



Department of Administration  
 Purchasing Division  
 2019 Washington Street East  
 Post Office Box 50130  
 Charleston, WV 25305-0130

State of West Virginia  
 Centralized Request for Quote  
 Equipment

<b>Proc Folder:</b> 789505		<b>Reason for Modification:</b>	
<b>Doc Description:</b> ADDENDUM NO.3 Class 352 4 Wheel Drive Loader/Backhoe		Addendum No.3 - Vendor Questions and response	
<b>Proc Type:</b> Central Master Agreement			
<b>Date Issued</b>	<b>Solicitation Closes</b>	<b>Solicitation No</b>	<b>Version</b>
2020-12-01	2020-12-08 13:30	CRFQ 0803 DOT2100000047	4

**BID RECEIVING LOCATION**

BID CLERK  
 DEPARTMENT OF ADMINISTRATION  
 PURCHASING DIVISION  
 2019 WASHINGTON ST E  
 CHARLESTON WV 25305  
 US

RECEIVED  
 2020 DEC -7 PM 12:00  
 WV PURCHASING  
 DIVISION

**VENDOR**

**Vendor Customer Code:** 000000205464  
**Vendor Name :** STATE EQUIPMENT, INC.  
**Address :**  
**Street :** 560 NEW GOFF MOUNTAIN ROAD  
**City :** CROSS LANES, WV  
**State :** WV  
**Principal Contact :** EDDIE ROWAN, JR.  
**Vendor Contact Phone:** (304)776-4405

**Country :** USA **Zip :** 25313

**Extension:** 1012

**FOR INFORMATION CONTACT THE BUYER**

John W Estep  
 304-558-2566  
 john.w.estep@wv.gov

Vendor  
 Signature 

**FEIN#** 550658298

**DATE** 12-7-2020

All offers subject to all terms and conditions contained in this solicitation

**ADDITIONAL INFORMATION****ADDENDUM NO.3**

Addendum No.3 issued to publish and distribute the attached information to the Vendor Community.

**REQUEST FOR QUOTATION**

The West Virginia Purchasing Division is soliciting bids on behalf of West Virginia Division of Highways to establish an open-end contract for an Four Wheel Drive Loader with Backhoe. Per the bid requirements, specifications, terms and conditions attached to this solicitation.

INVOICE TO	SHIP TO
DIVISION OF HIGHWAYS EQUIPMENT DIVISION RT 33 83 BRUSHY ROAD CROSSING, PO BOX 610 BUCKHANNON WV 26201 US	DIVISION OF HIGHWAYS EQUIPMENT DIVISION 83 BRUSHY FORK RD CROSSING BUCKHANNON WV 26201 US

Line	Comm Ln Desc	Qty	Unit Issue	Unit Price	Total Price
1	class 352 4 wheel drive loader/backhoe	10.00000	EA	\$76,977.00	\$769,770.00

Comm Code	Manufacturer	Specification	Model #
22101509	CASE	4WHEEL DRIVE LOADER/BACKHOE	580SN

**Extended Description:**

Class 352 4 wheel drive loader/backhoe

**SCHEDULE OF EVENTS**


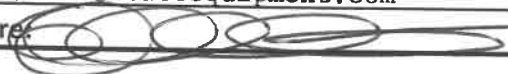
<u>Line</u>	<u>Event</u>	<u>Event Date</u>
1	Pre-Bid Meeting at 10:00am	2020-11-12
2	Tech Questions by 10:00am	2020-11-17

	Document Phase	Document Description	Page
DOT2100000047	Final	ADDENDUM NO.3 Class 352 4 Wheel Drive Loader/Backhoe	3

**ADDITIONAL TERMS AND CONDITIONS**

See attached document(s) for additional Terms and Conditions

**VENDOR:** STATE EQUIPMENT, INC. **Class 352**

Item No.	Description:	Model & Part Number Being Bid	Estimated Quantity	Unit Price	Item Total Cost
1	Four wheel drive Case 580 super N or equal	CASE 580SN	10	\$76,977.00	\$769,770.00
<b>Total Bid Cost</b>					\$769,770.00
<b>Bid Will Be Awarded To The Lowest Overall Bid Total For All Items</b>					
<b>Vendor Information</b>					
Company Name: STATE EQUIPMENT, INC.					
Contact Manager: EDDIE ROWAN, JR.					
Address: 560 NEW GOFF MOUNTAIN ROAD CROSS LANES, WV 25313					
Phone: 304-776-4405					
Fax: 304-776-4409					
E-mail: eddie@stateequipment.com					
Signature: 					

**ADDENDUM ACKNOWLEDGEMENT FORM**  
**SOLICITATION NO.: CRFO DOT210000047**

**Instructions:** Please acknowledge receipt of all addenda issued with this solicitation by completing this addendum acknowledgment form. Check the box next to each addendum received and sign below. Failure to acknowledge addenda may result in bid disqualification.

**Acknowledgment:** I hereby acknowledge receipt of the following addenda and have made the necessary revisions to my proposal, plans and/or specification, etc.

**Addendum Numbers Received:**

(Check the box next to each addendum received)

- |                                                    |                                          |
|----------------------------------------------------|------------------------------------------|
| <input type="checkbox"/> Addendum No. 1            | <input type="checkbox"/> Addendum No. 6  |
| <input type="checkbox"/> Addendum No. 2            | <input type="checkbox"/> Addendum No. 7  |
| <input checked="" type="checkbox"/> Addendum No. 3 | <input type="checkbox"/> Addendum No. 8  |
| <input type="checkbox"/> Addendum No. 4            | <input type="checkbox"/> Addendum No. 9  |
| <input type="checkbox"/> Addendum No. 5            | <input type="checkbox"/> Addendum No. 10 |

I understand that failure to confirm the receipt of addenda may be cause for rejection of this bid. I further understand that that any verbal representation made or assumed to be made during any oral discussion held between Vendor's representatives and any state personnel is not binding. Only the information issued in writing and added to the specifications by an official addendum is binding.

STATE EQUIPMENT, INC.

\_\_\_\_\_  
Company

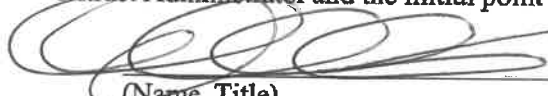
  
\_\_\_\_\_  
Authorized Signature

12-7-2020

\_\_\_\_\_  
Date


**NOTE:** This addendum acknowledgement should be submitted with the bid to expedite document processing.

**DESIGNATED CONTACT:** Vendor appoints the individual identified in this Section as the Contract Administrator and the initial point of contact for matters relating to this Contract.

  
GENERAL MANAGER  
(Name, Title)  
EDDIE ROWAN, JR. GENERAL MANAGER  
(Printed Name and Title)  
560 NEW GOFF MOUNTAIN ROAD. CROSS LANES, WV 25313  
(Address)  
(304) 776-4405 (304) 776-4409  
(Phone Number) / (Fax Number)  
eddie@stateequipment.com  
(email address)

**CERTIFICATION AND SIGNATURE:** By signing below, or submitting documentation through wvOASIS, I certify that I have reviewed this Solicitation in its entirety; that I understand the requirements, terms and conditions, and other information contained herein; that this bid, offer or proposal constitutes an offer to the State that cannot be unilaterally withdrawn; that the product or service proposed meets the mandatory requirements contained in the Solicitation for that product or service, unless otherwise stated herein; that the Vendor accepts the terms and conditions contained in the Solicitation, unless otherwise stated herein; that I am submitting this bid, offer or proposal for review and consideration; that I am authorized by the vendor to execute and submit this bid, offer, or proposal, or any documents related thereto on vendor's behalf; that I am authorized to bind the vendor in a contractual relationship; and that to the best of my knowledge, the vendor has properly registered with any State agency that may require registration.

STATE EQUIPMENT, INC.  
(Company)

  
GENERAL MANAGER  
(Authorized Signature) (Representative Name, Title)

EDDIE ROWAN, JR. GENERAL MANAGER  
(Printed Name and Title of Authorized Representative)

12-7-20  
(Date)

(304) 776-4405 (304) 776-4409  
(Phone Number) (Fax Number)

STATE OF WEST VIRGINIA  
Purchasing Division

**PURCHASING AFFIDAVIT**

**CONSTRUCTION CONTRACTS:** Under W. Va. Code § 5-22-1(i), the contracting public entity shall not award a construction contract to any bidder that is known to be in default on any monetary obligation owed to the state or a political subdivision of the state, including, but not limited to, obligations related to payroll taxes, property taxes, sales and use taxes, fire service fees, or other fines or fees.

**ALL CONTRACTS:** Under W. Va. Code §5A-3-10a, no contract or renewal of any contract may be awarded by the state or any of its political subdivisions to any vendor or prospective vendor when the vendor or prospective vendor or a related party to the vendor or prospective vendor is a debtor and: (1) the debt owed is an amount greater than one thousand dollars in the aggregate; or (2) the debtor is in employer default.

**EXCEPTION:** The prohibition listed above does not apply where a vendor has contested any tax administered pursuant to chapter eleven of the W. Va. Code, workers' compensation premium, permit fee or environmental fee or assessment and the matter has not become final or where the vendor has entered into a payment plan or agreement and the vendor is not in default of any of the provisions of such plan or agreement.

**DEFINITIONS:**

**"Debt"** means any assessment, premium, penalty, fine, tax or other amount of money owed to the state or any of its political subdivisions because of a judgment, fine, permit violation, license assessment, defaulted workers' compensation premium, penalty or other assessment presently delinquent or due and required to be paid to the state or any of its political subdivisions, including any interest or additional penalties accrued thereon.

**"Employer default"** means having an outstanding balance or liability to the old fund or to the uninsured employers' fund or being in policy default, as defined in W. Va. Code § 23-2c-2, failure to maintain mandatory workers' compensation coverage, or failure to fully meet its obligations as a workers' compensation self-insured employer. An employer is not in employer default if it has entered into a repayment agreement with the Insurance Commissioner and remains in compliance with the obligations under the repayment agreement.

**"Related party"** means a party, whether an individual, corporation, partnership, association, limited liability company or any other form or business association or other entity whatsoever, related to any vendor by blood, marriage, ownership or contract through which the party has a relationship of ownership or other interest with the vendor so that the party will actually or by effect receive or control a portion of the benefit, profit or other consideration from performance of a vendor contract with the party receiving an amount that meets or exceeds five percent of the total contract amount.

**AFFIRMATION:** By signing this form, the vendor's authorized signer affirms and acknowledges under penalty of law for false swearing (W. Va. Code §61-5-3) that: (1) for construction contracts, the vendor is not in default on any monetary obligation owed to the state or a political subdivision of the state, and (2) for all other contracts, that neither vendor nor any related party owe a debt as defined above and that neither vendor nor any related party are in employer default as defined above, unless the debt or employer default is permitted under the exception above.

**WITNESS THE FOLLOWING SIGNATURE:**

Vendor's Name: STATE EQUIPMENT, INC.

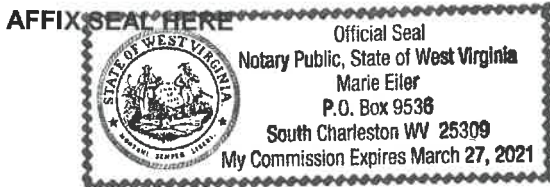
Authorized Signature: [Signature] Date: 12-7-2020

State of WEST VIRGINIA

County of KANAWHA, to-wit:

Taken, subscribed, and sworn to before me this 7<sup>th</sup> day of December, 2020

My Commission expires March 27, 2021.



NOTARY PUBLIC Marie Eiler  
Purchasing Affidavit (Revised 01/19/2018)

West Virginia Ethics Commission  
**Disclosure of Interested Parties to Contracts**

(Required by W. Va. Code § 6D-1-2)

Name of Contracting Business Entity: STATE EQUIPMENT, INC Address: 560 NEW GOFF MOUNTAIN ROAD  
CROSS LANES, WV 25313

Name of Authorized Agent: EDDIE ROWAN, JR. Address: \_\_\_\_\_

Contract Number: DOT2100000047 Contract Description: 4 WHEEL DRIVE LOADER/BACKHOE

Governmental agency awarding contract: \_\_\_\_\_

Check here if this is a Supplemental Disclosure

List the Names of Interested Parties to the contract which are known or reasonably anticipated by the contracting business entity for each category below (attach additional pages if necessary):

**1. Subcontractors or other entities performing work or service under the Contract**

Check here if none, otherwise list entity/individual names below.


**2. Any person or entity who owns 25% or more of contracting entity (not applicable to publicly traded entities)**

Check here if none, otherwise list entity/individual names below.

TERRY LAMM

**3. Any person or entity that facilitated, or negotiated the terms of, the applicable contract (excluding legal services related to the negotiation or drafting of the applicable contract)**

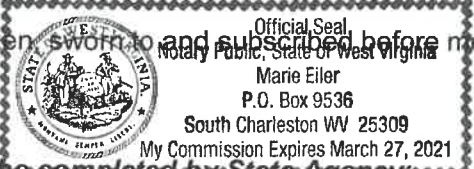
Check here if none, otherwise list entity/individual names below.

Signature:  Date Signed: 12-7-2020

**Notary Verification**

State of WEST VIRGINIA, County of KANAWHA \_\_\_\_\_:

I, EDDIE ROWAN, JR., the authorized agent of the contracting business entity listed above, being duly sworn, acknowledge that the Disclosure herein is being made under oath and under the penalty of perjury.

Taken, sworn to and subscribed before me this 7th day of December, 2020  
  
Marie Eiler  
Notary Public's Signature

**To be completed by State Agency:**  
Date Received by State Agency: \_\_\_\_\_  
Date submitted to Ethics Commission: \_\_\_\_\_  
Governmental agency submitting Disclosure: \_\_\_\_\_



REQUEST FOR QUOTATION  
**Class 352 Four Wheel Drive Case 580 Super N Loader With Backhoe or Equal**

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7.1.3 Failure to comply with any laws, rules, and ordinances applicable to the Contract Services provided under this Contract.

7.1.4 Failure to remedy deficient performance upon request.

7.2 The following remedies shall be available to Agency upon default.

7.2.1 Immediate cancellation of the Contract.

7.2.2 Immediate cancellation of one or more release orders issued under this Contract.

7.2.3 Any other remedies available in law or equity.

**8. MISCELLANEOUS:**

8.1 **No Substitutions:** Vendor shall supply only Contract Items submitted in Response to the Solicitation unless a contract modification is approved in accordance with the provisions contained in this Contract.

8.2 **Reports:** Vendor shall provide quarterly reports and annual summaries to the Agency showing the Agency's items purchased, quantities of items purchased, and total dollar value of the items purchased. Vendor shall also provide reports, upon request, showing the items purchased during the term of this Contract, the quantity purchased for each of those items, and the total value of purchases for each of those items. Failure to supply such reports may be grounds for cancellation of this Contract.

8.3 **Contract Manager:** During its performance of this Contract, Vendor must designate and maintain a primary contract manager responsible for overseeing Vendor's responsibilities under this Contract. The Contract manager must be available during normal business hours to address any customer service or other issues related to this Contract. Vendor should list its Contract manager and his or her contact information below.

**Contract Manager:** EDDIE ROWAN, JR.  
**Telephone Number:** 304-776-4405  
**Fax Number:** 304-776-4409  
**Email Address:** eddie@stateequipment.com



**CNH Industrial America LLC  
and CNH Industrial Canada, Ltd.**

**WARRANTY AND LIMITATION OF LIABILITY AGREEMENT  
LIGHT - CASE CONSTRUCTION EQUIPMENT**

**The Case Warranty**

The Case Warranty is a limited warranty that is provided to the initial retail purchaser in return for consideration paid as part of the purchase price of the product. The selling dealer is expected to review the warranty coverage with the initial retail purchaser and obtain his/her signature on this document.

**New Limited Warranty**

The warranty described here is from CNH Industrial America LLC and in Canada, CNH Industrial Canada Ltd., both of which are referred to in this agreement as "Case" for the Case Construction Brand. This warranty is for Case products sold and registered in the United States or Canada and normally operated in the United States or Canada. This warranty does NOT apply to any product normally operated outside of the United States and/or Canada, or to any unit purchased outside of the United States or Canada and imported in for any reason other than a customer relocation/personal move.

**Warranty Period**

For the products listed below, the Warranty Period for all coverage begins at the time that any person, dealer or agent first places the unit into service. At the latest, a unit is considered to be placed into service when purchased or delivered to an initial retail purchaser. Certain demonstration, rental, lease, and other used units may be eligible for a portion of a new unit warranty. The availability of the remaining portion of a new unit warranty does not mean that a unit is new or unused. The Warranty Period ends when either the month or machine hour limit is reached, whichever limit occurs first.

<b>CASE LIGHT PRODUCT</b>	<b>BASE WARRANTY</b>	<b>EXTENDED WARRANTY</b>	<b>NOTES</b>
<b>SKIDSTEER / COMPACT TRACK LOADERS</b> Case Engines (Warranty through Case)	12 Mo. / Unlimited Hrs	24 Mo. / 2000 Hrs 24 Mo. / 2000 Hrs	Notes 3, 4
<b>LOADER BACKHOES</b> Case Engines, Torque Converter, Transmission, Drive Shafts & Drive Axles	12 Mo. / Unlimited Hrs	24 Mo. / 2000 Hrs	Notes 1, 3
<b>TRACTOR LOADERS / FORKLIFTS</b> Case Engines, Torque Converter, Transmission, Drive Shafts & Drive Axles	12 Mo. / Unlimited Hrs	24 Mo. / 2000 Hrs	Notes 1, 3
<b>COMPACT EXCAVATORS CX-B Series</b> Yanmar Engines (Warranty through Case)	12 Mo. / 1000 Hrs	12 Mo / 1000 Hrs	Notes 2, 3
<b>COMPACT EXCAVATORS CX-C Series</b> Yanmar / Kubota Engines (Warranty through Case)	24 Mo. / 3000 Hrs	24 Mo. / 3000 Hrs	Notes 2, 3
<b>Mid-sized Compact Excavators – CX75/CX80 CX-C Series</b> Isuzu Engines (Warranty through Case)	12 Mo. / 1800 Hrs	24 Mo. / 2000 hrs	Notes 2, 3
<b>COMPACT WHEEL LOADERS</b> Case Engines (Warranty through Case)	12 Mo. / Unlimited Hrs	24 Mo. / 2000 Hrs	Note 3

- 1) Torque converter, transmission, drive shafts, & drive axles are covered for 24 months / 2000 hours.
- 2) Warranty does not cover any configuration excavator equipped with feller buncher/accumulator attachments
- 3) Engine warranty coverage is provided through Case.
- 4) Second year machine warranty coverage after base warranty expires

**Operator's Manual / Warranty Receipt Verification**

- YES  / NO  The selling dealer has reviewed the correct operator's manual with me and will provide the operator's manual upon delivery of the product.
- YES  / NO  The selling dealer has explained safety precautions to me.
- YES  / NO  The selling dealer has explained the warranty terms and coverage to me.
- YES  / NO  The selling dealer has explained Purchased Protection Plan options for additional coverage on select components.
- YES  / NO  Customer acknowledges that CNH Industrial America LLC/CNH Industrial Canada Ltd. may access and use diagnostic and telematics vehicle data for appropriate business purposes.

<b>Model:</b>	<b>Serial Number:</b>	<b>Hours:</b>	<b>Ops man. Number:</b>
<b>Model:</b>	<b>Serial Number:</b>	<b>Hours:</b>	<b>Ops man. Number:</b>
<b>Model:</b>	<b>Serial Number:</b>	<b>Hours:</b>	<b>Ops man. Number:</b>
<b>Retail DATE:</b>		<b>Usage:</b>	
<b>Purchaser Name (please print):</b>		<b>Dealer Name:</b>	
<b>Address:</b>		<b>Address:</b>	
<b>City / State:</b>		<b>City / State:</b>	
<b>Zip code:</b>		<b>Zip code:</b>	
<b>Phone Number:</b>		<b>Phone Number:</b>	

The answers checked above are correct. I acknowledge that I have read and I accept this warranty policy statement.

Purchaser Signature \_\_\_\_\_ Date \_\_\_\_\_

Dealer Signature \_\_\_\_\_ Date \_\_\_\_\_

**See page 2 for important limitations and exclusions**

**What's Covered**

If a defect in material or workmanship is found in a unit and reported during the Warranty Period, Case will pay parts and labor costs to repair the defect if the services are performed by an authorized Case dealer at the dealer's location. If parts are needed during the repair, Case will, at its option, use genuine Case new or remanufactured parts. Case replacement parts that are used in a warranty repair are warranted until the end of the machine warranty or to the end of the Case Replacement Parts Warranty, whichever is longer.

CASE PROVIDES NO WARRANTY, EXPRESS OR IMPLIED, FOR A COMPONENT OR OTHER ITEM THAT IS SEPARATELY WARRANTED TO THE PURCHASER BY ITS MANUFACTURER, SUCH AS TIRES, BATTERIES AND FUEL INJECTION COMPONENTS. CHECK WITH YOUR DEALER FOR DETAILS

**No Modification or Extension of Warranty Period**

The Case Warranty is limited to the written terms in this document. Case does not authorize any person, dealer or agent to change or extend the terms of this warranty in any manner. Any assistance to the purchaser in the repair or operation of any Case product outside the terms or limitations or exclusions of this warranty will not constitute a waiver of the terms, limitations or exclusions of this warranty, nor will such assistance extend or re-establish the warranty.

**EXCLUSIVE REMEDY**

**THE REMEDY OF REPAIRING A DEFECT IN MATERIALS OR WORKMANSHIP AT A CASE DEALERSHIP UNDER THE TERMS OF THIS WARRANTY IS THE PURCHASER'S EXCLUSIVE REMEDY AND IS IN LIEU OF ANY OTHER REMEDY OTHERWISE AVAILABLE.**

**This Warranty is Void If**

The unit's hour meter is changed or altered, unless a Case dealer, at the direction of Case, changed the meter. If the unit is modified or used in an application for which it is not designed, or the unit has been scrapped, salvaged, stolen, junked or totaled.

**Limitation and Exclusions** The Case Warranty gives you specific legal rights and you may also have other rights, which vary, from region to region.

**THIS DOCUMENT CONTAINS THE ENTIRE CASE WARRANTY. CASE MAKES NO OTHER REPRESENTATIONS OR WARRANTIES, EXPRESSED OR IMPLIED, AND SPECIFICALLY EXCLUDES THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR PARTICULAR PURPOSE. CASE WILL NOT BE LIABLE FOR INCIDENTAL OR CONSEQUENTIAL DAMAGES RESULTING FROM A BREACH OF THE WRITTEN WARRANTY OR ANY IMPLIED WARRANTY IMPOSED BY LAW.**

**Owner's Responsibility**

The Case warranty remains in effect during the Warranty Period if the owner performs the required maintenance at the recommended intervals outlined in the product operator's manual and the unit is operated within its rated capacity. Genuine Case service parts or Case approved service parts that meet Case specifications must be used for maintenance and repair.

**What's Not Covered**

- Cost associated with performing pre-delivery or scheduled inspection service.
- Repairs arising from storage deterioration, failure to maintain the equipment, negligence, alteration, improper use of the equipment, collision or other accident, vandalism, or other casualty, or operation beyond rated capacity or specification.
- Repairs arising from abuse or neglect, including but not limited to: operation without adequate coolant or lubricants, adjustments to the fuel system outside equipment specifications, over-speeding, improper storage, starting, warm-up, or shutdown practices, incorrect fuel or contaminated fuel, oil or other fluids.
- Normal maintenance services, such as engine tune-ups, engine fuel system cleaning, checks, adjustments, shimming, etc.
- Replacement of non-defective wear items expected to be replaced during the warranty period, including but not limited to: light bulbs, spark plugs, ignition points, brake or clutch linings, slip clutches, belts, chains, knives, bucket cutting edges and teeth, crawler track pads and track components, crop processing and cutting components, external drive sprockets and chains, soil engaging tools and accessories.
- Items replaced due to customer demand.
- Labor charges performed by anyone except a dealer authorized by contract to repair the equipment, unless they qualify under special provisions (i.e.; outside labor).
- Any and all travel costs for items such as towing, service calls, or transporting a unit to and from the place where the warranty service is performed, unless specifically covered by a product improvement program or units classified as heavy and/or compaction products
- Claims involving loss or damage during shipment or handling, including units subsequently sold as a "salvage" unit.
- "Salvage" or other units sold on an "as is" basis, unless otherwise specified in writing at the time of sale.
- Normal maintenance costs, including but not limited to: lubricants, coolants, fluids, fuel, filters, and associated labor. Lubricants, filters, and coolants may qualify for warranty reimbursement if they require replacement as a DIRECT RESULT of a defect in material or workmanship.
- Claims involving the inspection or reconditioning of units after storage or prior use.
- Components or items that are separately warranted directly by the manufacturer including but are not limited to: tires, tracks, engines, transmissions, batteries, fuel injection pumps, fuel injectors, etc.
- Shop comebacks: any duplicate, repeat, or comeback repair resulting from improper diagnosis, testing, or service work. This also includes repairs arising from service performed by agents not approved by Case.
- Repairs arising from any unauthorized modification to the product or the use on non-CNH Industrial parts, implements, or attachments, including but not limited to performance changing (i.e., increasing horsepower or other modifications) and/or emissions defeating modifications.
- Removal, replacement, or installation of non-CNH Industrial optional equipment, attachments or components.
- Premiums charged for overtime labor costs or out of shop expenses.
- Economic loss including lost profits, crop loss, crop damages, equipment rental, contract delay, project expenses, or other expenses or damages.
- Unauthorized modification or updating machines without a warrantable failure based on Service Bulletin information or production changes.
- Any and all costs of special tools
- Any and all costs of dealer shop supplies incurred with repairs, including but not limited to: solvents, cleaners, anti-seize lubricants, loctite, sealant, adhesive, oil-dry, shop towels, etc. Sealant or adhesive may qualify for warranty reimbursement in certain applications requiring a large volume of sealant/ adhesive.
- Failure of the machine, its implements or attachments caused by improper field application or loading.
- Any and all costs for coolant, fuel, or lube (oil) analysis including supplies and lab recommendations.
- Cost of initial setup or installation of any optional equipment or attachments to a unit.
- Cost associated with cleaning of machine in preparation for servicing

The signed WLL can be scanned and emailed as an attachment to [NA-WLL-AGREEMENT@CNHIND.COM](mailto:NA-WLL-AGREEMENT@CNHIND.COM) or can be mailed to:

USA mail original to CNH Industrial Capital America LLC, Attn: WLL Agreement, PO Box 1700 New Holland, PA 17557  
USA Overnight courier mail original to CNH Industrial Capital America LLC, Attn: WLL Agreement, 500 Diller Ave., New Holland, PA 17557  
Canada mail original to CNH Industrial Capital America LLC, Attn: WLL Agreement, 4475 North Service Rd, Suite 301, Burlington, ON L7L4X7 Canada

Case is a registered trademark in the United States and many other countries, owned by or licensed to CNH Industrial N.V., its subsidiaries or affiliates.

**CASE**  
CONSTRUCTION

# Backhoe Loaders

N SERIES



580N EP | 580N | 580 Super N | 580 Super N WT | 590 Super N

**SINCE 1842**



**580N EP**



**580N**



**580 Super N**




**580 Super N WT**



**590 Super N**





# Outmuscle, Outpower, Outperform, Outlast

When your legacy goes back to creating the world's first fully integrated backhoe loader you tend to understand a thing or two about how to engineer them. Meet the Tier 4 Final N Series—some of the most versatile machines in the industry—and built to outdo. The best breakout force. The highest lifting capacity. Fast roading speeds. One of the quietest cabs. Their list of credentials is impressive. Whether it's excavating, grading, craning, loading or removing snow, the Tier 4 Final N Series are the machines made for the job.

- + PowerLift™\*\*
- + PowerBoost\*\*
- + PowerDrive - Direct Drive Transmission\*
- + Over-Center Backhoe Design
- + ProControl System (PCS)
- + Comfort Steer™\*\*\*
- + Greater Coupler Compatibility and Design\*\*\*\*
- + Second-to-None Serviceability

\*Not available on the 580N EP

\*\*Not available on the 580N EP or 580N

\*\*\*Not available on the 580N EP or any 2WD models

\*\*\*\*Optional

## STRENGTH FROM WITHIN



### **FUEL-SAVING FEATURES\***

ECO-mode minimizes fuel burn while still providing full power to hydraulics. Other features such as auto-idle and auto-shutdown help take efficiency even further to lower operating costs.

\*ECO-mode, auto-idle and auto-shutdown not available on 580N EP

### **CUT TURNS IN HALF WITH COMFORT STEER™\***

CASE's Comfort Steer option reduces lock-to-lock rotations when moving from full right to full left (and vice versa). Load, stockpile and backfill considerably faster with less operator discomfort throughout the day.

\*Comfort Steer™ not available on 580N EP or any 2WD models

### **THE MOST MANEUVERABLE CONTROLS AROUND**

Creature comforts such as infinitely adjustable pilot control towers that adjust fore/aft and tilt in/out, as well as proportional roller switches, comfortable armrests, adjustable wrist rests and a footrest help keep any-sized operator comfortable.

Change directions quickly and easily with the flip of a switch. PowerDrive equipped machines offer a secondary Forward Neutral Reverse (FNR) switch that can be easily operated on the loader control lever. Also offered is an ergonomically placed clutch cut-out trigger allowing operators to channel more hydraulic flow to the loader.

### **LIGHTS, VISIBILITY, 360° ACTION**

All N Series machines feature high-intensity exterior lighting, including industry-inclusive "Easy Flex" side lighting\*. These adjustable lights have 45° rotation to provide overlapping fields of coverage for 360° visibility at night. For even greater visibility, an optional LED lighting package is available.

\*Not available on 580N EP canopy models

### **COMMUNICATION IS A BREEZE**

All windows easily open by hand, including the rear-quarter window, which opens 180°. Not only does this maximize airflow through the cab, it enables operators to clearly communicate with spotters all around the machine.

### **ADD VALUE WITH CASE OPTIONS**

For an increase in comfort the premium cloth hand stitched seat offers heat and air suspension with distinctive Power Tan striping, contrast stitching and a woven CASE logo. Hands-free calling, music streaming and a variety of connections allow operators to communicate and connect to their cell phone and audio devices with the standard waterproof bluetooth radio\*. Keep mud, dirt and debris contained with optional front fenders.

\*Standard on all cab models



**MAXIMUM VISIBILITY  
MINIMUM VOLUME**

Floor-to-ceiling windows encircle the operator for exceptional sightlines of loader and backhoe. The N Series also offers one of the quietest cabs in the industry, with a sound rating as low as 72 dBa.



# DIG, LIFT, LOAD AND ROAD – BETTER

**PROCONTROL MEANS PRECISION**



When swinging the backhoe from side to side, our exclusive ProControl swing dampening system stops the boom exactly when and where you want. No wiggle. No rebound. No waiting for it to set. Just precise, responsive control.






**POWERLIFT™ AND POWERBOOST TAKE TOUGHNESS UP A NOTCH\***

Our push-button PowerLift feature unleashes the industry's most ferocious breakout force and a lifting capacity that outperforms the competition. Additional hydraulic power is channeled directly to the backhoe, giving the N Series strength comparable to an 8-ton excavator and greater precision when craning with lower engine RPMs. PowerBoost offers PowerLift forces and unleashed engine RPMs for full power and speed designed to dig through tough ground in an instant. \*Not available on 580N EP and 580N




**POWERLIFT**    **POWERBOOST**

**POWERDRIVE – DIRECT DRIVE TRANSMISSION**




PowerDrive transmissions feature automatic Direct Drive engagement in 3rd and 4th gear locking the power of the engine to the transmission for increased gradeability and acceleration while reducing travel times around the job site. Standard Auto-Shifting, a fourth reverse gear and six distinct speeds provide constant matched speed and torque to adapt to a variety of terrains and demanding tasks.

**BENEFIT OF OVER-CENTER DESIGN**




Our revolutionary over-center backhoe design locks the boom in toward the machine, transferring at least 15% of its weight to the front axle, which drastically improves stability to minimize “porpoising” during roading. You’ll retain more material and comfortably travel up to 25 mph to, from and around the site.

**AUTO-RIDE CONTROL™**




CASE Auto-Ride Control is a spill-reducing feature engineered into our 4WD backhoe loaders. This highlight automatically reduces loader arm bounce at elevated speeds and features industry-leading adjustable speed settings, giving operators full control of their load retention as well as their comfort.

**LOW-TO-NO MAINTENANCE TIER 4 FINAL SOLUTIONS**



All N Series backhoe loaders make it easy to meet emissions regulations. The 580N EP uses a maintenance-free Diesel Oxidation Catalyst that has no exhaust filter to replace, no regeneration and no DEF (Diesel Exhaust Fluid) to add - just get in and go. The rest of the N-Series lineup uses an SCR (Selective Catalytic Reduction) after-treatment system. Without the need to regenerate, you don't have to worry about downtime or burning additional fuel. The system lets the engine run at peak performance for maximum power and better fuel efficiency. Just top off the DEF (Diesel Exhaust Fluid) when needed and you're ready to go.

**ADDED CLEARANCE – ADDED PERFORMANCE\***



18" front tires and a heavy duty front axle clear the most severe terrain and put power to the ground for increased gradeability, push power and maneuverability in demanding applications.

\*Available on 580N and 580SN models



## ATTACHED TO STRENGTH

CASE backhoe loaders are available with a variety of attachments to give your business even greater versatility.

**SEE OUR FULL LINE AT [CASECE.COM/ATTACHMENTS](http://CASECE.COM/ATTACHMENTS)**

### UNIVERSAL COUPLER

CASE offers a universal backhoe coupler option that also fits most Cat® and John Deere attachments for even greater versatility.

### FACTORY INSTALLED THUMB

Get a grip with a hydraulic backhoe thumb designed and manufactured by CASE, available as a bolt-on, no welding required, factory installed option or Dealer Installed Accessory (DIA) kit. The serrated teeth, made of rugged high-strength steel, provide excellent grip to make material handling easy. The adjustable teeth can be bolted into two positions in order to mesh with both the 18 or 24 inch universal and high-capacity buckets. Designed for use with both hydraulic and mechanical quick couplers allows quick and easy bucket changes throughout the day. When not in use, a convenient thumb lock mechanically holds the thumb in the "open" position for worry-free bucket operation.

Thumbs can be installed on all Extendahoe® machines equipped with two-way backhoe auxiliary hydraulics.

### INDUSTRY-EXCLUSIVE INTEGRATED HYDRAULIC QUICK-COUPLER

Only CASE offers an integrated hydraulic quick-coupler\* on our backhoes. Its unique design is factory-built into the backhoe, so it doesn't alter the physics or breakout force of the machine like after-market options. You get the same industry-leading power with the added convenience of being able to switch out attachments from the comfort of the cab.

\*Not available on 580N EP, 580N or any standard dipper/arm configuration

### SMARTFIT™ BUCKET TEETH

N Series buckets come standard with the innovative SmartFit bucket tooth system. These heavy-duty, self-sharpening teeth combine exceptional strength and unmatched ease of installation, thanks to a hammerless fastener system with reusable locking pins. Available in a full range of styles.



**THUMB AND THUMB LOCK**



**HYDRAULIC COUPLER**



**RIPPER**



**GRADER RAKE**



**AUGER**

# MAINTENANCE MADE EASY

## SERVICEABILITY IS IN OUR DNA

When you invest in CASE equipment, you need it to last. We make it simple. The N Series is no exception. From swing-out coolers and outboard-mounted disc brakes to ground-level site gauges and grouped service points located under a tilt-up hood, you can do daily maintenance in a matter of minutes. It's the easiest way to help you get the most performance and longest life out of your machine.



### Easy access to everything

- 1 Easiest safety strut to lower/raise
- 2 Spin-on filters
- 3 Electronic Fuel Priming\*  
\*Not available on 580N EP models
- 4 Flip-up hood
- 5 Outboard-mounted wet disc brakes
- 6 Hydraulic diagnostic ports
- 7 Grouped site gauges
- 8 Safe jump-start terminal and master disconnect switch
- 9 Externally adjustable Extendahoe wear pads

## **NO TOOLS NECESSARY**

The N Series backhoe loaders continue the CASE hallmark of simple serviceability with features like tool-free access to routine maintenance points.



### **Service-free features**

- + Lube-for-life U-joints
- + Hardened steel triple-bushed joints
- + Maintenance-free Tier 4 Final solution for 580N EP

## **SUPPORT COMES STANDARD**

### **BASE & EXTENDED LIMITED WARRANTY COVERAGE\***

#### **1-YEAR/UNLIMITED-HOUR FULL-COVERAGE BASE LIMITED WARRANTY**

#### **2-YEAR/2,000-HOUR EXTENDED LIMITED ENGINE WARRANTY**

Discuss the extended engine warranty coverage details with your dealer.

#### **UPTIME SOLUTIONS**

Your CASE dealer can provide solutions to meet all your needs and keep you productive.



#### **STRONGER PRODUCT SUPPORT SOLUTIONS**

Your CASE dealer knows best how you can maximize your equipment investment and uptime—with genuine CASE parts, expert service and a complete range of product support solutions including CASE remanufactured and all-makes parts. CASE supports better parts availability and faster deliveries through nine parts distribution centers in North America and a forecasting system to ensure that the right parts will be there when you need them. And only CASE dealers have exclusive access to the Electronic Service Tool (EST) that quickly pinpoints machine issues. Just ask your dealer for details.



#### **FLEXIBLE FINANCIAL OPTIONS**

Specialized finance programs and flexible leasing packages put you in the driver's seat of industry-leading CASE equipment while no-nonsense warranties and comprehensive protection plans ensure that your equipment is protected. As the only finance company dedicated to CASE, we offer strong products and services designed around your unique needs and are the only ones supported by the helpful service professionals at your CASE dealer.

\*Please see your CASE dealer for limitations, exclusions and confirmation of policies in effect.







## REMOTE CONTROL

**SiteWatch™**

Standard on all N Series backhoe loaders, CASE SiteWatch™ telematics break the boundaries of fleet management by allowing you to monitor and manage multiple machines from your computer, wherever you may be. No more manually tracking down engine hours and fuel levels. Get real-time performance metrics, idle-time analytics, scheduled maintenance intervals and programmable security alerts sent to any computer, anytime, anywhere.



# SPECIFICATIONS AND DIMENSIONS

SPECIFICATIONS	580N EP	580N	580 Super N	580 Super N WT	590 Super N
<b>Engine</b>	FPT F5HFL463D	FPT F5BFL413C	FPT F5BFL413B	FPT F5BFL413A	FPT F5BFL413A
<b>Displacement/Cylinders-in<sup>3</sup> (L)</b>	207 (3.4)/4	207 (3.4)/4	207 (3.4)/4	207 (3.4)/4	207 (3.4)/4
<b>Emissions Certification* Solutions</b>	Tier 4 Final (DOC)	Tier 4 Final (SCR)	Tier 4 Final (SCR)	Tier 4 Final (SCR)	Tier 4 Final (SCR)
<b>Gross Horsepower @ 2200 RPM – hp (kW)</b>	74 (55)	90 (67)	97 (72)	110 (82)	110 (82)
<b>Net Horsepower @ 2200 RPM – hp (kW)</b>	68 (51)	83 (62)	95 (71)	108 (81)	108 (81)
<b>Maximum Net Torque @ 1400 RPM – lb-ft (N·m)</b>	233 (316)	306 (415)	334 (453)	339 (460)	339 (460)
<b>Operating Weight 4WD – lb (kg)</b>	15,810 (7 171)	17,751 (8 052)	19,067 (8 649)	20,077 (9 107)	20,532 (9 309)
<b>Maximum Travel Speed Forward – mph (kph)</b>	21.3 (34.3)	25.0 (40.2)	25.0 (40.2)	25.2 (40.6)	25.2 (40.6)
<b>System Flow – gpm (L/min)</b>	28.5 (108)	28.5 (108)	41 (155.2)	41 (155.2)	43 (162.6)
<b>Backhoe Bucket Force – lbf (kN)</b>	11,517 (51.2)	11,517 (51.2)	14,452 (64.2)	15,070 (67.0)	15,853 (70.5)
<b>Backhoe Boom Lift Capacity @ groundline – lb (kg)</b>	2,858 (1 297)	2,858 (1 297)	3,513 (1 594)	3,761 (1 706)	4,175 (1 894)
<b>Loader Bucket Breakout Force – lb (daN)</b>	9,607 (4 273)	10,622 (4 724)	10,947 (4 965)	10,873 (4 837)	12,776 (5 683)
<b>Loader Lift Capacity @ Full Height – lb (kg)</b>	6,503 (2 950)	6,803 (3 086)	7,044 (3 195)	8,425 (3 822)	8,202 (3 721)
DIMENSIONS	580N EP	580N	580 Super N	580 Super N WT	590 Super N
<b>Height to Top of Cab</b>	8 ft 11 in (2.72 m)	8 ft 11 in (2.72 m)	8 ft 11 in (2.72 m)	8 ft 11 in (2.72 m)	8 ft 11 in (2.71 m)
<b>Bucket Hinge Pin Height, Fully Raised</b>	11 ft 3 in (3.41 m)	11 ft 3 in (3.42 m)	11 ft 3 in (3.42 m)	11 ft 6 in (3.50 m)	11 ft 6 in (3.50 m)
<b>Overall Operating Height, Fully Raised</b>	13 ft 9 in (4.17 m)	13 ft 9 in (4.18 m)	13 ft 9 in (4.18 m)	13 ft 11 in (4.24 m)	13 ft 11 in (4.24 m)
<b>Dump Angle @ Full Height</b>	46°	47°	47°	45°	45°
<b>Dump Clearance @ Full Height, 45° Dump</b>	8 ft 8 in (2.63 m)	8 ft 10 in (2.69 m)	8 ft 10 in (2.69 m)	8 ft 11 in (2.73 m)	8 ft 11 in (2.73 m)
<b>Dump Reach @ Full Height, 45° Dump</b>	26.7 in (679 mm)	31.5 in (801 mm)	31.5 in (801 mm)	27.0 in (685 mm)	29.2 in (741 mm)
<b>Bucket Rollback @ Groundline</b>	40°	42°	42°	40°	40°
<b>Digging Depth Below Grade, Bucket Flat</b>	7.8 in (199 mm)	6.1 in (155 mm)	6.1 in (155 mm)	6.1 in (156 mm)	6.2 in (157 mm)
<b>Wheelbase</b>	84.5 in (2.15 m)	84.5 in (2.15 m)	84.5 in (2.15 m)	84.5 in (2.15 m)	84.5 in (2.15 m)
<b>Reach from Front Axle Centerline, Bucket on Ground</b>	6 ft 10 in (2.07 m)	6 ft 10 in (2.07 m)	6 ft 10 in (2.07 m)	6 ft 9 in (2.05 m)	6 ft 7 in (2.05 m)
<b>Turning Radius at Curb, 4WD, Brakes Applied</b>	11 ft 4 in (3.45 m)	11 ft 4 in (3.45 m)	11 ft 4 in (3.45 m)	12 ft 0 in (3.65 m)	12 ft 6 in (3.81 m)
<b>Backhoe Dig Depth</b>	18 ft 6 in (5.63 m)	18 ft 3 in (5.55 m)	17 ft 11 in (5.47 m)	18 ft 0 in (5.48 m)	19 ft 6 in (5.94 m)

Specification data calculated using same bucket determining operating weight unless otherwise specified.  
 \*DOC = Diesel Oxidation Catalyst, SCR = Selective Catalytic Reduction.



## **BUILDING A STRONG CASE**

Since 1842, we at CASE Construction Equipment have lived by an unwavering commitment to build practical, intuitive solutions that deliver both efficiency and productivity. We continually strive to make it easier for our customers to implement emerging technologies and new compliance mandates.

Today, our global scale combined with our local expertise enables us to keep customers' real-world challenges at the center of our product development. This focus has led to numerous innovations like Ride Control™, EZ-EH controls, blade shake, PowerLift™, over-center boom design and the peace of mind that only CASE ProCare provides.

Every CASE machine is backed by more than 300 North American dealer locations, thousands of OEM, remanufactured and all-makes parts, and flexible financing and insurance options that provide the kind of reliable, steadfast support you expect from a professional partner.

We are passionate about improving the lives of others, whether investing in our veterans or raising awareness about local infrastructure initiatives through Dire States. Our goal is to build both stronger machines — and stronger communities.

At the end of the day, we do what's right by our customers and our communities so that they can count on CASE.

**CaseCE.com/TLB**

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**Form No. CCE201910TLB**  
Replaces Form No. CCE201901TLB

**IMPORTANT:** CASE Construction Equipment Inc. reserves the right to change these specifications without notice and without incurring any obligation relating to such change. Availability of some models and equipment builds vary according to the country in which the equipment is used. The illustrations and text may include optional equipment and accessories and may not include all standard equipment. Your CASE dealer/distributor will be able to give you details of the products and their specifications available in your area.



CASE Construction Equipment is biodiesel-friendly. NOTE: All engines meet current EPA emissions regulations. All specifications are stated in accordance with SAE Standards or Recommended Practices, where applicable.



Always read the Operator's Manual before operating any equipment. Inspect equipment before using it, and be sure it is operating properly. Follow the product safety signs and use any safety features provided.



## ENGINE

Model	FPT F5BFL413B
Emissions Certification	Tier 4 Final
Type	Diesel 4-stroke, Turbocharged
Cylinders	4
Bore/Stroke	3.90 x 4.33 in (99 x 110 mm)
Displacement	207 in <sup>3</sup> (3.4 L)
Fuel injection	Direct, high pressure common rail – HPCR
Fuel	Diesel
Engine speeds*	RPM
Rated speed – full load	2200
Low idle	900 – 1000
High idle – no load	2330 – 2430
Horsepower @ 2200 RPM:	
Gross	97 hp (72 kW)
Net	95 hp (71 kW)
Maximum torque @ 1400 RPM:	
Gross	334 lb-ft (453 N-m)
Net	333 lb-ft (452 N-m)
Torque rise at rated speed	45% +/- 5%
Radiator:	
Core type	Square wave
Core size area	486 in <sup>2</sup> (3 145 cm <sup>2</sup> )
Rows of tubes	4
39° fan:	
Style	9 blade suction
Diameter	19.65 in (499 mm)
Ratio**	1.4:1
Pump operating angle ratings:	
Side to side	Rated 35°
Fore and aft	Rated 35°
Oil filtration	Replaceable, full flow cartridge

NOTE: \*Engine speeds w/ standard transmission.  
Meets federal emission regulations.  
\*\*Viscous fan.

## DRIVETRAIN

Transmission – standard:  
4F-4R Power Shuttle Synchronesh Transmission  
manual gear shift, fully synchronized

Transmission – optional:  
PowerDrive S-Type, 4F-4R fully synchronized  
electric/hydraulic shifting w/ auto shift mode  
and direct drive

Specifications below apply to both Power Shuttle and PowerDrive S-Type transmission unless otherwise indicated.

Gear ratios	Forward/Reverse
1st	5.603/4.643
2nd	3.481/2.884
3rd	1.584/1.313
4th	0.793/0.657

Travel speeds – Standard Power Shuttle		
Transmission	Forward Reverse	
	mph (kph)	mph (kph)
1st	3.8 (6.1)	4.5 (7.3)
2nd	6.0 (9.7)	7.2 (11.6)
3rd w/ DD Feature Off	13.1 (21.1)	15.7 (25.3)
4th w/ DD Feature Off	24.6 (39.6)	29.5 (47.5)

Travel speeds – Optional S-Type PowerDrive		
DD Transmission	Forward Reverse	
	mph (kph)	mph (kph)
1st	3.8 (6.1)	4.5 (7.3)
2nd	6.0 (9.7)	7.2 (11.6)
3rd w/ DD Feature Off	13.1 (21.1)	15.7 (25.3)
3rd DD – S-Type PowerDrive Only:	13.6 (22.0)	16.4 (26.4)
4th w/ DD Feature Off	24.6 (39.6)	29.5 (47.5)
4th DD – S-Type PowerDrive Only:	25.0 (40.2)	30.0 (48.2)

Transmission – optional:  
PowerDrive H-Type, 4F-4R hydraulic clutch  
shifting w/ auto shift mode and direct drive

Gear ratios	Forward/Reverse
1st	5.533/4.549
2nd	3.359/2.762
3rd	1.533/1.260
4th	0.811/–

Travel speeds – Optional H-Type PowerDrive		
DD Transmission	Forward Reverse	
	mph (kph)	mph (kph)
1st	3.9 (6.2)	4.6 (7.4)
2nd	6.3 (10.1)	7.5 (12.1)
3rd w/ DD Feature Off	13.6 (21.9)	16.4 (26.3)
3rd w/ DD	14.2 (22.8)	17.0 (27.4)
4th w/ DD Feature Off	24.2 (39.0)	29.0 (46.7)
4th w/ DD	25.0 (40.2)	29.8 (48.0)

Torque converter ratio	2.2
Differential-lock:	On-the-go push-button activation

Front/Rear axle (w/ 4WD 12x16.5 front tires):	
Differential ratio	2.0/2.5
Planetary hub ratio	6.0/6.4
Total reduction ratio	12.0/16.0

Service brakes:	
Individually applied, power assisted, hydraulically actuated, maintenance-free, self-adjusting, outboard mounted, wet disc, 2 per side.	
Total disc area	384 in <sup>2</sup> (0.25 m <sup>2</sup> )

Parking brakes	Trans Mounted spring-applied hydraulic release – SAHR
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NOTE: Travel speeds at 2312 engine  
RPM specified: w/ 19.5 L x 24.0 tires.  
Speeds decrease w/ 17.5 L x 24.0 rear tires.

## ELECTRICAL

Voltage	12 Volts, negative ground
Alternator	160 amp
Battery	850 cold-cranking amps
Optional dual batteries:	850 cold-cranking amps each
Power plugs – 2	30 amps total

## OPERATOR ENVIRONMENT

ROPS/FOPS certified protective canopy;  
Anti-vandalism cover for dash – w/ canopy  
only; Rear fenders extensions; Coat hook w/  
garment strap; Interior rearview convex mirror;  
Non-suspension seat – 180° swivel – Vinyl; 2 in  
(50 mm) retractable seat belt; Cup holder/  
storage tray mounted on left-hand fender;  
Right-hand storage compartment w/ lid.

### Gauges:

Engine water temperature; Converter oil  
temperature; Fuel level; Tachometer/  
hourmeter; DEF level.

### Warning lights:

Air cleaner restriction; Alternator; A/C high  
pressure; Cold start; Engine oil pressure;  
Hydraulic oil filter bypass; Parking brake  
engagement; Low fuel; Water in fuel; Low DEF.

### Audible alarms w/ diagnostics:

Coolant temperature; Engine oil pressure;  
Parking brake engagement; Converter oil  
temperature; Shuttle engagement/seat  
position; Backup alarm; Low DEF.

Horn	Dual switched front and rear
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## OPERATING WEIGHT

### Configuration 1 – SAE Transport:

No Operator, GP Loader Bucket, Cab, AC,  
Small Front Counter Weight, 2WD, Full of Fuel,  
SAE Carry T4 Final Engine, Pilot Controls,  
11 L – 16 @ 52 psi front tires, 17.5 L – 24 @  
30 psi rear tires.

19,269 lb (7 883 kg)

### Configuration 2 – SAE Transport:

No Operator, 4:1 Loader Bucket, E-hoe, Cab,  
big front counter weight, Full of Fuel, SAE  
Carry T4 Final Engine, Pilot Controls, Galaxy  
12 x 16.5 @ 50 psi front tires, Solideal  
19.5 L – 24 @ 30 psi rear tires.

19,067 lb (8 649 kg)

### Add-on weights:

Cab-over canopy	309 lb (140 kg)
Fabricated stabilizer pads	141 lb (64 kg)
Counterweights	700 lb (318 kg)
Extendahoe®	286 lb (130 kg)
4WD w/ driveshaft guard	283 lb (128 kg)

## HYDRAULICS

<b>Pump:</b> Bosch Rexroth Series 31 Variable Displacement Axial Piston Pump	
<b>Main relief pressure:</b>	
Standard	3,450 +/- 50 psi (238 +/- 3.5 bar)
Power Lift	3,625 +/- 50 psi (250 +/- 3.5 bar)

<b>Filtration:</b> 7-micron, full flow replaceable cartridge on return line, condition indicator light for filter.	
<b>Oil cooler</b>	Heavy-duty

<b>Loader flow @ rated engine RPM:</b>	
	41 gpm @ 2,340 psi (156.2 L/min @ 161 bar)

<b>Loader control valve w/ pilot or manual backhoe controls:</b> Two or three-spool closed center sectional control valve. Single lever manual control for lift and tilt functions. The three-spool valve uses a proportional Electro-Hydraulic control for the auxiliary function. The lift lever has a positive hold "Float" position and a "return-to-dig" feature.	
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<b>Loader auxiliary hydraulics w/ proportional thumb switch w/ detent on loader control handle:</b>	
	0 - 41 gpm @ 2,340 psi (0 - 156.2 L/min @ 161 bar)

<b>Backhoe flow @ rated engine RPM:</b>	
	41 gpm @ 3,100 psi (156.2 L/min @ 214 bar)

<b>Manual backhoe control valve:</b> Six-spool monoblock open center control valve w/ seventh and eighth spool bolt-on sections. Features "Pro-Control" which includes custom designed spools for each individual function along w/ "swing cushioning" valve for zero-wag swing control. Basic control valve has an open center parallel circuit for all functions.	
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**Pilot backhoe control valve:**  
Six, seven, or eight spool sectional closed center control valve. Features "Pro-Control" which includes custom designed spools for each individual function along w/ "swing cushioning" valve for zero-wag swing control. Basic control valve is closed center, w/ circuits in parallel w/ a post-compensated, flow sharing feature for simultaneous operation of all circuits.

<b>1-way flow auxiliary hydraulics:</b> 1-way flow hydraulic valve is equipped w/ an adjustable LS relief valve to control attachment pressure and a 6 position flow control selector for 6 detented, distinct flow settings. <b>Actuation:</b> Manual backhoe controls - cab floor pedal Pilot controls - left-hand joystick	
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<b>2-way flow auxiliary hydraulics*:</b> <b>Actuation:</b> Activate the 2-way flow switch located on the rear console Manual shift - 2-way flow linkage on far right of backhoe tower Pilot controls - left-hand joystick.	
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NOTE: \*Available w/ 1-way/2-way Aux. Hyd. option.

## SERVICE CAPACITIES

<b>Fuel tank</b>	35.0 gal (132.0 L)
<b>DEF tank</b>	3.6 gal (13.5 L)
<b>Hydraulic system:</b>	
Total	125 qt (118.0 L)
w/ Extendahoe®	131 qt (123.6 L)
Reservoir w/ filter	53 qt (50.5 L)
Reservoir w/o filter	55 qt (52.4 L)

<b>Transmission - total system:</b>	
2WD Standard	18 qt (17.0 L)
2WD PowerDrive S-Type	23 qt (21.7 L)
4WD Standard	21 qt (19.4 L)
4WD PowerDrive S-Type	22 qt (20.7 L)
4WD PowerDrive H-Type	19 qt (18.0 L)

<b>Standard front axle:</b>	
4WD Differential	8.1 qt (7.7 L)
4WD Planetaries - each	0.5 qt (0.5 L)
<b>Rear axle:</b>	
Differential and planetaries	14.4 qt (13.6 L)
<b>Engine oil w/ filter</b>	8.5 qt (8.0 L)
<b>Cooling system:</b>	
w/ heater	19.0 qt (18.0 L)
w/o heater	18.3 qt (17.3 L)
<b>Window washer reservoir</b>	3.0 qt (2.8 L)

## OTHER SPECIFICATIONS

<b>Front tires:</b>	
2WD	11.0 L x 16.0, 10-ply rating
4WD	12.0 L x 16.5, 10-ply rating
4WD	12.5/80 x 18.0 10-ply rating

<b>Rear tires:</b>	
2/4WD	19.5 L x 24.0, 10-ply rating
2/4WD	17.5 L x 24.0, 10-ply rating

<b>Turning radius: Curb to Curb:</b>	
<b>2WD:</b>	
Brakes on	10 ft 8 in (3.24 m)
Brakes off	12 ft 4 in (3.76 m)

<b>4WD - engaged*:</b>	
Brakes on	11 ft 4 in (3.45 m)
Brakes off	13 ft 10 in (4.21 m)

<b>4WD - disengaged*:</b>	
Brakes on	11 ft 0 in (3.36 m)
Brakes off	12 ft 3 in (3.72 m)

NOTE: \*Turning radius dimensions curb to curb w/ 12.0 x 16.5 front tires and 17.5 L x 24.0 rear tires.

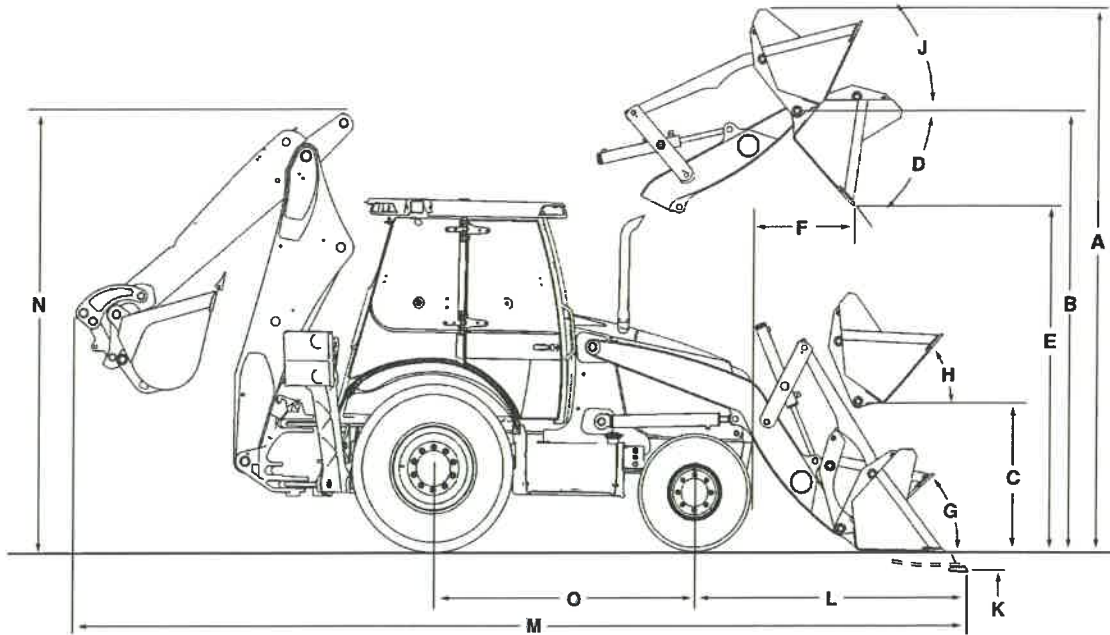
## LOADER BUCKET SIZES

Type	Width	Weight	Struck	Heaped Capacity	
Long Lip Bucket:	without bolt-on edge	82 in (2.08 m)	864 lb (392 kg)	0.88 yd <sup>3</sup> (0.67 m <sup>3</sup> )	1.03 yd <sup>3</sup> (0.79 m <sup>3</sup> )
	with bolt-on edge	93 in (2.36 m)	1,188 lb* (539 kg)	1.10 yd <sup>3</sup> (0.89 m <sup>3</sup> )	1.29 yd <sup>3</sup> (0.99 m <sup>3</sup> )
4 IN 1® Bucket with bolt-on edge	82 in (2.08 m)	1,572 lb* (713 kg)	0.85 yd <sup>3</sup> (0.65 m <sup>3</sup> )	1.04 yd <sup>3</sup> (0.80 m <sup>3</sup> )	

NOTE: \*Weight of 4 IN 1® bucket includes edges, cylinders and tube lines.

## BACKHOE BUCKET SIZES

Type	Width	Weight	Heaped Capacity
Universal Buckets	12 in (305 mm)	295 lb (134 kg)	3.40 ft <sup>3</sup> (0.10 m <sup>3</sup> )
	18 in (457 mm)	356 lb (162 kg)	5.30 ft <sup>3</sup> (0.15 m <sup>3</sup> )
	24 in (610 mm)	427 lb (194 kg)	7.70 ft <sup>3</sup> (0.22 m <sup>3</sup> )
	30 in (762 mm)	489 lb (222 kg)	10.20 ft <sup>3</sup> (0.29 m <sup>3</sup> )
	36 in (914 mm)	552 lb (251 kg)	12.70 ft <sup>3</sup> (0.36 m <sup>3</sup> )
High Capacity Buckets	24 in (610 mm)	447 lb (203 kg)	8.50 ft <sup>3</sup> (0.24 m <sup>3</sup> )
	30 in (762 mm)	502 lb (228 kg)	10.60 ft <sup>3</sup> (0.30 m <sup>3</sup> )



Line drawings are for illustrative purpose only and may not be exact representation of unit.

### LOADER DIMENSIONS

	Long Lip Bucket	4 IN 1® Bucket
<b>A.</b> Overall operating height – fully raised	13 ft 9 in (4.18 m)	13 ft 8 in (4.16 m)
Height to:		
<b>B.</b> Bucket hinge pin fully raised	11 ft 3 in (3.42 m)	11 ft 3 in (3.42 m)
<b>C.</b> Bucket hinge pin at SAE carry	13.6 in (345 mm)	13.6 in (345 mm)
<b>D.</b> Dump angle at full height	47°	47°
<b>E.</b> Dump clearance at full height, 45° dump:		
Bucket	8 ft 10 in (2.69 m)	8 ft 11 in (2.71 m)
Clam open	—	9 ft 8 in (2.96 m)
<b>F.</b> Dump reach at full height, 45° dump – from bumper:		
Bucket	31.5 in (801 mm)	29.1 in (738 mm)
Clam open	—	15.3 in (388 mm)
Bucket rollback:		
<b>G.</b> @ Groundline	42°	42°
<b>H.</b> @ SAE carry	42°	42°
<b>J.</b> @ Full height	Adjustable	Adjustable
<b>K.</b> Digging depth below grade:		
Bucket flat	6.1 in (155 mm)	4.8 in (122 mm)
Clam open – dozing	—	4.1 in (103 mm)
<b>L.</b> Reach from front axle centerline – bucket on ground	6 ft 10 in (2.07 m)	6 ft 8 in (2.03 m)
Lift capacity to full height – calculated values	7,044 lb (3 195 kg)	6,703 lb (3 040 kg)
Breakout force:		
Lift cylinders	9,833 lb (4 460 daN)	9,610 lb (4 359 daN)
Dump cylinders	10,947 lb (4 965 daN)	11,658 lb (5 288 daN)
Bucket cutting edge width	82.5 in (2.09 m)	82.0 in (2.08 m)
Maximum grading angle	114°	114°
Maximum clam opening	—	38.3 in (972 mm)
Moldboard height	—	36.8 in (934 mm)
Raising time to full height – manual/pilot controls	2.6/3.2 sec	2.6/3.2 sec
Bucket dumping time	0.8/1.2 sec	0.8/1.2 sec
Lowering time:		
Power down	1.9/2.1 sec	1.9/2.1 sec
Return-to-dig	2.5/2.2 sec	2.5/2.2 sec
Clam:		
Open time	—	1.1 sec
Close time	—	1.1 sec

NOTE: Loader dimensions taken with 4WD, 12.0 x 16.5 front tires and 19.5 L x 24.0 rear tires.

## DIMENSIONS

2WD with 17.5 L x 24.0 rear tires

4WD with 19.5 L x 24.0 tires

<b>M. Overall transport length:</b>		
Long Lip bucket with Quick Coupler	23 ft 5 in (7.14 m)	23 ft 4 in (7.10 m)
4 IN 1 <sup>®</sup> bucket with Quick Coupler	23 ft 3 in (7.07 m)	23 ft 1 in (7.04 m)
Long Lip bucket with Straight Links	23 ft 6 in (7.15 m)	23 ft 4 in (7.12 m)
4 IN 1 <sup>®</sup> bucket with Straight Links	23 ft 3 in (7.09 m)	23 ft 2 in (7.06 m)
Overall transport width	7 ft 2 in (2.17 m)	7 ft 2 in (2.17 m)
<b>Height:</b>		
To top of canopy	8 ft 8 in (2.64 m)	8 ft 9 in (2.66 m)
To top of cab	8 ft 9 in (2.68 m)	8 ft 11 in (2.72 m)
To top of exhaust stack	8 ft 5 in (2.58 m)	8 ft 7 in (2.62 m)
<b>N. Transport</b>	10 ft 10 in (3.29 m)	11 ft 1 in (3.37 m)
Ground clearance at backhoe frame	12 in (304 mm)	15.0 in (381 mm)
Angle of departure	15.3°	19.0°
<b>Front wheel tread:</b>		
11.0 L x 16.0	67.5 in (1.72 m)	67.5 in (1.72 m)
12.0 L x 16.5	67.7 in (1.72 m)	67.7 in (1.72 m)
12.5/80 x 18.0	70.3 in (1.79 m)	70.3 in (1.79 m)
19.5 L x 24.0	61.2 in (1.55 m)	61.2 in (1.55 m)
17.5 L x 24.0	63.1 in (1.60 m)	63.1 in (1.60 m)
<b>Width over tires:</b>		
11.0 L x 16.0	79.3 in (2.02 m)	79.3 in (2.02 m)
12.0 L x 16.5	81.1 in (2.06 m)	81.1 in (2.06 m)
12.5/80 x 18.0	81.4 in (2.07 m)	81.4 in (2.07 m)
19.5 L x 24.0	81.4 in (2.07 m)	81.4 in (2.07 m)
17.5 L x 24.0	81.7 in (2.07 m)	81.7 in (2.07 m)
<b>O. Wheelbase:</b>		
19.5 L x 24.0	84.0 in (2.13 m)	84.5 in (2.15 m)
17.5 L x 24.0	84.0 in (2.13 m)	84.5 in (2.15 m)

## CYLINDERS

	Bore Diameter	Rod Diameter	Stroke	Closed Length
<b>Loader:</b>				
Lift – 2	3.25 in (82.6 mm)	1.75 in (44.5 mm)	28.86 in (733.0 mm)	42.95 in (1 062.0 mm)
Dump – 2	3.00 in (76.2 mm)	1.50 in (38.1 mm)	20.33 in (516.5 mm)	29.90 in (759.5 mm)
4 IN 1 <sup>®</sup> clam – 2	3.00 in (76.2 mm)	1.75 in (44.5 mm)	9.08 in (230.6 mm)	19.62 in (498.3 mm)
<b>Backhoe:</b>				
Boom	5.00 in (127.0 mm)	2.50 in (63.5 mm)	38.25 in (971.6 mm)	52.82 in (1 341.6 mm)
Dipperstick	4.75 in (120.7 mm)	2.50 in (63.5 mm)	25.14 in (628.5 mm)	39.65 in (1 007.0 mm)
Bucket	3.50 in (88.9 mm)	2.50 in (63.5 mm)	35.35 in (897.9 mm)	48.17 in (1 223.6 mm)
Extendahoe <sup>®</sup>	3.00 in (76.2 mm)	1.75 in (44.5 mm)	42.05 in (1 068.0 mm)	56.22 in (1 428.0 mm)
Swing – 2	4.00 in (101.6 mm)	2.00 in (50.8 mm)	11.50 in (292.0 mm)	24.44 in (620.8 mm)
Stabilizer – 2	4.50 in (114.3 mm)	2.25 in (57.2 mm)	21.37 in (542.9 mm)	33.87 in (860.2 mm)

## AXLE RATINGS

	Front – 2WD	Rear	Front – 4WD
Maximum static	70,821 lb (32 124 kg)	90,145 lb (40 889 kg)	64,613 lb (29 308 kg)
Dynamic operating	44,261 lb (20 076 kg)	56,200 lb (25 492 kg)	39,328 lb (17 839 kg)
Static operating	17,704 lb (8 030 kg)	22,480 lb (10 197 kg)	15,732 lb (7 136 kg)
Oscillation – front axle	22° total – 11° side to side	–	22° total – 11° side to side

**BACKHOE LIFT CAPACITIES**

Boom Lift	Standard Backhoe		Extendahoe®			
	Standard	Power Lift	Retracted		Extended	
	Lift Capacity lb (kg)	Lift Capacity lb (kg)	Lift Capacity lb (kg)	Lift Capacity lb (kg)	Lift Capacity lb (kg)	Lift Capacity lb (kg)
+16 ft (4.87 m)	—	—	—	—	2,115 (959)	2,298 (1 043)
+14 ft (4.27 m)	3,039 (1 378)	3,285 (1 490)	2,837 (1 287)	3,083 (1 398)	2,395 (1 086)	2,603 (1 181)
+12 ft (3.66 m)	3,413 (1 548)	3,691 (1 674)	3,201 (1 452)	3,479 (1 578)	2,536 (1 151)	2,757 (1 250)
+10 ft (3.05 m)	3,499 (1 587)	3,784 (1 716)	3,281 (1 488)	3,566 (1 618)	2,593 (1 176)	2,818 (1 278)
+8 ft (2.44 m)	3,485 (1 581)	3,768 (1 709)	3,263 (1 480)	3,546 (1 608)	2,564 (1 163)	2,786 (1 264)
+6 ft (1.83 m)	3,438 (1 559)	3,717 (1 686)	3,213 (1 457)	3,492 (1 584)	2,549 (1 156)	2,770 (1 257)
+4 ft (1.22 m)	3,374 (1 530)	3,648 (1 655)	3,146 (1 427)	3,420 (1 551)	2,521 (1 144)	2,741 (1 243)
+2 ft (0.61 m)	3,307 (1 500)	3,575 (1 622)	3,077 (1 396)	3,345 (1 517)	2,489 (1 129)	2,706 (1 227)
<b>Ground Level</b>	<b>3,251 (1 475)</b>	<b>3,513 (1 594)</b>	<b>3,018 (1 369)</b>	<b>3,280 (1 488)</b>	<b>2,489 (1 129)</b>	<b>2,706 (1 227)</b>
-2 ft (0.61 m)	3,201 (1 452)	3,459 (1 569)	2,965 (1 345)	3,223 (1 462)	2,466 (1 118)	2,680 (1 215)
-4 ft (1.22 m)	3,175 (1 440)	3,430 (1 556)	2,935 (1 331)	3,190 (1 447)	2,446 (1 109)	2,659 (1 206)
-6 ft (1.83 m)	3,182 (1 443)	3,437 (1 559)	2,938 (1 333)	3,193 (1 448)	2,443 (1 108)	2,656 (1 205)
-8 ft (2.44 m)	3,258 (1 478)	3,520 (1 597)	3,007 (1 364)	3,269 (1 483)	2,465 (1 118)	2,679 (1 215)
-10 ft (3.05 m)	3,441 (1 561)	3,717 (1 686)	3,175 (1 440)	3,451 (1 565)	2,530 (1 148)	2,750 (1 248)
-12 ft (3.66 m)	—	—	—	—	2,707 (1 228)	2,943 (1 335)
-14 ft (4.27 m)	—	—	—	—	3,239 (1 469)	3,521 (1 597)
<b>Dipper Lift</b>						
+14 ft (4.27 m)	—	—	—	—	4,281 (1 942)	4,281 (1 942)
+12 ft (3.66 m)	5,822 (2 641)	5,822 (2 641)	5,618 (2 548)	5,618 (2 548)	4,046 (1 835)	4,046 (1 835)
+10 ft (3.05 m)	5,600 (2 540)	5,600 (2 540)	5,399 (2 449)	5,399 (2 449)	3,984 (1 807)	3,984 (1 807)
+8 ft (2.44 m)	5,562 (2 523)	5,562 (2 523)	5,360 (2 431)	5,360 (2 431)	3,913 (1 775)	3,913 (1 775)
+6 ft (1.83 m)	6,236 (2 829)	6,236 (2 829)	6,030 (2 735)	6,030 (2 735)	4,166 (1 889)	4,166 (1 889)
+4 ft (1.22 m)	7,424 (3 368)	7,424 (3 368)	7,203 (3 267)	7,203 (3 267)	4,102 (1 861)	4,102 (1 861)
+2 ft (0.61 m)	—	—	—	—	4,850 (2 200)	4,850 (2 200)

NOTE: Boom and Dipper Lift Capacities are rated per SAE J31 and are 87% of the maximum hydraulic lift force available with the specified options.

**BACKHOE OPERATIONAL DATA**

	Standard Backhoe	Extendahoe®	
		Retracted	Extended
<b>Digging depth:</b>			
Maximum	14 ft 6 in (4.41 m)	14 ft 6 in (4.41 m)	17 ft 11 in (5.47 m)
Maximum with hi-capacity bucket	15 ft 0 in (4.51 m)	15 ft 0 in (4.51 m)	18 ft 6 in (5.63 m)
2 ft (610 mm) flat bottom	14 ft 4 in (4.37 m)	14 ft 4 in (4.37 m)	17 ft 10 in (5.43 m)
8 ft (2.44 m) flat bottom	13 ft 4 in (4.06 m)	13 ft 4 in (4.06 m)	17 ft 1 in (5.19 m)
<b>Overall reach from:</b>			
Rear axle centerline	21 ft 10 in (6.66 m)	21 ft 10 in (6.66 m)	25 ft 3 in (7.69 m)
Swing pivot	18 ft 2 in (5.55 m)	18 ft 2 in (5.55 m)	21 ft 7 in (6.58 m)
<b>Loading height</b>	12 ft 1 in (3.67 m)	12 ft 1 in (3.67 m)	14 ft 5 in (4.38 m)
<b>Loading reach</b>	4 ft 7 in (1.41 m)	4 ft 7 in (1.41 m)	7 ft 3 in (2.20 m)
<b>Swing arc</b>	180°	180°	180°
<b>Bucket rotation:</b>			
Straight links	175.6°	175.6°	175.6°
Mechanical coupler	198.0°	198.0°	198.0°
Hydraulic coupler – Extendahoe® dipper	194.8°	194.8°	194.8°
Hydraulic coupler – standard dipper	198.0°	198.0°	198.0°
<b>Stabilizer spread – operating:</b>			
Flip pad	9 ft 3 in (2.82 m)	9 ft 3 in (2.82 m)	9 ft 3 in (2.82 m)
Cast pad	9 ft 7 in (2.93 m)	9 ft 7 in (2.93 m)	9 ft 7 in (2.93 m)
<b>Digging force:</b>			
Bucket cylinder – SAE rated 3,460 psi	13,975 lb (61 363 N)	13,975 lb (61 363 N)	13,975 lb (61 363 N)
Bucket cylinder – Power Lift	14,452 lb (64 240 N)	14,452 lb (64 240 N)	14,452 lb (64 240 N)
Dipper cylinder – SAE rated 3,460 psi	8,657 lb (38 508 N)	8,657 lb (38 508 N)	6,305 lb (28 045 N)
Dipper cylinder – Power Lift	9,070 lb (40 345 N)	9,070 lb (40 345 N)	6,606 lb (29 382.7 N)
<b>Leveling angle:</b>			
Flip pad	11.8°	11.8°	11.8°
Cast pad	12.8°	12.8°	12.8°

NOTE: Lift capacities apply straight to the rear of prime mover. 4WD with 19.5 L x 24.0 tires equipped with 24 in (610 mm) heavy-duty bucket and Case coupler except as noted.



## STANDARD EQUIPMENT

### OPERATOR ENVIRONMENT

See page 1

### ENGINE

FPT F5BFL413B diesel  
Selective Catalytic Reduction – SCR  
Full flow engine oil filter  
Aspirated air cleaner – replaceable dual element dry type with radial seal  
Fuel filter with water trap  
Radiator with de-aeration bottle  
Antifreeze to -34° F (-37° C)  
Electronic throttles – foot and rotary hand  
Self-adjusting belt  
High Pressure Common Rail computer controlled injection with diagnostic features  
Engine ECO Mode – Detent on backhoe hand throttle, push button switch on dash  
Auto Engine Idle  
Auto Engine Shutdown  
Auto Protection Shutdown  
Electronic Fuel Priming

### DRIVETRAIN

Power Shuttle 4F-4R synchromesh transmission  
Front axle:  
2WD front axle with 11.0 L x 16.0 tires  
4WD mechanically driven front axle with 12.0 L x 16.5 tires and drive shaft guard  
Rear axle:  
2/4WD heavy-duty outboard planetary drive, with 19.5 L x 24.0 tires  
Torque converter – 11.8 in (300 mm)  
On-the-go electric 4WD control  
Electric F/R shuttle control  
Electric differential lock control, push-button  
Park brake, spring-applied, hydraulic release – SAHR

### HYDRAULICS

Ground level remote hydraulic test ports  
Pump:  
41 gpm @ 3,000 psi  
(156.2 L/min @ 207 bar)  
Heavy-duty hydraulic oil cooler  
7-micron, spin on oil filter

### LOADER

Bucket position indicator; Lifting lugs on standard bucket; Single lever control with self-leveling and return-to-dig; Hand operated clutch disconnects on loader and shift levers, single lever 4-function loader control: lift, dump, clutch cut-out, differential lock

### BACKHOE

Over center design, Fabricated “S” boom; Pro Control System; Dipperstick integrated serrated gripper teeth; Case mechanical coupler

### OTHER

Forward tilt engine hood  
Replaceable, molded front bumpers  
Front/Rear tie downs  
Reflective logos  
Signal Lights – cab and canopy:  
2 rear tail/stop  
2 front flashers/turn  
2 rear flashers/turn  
Working/Driving Lights – cab and canopy:  
Adjustable halogen work lights – 55 W:  
4 front  
2 side – one left, one right  
4 rear  
Master disconnect switch and remote jump-start terminals  
Hydrostatic steering  
Backup alarm  
Vertical spin-on engine oil, fuel and hydraulic filters

### TELEMATICS

CASE SiteWatch™ Telematics – includes hardware and a 3-yr Advanced data subscription

### WARRANTY

1-Year/Unlimited-Hour Full-Coverage Base Limited Warranty  
2-Year/2,000-Hour Extended Engine Warranty

## OPTIONAL EQUIPMENT

### OPERATOR ENVIRONMENT

- Speed selectable Auto Ride Control – 4WD models
- Standard Ride Control – 2WD models
- Comfort Steering with two speed steering pump and 3rd/4th gear cutout
- Deluxe Canopy with glass windshield, windshield wiper, windshield washer, floor mat, 85 dba sound level, two additional front lights, two additional rear lights and anti-vandalism cover
- ROPS/FOFS certified protective cab available in LH Door or 2 door with heat, A/C, defroster, door activated dome light, 4 front, 4 rear and 2 adjustable side lights, tilt steering wheel, floor mat, tinted glass, radio ready, front and rear wiper and fender extensions
- Deluxe Cab package with deluxe interior, viscous fan, pull-down sun visor and 72 dba sound level
- Mechanical suspension seat with flip-up armrests, 180° swivel, adjustable seat and weight, backrest angle, lumbar and cushion angle – cab units cloth or vinyl, canopy units vinyl only
- Air suspension seat with flip-up armrests, 180° swivel, electric height adjustment, adjustable back rest and lumbar and cushion angle – cab units cloth or vinyl, canopy units vinyl only
- Heated seat option for vinyl and cloth Air suspension seats – cab units cloth or vinyl, canopy units vinyl only
- Premium multi-color, hand stitched cloth, heated air suspension seat – not for use with ROPS Canopy option
- Bluetooth Radio – Communication and Media streaming, Sirius XM satellite radio ready – does not include satellite antenna, AM/FM tuner, NOAA weatherband tuner, USB input and audio Aux-in
- 3 in (75 mm) seat belt for mechanical and air suspension seat

### ENGINE

- Cold Weather Starting Aid:
  - Dual 12 volt batteries, glow plugs, engine block heater and heated CCV hose
- Severe Cold Weather Starting Aid:
  - Synthetic transmission, hydraulic and engine oil – order with cold weather starting aid

### DRIVETRAIN

- PowerDrive S-Type transmission, 4F-4R, fully synchronized electronic transmission controller, kick down, transmission disconnect and FNR switch in loader control lever, includes auto shift mode and direct drive
- PowerDrive H-Type transmission, 4F-4R, hydraulic clutch shifting, kick down, transmission disconnect and FNR switch in loader control lever, includes auto shift mode and direct drive
- 4WD heavy-duty mechanically driven front axle with 12.5/80 x 18.0 tires

### LOADER

- Auxiliary hydraulics for loader-mounted equipment with thumb-operated proportional control
- Hydraulic front quick coupler
- Tool portfolio of additional attachments
- Buckets – see page 2

### BACKHOE

- 1-way Auxiliary backhoe hydraulics for hammers, plate compactors or similar 1-way flow attachments
- 1-way/2-way Auxiliary backhoe hydraulics for hammers, plate compactors or similar 1-way flow attachments or switch to 2-way flow for thumbs, augers or similar 2-way flow attachments
- Extendahoe®
- Power Lift
- Power Boost
- Bolt-on hardened gripper teeth
- Two-lever control – backhoe or Extendahoe®
- Pilot operated control system:
  - Fingertip proportional Electro-Hydraulic stabilizer controls
  - Thumb-operated proportional Electro-Hydraulic Extendahoe® control
  - Thumb-operated horn button
  - Thumb-operated auxiliary hydraulic control
  - Infinitely adjustable towers
  - In-cab switchable “excavator to backhoe” control pattern change
- Flip over stabilizer pads
- Cemetery/Street pads
- Hydraulic bucket quick coupler
- Universal coupler – CAT/Deere compatible
- Buckets – see page 2

- Hydraulic thumb – Includes: 2 replaceable, high strength, bolt on tines with two positions for Universal or Hi-Cap buckets – meshes with Bucket teeth on 18 in & 24 in Buckets

### OTHER

- Front tires:
  - 11.0 L x 16.0 or 12.0 L x 16.5
  - 12.5/80 x 18.0 10-ply includes heavy duty front axle
- Rear tires:
  - 17.5 L x 24.0 or 19.5 L x 24.0
- Special paint
- Tool box – bolt-on, step-mounted
- Front counterweights:
  - 700 lb and 1,100 lb (318 kg and 500 kg)
- Rotating beacon
- LED Working/Driving Light Package:
  - 4 front
  - 4 rear
  - 2 side
- Chaff Screen – Additional fine mesh screen in front of standard grille
- Locking DEF/Fuel covers
- Front Fenders

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CASE Construction Equipment is biodiesel-friendly. NOTE: All engines meet current EPA emissions regulations. All specifications are stated in accordance with SAE Standards or Recommended Practices, where applicable.



Always read the Operator's Manual before operating any equipment. Inspect equipment before using it, and be sure it is operating properly. Follow the product safety signs and use any safety features provided.

Form No. CCE201810580SN

Replaces Form No. CCE201710580SN

580SN

7 of 7