to 3.5") size	1442	2,430
Stone or gravel, 18.75-mm (3/4") size	1602	2,700

\*This guide, representing bucket sizes not necessarily manufactured by Deere, will help you in selecting proper bucket size for material density, loader configuration, and operating conditions. Optimum bucket size is determined after adding or subtracting all tipping load changes due to optional equipment. The "conservative load" line on this guide is recommended when operating in conditions such as soft ground and unlevel surfaces. The "maximum load" condition on this guide is sometimes utilized when operating on firm ground and level surfaces.

LOOSE MATERIALS kg/m<sup>3</sup> lb./cu. yd.

Chips, pulpwood	288	486
Cinders (coal, ashes, clinkers)	673	1,134
Clay and gravel, dry	1602	2,700
Clay, compact, solid	1746	2,943
Clay, dry in lump loose	1009	1,701
Clay, excavated in water	1282	2,160
Coal, anthracite, broken, loose	865	1,458
Coal, bituminous, moderately wet	801	1,350
Earth, common loam, dry	1218	2,052
Earth, mud, packed	1843	3,105
Granite, broken	1538	2,592
Gypsum	2275	3,834
Limestone, coarse, sized	1570	2,646
Limestone, mixed sizes	1682	2,835
Limestone, pulverized or crushed	1362	2,295
Sand, damp	2083	3,510
Sand, dry	1762	2,970
Sand, voids, full of water	2083	3,510
Sandstone, quarried	1314	2,214
Shale, broken crushed	1362	2,295
Slag, furnace granulated	1955	3,294
Stone or gravel, 37.5 to 87.5-mm (1.5 to 3.5") size	1442	2,430
Stone or gravel, 18.75-mm (3/4") size	1602	2,700

\*This guide, representing bucket sizes not necessarily manufactured by Deere, will help you in selecting proper bucket size for material density, loader configuration, and operating conditions. Optimum bucket size is determined after adding or subtracting all tipping load changes due to optional equipment. The "conservative load" line on this guide is recommended when operating in conditions such as soft ground and unlevel surfaces. The "maximum load" condition on this guide is sometimes utilized when operating on firm ground and level surfaces.





Engine	624K Z-BAR / HIGH-LIFT / POWERLLEL™ / TOOL CARRIER		
Manufacturer and Model	John Deere PowerTech™ PVX 6068	John Deere PowerTech™ Plus 6068H	John Deere PowerTech™ 6068H
Non-Road Emissions Standard	EPA Interim Tier 4/EU Stage IIIB	EPA Tier 3/EU Stage IIIA	EPA Tier 2/EU Stage II
Cylinders	6	6	6
Valves Per Cylinder	4	4	4
Displacement	6.8 L (414 cu. in.)	6.8 L (414 cu. in.)	6.8 L (414 cu. in.)
Net Peak Power at 1,800 rpm (ISO 9249)	139 kW (186 hp)	147 kW (198 hp)	147 kW (198 hp)
Net Peak Torque (ISO 9249)	826 Nm (609 lb.-ft.) at 1,300 rpm	836 Nm (617 lb.-ft.) at 1,600 rpm	836 Nm (617 lb.-ft.) at 1,600 rpm
Net Torque Rise	57%	65%	65%
Fuel System (electronically controlled)	High-pressure common rail	High-pressure common rail	High-pressure common rail
Lubrication	Full-flow spin-on filter and integral cooler	Full-flow spin-on filter and integral cooler	Full-flow spin-on filter and integral cooler
Aspiration	Turbocharged, charge air cooled	Turbocharged, charge air cooled	Turbocharged, charge air cooled
Air Cleaner	Under-hood, dual-element dry type	restriction indicator in cab monitor for service	
Fan Drive	Hydraulically driven, proportionally controlled, fan aft of coolers	Hydraulically driven, proportionally controlled, fan aft of coolers	Hydraulically driven, proportionally controlled, fan aft of coolers
Electrical System	24 volt with 100-amp alternator (optional 130-amp alternator)	24 volt with 80-amp alternator (optional 100-amp alternator)	24 volt with 80-amp alternator (optional 100-amp alternator)
Batteries (2 – 12 volt)	950 CCA (each)	950 CCA (each)	950 CCA (each)

Transmission	624K Z-BAR / HIGH-LIFT / POWERLLEL™ / TOOL CARRIER		
Type	Countershaft-type PowerShift™		
Torque Converter	Single stage, single phase		
Shift Control	Electronically modulated, adaptive, load and speed dependent		
Operator Interface	Steering-column or joystick-mounted F-N-R and gear-select lever; quick-shift button on hydraulic lever		
Shift Modes	Manual/auto (1st-D or 2nd-D); quick-shift button with 2 selectable modes: kick-down or kick-up/down; and 3 adjustable clutch-cutoff settings		
Maximum Travel Speeds (with 20.5-25 tires)	Forward	Reverse	
Gear 1	7.6 km/h (4.7 mph)	7.6 km/h (4.7 mph)	
Gear 2	12.5 km/h (7.8 mph)	13.0 km/h (8.1 mph)	
Gear 3	25.0 km/h (15.5 mph)	25.7 km/h (16.0 mph)	
Gear 4	39.5 km/h (24.5 mph)	N/A	

Axles/Brakes	624K Z-BAR / HIGH-LIFT / POWERLLEL™ / TOOL CARRIER		
Final Drives	Heavy-duty inboard-mounted planetary		
Differentials	Hydraulic locking front with conventional rear – standard; dual locking front and rear – optional		
Rear Axle Oscillation, Stop to Stop (with 20.5-25 tires)	24 deg. (12 deg. per side)		
Brakes (conform to ISO 3450)	Hydraulically actuated, inboard sun-shaft mounted, oil cooled, self-adjusting, single disc		
Service Brakes	Automatic spring applied, hydraulically released, driveline mounted, oil cooled, multi disc		
Parking Brake			

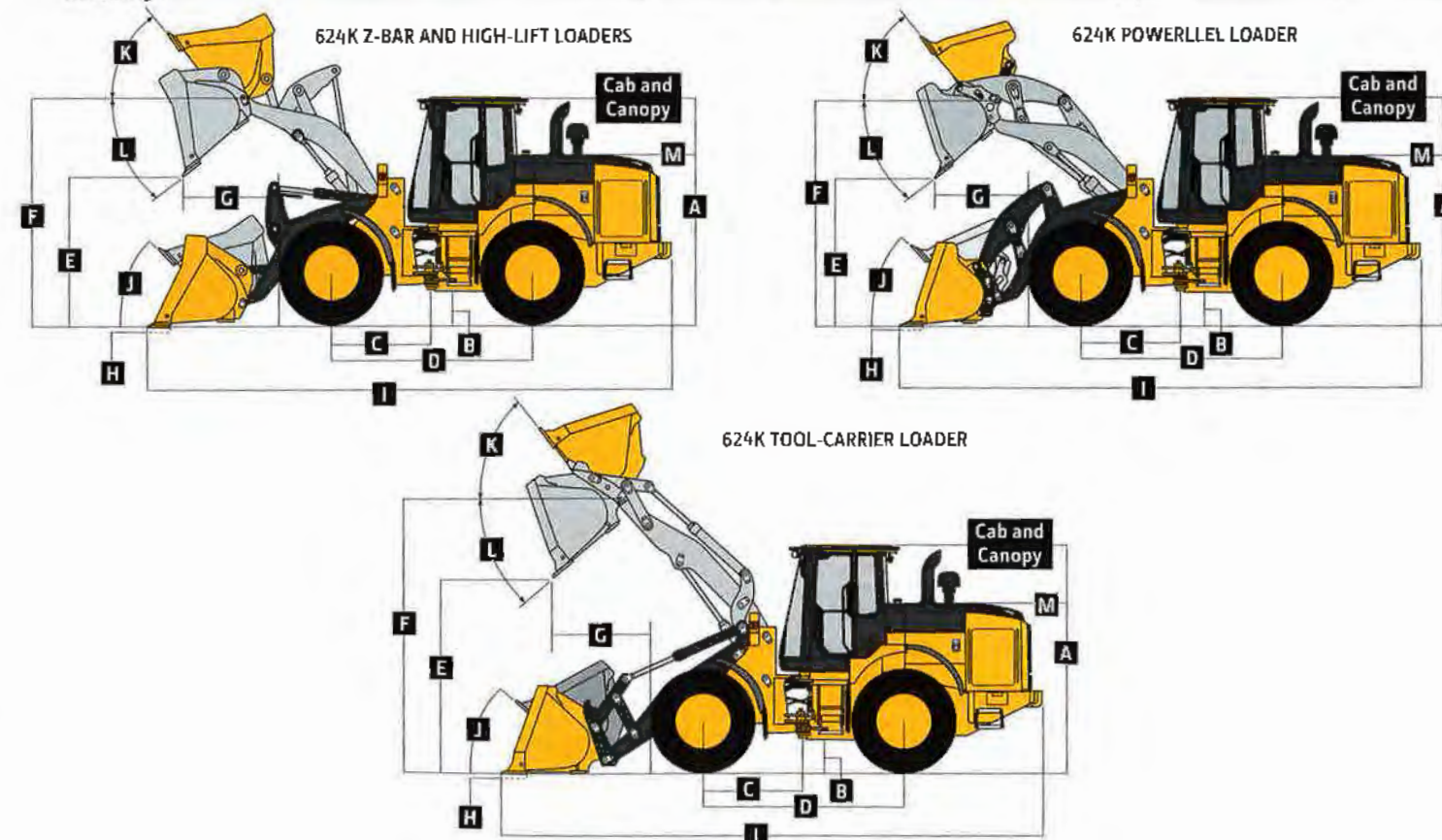
Tires/Wheels	624K Z-BAR / HIGH-LIFT / POWERLLEL™ / TOOL CARRIER		
Choice of (with 3-piece rims)*	Tread Width	Width Over Tires	Change in Vertical Height
Michelin 20.5 R 25, 1 Star L-3	2050 mm (80.7 in.)	2657 mm (104.6 in.)	No change
Bridgestone 20.5 R 25, 1 Star L-3	2050 mm (80.7 in.)	2641 mm (104.0 in.)	No change
Titan 20.5 R 25, 1 Star L-3	2050 mm (80.7 in.)	2641 mm (104.0 in.)	No change
Michelin 20.5 R 25, 1 Star L-2	2050 mm (80.7 in.)	2641 mm (104.0 in.)	-3 mm (-0.1 in.)
Bridgestone 20.5 R 25, 1 Star L-2	2050 mm (80.7 in.)	2641 mm (104.0 in.)	-3 mm (-0.1 in.)
Titan 20.5 R 25, 1 Star L-2	2050 mm (80.7 in.)	2641 mm (104.0 in.)	-3 mm (-0.1 in.)
Firestone 20.5-25, 16 PR L-3	2050 mm (80.7 in.)	2645 mm (104.1 in.)	+13 mm (+0.5 in.)
Titan 20.5-25, 16 PR L-2	2050 mm (80.7 in.)	2645 mm (104.1 in.)	+6 mm (+0.2 in.)
Firestone 20.5-25, 16 PR L-2	2050 mm (80.7 in.)	2645 mm (104.1 in.)	+6 mm (+0.2 in.)
725/70-25, 16-Ply L-4T (Logger Style) <sup>†</sup>	2050 mm (80.7 in.)	2802 mm (110.3 in.)	+106 mm (+4.2 in.)
Michelin 600/65 R 25, 1 Star L-3T <sup>‡</sup>	2050 mm (80.7 in.)	2740 mm (107.9 in.)	-24 mm (-0.9 in.)

\*Based on Z-bar machine configuration; may change based on vehicle configuration, weight, or tire-pressure adjustments.  
<sup>†</sup>CaCI, not recommended.  
<sup>‡</sup>Equipped with 5-piece heavy-duty rims.

Serviceability	624K Z-BAR / HIGH-LIFT / POWERLLEL™ / TOOL CARRIER		
Refill Capacities	EPA Interim Tier 4/EU Stage IIIB	EPA Tier 3/EU Stage IIIA	EPA Tier 2/EU Stage II
Fuel Tank (with ground-level fueling)	352 L (93 gal.)	352 L (93 gal.)	352 L (93 gal.)
Cooling System	34 L (36 qt.)	27 L (29 qt.)	27 L (29 qt.)
Engine Oil with Vertical Spin-On Filter	20 L (21 qt.)	19 L (20 qt.)	19 L (20 qt.)
Transmission Fluid with Vertical Filter	22 L (23 qt.)	22 L (23 qt.)	22 L (23 qt.)
Axle Oil			
Front	22 L (23 qt.)	22 L (23 qt.)	22 L (23 qt.)
Rear	17 L (18 qt.)	17 L (18 qt.)	17 L (18 qt.)
Hydraulic Reservoir and Filters	102 L (27 gal.)	110 L (29 gal.)	110 L (29 gal.)
Park Brake Oil (wet disc)	0.3 L (10 oz.)	0.3 L (10 oz.)	0.3 L (10 oz.)

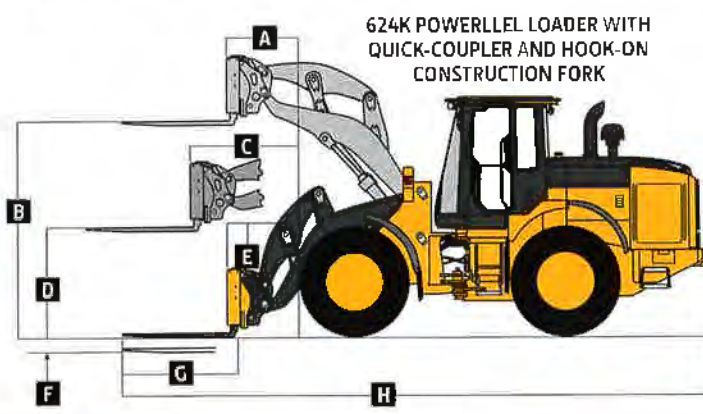
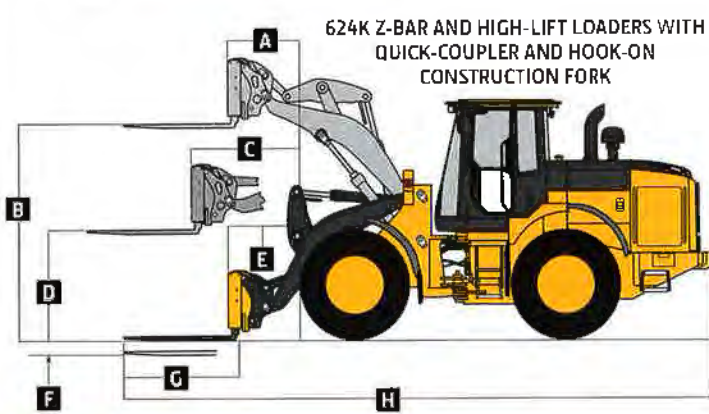
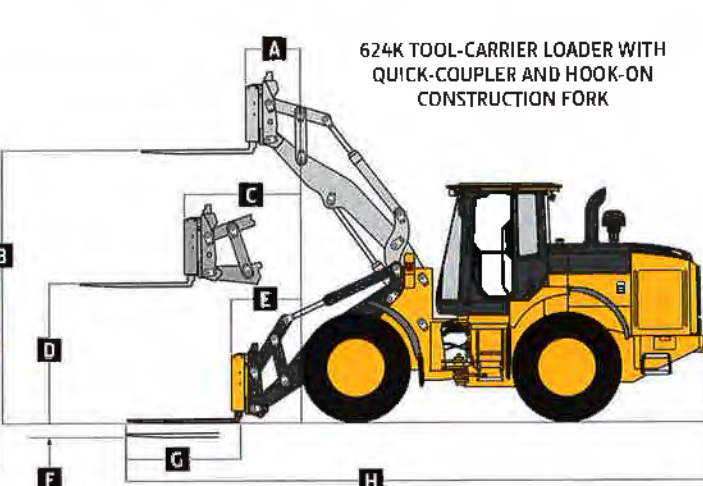
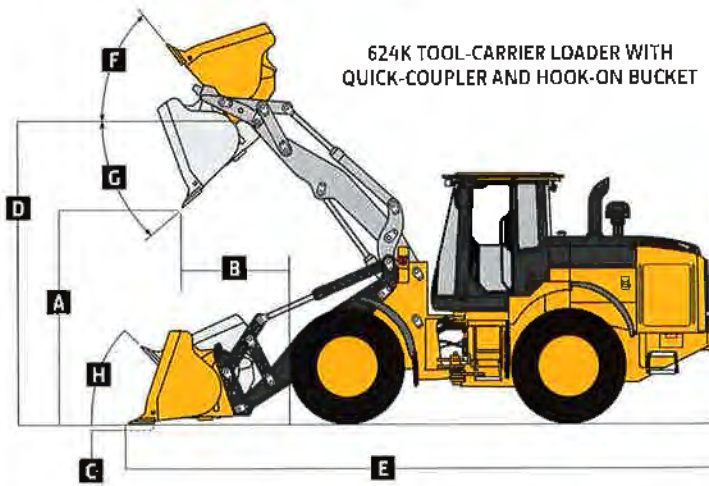
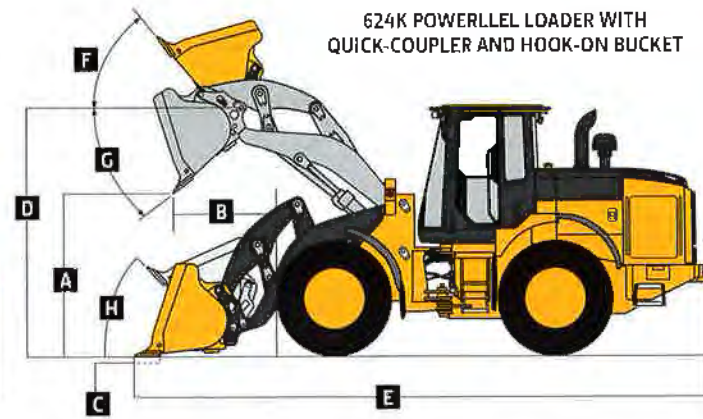
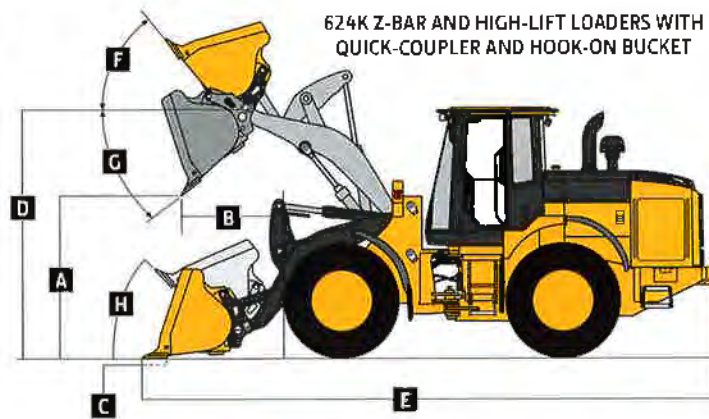
Hydraulic System/Steering	624K Z-BAR / HIGH-LIFT / POWERLLEL™ / TOOL CARRIER			
Pump (loader and steering)	Variable-displacement, axial-piston pump; closed-center, pressure-compensating system			
Maximum Rated Flow at 6895 kPa (1,000 psi) and 2,350 rpm	223 L/m (59 gpm)			
System Relief Pressure (loader and steering)	24 821 kPa (3,675 psi)			
Loader Controls	2-function valve, joystick control or fingertip controls, hydraulic-function enable/disable, optional 3rd- and 4th-function valve with auxiliary lever			
Steering (conforms to ISO 5010)	Power, fully hydraulic			
Type	80-deg. arc (40-deg. each direction)			
Articulation Angle	5.27 m (17 ft. 4 in.)			
Turning Radius (measured to centerline of outside tire)				
Hydraulic Cycle Times	Z-BAR	HIGH-LIFT	POWERLLEL	TOOL CARRIER
Raise	5.9 sec.	5.9 sec.	5.9 sec.	5.6 sec.
Dump	1.3 sec.	1.3 sec.	1.4 sec.	3.0 sec.
Lower (float down)	2.7 sec.	2.7 sec.	2.8 sec.	2.7 sec.
Total	9.9 sec.	9.9 sec.	10.1 sec.	11.3 sec.

Dimensions with Standard Configuration	Z-BAR	HIGH-LIFT	POWERLLEL	TOOL CARRIER
A Height to Top of Cab and Canopy	2.7-m <sup>3</sup> (3.5 cu. yd.) pin-on bucket	2.7-m <sup>3</sup> (3.5 cu. yd.) pin-on bucket	2.7-m <sup>3</sup> (3.5 cu. yd.) hook-on bucket with coupler	2.7-m <sup>3</sup> (3.5 cu. yd.) hook-on bucket with coupler
B Ground Clearance	3.32 m (10 ft. 11 in.)	3.32 m (10 ft. 11 in.)	3.32 m (10 ft. 11 in.)	3.32 m (10 ft. 11 in.)
C Length from Centerline to Front Axle	384 mm (15.1 in.)	384 mm (15.1 in.)	384 mm (15.1 in.)	384 mm (15.1 in.)
D Wheelbase	1.52 m (5 ft. 0 in.)	1.52 m (5 ft. 0 in.)	1.52 m (5 ft. 0 in.)	1.52 m (5 ft. 0 in.)
E Dump Clearance	3.09 m (10 ft. 1 in.)	3.09 m (10 ft. 1 in.)	3.09 m (10 ft. 1 in.)	3.09 m (10 ft. 1 in.)
F Height to Hinge Pin, Fully Raised	▲ (see page 37)	▲ (see page 37)	▲ (see page 37)	▲ (see page 37)
G Dump Reach	▲▲ (see page 37)	▲▲ (see page 37)	▲▲ (see page 37)	▲▲ (see page 37)
H Maximum Digging Depth	3.95 m (13 ft. 0 in.)	4.30 m (14 ft. 2 in.)	3.99 m (13 ft. 1 in.)	3.99 m (13 ft. 1 in.)
I Overall Length	▲▲▲ (see page 37)	▲▲▲ (see page 37)	▲▲▲ (see page 37)	▲▲▲ (see page 37)
J Maximum Rollback at Ground Level	95 mm (3.8 in.)	203 mm (8.0 in.)	179 mm (4.7 in.)	102 mm (4.0 in.)
K Maximum Rollback, Boom Fully Raised	37 deg.	42 deg.	49 deg.	49 deg.
L Maximum Bucket Angle, Fully Raised	50 deg.	49 deg.	52 deg.	64 deg.
M Hood Height	45 deg.	46 deg.	46 deg.	43 deg.
	2.46 m (8 ft. 1 in.)	2.46 m (8 ft. 1 in.)	2.46 m (8 ft. 1 in.)	2.46 m (8 ft. 1 in.)





Dimensions with Quick-Coupler and Hook-On Bucket	Z-BAR	HIGH-LIFT	POWERLLEL	TOOL CARRIER
A Dump Clearance	▲ (see page 37)	▲ (see page 37)	▲ (see page 37)	▲ (see page 37)
B Dump Reach	▲▲ (see page 37)	▲▲ (see page 37)	▲▲ (see page 37)	▲▲ (see page 37)
C Maximum Digging Depth	165 mm (6.5 in.)	262 mm (10.3 in.)	119 mm (4.7 in.)	102 mm (4.0 in.)
D Height to Hinge Pin, Fully Raised	3.96 m (13 ft. 0 in.)	4.32 m (14 ft. 2 in.)	3.99 m (13 ft. 1 in.)	3.99 m (13 ft. 1 in.)
E Overall Length	▲▲▲ (see page 37)	▲▲▲ (see page 37)	▲▲▲ (see page 37)	▲▲▲ (see page 37)
F Maximum Rollback, Boom Fully Raised	55 deg.	48 deg.	52 deg.	64 deg.
G Maximum Bucket Angle, Fully Raised	45 deg.	42 deg.	46 deg.	43 deg.
H Maximum Rollback at Ground Level	39 deg.	39 deg.	42 deg.	49 deg.



Dimensions with Quick-Coupler and Hook-On Construction Fork	Z-BAR	HIGH-LIFT	POWERLLEL	TOOL CARRIER
A Reach, Fully Raised	0.75 m (29 in.)	0.84 m (33 in.)	0.92 m (36 in.)	0.89 m (35 in.)
B Fork Height, Fully Raised	3.73 m (12 ft. 3 in.)	4.09 m (13 ft. 5 in.)	3.76 m (12 ft. 4 in.)	3.91 m (12 ft. 10 in.)
C Maximum Reach, Fork Level	1.58 m (5 ft. 2 in.)	1.92 m (6 ft. 4 in.)	1.77 m (5 ft. 10 in.)	1.65 m (5 ft. 5 in.)
D Maximum Reach, Fork Height	1.77 m (5 ft. 10 in.)	1.77 m (5 ft. 10 in.)	1.84 m (6 ft. 1 in.)	1.99 m (6 ft. 7 in.)
E Reach, Ground Level	0.96 m (3 ft. 2 in.)	1.40 m (4 ft. 7 in.)	1.11 m (3 ft. 8 in.)	0.88 m (35 in.)
F Depth Below Ground	23 mm (0.9 in.)	123 mm (4.8 in.)	19 mm (0.8 in.)	0 mm (0 in.)
G Tine Length	▲ (see page 37)	▲ (see page 37)	▲ (see page 37)	▲ (see page 37)
H Overall Length	▲▲ (see page 37)	▲▲ (see page 37)	▲▲ (see page 37)	▲▲ (see page 37)

Dimensions with Full-Pin Bucket	General-Purpose with Bolt-on Edge	General-Purpose with Bolt-on Edge
Capacity, Heaped	2.7 m³ (3.5 cu. yd.)	2.7 m³ (3.5 cu. yd.)
Capacity, Struck	2.3 m³ (3.0 cu. yd.)	2.3 m³ (3.0 cu. yd.)
Bucket Weight	1148 kg (2,532 lb.)	1149 kg (2,532 lb.)
Bucket Width	2.69 m (8 ft. 10 in.)	2.69 m (8 ft. 10 in.)
Breakout Force	12 821 kg (28,266 lb.)	11 662 kg (25,709 lb.)
Tipping Load, Straight	13 822 kg (30,473 lb.)	11 604 kg (25,582 lb.)
Tipping Load, 40-deg. Full Turn	11 979 kg (26,409 lb.)	10 020 kg (22,090 lb.)
Reach, 45-deg. Dump, 2.13-m (7 ft.) Clearance	1.57 m (5 ft. 2 in.)	1.93 m (6 ft. 4 in.)
▲▲ Reach, 45-deg. Dump, Full Height	1.02 m (3 ft. 4 in.)	1.11 m (3 ft. 8 in.)
▲ Dump Clearance, 45 deg., Full Height	2.86 m (9 ft. 5 in.)	3.23 m (10 ft. 7 in.)
▲▲▲ Overall Length, Bucket on Ground	7.76 m (25 ft. 5 in.)	8.17 m (26 ft. 9 in.)
Loader Clearance Circle, Bucket Carry Position	12.24 m (40 ft. 2 in.)	12.61 m (41 ft. 4 in.)
Operating Weight	15 483 kg (34,134 lb.)	15 679 kg (34,566 lb.)

Loader operating information is based on machine with identified linkage and standard equipment, PowerTech PVX 6068 (EPA Interim Tier 4/EU Stage IIIB) engine, ROPS cab, rear cast bumper/counterweight, transmission side-frame guards, bottom guards, standard tires, full fuel tank, and 79-kg (175 lb.) operator. This information is affected by changes in tires, ballast, and different attachments, and assumes no tire deflection per the standard ISO 14397-1 section 5.

Dimensions with Quick-Coupler and Hook-on Bucket	Z-BAR	HIGH-LIFT	POWERLLEL	TOOL CARRIER
Bucket Type/Size	General-Purpose with Bolt-on Edge	General-Purpose with Bolt-on Edge	General-Purpose with Bolt-on Edge	General-Purpose with Bolt-on Edge
Capacity, Heaped	2.7 m³ (3.5 cu. yd.)	2.7 m³ (3.5 cu. yd.)	2.7 m³ (3.5 cu. yd.)	2.7 m³ (3.5 cu. yd.)
Capacity, Struck	2.3 m³ (3.0 cu. yd.)	2.3 m³ (3.0 cu. yd.)	2.3 m³ (3.0 cu. yd.)	2.3 m³ (3.0 cu. yd.)
Bucket Weight with Coupler	1532 kg (3,378 lb.)	1532 kg (3,378 lb.)	1562 kg (3,444 lb.)	1077 kg (2,375 lb.)
Bucket Width	2.69 m (8 ft. 10 in.)	2.69 m (8 ft. 10 in.)	2.69 m (8 ft. 10 in.)	2.69 m (8 ft. 10 in.)
Breakout Force	10 983 kg (24,214 lb.)	9998 kg (22,042 lb.)	10 759 kg (23,719 lb.)	12 920 kg (28,484 lb.)
Tipping Load, Straight	12 373 kg (27,279 lb.)	10 431 kg (22,997 lb.)	10 877 kg (23,980 lb.)	12 808 kg (28,236 lb.)
Tipping Load, 40-deg. Full Turn	10 669 kg (23,521 lb.)	8952 kg (19,737 lb.)	9348 kg (20,609 lb.)	11 079 kg (24,426 lb.)
Reach, 45-deg. Dump, 2.13-m (7 ft.) Clearance	1.56 m (5 ft. 2 in.)	1.94 m (6 ft. 4 in.)	1.75 m (5 ft. 9 in.)	1.85 m (6 ft. 1 in.)
▲▲ Reach, 45-deg. Dump, Full Height	1.11 m (3 ft. 8 in.)	1.20 m (3 ft. 11 in.)	1.28 m (4 ft. 2 in.)	1.45 m (4 ft. 9 in.)
▲ Dump Clearance, 45 deg., Full Height	2.69 m (8 ft. 10 in.)	3.06 m (10 ft. 1 in.)	2.70 m (8 ft. 10 in.)	2.81 m (9 ft. 3 in.)
▲▲▲ Overall Length, Bucket on Ground	7.98 m (26 ft. 2 in.)	8.39 m (27 ft. 6 in.)	8.13 m (26 ft. 8 in.)	7.95 m (26 ft. 1 in.)
Loader Clearance Circle, Bucket Carry Position	12.38 m (40 ft. 7 in.)	12.77 m (41 ft. 11 in.)	12.60 m (41 ft. 4 in.)	12.26 m (40 ft. 3 in.)
Operating Weight	15 887 kg (35,025 lb.)	16 083 kg (35,458 lb.)	16 905 kg (37,268 lb.)	15 856 kg (34,956 lb.)

Loader operating information is based on machine with identified linkage and standard equipment, PowerTech PVX 6068 (EPA Interim Tier 4/EU Stage IIIB) engine, ROPS cab, rear cast bumper/counterweight, transmission side-frame guards, bottom guards, standard tires, full fuel tank, and 79-kg (175 lb.) operator. This information is affected by changes in tires, ballast, and different attachments, and assumes no tire deflection per the standard ISO 14397-1 section 5.

Specifications with Quick-Coupler and Hook-on Construction Fork	Z-BAR	HIGH-LIFT	POWERLLEL	TOOL CARRIER
▲ Tine Length	1.22 m (48 in.)	1.52 m (60 in.)	1.22 m (48 in.)	1.52 m (60 in.)
▲▲ Overall Length	8.18 m (26 ft. 10 in.)	8.48 m (27 ft. 10 in.)	8.60 m (28 ft. 2 in.)	8.89 m (29 ft. 2 in.)
Tipping Load, Straight (fork level, load centered and positioned at 50% tine length)	9633 kg (21,236 lb.)	9108 kg (20,080 lb.)	8556 kg (18,863 lb.)	8137 kg (17,938 lb.)
Tipping Load, 40-deg. Full Turn (fork level, load centered and positioned at 50% tine length)	8340 kg (18,387 lb.)	7879 kg (17,371 lb.)	7380 kg (16,269 lb.)	7012 kg (15,458 lb.)
Operating Weight	15 607 kg (34,407 lb.)	15 650 kg (34,502 lb.)	15 784 kg (33,982 lb.)	15 414 kg (33,982 lb.)

Loader operating information is based on machine with identified linkage and standard equipment, PowerTech PVX 6068 (EPA Interim Tier 4/EU Stage IIIB) engine, ROPS cab, rear cast bumper/counterweight, transmission side-frame guards, bottom guards, standard tires, full fuel tank, and 79-kg (175 lb.) operator. This information is affected by changes in tires, ballast, and different attachments, and assumes no tire deflection per the standard ISO 14397-1 section 5.



Adjustments to operating weights and tipping loads are based on Z-bar machine with ROPS cab, rear cast bumper/counterweight, transmission side-frame guards, bottom guards, standard tires, full fuel tank, and 79-kg (175 lb.) operator\*

Loaders with 3-piece rims and	Operating Weight	Tipping Load, Straight	Tipping Load, 40-deg Full Turn SAE
John Deere PowerTech PVX 6068	0 kg (0 lb.)	0 kg (0 lb.)	0 kg (0 lb.)
John Deere PowerTech Plus 6068H	- 41 kg (-90 lb.)	+ 119 kg (+ 262 lb.)	+ 84 kg (+ 185 lb.)
John Deere PowerTech 6068H	- 67 kg (-148 lb.)	+ 74 kg (+ 163 lb.)	+ 39 kg (+ 86 lb.)
Michelin 20.5 R 25, 1 Star L-3	0 kg (0 lb.)	0 kg (0 lb.)	0 kg (0 lb.)
Bridgestone 20.5 R 25, 1 Star L-3	+ 44 kg (+ 97 lb.)	+ 33 kg (+ 73 lb.)	+ 29 kg (+ 64 lb.)
Titan 20.5 R 25, 1 Star L-3	- 4 kg (-9 lb.)	- 3 kg (-7 lb.)	- 3 kg (-6 lb.)
Michelin 20.5 R 25, 1 Star L-2	- 172 kg (-379 lb.)	- 129 kg (-285 lb.)	- 114 kg (-251 lb.)
Bridgestone 20.5 R 25, 1 Star L-2	- 80 kg (-176 lb.)	- 60 kg (-132 lb.)	- 53 kg (-117 lb.)
Titan 20.5 R 25, 1 Star L-2	- 128 kg (-282 lb.)	- 96 kg (-212 lb.)	- 85 kg (-187 lb.)
Firestone 20.5-25, 16 PR L-3	- 252 kg (-556 lb.)	- 189 kg (-417 lb.)	- 167 kg (-367 lb.)
Titan 20.5-25, 16 PR L-2	- 260 kg (-573 lb.)	+ 195 kg (+ 430 lb.)	- 172 kg (-379 lb.)
Firestone 20.5-25, 16 PR L-2	- 280 kg (-617 lb.)	- 210 kg (-464 lb.)	- 185 kg (-408 lb.)
725/70-25, 16-Ply L-4T (Logger Style) <sup>†</sup>	+ 460 kg (+ 1,014 lb.)	+ 333 kg (+ 735 lb.)	+ 294 kg (+ 647 lb.)
Michelin 600/65 R 25, 1 Star L-3T <sup>‡</sup>	+ 4 kg (+ 9 lb.)	+ 3 kg (+ 7 lb.)	+ 3 kg (+ 6 lb.)
CaCl <sub>2</sub> in 20.5-25, L-3 rear tires	+ 1166 kg (+ 2,571 lb.)	+ 1432 kg (+ 3,157 lb.)	+ 1305 kg (+ 2,878 lb.)

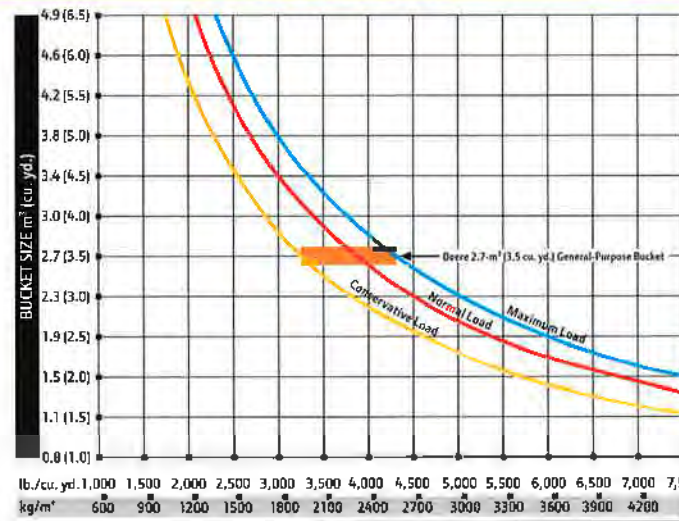
\*May change based on vehicle configuration, weight, or tire-pressure adjustments.

<sup>†</sup>CaCl<sub>2</sub> not recommended.

<sup>‡</sup>Equipped with 5-piece heavy-duty rims.

Bucket Selection Guides\*

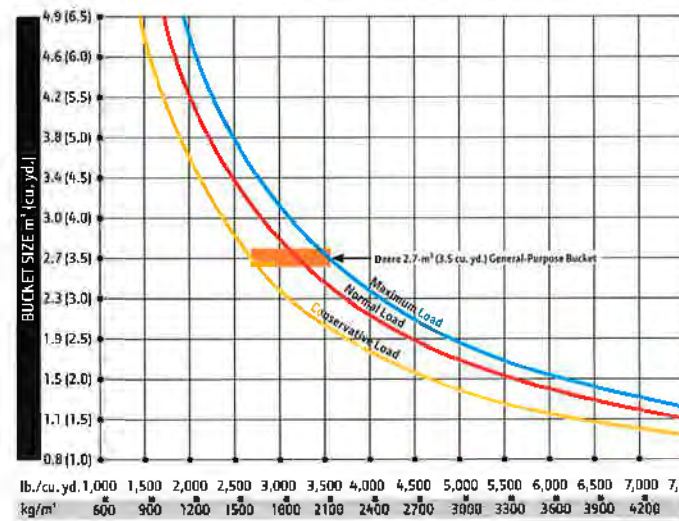
624K Z-BAR / HIGH-LIFT



LOOSE MATERIALS	kg/m³	lb./cu. yd.
Chips, pulpwood	288	486
Cinders (coal, ashes, clinkers)	673	1,134
Clay and gravel, dry	1602	2,700
Clay, compact, solid	1746	2,943
Clay, dry in lump loose	1009	1,701
Clay, excavated in water	1282	2,160
Coal, anthracite, broken, loose	865	1,458
Coal, bituminous, moderately wet	801	1,350
Earth, common loam, dry	1218	2,052
Earth, mud, packed	1843	3,105
Granite, broken	1538	2,592
Gypsum	2275	3,834
Limestone, coarse, sized	1570	2,646
Limestone, mixed sizes	1682	2,835
Limestone, pulverized or crushed	1362	2,295
Sand, damp	2083	3,510
Sand, dry	1762	2,970
Sand, voids, full of water	2083	3,510
Sandstone, quarried	1314	2,214
Shale, broken crushed	1362	2,295
Slag, furnace granulated	1955	3,294
Stone or gravel, 37.5 to 87.5-mm (1.5 to 3.5") size	1442	2,430
Stone or gravel, 18.75-mm (3/4") size	1602	2,700

\*This guide, representing bucket sizes not necessarily manufactured by Deere, will help you in selecting proper bucket size for material density, loader configuration, and operating conditions. Optimum bucket size is determined after adding or subtracting all tipping load charges due to optional equipment. The "conservative load" line on this guide is recommended when operating in conditions such as soft ground and uneven surfaces. The "maximum load" condition on this guide is sometimes utilized when operating on firm ground and level surfaces.

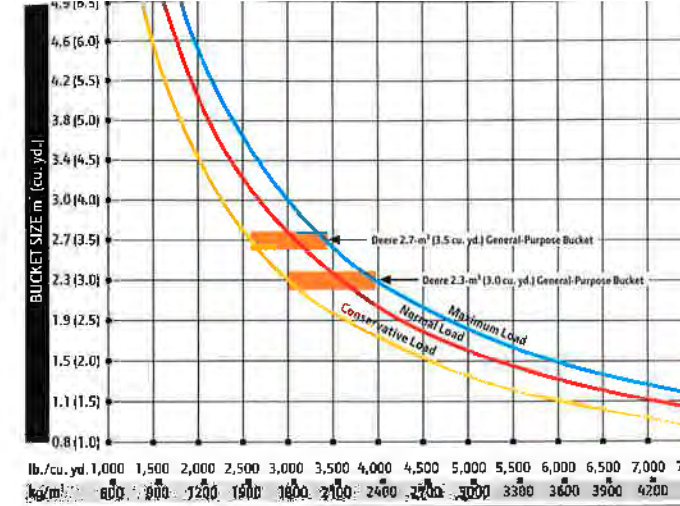
624K Z-BAR LOADER WITH PIN-ON BUCKET



LOOSE MATERIALS	kg/m³	lb./cu. yd.
Chips, pulpwood	288	486
Cinders (coal, ashes, clinkers)	673	1,134
Clay and gravel, dry	1602	2,700
Clay, compact, solid	1746	2,943
Clay, dry in lump loose	1009	1,701
Clay, excavated in water	1282	2,160
Coal, anthracite, broken, loose	865	1,458
Coal, bituminous, moderately wet	801	1,350
Earth, common loam, dry	1218	2,052
Earth, mud, packed	1843	3,105
Granite, broken	1538	2,592
Gypsum	2275	3,834
Limestone, coarse, sized	1570	2,646
Limestone, mixed sizes	1682	2,835
Limestone, pulverized or crushed	1362	2,295
Sand, damp	2083	3,510
Sand, dry	1762	2,970
Sand, voids, full of water	2083	3,510
Sandstone, quarried	1314	2,214
Shale, broken crushed	1362	2,295
Slag, furnace granulated	1955	3,294
Stone or gravel, 37.5 to 87.5-mm (1.5 to 3.5") size	1442	2,430
Stone or gravel, 18.75-mm (3/4") size	1602	2,700

\*This guide, representing bucket sizes not necessarily manufactured by Deere, will help you in selecting proper bucket size for material density, loader configuration, and operating conditions. Optimum bucket size is determined after adding or subtracting all tipping load charges due to optional equipment. The "conservative load" line on this guide is recommended when operating in conditions such as soft ground and uneven surfaces. The "maximum load" condition on this guide is sometimes utilized when operating on firm ground and level surfaces.

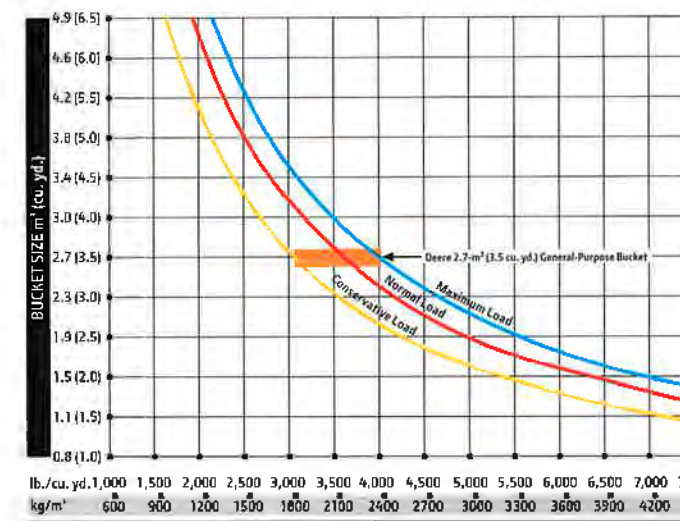
624K HIGH-LIFT LOADER WITH PIN-ON BUCKET



LOOSE MATERIALS	kg/m³	lb./cu. yd.
Chips, pulpwood	288	486
Cinders (coal, ashes, clinkers)	673	1,134
Clay and gravel, dry	1602	2,700
Clay, compact, solid	1746	2,943
Clay, dry in lump loose	1009	1,701
Clay, excavated in water	1282	2,160
Coal, anthracite, broken, loose	865	1,458
Coal, bituminous, moderately wet	801	1,350
Earth, common loam, dry	1218	2,052
Earth, mud, packed	1843	3,105
Granite, broken	1538	2,592
Gypsum	2275	3,834
Limestone, coarse, sized	1570	2,646
Limestone, mixed sizes	1682	2,835
Limestone, pulverized or crushed	1362	2,295
Sand, damp	2083	3,510
Sand, dry	1762	2,970
Sand, voids, full of water	2083	3,510
Sandstone, quarried	1314	2,214
Shale, broken crushed	1362	2,295
Slag, furnace granulated	1955	3,294
Stone or gravel, 37.5 to 87.5-mm (1.5 to 3.5") size	1442	2,430
Stone or gravel, 18.75 mm (3/4") size	1602	2,700

\*This guide, representing bucket sizes not necessarily manufactured by Deere, will help you in selecting proper bucket size for material density, loader configuration, and operating conditions. Optimum bucket size is determined after adding or subtracting all tipping load charges due to optional equipment. The "conservative load" line on this guide is recommended when operating in conditions such as soft ground and uneven surfaces. The "maximum load" condition on this guide is sometimes utilized when operating on firm ground and level surfaces.

624K POWERLLE LOADER WITH QUICK-COUPLER AND HOOK-ON BUCKET



LOOSE MATERIALS	kg/m³	lb./cu. yd.
Chips, pulpwood	288	486
Cinders (coal, ashes, clinkers)	673	1,134
Clay and gravel, dry	1602	2,700
Clay, compact, solid	1746	2,943
Clay, dry in lump loose	1009	1,701
Clay, excavated in water	1282	2,160
Coal, anthracite, broken, loose	865	1,458
Coal, bituminous, moderately wet	801	1,350
Earth, common loam, dry	1218	2,052
Earth, mud, packed	1843	3,105
Granite, broken	1538	2,592
Gypsum	2275	3,834
Limestone, coarse, sized	1570	2,646
Limestone, mixed sizes	1682	2,835
Limestone, pulverized or crushed	1362	2,295
Sand, damp	2083	3,510
Sand, dry	1762	2,970
Sand, voids, full of water	2083	3,510
Sandstone, quarried	1314	2,214
Shale, broken crushed	1362	2,295
Slag, furnace granulated	1955	3,294
Stone or gravel, 37.5 to 87.5-mm (1.5 to 3.5") size	1442	2,430
Stone or gravel, 18.75 mm (3/4") size	1602	2,700

\*This guide, representing bucket sizes not necessarily manufactured by Deere, will help you in selecting proper bucket size for material density, loader configuration, and operating conditions. Optimum bucket size is determined after adding or subtracting all tipping load charges due to optional equipment. The "conservative load" line on this guide is recommended when operating in conditions such as soft ground and uneven surfaces. The "maximum load" condition on this guide is sometimes utilized when operating on firm ground and level surfaces.

624K TOOL-CARRIER LOADER WITH QUICK-COUPLER AND HOOK-ON BUCKET



# Additional equipment

Key: ● Standard ▲ Optional or special

See your John Deere dealer for further information.

444	524	544	624	Engine
●	●	●	●	Wet-sleeve cylinder liners
●	●	●	●	Automatic glow plugs for cold start*
●	●	●	●	Programmable auto-idle and auto shutdown
●	●	●	●	Selected idle adjustment from 900–1,250 rpm
●	●	●	●	Starter protection
●	●	●	●	Automatic turbo cool-down/shutdown timer†
●	●	●	●	Automatic derating for exceeded system temperatures
●	●	●	●	Serpentine drive belt for automatic tensioner
●	●	●	●	Under-hood prescreened air intake
●	●	●	●	Dual-stage fuel filter and water separator
●	●	●	●	500-hour vertical spin-on oil filter
▲	▲	▲	▲	Chrome exhaust stack
▲	▲	▲	▲	Automatic ether starting aid (recommended for cold starts below –17 deg. C [10 deg. F])
▲	▲	▲	▲	Engine-block heater (recommended for cold starts below –23 deg. C [–10 deg. F])
▲	▲	▲	▲	Centrifugal engine air pre-cleaner
Powertrain				
●	●	●	●	Programmable maximum high gear
●	●	●	●	Clutch calibration engaged from monitor
●	●	●	●	2,000-hour vertical spin-on transmission filter
●	●	●	●	Transmission fill tube and sight gauge
▲	▲	▲	▲	Rear axle disconnect
●	●	●	●	Front locking differential
▲	▲	▲	▲	Rear locking differential
▲	▲	▲	▲	Automatic differential lock
●	●	●	●	Axle temperature sensing
▲	▲	▲	▲	Wheel-spin control
Quad-Cool™ Cooling System				
●	●	●	●	Heavy-duty, trash-resistant radiator and high ambient cooling package
●	●	●	●	2-side access to all coolers
●	●	●	●	Isolated from engine compartment
●	●	●	●	Engine radiator
●	●	●	●	Integral engine oil cooler
●	●	●	●	Hydraulic oil cooler (oil to air)
●	●	●	●	Transmission oil cooler (oil to air)
●	●	●	●	Charge air cooler (air to air)
●	●	●	●	Coolant recovery tank
●	●	●	●	Antifreeze, –37 deg. C [–34 deg. F]
●	●	●	●	Cool-on-demand swing-out fan
●	●	●	●	Enclosed fan safety guard
▲	▲	▲	▲	Automatic reversing fan drive
▲	▲	▲	▲	Axle and service-brake coolers
▲	▲	▲	▲	Corrosive-environment coolers
Hydraulics				
●	●	●	●	Automatic return-to-dig bucket positioner
●	●	●	●	In-cab adjustable automatic return-to-dig bucket positioner (PowerLift™ only)
●	●	●	●	In-cab adjustable automatic boom-height kickout/return to carry
●	●	●	●	Reservoir with sight gauge and fill strainer
●	●	●	●	Hydraulic diagnostic ports
●	●	●	●	4,000-hour in-tank filter
●	●	●	●	2 function — joystick with F-N-R
▲	▲	▲	▲	2 function — joystick with steering column F-N-R
▲	▲	▲	▲	7 function — 4-lever fingertip controls and steering column F-N-R
▲	▲	▲	▲	3 function — joystick with F-N-R and 3rd-function auxiliary lever
▲	▲	▲	▲	3 function — joystick with steering column F-N-R and 3rd-function auxiliary lever
▲	▲	▲	▲	3 function — 3-lever fingertip controls and steering column F-N-R

444	524	544	624	Hydraulics (continued)
▲	▲	▲	▲	4 function — 4-lever fingertip controls and steering column F-N-R
▲	▲	▲	▲	Ride control, automatic with monitor adjustable speed settings
▲	▲	▲	▲	Hydraulic control system for quick-coupler locking pins
Steering Systems				
●	●	●	●	Conventional steering wheel with spinner knob
▲	▲	▲	▲	Joystick steering (including conventional steering column) with gearshift, F-N-R, and horn
▲	▲	▲	▲	Secondary steering
Electrical				
●	●	●	●	Solid-state electrical power-distribution system
●	●	●	●	Lockable master electrical-disconnect switch
●	●	●	●	Battery-terminal safety covers
●	●	●	●	By-pass start safety cover at starter
●	●	●	●	Pre-wired for beacon/strobe light
●	●	●	●	Lights: Halogen driving lights with guards (2) / Front (4) and rear (2) cab work lights / Turn signals and flashers / LED stop- and taillights
●	●	●	●	Programmable courtesy lights
●	●	●	●	Horn, electric
●	●	●	●	Reverse warning alarm
●	●	●	●	Multi-function/multi-language LCD color monitor includes: Digital instruments — Analog display (hydraulic oil temperature, engine coolant temperature, transmission oil temperature, and engine oil pressure) / Digital display (engine rpm, transmission gear/direction indicator, hour meter, fuel level, speedometer, odometer, and outside temperature)
●	●	●	●	Integrated cycle counter with 5 categories
●	●	●	●	Indicator lights: Standard and selected options / Amber caution and red stop
●	●	●	●	Operator warning messages
●	●	●	●	Built-in diagnostics: Diagnostic-code details / Sensor values / Calibrations / Individual circuit tester
●	●	●	●	Menu display: Codes / Machine settings / Diagnostics / Monitor settings / Clock
▲	▲	▲	▲	Heavy-duty LED turn signal and marker lights
▲	▲	▲	▲	Electrical corrosion-prevention package
▲	▲	▲	▲	AM/FM/weather-band radio
▲	▲	▲	▲	AM/FM/weather-band radio with CD player
▲	▲	▲	▲	24- to 12-volt, 8-amp converter
Operator's Station				
●	●	●	●	Canopy with ROPS/FOPS, isolation mounted
▲	▲	▲	▲	ROPS canopy rear window
▲	▲	▲	▲	Quiet cab with heater
▲	▲	▲	▲	Quiet cab with air conditioning/heater
●	●	●	●	Key-less start with multiple security modes
●	●	●	●	Sealed-switch module with function indicators
●	●	●	●	Seat with backrest extension, deep foam, vinyl cover, and adjustable air suspension
▲	▲	▲	▲	Seat with backrest extension, deep foam, fabric cover, and adjustable air suspension
▲	▲	▲	▲	Premium seat with high-wide back and headrest extension, heated, leather/fabric cover, and adjustable air suspension
●	●	●	●	Hydraulic controls integrated to seat
●	●	●	●	Seat belt, 76 mm [3 in.], with retractor
●	●	●	●	Cup holders (2)
●	●	●	●	Lunch box/cooler holder
●	●	●	●	Dome and reading light
▲	▲	▲	▲	12-volt power part
●	●	●	●	Rubber floor mat
●	●	●	●	Tilt steering column
●	●	●	●	Operator's manual storage compartment
●	●	●	●	Outside (2) and inside (1) rearview mirrors
●	●	●	●	Left-side operator-station access

444	524	544	624	Operator's Station (continued)
●	●	●	●	Slip-resistant steps and ergonomic handholds
▲	▲	▲	▲	Powered cab air pre-cleaner
▲	▲	▲	▲	Large heated outside mirrors
▲	▲	▲	▲	Beacon bracket
▲	▲	▲	▲	Rear camera and radar object-detection system
▲	▲	▲	▲	Embedded payload scale
▲	▲	▲	▲	Fire extinguisher
Loader Linkage				
●	●	●	●	Z-bar loader linkage
▲	▲	▲	▲	High-lift Z-bar loader linkage
▲	▲	▲	▲	Powerlift linkage for visibility and parallel-lift
▲	▲	▲	▲	Tool-carrier linkage for parallel-lift
Buckets and Attachments				
▲	▲	▲	▲	Full line of Deere pin-on buckets
▲	▲	▲	▲	Worksite Pro™ hydraulic coupler which accepts JRB-pattern attachments
▲	▲	▲	▲	Hi-Vis hydraulic coupler which accepts Euro-pattern attachments (Volvo)
▲	▲	▲	▲	Full line of Deere hook-on buckets and forks
▲	▲	▲	▲	Bolt-on fork frame guard
Overall Vehicle				
●	●	●	●	JDLINK™ Ultimate wireless communication system (available in specific countries; see your dealer for details)
●	●	●	●	NeverGrease™ rear-axle oscillation
●	●	●	●	NeverGrease steering-cylinder joints
●	●	●	●	Front and rear tie-downs
●	●	●	●	Rear cast bumper/counterweight with rear hitch and locking pin
●	●	●	●	Articulation locking bar
●	●	●	●	Loader boom service locking bar
●	●	●	●	40-deg. steering articulation to each side with rubber-cushion stops on frame
●	●	●	●	Vandal protection with lockable engine enclosures, right counterweight storage, battery box, and filler access for radiator/fuel/hydraulic transmission
●	●	●	●	Service steps and handholds
●	●	●	●	Storage compartment
●	●	●	●	Fuel-tank fill strainer
●	●	●	●	Heavy-duty fuel-tank guard
●	●	●	●	Ground-level fueling
●	●	●	●	17.5R25 L3 radial tires on 3-piece rims
▲	▲	▲	▲	20.5R25 L3 radial tires on 3-piece rims
▲	▲	▲	▲	Waste handler (Z-bar and High-Lift)
▲	▲	▲	▲	NeverGrease linkage (Z-bar and High-Lift)
▲	▲	▲	▲	Level 1 sound package
▲	▲	▲	▲	Level 2 sound package
●	●	●	●	Environmental drains and sample ports
▲	▲	▲	▲	Quick fluid service (engine, transmission, hydraulic and axle oils, and engine coolant)
●	●	●	●	Fluid sampling ports for engine, transmission, hydraulic and axle oils, and engine coolant
●	●	●	●	Fenders, front
▲	▲	▲	▲	Fenders, full-coverage, front
▲	▲	▲	▲	Fenders, full-coverage, front and rear
▲	▲	▲	▲	Close-mounted steps
▲	▲	▲	▲	Less wheels and tires with 8-deg. axle stops
▲	▲	▲	▲	Cup holders (2)
▲	▲	▲	▲	Transmission side-frame guards
▲	▲	▲	▲	Bottom guards, front frame and transmission
▲	▲	▲	▲	Lift eyes
▲	▲	▲	▲	License-plate bracket and light
▲	▲	▲	▲	Special guarding for waste and forestry applications

\*For 444K, 524K, and 544K models, glow plugs are only available on EPA Interim Tier 4/EU Stage IIIB engines.

†Available only with EPA Interim Tier 4/EU Stage IIIB engines.



DKAKULDR Litho in U.S.A. (12-03)

Net engine power is with standard equipment including air cleaner, exhaust system, alternator, and cooling fan at test conditions per ISO 9249. No derating is required up to 3050 m (10,000 ft.) altitude. Specifications are designed subject to change without notice. Specifications with the exception of bucket capacity are in accordance with all applicable ISO standards. Except where otherwise noted, these specifications are based on units with applicable linkage and standard equipment. ROPS cab, rear cast bumper/counterweight, transmission side frame guards, bottom guards, standard tires, full fuel tank, and 79-kg (175 lb.) operator.

www.JohnDeere.com



# 524K-II/544K-II/ 624K-II LOADERS

104–139 kW (140–186 net hp)



**JOHN DEERE**







# Powerful. And proven.

Got a material-handling app that demands extra agility and ability? There's a John Deere K Series-II Loader for that. Built on the highly reliable platform of their predecessors, these models are loaded with even more customer-inspired productivity- and uptime-increasing features. John Deere PowerTech™ EPA Final Tier 4 (FT4)/EU Stage IV diesels provide generous displacement, power, and lugging ability. Daily checks and maintenance access are even easier. And all new K Series-II Loaders come with a standard five-speed transmission, a new adaptive clutch cutoff, and new axles with brake retractors that will improve productivity while providing up to 10-percent fuel savings compared to previous K-Series models. Get more in a K Series-II.

K-Series Specifications	524K-II	544K-II	624K-II
<b>Net Peak Power</b>	104 kW (140 hp)	121 kW (163 hp)	139 kW (186 hp)
<b>Bucket Capacity</b>	1.9–3.4 m <sup>3</sup> (2.5–4.5 cu. yd.)	2.1–4.0 m <sup>3</sup> (2.75–5.25 cu. yd.)	2.7–4.0 m <sup>3</sup> (3.5–5.25 cu. yd.)
<b>Z-Bar: Tipping Load (40-deg. full turn, no tire deflection, with pin-on bucket)</b>	9168 kg (20,212 lb.)	9637 kg (21,246 lb.)	12 006 kg (26,469 lb.)
<b>Breakout Force</b>	9060 kg (19,974 lb.)	10 115 kg (22,300 lb.)	12 821 kg (28,266 lb.)
<b>Operating Weight</b>	12 668 kg (27,928 lb.)	13 217 kg (29,138 lb.)	15 747 kg (34,717 lb.)
<b>Powerlifter™: Tipping Load (40-deg. full turn, no tire deflection, with coupler)</b>	N/A	7788 kg (17,170 lb.)	9312 kg (20,530 lb.)
<b>Breakout Force</b>	N/A	8604 kg (18,968 lb.)	10 759 kg (23,719 lb.)
<b>Operating Weight</b>	N/A	14 327 kg (31,586 lb.)	17 167 kg (37,847 lb.)
<b>Tool Carrier: Tipping Load (40-deg. full turn, no tire deflection, with coupler)</b>	N/A	N/A	10 253 kg (22,605 lb.)
<b>Breakout Force</b>	N/A	N/A	10 978 kg (24,202 lb.)
<b>Operating Weight</b>	N/A	N/A	16 166 kg (35,640 lb.)



# Easy rider.

Long days seem shorter when you're getting things done. And what operator wouldn't be more productive in the high-back air-ride seat of a K Series-II Loader? Up-front, an enhanced multifunction monitor displays operating, diagnostic, and maintenance info on a color LCD screen with easy-on-the-eyes clarity. Generous tinted glass and a low-profile console allow a commanding view of the work ahead. Spacious and quiet cab boasts plenty of legroom and fatigue-beating ergonomics, including convenience features such as seat-mounted loader controls. And sealed-switch module (SSM) with keyless start and effortless push-button operation of numerous machine functions. So you can work harder with less effort.

Adjustable automotive-style louvers provide effective airflow to keep the glass clear and the pressurized cab comfortable.

Available premium heated air-ride armchair seat adjusts multiple ways for extra comfort and cushioning.

To help prevent unauthorized machine operation, the keyless-start security system requires a numeric pass code (when activated).



Multi-language color LCD monitor provides push-button access to a wealth of machine data and functions:

- A. Vital and general operating info**, including transmission mode, gear, engine rpm, ground speed, fuel and diesel exhaust fluid (DEF) levels, and fluid temps.
- B. Enhanced onboard diagnostics** with speed, pressure, and temperature readings and real-time switch status.
- C. Customized machine settings** such as Quick Shift, Auto-to-1st, and optional Ride Control let you match operating characteristics to specific jobs and conditions.
- D. Optional embedded payload scale** weighs each bucket load, helping fill trucks to the max.



1. Cooler compartment and beverage holder make it handy to stow your lunch.

2. Optional rearview camera and radar object-detection system or rearview camera only displays the activity behind the machine on the LCD screen. Emits an audible alert for extra awareness in tight quarters and high-traffic areas.

3. Backlit touchpad in the SSM controls keyless start and 24 other machine functions, allowing the operator to activate boom-height kick-out, return-to-carry, and return-to-dig from the seat.



# Control your productivity.

If you want maximum productivity, a K Series-II Loader should be on your jobsite. It's not just their big torque reserves that make them such impressive performers. Single-lever joystick or two-lever fingertip controls provide smooth effortless control. Excavator-style hydraulics sense the load and deliver the flow needed for smooth combined functions and fast work cycles. PowerShift™ torque-converter transmission on the 524K-II employs smart shift technology to continuously evaluate speed and load conditions, and adjusts clutch-pack engagement to suit. 544K-II and 624K-II feature standard five-speed transmission with lockup torque converter in gears 2–5, to increase acceleration, speed cycles, and optimize power and fuel efficiency during transport, roading, and ramp climbing. You won't find a smoother-shifting loader.

Boom-height kick-out and return-to-carry functions help speed production in repetitive loading applications. On 544K-II and 624K-II Parallel-equipped models, the touchpad has two presets for added convenience when frequent attachment change-over is required.

Engine/hydraulic match maintains good boom and bucket power into and out of the pile. For big loads, even in wet or packed materials.

Responsive steering and full 80-deg. articulation increase maneuverability in tight quarters, for faster cycle times and fewer three-point turns.

Optional wheel-spin control boosts productivity by improving traction in troublesome material or underfoot conditions. Reduces tire wear, fuel costs, and operator fatigue, too.



1. Choose single-lever joystick or two-lever fingertip pilot-operated hydraulic controls. Joystick F-N-R selector provides convenient direction and full-range gear changes. Both include innovative Quick-Shift feature for push-button gear changes, one gear at a time.
2. Hinged panel tilts away for quick ground-level access to both the fuel and diesel exhaust fluid (DEF) tanks, making refills convenient and easy.
3. New adaptive clutch cutoff automatically provides more power to the hydraulic system, ensures smooth control at high engine rpms and low speeds, and allows for better machine handling in all terrain without the operator having to change settings.





# Get unparalleled Powerllel lift.

544K-II and 624K-II Powerllel Loaders deliver both powerful digging forces and parallel lift. Their innovative design allows load forces to work with, not against, the boom. For big breakout force, even in difficult digging. Impressive torque throughout the entire dump and rollback range enables Powerllels to excel at a wide variety of material-handling tasks. But don't just look for these John Deere advantages in the numbers on a spec sheet. The best way to fully appreciate them is on your jobsite. Whatever the task, whatever the load, you'll discover parallel lift that's without parallel.

1. 544K-II and 624K-II Powerllel Loaders power outstanding breakout throughout the entire bucket and angle range to conquer tough tasks such as loading logs.

2. John Deere Worksite Pro™ couplers increase versatility and make attachment switchover push-button easy. Hi-Vis coupler picks up a broad range of Deere and other attachments so you can do more with one machine.

Bell crank is attached to the loader frame via a Y-shaped link, separating it from the cross tube. "Free-floating" bell-crank design allows load forces to work with, not against, the boom, for powerful breakout in tough digging.

Hi-Vis coupler fastens the attachment close to the machine for stability with heavy loads.

Tire and axle options let you equip your 544K-II or 624K-II Powerllel for material handling on a wide range of terrain.





# Designed to hit deadlines — and new heights.

K Series-II Loaders come equipped with plenty of production-boosting features to help you handle almost anything you throw their way. But if yours isn't just any application, we've got you covered with a wide variety of factory- or dealer-installed options. So you can equip your loader with exactly what you need to maximize your efforts and expand your opportunities. Not all options are available on all loaders, so see your dealer for specific details.

1. With optional ride control, the lift cylinders act as shock absorbers, cushioning bumps to enable quick and easy navigation over rough ground without losing the load. Auto-actuation travel speed is adjustable from 1.5 to 24.0 km/h (1.0 to 15.0 mph) in increments of 0.5 units.

2. Embedded payload scale enables you to fill each truck to its legal limit, for maximum productivity. It's available on Z-Bar and High-Lift models.



Full-tire front and rear fenders and flaps help keep the machine free of mud and debris.

Heated mirrors prevent fog and ice from obstructing visibility and impacting productivity.

General-purpose or excavating buckets are available in pin-on or coupler configurations from 1.9–2.7 m<sup>3</sup> (2.5–3.5 cu. yd.). Or opt for forks with 1.22- and 1.52-m (48 and 60 in.) tines, depending on model.

Mine Safety and Health Administration (MSHA)-compliant self-cleaning steps and convenient handrails provide right-side access to the skid-resistant platform for cleaning windows.

Optional corrosion package shields electrical components and connections to help prevent corrosive materials from short-circuiting productivity.



# Built to tackle whatever you've got.

It's all about uptime. So we gave the K Series-II plenty of resources to help you succeed. All three loaders come loaded with traditional John Deere durability features such as heavy-duty wet-sleeve diesels, Quad-Cool, and solid-state electrical systems. Reinforced articulation joints with double-tapered roller bearings. Plus, booms and mainframes so tough they're warranted for three years or 10,000 hours. When you know how they're built, you'll run a Deere.

Auto-idle applies the brakes and automatically reduces engine speed to help conserve fuel after an operator-determined period of inactivity. Auto shutdown turns off the engine after extended idleness.

Standard starter protection limits cranking time and requires cool-down periods between attempts.

Hydraulically driven fan runs only as needed for efficient cooling. Helps conserve precious fuel, too.

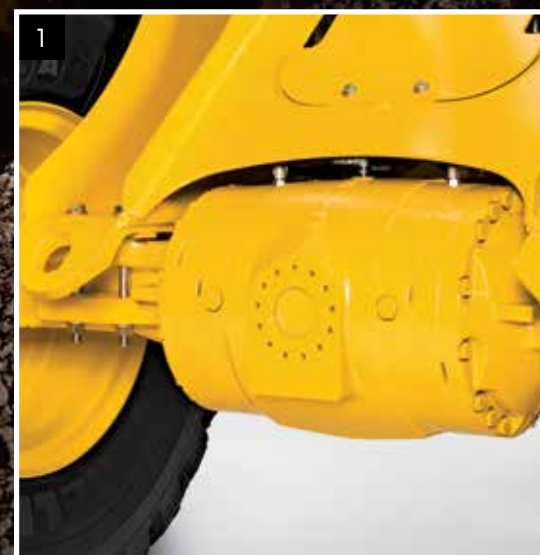
Electrical-distribution center employs highly reliable circuit-board technology and solid-state switches that eliminate numerous wiring harnesses, fuses, relays, and connectors. Sealed gold-pin electrical connectors resist corrosion, for superior long-term integrity.



1. Planetary final drives are mounted inboard. Hydraulic wet-disc brakes on all models self-adjust.

2. Optional programmable fan automatically reverses at predetermined intervals, ejecting debris from the radiator and cooler cores. Or set individual cleaning cycles through the monitor.

3. Quad-Cool places the radiator, air-conditioner condenser, intercooler, and hydraulic, transmission, and axle coolers (standard on the 624K-II, optional on the 524K-II and 544K-II) in a unique boxed configuration that's isolated from engine heat, boosting efficiency and durability.





# Save time — and your bottom line.

Controlling daily owning and operating costs shouldn't stretch your resources — and it doesn't on a K Series-II Loader. Same-side ground-level service points make quick work of the daily routine. Unique Quad-Cool system provides wide-open access to both sides of the coolers, easing cleanout. Extended service intervals let you work longer between changes. And because no maintenance beats low maintenance, standard self-adjusting serpentine engine belts and wet-disc brakes seldom, if ever, require attention. The list of maintenance-minimizing features — and the owning and operating savings — goes on and on.

1. Vertical spin-on filters allow quick, no-spill changes. 500-, 2,000-, and 4,000-hour engine, transmission, and hydraulic oil-change intervals help reduce operating costs.
2. Easy-to-navigate LCD monitor displays diagnostic messages if problems occur, and even offers possible solutions to help get you back up and running quickly.
3. Color-coded fluid-sample and diagnostic test ports help speed preventative maintenance and troubleshooting. Noninvasive design helps keep out contaminants.
4. Conveniently located, easy-to-read sight gauges and see-through reservoirs let you check transmission, hydraulic, coolant, and windshield washer fluid levels at a glance.
5. Lockable master electrical-disconnect switch, cab circuit breaker, and remote-start terminals are enclosed beneath the right-side step, for ground-level convenience.



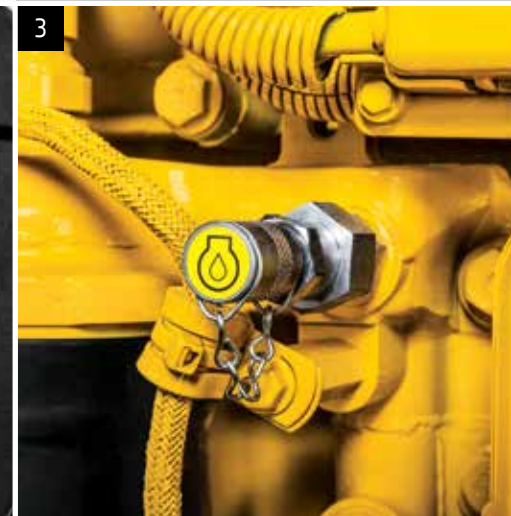
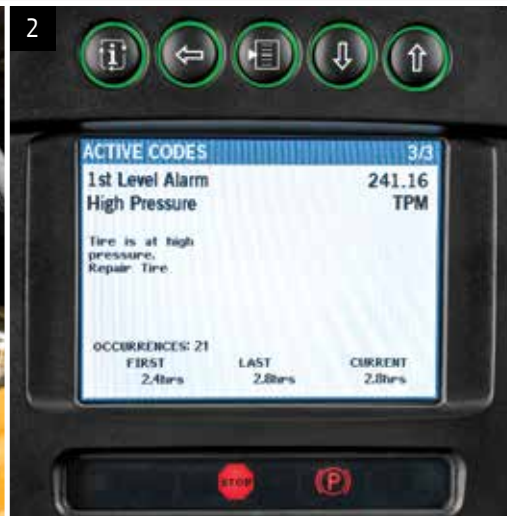
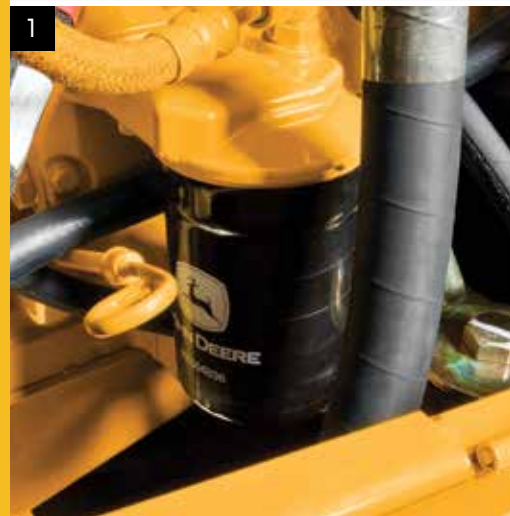
3-mm (0.12 in.) side-shield perforations block most airborne debris. Unlike stacked coolers, Quad-Cool cores resist plugging and are easily accessible from either side, for quick and easy cleanout.

All daily service points including fuel are conveniently grouped on the left side of the machine.

Greasing is less messy, with centralized lube banks providing easy access to difficult-to-reach zerks. Periodic lube and maintenance chart conveniently ensures that nothing gets overlooked.

John Deere WorkSight™ is an exclusive suite of telematics solutions that increases uptime while lowering operating costs. At its heart, JDLink™ Ultimate machine monitoring provides real-time utilization data and alerts to help you maximize productivity and efficiency while minimizing downtime. Remote diagnostics enable your dealer to read codes, record performance data, and even update software without a trip to the jobsite.

John Deere Ultimate Uptime, featuring John Deere WorkSight, is a customizable support solution available exclusively from your Deere dealer. This flexible offering maximizes equipment availability with standard John Deere WorkSight capabilities that can help prevent future downtime and speed repairs when needed. In addition to the base John Deere WorkSight features, our dealers work with you to build an uptime package that meets the specific needs of your machine, fleet, project, and business, including customized maintenance and repair agreements, onsite parts availability, extended warranties, fluid sampling, response-time guarantees, and more.





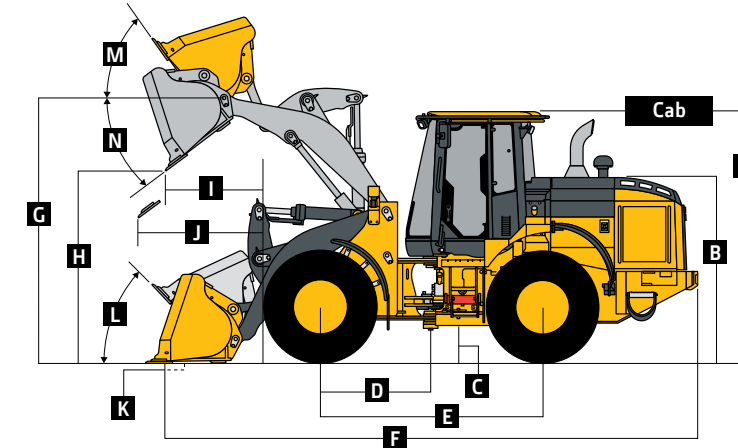
# 524K-II

# 524K-II

Engine		
Manufacturer and Model	John Deere PowerTech™ PVS 6068	John Deere PowerTech™ E 6068H
Non-Road Emission Standard	EPA Final Tier 4/EU Stage IV	EPA Tier 3/EU Stage IIIA
Cylinders	6	6
Valves Per Cylinder	4	2
Displacement	6.8 L (414 cu. in.)	6.8 L (414 cu. in.)
Net Peak Power (ISO 9249)	104 kW (140 hp) at 1,900 rpm	106 kW (142 hp) at 1,900 rpm
Net Peak Torque (ISO 9249)	640 Nm (472 lb.-ft.) at 1,100 rpm	644 Nm (475 lb.-ft.) at 1,300 rpm
Net Torque Rise	66%	43%
Fuel System (electronically controlled)	High-pressure common rail	High-pressure common rail
Lubrication	Full-flow spin-on filter and integral cooler	Full-flow spin-on filter and integral cooler
Aspiration	Turbocharged, charge air cooled	Turbocharged, charge air cooled
Air Cleaner	Under-hood, dual-element dry type, restriction indicator in cab monitor for service	
Cooling		
Fan Drive	Hydraulically driven, proportionally controlled, fan aft of coolers	
Electrical		
Electrical System	24 volt with 100-amp (130-amp optional) alternator	24 volt with 80-amp (100-amp optional) alternator
Batteries (2 – 12 volt)	950 CCA (each)	950 CCA (each)
Transmission System		
Type	Countershaft-type PowerShift™	
Torque Converter	Single stage, single phase	
Shift Control	Electronically modulated, adaptive, load and speed dependent	
Operator Interface	Steering-column or joystick-mounted F-N-R and gear-select lever; Quick-Shift button on hydraulic lever	
Shift Modes	Manual/auto (1st-D or 2nd-D); Quick-Shift button with 2 selectable modes: kick-down or kick-up/down; and adaptive clutch cutoff	
Maximum Travel Speeds (with 20.5 R 25 tires)	<i>Forward</i>	<i>Reverse</i>
Range 1	5.5 km/h (3.4 mph)	5.8 km/h (3.6 mph)
Range 2	11.7 km/h (7.3 mph)	12.3 km/h (7.6 mph)
Range 3	17.9 km/h (11.1 mph)	27.6 km/h (17.1 mph)
Range 4	25.8 km/h (16.0 mph)	N/A
Range 5	38.5 km/h (23.9 mph)	N/A
Axles/Brakes		
Final Drives	Heavy-duty inboard-mounted planetary	
Differentials	Hydraulic locking front with conventional rear – standard; dual locking front and rear – optional	
Rear Axle Oscillation, Stop to Stop (with 20.5 R 25 tires)	24 deg. (12 deg. each direction)	
Service Brakes (conform to ISO 3450)	Hydraulically actuated, spring-retracted, self-adjusting inboard sun-shaft mounted, oil cooled, single disc	
Parking Brakes (conform to ISO 3450)	Automatic spring applied, hydraulically released, driveline mounted, sealed wet multi disc	
Tires/Wheels (see page 20 for complete tire adjustments)		
	<i>Tread Width</i>	<i>Width Over Tires</i>
Michelin 20.5 R 25, 1 Star L-3	1950 mm (76.8 in.)	2546 mm (100.2 in.)
Serviceability		
Refill Capacities	EPA FT4/EU Stage IV	EPA Tier 3/EU Stage IIIA
Fuel Tank (with lockable cap)	220 L (58 gal.)	220 L (58 gal.)
Cooling System	23.5 L (24.8 qt.)	22.5 L (23.8 qt.)
Diesel Exhaust Fluid (DEF)	19 L (20 qt.)	N/A
Engine Oil with Vertical Spin-On Filter	19.5 L (20.6 qt.)	19 L (20 qt.)
Transmission Reservoir with Vertical Filter	21.5 L (22.7 qt.)	21.5 L (22.7 qt.)
Axle Oil (front and rear, each)	18 L (19 qt.)	18 L (19 qt.)
Hydraulic Reservoir and Filter	118.7 L (31.35 gal.)	92 L (24.3 gal.)
Park Brake Oil (wet disc)	0.3 L (10 oz.)	0.3 L (10 oz.)
Hydraulic System/Steering		
Pump (loader and steering)	Variable-displacement, axial-piston pump; closed-center, pressure-compensating system	
Maximum Rated Flow at 6895 kPa (1,000 psi) and 2,350 rpm	165 L/m (44 gpm)	
System Relief Pressure (loader and steering)	24 994 kPa (3,625 psi)	
Loader Controls	2-function valve; joystick control or fingertip controls; hydraulic-function enable/disable; optional 3rd- and 4th-function valve with auxiliary lever	
Steering (conforms to ISO 5010)	Steering-column-mounted, twist-grip shift lever; Quick-Shift button on hydraulic lever	
Type	Power, fully hydraulic	
Articulation Angle	80-deg. arc (40 deg. each direction)	
Turning Radius (measured to centerline of outside tire)	5.0 m (16 ft. 5 in.)	

Hydraulic System/Steering (continued)	524K-II Z-BAR / HIGH-LIFT	
Hydraulic Cycle Times	EPA FT4/EU Stage IV	EPA Tier 3/EU Stage IIIA
Raise	5.7 sec.	6.1 sec.
Dump	1.3 sec.	1.4 sec.
Lower (float down)	3.0 sec.	3.0 sec.
Total	10.0 sec.	10.5 sec.

### Dimensions and Specifications with Pin-On Bucket

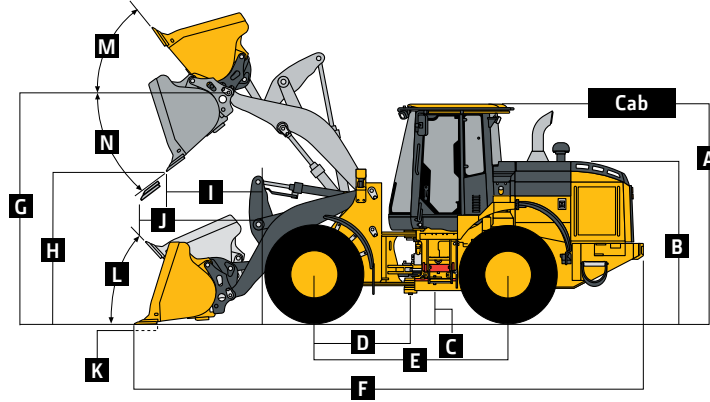


### 524K-II Z-BAR AND HIGH-LIFT LOADERS WITH PIN-ON BUCKET

Dimensions with Bucket	Z-Bar	High-Lift
	2.1-m <sup>3</sup> (2.75 cu. yd.) general-purpose with bolt-on edge	2.1-m <sup>3</sup> (2.75 cu. yd.) general-purpose with bolt-on edge
A Height to Top of Cab	3.25 m (10 ft. 8 in.)	3.25 m (10 ft. 8 in.)
B Hood Height	2.375 m (7 ft. 9 in.)	2.375 m (7 ft. 9 in.)
C Ground Clearance	0.40 m (15.7 in.)	0.40 m (15.7 in.)
D Length from Centerline to Front Axle	1.45 m (4 ft. 9 in.)	1.45 m (4 ft. 9 in.)
E Wheelbase	2.93 m (9 ft. 7 in.)	2.93 m (9 ft. 7 in.)
F Overall Length, Bucket on Ground	7.34 m (24 ft. 1 in.)	7.67 m (25 ft. 2 in.)
G Height to Hinge Pin, Fully Raised	3.77 m (12 ft. 5 in.)	4.12 m (13 ft. 6 in.)
H Dump Clearance, 45 deg., Full Height	2.77 m (9 ft. 1 in.)	3.12 m (10 ft. 3 in.)
I Reach, 45-deg. Dump, Full Height	0.98 m (3 ft. 2 in.)	0.99 m (3 ft. 3 in.)
J Reach, 45-deg. Dump, 2.13-m (7 ft. 0 in.) Clearance	1.44 m (4 ft. 9 in.)	1.73 m (5 ft. 8 in.)
K Maximum Digging Depth	97 mm (3.8 in.)	222 mm (8.7 in.)
L Maximum Rollback at Ground Level	41 deg.	41 deg.
M Maximum Rollback, Boom Fully Raised	55 deg.	50 deg.
N Maximum Bucket Dump Angle, Fully Raised	51 deg.	47 deg.
Loader Clearance Circle, Bucket Carry Position	11.60 m (38 ft. 1 in.)	11.90 m (39 ft. 1 in.)
Specifications with Bucket		
Capacity, Heaped	2.1 m <sup>3</sup> (2.75 cu. yd.)	2.1 m <sup>3</sup> (2.75 cu. yd.)
Capacity, Struck	1.7 m <sup>3</sup> (2.27 cu. yd.)	1.7 m <sup>3</sup> (2.27 cu. yd.)
Bucket Weight with Bolt-On Cutting Edge	1013 kg (2,233 lb.)	1013 kg (2,233 lb.)
Bucket Width	2.54 m (8 ft. 4 in.)	2.54 m (8 ft. 4 in.)
Breakout Force	9060 kg (19,974 lb.)	8371 kg (18,455 lb.)
Tipping Load, Straight, No Tire Deflection	10 540 kg (23,237 lb.)	9071 kg (19,998 lb.)
Tipping Load, Straight, with Tire Deflection	10 014 kg (22,077 lb.)	8664 kg (19,101 lb.)
Tipping Load, 40-deg. Full Turn, No Tire Deflection	9168 kg (20,212 lb.)	7862 kg (17,333 lb.)
Tipping Load, 40-deg. Full Turn, with Tire Deflection	8496 kg (18,730 lb.)	7335 kg (16,171 lb.)
Rated Operating Load, 50% Full-Turn Tipping Load, No Tire Deflection (conforms to ISO 14397-1)*	4584 kg (10,106 lb.)	3931 kg (8,666 lb.)
Rated Operating Load, 50% Full-Turn Tipping Load, with Tire Deflection (conforms to ISO 14397-1)*	4248 kg (9,365 lb.)	3667 kg (8,084 lb.)
Operating Weight	12 668 kg (27,928 lb.)	12 877 kg (28,389 lb.)

Loader operating information is based on machine with identified linkage and standard equipment, PowerTech PVS 6068 (EPA Final Tier 4/EU Stage IV) engine, ROPS cab, rear cast bumper/counterweight, transmission side-frame guards, bottom guards, standard tires, full fuel tank, and 79-kg (175 lb.) operator. This information is affected by changes in tires, ballast, and different attachments.

\*Rated operating capacity based on Deere attachments only.

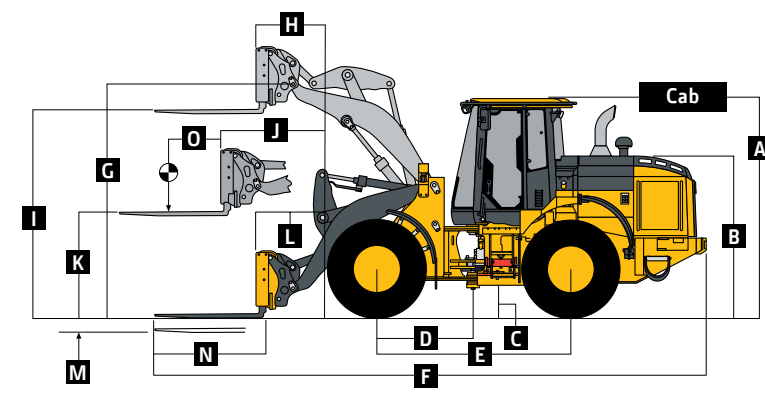


524K-II Z-BAR AND HIGH-LIFT LOADERS WITH QUICK-COUPLER AND HOOK-ON BUCKET

	Z-Bar	Z-Bar	High-Lift	High-Lift
<b>Dimensions with Bucket</b>	2.1-m <sup>3</sup> (2.75 cu. yd.) general-purpose with bolt-on edge	3.1-m <sup>3</sup> (4.0 cu. yd.) light-material with bolt-on edge	2.1-m <sup>3</sup> (2.75 cu. yd.) general-purpose with bolt-on edge	3.1-m <sup>3</sup> (4.0 cu. yd.) light-material with bolt-on edge
<b>A</b> Height to Top of Cab	3.25 m (10 ft. 8 in.)	3.25 m (10 ft. 8 in.)	3.25 m (10 ft. 8 in.)	3.25 m (10 ft. 8 in.)
<b>B</b> Hood Height	2.375 m (7 ft. 9 in.)	2.375 m (7 ft. 9 in.)	2.375 m (7 ft. 9 in.)	2.375 m (7 ft. 9 in.)
<b>C</b> Ground Clearance	0.40 m (15.7 in.)	0.40 m (15.7 in.)	0.40 m (15.7 in.)	0.40 m (15.7 in.)
<b>D</b> Length from Centerline to Front Axle	1.45 m (4 ft. 9 in.)	1.45 m (4 ft. 9 in.)	1.45 m (4 ft. 9 in.)	1.45 m (4 ft. 9 in.)
<b>E</b> Wheelbase	2.93 m (9 ft. 7 in.)	2.93 m (9 ft. 7 in.)	2.93 m (9 ft. 7 in.)	2.93 m (9 ft. 7 in.)
<b>F</b> Overall Length, Bucket on Ground	7.57 m (24 ft. 10 in.)	7.73 m (24 ft. 6 in.)	7.90 m (25 ft. 11 in.)	8.05 m (25 ft. 7 in.)
<b>G</b> Height to Hinge Pin, Fully Raised	3.77 m (12 ft. 5 in.)	3.77 m (12 ft. 5 in.)	4.12 m (13 ft. 6 in.)	4.12 m (13 ft. 6 in.)
<b>H</b> Dump Clearance, 45 deg., Full Height	2.61 m (8 ft. 7 in.)	2.50 m (8 ft. 2 in.)	2.96 m (9 ft. 8 in.)	2.80 m (9 ft. 2 in.)
<b>I</b> Reach, 45-deg. Dump, Full Height	1.10 m (3 ft. 7 in.)	1.11 m (3 ft. 8 in.)	1.11 m (3 ft. 8 in.)	1.13 m (3 ft. 8 in.)
<b>J</b> Reach, 45-deg. Dump, 2.13-m (7 ft. 0 in.) Clearance	1.47 m (4 ft. 10 in.)	1.40 m (4 ft. 7 in.)	1.77 m (5 ft. 10 in.)	1.71 m (5 ft. 7 in.)
<b>K</b> Maximum Digging Depth	146 mm (5.7 in.)	225 mm (8.8 in.)	226 mm (10.3 in.)	307 mm (12.08 in.)
<b>L</b> Maximum Rollback at Ground Level	40 deg.	41 deg.	45 deg.	41 deg.
<b>M</b> Maximum Rollback, Boom Fully Raised	54 deg.	55 deg.	48 deg.	48 deg.
<b>N</b> Maximum Bucket Dump Angle, Fully Raised	48 deg.	51 deg.	48 deg.	47 deg.
Loader Clearance Circle, Bucket Carry Position	11.77 m (38 ft. 7 in.)	12.13 m (39 ft. 9 in.)	12.08 m (39 ft. 8 in.)	12.47 m (40 ft. 11 in.)
<b>Specifications with Bucket</b>				
Capacity, Heaped	2.1 m <sup>3</sup> (2.75 cu. yd.)	3.1 m <sup>3</sup> (4.0 cu. yd.)	2.1 m <sup>3</sup> (2.75 cu. yd.)	3.1 m <sup>3</sup> (4.0 cu. yd.)
Capacity, Struck	1.7 m <sup>3</sup> (2.27 cu. yd.)	2.59 m <sup>3</sup> (3.4 cu. yd.)	1.7 m <sup>3</sup> (2.27 cu. yd.)	2.59 m <sup>3</sup> (3.4 cu. yd.)
Bucket Weight with Bolt-On Cutting Edge	1421 kg (3,133 lb.)	1693 kg (3,732 lb.)	1421 kg (3,133 lb.)	1693 kg (3,732 lb.)
Bucket Width	2.54 m (8 ft. 4 in.)	2.89 m (9 ft. 6 in.)	2.54 m (8 ft. 4 in.)	2.89 m (9 ft. 6 in.)
Breakout Force	7446 kg (16,415 lb.)	6708 kg (14,789 lb.)	6861 kg (15,126 lb.)	6219 kg (13,710 lb.)
Tipping Load, Straight, No Tire Deflection	9281 kg (20,461 lb.)	8838 kg (19,484 lb.)	8000 kg (17,637 lb.)	7582 kg (16,715 lb.)
Tipping Load, Straight, with Tire Deflection	8823 kg (19,451 lb.)	8382 kg (18,479 lb.)	7635 kg (16,832 lb.)	7221 kg (15,919 lb.)
Tipping Load, 40-deg. Full Turn, No Tire Deflection	8020 kg (17,681 lb.)	7597 kg (16,748 lb.)	6880 kg (15,168 lb.)	6480 kg (14,286 lb.)
Tipping Load, 40-deg. Full Turn, with Tire Deflection	7434 kg (16,389 lb.)	7014 kg (15,463 lb.)	6408 kg (14,127 lb.)	6006 kg (13,241 lb.)
Rated Operating Load, 50% Full-Turn Tipping Load, No Tire Deflection (conforms to ISO 14397-1)*	4010 kg (8,840 lb.)	3798 kg (8,373 lb.)	3440 kg (7,583 lb.)	3240 kg (7,143 lb.)
Rated Operating Load, 50% Full-Turn Tipping Load, with Tire Deflection (conforms to ISO 14397-1)*	3717 kg (8,195 lb.)	3507 kg (7,732 lb.)	3204 kg (7,064 lb.)	3003 kg (6,620 lb.)
Operating Weight	13 077 kg (28,830 lb.)	13 349 kg (29,429 lb.)	13 286 kg (29,291 lb.)	13 557 kg (29,888 lb.)

Loader operating information is based on machine with identified linkage and standard equipment, PowerTech PVS 6068 (EPA Final Tier 4/EU Stage IV) engine, ROPS cab, rear cast bumper/counterweight, transmission side-frame guards, bottom guards, standard tires, full fuel tank, and 79-kg (175 lb.) operator. This information is affected by changes in tires, ballast, and different attachments.

\*Rated operating capacity based on Deere attachments only.



524K-II Z-BAR AND HIGH-LIFT LOADERS WITH QUICK-COUPLER AND HOOK-ON CONSTRUCTION FORKS

	Z-Bar	Z-Bar	High-Lift	High-Lift
<b>Dimensions with Forks</b>	1.22-m (48 in.) tine length	1.52-m (60 in.) tine length	1.22-m (48 in.) tine length	1.52-m (60 in.) tine length
<b>A</b> Height to Top of Cab	3.25 m (10 ft. 8 in.)	3.25 m (10 ft. 8 in.)	3.25 m (10 ft. 8 in.)	3.25 m (10 ft. 8 in.)
<b>B</b> Hood Height	2.30 m (7 ft. 7 in.)	2.30 m (7 ft. 7 in.)	2.30 m (7 ft. 7 in.)	2.30 m (7 ft. 7 in.)
<b>C</b> Ground Clearance	0.40 m (15.7 in.)	0.40 m (15.7 in.)	0.40 m (15.7 in.)	0.40 m (15.7 in.)
<b>D</b> Length from Centerline to Front Axle	1.45 m (4 ft. 9 in.)	1.45 m (4 ft. 9 in.)	1.45 m (4 ft. 9 in.)	1.45 m (4 ft. 9 in.)
<b>E</b> Wheelbase	2.93 m (9 ft. 7 in.)	2.93 m (9 ft. 7 in.)	2.93 m (9 ft. 7 in.)	2.93 m (9 ft. 7 in.)
<b>F</b> Overall Length, Forks on Ground	7.88 m (25 ft. 10 in.)	8.18 m (26 ft. 10 in.)	8.21 m (26 ft. 11 in.)	8.51 m (27 ft. 11 in.)
<b>G</b> Height to Hinge Pin, Fully Raised	3.77 m (12 ft. 5 in.)	3.77 m (12 ft. 5 in.)	4.12 m (13 ft. 6 in.)	4.12 m (13 ft. 6 in.)
<b>H</b> Reach, Fully Raised	0.80 m (31.3 in.)	0.80 m (31.3 in.)	0.81 m (31.9 in.)	0.81 m (31.9 in.)
<b>I</b> Fork Height, Fully Raised	3.55 m (11 ft. 8 in.)	3.55 m (11 ft. 8 in.)	3.90 m (12 ft. 9 in.)	3.90 m (12 ft. 9 in.)
<b>J</b> Maximum Reach, Fork Level	1.54 m (5 ft. 1 in.)	1.54 m (5 ft. 1 in.)	1.80 m (5 ft. 11 in.)	1.80 m (5 ft. 11 in.)
<b>K</b> Fork Height, Maximum Reach	1.72 m (5 ft. 8 in.)	1.72 m (5 ft. 8 in.)	1.72 m (5 ft. 8 in.)	1.72 m (5 ft. 8 in.)
<b>L</b> Reach, Ground Level	0.94 m (3 ft. 1 in.)	0.94 m (3 ft. 1 in.)	1.27 m (4 ft. 2 in.)	1.27 m (4 ft. 2 in.)
<b>M</b> Depth Below Ground	16 mm (0.6 in.)	16 mm (0.6 in.)	95 mm (3.7 in.)	95 mm (3.7 in.)
<b>N</b> Tine Length	1.22 m (48 in.)	1.52 m (60 in.)	1.22 m (48 in.)	1.52 m (60 in.)
<b>O</b> Load Position, 50% Tine Length	0.61 m (24 in.)	0.76 m (30 in.)	0.61 m (24 in.)	0.76 m (30 in.)
<b>Specifications with Forks</b>				
Tipping Load, Straight, No Tire Deflection	7256 kg (15,997 lb.)	6849 kg (15,099 lb.)	6574 kg (14,493 lb.)	6227 kg (13,728 lb.)
Tipping Load, Straight, with Tire Deflection	7068 kg (15,582 lb.)	6681 kg (14,729 lb.)	6414 kg (14,140 lb.)	6081 kg (13,406 lb.)
Tipping Load, 40-deg. Full Turn, No Tire Deflection	6303 kg (13,896 lb.)	5943 kg (13,102 lb.)	5690 kg (12,544 lb.)	5383 kg (11,867 lb.)
Tipping Load, 40-deg. Full Turn, with Tire Deflection	6054 kg (13,347 lb.)	5718 kg (12,606 lb.)	5472 kg (12,064 lb.)	5175 kg (11,409 lb.)
Rated Operating Load, 50% Full-Turn Tipping Load, with Tire Deflection (conforms to ISO 14397-1 and SAE J1197)*	3027 kg (6,673 lb.)	2859 kg (6,303 lb.)	2736 kg (6,032 lb.)	2587 kg (5,703 lb.)
Rated Operating Load, Rough Terrain, 60% Full-Turn Tipping Load, with Tire Deflection (conforms to EN474-3)*	3632 kg (8,007 lb.)	3431 kg (7,564 lb.)	3283 kg (7,238 lb.)	3105 kg (6,845 lb.)
Rated Operating Load, Firm and Level Ground, 80% Full-Turn Tipping Load, with Tire Deflection (conforms to EN474-3)*	4843 kg (10,677 lb.)	4574 kg (10,084 lb.)	4378 kg (9,652 lb.)	4140 kg (9,127 lb.)
Operating Weight	12 710 kg (28,021 lb.)	12 753 kg (28,115 lb.)	12 918 kg (28,479 lb.)	12 961 kg (28,574 lb.)

Loader operating information is based on machine with identified linkage and standard equipment, PowerTech PVS 6068 (EPA Final Tier 4/EU Stage IV) engine, ROPS cab, rear cast bumper/counterweight, transmission side-frame guards, bottom guards, standard tires, full fuel tank, and 79-kg (175 lb.) operator. This information is affected by changes in tires, ballast, and different attachments.

\*Rated operating capacity based on Deere attachments only.



**Adjustments to Operating Weights and Tipping Loads with Buckets** **524K-II Z-BAR / HIGH-LIFT**

Adjustments to operating weights, tipping loads, and tires are based on Z-Bar machine with pin-on 2.1-m<sup>3</sup> (2.75 cu. yd.) general-purpose bucket with bolt-on cutting edge, ROPS cab, rear cast bumper/counterweight, transmission side-frame guards, bottom guards, standard tires, full fuel tank, and 79-kg (175 lb.) operator\*

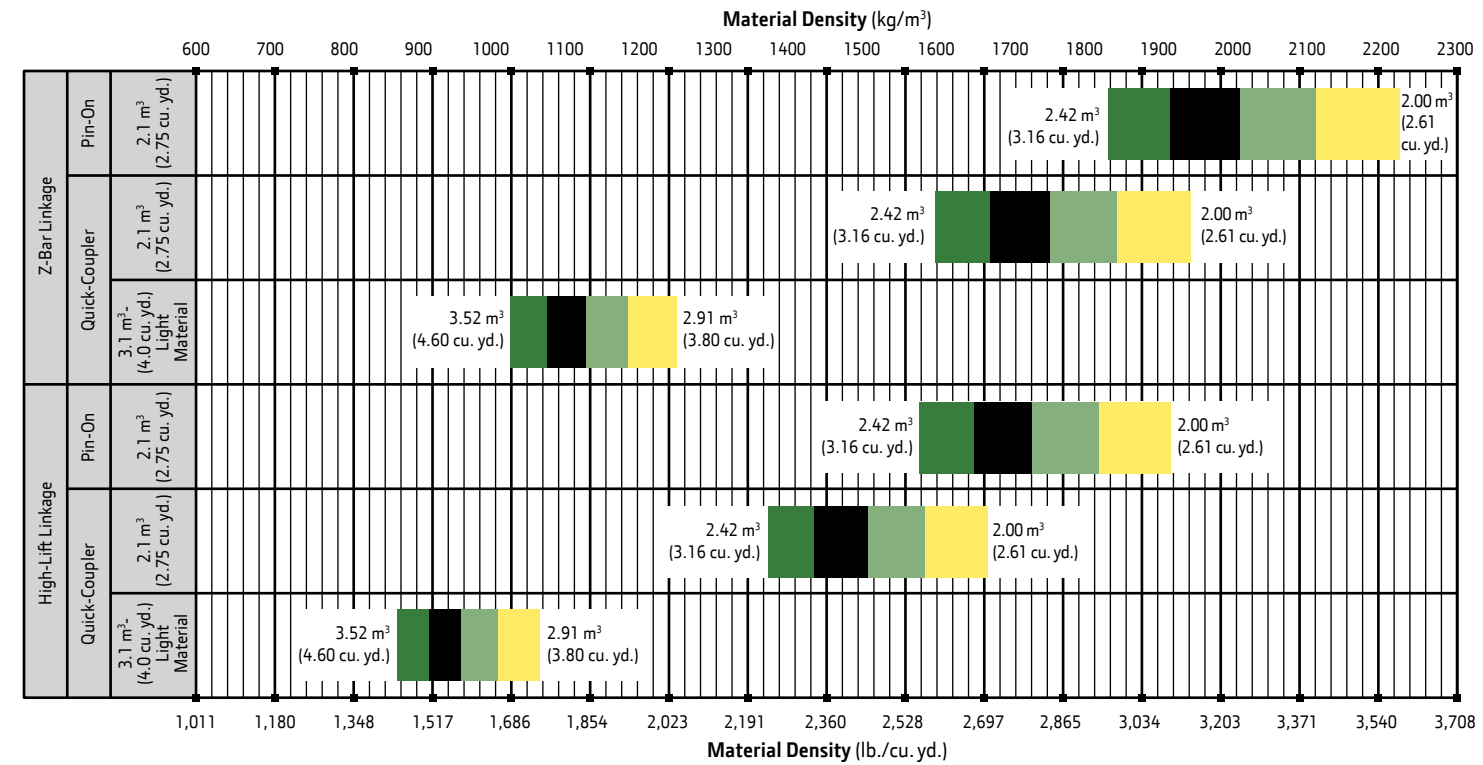
	Operating Weight	Tipping Load, Straight	Tipping Load, 40-deg. Full Turn	Tread Width	Width Over Tires	Vertical Height
John Deere PowerTech PVS 6068	0 kg (0 lb.)	0 kg (0 lb.)	0 kg (0 lb.)	N/A	N/A	N/A
John Deere PowerTech E 6068H						
Z-Bar	-1 kg (-2.2 lb.)	+147 kg (+324 lb.)	+113 kg (+249 lb.)	N/A	N/A	N/A
High-Lift	-41 kg (-90 lb.)	+40 kg (+88 lb.)	+25 kg (+55 lb.)	N/A	N/A	N/A
Michelin 20.5 R 25, 1 Star L-3	0 kg (0 lb.)	0 kg (0 lb.)	0 kg (0 lb.)	0 mm (0 in.)	0 mm (0 in.)	0 mm (0 in.)
Bridgestone 20.5 R 25, 1 Star L-3	+44 kg (+97 lb.)	+32 kg (+70 lb.)	+28 kg (+62 lb.)	0 mm (0 in.)	-5 mm (-0.2 in.)	-5 mm (-0.2 in.)
Titan 20.5 R 25, 1 Star L-3	-4 kg (-9 lb.)	-3 kg (-6 lb.)	-2 kg (-5 lb.)	0 mm (0 in.)	-5 mm (-0.2 in.)	-5 mm (-0.2 in.)
Michelin 20.5 R 25, 1 Star L-2	-172 kg (-379 lb.)	-125 kg (-275 lb.)	-110 kg (-242 lb.)	0 mm (0 in.)	-5 mm (-0.2 in.)	-5 mm (-0.2 in.)
Bridgestone 20.5 R 25, 1 Star L-2	-80 kg (-176 lb.)	-58 kg (-128 lb.)	-51 kg (-112 lb.)	0 mm (0 in.)	-5 mm (-0.2 in.)	-5 mm (-0.2 in.)
Titan 20.5 R 25, 1 Star L-2	-100 kg (-220 lb.)	-73 kg (-161 lb.)	-64 kg (-141 lb.)	0 mm (0 in.)	-5 mm (-0.2 in.)	-5 mm (-0.2 in.)
Titan 20.5-25, 16 PR L-2	-260 kg (-573 lb.)	-190 kg (-419 lb.)	-167 kg (-368 lb.)	0 mm (0 in.)	-2 mm (-0.1 in.)	+3 mm (+0.1 in.)
Firestone 20.5-25, 16 PR L-2	-280 kg (-617 lb.)	-204 kg (-450 lb.)	-180 kg (-397 lb.)	0 mm (0 in.)	-2 mm (-0.1 in.)	+3 mm (+0.1 in.)
Firestone 20.5-25, 12 PR L-2	-316 kg (-697 lb.)	-231 kg (-509 lb.)	-203 kg (-448 lb.)	0 mm (0 in.)	-2 mm (-0.1 in.)	+3 mm (+0.1 in.)
Titan 20.5-25, 12 PR L-2	-280 kg (-617 lb.)	-204 kg (-450 lb.)	-180 kg (-397 lb.)	0 mm (0 in.)	-2 mm (-0.1 in.)	+3 mm (+0.1 in.)
Firestone 20.5-25, 16 PR L-3	-252 kg (-556 lb.)	-184 kg (-405 lb.)	-162 kg (-357 lb.)	0 mm (0 in.)	-2 mm (-0.1 in.)	+9 mm (+0.4 in.)
Michelin 20.5 R 25 L2 Sno-Plus	-100 kg (-220 lb.)	-73 kg (-161 lb.)	-64 kg (-141 lb.)	0 mm (0 in.)	+7 mm (+0.28 in.)	-16 mm (-0.6 in.)
620/75R26 MegaXbib <sup>6</sup>	-200 kg (-441 lb.)	-146 kg (-322 lb.)	-129 kg (-284 lb.)	+189 mm (+7.4 in.)	+61 mm (+2.4 in.)	+22 mm (+0.86 in.)
CaCl <sub>2</sub> in 20.5-25, L-3 Rear Tires, 75% Fill	+825 kg (+1,820 lb.)	+1010 kg (+2,227 lb.)	+891 kg (+1,964 lb.)	N/A	N/A	N/A

\*May change based on vehicle configuration, weight, or tire-pressure adjustments.

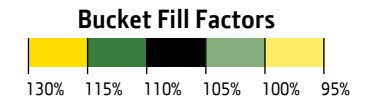
<sup>5</sup>Equipped with 1-piece rims.

<sup>6</sup>Requires 8-deg. rear axle stops.

**Bucket Selection Guides** **524K-II Z-BAR / HIGH-LIFT**



LOOSE MATERIALS	kg/m <sup>3</sup>	lb./cu. yd.	LOOSE MATERIALS	kg/m <sup>3</sup>	lb./cu. yd.
Chips, pulpwood	288	486	Limestone, coarse, sized	1570	2,646
Cinders (coal, ashes, clinkers)	673	1,134	Limestone, mixed sizes	1682	2,835
Clay and gravel, dry	1602	2,700	Limestone, pulverized or crushed	1362	2,295
Clay, compact, solid	1746	2,943	Sand, damp	2083	3,510
Clay, dry in lump loose	1009	1,701	Sand, dry	1762	2,970
Clay, excavated in water	1282	2,160	Sand, voids, full of water	2083	3,510
Coal, anthracite, broken, loose	865	1,458	Sandstone, quarried	1314	2,214
Coal, bituminous, moderately wet	801	1,350	Shale, broken crushed	1362	2,295
Earth, common loam, dry	1218	2,052	Slag, furnace granulated	1955	3,294
Earth, mud, packed	1843	3,105	Stone or gravel, 37.5 to 87.5-mm (1.5 to 3.5") size	1442	2,430
Granite, broken	1538	2,592	Stone or gravel, 18.75-mm (3/4") size	1602	2,700
Gypsum	2275	3,834			

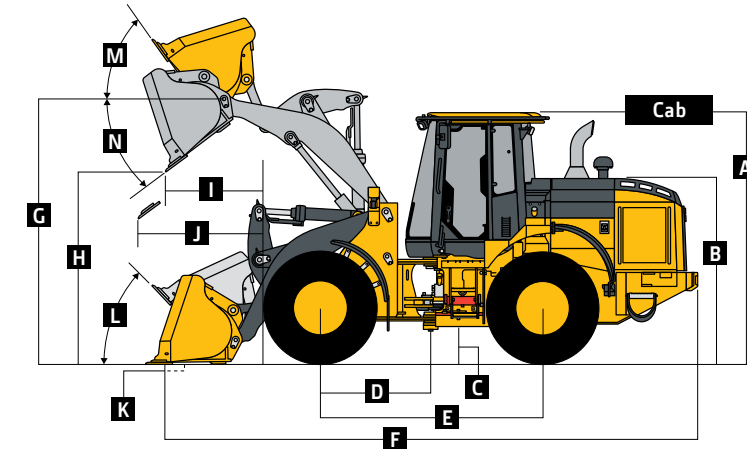


# 544K-II

Engine		
Manufacturer and Model	John Deere PowerTech™ PVS 6068	John Deere PowerTech™ E 6068H
Non-Road Emission Standard	EPA Final Tier 4/EU Stage IV	EPA Tier 3/EU Stage IIIA
Cylinders	6	6
Valves Per Cylinder	4	2
Displacement	6.8 L (414 cu. in.)	6.8 L (414 cu. in.)
Net Peak Power (ISO 9249)	121 kW (163 hp) at 1,800 rpm	122 kW (163 hp) at 1,900 rpm
Net Peak Torque (ISO 9249)	683 Nm (504 lb.-ft.) at 1,100 rpm	659 Nm (486 lb.-ft.) at 1,600 rpm
Net Torque Rise	45%	39%
Fuel System (electronically controlled)	High-pressure common rail	High-pressure common rail
Lubrication	Full-flow spin-on filter and integral cooler	Full-flow spin-on filter and integral cooler
Aspiration	Turbocharged, charge air cooled	Turbocharged, charge air cooled
Air Cleaner	Under-hood, dual-element dry type, restriction indicator in cab monitor for service	
Cooling		
Fan Drive	Hydraulically driven, proportionally controlled, fan aft of coolers	
Electrical		
Electrical System	24 volt with 100-amp (130-amp optional) alternator	24 volt with 80-amp (100-amp optional) alternator
Batteries (2 – 12 volt)	950 CCA (each)	950 CCA (each)
Transmission System		
Type	Countershaft-type PowerShift™	
Torque Converter	Single stage, single phase	
Shift Control	Electronically modulated, adaptive, load and speed dependent	
Operator Interface	Steering-column or joystick-mounted F-N-R and gear-select lever; kick-down button on hydraulic lever	
Shift Modes	Manual/auto (1st-D or 2nd-D); Quick-Shift button with 2 selectable modes: kick-down or kick-up/down; and adaptive clutch cutoff	
	<i>Standard 5-Speed with Lockup Torque Converter</i>	<i>Optional 5-Speed without Lockup Torque Converter</i>
	<i>Forward</i>	<i>Reverse</i>
Maximum Travel Speeds (with 20.5 R 25 tires)		
Range 1	5.8 km/h (3.6 mph)	6.3 km/h (3.9 mph)
Range 2	12.0 km/h (7.5 mph)	12.7 km/h (7.9 mph)
Range 3	18.6 km/h (11.6 mph)	29.1 km/h (18.1 mph)
Range 4	27.7 km/h (17.2 mph)	N/A
Range 5	40.0 km/h (24.9 mph)	N/A
	<i>Forward</i>	<i>Reverse</i>
Maximum Travel Speeds (with 20.5 R 25 tires)		
Range 1	5.2 km/h (3.2 mph)	5.5 km/h (3.4 mph)
Range 2	10.9 km/h (6.8 mph)	11.5 km/h (7.2 mph)
Range 3	16.6 km/h (10.3 mph)	25.3 km/h (15.7 mph)
Range 4	23.8 km/h (14.8 mph)	N/A
Range 5	37.6 km/h (23.4 mph)	N/A
Axles/Brakes		
Final Drives	Heavy-duty inboard-mounted planetary	
Differentials	Hydraulic locking front with conventional rear – standard; dual locking front and rear – optional	
Rear Axle Oscillation, Stop to Stop (with 20.5 R 25 tires)	24 deg. (12 deg. each direction)	
Service Brakes (conform to ISO 3450)	Hydraulically actuated, spring-retracted, self-adjusting inboard sun-shaft mounted, oil cooled, single disc	
Parking Brakes (conform to ISO 3450)	Automatic spring applied, hydraulically released, driveline mounted, sealed wet multi disc	
Tires/Wheels (see page 26 for complete tire adjustments)		
	<i>Tread Width</i>	<i>Width Over Tires</i>
Michelin 20.5 R 25, 1 Star L-3	1950 mm (76.8 in.)	2546 mm (100.2 in.)
Serviceability		
Refill Capacities	EPA FT4/EU Stage IV	EPA Tier 3/EU Stage IIIA
Fuel Tank (with lockable cap)	298 L (79 gal.)	325 L (86 gal.)
Cooling System	23.5 L (24.8 qt.)	22.5 L (23.8 qt.)
Diesel Exhaust Fluid (DEF)	19 L (20 qt.)	N/A
Engine Oil with Vertical Spin-On Filter	19.5 L (20.6 qt.)	19 L (20 qt.)
Transmission Reservoir with Vertical Filter	21.5 L (22.7 qt.)	18.5 L (19.5 qt.)
Axle Oil (front and rear, each)	18 L (19 qt.)	17 L (18 qt.)
Hydraulic Reservoir and Filter	118.7 L (31.35 gal.)	92 L (24.3 gal.)
Park Brake Oil (wet disc)	0.3 L (10 oz.)	0.3 L (10 oz.)
Hydraulic System/Steering		
Pump (loader and steering)	Variable-displacement, axial-piston pump; closed-center, pressure-compensating system	
Maximum Rated Flow at 6895 kPa (1,000 psi) and 2,350 rpm	189 L/m (50 gpm)	
System Relief Pressure (loader and steering)	25 166 kPa (3,650 psi)	
Loader Controls	2-function valve; joystick control or fingertip controls; hydraulic-function enable/disable; optional 3rd- and 4th-function valve with auxiliary lever	
Steering (conforms to ISO 5010)	Steering-column-mounted, twist-grip shift lever; Quick-Shift button on hydraulic lever	
Type	Power, fully hydraulic	
Articulation Angle	80-deg. arc (40 deg. each direction)	
Turning Radius (measured to centerline of outside tire)	5.0 m (16 ft. 5 in.)	

Hydraulic System/Steering (continued)	544K-II Z-BAR / HIGH-LIFT / POWERLLEL	
	<i>Z-Bar / High-Lift</i>	<i>Powerllel</i>
Hydraulic Cycle Times		
Raise	5.8 sec.	5.8 sec.
Dump	1.2 sec.	1.2 sec.
Lower (float down)	3.2 sec.	2.5 sec.
Total	10.2 sec.	9.5 sec.

### Dimensions and Specifications with Pin-On Bucket



### 544K-II Z-BAR AND HIGH-LIFT LOADERS WITH PIN-ON BUCKET

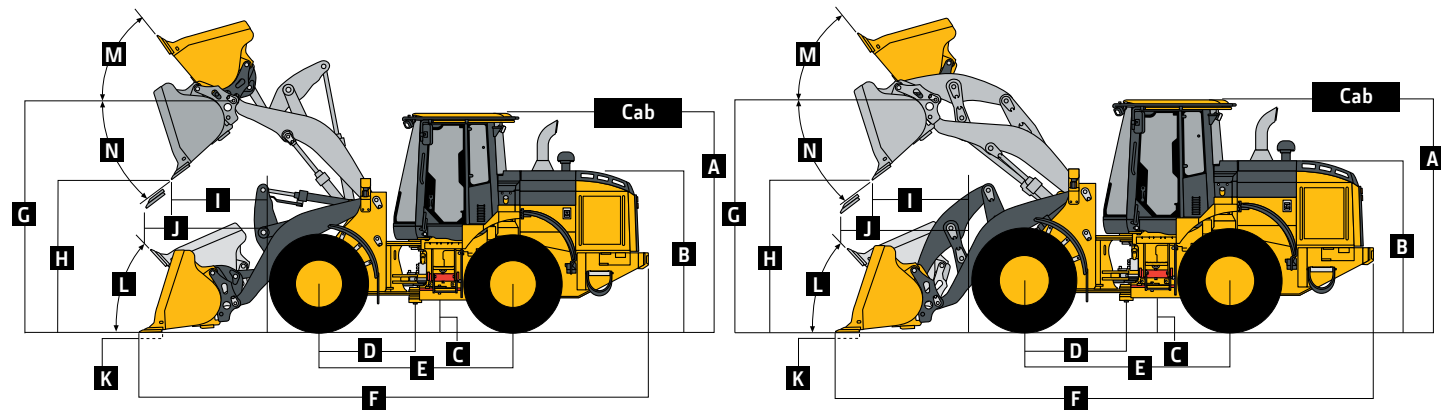
Dimensions with Bucket	Z-Bar		High-Lift	
	<i>Narrow 2.3-m³ (3.0 cu. yd.) general-purpose with bolt-on edge</i>	<i>Wide 2.3-m³ (3.0 cu. yd.) general-purpose with bolt-on edge</i>	<i>Narrow 2.3-m³ (3.0 cu. yd.) general-purpose with bolt-on edge</i>	<i>Wide 2.3-m³ (3.0 cu. yd.) general-purpose with bolt-on edge</i>
A Height to Top of Cab	3.24 m (10 ft. 8 in.)	3.24 m (10 ft. 8 in.)	3.24 m (10 ft. 8 in.)	3.24 m (10 ft. 8 in.)
B Hood Height	2.37 m (7 ft. 9 in.)	2.37 m (7 ft. 9 in.)	2.37 m (7 ft. 9 in.)	2.37 m (7 ft. 9 in.)
C Ground Clearance	0.40 m (15.7 in.)	0.40 m (15.7 in.)	0.40 m (15.7 in.)	0.40 m (15.7 in.)
D Length from Centerline to Front Axle	1.45 m (4 ft. 9 in.)	1.45 m (4 ft. 9 in.)	1.45 m (4 ft. 9 in.)	1.45 m (4 ft. 9 in.)
E Wheelbase	2.93 m (9 ft. 7 in.)	2.93 m (9 ft. 7 in.)	2.93 m (9 ft. 7 in.)	2.93 m (9 ft. 7 in.)
F Overall Length, Bucket on Ground	7.43 m (24 ft. 4 in.)	7.34 m (24 ft. 1 in.)	7.75 m (25 ft. 5 in.)	7.67 m (25 ft. 2 in.)
G Height to Hinge Pin, Fully Raised	3.82 m (12 ft. 6 in.)	3.82 m (12 ft. 6 in.)	4.17 m (13 ft. 8 in.)	4.17 m (13 ft. 8 in.)
H Dump Clearance, 45 deg., Full Height	2.76 m (9 ft. 1 in.)	2.82 m (9 ft. 3 in.)	3.11 m (10 ft. 3 in.)	3.17 m (10 ft. 5 in.)
I Reach, 45-deg. Dump, Full Height	0.99 m (3 ft. 3 in.)	0.93 m (3 ft. 1 in.)	0.99 m (3 ft. 3 in.)	0.93 m (3 ft. 1 in.)
J Reach, 45-deg. Dump, 2.13-m (7 ft. 0 in.) Clearance	1.46 m (4 ft. 10 in.)	1.44 m (4 ft. 9 in.)	1.76 m (5 ft. 9 in.)	1.73 m (5 ft. 8 in.)
K Maximum Digging Depth	95 mm (3.72 in.)	95 mm (3.72 in.)	221 mm (8.7 in.)	221 mm (8.7 in.)
L Maximum Rollback at Ground Level	42 deg.	42 deg.	37 deg.	37 deg.
M Maximum Rollback, Boom Fully Raised	55 deg.	55 deg.	50 deg.	50 deg.
N Maximum Bucket Dump Angle, Fully Raised	49 deg.	49 deg.	46 deg.	46 deg.
Loader Clearance Circle, Bucket Carry Position	11.65 m (38 ft. 3 in.)	11.72 m (38 ft. 5 in.)	11.96 m (39 ft. 3 in.)	12.03 m (39 ft. 6 in.)
Specifications with Bucket				
Capacity, Heaped	2.3 m³ (3.0 cu. yd.)	2.3 m³ (3.0 cu. yd.)	2.3 m³ (3.0 cu. yd.)	2.3 m³ (3.0 cu. yd.)
Capacity, Struck	2.0 m³ (2.6 cu. yd.)	2.0 m³ (2.6 cu. yd.)	2.0 m³ (2.6 cu. yd.)	2.0 m³ (2.6 cu. yd.)
Bucket Weight with Bolt-On Cutting Edge	1066 kg (2,350 lb.)	1048 kg (2,310 lb.)	1066 kg (2,350 lb.)	1048 kg (2,310 lb.)
Bucket Width	2.54 m (8 ft. 4 in.)	2.69 m (8 ft. 10 in.)	2.54 m (8 ft. 4 in.)	2.69 m (8 ft. 10 in.)
Breakout Force	10 115 kg (22,300 lb.)	10 869 kg (23,962 lb.)	9352 kg (20,618 lb.)	10 050 kg (22,156 lb.)
Tipping Load, Straight, No Tire Deflection	11 106 kg (24,484 lb.)	11 163 kg (24,610 lb.)	9565 kg (21,087 lb.)	9623 kg (21,215 lb.)
Tipping Load, Straight, with Tire Deflection	10 530 kg (23,215 lb.)	10 590 kg (23,347 lb.)	9120 kg (20,106 lb.)	9180 kg (20,238 lb.)
Tipping Load, 40-deg. Full Turn, No Tire Deflection	9637 kg (21,246 lb.)	9690 kg (21,363 lb.)	8273 kg (18,239 lb.)	8325 kg (18,353 lb.)
Tipping Load, 40-deg. Full Turn, with Tire Deflection	8895 kg (19,610 lb.)	8952 kg (19,736 lb.)	7689 kg (16,951 lb.)	7746 kg (17,077 lb.)
Rated Operating Load, 50% Full-Turn Tipping Load, No Tire Deflection (conforms to ISO 14397-1)*	4818 kg (10,622 lb.)	4845 kg (10,681 lb.)	4136 kg (9,118 lb.)	4162 kg (9,176 lb.)
Rated Operating Load, 50% Full-Turn Tipping Load, with Tire Deflection (conforms to ISO 14397-1)*	4447 kg (9,804 lb.)	4476 kg (9,868 lb.)	3844 kg (8,475 lb.)	3873 kg (8,538 lb.)
Operating Weight	13 217 kg (29,138 lb.)	13 200 kg (29,101 lb.)	13 352 kg (29,436 lb.)	13 335 kg (29,399 lb.)

Loader operating information is based on machine with identified linkage and standard equipment, PowerTech PVS 6068 (EPA Final Tier 4/EU Stage IV) engine, ROPS cab, rear cast bumper/counterweight, transmission side-frame guards, bottom guards, standard tires, full fuel tank, and 79-kg (175 lb.) operator. This information is affected by changes in tires, ballast, and different attachments.

\*Rated operating capacity based on Deere attachments only.



**Dimensions and Specifications with Hi-Vis Coupler and Hook-On Bucket 544K-II Z-BAR / HIGH-LIFT / POWERLLEL**



**544K-II Z-BAR AND HIGH-LIFT LOADERS WITH QUICK-COUPLER AND HOOK-ON BUCKET**

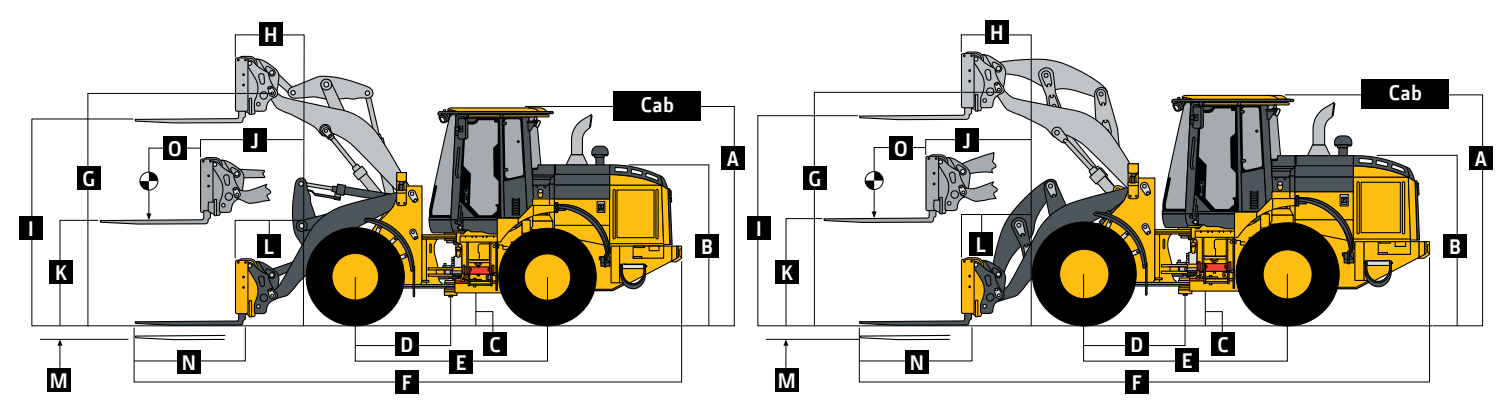
**544K-II POWERLLEL LOADER WITH QUICK-COUPLER AND HOOK-ON BUCKET**

	Z-Bar	Z-Bar	High-Lift	High-Lift	Powerllel	Powerllel
<b>Dimensions with Bucket</b>	2.3-m <sup>3</sup> (3.0 cu. yd.) general-purpose with bolt-on edge	3.4-m <sup>3</sup> (4.5 cu. yd.) light-material with bolt-on edge	2.3-m <sup>3</sup> (3.0 cu. yd.) general-purpose with bolt-on edge	3.4-m <sup>3</sup> (4.5 cu. yd.) light-material with bolt-on edge	2.3-m <sup>3</sup> (3.0 cu. yd.) general-purpose with bolt-on edge	3.4-m <sup>3</sup> (4.5 cu. yd.) light-material with bolt-on edge
A Height to Top of Cab	3.24 m (10 ft. 8 in.)	3.24 m (10 ft. 8 in.)	3.24 m (10 ft. 8 in.)	3.24 m (10 ft. 8 in.)	3.24 m (10 ft. 8 in.)	3.24 m (10 ft. 8 in.)
B Hood Height	2.375 m (7 ft. 9 in.)	2.375 m (7 ft. 9 in.)	2.375 m (7 ft. 9 in.)	2.375 m (7 ft. 9 in.)	2.375 m (7 ft. 9 in.)	2.375 m (7 ft. 9 in.)
C Ground Clearance	0.40 m (15.7 in.)	0.40 m (15.7 in.)	0.40 m (15.7 in.)	0.40 m (15.7 in.)	0.40 m (15.7 in.)	0.40 m (15.7 in.)
D Length from Centerline to Front Axle	1.45 m (4 ft. 9 in.)	1.45 m (4 ft. 9 in.)	1.45 m (4 ft. 9 in.)	1.45 m (4 ft. 9 in.)	1.45 m (4 ft. 9 in.)	1.45 m (4 ft. 9 in.)
E Wheelbase	2.93 m (9 ft. 7 in.)	2.93 m (9 ft. 7 in.)	2.93 m (9 ft. 7 in.)	2.93 m (9 ft. 7 in.)	2.93 m (9 ft. 7 in.)	2.93 m (9 ft. 7 in.)
F Overall Length, Bucket on Ground	7.57 m (24 ft. 10 in.)	7.87 m (25 ft. 10 in.)	7.90 m (25 ft. 11 in.)	8.02 m (26 ft. 4 in.)	7.69 m (25 ft. 3 in.)	7.89 m (25 ft. 11 in.)
G Height to Hinge Pin, Fully Raised	3.81 m (12 ft. 6 in.)	3.81 m (12 ft. 6 in.)	4.13 m (13 ft. 7 in.)	4.13 m (13 ft. 7 in.)	3.85 m (12 ft. 8 in.)	3.85 m (12 ft. 8 in.)
H Dump Clearance, 45 deg., Full Height	2.66 m (8 ft. 9 in.)	2.40 m (7 ft. 10 in.)	3.01 m (9 ft. 10 in.)	2.74 m (8 ft. 11 in.)	2.68 m (8 ft. 9 in.)	2.47 m (8 ft. 1 in.)
I Reach, 45-deg. Dump, Full Height	1.05 m (3 ft. 5 in.)	1.20 m (3 ft. 11 in.)	1.05 m (3 ft. 5 in.)	1.22 m (4 ft. 0 in.)	1.09 m (3 ft. 7 in.)	1.26 m (4 ft. 2 in.)
J Reach, 45-deg. Dump, 2.13-m (7 ft. 0 in.) Clearance	1.46 m (4 ft. 10 in.)	1.43 m (4 ft. 8 in.)	1.77 m (5 ft. 10 in.)	1.75 m (5 ft. 9 in.)	1.51 m (5 ft. 0 in.)	1.56 m (5 ft. 1 in.)
K Maximum Digging Depth	138 mm (5.4 in.)	230 mm (9.0 in.)	227 mm (8.9 in.)	311 mm (12.2 in.)	127 mm (5.0 in.)	216 mm (8.5 in.)
L Maximum Rollback at Ground Level	41 deg.	41 deg.	41 deg.	41 deg.	42 deg.	44 deg.
M Maximum Rollback, Boom Fully Raised	54 deg.	55 deg.	48 deg.	50 deg.	51 deg.	54 deg.
N Maximum Bucket Dump Angle, Fully Raised	51 deg.	49 deg.	47 deg.	45 deg.	50 deg.	47 deg.
Loader Clearance Circle, Bucket Carry Position	11.88 m (39 ft. 0 in.)	12.24 m (40 ft. 2 in.)	12.19 m (40 ft. 0 in.)	12.58 m (41 ft. 3 in.)	12.10 m (39 ft. 8 in.)	12.35 m (40 ft. 6 in.)
<b>Specifications with Bucket</b>						
Capacity, Heaped	2.3 m <sup>3</sup> (3.0 cu. yd.)	3.4 m <sup>3</sup> (4.5 cu. yd.)	2.3 m <sup>3</sup> (3.0 cu. yd.)	3.4 m <sup>3</sup> (4.5 cu. yd.)	2.3 m <sup>3</sup> (3.0 cu. yd.)	3.4 m <sup>3</sup> (4.5 cu. yd.)
Capacity, Struck	2.0 m <sup>3</sup> (2.6 cu. yd.)	2.9 m <sup>3</sup> (3.8 cu. yd.)	2.0 m <sup>3</sup> (2.6 cu. yd.)	2.9 m <sup>3</sup> (3.8 cu. yd.)	2.0 m <sup>3</sup> (2.6 cu. yd.)	2.9 m <sup>3</sup> (3.8 cu. yd.)
Bucket Weight with Bolt-On Cutting Edge	1450 kg (3,197 lb.)	1745 kg (3,847 lb.)	1450 kg (3,197 lb.)	1745 kg (3,847 lb.)	1428 kg (3,148 lb.)	1724 kg (3,801 lb.)
Bucket Width	2.69 m (8 ft. 10 in.)	2.89 m (9 ft. 6 in.)	2.69 m (8 ft. 10 in.)	2.89 m (9 ft. 6 in.)	2.69 m (8 ft. 10 in.)	2.69 m (8 ft. 10 in.)
Breakout Force	8992 kg (19,824 lb.)	7375 kg (16,259 lb.)	8294 kg (18,285 lb.)	6847 kg (15,095 lb.)	8604 kg (18,968 lb.)	7861 kg (17,330 lb.)
Tipping Load, Straight, No Tire Deflection	9877 kg (21,775 lb.)	9290 kg (20,481 lb.)	8532 kg (18,810 lb.)	7986 kg (17,606 lb.)	9054 kg (19,961 lb.)	8472 kg (18,677 lb.)
Tipping Load, Straight, with Tire Deflection	9378 kg (20,675 lb.)	8796 kg (19,392 lb.)	8139 kg (17,943 lb.)	7602 kg (16,759 lb.)	8613 kg (18,988 lb.)	8043 kg (17,732 lb.)
Tipping Load, 40-deg. Full Turn, No Tire Deflection	8520 kg (18,783 lb.)	7968 kg (17,566 lb.)	7328 kg (16,155 lb.)	6812 kg (15,018 lb.)	7788 kg (17,170 lb.)	7248 kg (15,979 lb.)
Tipping Load, 40-deg. Full Turn, with Tire Deflection	7869 kg (17,348 lb.)	7326 kg (16,151 lb.)	6807 kg (15,007 lb.)	6297 kg (13,882 lb.)	7209 kg (15,893 lb.)	6666 kg (14,696 lb.)
Rated Operating Load, 50% Full-Turn Tipping Load, No Tire Deflection (conforms to ISO 14397-1)*	4260 kg (9,392 lb.)	3984 kg (8,783 lb.)	3664 kg (8,078 lb.)	3406 kg (7,509 lb.)	3894 kg (8,585 lb.)	3624 kg (7,989 lb.)
Rated Operating Load, 50% Full-Turn Tipping Load, with Tire Deflection (conforms to ISO 14397-1)*	3934 kg (8,673 lb.)	3663 kg (8,075 lb.)	3403 kg (7,502 lb.)	3148 kg (6,940 lb.)	3604 kg (7,945 lb.)	3333 kg (7,348 lb.)
Operating Weight	13 601 kg (29,985 lb.)	13 896 kg (30,635 lb.)	13 736 kg (30,283 lb.)	14 031 kg (30,933 lb.)	14 327 kg (31,586 lb.)	14 622 kg (32,236 lb.)

Loader operating information is based on machine with identified linkage and standard equipment, PowerTech PVS 6068 (EPA Final Tier 4/EU Stage IV) engine, ROPS cab, rear cast bumper/counterweight, transmission side-frame guards, bottom guards, standard tires, full fuel tank, and 79-kg (175 lb.) operator. This information is affected by changes in tires, ballast, and different attachments.

\*Rated operating capacity based on Deere attachments only.

**Dimensions and Specifications with Hi-Vis Coupler and Construction Forks 544K-II Z-BAR / HIGH-LIFT / POWERLLEL**



**544K-II Z-BAR AND HIGH-LIFT LOADERS WITH QUICK-COUPLER AND HOOK-ON CONSTRUCTION FORKS**

**544K-II POWERLLEL LOADER WITH QUICK-COUPLER AND HOOK-ON CONSTRUCTION FORKS**

	Z-Bar	Z-Bar	High-Lift	High-Lift	Powerllel	Powerllel
<b>Dimensions with Forks</b>	1.22-m (48 in.) tine length	1.52-m (60 in.) tine length	1.22-m (48 in.) tine length	1.52-m (60 in.) tine length	1.22-m (48 in.) tine length	1.52-m (60 in.) tine length
A Height to Top of Cab	3.24 m (10 ft. 8 in.)	3.24 m (10 ft. 8 in.)	3.24 m (10 ft. 8 in.)	3.24 m (10 ft. 8 in.)	3.24 m (10 ft. 8 in.)	3.24 m (10 ft. 8 in.)
B Hood Height	2.30 m (7 ft. 7 in.)	2.30 m (7 ft. 7 in.)	2.30 m (7 ft. 7 in.)	2.30 m (7 ft. 7 in.)	2.30 m (7 ft. 7 in.)	2.30 m (7 ft. 7 in.)
C Ground Clearance	0.40 m (15.7 in.)	0.40 m (15.7 in.)	0.40 m (15.7 in.)	0.40 m (15.7 in.)	0.40 m (15.7 in.)	0.40 m (15.7 in.)
D Length from Centerline to Front Axle	1.45 m (4 ft. 9 in.)	1.45 m (4 ft. 9 in.)	1.45 m (4 ft. 9 in.)	1.45 m (4 ft. 9 in.)	1.45 m (4 ft. 9 in.)	1.45 m (4 ft. 9 in.)
E Wheelbase	2.93 m (9 ft. 7 in.)	2.93 m (9 ft. 7 in.)	2.93 m (9 ft. 7 in.)	2.93 m (9 ft. 7 in.)	2.93 m (9 ft. 7 in.)	2.93 m (9 ft. 7 in.)
F Overall Length, Forks on Ground	7.89 m (25 ft. 11 in.)	8.19 m (26 ft. 10 in.)	8.22 m (27 ft. 0 in.)	8.52 m (27 ft. 11 in.)	7.99 m (26 ft. 3 in.)	8.29 m (27 ft. 2 in.)
G Height to Hinge Pin, Fully Raised	3.81 m (12 ft. 6 in.)	3.81 m (12 ft. 6 in.)	4.13 m (13 ft. 7 in.)	4.13 m (13 ft. 7 in.)	3.85 m (12 ft. 8 in.)	3.85 m (12 ft. 8 in.)
H Reach, Fully Raised	0.75 m (29.5 in.)	0.75 m (29.5 in.)	0.75 m (29.5 in.)	0.75 m (29.5 in.)	0.79 m (31 in.)	0.79 m (31 in.)
I Fork Height, Fully Raised	3.59 m (11 ft. 9 in.)	3.59 m (11 ft. 9 in.)	3.94 m (12 ft. 11 in.)	3.94 m (12 ft. 11 in.)	3.64 m (11 ft. 11 in.)	3.64 m (11 ft. 11 in.)
J Maximum Reach, Fork Level	1.54 m (5 ft. 1 in.)	1.54 m (5 ft. 1 in.)	1.80 m (5 ft. 11 in.)	1.80 m (5 ft. 11 in.)	1.61 m (5 ft. 4 in.)	1.61 m (5 ft. 4 in.)
K Fork Height, Maximum Reach	1.72 m (5 ft. 8 in.)	1.72 m (5 ft. 8 in.)	1.72 m (5 ft. 8 in.)	1.72 m (5 ft. 8 in.)	1.75 m (5 ft. 9 in.)	1.75 m (5 ft. 9 in.)
L Reach, Ground Level	0.95 m (3 ft. 2 in.)	0.95 m (3 ft. 2 in.)	1.28 m (4 ft. 3 in.)	1.28 m (4 ft. 3 in.)	0.99 m (3 ft. 3 in.)	0.99 m (3 ft. 3 in.)
M Depth Below Ground	13 mm (0.5 in.)	13 mm (0.5 in.)	96 mm (3.8 in.)	96 mm (3.8 in.)	1 mm (0.04 in.)	1 mm (0.04 in.)
N Tine Length	1.22 m (48 in.)	1.52 m (60 in.)	1.22 m (48 in.)	1.52 m (60 in.)	1.22 m (48 in.)	1.52 m (60 in.)
O Load Position, 50% Tine Length	0.61 m (24 in.)	0.76 m (30 in.)	0.61 m (24 in.)	0.76 m (30 in.)	0.61 m (24 in.)	0.76 m (30 in.)
<b>Specifications with Forks</b>						
Tipping Load, Straight, No Tire Deflection	7739 kg (17,061 lb.)	7308 kg (16,111 lb.)	7024 kg (15,485 lb.)	6657 kg (14,676 lb.)	7359 kg (16,224 lb.)	6963 kg (15,351 lb.)
Tipping Load, Straight, with Tire Deflection	7533 kg (16,607 lb.)	7119 kg (15,695 lb.)	6843 kg (15,086 lb.)	6492 kg (14,312 lb.)	7158 kg (15,781 lb.)	6780 kg (14,947 lb.)
Tipping Load, 40-deg. Full Turn, No Tire Deflection	6712 kg (14,797 lb.)	6332 kg (13,960 lb.)	6073 kg (13,389 lb.)	5749 kg (12,674 lb.)	6366 kg (14,035 lb.)	6018 kg (13,267 lb.)
Tipping Load, 40-deg. Full Turn, with Tire Deflection	6432 kg (14,180 lb.)	6075 kg (13,393 lb.)	5829 kg (12,851 lb.)	5532 kg (12,196 lb.)	6096 kg (13,439 lb.)	5766 kg (12,712 lb.)
Rated Operating Load, 50% Full-Turn Tipping Load, with Tire Deflection (conforms to ISO 14397-1 and SAE J1197)*	3216 kg (7,090 lb.)	3037 kg (6,695 lb.)	2914 kg (6,424 lb.)	2766 kg (6,098 lb.)	3048 kg (6,720 lb.)	2883 kg (6,356 lb.)
Rated Operating Load, Rough Terrain, 60% Full-Turn Tipping Load, with Tire Deflection (conforms to EN474-3)*	3859 kg (8,508 lb.)	3645 kg (8,036 lb.)	3497 kg (7,710 lb.)	3319 kg (7,317 lb.)	3658 kg (8,064 lb.)	3460 kg (7,628 lb.)
Rated Operating Load, Firm and Level Ground, 80% Full-Turn Tipping Load, with Tire Deflection (conforms to EN474-3)*	5146 kg (11,345 lb.)	4860 kg (10,714 lb.)	4663 kg (10,280 lb.)	4478 kg (9,871 lb.)	4877 kg (10,752 lb.)	4613 kg (10,170 lb.)
Operating Weight	13 205 kg (29,112 lb.)	13 248 kg (29,207 lb.)	13 340 kg (29,410 lb.)	13 383 kg (29,504 lb.)	13 931 kg (30,713 lb.)	13 974 kg (30,807 lb.)

Loader operating information is based on machine with identified linkage and standard equipment, PowerTech PVS 6068 (EPA Final Tier 4/EU Stage IV) engine, ROPS cab, rear cast bumper/counterweight, transmission side-frame guards, bottom guards, standard tires, full fuel tank, and 79-kg (175 lb.) operator. This information is affected by changes in tires, ballast, and different attachments.

\*Rated operating capacity based on Deere attachments only.

**Adjustments to Operating Weights and Tipping Loads with Buckets** **544K-II Z-BAR / HIGH-LIFT / POWERLLEL**

Adjustments to operating weights, tipping loads, and tires are based on Z-Bar machine with pin-on 2.3-m<sup>3</sup> (3.0 cu. yd.) general-purpose bucket with bolt-on cutting edge, ROPS cab, rear cast bumper/counterweight, transmission side-frame guards, bottom guards, standard tires, full fuel tank, and 79-kg (175 lb.) operator\*

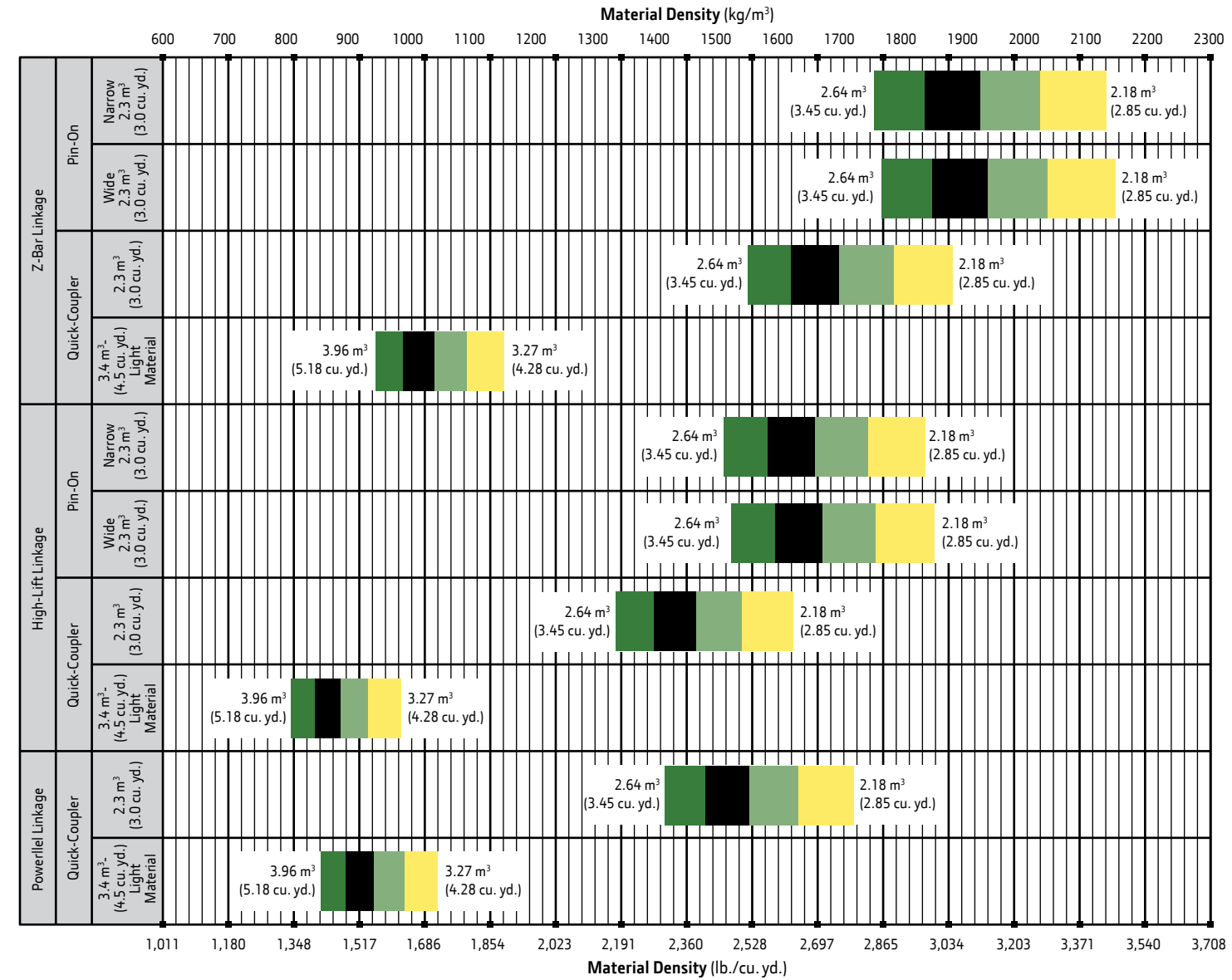
	Operating Weight	Tipping Load, Straight	Tipping Load, 40-deg. Full Turn	Tread Width	Width Over Tires	Vertical Height
John Deere PowerTech PVS 6068	0 kg (0 lb.)	0 kg (0 lb.)	0 kg (0 lb.)	N/A	N/A	N/A
John Deere PowerTech E 6068H						
Z-Bar	-96 kg (-212 lb.)	-3 kg (-7 lb.)	-18 kg (-40 lb.)	N/A	N/A	N/A
High-Lift/Powerllel	-112 kg (-245 lb.)	-37 kg (-82 lb.)	-45 kg (-99 lb.)	N/A	N/A	N/A
Michelin 20.5 R 25, 1 Star L-3	0 kg (0 lb.)	0 kg (0 lb.)	0 kg (0 lb.)	0 mm (0 in.)	0 mm (0 in.)	0 mm (0 in.)
Bridgestone 20.5 R 25, 1 Star L-3	+44 kg (+97 lb.)	+32 kg (+71 lb.)	+28 kg (+62 lb.)	0 mm (0 in.)	-5 mm (-0.2 in.)	-5 mm (-0.2 in.)
Titan 20.5 R 25, 1 Star L-3	-4 kg (-9 lb.)	-3 kg (-7 lb.)	-3 kg (-7 lb.)	0 mm (0 in.)	-5 mm (-0.2 in.)	-5 mm (-0.2 in.)
Michelin 20.5 R 25, 1 Star L-2	-172 kg (-379 lb.)	-125 kg (-276 lb.)	-110 kg (-242 lb.)	0 mm (0 in.)	-5 mm (-0.2 in.)	-5 mm (-0.2 in.)
Bridgestone 20.5 R 25, 1 Star L-2	-80 kg (-176 lb.)	-58 kg (-128 lb.)	-51 kg (-112 lb.)	0 mm (0 in.)	-5 mm (-0.2 in.)	-5 mm (-0.2 in.)
Titan 20.5 R 25, 1 Star L-2	-100 kg (-220 lb.)	-72 kg (-159 lb.)	-64 kg (-141 lb.)	0 mm (0 in.)	-5 mm (-0.2 in.)	-5 mm (-0.2 in.)
Titan 20.5-25, 16 PR L-2	-260 kg (-573 lb.)	-188 kg (-415 lb.)	-166 kg (-366 lb.)	0 mm (0 in.)	-2 mm (-0.1 in.)	+3 mm (+0.1 in.)
Firestone 20.5-25, 16 PR L-2	-280 kg (-617 lb.)	-203 kg (-448 lb.)	-179 kg (-395 lb.)	0 mm (0 in.)	-2 mm (-0.1 in.)	+3 mm (+0.1 in.)
Firestone 20.5-25, 12 PR L-2	-316 kg (-697 lb.)	-229 kg (-505 lb.)	-202 kg (-445 lb.)	0 mm (0 in.)	-2 mm (-0.1 in.)	+3 mm (+0.1 in.)
Titan 20.5-25, 12 PR L-2	-280 kg (-617 lb.)	-203 kg (-448 lb.)	-179 kg (-395 lb.)	0 mm (0 in.)	-2 mm (-0.1 in.)	+3 mm (+0.1 in.)
Firestone 20.5-25, 16 PR L-3	-252 kg (-556 lb.)	-183 kg (-403 lb.)	-161 kg (-355 lb.)	0 mm (0 in.)	-2 mm (-0.1 in.)	+9 mm (+0.4 in.)
Michelin 20.5 R 25 L2 Sno-Plus	-100 kg (-220 lb.)	-72 kg (-159 lb.)	-64 kg (-141 lb.)	0 mm (0 in.)	+7 mm (+0.28 in.)	-22 mm (-0.9 in.)
620/75R26 MegaXbib <sup>6</sup>	-200 kg (-440 lb.)	-145 kg (-320 lb.)	-128 kg (-282 lb.)	+189 mm (+7.4 in.)	+61 mm (+2.4 in.)	+22 mm (+0.86 in.)
CaCl <sub>2</sub> in 20.5-25, L-3 Rear Tires, 75% Fill	+825 kg (+1,820 lb.)	+1010 kg (+2,227 lb.)	+891 kg (+1,964 lb.)	N/A	N/A	N/A

\*May change based on vehicle configuration, weight, or tire-pressure adjustments.

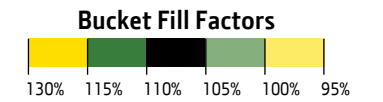
<sup>6</sup>Equipped with 1-piece rims.

<sup>8</sup>Requires 8-deg. rear axle stops.

**Bucket Selection Guides** **544K-II Z-BAR / HIGH-LIFT / POWERLLEL**



LOOSE MATERIALS		kg/m <sup>3</sup>	lb./cu. yd.	LOOSE MATERIALS		kg/m <sup>3</sup>	lb./cu. yd.
Chips, pulpwood		288	486	Limestone, coarse, sized		1570	2,646
Cinders (coal, ashes, clinkers)		673	1,134	Limestone, mixed sizes		1682	2,835
Clay and gravel, dry		1602	2,700	Limestone, pulverized or crushed		1362	2,295
Clay, compact, solid		1746	2,943	Sand, damp		2083	3,510
Clay, dry in lump loose		1009	1,701	Sand, dry		1762	2,970
Clay, excavated in water		1282	2,160	Sand, voids, full of water		2083	3,510
Coal, anthracite, broken, loose		865	1,458	Sandstone, quarried		1314	2,214
Coal, bituminous, moderately wet		801	1,350	Shale, broken crushed		1362	2,295
Earth, common loam, dry		1218	2,052	Slag, furnace granulated		1955	3,294
Earth, mud, packed		1843	3,105	Stone or gravel, 37.5 to 87.5-mm (1.5 to 3.5") size		1442	2,430
Granite, broken		1538	2,592	Stone or gravel, 18.75-mm (3/4") size		1602	2,700
Gypsum		2275	3,834				



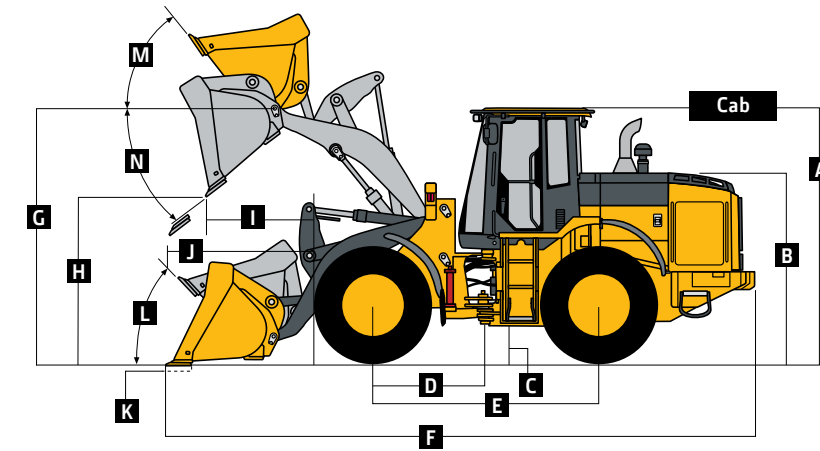


# 624K-II

Engine	624K-II Z-BAR / HIGH-LIFT / POWERLLEL™ / TOOL CARRIER	
Manufacturer and Model	John Deere PowerTech™ PVX 6068	John Deere PowerTech™ Plus 6068H
Non-Road Emission Standard	EPA Final Tier 4/EU Stage IV	EPA Tier 3/EU Stage IIIA
Cylinders	6	6
Valves Per Cylinder	4	4
Displacement	6.8 L (414 cu. in.)	6.8 L (414 cu. in.)
Net Peak Power (ISO 9249)	139 kW (186 hp) at 1,800 rpm	141 kW (188 hp) at 1,800 rpm
Net Peak Torque (ISO 9249)	826 Nm (609 lb.-ft.) at 1,300 rpm	804 Nm (593 lb.-ft.) at 1,400 rpm
Net Torque Rise	64%	57%
Fuel System (electronically controlled)	High-pressure common rail	High-pressure common rail
Lubrication	Full-flow spin-on filter and integral cooler	Full-flow spin-on filter and integral cooler
Aspiration	Turbocharged, charge air cooled	Turbocharged, charge air cooled
Air Cleaner	Under-hood, dual-element dry type, restriction indicator in cab monitor for service	
Cooling	Hydraulically driven, proportionally controlled, fan aft of coolers	
Electrical	24 volt with 130-amp alternator	
Batteries (2 – 12 volt)	950 CCA (each)	950 CCA (each)
Transmission System	Countershaft-type PowerShift™	
Torque Converter	Single stage, single phase	
Shift Control	Electronically modulated, adaptive, load and speed dependent	
Operator Interface	Steering-column or joystick-mounted F-N-R and gear-select lever; quick-shift button on hydraulic lever	
Shift Modes	Manual/auto (1st-D or 2nd-D); Quick-Shift button with 2 selectable modes: kick-down or kick-up/down; and adaptive clutch cutoff	
	<i>Standard 5-Speed with Lockup Torque Converter</i>	<i>Optional 5-Speed without Lockup Torque Converter</i>
Maximum Travel Speeds (with 20.5 R 25 tires)	<i>Forward</i>	<i>Reverse</i>
Range 1	6.2 km/h (3.85 mph)	6.6 km/h (4.1 mph)
Range 2	11.1 km/h (6.9 mph)	11.8 km/h (7.3 mph)
Range 3	17.1 km/h (10.6 mph)	28.1 km/h (17.5 mph)
Range 4	26.7 km/h (16.6 mph)	N/A
Range 5	40.0 km/h (24.9 mph)	N/A
	<i>Forward</i>	<i>Reverse</i>
Range 1	6.4 km/h (4.0 mph)	6.7 km/h (4.2 mph)
Range 2	11.3 km/h (7.0 mph)	11.9 km/h (7.4 mph)
Range 3	17.0 km/h (10.6 mph)	26.5 km/h (16.5 mph)
Range 4	25.4 km/h (15.8 mph)	N/A
Range 5	36.3 km/h (22.5 mph)	N/A
Axles/Brakes	Heavy-duty inboard-mounted planetary	
Differentials	Hydraulic locking front with conventional rear – standard; dual locking front and rear – optional	
Rear Axle Oscillation, Stop to Stop (with 20.5 R 25 tires)	24 deg. (12 deg. each direction)	
Service Brakes (conform to ISO 3450)	Hydraulically actuated, spring-retracted, self-adjusting, inboard sun-shaft mounted, oil-cooled, single disc	
Parking Brakes (conform to ISO 3450)	Automatic spring-applied, hydraulically released, driveline-mounted, oil-cooled, multi disc	
Tires/Wheels (see page 33 for complete tire adjustments)	<i>Tread Width</i>	<i>Width Over Tires</i>
Michelin 20.5 R 25, 1 Star L-3	2050 mm (80.7 in.)	2657 mm (104.6 in.)
Serviceability	EPA FT4/EU Stage IV	
Refill Capacities	EPA Tier 3/EU Stage IIIA	
Fuel Tank with Lockable Cap	299 L (79 gal.)	352 L (93 gal.)
Diesel Exhaust Fluid (DEF)	19 L (20 qt.)	N/A
Cooling System	33.8 L (35.7 qt.)	27 L (29 qt.)
Engine Oil with Vertical Spin-On Filter	19.5 L (20.6 qt.)	19 L (20 qt.)
Transmission Reservoir with Vertical Filter	27 L (28.5 qt.)	22 L (23 qt.)
Axle Oil		
Front	22 L (23 qt.)	22 L (23 qt.)
Rear	17 L (18 qt.)	17 L (18 qt.)
Hydraulic Reservoir and Filter	105.2 L (27.8 gal.)	110 L (29 gal.)
Park Brake Oil (wet disc)	0.3 L (10 oz.)	0.3 L (10 oz.)
Hydraulic System/Steering	Variable-displacement, axial-piston pump; closed-center, pressure-compensating system	
Pump (loader and steering)	Maximum Rated Flow at 6895 kPa (1,000 psi) and 2,350 rpm	
	223 L/m (59 gpm)	
System Relief Pressure (loader and steering)	24 821 kPa (3,675 psi)	
Loader Controls	2-function valve; joystick control or fingertip controls; hydraulic-function enable/disable; optional 3rd- and 4th-function valve with auxiliary lever	
Steering (conforms to ISO 5010)	Power, fully hydraulic	
Type	Power, fully hydraulic	
Articulation Angle	80-deg. arc (40 deg. each direction)	

Hydraulic System/Steering (continued)	624K-II Z-BAR / HIGH-LIFT / POWERLLEL / TOOL CARRIER		
Turning Radius (measured to centerline of outside tire)	5.27 m (17 ft. 4 in.)		
Hydraulic Cycle Times	<i>Z-Bar / High-Lift</i>	<i>Powerllel</i>	<i>Tool Carrier</i>
Raise	5.9 sec.	5.9 sec.	5.6 sec.
Dump	1.3 sec.	1.4 sec.	3.0 sec.
Lower (float down)	2.7 sec.	2.8 sec.	2.7 sec.
Total	9.9 sec.	10.1 sec.	11.3 sec.

### Dimensions and Specifications with Pin-On Bucket



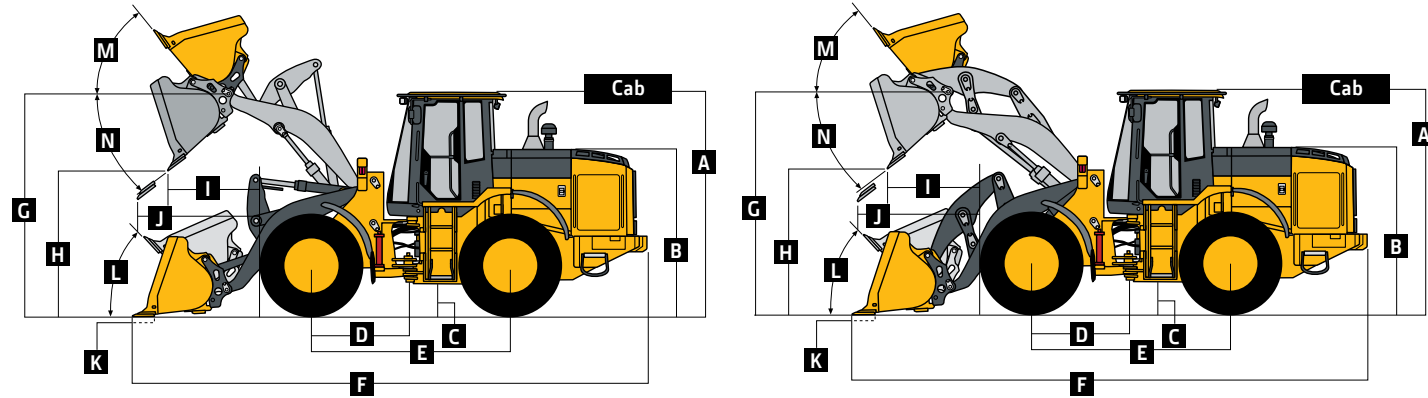
### 624K-II Z-BAR AND HIGH-LIFT LOADERS WITH PIN-ON BUCKET

Dimensions with Bucket	Z-Bar	High-Lift
<b>A</b> Height to Top of Cab	2.7-m <sup>3</sup> (3.5 cu. yd.) general-purpose with bolt-on edge	2.7-m <sup>3</sup> (3.5 cu. yd.) general-purpose with bolt-on edge
<b>B</b> Hood Height	3.32 m (10 ft. 11 in.)	3.32 m (10 ft. 11 in.)
<b>C</b> Ground Clearance	2.46 m (8 ft. 1 in.)	2.46 m (8 ft. 1 in.)
<b>D</b> Length from Centerline to Front Axle	384 mm (15.1 in.)	384 mm (15.1 in.)
<b>E</b> Wheelbase	1.52 m (5 ft. 0 in.)	1.52 m (5 ft. 0 in.)
<b>F</b> Overall Length, Bucket on Ground	3.09 m (10 ft. 1 in.)	3.09 m (10 ft. 1 in.)
<b>G</b> Height to Hinge Pin, Fully Raised	7.76 m (25 ft. 5 in.)	8.17 m (26 ft. 9 in.)
<b>H</b> Dump Clearance, 45 deg., Full Height	3.95 m (13 ft. 0 in.)	4.30 m (14 ft. 2 in.)
<b>I</b> Reach, 45-deg. Dump, Full Height	2.86 m (9 ft. 5 in.)	3.23 m (10 ft. 7 in.)
<b>J</b> Reach, 45-deg. Dump, 2.13-m (7 ft. 0 in.) Clearance	1.02 m (3 ft. 4 in.)	1.11 m (3 ft. 8 in.)
<b>K</b> Maximum Digging Depth	1.57 m (5 ft. 2 in.)	1.93 m (6 ft. 4 in.)
<b>L</b> Maximum Rollback at Ground Level	95 mm (3.8 in.)	203 mm (8.0 in.)
<b>M</b> Maximum Rollback, Boom Fully Raised	37 deg.	36 deg.
<b>N</b> Maximum Bucket Dump Angle, Fully Raised	50 deg.	49 deg.
Loader Clearance Circle, Bucket Carry Position	45 deg.	46 deg.
	12.24 m (40 ft. 2 in.)	12.61 m (41 ft. 4 in.)
Specifications with Bucket		
Capacity, Heaped	2.7 m <sup>3</sup> (3.5 cu. yd.)	2.7 m <sup>3</sup> (3.5 cu. yd.)
Capacity, Struck	2.3 m <sup>3</sup> (3.0 cu. yd.)	2.3 m <sup>3</sup> (3.0 cu. yd.)
Bucket Weight with Bolt-On Cutting Edge	1148 kg (2,532 lb.)	1148 kg (2,532 lb.)
Bucket Width	2.69 m (8 ft. 10 in.)	2.69 m (8 ft. 10 in.)
Breakout Force	12 821 kg (28,266 lb.)	11 662 kg (25,709 lb.)
Tipping Load, Straight, No Tire Deflection	13 804 kg (30,433 lb.)	11 590 kg (25,552 lb.)
Tipping Load, Straight, with Tire Deflection	13 005 kg (28,671 lb.)	11 007 kg (24,266 lb.)
Tipping Load, 40-deg. Full Turn, No Tire Deflection	12 006 kg (26,469 lb.)	10 044 kg (22,143 lb.)
Tipping Load, 40-deg. Full Turn, with Tire Deflection	10 956 kg (24,154 lb.)	9255 kg (20,404 lb.)
Rated Operating Load, 50% Full-Turn Tipping Load, No Tire Deflection (conforms to ISO 14397-1)*	6003 kg (13,234 lb.)	5022 kg (11,072 lb.)
Rated Operating Load, 50% Full-Turn Tipping Load, with Tire Deflection (conforms to ISO 14397-1)*	5478 kg (12,077 lb.)	4627 kg (10,201 lb.)
Operating Weight	15 747 kg (34,717 lb.)	15 948 kg (35,159 lb.)

Loader operating information is based on machine with identified linkage and standard equipment, PowerTech PVX 6068 (EPA Final Tier 4/EU Stage IV) engine, ROPS cab, rear cast bumper/counterweight, transmission side-frame guards, bottom guards, standard tires, full fuel tank, and 79-kg (175 lb.) operator. This information is affected by changes in tires, ballast, and different attachments.

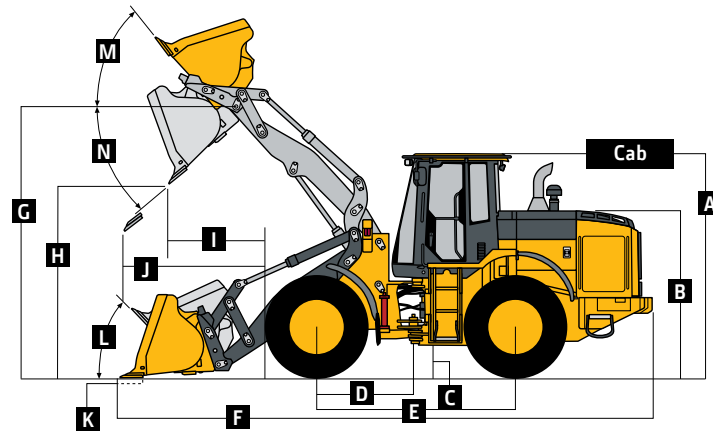
\*Rated operating capacity based on Deere attachments only.

**Dimensions and Specifications with Hi-Vis Coupler and Hook-On Bucket 624K-II Z-BAR / HIGH-LIFT / POWERLLEL / TOOL CARRIER**



**624K-II Z-BAR AND HIGH-LIFT LOADERS WITH QUICK-COUPLER AND HOOK-ON BUCKET**

**624K-II POWERLLEL LOADER WITH QUICK-COUPLER AND HOOK-ON BUCKET**



**624K-II TOOL CARRIER LOADER WITH QUICK-COUPLER AND HOOK-ON BUCKET**

	Z-Bar	Z-Bar	High-Lift	High-Lift	Powerllel	Powerllel	Tool Carrier	Tool Carrier
<b>Dimensions with Bucket</b>	2.7-m <sup>3</sup> (3.5 cu. yd.) general-purpose with bolt-on edge	4.01-m <sup>3</sup> (5.25 cu. yd.) light-material with bolt-on edge	2.7-m <sup>3</sup> (3.5 cu. yd.) general-purpose with bolt-on edge	4.01-m <sup>3</sup> (5.25 cu. yd.) light-material with bolt-on edge	2.7-m <sup>3</sup> (3.5 cu. yd.) general-purpose with bolt-on edge	4.01-m <sup>3</sup> (5.25 cu. yd.) light-material with bolt-on edge	2.7-m <sup>3</sup> (3.5 cu. yd.) general-purpose with bolt-on edge	4.01-m <sup>3</sup> (5.25 cu. yd.) light-material with bolt-on edge
<b>A</b> Height to Top of Cab	3.32 m (10 ft. 11 in.)	3.32 m (10 ft. 11 in.)	3.32 m (10 ft. 11 in.)	3.32 m (10 ft. 11 in.)	3.32 m (10 ft. 11 in.)	3.32 m (10 ft. 11 in.)	3.32 m (10 ft. 11 in.)	3.32 m (10 ft. 11 in.)
<b>B</b> Hood Height	2.46 m (8 ft. 1 in.)	2.46 m (8 ft. 1 in.)	2.46 m (8 ft. 1 in.)	2.46 m (8 ft. 1 in.)	2.46 m (8 ft. 1 in.)	2.46 m (8 ft. 1 in.)	2.46 m (8 ft. 1 in.)	2.46 m (8 ft. 1 in.)
<b>C</b> Ground Clearance	384 mm (15.1 in.)	384 mm (15.1 in.)	384 mm (15.1 in.)	384 mm (15.1 in.)	384 mm (15.1 in.)	384 mm (15.1 in.)	384 mm (15.1 in.)	384 mm (15.1 in.)
<b>D</b> Length from Centerline to Front Axle	1.52 m (5 ft. 0 in.)	1.52 m (5 ft. 0 in.)	1.52 m (5 ft. 0 in.)	1.52 m (5 ft. 0 in.)	1.52 m (5 ft. 0 in.)	1.52 m (5 ft. 0 in.)	1.52 m (5 ft. 0 in.)	1.52 m (5 ft. 0 in.)
<b>E</b> Wheelbase	3.09 m (10 ft. 1 in.)	3.09 m (10 ft. 1 in.)	3.09 m (10 ft. 1 in.)	3.09 m (10 ft. 1 in.)	3.09 m (10 ft. 1 in.)	3.09 m (10 ft. 1 in.)	3.09 m (10 ft. 1 in.)	3.09 m (10 ft. 1 in.)
<b>F</b> Overall Length, Bucket on Ground	7.98 m (26 ft. 2 in.)	8.09 m (26 ft. 6 in.)	8.39 m (27 ft. 6 in.)	8.50 m (27 ft. 11 in.)	8.13 m (26 ft. 8 in.)	8.42 m (27 ft. 7.5 in.)	7.95 m (26 ft. 1 in.)	8.19 m (26 ft. 10 in.)
<b>G</b> Height to Hinge Pin, Fully Raised	3.96 m (13 ft. 0 in.)	3.96 m (13 ft. 0 in.)	4.32 m (14 ft. 2 in.)	4.32 m (14 ft. 2 in.)	3.99 m (13 ft. 1 in.)	3.99 m (13 ft. 1 in.)	3.99 m (13 ft. 1 in.)	3.99 m (13 ft. 1 in.)
<b>H</b> Dump Clearance, 45 deg., Full Height	2.69 m (8 ft. 10 in.)	2.56 m (8 ft. 5 in.)	3.06 m (10 ft. 1 in.)	2.90 m (9 ft. 6 in.)	2.70 m (8 ft. 10 in.)	2.55 m (8 ft. 4 in.)	2.81 m (9 ft. 3 in.)	2.60 m (8 ft. 6 in.)
<b>I</b> Reach, 45-deg. Dump, Full Height	1.11 m (3 ft. 8 in.)	1.15 m (3 ft. 9 in.)	1.20 m (3 ft. 11 in.)	1.23 m (4 ft. 0 in.)	1.28 m (4 ft. 2 in.)	1.31 m (4 ft. 4 in.)	1.45 m (4 ft. 9 in.)	1.42 m (4 ft. 8 in.)
<b>J</b> Reach, 45-deg. Dump, 2.13-m (7 ft. 0 in.) Clearance	1.56 m (5 ft. 2 in.)	1.50 m (4 ft. 11 in.)	1.94 m (6 ft. 4 in.)	1.90 m (6 ft. 3 in.)	1.75 m (5 ft. 9 in.)	1.70 m (5 ft. 7 in.)	1.85 m (6 ft. 1 in.)	1.77 m (5 ft. 10 in.)
<b>K</b> Maximum Digging Depth	165 mm (6.5 in.)	257 mm (10.12 in.)	262 mm (10.3 in.)	358 mm (14.0 in.)	119 mm (4.7 in.)	228 mm (9.0 in.)	102 mm (4.0 in.)	225 mm (8.9 in.)
<b>L</b> Maximum Rollback at Ground Level	39 deg.	40 deg.	39 deg.	41 deg.	42 deg.	45 deg.	49 deg.	56 deg.
<b>M</b> Maximum Rollback, Boom Fully Raised	55 deg.	56 deg.	48 deg.	50 deg.	52 deg.	53 deg.	64 deg.	58.5 deg.
<b>N</b> Maximum Bucket Dump Angle, Fully Raised	45 deg.	49 deg.	42 deg.	45 deg.	46 deg.	48 deg.	43 deg.	48 deg.
<b>Loader Clearance Circle, Bucket Carry Position</b>	12.38 m (40 ft. 7 in.)	13.00 m (42 ft. 8 in.)	12.77 m (41 ft. 11 in.)	13.36 m (43 ft. 10 in.)	12.60 m (41 ft. 4 in.)	12.90 m (42 ft. 4 in.)	12.26 m (40 ft. 3 in.)	12.55 m (41 ft. 2 in.)

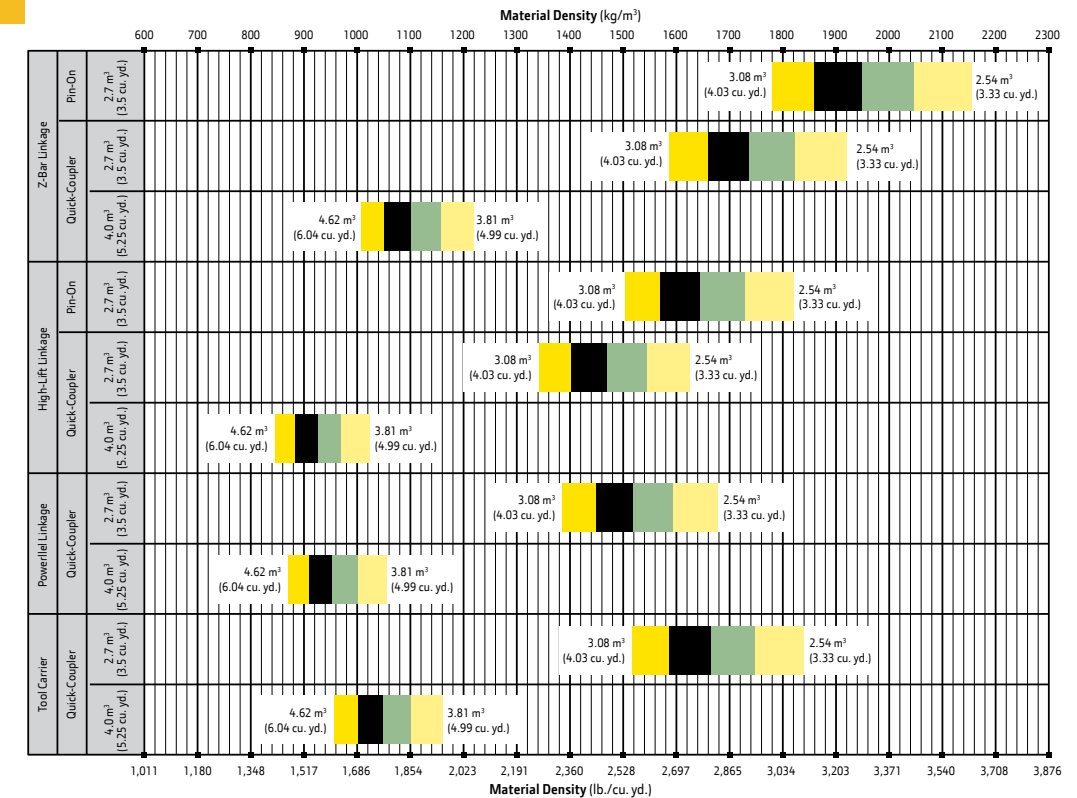
**Dimensions and Specifications with Hi-Vis Coupler and Hook-On Bucket (continued)**

	Z-Bar	Z-Bar	High-Lift	High-Lift	Powerllel	Powerllel	Tool Carrier	Tool Carrier
<b>Specifications with Bucket</b>	2.7-m <sup>3</sup> (3.5 cu. yd.) general-purpose with bolt-on edge	4.01-m <sup>3</sup> (5.25 cu. yd.) light-material with bolt-on edge	2.7-m <sup>3</sup> (3.5 cu. yd.) general-purpose with bolt-on edge	4.01-m <sup>3</sup> (5.25 cu. yd.) light-material with bolt-on edge	2.7-m <sup>3</sup> (3.5 cu. yd.) general-purpose with bolt-on edge	4.01-m <sup>3</sup> (5.25 cu. yd.) light-material with bolt-on edge	2.7-m <sup>3</sup> (3.5 cu. yd.) general-purpose with bolt-on edge	4.01-m <sup>3</sup> (5.25 cu. yd.) light-material with bolt-on edge
<b>Capacity, Heaped</b>	2.7 m <sup>3</sup> (3.5 cu. yd.)	4.0 m <sup>3</sup> (5.25 cu. yd.)	2.7 m <sup>3</sup> (3.5 cu. yd.)	4.0 m <sup>3</sup> (5.25 cu. yd.)	2.7 m <sup>3</sup> (3.5 cu. yd.)	4.0 m <sup>3</sup> (5.25 cu. yd.)	2.7 m <sup>3</sup> (3.5 cu. yd.)	4.0 m <sup>3</sup> (5.25 cu. yd.)
<b>Capacity, Struck</b>	2.3 m <sup>3</sup> (3.0 cu. yd.)	3.5 m <sup>3</sup> (4.6 cu. yd.)	2.3 m <sup>3</sup> (3.0 cu. yd.)	3.5 m <sup>3</sup> (4.6 cu. yd.)	2.3 m <sup>3</sup> (3.0 cu. yd.)	3.5 m <sup>3</sup> (4.6 cu. yd.)	2.3 m <sup>3</sup> (3.0 cu. yd.)	3.5 m <sup>3</sup> (4.6 cu. yd.)
<b>Bucket Weight with Bolt-On Cutting Edge</b>	1532 kg (3,378 lb.)	1890 kg (4,167 lb.)	1532 kg (3,378 lb.)	1890 kg (4,167 lb.)	1562 kg (3,444 lb.)	1913 kg (4,217 lb.)	1562 kg (3,444 lb.)	1913 kg (4,217 lb.)
<b>Bucket Width</b>	2.69 m (8 ft. 10 in.)	3.05 m (10 ft. 0 in.)	2.69 m (8 ft. 10 in.)	3.05 m (10 ft. 0 in.)	2.69 m (8 ft. 10 in.)	3.05 m (10 ft. 0 in.)	2.69 m (8 ft. 10 in.)	3.05 m (10 ft. 0 in.)
<b>Breakout Force</b>	10 983 kg (24,214 lb.)	9849 kg (21,713 lb.)	9998 kg (22,042 lb.)	9035 kg (19,919 lb.)	10 759 kg (23,719 lb.)	10 638 kg (23,453 lb.)	10 978 kg (24,202 lb.)	9826 kg (21,663 lb.)
<b>Tipping Load, Straight, No Tire Deflection</b>	12 357 kg (27,242 lb.)	11 924 kg (26,288 lb.)	11 924 kg (26,288 lb.)	10 419 kg (22,969 lb.)	10 803 kg (23,816 lb.)	10 299 kg (22,705 lb.)	11 837 kg (26,097 lb.)	11 337 kg (24,994 lb.)
<b>Tipping Load, Straight, with Tire Deflection</b>	11 661 kg (25,708 lb.)	11 199 kg (24,689 lb.)	9900 kg (21,826 lb.)	9540 kg (21,032 lb.)	10 251 kg (22,600 lb.)	9729 kg (21,449 lb.)	11 169 kg (24,623 lb.)	10 659 kg (23,499 lb.)
<b>Tipping Load, 40-deg. Full Turn, No Tire Deflection</b>	10 694 kg (23,577 lb.)	10 278 kg (22,659 lb.)	8975 kg (19,786 lb.)	8573 kg (18,900 lb.)	9312 kg (20,530 lb.)	8835 kg (19,478 lb.)	10 253 kg (22,605 lb.)	9774 kg (21,548 lb.)
<b>Tipping Load, 40-deg. Full Turn, with Tire Deflection</b>	9768 kg (21,535 lb.)	9318 kg (20,542 lb.)	8268 kg (18,228 lb.)	7827 kg (17,255 lb.)	8547 kg (18,843 lb.)	8064 kg (17,778 lb.)	9354 kg (20,622 lb.)	8862 kg (19,537 lb.)
<b>Rated Operating Load, 50% Full-Turn Tipping Load, No Tire Deflection (conforms to ISO 14397-1)*</b>	5347 kg (11,788 lb.)	5139 kg (11,329 lb.)	4487 kg (9,893 lb.)	4286 kg (9,449 lb.)	4656 kg (10,265 lb.)	4417 kg (9,738 lb.)	5127 kg (11,302 lb.)	4887 kg (10,774 lb.)
<b>Rated Operating Load, 50% Full-Turn Tipping Load, with Tire Deflection (conforms to ISO 14397-1)*</b>	4884 kg (10,767 lb.)	4659 kg (10,271 lb.)	4134 kg (9,114 lb.)	3913 kg (8,627 lb.)	4273 kg (9,420 lb.)	4032 kg (8,889 lb.)	4677 kg (10,311 lb.)	4431 kg (9,769 lb.)
<b>Operating Weight</b>	16 152 kg (35,608 lb.)	16 477 kg (36,325 lb.)	16 352 kg (36,050 lb.)	16,678 kg (36,769 lb.)	17 167 kg (37,847 lb.)	17 472 kg (38,519 lb.)	16 166 kg (35,640 lb.)	16 482 kg (36,336 lb.)

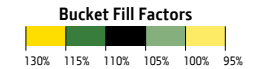
Loader operating information is based on machine with identified linkage and standard equipment, PowerTech PVX 6068 (EPA Final Tier 4/EU Stage IV) engine, ROPS cab, rear cast bumper/counterweight, transmission side-frame guards, bottom guards, standard tires, full fuel tank, and 79-kg (175 lb.) operator. This information is affected by changes in tires, ballast, and different attachments.

\*Rated operating capacity based on Deere attachments only.

**Bucket Selection Guides**

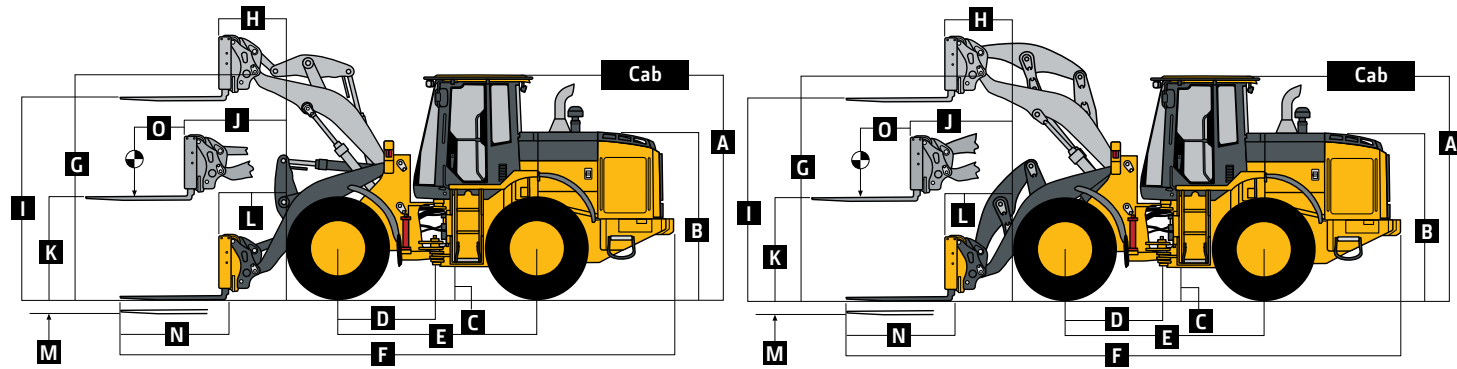


LOOSE MATERIALS	kg/m <sup>3</sup>	lb./cu. yd.	LOOSE MATERIALS	kg/m <sup>3</sup>	lb./cu. yd.
Chips, pulpwood	288	486	Limestone, coarse, sized	1570	2,646
Cinders (coal, ashes, clinkers)	673	1,134	Limestone, mixed sizes	1682	2,835
Clay and gravel, dry	1602	2,700	Limestone, pulverized or crushed	1362	2,295
Clay, compact, solid	1746	2,943	Sand, damp	2083	3,510
Clay, dry in lump loose	1009	1,701	Sand, dry	1762	2,970
Clay, excavated in water	1282	2,160	Sand, voids, full of water	2083	3,510
Coal, anthracite, broken, loose	865	1,458	Sandstone, quarried	1314	2,214
Coal, bituminous, moderately wet	801	1,350	Shale, broken crushed	1362	2,295
Earth, common loam, dry	1218	2,052	Slag, furnace granulated	1955	3,294
Earth, mud, packed	1843	3,105	Stone or gravel, 37.5 to 87.5-mm (1.5 to 3.5") size	1442	2,430
Granite, broken	1538	2,592	Stone or gravel, 18.75-mm (3/4") size	1602	2,700
Gypsum	2275	3,834			



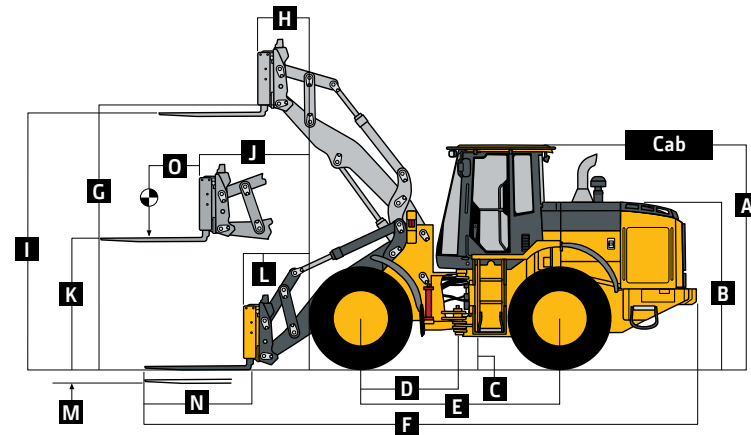


**Dimensions and Specifications with Hi-Vis Coupler and Construction Forks 624K-II Z-BAR / HIGH-LIFT / POWERLLEL / TOOL CARRIER**



**624K-II Z-BAR AND HIGH-LIFT LOADERS WITH QUICK-COUPLER AND HOOK-ON CONSTRUCTION FORKS**

**624K-II POWERLLEL LOADER WITH QUICK-COUPLER AND HOOK-ON CONSTRUCTION FORKS**



**624K-II TOOL CARRIER LOADER WITH QUICK-COUPLER AND HOOK-ON CONSTRUCTION FORKS**

	Z-Bar	Z-Bar	High-Lift	High-Lift	Powerllec	Powerllec	Tool Carrier	Tool Carrier
	1.22-m (48 in.)	1.52-m (60 in.)	1.22-m (48 in.)	1.52-m (60 in.)	1.22-m (48 in.)	1.52-m (60 in.)	1.22-m (48 in.)	1.52-m (60 in.)
Dimensions with Forks	tine length	tine length	tine length	tine length	tine length	tine length	tine length	tine length
<b>A</b> Height to Top of Cab	3.32 m (10 ft. 11 in.)	3.32 m (10 ft. 11 in.)	3.32 m (10 ft. 11 in.)	3.32 m (10 ft. 11 in.)	3.32 m (10 ft. 11 in.)	3.32 m (10 ft. 11 in.)	3.32 m (10 ft. 11 in.)	3.32 m (10 ft. 11 in.)
<b>B</b> Hood Height	2.46 m (8 ft. 1 in.)	2.46 m (8 ft. 1 in.)	2.46 m (8 ft. 1 in.)	2.46 m (8 ft. 1 in.)	2.46 m (8 ft. 1 in.)	2.46 m (8 ft. 1 in.)	2.46 m (8 ft. 1 in.)	2.46 m (8 ft. 1 in.)
<b>C</b> Ground Clearance	384 mm (15.1 in.)	384 mm (15.1 in.)	384 mm (15.1 in.)	384 mm (15.1 in.)	384 mm (15.1 in.)	384 mm (15.1 in.)	384 mm (15.1 in.)	384 mm (15.1 in.)
<b>D</b> Length from Centerline to Front Axle	1.52 m (5 ft. 0 in.)	1.52 m (5 ft. 0 in.)	1.52 m (5 ft. 0 in.)	1.52 m (5 ft. 0 in.)	1.52 m (5 ft. 0 in.)	1.52 m (5 ft. 0 in.)	1.52 m (5 ft. 0 in.)	1.52 m (5 ft. 0 in.)
<b>E</b> Wheelbase	3.09 m (10 ft. 1 in.)	3.09 m (10 ft. 1 in.)	3.09 m (10 ft. 1 in.)	3.09 m (10 ft. 1 in.)	3.09 m (10 ft. 1 in.)	3.09 m (10 ft. 1 in.)	3.09 m (10 ft. 1 in.)	3.09 m (10 ft. 1 in.)
<b>F</b> Overall Length, Forks on Ground	8.18 m (26 ft. 10 in.)	8.48 m (27 ft. 10 in.)	8.60 m (28 ft. 2 in.)	8.89 m (29 ft. 2 in.)	8.30 m (27 ft. 3 in.)	8.60 m (28 ft. 3 in.)	8.02 m (26 ft. 4 in.)	8.33 m (27 ft. 4 in.)
<b>G</b> Height to Hinge Pin, Fully Raised	3.96 m (13 ft. 0 in.)	3.96 m (13 ft. 0 in.)	4.32 m (14 ft. 2 in.)	4.32 m (14 ft. 2 in.)	3.99 m (13 ft. 1 in.)	3.99 m (13 ft. 1 in.)	3.99 m (13 ft. 1 in.)	3.99 m (13 ft. 1 in.)
<b>H</b> Reach, Fully Raised	0.75 m (29.5 in.)	0.75 m (29.5 in.)	0.84 m (33 in.)	0.84 m (33 in.)	0.92 m (36 in.)	0.92 m (36 in.)	0.89 m (35 in.)	0.89 m (35 in.)
<b>I</b> Fork Height, Fully Raised	3.73 m (12 ft. 3 in.)	3.73 m (12 ft. 3 in.)	4.09 m (13 ft. 5 in.)	4.09 m (13 ft. 5 in.)	3.76 m (12 ft. 4 in.)	3.76 m (12 ft. 4 in.)	3.91 m (12 ft. 10 in.)	3.91 m (12 ft. 10 in.)
<b>J</b> Maximum Reach, Fork Level	1.58 m (5 ft. 2 in.)	1.58 m (5 ft. 2 in.)	1.92 m (6 ft. 4 in.)	1.92 m (6 ft. 4 in.)	1.77 m (5 ft. 10 in.)	1.77 m (5 ft. 10 in.)	1.65 m (5 ft. 5 in.)	1.65 m (5 ft. 5 in.)
<b>K</b> Fork Height, Maximum Reach	1.77 m (5 ft. 10 in.)	1.77 m (5 ft. 10 in.)	1.77 m (5 ft. 10 in.)	1.77 m (5 ft. 10 in.)	1.84 m (6 ft. 1 in.)	1.84 m (6 ft. 1 in.)	1.99 m (6 ft. 7 in.)	1.99 m (6 ft. 7 in.)
<b>L</b> Reach, Ground Level	0.96 m (3 ft. 2 in.)	0.96 m (3 ft. 2 in.)	1.40 m (4 ft. 7 in.)	1.40 m (4 ft. 7 in.)	1.11 m (3 ft. 8 in.)	1.11 m (3 ft. 8 in.)	0.88 m (35 in.)	0.88 m (35 in.)
<b>M</b> Depth Below Ground	23 mm (0.9 in.)	23 mm (0.9 in.)	123 mm (4.8 in.)	123 mm (4.8 in.)	19 mm (0.8 in.)	19 mm (0.8 in.)	0 mm (0 in.)	0 mm (0 in.)
<b>N</b> Tine Length	1.22 m (48 in.)	1.52 m (60 in.)	1.22 m (48 in.)	1.52 m (60 in.)	1.22 m (48 in.)	1.52 m (60 in.)	1.22 m (48 in.)	1.52 m (60 in.)
<b>O</b> Load Position, 50% Tine Length	0.61 m (24 in.)	0.76 m (30 in.)	0.61 m (24 in.)	0.76 m (30 in.)	0.61 m (24 in.)	0.76 m (30 in.)	0.61 m (24 in.)	0.76 m (30 in.)

**Dimensions and Specifications with Hi-Vis Coupler and Construction Forks (continued)**

	624K-II Z-BAR / HIGH-LIFT / POWERLLEL / TOOL CARRIER							
Specifications with Forks	Z-Bar	Z-Bar	High-Lift	High-Lift	Powerllec	Powerllec	Tool Carrier	Tool Carrier
	1.22-m (48 in.)	1.52-m (60 in.)	1.22-m (48 in.)	1.52-m (60 in.)	1.22-m (48 in.)	1.52-m (60 in.)	1.22-m (48 in.)	1.52-m (60 in.)
	tine length	tine length	tine length	tine length	tine length	tine length	tine length	tine length
Tipping Load, Straight, No Tire Deflection	9706 kg (21,398 lb.)	9185 kg (20,249 lb.)	8642 kg (19,052 lb.)	8215 kg (18,111 lb.)	9054 kg (19,961 lb.)	8595 kg (18,949 lb.)	9369 kg (20,655 lb.)	8889 kg (19,597 lb.)
Tipping Load, Straight, with Tire Deflection	9420 kg (20,767 lb.)	8919 kg (19,663 lb.)	8397 kg (18,512 lb.)	7986 kg (17,606 lb.)	8778 kg (19,532 lb.)	8340 kg (18,387 lb.)	9102 kg (20,066 lb.)	8637 kg (19,041 lb.)
Tipping Load, 40-deg. Full Turn, No Tire Deflection	8445 kg (18,618 lb.)	7985 kg (17,604 lb.)	7494 kg (16,521 lb.)	7116 kg (15,688 lb.)	7854 kg (17,315 lb.)	7446 kg (16,416 lb.)	8157 kg (17,983 lb.)	7731 kg (17,044 lb.)
Tipping Load, 40-deg. Full Turn, with Tire Deflection	8052 kg (17,752 lb.)	7623 kg (16,806 lb.)	7155 kg (15,774 lb.)	6801 kg (14,994 lb.)	7473 kg (16,745 lb.)	7098 kg (15,648 lb.)	7776 kg (17,143 lb.)	7383 kg (16,277 lb.)
Rated Operating Load, 50% Full-Turn Tipping Load, with Tire Deflection (conforms to ISO 14397-1 and SAE J1197)*	4026 kg (8,876 lb.)	3812 kg (8,404 lb.)	3578 kg (7,888 lb.)	3401 kg (7,498 lb.)	3737 kg (8,239 lb.)	3549 kg (7,824 lb.)	3888 kg (8,572 lb.)	3692 kg (8,139 lb.)
Rated Operating Load, Rough Terrain, 60% Full-Turn Tipping Load, with Tire Deflection (conforms to EN474-3)*	4831 kg (10,650 lb.)	4574 kg (10,084 lb.)	4293 kg (9,464 lb.)	4081 kg (8,997 lb.)	4484 kg (9,885 lb.)	4259 kg (9,389 lb.)	4666 kg (10,287 lb.)	4430 kg (9,767 lb.)
Rated Operating Load, Firm and Level Ground, 80% Full-Turn Tipping Load, with Tire Deflection (conforms to EN474-3)*	6442 kg (14,202 lb.)	6098 kg (13,444 lb.)	5724 kg (12,619 lb.)	5441 kg (11,995 lb.)	5978 kg (13,179 lb.)	5678 kg (12,518 lb.)	6221 kg (13,715 lb.)	5906 kg (13,020 lb.)
Operating Weight	15 730 kg (34,679 lb.)	15 773 kg (34,773 lb.)	15 931 kg (35,122 lb.)	15 971 kg (35,210 lb.)	16 702 kg (36,822 lb.)	16 745 kg (36,916 lb.)	15 703 kg (34,619 lb.)	15 746 kg (34,714 lb.)

Loader operating information is based on machine with identified linkage and standard equipment, PowerTech PVX 6068 (EPA Final Tier 4/EU Stage IV) engine, ROPS cab, rear cast bumper/counterweight, transmission side-frame guards, bottom guards, standard tires, full fuel tank, and 79-kg (175 lb.) operator. This information is affected by changes in tires, ballast, and different attachments.

\*Rated operating capacity based on Deere attachments only.

**Adjustments to Operating Weights and Tipping Loads with Buckets**

Adjustments to operating weights, tipping loads, and tires are based on Z-Bar machine with pin-on 2.7-m<sup>3</sup> (3.5 cu. yd.) general-purpose bucket with bolt-on cutting edge, ROPS cab, rear cast bumper/counterweight, transmission side-frame guards, bottom guards, standard tires, full fuel tank, and 79-kg (175 lb.) operator\*

Add (+) or deduct (-) kg (lb.) as indicated for loaders with 3-piece rims	Operating Weight	Tipping Load, Straight	Tipping Load, 40-deg. Full Turn SAE	Tread Width	Width Over Tires	Vertical Height
John Deere PowerTech PVX 6068	0 kg (0 lb.)	0 kg (0 lb.)	0 kg (0 lb.)	N/A	N/A	N/A
John Deere PowerTech Plus 6068H	-130 kg (-287 lb.)	+38 kg (+84 lb.)	0 kg (0 lb.)	N/A	N/A	N/A
John Deere PowerTech 6068H	-146 kg (-322 lb.)	-7 kg (-15 lb.)	-45 kg (-101 lb.)	N/A	N/A	N/A
Powerllec Linkage, 2.7-m <sup>3</sup> (3.5 cu. yd.) Hook-On	0 kg (0 lb.)	0 kg (0 lb.)	0 kg (0 lb.)	0 mm (0 in.)	0 mm (0 in.)	0 mm (0 in.)
Tool-Carrier Linkage, 2.7-m <sup>3</sup> (3.5 cu. yd.) Hook-On	0 kg (0 lb.)	0 kg (0 lb.)	0 kg (0 lb.)	0 mm (0 in.)	0 mm (0 in.)	0 mm (0 in.)
Michelin 20.5 R 25, 1 Star L-3	0 kg (0 lb.)	0 kg (0 lb.)	0 kg (0 lb.)	0 mm (0 in.)	0 mm (0 in.)	0 mm (0 in.)
Bridgestone 20.5 R 25, 1 Star L-3	+44 kg (+97 lb.)	+33 kg (+73 lb.)	+29 kg (+64 lb.)	0 mm (0 in.)	-16 mm (-0.6 in.)	0 mm (0 in.)
Titan 20.5 R 25, 1 Star L-3	-4 kg (-9 lb.)	-3 kg (-7 lb.)	-3 kg (-7 lb.)	0 mm (0 in.)	-16 mm (-0.6 in.)	0 mm (0 in.)
Michelin 20.5 R 25, 1 Star L-2	-172 kg (-379 lb.)	-129 kg (-285 lb.)	-114 kg (-251 lb.)	0 mm (0 in.)	-16 mm (-0.6 in.)	-3 mm (-0.1 in.)
Bridgestone 20.5 R 25, 1 Star L-2	-80 kg (-176 lb.)	-60 kg (-132 lb.)	-53 kg (-117 lb.)	0 mm (0 in.)	-16 mm (-0.6 in.)	-3 mm (-0.1 in.)
Titan 20.5 R 25, 1 Star L-2	-128 kg (-282 lb.)	-96 kg (-212 lb.)	-85 kg (-187 lb.)	0 mm (0 in.)	-16 mm (-0.6 in.)	-3 mm (-0.1 in.)
Firestone 20.5-25, 16 PR L-3	-252 kg (-556 lb.)	-189 kg (-417 lb.)	-167 kg (-367 lb.)	0 mm (0 in.)	-12 mm (-0.5 in.)	+13 mm (+0.5 in.)
Titan 20.5-25, 16 PR L-2	-260 kg (-573 lb.)	+195 kg (+430 lb.)	-172 kg (-379 lb.)	0 mm (0 in.)	-12 mm (-0.5 in.)	+6 mm (+0.2 in.)
Firestone 20.5-25, 16 PR L-2	-280 kg (-617 lb.)	-210 kg (-464 lb.)	-185 kg (-408 lb.)	0 mm (0 in.)	-12 mm (-0.5 in.)	+6 mm (+0.2 in.)
Michelin 600/65 R 25, 1 Star L-3T <sup>3</sup>	+4 kg (+9 lb.)	+3 kg (+7 lb.)	+3 kg (+6 lb.)	0 mm (0 in.)	+83 mm (+3.3 in.)	-24 mm (-0.9 in.)
20.5R25 L2 Sno-Plus Michelin	-88 kg (-194 lb.)	-66 kg (-145 lb.)	-58 kg (-128 lb.)	0 mm (0 in.)	+7 mm (+0.3 in.)	-28 mm (-1.1 in.)
620/75R26 MegaXbib <sup>EB</sup>	-216 kg (-476 lb.)	-162 kg (-357 lb.)	-143 kg (-315 lb.)	0 mm (0 in.)	+61 mm (+3.3 in.)	+27 mm (+1.06 in.)
CaCl <sub>2</sub> in 20.5-25, L-3 Rear Tires	+1166 kg (+2,571 lb.)	+1432 kg (+3,157 lb.)	+1305 kg (+2,878 lb.)	N/A	N/A	N/A

\*May change based on vehicle configuration, weight, or tire-pressure adjustments.

<sup>3</sup>CaCl<sub>2</sub> not recommended.

<sup>E</sup>Equipped with 1-piece rims.

<sup>B</sup>Requires 8-deg. rear axle stops.

# Additional equipment

Key: ● Standard ▲ Optional or special See your John Deere dealer for further information.

524	544	624	Engine
●	●	●	Wet-sleeve cylinder liners
●	●	●	Automatic glow plugs for cold start*
●	●	●	Programmable auto-idle and auto shutdown
●	●	●	Selected idle adjustment from 900–1,250 rpm
●	●	●	Starter protection
●	●	●	Automatic engine cool-down timer†
●	●	●	Automatic derating for exceeded system temperatures
●	●	●	Serpentine drive belt for automatic tensioner
●	●	●	Electrical fuel-priming pump‡
●	●	●	Dual-stage fuel filter and water separator
●	●	●	500-hour vertical spin-on oil filter
▲	▲	▲	Engine-compartment light
▲	▲	▲	Chrome exhaust stack
▲	▲	▲	Engine-block heater (recommended for cold starts below –23 deg. C [–10 deg. F])
▲	▲	▲	Centrifugal engine air pre-cleaner
Powertrain			
●	●	●	Programmable maximum high gear
●	●	●	Clutch calibration engaged from monitor
●	●	●	2,000-hour vertical spin-on transmission filter
●	●	●	Transmission fill tube and sight gauge
●	●	●	Transmission diagnostic ports
●	●	●	5-speed transmission with lockup torque converter
●	▲	▲	5-speed transmission with non-lockup torque converter
●	●	●	Front locking differential
▲	▲	▲	Rear locking differential
●	●	●	Brake retractors and adjusters
▲	▲	▲	Automatic differential lock
●	●	●	Axle oil temperature sensing
▲	▲	▲	Wheel-spin control
Quad-Cool™ Cooling System			
●	●	●	Heavy-duty, trash-resistant radiator and high-ambient cooling package
●	●	●	2-side access to all coolers
●	●	●	Isolated from engine compartment
●	●	●	Engine radiator
●	●	●	Integral engine oil cooler
●	●	●	Hydraulic oil cooler (oil to air)
●	●	●	Transmission oil cooler (oil to air)
●	●	●	Charge air cooler (air to air)
●	●	●	Fuel cooler†
●	●	●	Coolant recovery tank
●	●	●	Antifreeze, –37 deg. C [–34 deg. F]
●	●	●	Cool-on-demand, hydraulically driven, swing-out fan
●	●	●	Enclosed fan safety guard
▲	▲	▲	Automatic reversing fan drive
▲	▲	●	Axle and service-brake coolers

524	544	624	Hydraulics
●	●	●	Automatic return-to-dig bucket positioner
●	●	●	In-cab adjustable automatic return-to-dig bucket positioner (Powerllel™ only)
●	●	●	In-cab adjustable automatic boom-height kickout/return to carry
●	●	●	Reservoir with sight gauge and fill strainer
●	●	●	Hydraulic diagnostic ports
●	●	●	4,000-hour in-tank filter
●	●	●	2 function — joystick with F-N-R
▲	▲	▲	2 function — joystick with steering column F-N-R
▲	▲	▲	2 function — 2-lever fingertip controls and steering column F-N-R
▲	▲	▲	3 function — joystick with F-N-R and 3rd-function auxiliary lever
▲	▲	▲	3 function — joystick with steering column F-N-R and 3rd-function auxiliary lever
▲	▲	▲	3 function — 3-lever fingertip controls and steering column F-N-R
▲	▲	▲	4 function — 4-lever fingertip controls and steering column F-N-R
▲	▲	▲	Ride control, automatic with monitor-adjustable speed settings
▲	▲	▲	Hydraulic control system for quick-coupler locking pins
▲	▲	▲	Hydrau™ XR cold-temperature hydraulic fluid recommended below –25 deg. C. [–13 deg. F]
Steering Systems			
●	●	●	Conventional steering wheel with spinner knob
▲	▲	▲	Secondary steering
Electrical			
●	●	●	Solid-state electrical power-distribution system
●	●	●	Lockable master electrical-disconnect switch
●	●	●	Battery-terminal safety covers
●	●	●	By-pass start safety cover at starter
●	●	●	Remote jump-start access in battery box†
●	●	●	Pre-wired for beacon/strobe light
●	●	●	Lights: Halogen driving lights with guards (2) / Front (4), rear cab (2), and rear grille (2) work lights / Incandescent front turn signals and flashers / LED stop and taillights
▲	▲	▲	Heavy-duty front LED turn signal and marker lights
▲	▲	▲	Premium LED light package (all exterior lights are heavy-duty LED)
●	●	●	Programmable courtesy lights
●	●	●	Horn, electric
●	●	●	Reverse warning alarm
●	●	●	Multi-function/multi-language LCD color monitor includes: Digital instruments — Analog display (hydraulic oil temperature, engine coolant temperature, transmission oil temperature, and engine oil pressure) / Digital display (engine rpm, transmission gear/direction indicator, hour meter, fuel level, diesel exhaust fluid (DEF) level <sup>‡</sup> , speedometer, odometer, and average fuel consumption)
●	●	●	Integrated cycle counter with 5 categories
●	●	●	Indicator lights: Standard and selected options / Amber caution and red stop

\*Available only on 524K-II and 544K-II EPA Final Tier 4 (FT4)/EU Stage IV engines, and 624K-II FT4/Stage IV and EPA Tier 3/EU Stage IIIA engines.

†Available only on FT4/Stage IV engines.

‡Available only on Tier 3/Stage IIIA engines.

§Available only on 624K-II Tier 3/Stage IIIA engines.

Net engine power is with standard equipment including air cleaner, exhaust system, alternator, and cooling fan at test conditions per ISO 9249. No derating is required up to 3050-m (10,000 ft.) altitude. Specifications and design subject to change without notice. Specifications with the exception of bucket capacity are in accordance with all applicable ISO standards. Except where otherwise noted, these specifications are based on units with applicable linkage and standard equipment, ROPS cab, rear cast bumper/counterweight, transmission side-frame guards, bottom guards, standard tires, full fuel tank, and 79-kg (175 lb.) operator.

# Additional equipment (continued)

Key: ● Standard ▲ Optional or special See your John Deere dealer for further information.

524	544	624	Electrical (continued)
●	●	●	Operator-warning messages
●	●	●	Built-in diagnostics: Diagnostic-code details / Sensor values / Calibrations / Individual circuit tester
▲	▲	▲	Electrical corrosion-prevention package
▲	▲	▲	AM/FM/Weather-Band (WB) radio with remote auxiliary port
▲	▲	▲	Premium AM/FM/WB/XM Satellite Radio™ ready radio with Bluetooth®, remote auxiliary port, and remote USB port
●	●	●	24- to 12-volt, 8-amp converter and power port
▲	▲	▲	24- to 12-volt, 15- or 30-amp converter and power port
Operator's Station			
●	●	●	Canopy (ROPS/FOPS Level 1, isolation mounted)
▲	▲	▲	Canopy rear window
▲	▲	▲	Quiet Cab with heater (ROPS/FOPS Level 1, isolation mounted)
▲	▲	●	Quiet Cab with air conditioning/heater (ROPS/FOPS Level 1, isolation mounted)
●	●	●	Keyless start with multiple security modes
●	●	●	Sealed-switch module with function indicators
●	●	●	Seat with backrest extension, deep foam, vinyl cover, and adjustable air suspension
▲	▲	▲	Seat with backrest extension, deep foam, fabric cover, and adjustable air suspension
▲	▲	▲	Premium seat with high-wide back and headrest extension, heated, leather/fabric cover, and adjustable air suspension
●	●	●	Hydraulic controls integrated to seat
●	●	●	High-visibility, bright-orange seat belt, 76 mm (3 in.), with retractor
●	●	●	Cup holders (2)
●	●	●	Lunch-box/cooler holder
▲	▲	●	Dome and reading light (included with Quiet Cab)
●	●	●	Rubber floor mat
●	●	●	Tilt steering column
●	●	●	Operator's manual storage compartment
●	●	●	Outside (2) and inside (1) rearview mirrors
▲	▲	▲	Large heated outside mirrors
●	●	●	Left-side operator-station access
●	●	●	Slip-resistant steps and ergonomic handholds
▲	▲	●	Sun visor (included with Quiet Cab)
▲	▲	●	Radio ready (Quiet Cab only)
▲	▲	●	Front and rear intermittent windshield wipers and washers (included with Quiet Cab)
▲	▲	▲	Powered cab air pre-cleaner
▲	▲	▲	Beacon bracket (single or dual available)
▲	▲	▲	Rearview camera
▲	▲	▲	Rear camera and radar object-detection system
●	●	●	LOADRITE™ L2180™ Payload Scale Ready
▲	▲	▲	LOADRITE L2180 Payload Scale
▲	▲	▲	Embedded payload scale
▲	▲	▲	Fire extinguisher
Loader Linkage			
●	●	●	Z-Bar loader linkage
▲	▲	▲	High-Lift Z-Bar loader linkage
▲	▲	▲	Powerllel linkage for visibility and parallel-lift
▲	▲	▲	Tool-carrier linkage for parallel-lift

524	544	624	Buckets and Attachments
▲	▲	▲	Full line of Deere pin-on buckets
▲	▲	▲	Worksite Pro™ hydraulic coupler which accepts JRB-pattern attachments
▲	▲	▲	Hi-Vis hydraulic coupler which accepts Euro-pattern attachments (Volvo)
▲	▲	▲	Full line of Deere hook-on buckets and forks
▲	▲	▲	Bolt-on fork frame guard
Overall Vehicle			
●	●	●	JDLink™ Ultimate wireless communication system (available in specific countries; see your dealer for details)
●	●	●	NeverGrease™ rear-axle oscillation
●	●	●	NeverGrease steering-cylinder joints
●	●	●	Front and rear tie-downs
●	●	●	Rear cast bumper/counterweight with rear hitch and locking pin
●	●	●	Articulation locking bar
●	●	●	Loader boom service locking bar
●	●	●	40-deg. steering articulation to each side with rubber-cushion stops on frame
●	●	●	Vandal protection with lockable engine enclosures, right counterweight storage, and filler access for radiator/fuel/DEF/hydraulic transmission
●	●	●	Left-side service steps and handholds
▲	▲	▲	Right-side service steps and handrails
▲	▲	▲	Left-side close-mounted steps*
●	●	●	Storage compartment
●	●	●	Fuel-tank fill strainer
●	●	●	Heavy-duty fuel-tank guard
●	●	●	DEF <sup>‡</sup> and ground-level fueling
●	●	●	Same-side ground-level daily servicing
●	●	●	20.5R25 tires on 3-piece rims
▲	▲	▲	Waste handler (Z-Bar and High-Lift)
●	●	●	Level 1 sound package <sup>§</sup>
▲	▲	▲	Level 2 sound package
▲	▲	▲	Environmental drains and sample ports for engine, transmission, hydraulic oils, and engine coolant
▲	▲	▲	Quick fluid service (engine, transmission, hydraulic oils, and engine coolant)
●	●	●	Fenders, front
▲	▲	▲	Fenders, full-coverage, front
▲	▲	▲	Fenders, full-coverage, front and rear
▲	▲	▲	Less wheels and tires with 8-deg. axle stops
▲	▲	▲	Rims less tires
▲	▲	▲	Transmission side-frame guards
▲	▲	▲	Bottom guards
▲	▲	▲	Lift eyes
▲	▲	▲	License-plate bracket and light
▲	▲	▲	Special guarding for waste applications

\*Available only on EPA Final Tier 4 (FT4)/EU Stage IV engines.

‡Standard on 524K-II and 544K-II FT4/Stage IV engines, and 624K-II FT4/Stage IV and EPA Tier 3/EU Stage IIIA engines; optional on 524K-II and 544K-II Tier 3/Stage IIIA engines.

§Available only on 624K-II Tier 3/Stage IIIA engines.

Net engine power is with standard equipment including air cleaner, exhaust system, alternator, and cooling fan at test conditions per ISO 9249. No derating is required up to 3050-m (10,000 ft.) altitude. Specifications and design subject to change without notice. Specifications with the exception of bucket capacity are in accordance with all applicable ISO standards. Except where otherwise noted, these specifications are based on units with applicable linkage and standard equipment, ROPS cab, rear cast bumper/counterweight, transmission side-frame guards, bottom guards, standard tires, full fuel tank, and 79-kg (175 lb.) operator.





**JOHN DEERE**



Pete Ricketts, Governor

## ADDENDUM ONE QUESTIONS and ANSWERS

Date: November 22, 2016  
 To: All Bidders  
 From: René Botts, Buyer  
 AS Materiel State Purchasing  
 RE: Addendum for Invitation to Bid Number 5465 OF  
 to be opened December 15, 2016 at 2:00 p.m. Central Time

### Questions and Answers

Following are the questions submitted and answers provided for the above mentioned Invitation to Bid. The questions and answers are to be considered as part of the Invitation to Bid. It is the Bidder's responsibility to check the State Purchasing Bureau website for all addenda or amendments.

<u>Question Number</u>	<u>ITB Section Reference</u>	<u>ITB Page Number</u>	<u>Question</u>	<u>State Response</u>
1.	H specification C. b	24	Dump clearance at full lift with bucket at 45 degrees discharge shall be at least 9 feet 2 inches. Will a loader with 9 feet 1 inches be acceptable ? This machines meets or exceeds all of the other specifications listed.	Yes, 9'1" will be acceptable.
2.	Section W. Quick Attach Forklift Assm.		4. Manually adjustable tines 2-1/2 X6 inch Our Forks meet all the specs except are 2 ¼ thick is this acceptable?	Yes, 2 ¼" thick by 6" wide tine minimum dimensions are acceptable and the Quick Attach Forklift Assembly bid must meet all other requirements.
3.			"Lift Cycle Cost" Will they add this to the bid specifications?	Yes, See Addendum II, Life Cycle Attachments and Documents. If bidding Life Cycle please complete and return with bid submission.



Pete Ricketts, Governor

			<p>I see that you are not bidding the "Life Cycle Cost" on this bid. We have many Cities and Counties that use this off the State bid process as a better value than low bid. I have sent by request by the State, information on many Motor Graders and some 2.7 yard loaders that have been purchased off "Life Cycle Cost" by NE entities.</p> <p>SI hope they consider adding this to the bid.</p>	
--	--	--	--	--

This addendum will become part of the ITB and should be acknowledged with the Invitation to Bid.

**Life-Cycle Cost Analysis - Invitation to Bid# 5465 OF**

**Item Description - EQUIPMENT DESCRIPTION**

State Agency Data Use for Calculations		
1	<b>Projected Number of Months in Service:</b>	<b>156</b> <small>Provided by State Purchasing Bureau</small>
2	<b>Projected Number of Hours of Operation per Month</b>	<b>25</b> <small>Provided by State Purchasing Bureau</small>
3	<b>Projected Total Number of Hours</b>	<b>3,900</b> <small>Provided by State Purchasing Bureau</small>
4	<b>Number of Maintenance Cycles Performed Per Year</b>	<b>2</b> <small>Provided by State Purchasing Bureau</small>
5	<b>Fuel Cost-per-Gallon:</b> <small>(Data from U.S. Energy Information Administration the week of bid release.)</small>	<b>\$2.443</b> <small>Provided by State Purchasing Bureau</small>

Net Cost		
6	<b>Bid Price (Listed on ITB Line # 1)</b>	<b>Bidder enters amount</b>
7	<b>Projected Salvage Value</b> <i>(Using Projected Total Hours &amp; Projected Total Months) Salvage value will be based on documented sale price(s) of the same or comparable equipment within previous twelve (12) months. Vendor(s) should submit documentation from at least three (3) sales within the U.S. Midwest region with the Invitation To Bid. All documentation will be required prior to award.</i>	<b>Bidder enters amount</b>
8	<b>Net Cost (Line 6 - Line 7)</b>	<b>\$ - Total Net Cost</b>

Operating Costs		
9	<b>Fuel</b> <i>Estimated Fuel Use Rate (Gallons Per Hour) "Rated RPM Full Load" or Highest Consumption Rate Tested and Documented Bidder should supply manufacturers documentation with the Invitation to Bid and will be required prior to award.</i>	<b>Bidder enters amount</b>
10	<b>Projected Number of Hours</b>	<b>3900</b> <small>Provided by State Purchasing Bureau</small>
11	<b>Projected Total Gallons (Line 9 x Line 10)</b>	<b>0</b>
12	<b>Fuel Cost-per-Gallon</b> <small>(Data from U.S. Energy Information Administration the week of bid release.)</small>	<b>\$2.443</b> <small>Provided by State Purchasing Bureau</small>
13	<b>Total Estimated Fuel Cost (Line 11 x Line 12)</b>	<b>\$ -</b>
14	<b>Estimated Maintenance Cost for Parts (Labor not included)</b>	<b>Bidder enters amount from Maintenance Cost Work Sheet</b>
15	<b>Total Operating Cost (Fuel + Maintenance) (Line 13 + Line 14)</b>	<b>\$0.00</b>
16	<b>Total Life-Cycle Cost (Net Cost, Line 8 + Total Operating Cost, Line 15)</b>	<b>\$0.00 Total Life-Cycle Cost</b>
17	<b>(Total Life-Cycle Cost divided by Total Hours) (Line 16/Line 3)</b>	<b>\$0.00 Life-Cycle Cost Per Hour</b>

In order to be considered for a Life-Cycle Cost Award, all Bidder fields must be completed. Additional supporting documentation may be requested.

In the event equipment performance does not meet the criteria as indicated, a Vendor Performance Report may be submitted by the purchasing agency and vendor suspension may occur.

Bidder Name: \_\_\_\_\_

I hereby certify the above to be true and accurate information.

Authorized Representative: \_\_\_\_\_ Date: \_\_\_\_\_

Signature



## **Instructions for Life-Cycle Cost Analysis - Heavy Equipment Vendor Submission Form**

### **State Agency Data use for Calculations:**

Line #1 - Projected Number of Months in Service – Provided by State Purchasing Bureau

Line #2 - Projected Number of Hours of Operation per Month – Provided by State Purchasing

Line #3 - Projected Total Number of Hours – Anticipated hours at the time of disposal provided by State Purchasing Bureau

Line #4 - Number of Maintenance Cycles Performed Per Year - Provided by State Purchasing

Line #5 - Fuel Cost-per-Gallon – Provided by SPB (US Energy Information Administration)

### **Net Cost**

Line #6 - Bid price – Must match ITB (Invitation to Bid) Line 1 – Bidder enters amount

Line #7 - Projected Salvage Value – Bidder enters amount from documented sale price(s) of comparable equipment. Bidder shall supply documentation prior to award for pricing information from an independently owned published source.

Line #8 - Net Cost – Bid Price less the Projected Salvage Value (Line 6 - Line 7)

### **Operating Costs**

#### **Fuel**

Line #9 - Estimated Fuel Use Rate (Gallons per Hour) "Rated RPM Full Load" or Highest Consumption Rate Tested and Documented at SAE Standards – Bidder should supply manufacturer's documentation with the ITB and will be required prior to award

Line #10 - Projected Number of Hours – Provided by State Purchasing Bureau

Line #11 - Projected Total Gallons is the result of the estimated fuel use rate multiplied by the projected number of hours (Line 9 x Line 10)

Line #12 - Fuel Cost-per-Gallon Provided by State Purchasing Bureau

Line #13 - Total Estimated Fuel Cost is the result of the Projected Total Gallons multiplied by the Fuel Cost per Gallon (Line 11 x Line 12)

### **Estimated Maintenance Cost for Parts (Labor not included)**

Line #14 - Total Maintenance Cost – Bidder enters amount from Maintenance Cost Work Sheet.

Line #15 - Total Operating Cost is the sum Total Estimated Fuel Cost plus the Total Maintenance Cost (Line 13 + Line 14)

**Line #16 - Total Life-Cycle Cost is the Net Cost plus the Total Operating Cost (Line 8 + Line 15)**

**Line #17 - Life-Cycle Cost per Hour is the result of the Total Life-Cycle Cost divided by the Total Projected Hours (Line 16 / Line 3)**

**Maintenance Cost Work Sheet**

Item No.	Total Maintenance Costs - Indicate parts necessary to perform a <u>complete change</u> ; that <u>is</u> , if the machine has two air filters, you must price both).	No. of Maint. Procedures Performed During Life Cycle of Unit	Vendor Supplied "Manufacturer's Suggested Retail Price" for Parts	Total Cost
1	Change Engine Oil and Filter(s)	26		
2	Lube Chassis (grease all zerks complete)	26		
3	Change Engine Fuel Filter(s)	13		
4	Replace Transmission Filter(s)	13		
5	Replace Engine Air Filter(s)	6		
6	Replace Cab Air Filter(s)	6		
7	Change Transmission Oil/Fluid	6		
8	Change Hydraulic Oil/Fluid and Filter(s)	4		
9	Change Differential/Final Drive Oil/Fluid	4		
10	Replace Engine Coolant	4		
11	Adjust Engine Valve Clearance	2		
12	Replace Engine Belt(s)	3		
	Additional maintenance as mandated by the manufacturer for warranty compliance, if necessary:			
9				
10				
11				
	<b>Total Life Cycle Maintenance Cost</b> (To be entered in Line 14)			\$ -



## ADDENDUM TWO, LIFE CYCLE COST SHEETS

Date: November 22, 2016

To: All Bidders

From: René Botts, Buyer  
AS Materiel State Purchasing

RE: Addendum for Invitation to Bid Number 5465 OF  
to be opened December 15, 2016 at 2:00 p.m. Central

### Life Cycle Cost

If bidding Life Cycle please complete and return with bid submission.

YES	NO	NO & PROVIDE ALTERNATIVE	1. LIFE CYCLE COST *NOTE: LIFE CYCLE COST WORKSHEET AND INSTRUCTIONS ARE ATTACHED
			<p><b>A.</b> Life-cycle cost information will be captured in a formula to allow a comparison between the price based on acquisition costs and the price based on life cycle costs.</p> <p>Vendors must provide a price based on acquisition costs according to specifications. Vendors will not be required to submit a price based on life-cycle costs. In order for a vendor submission to be considered on the basis of life cycle costs, the Bidder must supply the information requested on the Life-Cycle Cost Analysis for Heavy Equipment / Vendor Submission form provided by the State Purchasing Bureau. Life-cycle cost information considered for purposes of a bid will include only the life-cycle cost information as submitted with the bid by the Vendor. The State Purchasing Bureau will not add any additional information or stipulate to the creditability of any information provided and /or not provided in the form. If a Vendor fails to complete any of the information requested for a bid price based on life-cycle costs, the bid will be disqualified from further consideration for a contract based on life-cycle costs. The Vendor's bid based on acquisition costs will be considered if the requirements of that bid are met independently of the bid</p>

			<p>based on life-cycle costs.</p> <p>Life-cycle cost comparisons will be based upon the Life-Cycle Cost per Hour, which will be calculated using information provided by the Bidders and the State as indicated in the Life Cycle Cost Analysis Form.</p>
			<p><b>B. Life-Cycle Information Certification</b>  The Bidder or authorized representative will be required to sign the Life-Cycle Cost Analysis – Heavy Equipment Vendor Submission form and certify that the information is true and accurate. Additionally, the Bidder is informed on the form that a Vendor Performance Report may be submitted by the purchasing agency and possible suspension may occur if the data provided proves to be inaccurate throughout the life of the equipment bid.</p>
			<p><b>C. Contract Awards</b>  State Purchasing Bureau may award multiple contracts meeting specification: one based on low acquisition cost and one based on life-cycle cost. If no life-cycle cost bid is submitted, the award will only be based on acquisition cost.</p>
			<p><b>D. Contract Selection by Procuring Agency</b>  The procuring agency may select either contract: low acquisition cost contract or the life-cycle cost contract. The procuring agency will generate a purchase order from one of the contracts and include an attachment with a statement of explanation indicating the basis for the selection signed by the Agency Director.</p>
<p><b>NOTES/COMMENTS:</b></p>			

This addendum will become part of the proposal and should be acknowledged with the Invitation to Bid.



**Life-Cycle Cost Analysis - Invitation to Bid# 5465 OF**

**Item Description - EQUIPMENT DESCRIPTION**

State Agency Data Use for Calculations		
1	<b>Projected Number of Months in Service:</b>	<b>156</b> Provided by State Purchasing Bureau
2	<b>Projected Number of Hours of Operation per Month</b>	<b>25</b> Provided by State Purchasing Bureau
3	<b>Projected Total Number of Hours</b>	<b>3,900</b> Provided by State Purchasing Bureau
4	<b>Number of Maintenance Cycles Performed Per Year</b>	<b>2</b> Provided by State Purchasing Bureau
5	<b>Fuel Cost-per-Gallon:</b> (Data from U.S. Energy Information Administration the week of bid release.)	<b>\$2.443</b> Provided by State Purchasing Bureau

Net Cost		
6	<b>Bid Price (Listed on ITB Line # 1)</b>	<b>Bidder enters amount</b>
7	<b>Projected Salvage Value</b> (Using Projected Total Hours & Projected Total Months) Salvage value will be based on documented sale price(s) of the same or comparable equipment within previous twelve (12) months. Vendor(s) should submit documentation from at least three (3) sales within the U.S. Midwest region with the Invitation To Bid. All documentation will be required prior to award.	<b>Bidder enters amount</b>
8	<b>Net Cost (Line 6 - Line 7)</b>	<b>\$ - Total Net Cost</b>

Operating Costs		
9	<b>Fuel</b> <b>Estimated Fuel Use Rate (Gallons Per Hour)</b> "Rated RPM Full Load" or Highest Consumption Rate Tested and Documented Bidder should supply manufacturers documentation with the Invitation to Bid and will be required prior to award.	<b>Bidder enters amount</b>
10	<b>Projected Number of Hours</b>	<b>3900</b> Provided by State Purchasing Bureau
11	<b>Projected Total Gallons (Line 9 x Line 10)</b>	<b>0</b>
12	<b>Fuel Cost-per-Gallon</b> (Data from U.S. Energy Information Administration the week of bid release.)	<b>\$2.443</b> Provided by State Purchasing Bureau
13	<b>Total Estimated Fuel Cost (Line 11 x Line 12)</b>	<b>\$ -</b>
14	<b>Estimated Maintenance Cost for Parts</b> (Labor not included)	<b>Bidder enters amount from Maintenance Cost Work Sheet</b>
15	<b>Total Operating Cost (Fuel + Maintenance)</b> (Line 13 + Line 14)	<b>\$0.00</b>
16	<b>Total Life-Cycle Cost</b> (Net Cost, Line 8 + Total Operating Cost, Line 15)	<b>\$0.00 Total Life-Cycle Cost</b>
17	<b>(Total Life-Cycle Cost divided by Total Hours) (Line 16/Line 3)</b>	<b>\$0.00 Life-Cycle Cost Per Hour</b>

In order to be considered for a Life-Cycle Cost Award, all Bidder fields must be completed. Additional supporting documentation may be requested.

In the event equipment performance does not meet the criteria as indicated, a Vendor Performance Report may be submitted by the purchasing agency and vendor suspension may occur.

Bidder Name: \_\_\_\_\_

I hereby certify the above to be true and accurate information.

Authorized Representative: \_\_\_\_\_ Date: \_\_\_\_\_

Signature

## **Instructions for Life-Cycle Cost Analysis - Heavy Equipment Vendor Submission Form**

### **State Agency Data use for Calculations:**

Line #1 - Projected Number of Months in Service – Provided by State Purchasing Bureau

Line #2 - Projected Number of Hours of Operation per Month – Provided by State Purchasing

Line #3 - Projected Total Number of Hours – Anticipated hours at the time of disposal provided by State Purchasing Bureau

Line #4 - Number of Maintenance Cycles Performed Per Year - Provided by State Purchasing

Line #5 - Fuel Cost-per-Gallon – Provided by SPB (US Energy Information Administration)

### **Net Cost**

Line #6 - Bid price – Must match ITB (Invitation to Bid) Line 1 – Bidder enters amount

Line #7 - Projected Salvage Value – Bidder enters amount from documented sale price(s) of comparable equipment. Bidder shall supply documentation prior to award for pricing information from an independently owned published source.

Line #8 - Net Cost – Bid Price less the Projected Salvage Value (Line 6 - Line 7)

### **Operating Costs**

#### **Fuel**

Line #9 - Estimated Fuel Use Rate (Gallons per Hour) "Rated RPM Full Load" or Highest Consumption Rate Tested and Documented at SAE Standards – Bidder should supply manufacturer's documentation with the ITB and will be required prior to award

Line #10 - Projected Number of Hours – Provided by State Purchasing Bureau

Line #11 - Projected Total Gallons is the result of the estimated fuel use rate multiplied by the projected number of hours (Line 9 x Line 10)

Line #12 - Fuel Cost-per-Gallon Provided by State Purchasing Bureau

Line #13 - Total Estimated Fuel Cost is the result of the Projected Total Gallons multiplied by the Fuel Cost per Gallon (Line 11 x Line 12)

### **Estimated Maintenance Cost for Parts (Labor not included)**

Line #14 - Total Maintenance Cost – Bidder enters amount from Maintenance Cost Work Sheet.

Line #15 - Total Operating Cost is the sum Total Estimated Fuel Cost plus the Total Maintenance Cost (Line 13 + Line 14)

**Line #16 - Total Life-Cycle Cost is the Net Cost plus the Total Operating Cost (Line 8 + Line 15)**

**Line #17 - Life-Cycle Cost per Hour is the result of the Total Life-Cycle Cost divided by the Total Projected Hours (Line 16 / Line 3)**



**Maintenance Cost Work Sheet**

Item No.	Total Maintenance Costs - Indicate parts necessary to perform a <u>complete change</u> ; that <u>is</u> , if the machine has two air filters, you must price both).	No. of Maint. Procedures Performed During Life Cycle of Unit	Vendor Supplied "Manufacturer's Suggested Retail Price" for Parts	Total Cost
1	Change Engine Oil and Filter(s)	26		
2	Lube Chassis (grease all zerks complete)	26		
3	Change Engine Fuel Filter(s)	13		
4	Replace Transmission Filter(s)	13		
5	Replace Engine Air Filter(s)	6		
6	Replace Cab Air Filter(s)	6		
7	Change Transmission Oil/Fluid	6		
8	Change Hydraulic Oil/Fluid and Filter(s)	4		
9	Change Differential/Final Drive Oil/Fluid	4		
10	Replace Engine Coolant	4		
11	Adjust Engine Valve Clearance	2		
12	Replace Engine Belt(s)	3		
	Additional maintenance as mandated by the manufacturer for warranty compliance, if necessary:			
9				
10				
11				
	<b>Total Life Cycle Maintenance Cost</b> (To be entered in Line 14)			\$ -

Pete Ricketts, Governor

November 4, 2016

Dear Prospective Bidder:

The State of Nebraska Purchasing Bureau is issuing the following Invitation to Bid (ITB):

ITB Number:	5465 OF
Commodity:	Articulated All Wheel Drive Loader with Minimum 2.2 Cubic Yard Bucket
Opening Date:	December 15, 2016 2:00 p.m. Central Time
Buyer:	Rene Botts

Copies of 5465 OF and all information relevant to this ITB to include addenda and/or amendments may be obtained from the State Purchasing Bureau web site at:

<http://das.nebraska.gov/materiel/purchasing.html>

**It is the responsibility of the bidder to check this site for other pertinent information and any mandatory requirements. All information relevant to this ITB, to include addenda and/or amendments that may be issued prior to the opening date, will be posted to the website.**

ITB responses must be in a sealed envelope that indicates the ITB Number and Opening Date. Sealed responses must be received in the State Purchasing Bureau on or before December 8, 2016; 2:00 p.m. Central Time, at which time responses will be publicly opened. ITB response must be sent to:

State Purchasing Bureau  
1526 K Street, Suite 130  
Lincoln, NE 68508

Any problems accessing the website regarding the above ITB should be e-mailed or faxed to the State Purchasing Bureau at [as.materielpurchasing@nebraska.gov](mailto:as.materielpurchasing@nebraska.gov) or 402-471-2089.

Sincerely,



Rene Botts, Buyer  
State Purchasing Bureau



# State of Nebraska - INVITATION TO BID CONTRACT

Return to:  
State Purchasing Bureau  
1526 K Street, Suite 130  
Lincoln, Nebraska 68508

Telephone: 402-471-6500  
Fax: 402-471-2089

Date	11/4/16	Page	1 of 2
Solicitation Number	5465 OF		
Opening Date and Time	12/15/16	2:00 pm	
Buyer	RENE BOTTS (AS)		

**DESTINATION OF GOODS**  
**MULTIPLE DELIVERY LOCATIONS**  
**PLEASE REFER TO DOCUMENTATION**  
**FOR DELIVERY ADDRESSES.**

Per Nebraska's Transparency in Government Procurement Act, DAS is required to collect statistical information regarding the number of contracts awarded to Nebraska contractors. This information is for statistical purposes only and will not be considered for contract award purposes.

\_\_\_\_ NEBRASKA CONTRACTOR AFFIDAVIT: Bidder hereby attests that bidder is a Nebraska Contractor. " Nebraska Contractor" shall mean any bidder who has maintained a bona fide place of business and at least one employee within this state for at least the six (6) months immediately preceding the posting date of this ITB.

\_\_\_\_ I hereby certify that I am a Resident disabled veteran or business located in a designated enterprise zone in accordance with Neb. Rev. Stat. §73-107 and wish to have preference, if applicable, considered in the award of this contract.

Contract to supply and deliver Articulated All Wheel Drive Loader with Minimum 2.2 Cubic Yard Bucket to the State of Nebraska as per the attached specifications for a one (1) year period from date of award. The contract may be renewed for four (4) additional one (1) year periods when mutually agreeable to the vendor and the State of Nebraska.

(ka 11/2/16)

## INVITATION

Line	Description	Quantity	Unit of Measure	Unit Price	Extended Price
1	ARTICULATED ALL WHEEL DRIVE LOADER W/MIN 2.2 CY BUCKET	5.0000	EA	_____	_____
	MAKE: _____ MODEL: _____				
	OPTIONS:				
2	DEDUCT FOR NO MANUFACTURER'S FACTORY INSTALLED AIR CONDITIONER	5.0000	EA	_____	_____
3	DEDUCT FOR NO LOAD RIDE CONTROL OR BOOM SUSPENSION SYSTEM	5.0000	EA	_____	_____

### BIDDER MUST COMPLETE THE FOLLOWING

DISCOUNT PAYMENT TERMS: \_\_\_\_\_% \_\_\_\_\_ DAYS

By signing this Invitation to Bid form, the bidder guarantees compliance with the provisions stated in this Invitation to Bid, agrees to the terms and conditions unless otherwise agreed to (see Section III) and certifies that bidder maintains a drug free work place environment. Vendor will furnish the items requested within \_\_\_\_\_ days after receipt of order. Failure to enter Delivery Date may cause quotation to be REJECTED.

Sign

Here (Authorized Signature MANDATORY - MUST BE SIGNED IN INK)

Enter Contact Information Below

VENDOR# \_\_\_\_\_

VENDOR: \_\_\_\_\_

Address: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Contact \_\_\_\_\_

Telephone \_\_\_\_\_

Facsimile \_\_\_\_\_

Email \_\_\_\_\_

# State of Nebraska - INVITATION TO BID CONTRACT

Return to:  
State Purchasing Bureau  
1526 K Street, Suite 130  
Lincoln, Nebraska 68508

Telephone: 402-471-6500  
Fax: 402-471-2089

Date	11/4/16	Page	2 of 2
Solicitation Number	5465 OF		
Opening Date and Time	12/15/16	2:00 pm	
Buyer	RENE BOTTS (AS)		

**DESTINATION OF GOODS**  
MULTIPLE DELIVERY LOCATIONS  
PLEASE REFER TO DOCUMENTATION  
FOR DELIVERY ADDRESSES.

## INVITATION

Line	Description	Quantity	Unit of Measure	Unit Price	Extended Price
4	<b>QUICK HITCH WITH SPECIFIED BUCKET</b>	5.0000	EA	_____	_____
	MAKE: _____ MODEL: _____				
5	<b>MULTI-PURPOSE BUCKET</b>	5.0000	EA	_____	_____
	MAKE: _____ MODEL: _____				
6	<b>GRAPPLE FOR ATTACHMENT</b>	5.0000	EA	_____	_____
	MAKE: _____ MODEL: _____				
7	<b>THIRD VALVE WITH LINES TO FRONT OF LOADER BOOM FOR ATTACHMENTS</b>	5.0000	EA	_____	_____
	MAKE: _____ MODEL: _____				
8	<b>AM/FM RADIO</b>	5.0000	EA	_____	_____
	MAKE: _____ MODEL: _____				
9	<b>DEDUCT FOR EXTENDED WARRANTY AFTER THE BASIC 1 YEAR WARRANTY</b>	5.0000	EA	_____	_____
10	<b>DEDUCT FOR TRANSPORTATION COST CHARGES FOR THE EXTENDED WARRANTY</b>	5.0000	EA	_____	_____
11	<b>LOUP ELECTRONICS LOADLOG 8000I WHEEL LOADER SCALE SYSTEM</b>	5.0000	EA	_____	_____
	MAKE: _____ MODEL: _____				
12	<b>IN-CAB PRINTER FOR LOADLOG 8000I WHEEL LOADER SCALE SYSTEM</b>	5.0000	EA	_____	_____
	MAKE: _____ MODEL: _____				



**TABLE OF CONTENTS**

**GLOSSARY OF TERMS..... iii**

**I. SCOPE OF THE INVITATION TO BID (ITB)..... 1**

A. SCHEDULE OF EVENTS ..... 1

**II. PROCUREMENT PROCEDURES..... 2**

A. PROCURING OFFICE AND CONTACT PERSON ..... 2

B. GENERAL INFORMATION..... 2

C. COMMUNICATION WITH STATE STAFF AND EVALUATORS ..... 2

D. WRITTEN QUESTIONS AND ANSWERS..... 2

E. SUBMISSION OF BIDS ..... 3

F. IMPORTANT NOTICE LANGUAGE ..... 3

G. DISCOUNTS..... 3

H. PRICE ADJUSTMENTS DURING CONTRACT TERM ..... 3

I. PAYMENT ..... 3

J. BID EXECUTION ..... 3

K. BID OPENING ..... 3

L. ELECTRONIC DOCUMENTS/FACSMILIE SUBMISSIONS ..... 4

M. VALID BID TIME ..... 4

N. ALTERNATE/EQUIVALENT BIDS..... 4

O. LATE BIDS ..... 4

P. NO BID ..... 4

Q. LUMP SUM OR ALL OR NONE BIDS ..... 4

R. REJECTION OF BIDS ..... 4

S. EVALUATION OF BIDS..... 4

T. BID TABULATIONS ..... 4

U. MANDATORY REQUIREMENTS ..... 5

V. REFERENCE CHECKS..... 5

W. RECYCLING ..... 5

X. SECRETARY OF STATE/TAX COMMISSIONER REGISTRATION REQUIREMENTS..... 5

Y. RESIDENT BIDDER ..... 5

Z. EVALUATION CRITERIA AND AWARD..... 5

AA. POLITICAL SUB-DIVISIONS ..... 6

BB. VIOLATION OF TERMS AND CONDITIONS ..... 6

**III. INVITATION TO BID - TERMS AND CONDITIONS..... 7**

A. GENERAL..... 7

B. DEBARMENT ..... 7

C. SPECIFICATIONS..... 8

D. PERFORMANCE AND DEFAULT ..... 8

E. DRUG POLICY ..... 8

F. NE ACCESS TECHNOLOGY STANDARDS ..... 8

G. COMPLIANCE WITH CIVIL RIGHTS LAWS AND EQUAL OPPORTUNITY EMPLOYMENT /  
NONDISCRIMINATION ..... 9

H. PERMITS, REGULATIONS, LAWS ..... 9

I. COOPERATION WITH OTHER CONTRACTORS ..... 9

J. CONTRACTOR RESPONSIBILITY ..... 9

K. CONTRACT CONFLICTS..... 10

L. FUNDING OUT CLAUSE OR LOSS OF APPROPRIATIONS ..... 10

M. RIGHT TO AUDIT ..... 10

N. CONFLICT OF INTEREST ..... 11

O. BID PREPARATION COSTS..... 11

P. ERRORS AND OMISSIONS..... 11

Q. ASSIGNMENT BY THE STATE..... 11

R. ASSIGNMENT BY THE CONTRACTOR ..... 12

S. GOVERNING LAW ..... 12

T. ATTORNEY'S FEES ..... 12

U. ADVERTISING ..... 12

V. NOTIFICATION ..... 13

W. EARLY TERMINATION ..... 13

X.	BREACH BY CONTRACTOR .....	14
Y.	ASSURANCES BEFORE BREACH.....	14
Z.	ACCEPTANCE AND PAYMENT OF GOODS .....	14
AA.	FORCE MAJEURE .....	15
BB.	PROHIBITION AGAINST ADVANCE PAYMENT .....	15
CC.	PAYMENT .....	15
DD.	INVOICES.....	15
EE.	TAXES.....	16
FF.	SEVERABILITY .....	16
GG.	PROPRIETARY INFORMATION .....	16
HH.	CERTIFICATION OF INDEPENDENT PRICE DETERMINATION/COLLUSIVE BIDDING .....	16
II.	PRICES .....	17
JJ.	ETHICS IN PUBLIC CONTRACTING .....	17
KK.	INDEMNIFICATION.....	18
LL.	ANTITRUST.....	19
MM.	EMPLOYEE WORK ELIGIBILITY STATUS.....	19
<b>IV.</b>	<b>SCOPE OF WORK .....</b>	<b>20</b>
A.	SCOPE .....	20
B.	AMENDMENT.....	20
C.	REVISIONS .....	20
<b>V.</b>	<b>INVITATION TO BID - TECHNICAL SPECIFICATIONS.....</b>	<b>21</b>
A.	BIDDER INSTRUCTIONS .....	21
B.	NON-COMPLIANCE STATEMENT .....	21
C.	ENGINE.....	21
D.	DRIVETRAIN .....	22
E.	TIRES .....	23
F.	BRAKES .....	23
G.	STEERING .....	23
H.	LOADER .....	24
I.	CAB .....	24
J.	INSTRUMENTS.....	25
K.	HYDRAULIC SYSTEM .....	25
L.	COUNTERWEIGHTS .....	26
M.	GENERAL.....	26
N.	NOISE LEVEL .....	26
O.	RADIO FREQUENCY SHIELDING – CAUTION!!!.....	27
P.	MANUALS .....	27
Q.	MISCELLANEOUS .....	28
R.	WARRANTY .....	28
S.	SPECIFICATION FORM.....	30
T.	TRAINING.....	30
U.	OEM BRAND INFORMATION .....	30
V.	QUICK HITCH WITH SPECIFIED BUCKET .....	31
W.	QUICK ATTACH FORKLIFT ASSEMBLY.....	32
Y.	GRAPPLE FORK ATTACHMENT .....	33
Z.	WHEEL LOADER SCALE SYSTEM.....	33
AA.	ANNUAL USAGE, ESTIMATED .....	34
BB.	USAGE REPORT .....	34
CC.	DELIVERY ARO .....	34
DD.	DELIVERY LOCATIONS/INSTRUCTIONS (BIDDER IS CERTIFYING THAT THEY CAN MEET THE DELIVERY LOCATIONS/INSTRUCTIONS).....	35
EE.	ORDERS .....	35
FF.	QUALITY .....	35
GG.	PRICES .....	35
HH.	AUTHORIZED DEALER & WARRANTY .....	36
II.	SUBSTITUTIONS .....	36
JJ.	SECRETARY OF STATE REGISTRATION REQUIREMENTS.....	37
<b>Form A Bidder Contact Sheet .....</b>	<b>38</b>	



## GLOSSARY OF TERMS

**Acceptance Test Procedure:** Benchmarks and other performance criteria, developed by the State of Nebraska or other sources of testing standards, for measuring the effectiveness of products or services and the means used for testing such performance.

**Addendum:** Something to be added or deleted to an existing document; a supplement.

**After Receipt of Order (ARO):** After Receipt of Order

**Agency:** Any state agency, board, or commission other than the University of Nebraska, the Nebraska State colleges, the courts, the Legislature, or any other office or agency established by the Constitution of Nebraska.

**Agent/Representative:** A person authorized to act on behalf of another.

**Amend:** To alter or change by adding, subtracting, or substituting.

**Amendment:** A written correction or alteration to a document.

**Appropriation:** Legislative authorization to expend public funds for a specific purpose. Money set apart for a specific use.

**Award:** All purchases, leases, or contracts which are based on competitive bids will be awarded according to the provisions in the Invitation to Bid. The State reserves the right to reject any or all bids, wholly or in part, or to award to multiple bidders in whole or in part. The State reserves the right to waive any deviations or errors that are not material, do not invalidate the legitimacy of the bid, and do not improve the bidder's competitive position. All awards will be made in a manner deemed in the best interest of the State.

**Bid/Proposal:** The offer submitted by a vendor in a response to written solicitation.

**Bid Bond:** An insurance agreement, accompanied by a monetary commitment, by which a third party (the surety) accepts liability and guarantees that the vendor will not withdraw the bid.

**Bidder:** A vendor who submits an offer bid in response to a written solicitation.

**Business:** Any corporation, partnership, individual, sole proprietorship, joint-stock company, joint venture, or any other private legal entity.

**Business Day:** Any weekday, except State-recognized holidays.

**Calendar Day:** Every day shown on the calendar including Saturdays, Sundays, and State/Federal holidays.

**Cancellation:** To call off or revoke a purchase order without expectation of conducting or performing it at a later time.

**Central Processing Unit (CPU):** Any computer or computer system that is used by the State to store, process, or retrieve data or perform other functions using Operating Systems and applications software.

**Change Order:** Document that provides amendments to an executed purchase order.

**Collusion:** An agreement or cooperation between two or more persons or entities to accomplish a fraudulent, deceitful, or unlawful purpose.

**Commodities:** Any equipment, material, supply or goods; anything movable or tangible that is provided or sold.

**Commodities Description:** Detailed descriptions of the items to be purchased; may include information necessary to obtain the desired quality, type, color, size, shape, or special characteristics necessary to perform the work intended to produce the desired results.

**Competition:** The effort or action of two or more commercial interests to obtain the same business from third parties.

**Confidential Information:** Unless otherwise defined below, "Confidential Information" shall also mean proprietary trade secrets, academic and scientific research work which is in progress and unpublished, and other information which if released would give advantage to business competitors and serve no public purpose (see Neb. Rev. Stat. §84-712.05(3)). In accordance with Nebraska Attorney General Opinions 92068 and 97033, proof that information is proprietary requires identification of specific, named competitor(s) who would be advantaged by release of the information and the specific advantage the competitor(s) would receive.

**Contract:** An agreement between two or more parties creating obligations that are enforceable or otherwise recognizable at law; the writing that sets forth such an agreement.

**Contract Administration:** The management of the contract which includes and is not limited to contract signing, contract amendments and any necessary legal actions.

**Contract Management:** The management of day to day activities at the agency which includes and is not limited to ensuring deliverables are received, specifications are met, handling meetings and making payments to the Contractor.

**Contract Period:** The duration of the contract.

**Contractor:** Any individual or entity having a contract or awarded purchase order to furnish commodities or services.

**Cooperative Purchasing:** The combining of requirements of two or more political entities to obtain advantages of volume purchases, reduction in administrative expenses or other public benefits.

**Copyright:** A property right in an original work of authorship fixed in any tangible medium of expression, giving the holder the exclusive right to reproduce, adapt and distribute the work.

**Critical Program Error:** Any Program Error, whether or not known to the State, which prohibits or significantly impairs use of the Licensed Software as set forth in the documentation and intended in the contract.

**Customer Service:** The process of ensuring customer satisfaction by providing assistance and advice on those products or services provided by a Contractor.

**Default:** The omission or failure to perform a contractual duty.

**Deviation:** Any proposed change(s) or alteration(s) to either the terms and conditions or deliverables within the scope of the written solicitation or contract.

**Evaluation:** The process of examining an offer after opening to determine the vendor's responsibility, responsiveness to requirements, and to ascertain other characteristics of the offer that relate to determination of the successful award.

**Evaluation Committee:** Committee(s) appointed by the requesting agency that advises and assists the procuring office in the evaluation of bids/proposals (offers made in response to written solicitations).

**Extension:** Continuance of a contract for a specified duration upon the agreement of the parties beyond the original Contract Period. Not to be confused with "Renewal Period".

**Free on Board (F.O.B.) Destination:** The delivery charges are included in the quoted price and prepaid by the vendor. Vendor is responsible for all claims associated with damages during delivery of product.

**Free on Board (F.O.B.) Point of Origin:** The delivery charges are not included in the quoted price and are the responsibility of the agency. Agency is responsible for all claims associated with damages during delivery of product.

**Foreign Corporation:** A foreign corporation that was organized and chartered under the laws of another state, government, or country.

**Installation Date:** The date when the procedures described in "Installation by Contractor", and "Installation by State", as found in the RFP, ITB (written solicitation) or contract are completed.

**Late Bid/Proposal:** An offer received after the Opening Date and Time.

**Licensed Software Documentation:** The user manuals and any other materials in any form or medium customarily provided by the Contractor to the users of the Licensed Software which will provide the State with sufficient information to operate, diagnose, and maintain the Licensed Software properly, safely, and efficiently.

**Mandatory/Must:** Required, compulsory, or obligatory.

**May:** Discretionary, permitted; used to express possibility.

**Module (see System):** A collection of routines and data structures that perform a specific function of software.

**Must:** See Shall/Will/Must.

**National Institute for Governmental Purchasing (NIGP):** National Institute of Governmental Purchasing – Source used for assignment of universal commodity codes to goods and services.

**OEM:** Original equipment manufacturer.



**Open Market Purchase:** Authorization may be given to an agency to purchase items above direct purchase authority due to the unique nature, price, quantity, location of the using agency, or time limitations by the AS Materiel Division, State Purchasing Bureau.

**Opening Date and Time:** Specified date and time for the public opening of received, labeled, and sealed formal bids.

**Operating System:** The control program in a computer that provides the interface to the computer hardware and peripheral devices, and the usage and allocation of memory resources, processor resources, input/output resources, and security resources.

**Outsourcing:** The contracting out of a business process which an organization may have previously performed internally or has a new need for, to an independent organization from which the process is purchased back.

**Payroll & Financial Center (PFC):** Electronic procurement system of record.

**Performance Bond:** An insurance agreement, accompanied by a monetary commitment, by which a third party (the surety) accepts liability and guarantees that the Contractor fulfills any and all obligations under the contract.

**Platform:** A specific hardware and Operating System combination that is different from other hardware and Operating System combinations to the extent that a different version of the Licensed Software product is required to execute properly in the environment established by such hardware and Operating System combination.

**Pre-Bid/Pre-Proposal Conference:** A meeting scheduled for the purpose of clarifying a written solicitation and related expectations.

**Product:** Something that is distributed commercially for use or consumption and that is usually (1) tangible personal property, (2) the result of fabrication or processing, and (3) an item that has passed through a chain of commercial distribution before ultimate use or consumption.

**Program Error:** Code in Licensed Software which produces unintended results or actions, or which produces results or actions other than those described in the specifications. A program error includes, without limitation, any Critical Program Error.

**Program Set:** The group of programs and products, including the Licensed Software specified in the RFP, plus any additional programs and products licensed by the State under the contract for use by the State.

**Project:** The total scheme, program, or method worked out for the accomplishment of an objective, including all documentation, commodities, and services to be provided under the contract.

**Proposal:** See Bid/Proposal.

**Proprietary Information:** Proprietary information is defined as trade secrets, academic and scientific research work which is in progress and unpublished, and other information which if released would give advantage to business competitors and service no public purpose (see Neb. Rev. Stat. § 84-712.05(3)). In accordance with Attorney General Opinions 92068 and 97033, proof that information is proprietary requires identification of specific named competitor(s) advantaged by release of the information and the demonstrated advantage the named competitor(s) would gain by the release of information.

**Protest/Grievance:** A complaint about a governmental action or decision related to an Invitation to Bid or resultant contract, brought by a vendor who has timely submitted a bid response in connection with the award in question, to AS Materiel Division or another designated agency with the intention of achieving a remedial result.

**Public Proposal/Bid Opening:** The process of opening correctly submitted offers at the time and place specified in the written solicitation and in the presence of anyone who wished to attend.

**Recommended Hardware Configuration:** The data processing hardware (including all terminals, auxiliary storage, communication, and other peripheral devices) to the extent utilized by the State as recommended by the Contractor.

**Release Date:** The date of public release of the written solicitation to seek offers

**Renewal Period:** Optional contract periods subsequent to the original Contract Period for a specified duration with previously agreed to terms and conditions. Not to be confused with Extension.

**Request for Information (RFI):** A general invitation to vendors requesting information for a potential future solicitation. The RFI is typically used as a research and information gathering tool for preparation of a solicitation.

**Request for Proposal (RFP):** A written solicitation utilized for obtaining competitive offers.

**Responsible Bidder:** A bidder who has the capability in all respects to perform fully and lawfully all requirements with integrity and reliability to assure good faith performance.

**Responsive Bidder:** A bidder who has submitted a bid which conforms to all requirements of the solicitation document.

**Shall/Will/Must:** An order/command; mandatory.

**Should:** Expected; suggested, but not necessarily mandatory.

**Software License:** Legal instrument with or without printed material that governs the use or redistribution of licensed software.

**Sole Source – Commodity:** When an item is available from only one source due to the unique nature of the requirement, its supplier, or market conditions.

**Sole Source – Services:** A service of such a unique nature that the vendor selected is clearly and justifiably the only practical source to provide the service. Determination that the vendor selected is justifiably the sole source is based on either the uniqueness of the service or sole availability at the location required.

**Specifications:** The detailed statement, especially of the measurements, quality, materials, and functional characteristics, or other items to be provided under a contract.

**System (see Module):** Any collection or aggregation of two (2) or more Modules that is designed to function, or is represented by the Contractor as functioning or being capable of functioning, as an entity.

**Termination:** Occurs when either party, pursuant to a power created by agreement or law, puts an end to the contract prior to the stated expiration date. All obligations which are still executory on both sides are discharged but any right based on prior breach or performance survives.

**Trade Secret:** Information, including, but not limited to, a drawing, formula, pattern, compilation, program, device, method, technique, code, or process that (a) derives independent economic value, actual or potential, from not being known to, and not being ascertainable by proper means by, other persons who can obtain economic value from its disclosure or use; and (b) is the subject of efforts that are reasonable under the circumstances to maintain its secrecy (see Neb. Rev. Stat. § 87-502(4)).

**Trademark:** A word, phrase, logo, or other graphic symbol used by a manufacturer or vendor to distinguish its product from those of others, registered with the U.S. Patent and Trademark Office.

**Upgrade:** Any change that improves or alters the basic function of a product of service.

**Vendor:** An individual or entity lawfully conducting business in the State of Nebraska, or licensed to do so, who seeks to provide goods or services under the terms of a written solicitation.

**Vendor Performance Report:** A report issued to the Contractor by State Purchasing Bureau when products or services delivered or performed fail to meet the terms of the purchase order, contract, and/or specifications, as reported to State Purchasing Bureau by the agency. The State Purchasing Bureau shall contact the Contractor regarding any such report. The vendor performance report will become a part of the permanent record for the Contractor. The State may require vendor to cure. Two such reports may be cause for immediate termination.

**Will:** See Shall/Will/Must.

**Work Day:** See Business Day.



**I. SCOPE OF THE INVITATION TO BID (ITB)**

The State of Nebraska, Administrative Services (AS), Materiel Division, State Purchasing Bureau (hereafter known as State Purchasing Bureau or SPB), is issuing this Invitation To Bid, Number 5465 OF for the purpose of selecting a qualified Contractor to provide Articulated All Wheel Drive Loader With Minimum 2.2 Cubic Yard Bucket.

A contract resulting from this Invitation To Bid will be issued approximately for a period of (1) year effective the date of award. The contract has the option to be renewed for four (4) additional one (1) year periods as mutually agreed upon by all parties.

**ALL INFORMATION PERTINENT TO THIS INVITATION TO BID CAN BE FOUND ON THE INTERNET AT:**  
<http://das.nebraska.gov/materiel/purchasing.html>

**A. SCHEDULE OF EVENTS**

The State expects to adhere to the tentative procurement schedule shown below. It should be noted, however, that some dates are approximate and subject to change.

ACTIVITY	DATE/TIME
Release Invitation To Bid	November 4, 2016
Last day to submit written questions	November 18, 2016
State responds to written questions through Invitation To Bid "Addendum" and/or "Amendment" to be posted to the Internet at: <a href="http://das.nebraska.gov/materiel/purchasing.html">http://das.nebraska.gov/materiel/purchasing.html</a>	November 22, 2016
Bid opening Location: State Purchasing Bureau 1526 K Street, Suite 130 Lincoln, NE 68508	December 15, 2016 2:00 PM Central Time
Review for conformance of mandatory requirements	TBA
Review period	TBA
Post "Letter of Intent to Award" to Internet at: <a href="http://das.nebraska.gov/materiel/purchasing.html">http://das.nebraska.gov/materiel/purchasing.html</a>	TBA
Contract finalization period	TBA
Contract award	TBA

## **II. PROCUREMENT PROCEDURES**

### **A. PROCURING OFFICE AND CONTACT PERSON**

Procurement responsibilities related to this Invitation To Bid reside with the State Purchasing Bureau. The point of contact for the procurement is as follows:

Name: René A. Botts  
Agency: State Purchasing Bureau  
Address: 1526 K Street, Suite 130  
Lincoln, NE 68508

### **B. GENERAL INFORMATION**

The Invitation To Bid (ITB) is designed to solicit bids from qualified vendors who will be responsible for providing Articulated All Wheel Drive Loader With Minimum 2.2 Cubic Yard Bucket at a competitive and reasonable cost. Bids that do not conform to the mandatory items as indicated in the Invitation To Bid will not be considered.

Bids shall conform to all instructions, conditions, and requirements included in the Invitation To Bid. Prospective Bidders are expected to carefully examine all documentation, schedules, and requirements stipulated in this Invitation To Bid, and respond to each requirement in the format prescribed.

In addition to the provisions of this Invitation To Bid and the awarded bid, which shall be incorporated by reference in the contract, any additional clauses or provisions required by the terms and conditions will be included as an amendment to the contract.

A fixed-price contract will be awarded as a result of this Invitation to Bid.

### **C. COMMUNICATION WITH STATE STAFF AND EVALUATORS**

From the date the Invitation To Bid is issued until a determination is announced regarding the contract award, contact regarding this project between potential Contractors and individuals employed by the State is restricted to only written communication with the staff designated above as the point of contact for this Invitation To Bid. Bidders shall not have any communication with, or attempt to communicate with or influence in any way, any evaluator involved in this ITB.

Once a Contractor is preliminarily selected, as documented in the intent to award, that Contractor is restricted from communicating with State staff until a contract is signed. The following exceptions to these restrictions are permitted:

- a. Written communication with the person(s) designated as the point(s) of contact for this Invitation To Bid or procurement;
- b. Contacts made pursuant to any pre-existing contracts or obligations; and
- c. State-requested presentations, key personnel interviews, clarification sessions or discussions to finalize a contract.

Violations of these conditions may be considered sufficient cause to reject a Bidder's bid and/or selection irrespective of any other condition. No individual member of the State or employee of the State is empowered to make binding statements regarding this Invitation To Bid. The Buyer will issue any clarifications or opinions regarding this Invitation To Bid in writing.

### **D. WRITTEN QUESTIONS AND ANSWERS**

Any explanation desired by a Bidder regarding the meaning or interpretation of any Invitation To Bid provision must be submitted in writing to the State Purchasing Bureau and clearly marked "ITB Number 5465 OF; Articulated All Wheel Drive Loader With Minimum 2.2 Cubic Yard Bucket.. Questions". It is preferred that questions be sent via e-mail to [as.materieelpurchasing@nebraska.gov](mailto:as.materieelpurchasing@nebraska.gov) Questions may also be sent by facsimile to 402-471-2089, and must include a cover sheet clearly indicating that the transmission is to the attention of René A. Botts, showing the total number of pages transmitted, and clearly marked "ITB Number 5465 OF Articulated All Wheel Drive Loader With Minimum 2.2 Cubic Yard Bucket Questions".

It is recommended that Bidders submit questions sequentially numbered and include the Invitation To Bid reference and page number.



Written answers will be provided through an addendum to be posted on the Internet at <http://das.nebraska.gov/materiel/purchasing.html> on or before the date shown in the Schedule of Events.

<u>Question Number</u>	<u>ITB Section References</u>	<u>ITB Page Number</u>	<u>Question</u>

**E. SUBMISSION OF BIDS**

The following describes the requirements related to bid submission, bid handling, and review by the State.

To facilitate the evaluation process, one (1) original of the entire bid should be submitted. Bids must be submitted by the bid due date and time. **A separate sheet must be provided that clearly states which sections, if applicable, have been submitted as proprietary or have copyrighted materials.** All proprietary information the Bidder wishes the State to withhold must be submitted in accordance with the instructions outlined in Section III, Proprietary Information. If a recipient phone number is required for delivery purposes, 402-471-6500 should be used. The Invitation To Bid number must be included in all correspondence.

**F. IMPORTANT NOTICE LANGUAGE**

Bid responses should include the completed Form A and Bidder Contact Sheet. Bids must reference the Invitation To Bid number and be sent to the specified address. Please note that the address label should appear as specified in Section II part A on the page of the calendar or bidder's bid response packet. Rejected late bids will return to the bidder unopened.

Pursuant to Neb. Rev. Stat. § 84-602.02, all State contracts in effect as of January 1, 2014 will be post to a public website beginning July 1, 2014. All non-proprietary or confidential information as defined by State Law WILL BE POSTED FOR PUBLIC VIEWING.

**G. DISCOUNTS**

Prices quoted shall be inclusive of ALL trade discounts. Cash discount terms of less than thirty (30) days will not be considered as part of the bid. Cash discount periods will be computed from the date of receipt of a properly executed claim voucher or the date of completion of delivery of all items in a satisfactory condition, whichever is later.

**H. PRICE ADJUSTMENTS DURING CONTRACT TERM**

Any request for a price adjustment must be submitted in writing to the State Purchasing Bureau, a minimum of thirty (30) days prior to proposed effective date of increase, and must show cause with supporting documentation (such as notification letter from manufacturer). Further documentation may be required by the State, to authenticate the increase (such as manufacturer invoices). Failure to supply any requested supporting documentation may be grounds to cancel the contract. The State further reserves the right to reject any proposed price increase(s), cancel the contract and re-bid if determined to be in the best interest of the State. The State will be given full proportionate benefit of any decrease for the term of the contract. No price increases are to be billed to any State Agencies without prior written approval by the State Purchasing Bureau. Contract supplier or suppliers may honor pricing and extend the contract to political sub-divisions, cities, and counties. Terms and conditions of the contract must be met by political sub-divisions, cities, and counties.

**I. PAYMENT**

Payment will be made by the responsible agency in accordance with the State of Nebraska Prompt Payment Act, Neb. Rev. Stat. §§ 81-2401 through 81-2408. The State may request that payment be made electronically instead of by state warrant.

**J. BID EXECUTION**

Bids must be signed in ink by the Bidder on the State of Nebraska's Invitation To Bid form. All bids must be typewritten or in ink on the State of Nebraska's Invitation To Bid form. Erasures and alternations must be initialed by the Bidder in ink. No telephone or voice bids will be accepted. Failure to comply with these provisions may result in the rejection of the bid.

**K. BID OPENING**

The sealed bids will be publicly opened and the bidding entities announced on the date, time, and location shown in the Schedule of Events. Bids will be available for viewing by those present at the bid opening. Vendors may also contact the State to schedule an appointment for viewing bids after the Intent to Award has been posted to the website.

**L. ELECTRONIC DOCUMENTS/FACSMILIE SUBMISSIONS**

The State Purchasing Bureau will not accept electronic responses to an Invitation To Bid for a commodity contract at any dollar amount. However, an exception applies to one-time purchase bids under \$25,000. These one-time purchase bids may be submitted by electronic means, but cannot exceed ten (10) pages.

Sealed responses to an Invitation To Bid that contain a two party bid, may include electronic pages transmitted between the two parties, but these documents cannot be submitted to the State Purchasing Bureau by electronic means. No direct electronic solicitation responses will be accepted for a commodity contract of any estimated value.

**M. VALID BID TIME**

Bids shall be firm for a minimum of sixty (60) calendar days after the opening date, unless otherwise stipulated by either party in the Invitation To Bid.

**N. ALTERNATE/EQUIVALENT BIDS**

Bidder may offer bids which are at variance from the express specifications of the Invitation To Bid. The State reserves the right to consider and accept such bids if, in the judgment of the State Procurement Manager, the bid will result in goods and/or services equivalent to or better than those which would be supplied in the original bid specifications. Bidders must indicate on the Invitation To Bid the manufacturer's name, number and shall submit with their bid, sketches, descriptive literature and/or complete specifications. Reference to literature submitted with a previous bid will not satisfy this provision. Bids which do not comply with these requirements are subject to rejection. In the absence of any stated deviation or exception, the bid will be accepted as in strict compliance with all terms, conditions and specification, and the Bidder shall be held liable therefore.

**O. LATE BIDS**

Bids received after the time and date of the bid opening will be considered late bids. Rejected late bids will be returned to the Bidder unopened. The State is not responsible for bids that are late or lost due to mail service inadequacies, traffic, or any other reason(s).

**P. NO BID**

If not submitting a bid, respond by returning the Invitation To Bid form explaining the reason in the space provided. NOTE: To qualify as a respondent, Bidder must submit a "NO BID" and it must be received no later than the stated bid opening date and time.

**Q. LUMP SUM OR ALL OR NONE BIDS**

The State reserves the right to purchase item-by-item, by groups or as a total when the State may benefit by so doing. Bidders may submit a bid on an "all or none" or "lump sum" basis, but should also submit a bid on an item-by-item basis. The term "all or none" means a conditional bid which requires the purchase of all items on which bids are offered and Bidder declines to accept award on individual items; a "lump sum" bid is one in which the Bidder offers a lower price than the sum of the individual bids if all items are purchased but agrees to deliver individual items at the prices quoted.

**R. REJECTION OF BIDS**

The State reserves the right to reject any or all bids, wholly or in part, or to award to multiple Bidders in whole or in part. The State reserves the right to waive any deviations or errors that are not material, do not invalidate the legitimacy of the bid and do not improve the Bidder's competitive position. All awards will be made in a manner deemed in the best interest of the State. The State reserves the right to reject any or all bids and re-advertise for bids; and further reserves the right to waive any informality or irregularity.

**S. EVALUATION OF BIDS**

All responses to this Invitation To Bid which fulfill all mandatory requirements will be evaluated for conformance to requested specifications. Elements that may also be considered include but are not limited to:

- a. The ability, capacity, and skill of the Bidder to deliver and implement the system or project, or provide the requested goods, that meet the requirements of the Invitation to Bid;
- b. The character, integrity, reputation, judgment, experience, and efficiency of the Bidder;
- c. Whether the Bidder can perform the contract within the specified time frame;
- d. The quality of Bidder performance on prior contracts; and
- e. Such other information that may be secured and that has a bearing on the decision to award the contract.

**T. BID TABULATIONS**

Bid tabulations are available on the website at: <http://www.das.state.ne.us/materiel/purchasing/bidtabs.htm>. Bid tabulations will not be provided by telephone or facsimile. Bid files may be examined, after the evaluation period is over, during normal business hours by appointment.



**U. MANDATORY REQUIREMENTS**

The bids will first be examined to determine if all mandatory requirements listed below have been addressed to warrant further evaluation. Bids not meeting mandatory requirements will be excluded from further evaluation. The mandatory requirement items are as follows:

- a. Invitation To Bid for Commodity Contract form, signed in ink;
- b. The completed Invitation To Bid document; and
- c. Bidder should submit a copy of the manufacturer's written warranty with bid submission. If not submitted with ITB, bidder has five (5) business days to submit document upon request of State Purchasing Bureau.

**V. REFERENCE CHECKS**

The State reserves the right to check any reference(s), regardless of the source of the reference information, including but not limited to, those that may be identified by the company in the bid, those indicated through the explicitly specified contacts, those that are identified during the review of the bid, or those that result from communication with other entities involved with similar projects. The State may use a third party to conduct reference checks.

**W. RECYCLING**

As outlined in Neb. Rev. Stat. § 81-15,159, a preference shall be given to those Bidders that provide products, materials, or supplies which are manufactured or produced from recycled material or that can be readily reused or recycled after its normal use. Preference will also be given to purchases of corn-based biodegradable plastics and road deicers. No preference shall be given if such preference would result in the purchase of products, materials, or supplies that are of inadequate quality or of substantially higher cost.

**X. SECRETARY OF STATE/TAX COMMISSIONER REGISTRATION REQUIREMENTS**

All Bidders should be authorized to transact business in the State of Nebraska. All Bidders are expected to comply with all Nebraska Secretary of State Registration requirements. It is the responsibility of the Bidder to comply with any registration requirements pertaining to types of business entities (e.g. person, partnership, foreign or domestic limited liability company, association, or foreign or domestic corporation or other type of business entity). The Bidder who is the recipient of an Intent to Award will be required to certify that it has complied and produce a true and exact copy of its current (within ninety (90) calendar days), valid Certificate of Good Standing or Letter of Good Standing; or in the case of a sole proprietorship, provide written documentation of sole proprietorship. This must be accomplished prior to the award of the contract. Construction Contractors are expected to meet all applicable requirements of the Nebraska Contractor Registration Act and provide a current, valid certification of registration. Further, all Bidders shall comply with any and all other applicable Nebraska statutes regarding transacting business in the State of Nebraska. Bidders should submit the above certification(s) with their bid.

**Y. RESIDENT BIDDER**

Pursuant to Neb. Rev. Stat. §§ 73-101.01 through 73-101.02, a Resident Bidder shall be allowed a preference against a Nonresident Bidder from a state which gives or requires a preference to Bidders from that state. The preference shall be equal to the preference given or required by the state of the Nonresident Bidders. Where the lowest responsible bid from a resident bidder is equal in all respects to one from a nonresident bidder from a state which has no preference law, the resident bidder shall be awarded the contract. The provision of this preference shall not apply to any contract for any project upon which federal funds would be withheld because of the provisions of this preference.

**Z. EVALUATION CRITERIA AND AWARD**

The State of Nebraska reserves the right to evaluate bids in a manner, and utilizing methods, selected in the State of Nebraska's best interest and discretion. The State of Nebraska may waive informalities or irregularities in bids if the waiver is in the best interest of the State of Nebraska and such waiver does not prejudice other bidders in the State of Nebraska's discretion. After evaluation of the bids, the State of Nebraska may take, in the State's discretion, one or more of the following actions:

- Accept or reject a portion of or all of a bid;
- Accept or reject all bids;
- Withdraw the Invitation to Bid;
- Elect to rebid the Invitation to Bid;
- Award single lines or multiple lines to one or more bidders; or,
- Award one or more complete contracts.

The State of Nebraska reserves the right to make awards that are in the best interest of the State of Nebraska. The State of Nebraska may consider, but is not limited to, one or more of the following award criteria:

- Price;
- Location;

Quality;  
Delivery time; and,  
State contract management requirements or costs.  
[Additional criteria may be added]

By submitting a bid in response to this Invitation to Bid, the Bidder grants to the State the right to contact or arrange a visit in person with any or all of the Bidder's clients.

Once an Intent to Award decision has been determined, it will be posted to the Internet at:  
<http://das.nebraska.gov/materiel/purchasing.html/>

**AA. POLITICAL SUB-DIVISIONS**

The Contractor may extend the contract to political sub-divisions conditioned upon the honoring of the prices charged to the State. Terms and conditions of the Contract must be met by political sub-divisions. Under no circumstances shall the State be contractually obligated or liable for any purchases by political sub-divisions or other public entities not authorized by Neb. Rev. Stat. § 81-145, listed as "all officers of the state, departments, bureaus, boards, commissions, councils, and institutions receiving legislative appropriations." A listing of Nebraska political subdivisions may be found at the website of the Nebraska Auditor of Public Accounts.

**BB. VIOLATION OF TERMS AND CONDITIONS**

Violation of the terms and conditions contained in this Invitation To Bid or any resultant contract, at any time before or after the award, shall be grounds for action by the State which may include, but is not limited to, the following:

- a. Rejection of a bidder's proposal;
- b. Withdrawal of the Intent to Award
- c. Termination of the resulting contract.
- d. Legal action.
- e. Suspension of the bidder from further bidding with the State for the period of time relative to the seriousness of the violation, such period to be within the sole discretion of the State.



**III. INVITATION TO BID - TERMS AND CONDITIONS**

By signing the "Invitation To Bid" form, the Bidder guarantees compliance with the provisions stated in this Invitation To Bid, agrees to the Terms and Conditions unless otherwise agreed to, and certifies Bidder maintains a drug free work place environment.

Bidders are expected to closely read the Terms and Conditions and provide a binding signature of intent to comply with the Terms and Conditions; provided, however, a Bidder may indicate any exceptions to the Terms and Conditions by one (1) clearly identifying the term or condition by subsection, and two (2) including an explanation for the Bidder's inability to comply with such term or condition which includes a statement recommending terms and conditions the Bidder would find acceptable. Rejection in whole or in part of the Terms and Conditions may be cause for rejection of a Bidder's bid. Bidders must include completed Section III with their ITB response.

The State of Nebraska is soliciting bids in response to the ITB. The State of Nebraska will not consider bids that propose the substitution of the bidder's contract, agreements, or terms for those of the State of Nebraska's. Any License, Service Agreement, Customer Agreement, User Agreement, Bidder Terms and Conditions, Document, or Clause purported or offered to be included as a part of this ITB must be submitted as individual clauses, as either a counter-offer or additional language, and each clause must be acknowledged and accepted in writing by the State. If the Bidder's clause is later found to be in conflict with the ITB or resulting contract the Bidder's clause shall be subordinate to the ITB or resulting contract.

**A. GENERAL**

Accept (Initial)	Reject (Initial)	Reject & Provide Alternative within ITB Response (Initial)	NOTES/COMMENTS:

The contract resulting from this Invitation To Bid shall incorporate the following documents:

- a. Amendment to Contract Award with the most recent dated amendment having the highest priority;
- b. Contract Award and any attached Addenda;
- c. The Invitation To Bid form and the Contractor's Bid Response signed in ink
- d. Amendments to ITB and any Questions and Answers; and
- e. The original ITB document and any Addenda.

These documents constitute the entirety of the contract.

Unless otherwise specifically stated in a contract amendment, in case of any conflict between the incorporated documents, the documents shall govern in the following order of preference with number one (1) receiving preference over all other documents and with each lower numbered document having preference over any higher numbered document: 1) Amendment to Contract Award with the most recent dated amendment having the highest priority, 2) Contract Award and any attached Addenda, 3) the signed Invitation To Bid form and the Contractor's Bid Response 4) Amendments to ITB and any Questions and Answers, 5) the original ITB document and any Addenda.

Any ambiguity in any provision of this contract which shall be discovered after its execution shall be resolved in accordance with the rules of contract interpretation as established in the State of Nebraska.

Once bids are opened they become the property of the State of Nebraska and will not be returned.

**B. DEBARMENT**

Accept (Initial)	Reject (Initial)	Reject & Provide Alternative within ITB Response (Initial)	NOTES/COMMENTS:

The contractor, by signature to the Invitation To Bid, certifies that the contractor is not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded by any federal department or agency from participating in transactions (debarred). The contractor also agrees to include the above requirements in any and all

subcontracts into which it enters. The contractor also agrees to include the above requirements in any and all subcontracts into which it enters. The contractor shall immediately notify the Department if, during the term of this contract, contractor becomes debarred. The Department may immediately terminate this contract by providing contractor written notices if contractor becomes debarred during the term of this contract.

**C. SPECIFICATIONS**

Accept (Initial)	Reject (Initial)	Reject & Provide Alternative within ITB Response (Initial)	NOTES/COMMENTS:

Any manufacturer's names, trade names, brand names, information and/or catalog numbers listed in a specification are for reference and not intended to limit competition, but will be used as the standard by which equivalent material offered will be judged. The State Procurement Manager will be the sole judge of equivalency. The Bidder may offer any brands which meets or exceeds the specification. When a specific product is required, the Invitation to Bid will so state. Any item bid is to be the latest current model under standard production at the time of order. No used or refurbished equipment will be accepted, unless otherwise stated.

**D. PERFORMANCE AND DEFAULT**

Accept (Initial)	Reject (Initial)	Reject & Provide Alternative within ITB Response (Initial)	NOTES/COMMENTS:

The State reserves the right to require a performance bond from the successful Bidder, as provided by law, without expense to the State. Otherwise, in case of default of the Contractor, the State may procure the articles from other sources and hold the Contractor responsible for any excess cost occasioned thereby.

**E. DRUG POLICY**

Accept (Initial)	Reject (Initial)	Reject & Provide Alternative within ITB Response (Initial)	NOTES/COMMENTS:

Bidder certifies that it maintains a drug free workplace environment to ensure worker safety and workplace integrity. Contractor agrees to provide a copy of its drug free workplace policy at any time upon request by the State.

**F. NE ACCESS TECHNOLOGY STANDARDS**

Accept (Initial)	Reject (Initial)	Reject & Provide Alternative within ITB Response (Initial)	NOTES/COMMENTS:

Contractor shall review the Nebraska Technology Access Standards, found at <http://nitc.nebraska.gov/standards/2-201.html> and ensure that products and/or services provided under the contract are in compliance or will comply with the applicable standards to the greatest degree possible. In the event such standards change during the Contractor's performance, the State may create an amendment to the contract to request that contract comply with the changed standard at a cost mutually acceptable to the parties.



**G. COMPLIANCE WITH CIVIL RIGHTS LAWS AND EQUAL OPPORTUNITY EMPLOYMENT / NONDISCRIMINATION**

Accept (Initial)	Reject (Initial)	Reject & Provide Alternative within ITB Response (Initial)	NOTES/COMMENTS:

The Contractor shall comply with all applicable local, state, and federal statutes and regulations regarding civil rights laws and equal opportunity employment. The Nebraska Fair Employment Practice Act prohibits Contractors of the State of Nebraska, and their Subcontractors, from discriminating against any employee or applicant for employment, with respect to hire, tenure, terms, conditions, compensation, or privileges of employment because of race, color, religion, sex, disability, marital status, or national origin (Neb. Rev. Stat. §§ 48-1101 t 48-1125). The Contractor guarantees compliance with the Nebraska Fair Employment Practice Act, and breach of this provision shall be regarded as a material breach of contract. The Contractor shall insert a similar provision in all subcontracts for services to be covered by any contract resulting from this Invitation To Bid.

**H. PERMITS, REGULATIONS, LAWS**

Accept (Initial)	Reject (Initial)	Reject & Provide Alternative within ITB Response (Initial)	NOTES/COMMENTS:

The Contractor shall procure and pay for all permits, licenses, and approvals necessary for the execution of the contract. The Contractor shall comply with all applicable local, state, and federal laws, ordinances, rules, orders, and regulations.

**I. COOPERATION WITH OTHER CONTRACTORS**

Accept (Initial)	Reject (Initial)	Reject & Provide Alternative within ITB Response (Initial)	NOTES/COMMENTS:

The State may already have in place or choose to award supplemental contracts related to this Invitation To Bid or any portion thereof.

- a. The State reserves the right to award the contract jointly between two or more potential Contractors, if such an arrangement is in the best interest of the State.
- b. The Contractor shall agree to cooperate with such other Contractors, and shall not commit or permit any act which may interfere with the performance of work by any other Contractor.
- c. The State reserves the right to award multiple contracts or to award line by line contract.

**J. CONTRACTOR RESPONSIBILITY**

Accept (Initial)	Reject (Initial)	Reject & Provide Alternative within ITB Response (Initial)	NOTES/COMMENTS:

The Contractor is solely responsible for fulfilling the contract, with responsibility for all services offered and products to be delivered as stated in the Invitation To Bid, the Contractor's bid, and the resulting contract. The Contractor shall be the sole point of contact regarding all contractual matters.

**K. CONTRACT CONFLICTS**

Accept (Initial)	Reject (Initial)	Reject & Provide Alternative within RFP Response (Initial)	NOTES/COMMENTS:

Contractor shall insure that contracts or agreements with sub-contractors and agents, and the performance of services in relation to this contract by sub-contractors and agents, does not conflict with this contract.

**L. FUNDING OUT CLAUSE OR LOSS OF APPROPRIATIONS**

Accept (Initial)	Reject (Initial)	Reject & Provide Alternative within ITB Response (Initial)	NOTES/COMMENTS:

The State may terminate the contract, in whole or in part, in the event funding is no longer available. The State's obligation to pay amounts due for fiscal years following the current fiscal year is contingent upon legislative appropriation of funds for the contract. Should said funds not be appropriated, the State may terminate the contract with respect to those payments for the fiscal years for which such funds are not appropriated. The State will give the Contractor written notice thirty (30) calendar days prior to the effective date of any termination, and advise the Contractor of the location of any related equipment. All obligations of the State to make payments after the termination date will cease and all interest of the State in any related equipment will terminate. In no event shall the Contractor be paid for a loss of anticipated profit.

**M. RIGHT TO AUDIT**

Accept (Initial)	Reject (Initial)	Reject & Provide Alternative within ITB Response (Initial)	NOTES/COMMENTS:

Contractor shall establish and maintain a reasonable accounting system that enables the State to readily audit contract. The State and its authorized representatives shall have the right to audit, to examine, and to make copies of or extracts from all financial and related records (in whatever form they may be kept, whether written, electronic, or other) relating to or pertaining to this contract kept by or under the control of the Contractor, including, but not limited to those kept by the Contractor, its employees, agents, assigns, successors, and Subcontractors. Such records shall include, but not be limited to, accounting records, written policies and procedures; all paid vouchers including those for out-of-pocket expenses; other reimbursement supported by invoices; ledgers; cancelled checks; deposit slips; bank statements; journals; original estimates; estimating work sheets; contract amendments and change order files; backcharge logs and supporting documentation; insurance documents; payroll documents; timesheets; memoranda; and correspondence.

Contractor shall, at all times during the term of this contract and for a period of five (5) years after the completion of this contract, maintain such records, together with such supporting or underlying documents and materials. The Contractor shall at any time requested by the State, whether during or after completion of this contract and at Contractor's own expense make such records available for inspection and audit (including copies and extracts of records as required) by the State. Such records shall be made available to the State during normal business hours at the Contractor's office or place of business. In the event that no such location is available, then the financial records, together with the supporting or underlying documents and records, shall be made available for audit at a time and location that is convenient for the State. Contractor shall ensure the State has these rights with Contractor's assigns, successors, and Subcontractors, and the obligations of these rights shall be explicitly included in any subcontracts or agreements formed between the Contractor and any Subcontractors to the extent that those subcontracts or agreements relate to fulfillment of the Contractor's obligations to the State.



Costs of any audits conducted under the authority of this right to audit and not addressed elsewhere will be borne by the State unless certain exemption criteria are met. If the audit identifies overpricing or overcharges (of any nature) by the Contractor to the State in excess of one-half of one percent (.5%) of the total contract billings, the Contractor shall reimburse the State for the total costs of the audit. If the audit discovers substantive findings related to fraud, misrepresentation, or non-performance, the Contractor shall reimburse the State for total costs of audit. Any adjustments and/or payments that must be made as a result of any such audit or inspection of the Contractor's invoices and/or records shall be made within a reasonable amount of time (not to exceed 90 days) from presentation of the State's findings to Contractor.

**N. CONFLICT OF INTEREST**

Accept (Initial)	Reject (Initial)	Reject & Provide Alternative within ITB Response (Initial)	NOTES/COMMENTS:

By submitting a bid, Bidder certifies that there does not now exist any relationship between the Bidder and any person or entity which is or gives the appearance of a conflict of interest related to this Invitation To Bid or project.

The Bidder certifies that it shall not take any action or acquire any interest, either directly or indirectly, which will conflict in any manner or degree with the performance of its services hereunder or which creates an actual or appearance of conflict of interest.

The Bidder certifies that it will not employ any individual known by Bidder to have a conflict of interest.

**O. BID PREPARATION COSTS**

Accept (Initial)	Reject (Initial)	Reject & Provide Alternative within ITB Response (Initial)	NOTES/COMMENTS:

The State shall not incur any liability for any costs incurred by Bidders in replying to this Invitation To Bid, including any activity related to bidding on this Invitation To Bid.

**P. ERRORS AND OMISSIONS**

Accept (Initial)	Reject (Initial)	Reject & Provide Alternative within ITB Response (Initial)	NOTES/COMMENTS:

The Bidder shall not take advantage of any errors and/or omissions in this Invitation To Bid or resulting contract. The Bidder must promptly notify the State of any errors and/or omissions that are discovered.

**Q. ASSIGNMENT BY THE STATE**

Accept (Initial)	Reject (Initial)	Reject & Provide Alternative within ITB Response (Initial)	NOTES/COMMENTS:

The State shall have the right to assign or transfer the contract or any of its interests herein to any agency, board, commission, or political subdivision of the State of Nebraska. There shall be no charge to the State for any assignment hereunder.

**R. ASSIGNMENT BY THE CONTRACTOR**

Accept (Initial)	Reject (Initial)	Reject & Provide Alternative within ITB Response (Initial)	NOTES/COMMENTS:

The Contractor may not assign, voluntarily or involuntarily, the contract or any of its rights or obligations hereunder (including without limitation rights and duties of performance) to any third party, without the prior written consent of the State, which will not be unreasonably withheld.

**S. GOVERNING LAW**

Accept (Initial)	Reject (Initial)	Reject & Provide Alternative within ITB Response (Initial)	NOTES/COMMENTS:

The contract shall be governed in all respects by the laws and statutes of the State of Nebraska. Any legal proceedings against the State of Nebraska regarding this Invitation To Bid or any resultant contract shall be brought in the State of Nebraska administrative or judicial forums as defined by State law. The Contractor must be in compliance with all Nebraska statutory and regulatory law.

**T. ATTORNEY'S FEES**

Accept (Initial)	Reject (Initial)	Reject & Provide Alternative within ITB Response (Initial)	NOTES/COMMENTS:

In the event of any litigation, appeal, or other legal action to enforce any provision of the contract, the Contractor agrees to pay all expenses of such action, as permitted by law, including attorney's fees and costs, if the State is the prevailing party.

**U. ADVERTISING**

Accept (Initial)	Reject (Initial)	Reject & Provide Alternative within ITB Response (Initial)	NOTES/COMMENTS:

The Contractor agrees not to refer to the contract award in advertising in such a manner as to state or imply that the company or its services are endorsed or preferred by the State. News releases pertaining to the project shall not be issued without prior written approval from the State.



**V. NOTIFICATION**

Accept (Initial)	Reject (Initial)	Reject & Provide Alternative within ITB Response (Initial)	NOTES/COMMENTS:

During the bid process, all communication between the State and a Bidder shall be between the Bidder's representative clearly noted in its bid and the buyer noted in Section II Part A., Procuring Office and Contact Person, of this ITB. Bidder is at all times to keep its point of contact updated with the most current information. After the award of the contract, all notices under the contract shall be deemed duly given upon delivery to the staff designated as the point of contact for this ITB, in person, or upon delivery by U.S. Mail, facsimile, or e-mail. Each Bidder should provide in its bid the name, title, and complete address of its designee to receive notices.

- a. Except as otherwise expressly specified herein, all notices, requests, or other communications shall be in writing and shall be deemed to have been given if delivered personally or mailed, by U.S. Mail, postage prepaid, return receipt requested, to the parties at their respective addresses set forth above, or at such other addresses as may be specified in writing by either of the parties. All notices, requests, or communications shall be deemed effective upon personal delivery or three (3) calendar days following deposit in the mail.
- b. Whenever the Contractor encounters any difficulty which is delaying or threatens to delay its timely performance under the contract, the Contractor shall immediately give notice thereof in writing to the State reciting all relevant information with respect thereto. Such notice shall not in any way constitute a basis for an extension of the delivery schedule or be construed as a waiver by the State of any of its rights or remedies to which it is entitled by law or equity or pursuant to the provisions of the contract. Failure to give such notice, however, may be grounds for denial of any request for an extension of the delivery schedule because of such delay.

Either party may change its address for notification purposes by giving notice of the change, and setting forth the new address and an effective date.

For the duration of the contract, all communication between Contractor and the State regarding the contract shall take place between the Contractor and individuals specified by the State in writing. Communication about the contract between Contractor and individuals not designated as points of contact by the State is strictly forbidden.

**W. EARLY TERMINATION**

Accept (Initial)	Reject (Initial)	Reject & Provide Alternative within ITB Response (Initial)	NOTES/COMMENTS:

The contract may be terminated as follows:

- a. The State and the Contractor, by mutual written agreement, may terminate the contract at any time.
- b. The State, in its sole discretion, may terminate the contract for any reason upon thirty (30) calendar days written notice to the Contractor shall not relieve the Contractor of warranty or other obligations incurred under the terms of the contract. In the event of cancellation the Contractor shall be entitled to payment, for those products received and accepted by the State.
- c. The State may terminate the contract immediately for the following reasons:
  - a. if directed to do so by statute;
  - b. Contractor has made an assignment for the benefit of creditors, has admitted in writing its inability to pay debts as they mature, or has ceased operating in the normal course of business;
  - c. a trustee or receiver of the Contractor or of any substantial part of the Contractor's assets has been appointed by a court;

- d. fraud, misappropriation, embezzlement, malfeasance, misfeasance, or illegal conduct pertaining to performance under the contract by its Contractor, its employees, officers, directors, or shareholders;
- e. an involuntary proceeding has been commenced by any party against the Contractor under any one of the chapters of Title 11 of the United States Code and (i) the proceeding has been pending for at least sixty (60) calendar days; or (ii) the Contractor has consented, either expressly or by operation of law, to the entry of an order for relief; or (iii) the Contractor has been decreed or adjudged a debtor;
- f. a voluntary petition has been filed by the Contractor under any of the chapters of Title 11 of the United States Code;
- g. Contractor intentionally discloses confidential information;
- h. Contractor has or announces it will discontinue support or provision of the deliverable;
- i. second or subsequent documented "vendor performance report" form deemed acceptable by the State Purchasing Bureau; or
- j. Contractor engaged in collusion or ones' actions which could have provided Contractor an unfair advantage in obtaining this contract.

**X. BREACH BY CONTRACTOR**

Accept (Initial)	Reject (Initial)	Reject & Provide Alternative within ITB Response (Initial)	NOTES/COMMENTS:

The State may terminate the contract, in whole or in part, if the Contractor fails to perform its obligations under the contract in a timely and proper manner. The State may, by providing a written notice of default to the Contractor, allow the Contractor to cure a failure or breach of contract within a period of thirty (30) calendar days (or longer at State's discretion considering the gravity and nature of the default). Said notice shall be delivered by Certified Mail, Return Receipt Requested, or in person with proof of delivery. Allowing the Contractor time to cure a failure or breach of contract does not waive the State's right to immediately terminate the contract for the same or different contract breach which may occur at a different time. In case of default of the Contractor, the State may contract the goods from other sources and hold the Contractor responsible for any excess cost occasioned thereby.

**Y. ASSURANCES BEFORE BREACH**

Accept (Initial)	Reject (Initial)	Reject & Provide Alternative within ITB Response (Initial)	NOTES/COMMENTS:

If any document or deliverable required pursuant to the contract does not fulfill the requirements of the Intent To Bid/resulting contract, upon written notice from the State, the Contractor shall deliver assurances in the form of additional Contractor resources at no additional cost to the project in order to complete the deliverable, and to ensure that other project schedules will not be adversely affected.

**Z. ACCEPTANCE AND PAYMENT OF GOODS**

Accept (Initial)	Reject (Initial)	Reject & Provide Alternative within ITB Response (Initial)	NOTES/COMMENTS:

In the event that the Contractor fails to provide the goods requested by the State, the State will not pay for such products until the same has been received and accepted by the State.



**AA. FORCE MAJEURE**

Accept (Initial)	Reject (Initial)	Reject & Provide Alternative within ITB Response (Initial)	NOTES/COMMENTS:

Neither party shall be liable for any costs or damages resulting from its inability to perform any of its obligations under the contract due to a natural disaster, or other similar event outside the control and not the fault of the affected party ("Force Majeure Event"). A Force Majeure Event shall not constitute a breach of the contract. The party so affected shall immediately give notice to the other party of the Force Majeure Event. The State may grant relief from performance of the contract if the Contractor is prevented from performance by a Force Majeure Event. The burden of proof for the need for such relief shall rest upon the Contractor. To obtain release based on a Force Majeure Event, the Contractor shall file a written request for relief with the State Purchasing Bureau. Labor disputes with the impacted party's own employees will not be considered a Force Majeure Event and will not suspend performance requirements under the contract.

**BB. PROHIBITION AGAINST ADVANCE PAYMENT**

Accept (Initial)	Reject (Initial)	Reject & Provide Alternative within ITB Response (Initial)	NOTES/COMMENTS:

Payments shall not be made until contractual deliverable(s) are received and accepted by the State.

**CC. PAYMENT**

Accept (Initial)	Reject (Initial)	Reject & Provide Alternative within ITB Response (Initial)	NOTES/COMMENTS:

State will render payment to Contractor when the terms and conditions of the contract and specifications have been satisfactorily completed on the part of the Contractor as solely determined by the State. Payment will be made by the responsible agency in compliance with the State of Nebraska Prompt Payment Act (See Neb. Rev. Stat. §§ 81-2401 through 81-2408). The State may require the Contractor to accept payment by electronic means such as ACH deposit. In no event shall the State be responsible or liable to pay for any goods provided by the Contractor prior to the Effective Date, and the Contractor hereby waives any claim or cause of action for any such claims.

**DD. INVOICES**

Accept (Initial)	Reject (Initial)	Reject & Provide Alternative within ITB Response (Initial)	NOTES/COMMENTS:

Invoices for payments must be submitted by the Contractor to the agency requesting the goods with sufficient detail to support payment. The terms and conditions included in the Contractor's invoice shall be deemed to be solely for the convenience of the parties. No terms or conditions of any such invoice shall be binding upon the State, and no action by the State, including without limitation the payment of any such invoice in whole or in part, shall be construed as binding or estopping the State with respect to any such term or condition, unless the invoice term or condition has been previously agreed to by the State as an amendment to the contract.

**EE. TAXES**

Accept (Initial)	Reject (Initial)	Reject & Provide Alternative within ITB Response (Initial)	NOTES/COMMENTS:

The State is not required to pay taxes of any kind and assumes no such liability as a result of this solicitation. Any property tax payable on the Contractor's equipment which may be installed in a state-owned facility is the responsibility of the Contractor.

**FF. SEVERABILITY**

Accept (Initial)	Reject (Initial)	Reject & Provide Alternative within ITB Response (Initial)	NOTES/COMMENTS:

If any term or condition of the contract is declared by a court of competent jurisdiction to be illegal or in conflict with any law, the validity of the remaining terms and conditions shall not be affected, and the rights and obligations of the parties shall be construed and enforced as if the contract did not contain the particular provision held to be invalid.

**GG. PROPRIETARY INFORMATION**

Accept (Initial)	Reject (Initial)	Reject & Provide Alternative within ITB Response (Initial)	NOTES/COMMENTS:

Data contained in the bid and all documentation provided therein, become the property of the State of Nebraska and the data becomes public information upon opening the bid. If the Bidder wishes to have any information withheld from the public, such information must fall within the definition of proprietary information contained within Nebraska's public record statutes. **All proprietary information the Bidder wishes the State to withhold must be submitted in a sealed package, which is separate from the remainder of the bid, and provide supporting documents showing why such documents should be marked proprietary.** The separate package must be clearly marked PROPRIETARY on the outside of the package. **Bidders may not mark their entire Invitation To Bid as proprietary.** Pricing submitted in Bidder's ITB may not be marked as proprietary information. Failure of the Bidder to follow the instructions for submitting proprietary and copyrighted information may result in the information being viewed by other Bidders and the public. Proprietary information is defined as trade secrets, academic and scientific research work which is in progress and unpublished, and other information which if released would give advantage to business competitors and serve no public purpose (see Neb. Rev. Stat. § 84-712.05(3)). In accordance with Attorney General Opinions 92068 and 97033, Bidders submitting information as proprietary may be required to prove specific, named competitor(s) who would be advantaged by release of the information and the specific advantage the competitor(s) would receive. Although every effort will be made to withhold information that is properly submitted as proprietary and meets the State's definition of proprietary information, the State is under no obligation to maintain the confidentiality of proprietary information and accepts no liability for the release of such information.

**HH. CERTIFICATION OF INDEPENDENT PRICE DETERMINATION/COLLUSIVE BIDDING**

Accept (Initial)	Reject (Initial)	Reject & Provide Alternative within ITB Response (Initial)	NOTES/COMMENTS:

By submission of this bid, the bidder certifies, that it is the party making the foregoing bid and that the bid is not made in the interest of, or on behalf of, any undisclosed person, partnership, company, association, organization, or corporation; that the bid is genuine and not collusive or sham; that the bidder has not directly or indirectly induced or solicited any other bidder to put in a false or sham bid, and has not directly or indirectly colluded, conspired, connived, or agreed with any bidder or anyone else to put in a sham bid, or that anyone shall refrain from bidding; that the bidder has not in any manner, directly or indirectly, sought by agreement, communication, or conference with anyone to fix the bid price of the bidder or any other bidder, or to fix any overhead, profit, or cost element of the bid price, or of that of any other bidder, or to secure any advantage against the public body awarding the contract of anyone interested in the proposed contract; that all statements contained in the bid are true; and further that the bidder has not, directly or indirectly, submitted the bid price or any breakdown thereof, or the contents thereof, or divulged information or data relative thereto, or paid, and will not pay, any fee to any corporation, partnership, company, association, organization, bid depository, or to any member or agent thereof to effectuate a collusive or sham bid.

**II. PRICES**

Accept (Initial)	Reject (Initial)	Reject & Provide Alternative within ITB Response (Initial)	NOTES/COMMENTS:

All prices, costs, and terms and conditions outlined in the proposal shall remain fixed and valid commencing on the opening date of the proposal until an award is made or the Request for Proposal is cancelled.

Prices quoted on the Cost Proposal form shall remain fixed for the first year of the contract period. Any request for a price increase subsequent to the first year must be submitted in writing to the State Purchasing Bureau a minimum of 30 days prior to the price increase taking effect, and be accompanied by documentation justifying the price increase. Further documentation may be required by the State to justify the increase. The State reserves the right to deny any requested price increase. No price increases are to be billed to any State Agencies prior to written amendment of the contract by the parties.

The State will be given full proportionate benefit of any price decrease during the term of the contract. Contractor represents and warrants that all prices for services, now or subsequently specified, are as low as and no higher than prices which the Contractor has charged or intends to charge customers other than the State for the same or similar products and services of the same or equivalent quantity and quality for delivery or performance during the same periods of time. If, during the term of the contract, the Contractor shall reduce any and/or all prices charged to any customers other than the State for the same or similar products or services specified herein, the Contractor shall make an equal or equivalent reduction in corresponding prices for said specified products or services.

Contractor also represents and warrants that all prices set forth in the contract and all prices in addition, which the Contractor may charge under the terms of the contract, do not and will not violate any existing federal, state, or municipal law or regulations concerning price discrimination and/or price fixing. Contractor agrees to hold the State harmless from any such violation. Prices quoted shall not be subject to increase throughout the contract period unless specifically allowed by these specifications.

**JJ. ETHICS IN PUBLIC CONTRACTING**

Accept (Initial)	Reject (Initial)	Reject & Provide Alternative within ITB Response (Initial)	NOTES/COMMENTS:

No Bidder shall pay or offer to pay, either directly or indirectly, any fee, commission compensation, gift, gratuity, or anything of value to any State officer, legislator, employee or evaluator based on the understanding that the receiving person's vote, actions, or judgment will be influenced thereby. No Bidder shall give any item of value to any employee of the State Purchasing Bureau or any evaluator.

Bidders shall be prohibited from utilizing the services of lobbyists, attorneys, political activists, or consultants to secure the contract. It is the intent of this provision to assure that the prohibition of state contact during the procurement process is not subverted through the use of lobbyists, attorneys, political activists, or consultants. It is the intent of



the State that the process of evaluation of bids and award of the contract be completed without external influence. It is not the intent of this section to prohibit Bidders from seeking professional advice, for example consulting legal counsel, regarding terms and conditions of this Invitation To Bid or the format or content of their bid.

If the Bidder is found to be in non-compliance with this section of the Invitation To Bid, they may forfeit the contract if awarded to them or be disqualified from the selection process.

**KK. INDEMNIFICATION**

Accept (Initial)	Reject (Initial)	Reject & Provide Alternative within ITB Response (Initial)	NOTES/COMMENTS:

a. **GENERAL**

The Contractor agrees to defend, indemnify, hold, and save harmless the State and its employees, volunteers, agents, and its elected and appointed officials (“the indemnified parties”) from and against any and all claims, liens, demands, damages, liability, actions, causes of action, losses, judgments, costs, and expenses of every nature, including investigation costs and expenses, settlement costs, and attorney fees and expenses (“the claims”), sustained or asserted against the State, arising out of, resulting from, or attributable to the willful misconduct, negligence, error, or omission of the Contractor, its employees, Subcontractors, consultants, representatives, and agents, except to the extent such Contractor liability is attenuated by any action of the State which directly and proximately contributed to the claims.

b. **INTELLECTUAL PROPERTY**

The Contractor agrees it will, at its sole cost and expense, defend, indemnify, and hold harmless the indemnified parties from and against any and all claims, to the extent such claims arise out of, result from, or are attributable to, the actual or alleged infringement or misappropriation of any patent, copyright, trade secret, trademark, or confidential information of any third party by the Contractor or its employees, Subcontractors, consultants, representatives, and agents; provided, however, the State gives the Contractor prompt notice in writing of the claim. The Contractor may not settle any infringement claim that will affect the State’s use of the Licensed Software without the State’s prior written consent, which consent may be withheld for any reason.

If a judgment or settlement is obtained or reasonably anticipated against the State’s use of any intellectual property for which the Contractor has indemnified the State, the Contractor shall, at the Contractor’s sole cost and expense, promptly modify the item or items which were determined to be infringing, acquire a license or licenses on the State’s behalf to provide the necessary rights to the State to eliminate the infringement, or provide the State with a non-infringing substitute that provides the State the same functionality. At the State’s election, the actual or anticipated judgment may be treated as a breach of warranty by the Contractor, and the State may receive the remedies provided under this ITB.

c. **SELF-INSURANCE**

The State of Nebraska is self-insured for any loss and purchases excess insurance coverage pursuant to Neb. Rev. Stat. § 81-8,239.01 (Reissue 2008). If there is a presumed loss under the provisions of this agreement, Contractor may file a claim with the Office of Risk Management pursuant to Neb. Rev. Stat. §§ 81-8,829 – 81-8,306 for review by the State Claims Board. The State retains all rights and immunities under the State Miscellaneous (Section 81-8,294), Tort (Section 81-8,209), and Contract Claim Acts (Section 81-8,302), as outlined in Neb. Rev. Stat. § 81-8,209 *et seq.* and under any other provisions of law and accepts liability under this agreement to the extent provided by law.

**LL. ANTITRUST**

Accept (Initial)	Reject (Initial)	Reject & Provide Alternative within ITB Response (Initial)	NOTES/COMMENTS:

The Contractor hereby assigns to the State any and all claims for overcharges as to goods and/or services provided in connection with this contract resulting from antitrust violations which arise under antitrust laws of the United States and the antitrust laws of the State.

**MM. EMPLOYEE WORK ELIGIBILITY STATUS**

Accept (Initial)	Reject (Initial)	Reject & Provide Alternative within ITB Response (Initial)	NOTES/COMMENTS:

The Contractor is required and hereby agrees to use a federal immigration verification system to determine the work eligibility status of employees physically performing services within the State of Nebraska. A federal immigration verification system means the electronic verification of the work authorization program authorized by the Illegal Immigration Reform and Immigrant Responsibility Act of 1996, 8 U.S.C. 1324a, known as the E-Verify Program, or an equivalent federal program designated by the United States Department of Homeland Security or other federal agency authorized to verify the work eligibility status of an employee.

If the Contractor is an individual or sole proprietorship, the following applies:

- a. The Contractor must complete the United States Citizenship Attestation Form, available on the Department of Administrative Services website at <http://das.nebraska.gov/materiel/purchasing.html>  
The completed United States Attestation Form should be submitted with the Invitation To Bid response.
- b. If the Contractor indicates on such attestation form that he or she is a qualified alien, the Contractor agrees to provide the US Citizenship and Immigration Services documentation required to verify the Contractor's lawful presence in the United States using the Systematic Alien Verification for Entitlements (SAVE) Program.
- c. The Contractor understands and agrees that lawful presence in the United States is required and the Contractor may be disqualified or the contract terminated if such lawful presence cannot be verified as required by Neb. Rev. Stat. §4-108.

**IV. SCOPE OF WORK**

The Bidder must provide the following information in response to this Invitation To Bid.

**A. SCOPE**

It is the intent of this bid invitation to establish a contract to supply Articulated All Wheel Drive Loader With Minimum 2.2 Cubic Yard Bucket per the attached specifications from date of award for a period of one (1) year with the option to renew for an additional four (4) one year periods when mutually agreeable to the vendor and the State of Nebraska. The State reserves the right to extend the period of this contract beyond the end date when mutually agreeable to the vendor and the State of Nebraska.

All items bid shall be of the latest manufacture in production as of the date of the Invitation To Bid and be of proven performance and under standard design complete as regularly advertised and marketed. All necessary materials for satisfactory performance of the supplies shall be incorporated into the Articulated All Wheel Drive Loader With Minimum 2.2 Cubic Yard Bucket whether or not they may be specifically mentioned below.

Complete specifications, manufacturer's descriptive literature and/or advertising data sheets with cuts or photographs may be required prior to an award and should be included with the bid on the IDENTICAL items proposed. Literature should be complete and the latest published. Any information necessary to show compliance with these specifications not given on the manufacturer's descriptive literature and/or advertising data sheets should be supplied in writing on or attached to the bid document. If manufacturer's specifications sheets, descriptive literature, advertising data sheets or information necessary to show compliance with these specifications is not supplied in writing on or attached to the bid document, the Bidder will be required to submit requested information within three (3) business days of a written request. Failure to submit requested descriptive literature or advertising data sheets may be grounds to reject the bid.

**B. AMENDMENT**

This Contract may be amended at any time in writing upon the agreement of both parties.

**C. REVISIONS**

In the event any product is discontinued or replaced with a newer version during the contract period, the State of Nebraska reserves the right to amend this contract to include the new product.



**V. INVITATION TO BID - TECHNICAL SPECIFICATIONS**

**A. BIDDER INSTRUCTIONS**

Bidder must respond to each of the following statements. Specifications listed are minimum conditions that must be met in order for a Bidder to qualify for the award.

“YES” response means the Bidder guarantees they can meet this condition.

“NO” response means the Bidder cannot meet this condition and will not be considered.

“NO & PROVIDE ALTERNATIVE” responses should be used only with a narrative response in the NOTES/COMMENTS section explaining in detail any deviation from the Bidder’s ability to meet the condition, and an explanation of how this would be determined to be an acceptable alternative to meeting the condition. Alternatives must be detailed in such a way that allows such deviations to be fully evaluated. The State of Nebraska shall determine at its sole discretion whether or not the Bidder’s alternative is an acceptable alternative.

**B. NON-COMPLIANCE STATEMENT**

YES	NO	NO & PROVIDE ALTERNATIVE	
			1. Read these specifications carefully. Any and all exceptions to these specifications must be written on or attached to quotation request. Any noncompliance may void your quotation. Non-compliance to any single specification can void your bid.
			2. It is the responsibility of Bidders to obtain information and clarifications as provided below. The State of Nebraska is not responsible for any erroneous or incomplete understandings or wrongful interpretations of this Invitation to Bid by any Bidder.
			3. No interpretation related to the meaning of bid specifications or other pre-bid documents will be made orally to any Bidder by the State of Nebraska. Any Invitation To bid interpretation must be put in writing and faxed by the Bidder to: the State Purchasing Bureau, Fax (402) 471-2089 or e-mailed to AS Materiel Purchasing <a href="mailto:as.materielpurchasing@nebraska.gov">as.materielpurchasing@nebraska.gov</a> by the last day to submit written questions that is specified in the Schedule of Events. (Inquiries received after the last day to submit written questions may not be addressed).
<b>NOTES/COMMENTS:</b>			

**C. ENGINE**

YES	NO	NO & PROVIDE ALTERNATIVE	
			1. Diesel engine shall be a minimum of 5.7 Liter and meet final Tier 4 emissions.
			2. Engine shall have minimum 135 net horsepower developed at SAE J1349 or ISO 9249 under standard conditions with all accessories.
			3. Cold starting aid of either glow plugs or equivalent pre-heater or ether injection of Turner LP535-1 or equivalent with cartridge required.
			4. Manufacturer’s recommended muffler, alternator and starter.
			5. Full flow, throw away type oil filter(s) required.

			6. Turbo II or Centri brand pre-cleaner or equivalent OEM supplied rotary ejection style pre-cleaner required. Dual element air filtration is preferred.
			7. Heavy duty radiator guard and crankcase guard is desired.
			8. Engine housing side panels or tilt hood required.
			9. Manufacturer's recommended type antifreeze protection to no less than 34 degrees below zero Fahrenheit required.
			10. A 120 volt AC block heater with a sturdily-mounted, male receptacle with cover that is conveniently located will be furnished in all water-cooled units.
			11. Counter-balanced rain cap for exhaust preferred. Exhaust elbow is acceptable.
			12. Please state the following: a. Engine Brand: _____ b. Engine Model: _____ c. Flywheel Horsepower: _____ d. Governed RPM: _____
<b>NOTES/COMMENTS:</b>			

**D. DRIVETRAIN**

YES	NO	NO & PROVIDE ALTERNATIVE	
			1. Torque converter/power shift with minimum three (3) speeds forward and two (2) reverse transmission. Hydrostatic transmission is also acceptable.
			2. Inboard or outboard four wheel planetary final reduction.
			3. Limited slip in front and/or rear differential required. Either front or rear differential lock-up will be acceptable. Please state what is to be provided: _____
			4. Minimum forward travel speed will be approximately 20 MPH.
<b>NOTES/COMMENTS:</b>			

**E. TIRES**

YES	NO	NO & PROVIDE ALTERNATIVE	
			1. Four 20.5R25, Michelin XTLA, or 550/65R25 XTLA tubeless, steel belted radial will be furnished.  Brand _____  Model # _____
<b>NOTES/COMMENTS:</b>			

**F. BRAKES**

YES	NO	NO & PROVIDE ALTERNATIVE	
			1. Brakes on all four wheels.
			2. Brakes shall be boosted, full hydraulic type or air brakes. Please state type of brakes furnished: _____
			a. Air dryer of equivalent moisture remover required with air brakes.
			3. Transmission drive or internal wet disk service brakes acceptable.
			4. Parking brake required.
<b>NOTES/COMMENTS:</b>			

**G. STEERING**

YES	NO	NO & PROVIDE ALTERNATIVE	
			1. Articulated frame at wheel base center point. Brakes on all four wheels.
			a. Turn to right and left of at least 35 degrees.
			2. To be hydraulically assisted.
			3. Turning radius at outside corner of bucket must not exceed 20 feet.
<b>NOTES/COMMENTS:</b>			



**H. LOADER**

YES	NO	NO & PROVIDE ALTERNATIVE	
			A. Static full turn tipping load must be 16,500 pounds or greater.
			B. Joystick control if available from manufacturer.
			C. General Purpose loader bucket to be minimum 2.2 cubic yard struck SAE rated but not more than 3 cubic yard heaped SAE rated.
			a. Bucket shall be minimum 96 inches wide but not less than the overall width of the machine. Bucket shall also be less than 102 inches overall in width.
			b. Dump clearance at full lift with bucket at 45 degrees discharge shall be at least 9 feet, 2 inches.
			c. Roll back at grade shall be minimum of 38 degrees.
			d. Minimum 17,700-pound breakout force.
			e. Digging depth of at least 1.8 inches below grade with bucket bottom approaching position parallel to grade.
			f. Bucket level indicator or automatic pre-set to dig position and adjustable automatic lift kick out required.
			g. Bucket shall have a bolt-on cutting edge.
			4. Z-bar linkage or Torque parallel linkage will be furnished.
			5. Loader shall be equipped with a suspension system for the loader boom cylinders. Ride Control/Suspension System to include any accumulators, valves, hydraulic lines and/or electrical circuits as required by manufacturer.
<b>NOTES/COMMENTS:</b>			

**I. CAB**

YES	NO	NO & PROVIDE ALTERNATIVE	
			1. The ROPS cab shall be of steel construction.
			a. Cab shall be fully and tightly enclosed with sound suppression.
			b. Tinted safety glass windshield, windows and door(s) required.
			2. Cab to be equipped with mounting ladder.
			a. Electric windshield wipers with washers both front and rear.
			b. Inside rear view mirror(s) and floor mat required.
			c. Defroster fan and heater of adequate capacity for Nebraska required.
			d. Unit shall have manufacturer's factory installed air conditioning.
			e. Loader must be able to be operated with door(s) secured open.

			3. Padded adjustable, cloth covered suspension seat with seat belt shall be provided.
<b>NOTES/COMMENTS:</b>			

**J. INSTRUMENTS**

YES	NO	NO & PROVIDE ALTERNATIVE	
			1. The following gauges or digital displays are required.
			a. Air pressure gauge if air brakes.
			b. Torque converter or transmission oil temperature gauge.
			c. Fuel gauge or indicator.
			d. Oil pressure gauge.
			e. Engine temperature gauge.
			f. Voltmeter, ammeter or warning light for the 12 or 24 volt system.
			2. Audible and visible alarm system for high engine temperature, low oil pressure and high transmission oil temperature.
			3. An electronic, back-up alarm meeting OSHA requirements will be provided.
<b>NOTES/COMMENTS:</b>			

**K. HYDRAULIC SYSTEM**

YES	NO	NO & PROVIDE ALTERNATIVE	
			1. Constantly driven, gear, piston or vane type pump required.
			2. Replaceable system filter and pressure relief valve required.
			3. System operation pressure shall not be in excess of 3,800 PSI.
<b>NOTES/COMMENTS:</b>			

**L. COUNTERWEIGHTS**

YES	NO	NO & PROVIDE ALTERNATIVE	
			1. Standard equipment rear counterweights are required if normally furnished by manufacturer.
<b>NOTES/COMMENTS:</b>			

**M. GENERAL**

YES	NO	NO & PROVIDE ALTERNATIVE	
			1. The overall length of the loader will not be greater than 24 feet, 4 inches, with loader bucket level on the ground.
			2. The operation weight of loader with minimum 2.2 cubic yard bucket, ROPS cab and without optional accessories or calcium chloride in tires shall be a minimum of 24,000 pounds. Bidder should state loader weight as described with bid:  _____Pounds.
			3. Four headlights (two at top of cab near corners and two at bottom of cab near each side) required.
			4. One rear working light to be provided.
			5. Combination stop/tail light and horn to be furnished.
			6. Drawbar hitch with pin is required.
			7. Turn signal and hazard flashing lights for front and rear must be furnished.
			8. Manufacturer's front and rear fenders required.
			9. A slow moving vehicle emblem shall be mounted on the rear of loader and displayed as required per Nebraska Statutes.
			a. Emblem shall be mounted so as not to restrict airflow for cooling purposes.
<b>NOTES/COMMENTS:</b>			

**N. NOISE LEVEL**

YES	NO	NO & PROVIDE ALTERNATIVE	
			1. Bidders should supply with bid the following decibel level per SAE standards.
			a. Sound exposure work cycle rating:  _____dba.
<b>NOTES/COMMENTS:</b>			



**O. RADIO FREQUENCY SHIELDING – CAUTION!!!**

YES	NO	NO & PROVIDE ALTERNATIVE	
			1. The loader and/or installed components and equipment shall be compatible with use of NDOR mobile and/or two-way communications devices. Main communication radio operates in low band range of 47 MHz to 48 MHz, but all frequencies apply including low band, high band, UHF and VHF.
			2. The loader ad/or installed components and equipment shall be manufactured to meet all current SAE and/or ISO Standards applicable and/or relevant to Electromagnetic Compatibility.
			3. NDOR will conduct testing of radio/two-way when installed in chassis. NDOR will notify vendor if normal operational parameters are not met due to degradation of signals caused by electromagnetic emissions from chassis or installed components and equipment. Vendor shall be required to work with NDOR personnel to reduce interference level to a point acceptable to NDOR normal radio operating parameters. Vendor shall have 30 days to resolve RFI issue.
			4. Vendor and/or manufacturer will be responsible for any and all cost to replace and/or modify any parts found to cause radio frequency interference. If NDOR and vendor cannot resolve source of RFI the unit will be sent to an independent accredited lab for testing to ensure SAE and/or ISO Standards compliance. Testing shall be done to SAE add/or ISO Standards which were current at date of bid. Should the loader and/or installed components and equipment fail testing at the accredited lab, the vendor shall be responsible for all cost incurred for testing.
			5. If after testing by NDOR and/or accredited lab, the vendor is unable or unwilling to incur the cost and correct the RFI issue to the satisfaction of NDOR, All orders and corresponding contract will be canceled.
<b>NOTES/COMMENTS:</b>			

**P. MANUALS**

YES	NO	NO & PROVIDE ALTERNATIVE	
			1. Operator/s manual should accompany each unit when delivered.
			2. Equipment shop repair manual or CD ROM. If available online the State of Nebraska must be able to access it free of charge for fifteen (15) years.
			3. Engine shop repair manual or CD ROM. If available online the State of Nebraska must be able to access it free of charge for fifteen (15) years.
			4. Equipment parts manual or CD ROM. If available online the State of Nebraska must be able to access if free of charge for fifteen (15) years.
			5. Engine parts manual or CD ROM. If available online the State of Nebraska must be able to access it free of charge for fifteen (15) years.
			6. All manuals must be furnished prior to payment and delivered to Fleet Management, Equipment Data Coordinator. Failure to deliver all manuals that are ordered may result in non-payment of ten percent of purchase order total until all manuals are delivered.

**NOTES/COMMENTS:**

**Q. MISCELLANEOUS**

YES	NO	NO & PROVIDE ALTERNATIVE	
			1. The bidders should submit with their bid a list of any special tools they will furnish with each machine.
			2. Dealer's decals, stickers or other signs shall not be affixed to units; manufacturer's nameplates, stampings and other similar signs are acceptable.
			3. Dealer's pre-delivery service required.
			4. Color: Manufacturer's standard yellow color.
			5. Prior to the awarding of, or entering into any agreement or contract, it shall be the responsibility of the manufacturer and/or the successful bidder to warrant to the State of Nebraska, in writing, that it has factory authorized dealers in the State of Nebraska who will provide warranty/service and repair work without undue delay.

**NOTES/COMMENTS:**

**R. WARRANTY**

YES	NO	NO & PROVIDE ALTERNATIVE	
			1. Manufacturer's usual warranty shall apply, and shall be in effect for at least one year from the date the equipment was placed in service by purchasing entity. Bidder should supply warranty information with proposal.
			2. Bidder should submit a copy of the manufacturer's written warranty with bid submission. If not submitted with ITB, bidder has five (5) business days to submit document upon request of State Purchasing Bureau.
			3. Manufacturer's warranty coverage shall not limit the number of hours of annual usage for equipment bid and supplied. Limitations on hours of annual usage may be a factor in evaluation and award.
			4. Vendor shall be responsible for all repairs to include parts, labor and machine transportation cost for a minimum twelve (12) month warranty period.
			5. The power train and engine shall be warranted for a minimum of additional five years.
			a. These guarantees are in addition to the minimum twelve (12) month warranty and do not have any effect upon the standard warranty.
			b. If the engine is not produced by the Loader manufacturer, the vendor will guarantee that the engine will be repaired by a certified and registered engine warranty dealer or distributorship.
			6. The following power train components are warranted to be free from defects in workmanship and material during the extended warranty period.

			a. Engine (excluding radiator, alternator, starter, compressor and other attachments).
			b. Torque converter (if applicable), transmission.
			c. Drive shafts and Universal joints.
			d. Differential.
			e. Transfer gear group.
			f. Drive axles.
			g. Drive pumps.
			h. Drive motors.
			i. Pinion and bevel gear.
			j. Final drive gear train.
			k. Computerized and electronic equipment.
			7. This warranty is limited to repair or replacement (including both parts and labor) or inspected parts determined to have been defective in material or workmanship. All extended power train warranty repairs will be performed by manufacturer's authorized service personnel. All machine transportation cost to and from the nearest authorized vendor repair facility and travel time and mileage during the extended warranty period will be responsibility of the vendor and/or manufacturer. This warranty does not apply to normal maintenance service (such as engine tune-up) or normal replacement of service or wear items.
			8. Any oil sampling or other necessary testing needed to implement this warranty must be included in writing with this bid. The Nebraska Department of Roads will do oil sampling if required by the manufacturer, but all materials must be furnished at no charge to the Department. A written report will be returned to Nebraska Department of Roads if sampling is required.
			9. This extended coverage is subject to the following conditions and limitations:
			a. Replacement parts provided are warranted for the remainder of the extended warranty period applicable to the product in which installed.
			b. The machine may not be altered or modified in any manner which affects the mechanical operation as designed without written permission from the Nebraska Department of Roads.
			10. The following limitations shall be applicable to all guarantees.
			a. Parts ordering and machine repair requests will occur during dealer's normal working hours.
			b. The parts and machine repair guarantees will not apply to machines which have been substantially damaged by collision, accident, flood, fire, vandalism or similar occurrence.
			11. If machine cannot be repaired within thirty (30) days, a comparable loaner machine will be furnished to the State of Nebraska at no cost during the warranty period.
<b>NOTES/COMMENTS:</b>			



**S. SPECIFICATION FORM**

YES	NO	NO & PROVIDE ALTERNATIVE	
			1. Successful bidder will be required to complete form to the fullest extent possible for each unit and must accompany each unit when delivered.
			2. Forms will be supplied by Department of Roads to successful bidder after purchase order is awarded.
			3. If vendor does not properly complete form for each unit, a sum of \$250.00 per unit will be deducted from purchase order amount.
<b>NOTES/COMMENTS:</b>			

**T. TRAINING**

YES	NO	NO & PROVIDE ALTERNATIVE	
			1. Minimum of four hours per loader at various locations throughout Nebraska by a factory trained representative in the operation and maintenance of loader. Fleet Management will contact successful bidder on schedule and places for this training.
<b>NOTES/COMMENTS:</b>			

**U. OEM BRAND INFORMATION**

YES	NO	NO & PROVIDE ALTERNATIVE	
			<p>1. Bidder shall include all OEM approved service and repair locations within the State of Nebraska or within a four (4) hour response time. Please list below or attach a list:</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p>
			<p>2. Please list all OEM parts stocking and sales locations in the State of Nebraska or within a four (4) hour response time:</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p>

			_____
			<p>3. Please list approximate number and locations of all OEM trained and/or certified service technicians within the State of Nebraska or within a four (4) hour response time:</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p>
			<p>4. Please list response time (in hours) for service calls: _____</p> <p>Note that NDOR has eight districts statewide, all of which will need to be responded to within in a four (4) hour response time for service calls. See attached district map (Attachment A).</p>
			<p>5. The above listed information (A. B. C. and D.) may be a factor used in bid award consideration process. Consideration will be given based on coverage for parts stocking, service locations, and availability of qualified service technicians, and response time for service calls</p>
			<p>6. Equipment bid shall be the latest current models in production as of the date of the invitation to bid and be of proven performance and under standard design, complete as regularly advertised and marketed and shall be delivered complete with all necessary parts, specified accessories, tools, and special features, whether or not they may be specifically mentioned below. Used, demonstrator, prototype, or discontinued equipment is not acceptable. Complete specifications, manufacturer's descriptive literature and/or advertising data sheets with cuts or photographs may be required prior to an award and should be included with the bid on the IDENTICAL equipment proposed. Literature should be complete and the latest published. Any information necessary to show compliance with these specifications not given on the manufacturer's descriptive literature and/or advertising data sheets should be supplied in writing on or attached to the bid document. Articulated All Wheel Drive Loader With Minimum 2.2 Cubic Yard Bucket bid must meet or exceed the requirements in this Invitation to Bid.</p>
<p><b>NOTES/COMMENTS:</b></p>			

**OPTIONAL COMPONENTS (Specifications V-Z)**

**V. QUICK HITCH WITH SPECIFIED BUCKET**

YES	NO	NO & PROVIDE ALTERNATIVE	
			1. Quick hitch (coupler) system with bucket equivalent to bucket specified in Section 7 of main specifications.
			2. The quick hitch and bucket will replace the loader manufacturer's

			factory bucket.
			3. Acceptable brands are JRB, ACS or loader manufacturer's model. Please specify which brand you are bidding: _____
			4. Securing pins will hydraulically operate from loader's existing hydraulics with controls in cab.
			5. Quick hitch and specified bucket manufacturer must recommend their unit for loader proposed.
			6. Any operators and/or parts manuals available from manufacturer will be provided with each unit delivered.
<b>NOTES/COMMENTS:</b>			

**W. QUICK ATTACH FORKLIFT ASSEMBLY**

YES	NO	NO & PROVIDE ALTERNATIVE	
			1. Forklift assembly to be quick attach style matching the above quick hitch as supplied in option #1. Quick hitch shall be JRB, ACS or loader manufacturer OEM supplied hitch.
			2. Carriage width to be minimum 53 inches.
			3. Tine lengths to be minimum 60 inches. _____
			4. Manually adjustable tines of 2-1/2 inch x 6 inches.
			5. Minimum Load Capacity of 10,000 pounds @ 24 inch Load Center.
<b>NOTES/COMMENTS:</b>			

**X. MULTI-PURPOSE BUCKET**

YES	NO	NO & PROVIDE ALTERNATIVE	
			1. The multi-purpose bucket will replace the loader's factory furnished bucket.
			2. The multi-purpose bucket shall be at least as heavy duty as the loader manufacturer's normally-furnished bucket.
			3. Any additional valves, hydraulics, hoses, etc. will be furnished. _____
			4. Bucket manufacturer must recommend their unit for loader proposed.
			5. Any operators and/or parts manuals available from manufacturer will be provided with each unit delivered.
<b>NOTES/COMMENTS:</b>			



**Y. GRAPPLE FORK ATTACHMENT**

YES	NO	NO & PROVIDE ALTERNATIVE	
			1. Grapple Fork to be GrabTec "GA" series or equivalent and be mounted to bucket specified in Section 7 of main specifications.
			2. Grapple is to be delivered installed on bucket as stated above. Vendor is to be responsible for any transportation cost incurred to have the grapple fork mounted to the specified bucket.
			3. Grapple Assembly to be of a Quick Attach Style.
			a. Install weight of grapple assembly to be minimum 1,200 pounds.
			b. Hydraulic cylinder bore to be a minimum 3 inches.
			c. Hydraulic hoses of adequate length with couplers shall be provided. The hoses shall be coupled to the loader's auxiliary circuit (Third Valve).
			d. Fork teeth material to be minimum 1 inch thick.
			e. Teeth to be replaceable. Minimum of 5 teeth per assembly.
			f. Clamping force of fork assembly to be approximately 10,000 pounds rated with cylinder pressure of 3750 psi.
			g. Opening of forks measured from ground level to tip of teeth to be approximately 86 inches.
			4. Any additional hydraulic valves hoses, etc will be furnished. The auxiliary third valve will be ordered on the loader; do not include this valve in pricing.
			5. Any operators and or parts manuals available from manufacturer will be provided with each unit when delivered.
			6. Attachment shall carry a one year warranty to be provided by the fork manufacturer or by the vendor.
<b>NOTES/COMMENTS:</b>			

**Z. WHEEL LOADER SCALE SYSTEM**

YES	NO	NO & PROVIDE ALTERNATIVE	
			1. Scale system to be Loup Electronics Loadlog 8000i or equivalent. To be installed and calibrated on loader.
			2. Optional in-cab printer.
			3. Hydraulic pressure sensors.
			4. Reference and direction sensor.
<b>NOTES/COMMENTS:</b>			

**AA. ANNUAL USAGE, ESTIMATED**

YES	NO	NO & PROVIDE ALTERNATIVE	
			1. Annual usage figures provided are estimates and are not to be construed as either a minimum or maximum purchase quantity. The orders shall be for the actual quantities of each item ordered by or for any agency during the life of the contract. Vendor shall not impose minimum order requirements.
			2. Estimated annual usage is five (5) units.
<b>NOTES/COMMENTS:</b>			

**BB. USAGE REPORT**

YES	NO	NO & PROVIDE ALTERNATIVE	
			1. The vendor shall, upon request by the State of Nebraska, provide an annual usage report of this contract by state agencies. Information will include agency name or political subdivision, item, and dollar amount. Information may be requested at any time by the State Purchasing Bureau, but may typically be requested at the end of the contract period or upon renewal of the contract, or at other intervals (monthly, quarterly, etc.) as determined by the State.
<b>NOTES/COMMENTS:</b>			

**CC. DELIVERY ARO**

YES	NO	NO & PROVIDE ALTERNATIVE	
			1. Delivery desired within (120) days after receipt of order(s).  At the time of delivery, a designated State of Nebraska employee will sign the "invoice/packing slip." This signature will only indicate that the order has been received and that the items actually delivered agree with the delivery invoice. This signature does not indicate all items were received in good condition and/or that there is not possible hidden damage.
<b>NOTES/COMMENTS:</b>			

**DD. DELIVERY LOCATIONS/INSTRUCTIONS (BIDDER IS CERTIFYING THAT THEY CAN MEET THE DELIVERY LOCATIONS/INSTRUCTIONS)**

YES	NO	NO & PROVIDE ALTERNATIVE	
			1. Department of Roads, 5001 S 14 St, Lincoln, NE
NOTES/COMMENTS:			

**EE. ORDERS**

YES	NO	NO & PROVIDE ALTERNATIVE	
			1. Orders will be placed either by, phone, fax, e-mail or Internet (if available and not to the exclusion of the other methods). All orders must reference a purchase order number and the purchase order number must be referenced on the packing slip, and invoice. Invoices are to be sent to the "Invoice to" address on the purchase order.
NOTES/COMMENTS:			

**FF. QUALITY**

YES	NO	NO & PROVIDE ALTERNATIVE	
			1. Product quality must meet specifications and be consistent for the term of the contract. A guarantee of satisfactory performance by the supplier and meeting delivery dates are considered to be an integral part of the purchase contract resulting from this bid invitation. All materials must be of first quality, under standard production by the manufacturer and be of standard design, complete as regularly advertised and marketed and be of proven performance. Products are to be fully guaranteed and may be returned for full credit or replacement (at the State's option) for any reason during the initial warranty period with no additional charges for shipping or restocking.
NOTES/COMMENTS:			

**GG. PRICES**

YES	NO	NO & PROVIDE ALTERNATIVE	
			1. Price quoted shall be unit price and shall be firm for one (1) year from date of an award and are to be net; including transportation and delivery charges fully prepaid by the Bidder F.O.B. Destination as specified. No additional charges will be allowed for packing, handling, fuel surcharge, or partial delivery costs. Any request for an increase must be submitted in writing to the State Purchasing Bureau a minimum of 30 days prior to proposed effective date of increase, and must show cause and be accompanied by supporting documentation (such as notification letter from manufacturer).



			Further documentation may be required by the State, to authenticate the increase (such as manufacturer invoices). Failure to supply any requested supporting documentation may be grounds to cancel the contract. The State further reserves the right to reject any proposed price increase(s), cancel the contract and re-bid if determined to be in the best interest of the State. No price increases are to be billed to any State Agencies without prior written approval by the State Purchasing Bureau.
			2. The State will be given full proportionate benefit of any decrease for the term of the contract.
			3. Contract supplier or suppliers may honor pricing and extend the contract to political sub-divisions, cities, and counties. Terms and conditions of the contract must be met by political sub-divisions, cities, and counties.
<b>NOTES/COMMENTS:</b>			

**HH. AUTHORIZED DEALER & WARRANTY**

YES	NO	NO & PROVIDE ALTERNATIVE	
			1. To the extent required by the manufacturer, the Bidder shall be an authorized dealer. Bidder may be required to substantiate that he/she is an authorized dealer. Proof, if required, must be submitted to the State Purchasing Bureau within three (3) days of the request and prior to the award of any contract. The terms of the original manufacturer's standard warranty shall apply to all equipment acquired from this solicitation for the entire warranty period.
<b>NOTES/COMMENTS:</b>			

**II. SUBSTITUTIONS**

YES	NO	NO & PROVIDE ALTERNATIVE	35. SUBSTITUTIONS
			1. Vendor will not substitute any item that has been awarded without prior written approval of State Purchasing Bureau.
<b>NOTES/COMMENTS:</b>			

**JJ. SECRETARY OF STATE REGISTRATION REQUIREMENTS**

YES	NO	NO & PROVIDE ALTERNATIVE	*Prior to contract award and/or upon request of SPB, potential award recipient(s) will be asked to certify compliance with Nebraska Secretary of State Registration by providing a true and exact copy of current (dated within 90 days) valid Certificate of Good Standing or Letter of Good Standing.
			<p>Bidder is a SOLE PROPRIETORSHIP (in which case, no Letter of Good Standing/Certificate of Good Standing is required) If the Bidder is an Individual or Sole Proprietorship, the following applies:</p> <p>The Bidder must complete the United States Citizenship Attestation Form, available on the Department of Administrative Services website at <a href="http://das.nebraska.gov/materiel/purchasing.html">http://das.nebraska.gov/materiel/purchasing.html</a></p> <p>The completed United States Attestation Form should be submitted with the Invitation to Bid response.</p> <p>The Bidder indicates on such attestation form that he or she is a qualified alien, the Contractor agrees to provide the US Citizenship and Immigration Services documentation required to verify the Contractor's lawful presence in the United States using the Systematic Alien Verification for Entitlements (SAVE) Program.</p> <p>Bidder understands and agrees that lawful presence in the United States is required and the Contractor may be disqualified or the contract terminated if such lawful presence cannot be verified as required by Neb. Rev. Stat. §4-108.</p>
			<p>Bidder is a GENERAL PARTNERSHIP (in which case, no Letter of Good Standing/Certificate of Good Standing is required)</p>
			<p>Bidder is a FOREIGN or DOMESTIC CORPORATION or BUSINESS and a copy of current Letter of Good Standing/Certificate of Good Standing from the Nebraska Secretary of State <b>is provided</b> within bid submission documents.</p>
			<p>Bidder is a FOREIGN or DOMESTIC CORPORATION or BUSINESS and a copy of current Letter of Good Standing/Certificate of Good Standing from the Nebraska Secretary of State <b>will be provided</b> in a timely manner upon request prior to award.</p>
<p><b>NOTES/COMMENTS:</b></p>			

**Form A  
Bidder Contact Sheet  
Invitation To Bid Number 5465 OF**

Form A should be completed and submitted with each response to this Invitation to Bid. This is intended to provide the State with information on the Bidder's name and address, and the specific person(s) who are responsible for preparation of the Bidder's response.

Preparation of ITB Contact Information	
Bidder Name:	
Bidder Address:	
Contact Person & Title:	
E-mail Address:	
Telephone Number (Office):	
Telephone Number (Cellular):	
Fax Number:	

Each Bidder shall also designate a specific contact person who will be responsible for responding to the State if any clarifications of the Bidder's response should become necessary.

Communication with the State Contact Information	
Bidder Name:	
Bidder Address:	
Contact Person & Title:	
E-mail Address:	
Telephone Number (Office):	
Telephone Number (Cellular):	
Fax Number:	