# 315SK Backhoe Loader

(PIN: 1T0315SK\_ \_D229820— ) (PIN: 1T0315SK\_ \_C219607— )

# OPERATOR'S MANUAL 315SK Backhoe Loader OMT305682 ISSUE F9 (ENGLISH)

CALIFORNIA

Proposition 65 Warning

Diesel engine exhaust and some of its constituents are known to the State of California to cause cancer, birth defects, and other reproductive harm.

If this product contains a gasoline engine:



The engine exhaust from this product contains chemicals known to the State of California to cause cancer, birth defects or other reproductive harm.

The State of California requires the above two warnings.

Additional Proposition 65 Warnings can be found in this manual.

Worldwide Construction And Forestry Division PRINTED IN U.S.A.

# Foreword

READ THIS MANUAL carefully to learn how to operate and service your machine correctly. Failure to do so could result in personal injury or equipment damage. This manual and safety signs on your machine may also be available in other languages. (See your John Deere dealer to order.)

THIS MANUAL SHOULD BE CONSIDERED a permanent part of your machine and should remain with the machine when you sell it.

MEASUREMENTS in this manual are given in both metric and customary U.S. unit equivalents. Use only correct replacement parts and fasteners. Metric and inch fasteners may require a specific metric or inch wrench.

RIGHT-HAND AND LEFT-HAND sides are determined by facing in the direction of forward travel.

WRITE PRODUCT IDENTIFICATION NUMBERS (P.I.N.) in the Machine Numbers section. Accurately record all the numbers to help in tracing the machine should it be stolen. Your dealer also needs these numbers when you order parts. File the identification numbers in a secure place off the machine.

WARRANTY is provided as part of John Deere's support program for customers who operate and maintain their

equipment as described in this manual. The warranty is explained on the warranty certificate or statement which you should have received from your dealer.

This warranty provides you the assurance that John Deere will back its products where defects appear within the warranty period. In some circumstances, John Deere also provides field improvements, often without charge to the customer, even if the product is out of warranty. Should the equipment be abused, or modified to change its performance beyond the original factory specifications, the warranty will become void and field improvements may be denied. Setting fuel delivery above specifications or otherwise overpowering machines will result in such action.

THE TIRE MANUFACTURER'S warranty supplied with your machine may not apply outside the U.S.

If you are not the original owner of this machine, it is in your interest to contact your local John Deere dealer to inform them of this unit's serial number. This will help John Deere notify you of any issues or product improvements.

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# Manual Identification—READ THIS FIRST!

**IMPORTANT: Use only supporting manuals** designated for your specific machine. If incorrect manual is chosen, improper service may occur. Verify product identification number (PIN) when choosing the correct manual.

## **Choosing the Correct Supporting Manuals**

John Deere backhoe loaders are available in different machine configurations based on the various markets into which they are sold. Different supporting manuals exist for different machine configurations.

When necessary, product identification numbers are listed on the front covers of backhoe loader manuals. These numbers are used to identify the correct supporting manual for your machine.

## **Product Identification Number**

The product identification number (PIN) plate (1) is located on the left-side of machine on the loader frame. Each machine has a 17-character PIN (2) shown on PIN plate.



PIN Plate Location



Example of PIN Plate

1-PIN Plate

2—17-Character PIN

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The PIN identifies the producing factory, machine model number, machine option, year of manufacture, engine emission level, and machine serial number.

	17-Character PIN Example															
	(3)			(4)		(5)	(4)	(6)	(7)	(8)			(9	<b>)</b> )		
1	Т	0	3	1	5	S	Κ			D	2	2	9	8	2	0
1	Т	0	3	1	5	S	К			С	2	1	9	6	0	7

- (3)—World Code—Identifies location where machine is manufactured.
- (4)—Machine Model Identifier—Identifies model number.
- (5)—Machine Option Code—Identifies which major machine option is equipped. This character will change from one machine to another.
- (6)—Check Letter—This is a random character assigned by the factory. This is not used in machine identification.
- (7)—Manufacturing Year Code—Identifies year of machine manufacture.
- (8)—Engine Emission Code—Represents engine emission certification.
- (9)—Machine Serial Number—Identifies machine serial number. This character will change from one machine to another.

The following is an example for a 315SK machine that meets Tier 3 and Stage III A emission levels:

## 1T0315SK\_\_D229820

1T0	World Code (manufacturing location)
1DW	Davenport Works
1T8	Thibodaux Works
1T0	Dubuque Works
315_K	Machine Model Identifier
s	Machine Option Code
х	Base Machine
S	Super Duty
E	Easy Power (EP)
т	Total Machine Control (TMC) Configuration
	Check Letter (variable)
	Manufacturing Year Code (variable)
С	2012
D	2013
E	2014
F	2015
G	2016
D	Engine Emission Code
С	Tier 2 and Stage II
D	Tier 3 and Stage III A
E	Interim Tier 4 and Stage III B
F	Tier 4
G	Interim Tier 4 and Stage III A (19-56 kW)
229820	Machine Serial Number

## **Engine Model Number**

This machine has multiple engine options. To ensure correct service information is being used, identify which engine is equipped. See Engine Identification. (Section 3-2.)

OUT4001,00000C6 -19-07AUG12-2/2

## IMPORTANT

Warranty will not apply to engine and drivetrain failures resulting from unauthorized adjustments to this engine.

Unauthorized adjustments are in violation of the emissions regulations applicable to this engine and may result in substantial fines and penalties.

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# Conformity Marking

NOTE: Some or all machine models listed on the front cover of this manual are available in optional factory configurations that meet or exceed European Union (EU) or Eurasian Economic Union (EAEU) conformity requirements. To validate conformance of a particular machine for sale into the EU or EAEU markets, check for the applicable marking on the machine, or see your authorized dealer.



# EPA Non-road Emissions Control Warranty Statement—Compression Ignition

DXLOGOV1 -UN-28APR09



JOHN DEERE

### U.S. AND CANADA EMISSION CONTROL WARRANTY STATEMENT YOUR WARRANTY RIGHTS AND OBLIGATIONS

To determine if the John Deere engine qualifies for the additional warranties set forth below, look for the "Emissions Control Information" label located on the engine. If the engine is operated in the United States or Canada and the Emissions Control information label states: "This engine complies with US EPA regulations for nonroad and stationary diesel engines", or "This engine conforms to US EPA nonroad compression-ignition regulations", refer to the "U.S. and Canada Emission Control Warranty Statement." If the engine is operated in California, and the label states: "This engine complies with US EPA and CARB regulations for nonroad diesel engines", or "This engine conforms to US EPA and California nonroad compression-ignition emission regulations", also refer to the "California Emission Control Warranty Statement."

Warranties stated on this certificate refer only to emissions-related parts and components of your engine. The complete engine warranty, less emissions-related parts and components, is provided separately. If you have any questions about your warranty rights and responsibilities, you should contact John Deere at 1-319-292-5400.

### JOHN DEERE'S WARRANTY RESPONSIBILITY

John Deere warrants to the ultimate purchaser and each subsequent purchaser that this off-road diesel engine including all parts of its emission-control system was designed, built and equipped so as to conform at the time of the sale with Section 213 of the Clean Air Act and is free from defects in materials and workmanship which would cause the engine to fail to conform with applicable US EPA regulations for a period of five years from the date the engine is placed into service or 3,000 hours of operation, whichever first occurs.

Where a warrantable condition exists, John Deere will repair or replace, as it elects, any part or component with a defect in materials or workmanship that would increase the engine's emissions of any regulated pollutant within the stated warranty period at no cost to you, including expenses related to diagnosing and repairing or replacing emission-related parts. Warranty coverage is subject to the limitations and exclusions set forth herein. Emission- related components include engine parts developed to control emissions related to the following:

Air-Induction System Fuel System Ignition System Exhaust Gas Recirculation Systems Aftertreatment Devices Crankcase Ventilation Valves Sensors Engine Electronic Control Units

#### EMISSION WARRANTY EXCLUSIONS

John Deere may deny warranty claims for malfunctions or failures caused by:

- Non-performance of maintenance requirements listed in the Operator's Manual
- The use of the engine/equipment in a manner for which it was not designed
- · Abuse, neglect, improper maintenance or unapproved modifications or alterations
- · Accidents for which it does not have responsibility or by acts of God

The off-road diesel engine is designed to operate on diesel fuel as specified in the Fuels, Lubricants and Coolants section in the Operators Manual. Use of any other fuel can harm the emissions control system of the engine/equipment and is not approved for use.

To the extent permitted by law John Deere is not liable for damage to other engine components caused by a failure of an emission-related part, unless otherwise covered by standard warranty.

THIS WARRANTY IS EXPRESSLY IN LIEU OF ANY OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. REMEDIES UNDER THIS WARRANTY ARE LIMITED TO THE PROVISIONS OF MATERIAL AND SERVICES AS SPECIFIED HEREIN. WHERE PERMITTED BY LAW, NEITHER JOHN DEERE NOR ANY AUTHORIZED JOHN DEERE ENGINE DISTRIBUTOR, DEALER, OR REPAIR FACILITY OR ANY COMPANY AFFILIATED WITH JOHN DEERE WILL BE LIABLE FOR INCIDENTAL OR CONSEQUENTIAL DAMAGES.

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#### JOHN DEERE U.S. AND CANADA EMISSION CONTROL WARRANTY STATEMENT YOUR WARRANTY RIGHTS AND OBLIGATIONS

To determine if the John Deere engine qualifies for the additional warranties set forth below, look for the "Emissions Control Information" label located on the engine. If the engine is operated in the United States or Canada and the Emissions Control information label states: "This engine complies with US EPA regulations for nonroad and stationary diesel engines", or "This engine conforms to US EPA nonroad compression-ignition regulations", refer to the "U.S. and Canada Emission Control Warranty Statement." If the engine is operated in California, and the label states: "This engine complies with US EPA and CARB regulations for nonroad diesel engines", or "This engine conforms to US EPA and California nonroad compression-ignition emission regulations", also refer to the "California Emission Control Warranty Statement."

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Where a warrantable condition exists, John Deere will repair or replace, as it elects, any part or component with a defect in materials or workmanship that would increase the engine's emissions of any regulated pollutant within the stated warranty period at no cost to you, including expenses related to diagnosing and repairing or replacing emission-related parts. Warranty coverage is subject to the limitations and exclusions set forth herein. Emission- related components include engine parts developed to control emissions related to the following:

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- Non-performance of maintenance requirements listed in the Operator's Manual
- The use of the engine/equipment in a manner for which it was not designed
- · Abuse, neglect, improper maintenance or unapproved modifications or alterations
- Accidents for which it does not have responsibility or by acts of God

The off-road diesel engine is designed to operate on diesel fuel as specified in the Fuels, Lubricants and Coolants section in the Operators Manual. Use of any other fuel can harm the emissions control system of the engine/equipment and is not approved for use.

To the extent permitted by law John Deere is not liable for damage to other engine components caused by a failure of an emission-related part, unless otherwise covered by standard warranty.

THIS WARRANTY IS EXPRESSLY IN LIEU OF ANY OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. REMEDIES UNDER THIS WARRANTY ARE LIMITED TO THE PROVISIONS OF MATERIAL AND SERVICES AS SPECIFIED HEREIN. WHERE PERMITTED BY LAW, NEITHER JOHN DEERE NOR ANY AUTHORIZED JOHN DEERE ENGINE DISTRIBUTOR, DEALER, OR REPAIR FACILITY OR ANY COMPANY AFFILIATED WITH JOHN DEERE WILL BE LIABLE FOR INCIDENTAL OR CONSEQUENTIAL DAMAGES.

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# CARB Non-road Emissions Control Warranty Statement—Compression Ignition

## **Emissions Control Warranty Statement 2016 through 2018**

DXLOGOV1 -UN-28APR09



# JOHN DEERE

### CALIFORNIA EMISSIONS CONTROL WARRANTY STATEMENT YOUR WARRANTY RIGHTS AND OBLIGATIONS

To determine if the John Deere engine qualifies for the additional warranties set forth below, look for the "Emission Control Information" label located on the engine. If the engine is operated in the United States or Canada and the engine label states: "This engine complies with US EPA regulations for nonroad and stationary diesel engines", or "This engine complies with US EPA regulations for stationary emergency diesel engines", refer to the "U.S. and Canada Emission Control Warranty Statement." If the engine is operated in California, and the engine label states: "This engine complies with US EPA and CARB regulations for nonroad diesel engines" also refer to the "California Emissions Control Warranty Statement."

Warranties stated on this certificate refer only to emissions-related parts and components of your engine. The complete engine warranty, less emission-related parts and components, is provided separately. If you have any questions about your warranty rights and responsibilities, you should contact John Deere at 1-319-292-5400.

### CALIFORNIA EMISSIONS CONTROL WARRANTY STATEMENT:

The California Air Resources Board (CARB) is pleased to explain the emission-control system warranty on 2016 through 2018 off-road diesel engines. In California, new off-road engines must be designed, built and equipped to meet the State's stringent anti-smog standards. John Deere must warrant the emission control system on your engine for the periods of time listed below provided there has been no abuse, neglect or improper maintenance of your engine.

Your emission control system may include parts such as the fuel injection system and the air induction system. Also included may be hoses, belts, connectors and other emission-related assemblies.

John Deere warrants to the ultimate purchaser and each subsequent purchaser that this off-road diesel engine was designed, built, and equipped so as to conform at the time of sale with all applicable regulations adopted by CARB and is free from defects in materials and workmanship which would cause the failure of a warranted part to be identical in all material respects to the part as described in John Deere's application for certification for a period of five years from the date the engine is delivered to an ultimate purchaser or 3,000 hours of operation, whichever occurs first for all engines rated at 19 kW and greater. In the absence of a device to measure hours of use, the engine shall be warranted for a period of five years.

### EMISSIONS WARRANTY EXCLUSIONS:

John Deere may deny warranty claims for failures caused by the use of an add-on or modified part which has not been exempted by the CARB. A modified part is an aftermarket part intended to replace an original emission-related part which is not functionally identical in all respects and which in any way affects emissions. An add-on part is any aftermarket part which is not a modified part or a replacement part.

In no event will John Deere, any authorized engine distributor, dealer, or repair facility, or any company affiliated with John Deere be liable for incidental or consequential damage.

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DX, EMISSIONS, CARB -19-03FEB17-1/8

#### JOHN DEERE'S WARRANTY RESPONSIBILITY:

Where a warrantable condition exists, John Deere will repair or replace, as it elects, your off-road diesel engine at no cost to you, including diagnosis, parts or labor. Warranty coverage is subject to the limitations and exclusions set forth herein. The off-road diesel engine is warranted for a period of five years from the date the engine is delivered to an ultimate purchaser or 3,000 hours of operation, whichever occurs first. The following are emissions-related parts:

Air Induction System	Emission control labels	Advanced Oxides of Nitrogen (NOx) Controls
<ul> <li>Intake manifold</li> <li>Turbocharger</li> </ul>	Particulate Controls	<ul> <li>NOx absorbers and catalysts</li> </ul>
Charge air cooler	<ul> <li>Any device used to capture particulate emissions</li> </ul>	SCR systems and urea containers/dispensing systems
Fuel Metering system	• Any device used in the regeneration of the	Misselleneous Items used in Above Systems
<ul> <li>Fuel injection system</li> </ul>	<ul> <li>Enclosures and manifolding</li> </ul>	Miscellaneous items used in Above Systems
Exhaust Gas Recirculation	Smoke Puff Limiters	<ul> <li>Electronic control units, sensors, actuators, wiring harnesses, hoses, connectors, clamps,</li> </ul>
• EGR valve	Positive Crankcase Ventilation (PCV) System	fittings, gasket, mounting hardware
Catalyst or Thermal Reactor Systems	<ul><li>PCV valve</li><li>Oil filler cap</li></ul>	
<ul><li>Catalytic converter</li><li>Exhaust manifold</li></ul>		

Any warranted emissions-related part scheduled for replacement as required maintenance is warranted by John Deere for the period of time prior to the first scheduled replacement point for the part. Any warranted emissions-related part not scheduled for replacement as required maintenance or scheduled only for regular inspection is warranted by John Deere for the stated warranty period.

## **OWNER'S WARRANTY RESPONSIBILITIES:**

As the off-road diesel engine owner you are responsible for the performance of the required maintenance listed in your Operator's Manual. John Deere recommends that the owner retain all receipts covering maintenance on the off-road diesel engine, but John Deere cannot deny warranty solely for the lack of receipts or for the owner's failure to ensure the performance of all scheduled maintenance. However, as the off-road diesel engine owner, you should be aware that John Deere may deny you warranty coverage if your off-road diesel engine or a part has failed due to abuse, neglect, improper maintenance or unapproved modifications.

The off-road diesel engine is designed to operate on diesel fuel as specified in the Fuels, Lubricants and Coolants section in the Operators Manual. Use of any other fuel may result in the engine no longer operating in compliance with applicable emissions requirements.

The owner is responsible for initiating the warranty process, and should present the machine to the nearest authorized John Deere dealer as soon as a problem is suspected. The warranty repairs should be completed by the authorized John Deere dealer as quickly as possible.

Emissions regulations require the customer to bring the unit to an authorized servicing dealer when warranty service is required. As a result, John Deere is NOT liable for travel or mileage on emissions warranty service calls.

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DX.EMISSIONS.CARB -19-03FEB17-2/8

## Emissions Control Warranty Statement 2016 through 2018

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#### JOHN DEERE

#### CALIFORNIA EMISSIONS CONTROL WARRANTY STATEMENT YOUR WARRANTY RIGHTS AND OBLIGATIONS

To determine if the John Deere engine qualifies for the additional warranties set forth below, look for the "Emission Control Information" label located on the engine. If the engine is operated in the United States or Canada and the engine label states: "This engine complies with US EPA regulations for nonroad and stationary diesel engines", or "This engine complies with US EPA regulations for stationary emergency diesel engines", refer to the "U.S. and Canada Emission Control Warranty Statement." If the engine is operated in California, and the engine label states: "This engine complies with US EPA and CARB regulations for nonroad diesel engines" also refer to the "California Emissions Control Warranty Statement."

Warranties stated on this certificate refer only to emissions-related parts and components of your engine. The complete engine warranty, less emission-related parts and components, is provided separately. If you have any questions about your warranty rights and responsibilities, you should contact John Deere at 1-319-292-5400.

### CALIFORNIA EMISSIONS CONTROL WARRANTY STATEMENT:

The California Air Resources Board (CARB) is pleased to explain the emission-control system warranty on 2016 through 2018 off-road diesel engines. In California, new off-road engines must be designed, built and equipped to meet the State's stringent anti-smog standards. John Deere must warrant the emission control system on your engine for the periods of time listed below provided there has been no abuse, neglect or improper maintenance of your engine.

Your emission control system may include parts such as the fuel injection system and the air induction system. Also included may be hoses, belts, connectors and other emission-related assemblies.

John Deere warrants to the ultimate purchaser and each subsequent purchaser that this off-road diesel engine was designed, built, and equipped so as to conform at the time of sale with all applicable regulations adopted by CARB and is free from defects in materials and workmanship which would cause the failure of a warranted part to be identical in all material respects to the part as described in John Deere's application for certification for a period of five years from the date the engine is delivered to an ultimate purchaser or 3,000 hours of operation, whichever occurs first for all engines rated at 19 kW and greater. In the absence of a device to measure hours of use, the engine shall be warranted for a period of five years.

### EMISSIONS WARRANTY EXCLUSIONS:

-24JUN14 John Deere may deny warranty claims for failures caused by the use of an add-on or modified part which has not been exempted by the CARB. A modified part is an aftermarket part intended to replace an original emission-related part which is not functionally identical in all respects and which ż in any way affects emissions. An add-on part is any aftermarket part which is not a modified part or a replacement part. RG26035

In no event will John Deere, any authorized engine distributor, dealer, or repair facility, or any company affiliated with John Deere be liable for incidental or consequential damage.

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#### JOHN DEERE'S WARRANTY RESPONSIBILITY:

Where a warrantable condition exists, John Deere will repair or replace, as it elects, your off-road diesel engine at no cost to you, including diagnosis, parts or labor. Warranty coverage is subject to the limitations and exclusions set forth herein. The off-road diesel engine is warranted for a period of five years from the date the engine is delivered to an ultimate purchaser or 3,000 hours of operation, whichever occurs first. The following are emissions-related parts:

Air Induction System	Emission control labels	Advanced Oxides of Nitrogen (NOx) Controls
<ul> <li>Intake manifold</li> <li>Turbocharger</li> </ul>	Particulate Controls	<ul> <li>NOx absorbers and catalysts</li> </ul>
Charge air cooler	<ul> <li>Any device used to capture particulate emissions</li> </ul>	SCR systems and urea containers/dispensing systems
Fuel Metering system	<ul> <li>Any device used in the regeneration of the</li> </ul>	
• Fuel injection system	<ul> <li>capturing system</li> <li>Enclosures and manifolding</li> <li>Smoke Puff Limiters</li> </ul>	Electronic control units, sensors, actuators,
Exhaust Gas Recirculation		wiring harnesses, hoses, connectors, clamps,
<ul> <li>EGR valve</li> </ul>	Positive Crankcase Ventilation (PCV) System	fittings, gasket, mounting hardware
Catalyst or Thermal Reactor Systems	<ul><li>PCV valve</li><li>Oil filler cap</li></ul>	
<ul> <li>Catalytic converter</li> <li>Exhaust manifold</li> </ul>		

Any warranted emissions-related part scheduled for replacement as required maintenance is warranted by John Deere for the period of time prior to the first scheduled replacement point for the part. Any warranted emissions-related part not scheduled for replacement as required maintenance or scheduled only for regular inspection is warranted by John Deere for the stated warranty period.

#### **OWNER'S WARRANTY RESPONSIBILITIES:**

As the off-road diesel engine owner you are responsible for the performance of the required maintenance listed in your Operator's Manual. John Deere recommends that the owner retain all receipts covering maintenance on the off-road diesel engine, but John Deere cannot deny warranty solely for the lack of receipts or for the owner's failure to ensure the performance of all scheduled maintenance. However, as the off-road diesel engine owner, you should be aware that John Deere may deny you warranty coverage if your off-road diesel engine or a part has failed due to abuse, neglect, improper maintenance or unapproved modifications.

The off-road diesel engine is designed to operate on diesel fuel as specified in the Fuels, Lubricants and Coolants section in the Operators Manual. Use of any other fuel may result in the engine no longer operating in compliance with applicable emissions requirements.

The owner is responsible for initiating the warranty process, and should present the machine to the nearest authorized John Deere dealer as soon as a problem is suspected. The warranty repairs should be completed by the authorized John Deere dealer as quickly as possible.

Emissions regulations require the customer to bring the unit to an authorized servicing dealer when warranty service is required. As a result, John Deere is NOT liable for travel or mileage on emissions warranty service calls.

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DX,EMISSIONS,CARB -19-03FEB17-4/8

RG26036

## Emissions Control Warranty Statement 2019 through 2021

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#### JOHN DEERE

#### CALIFORNIA EMISSIONS CONTROL WARRANTY STATEMENT YOUR WARRANTY RIGHTS AND OBLIGATIONS

To determine if the John Deere engine qualifies for the additional warranties set forth below, look for the "Emission Control Information" label located on the engine. If the engine is operated in the United States or Canada and the engine label states: "This engine complies with US EPA regulations for nonroad and stationary diesel engines", or "This engine complies with US EPA regulations for stationary emergency diesel engines", refer to the "U.S. and Canada Emission Control Warranty Statement." If the engine is operated in California, and the engine label states: "This engine complies with US EPA and CARB regulations for nonroad diesel engines" also refer to the "California Emissions Control Warranty Statement."

Warranties stated on this certificate refer only to emissions-related parts and components of your engine. The complete engine warranty, less emission-related parts and components, is provided separately. If you have any questions about your warranty rights and responsibilities, you should contact John Deere at 1-319-292-5400.

### CALIFORNIA EMISSIONS CONTROL WARRANTY STATEMENT:

The California Air Resources Board (CARB) is pleased to explain the emission-control system warranty on 2019 through 2021 off-road diesel engines. In California, new off-road engines must be designed, built and equipped to meet the State's stringent anti-smog standards. John Deere must warrant the emission control system on your engine for the periods of time listed below provided there has been no abuse, neglect or improper maintenance of your engine.

Your emission control system may include parts such as the fuel injection system and the air induction system. Also included may be hoses, belts, connectors and other emission-related assemblies.

John Deere warrants to the ultimate purchaser and each subsequent purchaser that this off-road diesel engine was designed, built, and equipped so as to conform at the time of sale with all applicable regulations adopted by CARB and is free from defects in materials and workmanship which would cause the failure of a warranted part to be identical in all material respects to the part as described in John Deere's application for certification for a period of five years from the date the engine is delivered to an ultimate purchaser or 3,000 hours of operation, whichever occurs first for all engines rated at 19 kW and greater. In the absence of a device to measure hours of use, the engine shall be warranted for a period of five years.

#### EMISSIONS WARRANTY EXCLUSIONS:

John Deere may deny warranty claims for failures caused by the use of an add-on or modified part which has not been exempted by the CARB. A modified part is an aftermarket part intended to replace an original emission-related part which is not functionally identical in all respects and which in any way affects emissions. An add-on part is any aftermarket part which is not a modified part or a replacement part.

In no event will John Deere, any authorized engine distributor, dealer, or repair facility, or any company affiliated with John Deere be liable for incidental or consequential damage.

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#### JOHN DEERE'S WARRANTY RESPONSIBILITY:

Where a warrantable condition exists, John Deere will repair or replace, as it elects, your off-road diesel engine at no cost to you, including diagnosis, parts or labor. Warranty coverage is subject to the limitations and exclusions set forth herein. The off-road diesel engine is warranted for a period of five years from the date the engine is delivered to an ultimate purchaser or 3,000 hours of operation, whichever occurs first. The following are emissions-related parts:

Air Induction System	Emission control labels	Advanced Oxides of Nitrogen (NOx) Controls
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Charge air cooler	<ul> <li>Any device used to capture particulate emissions</li> </ul>	SCR systems and urea containers/dispensing systems
Fuel Metering system	• Any device used in the regeneration of the	Misselleneous Items used in Above Systems
<ul> <li>Fuel injection system</li> </ul>	<ul> <li>Enclosures and manifolding</li> </ul>	Miscellaneous items used in Above Systems
Exhaust Gas Recirculation	Smoke Puff Limiters	<ul> <li>Electronic control units, sensors, actuators, wiring harnesses, hoses, connectors, clamps,</li> </ul>
• EGR valve	Positive Crankcase Ventilation (PCV) System	fittings, gasket, mounting hardware
Catalyst or Thermal Reactor Systems	<ul><li>PCV valve</li><li>Oil filler cap</li></ul>	
<ul><li>Catalytic converter</li><li>Exhaust manifold</li></ul>		

Any warranted emissions-related part scheduled for replacement as required maintenance is warranted by John Deere for the period of time prior to the first scheduled replacement point for the part. Any warranted emissions-related part not scheduled for replacement as required maintenance or scheduled only for regular inspection is warranted by John Deere for the stated warranty period.

## **OWNER'S WARRANTY RESPONSIBILITIES:**

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Emissions regulations require the customer to bring the unit to an authorized servicing dealer when warranty service is required. As a result, John Deere is NOT liable for travel or mileage on emissions warranty service calls.

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DX.EMISSIONS.CARB -19-03FEB17-6/8

## Emissions Control Warranty Statement 2019 through 2021

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### JOHN DEERE

#### CALIFORNIA EMISSIONS CONTROL WARRANTY STATEMENT YOUR WARRANTY RIGHTS AND OBLIGATIONS

To determine if the John Deere engine gualifies for the additional warranties set forth below, look for the "Emission Control Information" label located on the engine. If the engine is operated in the United States or Canada and the engine label states: "This engine complies with US EPA regulations for nonroad and stationary diesel engines", or "This engine complies with US EPA regulations for stationary emergency diesel engines", refer to the "U.S. and Canada Emission Control Warranty Statement." If the engine is operated in California, and the engine label states: "This engine complies with US EPA and CARB regulations for nonroad diesel engines" also refer to the "California Emissions Control Warranty Statement."

Warranties stated on this certificate refer only to emissions-related parts and components of your engine. The complete engine warranty, less emission-related parts and components, is provided separately. If you have any questions about your warranty rights and responsibilities, you should contact John Deere at 1-319-292-5400.

#### CALIFORNIA EMISSIONS CONTROL WARRANTY STATEMENT:

The California Air Resources Board (CARB) is pleased to explain the emission-control system warranty on 2019 through 2021 off-road diesel engines. In California, new off-road engines must be designed, built and equipped to meet the State's stringent anti-smog standards. John Deere must warrant the emission control system on your engine for the periods of time listed below provided there has been no abuse, neglect or improper maintenance of your engine.

Your emission control system may include parts such as the fuel injection system and the air induction system. Also included may be hoses, belts, connectors and other emission-related assemblies.

John Deere warrants to the ultimate purchaser and each subsequent purchaser that this off-road diesel engine was designed, built, and equipped so as to conform at the time of sale with all applicable regulations adopted by CARB and is free from defects in materials and workmanship which would cause the failure of a warranted part to be identical in all material respects to the part as described in John Deere's application for certification for a period of five years from the date the engine is delivered to an ultimate purchaser or 3,000 hours of operation, whichever occurs first for all engines rated at 19 kW and greater. In the absence of a device to measure hours of use, the engine shall be warranted for a period of five years.

#### EMISSIONS WARRANTY EXCLUSIONS:

-02FEB17 John Deere may deny warranty claims for failures caused by the use of an add-on or modified part which has not been exempted by the CARB. A Ņ modified part is an aftermarket part intended to replace an original emission-related part which is not functionally identical in all respects and which in any way affects emissions. An add-on part is any aftermarket part which is not a modified part or a replacement part. RG29280

In no event will John Deere, any authorized engine distributor, dealer, or repair facility, or any company affiliated with John Deere be liable for incidental or consequential damage.

Continued on next page

DX, EMISSIONS, CARB -19-03FEB17-7/8

## JOHN DEERE'S WARRANTY RESPONSIBILITY:

Where a warrantable condition exists, John Deere will repair or replace, as it elects, your off-road diesel engine at no cost to you, including diagnosis, parts or labor. Warranty coverage is subject to the limitations and exclusions set forth herein. The off-road diesel engine is warranted for a period of five years from the date the engine is delivered to an ultimate purchaser or 3,000 hours of operation, whichever occurs first. The following are emissions-related parts:

Air Induction System	Emission control labels	Advanced Oxides of Nitrogen (NOx) Controls
<ul> <li>Intake manifold</li> <li>Turbocharger</li> </ul>	Particulate Controls	<ul> <li>NOx absorbers and catalysts</li> </ul>
Charge air cooler	<ul> <li>Any device used to capture particulate emissions</li> </ul>	SCR systems and urea containers/dispensing systems
Fuel Metering system	<ul> <li>Any device used in the regeneration of the</li> </ul>	,
Fuel injection system	capturing system • Enclosures and manifolding • Smoke Puff Limiters	Miscellaneous Items used in Above Systems <ul> <li>Electronic control units, sensors, actuators,</li> </ul>
Exhaust Gas Recirculation		wiring harnesses, hoses, connectors, clamps,
EGR valve	Positive Crankcase Ventilation (PCV) System	fittings, gasket, mounting hardware
Catalyst or Thermal Reactor Systems	<ul><li>PCV valve</li><li>Oil filler cap</li></ul>	
<ul> <li>Catalytic converter</li> <li>Exhaust manifold</li> </ul>		

Any warranted emissions-related part scheduled for replacement as required maintenance is warranted by John Deere for the period of time prior to the first scheduled replacement point for the part. Any warranted emissions-related part not scheduled for replacement as required maintenance or scheduled only for regular inspection is warranted by John Deere for the stated warranty period.

## **OWNER'S WARRANTY RESPONSIBILITIES:**

As the off-road diesel engine owner you are responsible for the performance of the required maintenance listed in your Operator's Manual. John Deere recommends that the owner retain all receipts covering maintenance on the off-road diesel engine, but John Deere cannot deny warranty solely for the lack of receipts or for the owner's failure to ensure the performance of all scheduled maintenance. However, as the off-road diesel engine owner, you should be aware that John Deere may deny you warranty coverage if your off-road diesel engine or a part has failed due to abuse, neglect, improper maintenance or unapproved modifications.

The off-road diesel engine is designed to operate on diesel fuel as specified in the Fuels. Lubricants and Coolants section in the Operators Manual.

The owner is responsible for initiating the warranty process, and should present the machine to the nearest authorized John Deere dealer as soon to be authorized John Deere dealer as provided. The warranty repairs should be completed by the authorized John Deere dealer as quickly as possible.

Emissions regulations require the customer to bring the unit to an authorized servicing dealer when warranty service is required. As a result, John -N N Deere is NOT liable for travel or mileage on emissions warranty service calls.

Emission\_CI\_CARB (01Feb17)

DX,EMISSIONS,CARB -19-03FEB17-8/8

RG29281

# **FCC Notifications to User**

## **FCC Notification**

These devices comply with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) These devices may not cause harmful interference, and (2) these devices must accept any interference received, including interference that may cause undesired operation.

These devices must be operated as supplied by John Deere Ag Management Solutions. Any changes or modifications made to these devices without the express written approval of John Deere Ag Management Solutions may void the user's authority to operate these devices.

## Modular Telematics Gateway and Satellite Module

This equipment has been tested and found to comply with the limits for Class B digital devices, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy, and if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, no guarantee shall be made that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

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# Service ADVISOR™ Remote (SAR)—SOFTWARE TERMS AND CONDITIONS

IMPORTANT -- READ CAREFULLY: THIS SOFTWARE LICENSE AGREEMENT IS A LEGAL CONTRACT BETWEEN YOU AND THE LICENSOR ("LICENSOR") IDENTIFIED BELOW AND GOVERNS YOUR USE OF THE SOFTWARE DELIVERED TO YOUR MACHINE (THE "MACHINE").

BY INDICATING YOUR ACCEPTANCE ON A DISPLAY ON THE MACHINE, BY INSTALLING SOFTWARE TO THE MACHINE, OR USING SOFTWARE ON THE MACHINE, YOU ARE ACCEPTING AND AGREEING TO THE TERMS OF THIS LICENSE AGREEMENT WITH RESPECT TO THE SOFTWARE (THE "Software") THAT IS DELIVERED TO YOUR MACHINE. YOU AGREE THAT THIS SOFTWARE LICENSE AGREEMENT, INCLUDING THE WARRANTY DISCLAIMERS, LIMITATIONS OF LIABILITY AND TERMINATION PROVISIONS BELOW, IS BINDING UPON YOU, AND UPON ANY COMPANY ON WHOSE BEHALF YOU USE THE SOFTWARE AS WELL AS THE EMPLOYEES OF ANY SUCH COMPANY (COLLECTIVELY REFERRED TO AS "YOU" IN THIS SOFTWARE LICENSE AGREEMENT). IF YOU DO NOT AGREE TO THE TERMS OF THIS AGREEMENT. OR IF YOU ARE NOT AUTHORIZED TO ACCEPT THESE TERMS ON BEHALF OF YOUR COMPANY OR ITS EMPLOYEES, PLEASE CLICK THE [Decline] ICON ON THE DISPLAY ON THE MACHINE TO DECLINE THESE TERMS AND CONDITIONS. THIS LICENSE AGREEMENT REPRESENTS THE ENTIRE AGREEMENT CONCERNING THE SOFTWARE BETWEEN YOU AND THE LICENSOR.

**1. Delivery of Software.** Software may be delivered to your Machine by Licensor wirelessly or via an agent of Licensor, such as a dealer. If it is delivered wirelessly, you may be responsible for any data transmission fees incurred due to such delivery.

2. License. Licensor hereby grants to you, and you accept, a nonexclusive license to use the Software in machine-readable, object code form, only as authorized in this License Agreement and the applicable provisions of the Operators' Manuals, which you agree to review carefully prior to using the Software. The Software may be used only on the Machine to which it was initially delivered. You agree that you will not assign, sublicense, transfer, pledge, lease, rent, or share your rights under this License Agreement, except that you may permanently transfer all of your rights under this License Agreement in connection with the sale of the Machine on which the Software covered by this Agreement is installed.

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**4. License Fees.** The license fees paid by you, if any, are paid in consideration of the licenses granted under this License Agreement.

5. Limited Warranty. Licensor warrants, for your benefit alone and not for the benefit of any other party, that during the "Warranty Period" defined below, the Software will operate substantially in accordance with the applicable functional specifications ("Specifications") set forth in the Operators' Manuals. If, prior to expiration of the Warranty Period, the Software fails to perform substantially in accordance with the Specifications, you may return the Machine to the place of purchase for repair or replacement of the non-performing Software. The Warranty Period is ninety (90) days from the date of installation of the Software or the duration of the warranty period of the component of the Machine on which the Software is installed, whichever is longer. The Software Warranty Period does not affect the warranty period of the Machine itself or any component thereof.

6. DISCLAIMER OF WARRANTIES. YOU HEREBY AGREE THAT THE LIMITED WARRANTY PROVIDED ABOVE (THE "LIMITED WARRANTY") CONSTITUTES YOUR SOLE AND EXCLUSIVE REMEDY FOR ANY PROBLEM WHATSOEVER WITH THE SOFTWARE. EXCEPT AS PROVIDED IN THE LIMITED WARRANTY, THE SOFTWARE IS LICENSED "AS IS," AND LICENSOR, ITS AFFILIATES AND THIRD PARTY SUPPLIERS EXPRESSLY DISCLAIM AND YOU EXPRESSLY WAIVE, RELEASE AND RENOUNCE ALL WARRANTIES ARISING BY LAW OR OTHERWISE WITH RESPECT TO THE SOFTWARE, INCLUDING, BUT NOT LIMITED TO: ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE: ANY IMPLIED WARRANTY ARISING FROM COURSE OF PERFORMANCE. COURSE OF DEALING OR TRADE USAGE; ANY WARRANTY OF TITLE OR NON-INFRINGEMENT: AND, ANY OTHER WARRANTY ARISING UNDER ANY THEORY OF LAW, INCLUDING TORT, NEGLIGENCE, STRICT LIABILITY, CONTRACT OR OTHER LEGAL OR EQUITABLE THEORY. NO REPRESENTATION OR OTHER AFFIRMATION OF FACT INCLUDING, BUT NOT LIMITED TO, STATEMENTS REGARDING SUITABILITY FOR USE, SHALL BE DEEMED TO BE A WARRANTY BY LICENSOR OR ANY OF ITS AFFILIATES OR THIRD PARTY SUPPLIERS. LICENSOR DOES NOT WARRANT THAT THE SOFTWARE IS ERROR-FREE OR WILL OPERATE WITHOUT INTERRUPTION.

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7. LIMITATION OF LIABILITY. EXCEPT AS SET FORTH IN THE LIMITED WARRANTY, UNDER NO CIRCUMSTANCES SHALL LICENSOR. ITS AFFILIATES OR ITS THIRD PARTY SUPPLIERS BE LIABLE TO YOU OR TO ANY THIRD PARTIES FOR DIRECT. INDIRECT. INCIDENTAL OR CONSEQUENTIAL DAMAGES OF ANY KIND, INCLUDING ANY LOSS OR DAMAGE CAUSED BY THE SOFTWARE; ANY PARTIAL OR TOTAL FAILURE OF THE SOFTWARE; PERFORMANCE, NONPERFORMANCE OR DELAYS IN CONNECTION WITH ANY INSTALLATION. MAINTENANCE, WARRANTY OR REPAIRS OF THE SOFTWARE, DAMAGES FOR CROP LOSS, DAMAGE TO LAND, LOST PROFITS, LOSS OF BUSINESS OR LOSS OF GOODWILL, LOSS OF USE OF EQUIPMENT OR SERVICES OR DAMAGES TO BUSINESS OR REPUTATION ARISING FROM THE PERFORMANCE OR NON-PERFORMANCE OF ANY ASPECT OF THIS AGREEMENT, WHETHER IN CONTRACT, TORT OR OTHERWISE, AND WHETHER OR NOT LICENSOR. ITS AFFILIATES OR ITS THIRD PARTY SUPPLIERS HAVE BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES. IN NO EVENT SHALL LICENSOR'S CUMULATIVE LIABILITY TO YOU OR TO ANY OTHER PARTY FOR ANY LOSSES OR DAMAGES RESULTING FROM ANY CLAIMS, LAWSUITS, DEMANDS, OR ACTIONS ARISING FROM OR RELATING TO USE OF THE SOFTWARE EXCEED YOUR TOTAL PAYMENT FOR THE MACHINE AND FOR THE LICENSE OF THE SOFTWARE.

**8. Termination of License.** Licensor may terminate the license granted under this Agreement upon written notice of termination provided to you if you violate any material term of this Agreement pertaining to your use of the Software or Licensor's rights, including, without limitation, the provisions of Sections 2 and 3 above.

9. Compliance with Law. You agree that you will use the Software in accordance with United States law and the laws of the country in which you are located, as applicable, including foreign trade control laws and regulations. The Software may be subject to export and other foreign trade controls restricting re-sales and/or transfers to other countries and parties. By accepting the terms of this Agreement, you acknowledge that you understand that the Software may be so controlled, including, but not limited to, by the Export Administration Regulations and/or the foreign trade control regulations of the Treasury Department of the United States. Any other provision of this Agreement to the contrary notwithstanding, you agree that the Software will not be resold, re-exported or otherwise transferred. The Software remains subject to applicable U.S. laws.

**10. Indemnification.** You agree to defend, indemnify and hold Licensor, its affiliates and third party supplier, and their, officers, directors, employees, agents and representatives (each an "Indemnified Party"), harmless

from and against all claims, demands proceedings, injuries, liabilities, losses, or costs and expenses (including reasonable legal fees) brought by any third party against any such persons arising from or in connection with your use of the Software, regardless of whether such losses are caused, wholly or partially, by any negligence, breach of contract or other fault of an Indemnified Party.

**11. Costs of Litigation.** If any claim or action is brought by either party to this License Agreement against the other party regarding the subject matter hereof, the prevailing party shall be entitled to recover, in addition to any other relief granted, reasonable attorney fees and expenses of litigation.

**12. Severability and Waiver.** Should any term of this Agreement be declared void or unenforceable by any court of competent jurisdiction, such declaration shall have no effect on the remaining terms hereof. The failure of either party to enforce any rights granted hereunder or to take action against the other party in the event of any breach hereunder shall not be deemed a waiver by that party as to subsequent enforcement of rights of subsequent actions in the event of future breaches.

13. Language Clause. If you are a resident of Canada at the time you accept this Agreement, then the parties hereby acknowledge that they have required this Agreement, and all other documents relating hereto, be drawn up in the English language only. Les parties reconnaissent avoir demandé que le présent contrat ainsi que toute autre entente ou avis reguis ou permis à être conclu ou donné en vertu des stipulations du présent contrat, soient rédigés en langue anglaise seulement. If you are a resident of any country other than the United States, Canada, Great Britain, Australia or New Zealand then you agree as follows: there may be a translated version of this Agreement. If there is an inconsistency or contradiction between the translated version and the English version of this Agreement, the English version of this Agreement shall control.

**14. Assignment by Licensor.** Licensor may assign this Agreement without your prior consent to any company or entity affiliated with Licensor, or by an assignment associated with a corporate restructuring, merger or acquisition.

**15. Governing Law and Forum.** This Agreement will be governed by and construed in accordance with the substantive laws identified in the table in Section 18, below The respective courts of the venue identified in the table in Section 18, below, for the location of the Machine shall have non-exclusive jurisdiction over all disputes relating to this Agreement. This Agreement will not be governed by the conflict of law rules of any jurisdiction or the United Nations Convention on Contracts for the International Sale of Goods, the application of which is expressly excluded.

**16.** Specific Exceptions.

Continued on next page

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# 16.1 Limited Warranty for Users Residing in European Economic Area Countries or Switzerland. If you

obtained the Software in any European Economic Area country or Switzerland, and you usually reside in such country, then Section 6 does not apply, instead, Licensor warrants that the Software provides the functionalities set forth in the Operators Manuals (the "agreed upon functionalities") for the Warranty Period. As used in this Section, "Warranty Period" means one (1) vear. Non-substantial variation from the agreed upon functionalities shall not be considered and does not establish any warranty rights. THIS LIMITED WARRANTY DOES NOT APPLY TO SOFTWARE PROVIDED TO YOU FREE OF CHARGE, FOR EXAMPLE, UPDATES, OR SOFTWARE THAT HAS BEEN ALTERED BY YOU, TO THE EXTENT SUCH ALTERATIONS CAUSED A DEFECT. To make a warranty claim, during the Warranty Period you must return, at our expense, the Software and proof of purchase to the location where you obtained it. If the functionalities of the Software vary substantially from the agreed upon functionalities, Licensor is entitled -- by way of re-performance and at its own discretion -to repair or replace the Software. If this fails, you are entitled to a reduction of the purchase price (reduction) or to cancel the purchase agreement (rescission). For further warranty information, please contact Licensor at the address listed in Section 18.

# 16.2 Limitation of Liability for Users Residing in European Economic Area Countries or Switzerland.

(a) If you obtained the Software in any European Economic Area country or Switzerland, and you usually reside in such country, then Sections 7 and 10 do not apply, Instead, Licensor's statutory liability for damages shall be limited as follows: (a) Licensor shall be liable only up to the amount of damages as typically foreseeable at the time of entering into this Agreement in respect of damages caused by a slightly negligent breach of a material contractual obligation and (b) Licensor shall not be liable for damages caused by a slightly negligent breach of a non-material contractual obligation.

(b) The aforesaid limitation of liability shall not apply to any mandatory statutory liability, in particular, to liability under the German Product Liability Act, liability for assuming a specific guarantee or liability for culpably caused personal injuries.

(c) You are required to take all reasonable measures to avoid and reduce damages, in particular to make back-up copies of the Software and your computer data subject to the provisions of this Agreement.

**17. Representations of Licensee.** BY ACCEPTING THIS AGREEMENT, YOU: (A) ACKNOWLEDGE THAT YOU HAVE READ AND UNDERSTAND THIS AGREEMENT; (B) REPRESENT THAT YOU HAVE THE AUTHORITY TO ENTER INTO THIS AGREEMENT; (C) AGREE THAT THIS AGREEMENT IS ENFORCEABLE AGAINST YOU AND ANY LEGAL ENTITY THAT OBTAINED THE SOFTWARE AND ON WHOSE BEHALF IT IS USED; AND, (D) AGREE TO PERFORM THE OBLIGATIONS OF THIS AGREEMENT.

**18.** Identification of Licensor and Notices. The Licensor is the entity identified in the table below. All notices to Licensor shall be sent by certified or registered mail to the corresponding address for the Licensor given below. In each case a copy of the notice shall also be sent to John Deere Intelligent Solutions Group, ATTN: Legal, 4140 114th Street Urbandale, IA 50322 U.S.A. All notices to Licensor shall be effective upon receipt. All notices required to be given to you shall, in Licensor's sole discretion, either be sent via certified or registered mail to the address given to Licensor in connection with your purchase of the Machine. Either method of notification used by Licensor shall be effective upon dispatch. You agree to notify Licensor of any change in your address in the manner set forth above.

Place of Purchase	Address	Governing Law	Venue
United States of America	John Deere Shared Services, Inc. One John Deere Place Moline, IL 61265 U.S.A.	State of Illinois, USA	Rock Island County, Illinois, USA
Argentina	Industrias John Deere Argentina, S.A. Casilla de Correo 80 Rosario (Santa Fe), 2000, Argentina	Province of Santa Fe, Argentina	Province of Santa Fe, Argentina
Australia or New Zealand	John Deere Limited (Australia) P.O. Box 2022 Crestmead, Queensland, Australia 4132	State of Queensland, Australia	State of Queensland, Australia
Canada	John Deere Limited 295 Hunter Road P.O. Box 1000 Grimsby, ON L9K 1M3	Province of Ontario, Canada	Province of Ontario, Canada
Chile	John Deere Water, S.A. Cerro Santa Lucia 9990 Quilicura, Santiago, Chile	Province of Santiago, Chile	Province of Santiago, Chile
Mexico	Industrias John Deere, S.A. de C.V. Boulevard Diaz Ordaz #500 Garza Garcia Nuevo Leon 66210, Mexico	State of Nuevo Leon, Mexico	State of Nuevo Leon, Mexico

Europe	ETIC Strassburgerallee 5 67657 Kaiserslautern, Germany	Federal Republic of Germany	Kaiserslautern, Germany
Other	The John Deere entity identified	The John Deere entity identified	The John Deere entity identified
	for the location of your Machine	for the location of your Machine	for the location of your Machine
	on www.JDLink.com.	on www.JDLink.com.	on www.JDLink.com.

# **Technical Information Feedback Form**

We need your help to continually improve our technical publications. Please copy this page and FAX or mail your comments, ideas and improvements.

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### Page

# Safety—Safety And Operator Conveniences

Safet	y and	Operator	Convenience	Features	1-1	-1
-------	-------	----------	-------------	----------	-----	----

## Safety—General Precautions

Recognize Safety Information	1-2-1
Follow Safety Instructions	1-2-1
Operate Only If Qualified	1-2-1
Wear Protective Equipment	1-2-2
Avoid Unauthorized Machine Modifications	1-2-2
Inspect Machine	1-2-2
Stay Clear of Moving Parts	1-2-2
Avoid High-Pressure Fluids	1-2-3
Avoid High-Pressure Oils	1-2-3
Work In Ventilated Area	1-2-4
Prevent Fires	1-2-4
Prevent Battery Explosions	1-2-5
Handle Chemical Products Safely	1-2-5
Decommissioning — Proper Recycling	
and Disposal of Fluids and Components .	1-2-6
Prepare for Emergencies	1-2-6
Clean Debris from Machine	1-2-7

## Safety—Operating Precautions

energy eperating the end of the	
Use Steps and Handholds Correctly	1-3-1
Start Only From Operator's Seat	1-3-1
Use and Maintain Seat Belt	1-3-1
Prevent Unintended Machine Movement	1-3-1
Prevent Unintended Machine	
Movement—If Equipped With Pilot	
Controls	1-3-2
Avoid Work Site Hazards	1-3-2
Keep Riders Off Machine	1-3-3
Avoid Backover Accidents	1-3-3
Avoid Machine Tipover	1-3-4
Operating or Traveling On Public Roads	1-3-4
Inspect and Maintain ROPS	1-3-4
Add and Operate Attachments Safely	1-3-5
Use Special Care When Operating	1-3-5
eee epecial calle thick eperating	

## Safety—Maintenance Precautions

Park and Prepare for Service Safely	1-4-1
Service Cooling System Safely	1-4-1
Remove Paint Before Welding or Heating	1-4-2
Make Welding Repairs Safely	1-4-2
Drive Metal Pins Safely	1-4-2
Service Tires Safely	1-4-3

#### Page

4 - 4

# Safety—Safety Signs

	1-5-1
Safety Signs—Backhoe Coupler—If	
Equipped	1-5-7

## **Operation—Operator's Station**

Fire Extinguisher Mounting Location	2-1-1
Sealed Switch Module (SSM)	2-1-2
Security System	2-1-4
Right Console Functions	2-1-6
Dome Light Operation	2-1-7
Steering Console Controls	2-1-7
Pilot Enable Switch—If Equipped	2-1-8
Engine Speed Control Knob	2-1-9
Defroster, Heater, and Air Conditioner	
Controls—If Equipped	2-1-9
Seat Controls	2-1-10
Steering Wheel Tilt Lever	2-1-11
Accessory Power Outlets	2-1-11
Opening Windows	2-1-12
Loader Controls	2-1-13
Backhoe Controls—Manual Control	
Machines	2-1-14
Backhoe Controls—Pilot Control Machines	2-1-14

## **Operation—Monitor Operation**

Standard Display Monitor (SDM)	2-2-1
Standard Display Monitor	
(SDM)—Normal Display	2-2-3
Standard Display Monitor	
(SDM)—Display Messages	2-2-4
Standard Display Monitor	
(SDM)—Main Menu	2-2-5
Standard Display Monitor	
(SDM)—Main Menu—Operation	2-2-5
Standard Display Monitor	
(SDM)—Main Menu—Opera-	
tion—Job Timer	2-2-6
Standard Display Monitor	
(SDM)—Main Menu—Opera-	
tion—Software Delivery (If Equipped)	2-2-6
Standard Display Monitor	
(SDM)—Main Menu—Opera-	
tion—Software Delivery—Software	
Update (If Equipped)	2-2-7
,	

## Continued on next page

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Standard Display Monitor
(SDM)—Main Menu—Opera-
tion—Software Delivery—Delivery
Settings (If Equipped)2-2-7
Standard Display Monitor
(SDM)—Main Menu—Diagnostics2-2-8
Standard Display Monitor
(SDM)—Main Menu—Diagnostics—Codes2-2-8
Standard Display Monitor
(SDM)—Main Menu—Setup2-2-9
Standard Display Monitor
(SDM)—Main Menu—Setup—Monitor2-2-9
Standard Display Monitor
(SDM)—Main Menu—Setup—Wiper
Delay2-2-10
Standard Display Mon-
itor (SDM)—Main
Menu—Setup—MFWD Braking2-2-10
Standard Display Monitor
(SDM)—Main Menu—Setup—Security2-2-10
Standard Display Monitor
(SDM)—Main Menu—Setup—Se-
curity—Configuration2-2-11
Standard Display Monitor
(SDM)—Main Menu—Setup—Se-
curity—Manage PINs2-2-11
Standard Display Monitor
(SDM)—Main Menu—Setup—Auto
Shutdown2-2-12
Standard Display Monitor
(SDM)—Main Menu—Setup—Auto Idle2-2-12
Standard Display Monitor
(SDM)—Main Menu—Setup—Econ-
omy Mode (If Equipped)2-2-12
Standard Display Mon-
itor (SDM)—Main
Menu—Setup—Loader Aux Speed
(IT ⊨quippea)2-2-13

# **Operation—Operating The Machine**

Before Starting Work	2-3-1
Inspect Machine Daily Before Starting	2-3-1
Check Instruments Before Starting	2-3-2
Automatic Recall of Stored Functions	
and Settings	2-3-3
Engine Break-In Period	2-3-3
Starting the Engine	2-3-4
Cold Start Aid—Starting Fluid (If Equipped)	2-3-5
Cold Start Aid—Engine Block Heater	
(If Equipped)	2-3-6
Engine Warm-Up	2-3-7
Cold Weather Engine Warm-Up	2-3-7
Driving the Machine	2-3-8
Ride Control Operation—If Equipped	2-3-10
Pilot Control Operation—If Equipped	2-3-11
Service ADVISOR™ Remote (SAR)	
Software Delivery Process—If Equipped	2-3-12

Page
------

Economy Mode Operation—If Equipped	2-3-12
Auto-Shutdown Operation	2-3-13
Stabilizer Operation	2-3-13
Boom Lock Operation	2-3-14
Swing Lock Operation	2-3-15
Backhoe Boom Sideshift Operation	2-3-16
Backhoe Operation—Two-Lever	
Controls—Backhoe Pattern	2-3-17
Backhoe Operation—Two-Lever	
Controls—Excavator Pattern	2-3-18
Backhoe Operation—Pilot	
Controls—Backhoe Pattern	2-3-19
Backhoe Operation—Pilot	
Controls—Excavator Pattern	2-3-20
Auto-Idle Operation—Backhoe	
Functions Only	2-3-21
Extendable Dipperstick Operation—If	
Equipped	2-3-22
Extendable Dipperstick Operation With	
Attachments—If Equipped	2-3-23
Extendable Dipperstick Lock	
Operation—If Equipped	2-3-23
Backhoe Auxiliary Hydraulic Selective	
Flow Operation—If Equipped	2-3-24
Backhoe Auxiliary Hydraulics	
Operation—If Equipped	2-3-25
Backhoe Hydraulic Thumb	
Operation—If Equipped	2-3-26
Backhoe Coupler Operation—If Equipped	2-3-27
Loader Operation	2-3-28
Loader Clutch Disconnect Operation	2-3-29
Loader Auxiliary Hydraulic	
Operation—If Equipped	2-3-30
Differential Lock Operation	2-3-31
Mechanical Front Wheel Drive (MFWD)	
Operation—If Equipped	2-3-32
Operating in Water and Mud	2-3-33
Lifting Objects	2-3-33
Parking Machine	2-3-34
Lifting Machine	2-3-35
Loading Machine Onto Trailer	2-3-36
Towing	2-3-36

# Maintenance—Machine

Diesel Fuel	3-1-1
Lubricity of Diesel Fuel	3-1-1
Handling and Storing Diesel Fuel	3-1-2
Biodiesel Fuel	3-1-3
Testing Diesel Fuel	3-1-4
Minimizing the Effect of Cold Weather	
on Diesel Engines	3-1-5
John Deere Break-In Plus™ Engine Oil	3-1-6
Diesel Engine Oil—Engines	
4045HT054, 4045HT086, 4045HT087	3-1-6
Engine Oil and Filter Service	
Intervals—Engines 4045HT054,	
4045HT086, 4045HT087	3-1-7

Diesel Engine Oil—Engine 4045TT096	3-1-8
Intervale_Engine 4045TT096	3_1_0
Alternative and Synthetic Lubricants	3_1_0
	3_1_10
Transmission Ayles and Mechanical	
Front Wheel Drive (MEWD) Oil	3 1 11
	3_1_11
Grease For Sideshift Frame and	
Stabilizer Log Wear String	2 1 11
Stabilizer Leg Wear Strips	2 4 40
Mixing of Lubriconto	2 1 -12
Dissel Engine Caslent (angine with	
Diesei Engine Coolant (engine with	0 4 40
wet sleeve cylinder liners)	
Drain Intervals for Diesel Engine Coolant	3-1-14
John Deere COOL-GARD M II Coolant	0 4 4 4
Extender	3-1-14
Supplemental Coolant Additives	3-1-15
Operating in Warm Temperature Climates	3-1-15
Additional Information About Diesel	
Engine Coolants and John Deere	
COOL-GARD™ II Coolant Extender	3-1-16
Testing Diesel Engine Coolant	3-1-17
Disposing of Coolant	3-1-17

# Maintenance—Periodic Maintenance

Engine Identification	3-2-1
Service Machine at Specified Intervals	3-2-3
Check Hour Meter Regularly	3-2-3
Prepare Machine for Maintenance	3-2-4
Fuel Tank	3-2-4
Loader Boom Service Lock	3-2-5
Opening and Closing Engine Hood	3-2-6
Battery Disconnect—If Equipped	3-2-6
Fluid Analysis Program Test Kits and	
3-Way Coolant Test Kit	3-2-7
Maintenance Legend—If Equipped	3-2-8
Service Intervals	3-2-9
Required Parts	3-2-11

# Maintenance—As Required

Check Coolant	3-3-1
Inspect Tires and Check Pressure	3-3-2
Tire Pressures	3-3-3
Check Wheel Fasteners	3-3-5
Clean Cab Fresh Air and Recirculation	
Filters—If Equipped	3-3-5
Drain Water and Sediment from Fuel Filters	3-3-7
Drain Auxiliary Fuel Filter and Water	
Separator—If Equipped	3-3-8
Clean or Replace Air Cleaner Elements	3-3-9
Inspect and Clean Cooling System	.3-3-10
Lubricate Non-Powered Front Wheel	
Bearings—If Equipped	.3-3-12
Lubricate Sideshift Frame	.3-3-12
Lubricate Stabilizer Leg Wear Strips	.3-3-12

Check Coolant Level	3-4-1
Check Hydraulic Reservoir Oil Level	3-4-1
Check Engine Oil Level	3-4-2
Inspect Fuel Water Sediment Bowls	3-4-2
Lubricate Loader Pivots	3-4-4
Lubricate Front Axle Pivot Pin	3-4-4
Lubricate Stabilizer Pivots and Cylinder Pins	3-4-5
Lubricate Backhoe Boom, Crowd	
Cylinders and Pivots	3-4-5
Lubricate Backhoe Coupler Mechanical	
Jack—If Equipped	3-4-6
Lubricate Backhoe Bucket Cylinder	
and Pivots	3-4-6
Lubricate Backhoe Swing Cylinder and Pivots .	3-4-7
Lubricate MFWD Front Axle and	
Universal Joints—If Equipped	3-4-7
Lubricate Non-Powered Front Axle	
Steering Pivots—If Equipped	3-4-7
Lubricate Multipurpose Bucket	
Pivots—If Equipped	3-4-8

# Maintenance—Every 250 Hours

Take Engine Oil Sample	3-5-1
Check MFWD Planetary Housing Oil	
Level—If Equipped	3-5-1
Check MFWD Axle Oil Level—If Equipped	3-5-1
Check Battery Electrolyte Level and Terminals .	3-5-2
Check Rear Axle Oil Level	3-5-4
Check Transmission Oil Level	3-5-4
Lubricate MFWD Drive Shaft	
Splines—If Equipped	3-5-4

# Maintenance—Every 500 Hours

Take Fluid Samples	3-6-1
Check Air Intake Hose	3-6-1
Check Boom-to-Dipperstick Pin Bolt Torque	3-6-1
Drain Fuel Tank Water and Sediment	3-6-1
Change Engine Oil and Replace Filter	3-6-2
Replace Primary and Final Fuel Filters	3-6-3
Replace Auxiliary Fuel Filter and Water	
Separator—If Equipped	3-6-5
Clean Engine Crankcase Ventilation Tube	3-6-6

# Maintenance—Every 1000 Hours

Check Coolant	3-7-1
Clean, Pack, and Adjust Non-Powered	
Front Wheel Bearings—If Equipped	3-7-2
Change Transmission Oil and Replace Filter	3-7-3
Replace Hydraulic Oil Filter	3-7-4
Replace Cab Fresh Air and	
Recirculation Filters—If Equipped	3-7-4
Replace Hydraulic Reservoir Breather	3-7-5
Replace Fuel Breather	3-7-6
Replace Engine Air Cleaner Elements	3-7-6

Page

Inspe	ct Belt	 	 3	3-7-7

## Maintenance—Every 2000 Hours

Change MFWD Planetary Housing	
Oil—If Equipped	3-8-1
Change MFWD Front Axle Housing	
Oil—If Equipped	3-8-1
Change Rear Axle and Planetary	
Housing Oil	3-8-2
Inspect and Clean Hydraulic Reservoir	
Fill Screen	3-8-2
Change Hydraulic Reservoir Oil	3-8-3

## Maintenance—Every 3000 Hours

Adjust Engine Valve Lash (Cleara	ance)3-9-1
----------------------------------	------------

# Maintenance—Every 6000 Hours

Draining the Cooling System	3-10-1
Filling the Cooling System	3-10-2

## Miscellaneous—Machine

Changing Loader Buckets	4-1-1
Changing Sideshift Backhoe Stabilizer Feet .	4-1-2
Adjust Stabilizer Leg	4-1-2
Check and Adjust Backhoe Boom Lock	4-1-3
Check Receiver-Dryer-If Equipped	4-1-4
Checking Coolant Hoses and Radiator	4-1-4
Checking Ride Control Accumulator—If	
Equipped	4-1-5
Checking Starting System	4-1-6
Discharge Pilot Control System	
Hydraulic Pressure—If Equipped	4-1-6
Discharge Ride Control System	
Hydraulic Pressure—If Equipped	4-1-7
Inspect Loader Boom Service Lock	4-1-7
Replacing Bucket Teeth—Flex Pin	4-1-8
Replacing Bucket Teeth—TK Series	4-1-9
Lowering Boom Without Electrical	
Power—For Machines With Pilot Controls	4-1-10
Service Recommendations For	
Snap-To-Connect (STC®) Fittings	4-1-11
Toe-In Check and Adjust	4-1-12
Steering Angle Check and Adjust	4-1-14
Adding Front Counterweights	4-1-15
Adding Liquid Ballast to Front Tires	4-1-15
Pilot Control Wrist Rest Adjustment—If	
Equipped	4-1-16
Fuel System Bleed Procedure	4-1-16
Service Brake Bleed Procedure	4-1-17
Do Not Service Control Valves,	
Cylinders, Pumps, or Motors	4-1-18
Precautions for Alternator and Regulator	4-1-19
Handling, Checking and Servicing	
Batteries Carefully	4-1-20
Using Battery Charger	4-1-21
Using Booster Batteries—12-Volt System	4-1-22

Removing Batteries Replacing Batteries Welding On Machine Welding Near Electronic Control Units	4-1-22 4-1-23 4-1-23 4-1-23
Connectors Clean	4-1-23
Replacing Fuses	4-1-24
Check Park Brake	4-1-28
External Service Brake Inspection	4-1-29
Keep ROPS Installed Properly	4-1-30
JDLink <sup>™</sup> Machine Monitoring System	
(MMS)—If Equipped	4-1-30
Fluid Sampling Test Ports—If Equipped	4-1-31
Remove and Install Halogen Bulb	4-1-31
Hardware Torque Specifications	4-1-31
Unified Inch Bolt and Screw Torque Values	4-1-32
Metric Bolt and Screw Torque Values	4-1-33

Page

# Miscellaneous—Operational Checkout

# Miscellaneous—Troubleshooting

Troubleshooting Procedure	4-3-1
Engine	4-3-2
Electrical System	4-3-6
Hydraulic System	
Steering System	4-3-13
Power Train	4-3-14
MFWD	4-3-15
Rear Axle	4-3-16
Air Conditioning	4-3-17
Software Update—If Equipped	4-3-17

## Miscellaneous—Storage

Prepare	e Machine for Storage	4-4-1
Monthly	/ Storage Procedure	4-4-1

## Miscellaneous—Machine Numbers

Record Product Identification Number (PIN)	4-5-1
Record Engine Serial Number	4-5-1
Record Transmission Serial Number	4-5-1
Record Rear Axle Housing Serial Number	4-5-2
Record Mechanical Front Wheel Drive	
(MFWD) Front Axle Housing Serial	
Number—If Equipped	4-5-2
Keep Proof of Ownership	4-5-2
Keep Machines Secure	4-5-2

## Miscellaneous—Specifications

315SK Backhoe Loader Engine	
Specifications	4-6-1
Travel Speeds	4-6-2
Backhoe Loader Drain and Refill Capacities.	4-6-3
315SK Backhoe Loader Dimensions	4-6-4
315SK Backhoe Loader Weight	4-6-7
315SK Buckets	4-6-7

Page
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Contents



Please remember, the **operator** is the key to preventing accidents.

- 1. **Headlights/Taillights.** Two front halogen driving/work lights and two rear halogen work lights.
- 2. **Signal/Warning Lights.** Roof mounted turning signal lights and warning lights for on-road use.
- ROPS Protection. Certified rollover protection structure surrounds the operator. Integral roof provides overhead protection.
- Seat Position Sensor. An audio/visual warning alerts operator when transmission control lever (TCL) is in forward/reverse and the seat turned toward the backhoe position.
- 5. **Interior Rearview Mirror.** Offers the operator a view of activity behind him.
- Handholds. Large and conveniently placed handholds, make it easy to enter or exit the operator's station.
- 7. Loader Boom Service Lock. Provided for working on or around this machine with the boom raised.
- 8. **Engine Fan Guard.** A secondary engine fan guard inside engine compartment encloses rotating fan blades.

- 9. **Bypass Start Protection.** Shielding over the starter solenoid helps prevent dangerous bypass starting.
- 10. **Ground-Level Fueling, Daily Service Checks.** Ground-level fueling feature eliminates the need to climb on the machine to fuel it.
- 11. **Steps.** Wide, skid-resistant steps provide excellent footing for getting in/out of operator's station.
- 12. Independent Parking/Secondary Brake. Independent, electrically controlled, parking brake electrically engages when the engine is stopped.
- 13. **Neutral Start.** The machine will not move until the transmission control lever (TCL) is cycled back to neutral and the park brake is released, regardless of TCL position at startup.
- 14. **Backup Alarm.** Alerts bystanders when the machine is shifted into reverse.
- 15. Seat Belt Retractors. Seat belt retractors help keep belts clean and convenient to use.
- 16. Exceptional Visibility. Views to either side and front or rear working tools are unrestricted.
- 17. **Operator Manual Holder.** A sealed manual holder keeps manual clean and dry.

MB60223,000029F -19-01MAR12-1/1

# **Safety—General Precautions**

# **Recognize Safety Information**

This is the safety alert symbol. When you see this symbol on your machine or in this manual, be alert for the potential of personal injury.

Follow the precautions and safe operating practices highlighted by this symbol.

A signal word — DANGER, WARNING, or CAUTION — is used with the safety alert symbol. DANGER identifies the most serious hazards.

On your machine, DANGER signs are red in color, WARNING signs are orange, and CAUTION signs are yellow. DANGER and WARNING signs are located near specific hazards. General precautions are on CAUTION labels.



TX,RECOGNIZE -19-28JUN10-1/1

# **Follow Safety Instructions**

Carefully read all safety messages in this manual and on your machine safety signs. Keep safety signs in good condition. Replace missing or damaged safety signs. Use this operator's manual for correct safety sign placement. Be sure that new equipment components and repair parts include the current safety signs. Replacement safety signs are available from your John Deere dealer.

There can be additional safety information contained on parts and components sourced from suppliers that is not reproduced in this operator's manual.

Learn how to operate the machine and how to use controls properly. Do not let anyone operate without instruction.

Keep your machine in proper working condition. Unauthorized modifications to the machine could impair the function or safety and affect machine life.



If you do not understand any part of this manual and need assistance, contact your John Deere dealer.

TX,FOLLOW -19-20JAN11-1/1

# **Operate Only If Qualified**

Do not operate this machine unless the operator's manual has been read carefully, and you have been qualified by supervised training and instruction.

Operator should be familiar with the job site and surroundings before operating. Try all controls and

machine functions with the machine in an open area before starting to work.

Know and observe all safety rules that may apply to every work situation and work site.

TX,QUALIFIED -19-18JAN11-1/1

# Wear Protective Equipment

Guard against injury from flying pieces or metal or debris; wear goggles or safety glasses.

Wear close fitting clothing and safety equipment appropriate to the job.

Operating equipment safely requires the full attention of the operator. Do not wear radio or music headphones while operating machine.

Prolonged exposure to loud noise can cause impairment or loss of hearing. Wear suitable hearing protection such as earmuffs or earplugs to protect against objectionable or uncomfortable loud noises. Radio or music headphones are not suitable to use for hearing protection.



TX,WEAR,PE -19-22SEP10-1/1

# Avoid Unauthorized Machine Modifications

John Deere recommends using only genuine John Deere replacement parts to ensure machine performance. Never substitute genuine John Deere parts with alternate parts not intended for the application as these can create hazardous situations or hazardous performance. Non-John Deere parts, or any damage or malfunctions resulting from their use, are not covered by any John Deere warranty.

Modifications of this machine, or addition of unapproved products or attachments, may affect machine stability or

reliability, and may create a hazard for the operator or others near the machine. The installer of any modification which may affect the electronic controls of this machine is responsible for establishing that the modification does not adversely affect the machine or its performance.

Always contact an authorized dealer before making machine modifications that change the intended use, weight or balance of the machine, or that alter machine controls, performance, or reliability.

AM40430,00000A9 -19-01JUL15-1/1

# **Inspect Machine**

Inspect machine carefully each day by walking around it before starting.

Keep all guards and shields in good condition and properly installed. Fix damage and replace worn or broken parts immediately. Pay special attention to hydraulic hoses and electrical wiring.



TX INSPECT -19-08SEP10-1/1

# **Stay Clear of Moving Parts**

Entanglements in moving parts can cause serious injury.

Stop engine before examining, adjusting, or maintaining any part of machine with moving parts.

Keep guards and shields in place. Replace any guard or shield that has been removed for access as soon as service or repair is complete.



TX.MOVING.PARTS -19-20JAN11-1/1

# Avoid High-Pressure Fluids

Inspect hydraulic hoses periodically – at least once per year – for leakage, kinking, cuts, cracks, abrasion, blisters, corrosion, exposed wire braid or any other signs of wear or damage.

Replace worn or damaged hose assemblies immediately with John Deere approved replacement parts.

Escaping fluid under pressure can penetrate the skin causing serious injury.

Avoid the hazard by relieving pressure before disconnecting hydraulic or other lines. Tighten all connections before applying pressure.

Search for leaks with a piece of cardboard. Protect hands and body from high-pressure fluids.

If an accident occurs, see a doctor immediately. Any fluid injected into the skin must be surgically removed within a few hours or gangrene may result. Doctors unfamiliar



with this type of injury should reference a knowledgeable medical source. Such information is available in English from Deere & Company Medical Department in Moline, Illinois, U.S.A., by calling 1-800-822-8262 or +1 309-748-5636.

# **Avoid High-Pressure Oils**

This machine uses a high-pressure hydraulic system. Escaping oil under pressure can penetrate the skin causing serious injury.

**Never search for leaks with your hands.** Protect hands. Use a piece of cardboard to find location of escaping oil. Stop engine and relieve pressure before disconnecting lines or working on hydraulic system.

If hydraulic oil penetrates your skin, see a doctor immediately. Injected oil must be removed surgically within hours or gangrene could result. Contact a knowledgeable medical source or the Deere & Company Medical Department in Moline, Illinois, U.S.A.



DX,FLUID -19-120CT11-1/1

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