330G and 332G Skid Steer Loader

(PIN: F300253—)

OPERATOR'S MANUAL

330G and 332G Skid Steer Loader

OMT359143X19 ISSUE J3 (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:

⚠ WARNING

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.

**Worldwide Construction,
And Forestry Division**
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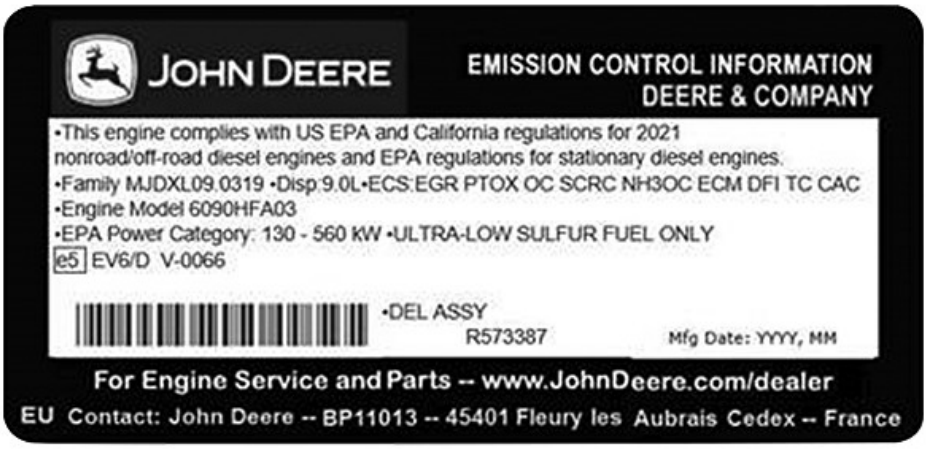
Carbon Dioxide Emissions (CO_2)



RG33429—UN—04FEB21

SAMPLE - Engine Emissions Label

To identify the carbon dioxide (CO_2) output, locate the engine emissions label. Find the appropriate family on the emissions label and reference the chart.

NOTE: The first letter of the family number is not utilized for family identification on the chart.

Emissions Label Family	CO_2 Result
_JDXL02.9323	952 g/kW-hr
_JDXL02.9327	784 g/kW-hr
_JDXL04.5337	819 g/kW-hr
_JDXL04.5338	682 g/kW-hr
_JDXL04.5304	1004 g/kW-hr
_JDXN04.5174	792 g/kW-hr
_JDXL06.8324	720 g/kW-hr
_JDXL06.8328	683 g/kW-hr
_JDXL06.8336	701 g/kW-hr
_JDXN06.8175	771 g/kW-hr
_JDXL09.0319	646 g/kW-hr
_JDXL09.0325	695 g/kW-hr
_JDXL09.0329	657 g/kW-hr
_JDXL09.0333	650 g/kW-hr
_JDXL13.5326	684 g/kW-hr
_JDXL13.6320	651 g/kW-hr
_JDXL13.5340	632 g/kW-hr
_JDXL18.0341	683 g/kW-hr
_JDXL18.0342	687 g/kW-hr
F28	870 g/kW-hr
F32	710 g/kW-hr
F33	677 g/kW-hr

This CO_2 measurement results from testing over a fixed test cycle under laboratory conditions a(n) (parent) engine representative of the engine type (engine family) and shall not imply or express any guarantee of the performance of a particular engine.

DX,EMISSIONS,CO2-19-23JUN23-1/1

Technical Information Feedback Form

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THANK YOU!

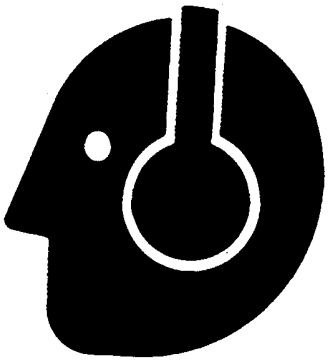
TX,TM,FAX-19-03JUL01-1/1

Protect Against Noise

There are many variables that affect the sound level range, including machine configuration, condition and maintenance level of the machine, ground surface, operating environmental, duty cycles, ambient noise, and attachments.

Exposure to loud noise can cause impairment or loss of hearing.

Always wear hearing protection. Wear a suitable hearing protective device such as earmuffs or earplugs to protect against objectionable or uncomfortable loud noises.



TS207—UN—23AUG88

DX,NOISE-19-03OCT17-1/1

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 to 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 that 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.

TX,AVOID,MACH,MODS-19-24FEB20-1/1

Control Pattern

The control functions are described as they are arranged when the machine leaves the factory. Some control functions can be changed to suit particular operating situations. Ensure that the operator is aware of all of the functions before operating any of the controls.

TX,CTRL,PAT-19-24FEB20-1/1

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.

T6607AQ—UN—15APR13

TX,INSPECT-19-16MAY23-1/1

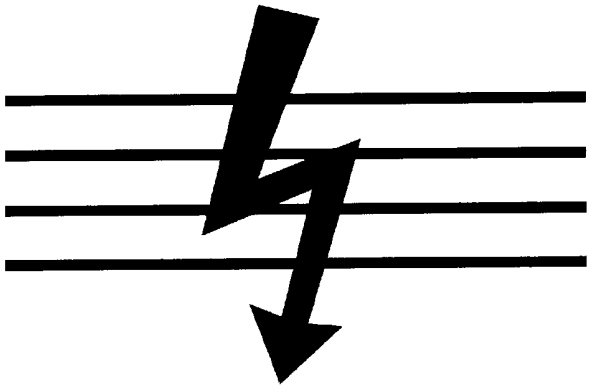
Avoid Power Lines

CAUTION: Power lines carrying more than 50 000 volts require a safety distance of 10 ft (3 m) plus 1/2 in (13 mm) for each additional 1000 volts above the 50 000 volt level.

Approach with caution areas where overhanging telephone or electric power lines are present. Serious injury or death by electrocution can result if the machine or any of its attachments are not kept a safe distance from high-voltage electric power lines.

Maintain a distance of 10 ft (3 m) between the machine, boom, stick, and any power line carrying up to 50 000 volts or less.

If state/province, local, or job site regulations require even greater safety distances than stated above, adhere strictly to these regulations for personal protection.



T147350—UN—24OCT01

Avoid Power Lines

TX,AVOID,POWER,LINES-19-08MAY20-1/1

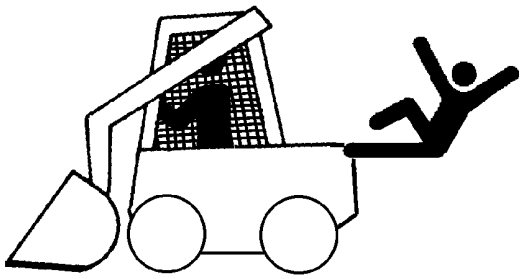
Keep Riders Off Machine

Always use seat belt.

Only allow operator on machine.

The instructional seat, if equipped, is used to accommodate trainers, persons that need to observe machine operation, and for coworkers to provide further operational instructions.

Riders are subject to injury due to fall from machine, being caught between machine parts, or being struck by foreign objects. Riders may obstruct the operator's view or impair the operator's ability to operate machine safely.



T192977—UN—26AUG03

Keep Riders Off Machine

TX,NO,RIDERS,SSL-19-23APR20-1/1

Avoid Backover Accidents

Before moving the machine, ensure that all persons are clear of the machine path. Use mirrors and cameras, if equipped, to assist in checking all around. Keep windows, mirrors and lenses clean, adjusted, and in good repair.

Verify reverse/travel warning alarm is working properly.

Use a signal person when backing if view is obstructed or when in close quarters. Keep signal person in view at all times. Use prearranged hand signals to communicate.

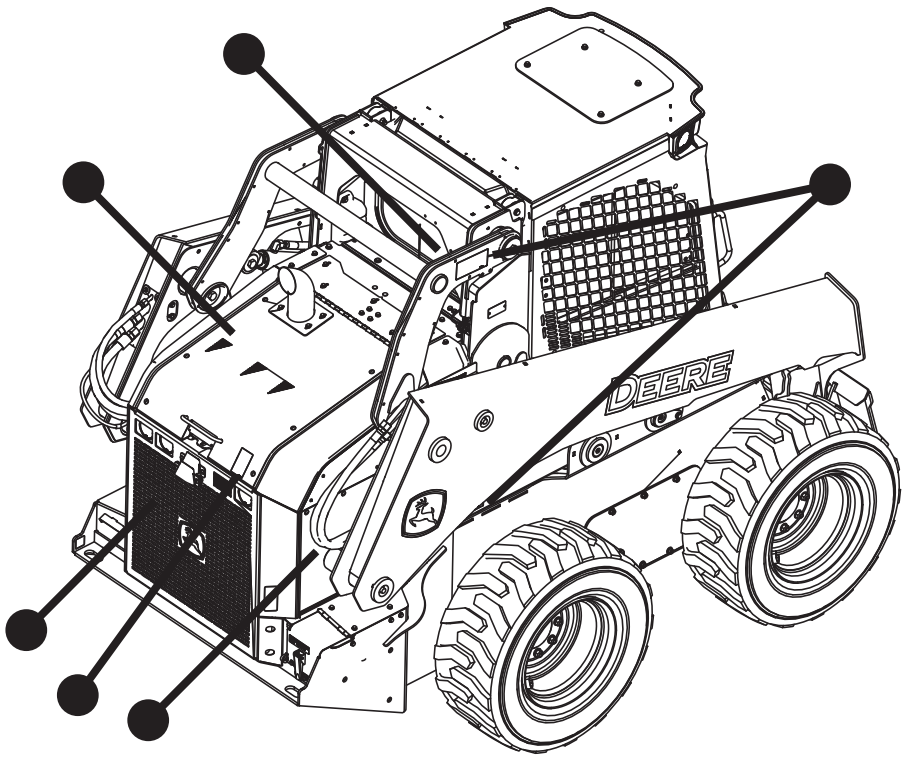
Do not rely solely on visibility aids (mirrors, rear camera, radar object detection system etc.), if equipped, as the only means of collision awareness.

Visibility aids may have limitations due to maintenance practices, environmental conditions, and operating range.

PC10857XW—UN—15APR13

Avoid Backover Accidents

TX,BACKOVER1-19-20DEC21-1/1



XJ1279617

XJ1279617—UN—07JUN19

Safety Signs and Other Instructions

13—Alternative Exit
14—DANGER, Start Only From Seat
15—WARNING, Avoid Crushing Injury
16—WARNING, Avoid Rotating Fan
17—WARNING, Avoid Injury From Escaping Fluid
20—WARNING, Pinch Area Keep Away (2 used)

JB92884,000013F-19-07JUN19-2/22

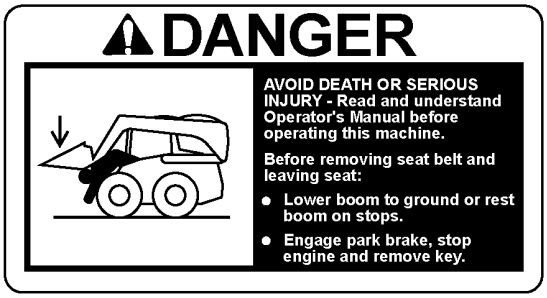
1. **DANGER, Avoid Death or Serious Injury**

AVOID DEATH OR SERIOUS INJURY - Read and understand Operator's Manual before operating this machine.

Before removing seat belt and leaving seat:

- Lower boom to ground or rest boom on stops.
- Engage park brake, stop engine and remove key.

This safety label is located inside the cab near the right joystick.



TX1125800—19—14NOV12

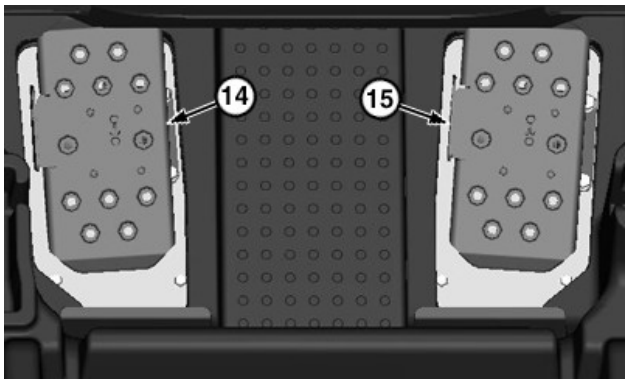
DANGER, Avoid Death or Serious Injury

Continued on next page

JB92884,000013F-19-07JUN19-3/22

EH Hand and Foot Controls—Joysticks operate the auxiliary hydraulic functions and steer machine using an H pattern. Loader boom and bucket functions are controlled by left and right pedals (14 and 15). Engine speed is controlled by the engine speed control dial.

EH Hand and Foot (ISO pattern) Controls—Left joystick steers machine using an ISO pattern. Loader boom and bucket functions are controlled by left and right pedals (14 and 15). Engine speed is controlled by the engine speed control dial. Control pattern must be activated in the engagement and monitor unit (EMU). See ISO Hand and Foot Controls—If Equipped (EH Only) (EMU). (Section 2-3.)



Left and Right Pedals

14—Left Pedal **15—Right Pedal**

RE59955,000118E-19-30SEP20-2/2

Door Adjustment

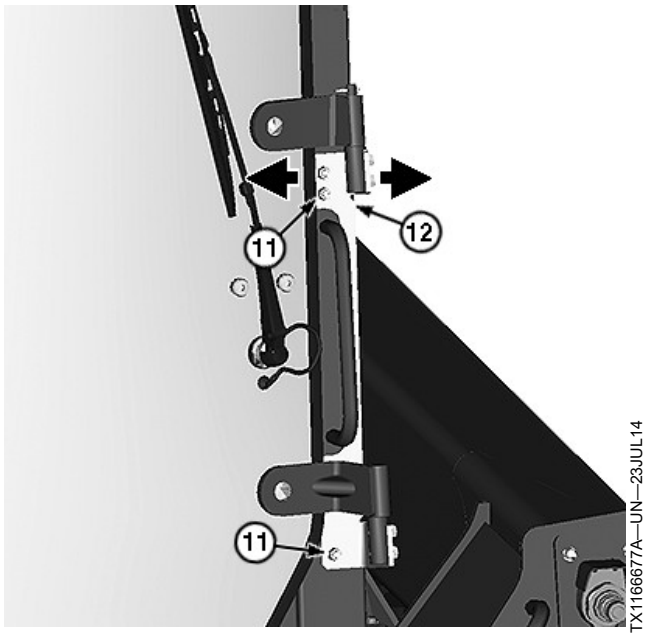
If door needs to be adjusted to seal properly, proceed with the following steps:

1. Position striker bolt (10) toward the front, bottom of the mounting hole, and lightly tighten the nut. More adjustment may be required later.
2. Loosen the three hinge fasteners (11). Cycle the door open and close several times.

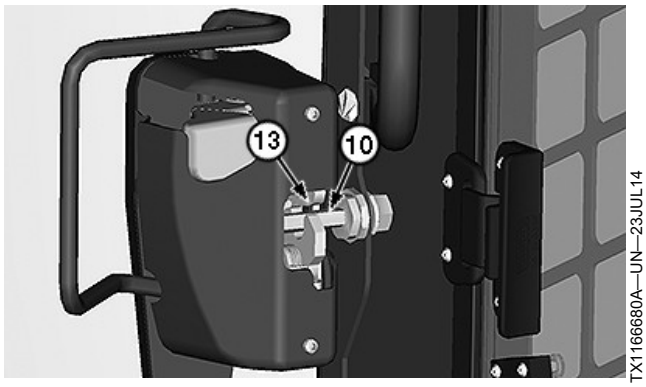
NOTE: Hinge fasteners are slotted so door can move slightly to get the proper fit.

3. Slide upper part of hinge (12) to the left or right so there is approximately 3 mm (1/8 in) gap between striker bolt and upper jaw of latch (13).
4. Tighten the three hinge fasteners.
5. Latch door and verify that there is approximately 1 mm (1/32—1/16 in) of compression on door seal near the upper, latch-side corner of the door. If there is too much compression and door latches with difficulty (door will be harder to close when the side windows are closed), adjust the striker forward. If there is not enough compression, adjust the striker rearward. Try to keep the striker at a constant height to avoid needing to adjust the hinge to maintain striker-latch jaw clearance.
6. After a positive seal is achieved and the effort to close the door is acceptable, verify that the striker bolt/latch jaw clearance is still good. If not, adjust the hinge and/or striker bolt to correct the position of the striker bolt in the latch jaw.
7. Once all adjustments are complete, fully tighten the striker bolt and the three hinge fasteners.

10—Striker Bolt
11—Hinge Fastener (3 used)
12—Upper Part of Hinge
13—Upper Jaw of Latch



Cab Door Hinge

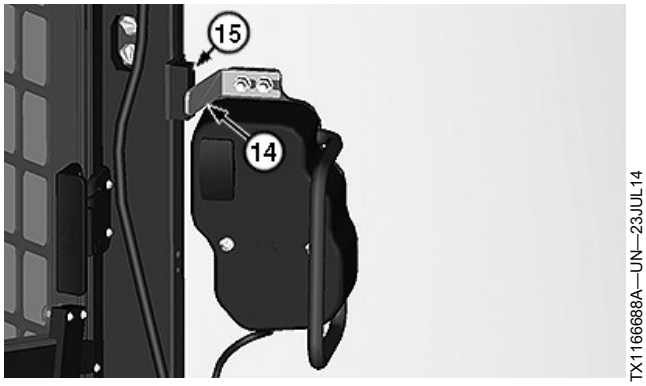


Cab Door Latch

JB92884,0000122-19-15JUN16-4/5

8. From inside the cab with door closed and latched, adjust the door sensor bracket (14) so there is approximately 2 mm (1/16 in) of space between the bracket and sensor (15). Less space is allowable, but the bracket should not touch the sensor. Fully tighten the bracket nuts when adjustment is complete.

14—Door Sensor Bracket
15—Sensor



Cab Door Sensor Bracket and Sensor

JB92884,0000122-19-15JUN16-5/5

Radio—If Equipped

Early Machines

1. Power Button (1)—Press to turn radio on or off.
2. Mute Button (2)—Press to silence radio audio. MUTE message appears on display. If mute feature is active when radio is turned off, the volume returns to the programmed turn on volume level when radio is turned on.
3. Display Button (3)—Press to switch between tuner, auxiliary input, or weather band function modes and clock mode. Frequency, time, and activated functions appear on display.
4. AM/FM Button (4)—Press to change between AM bands (AM1 and AM2) and FM bands (FM1, FM2, and FM3). Press AM/FM button to access tuner mode from any other function mode.
5. Auxiliary Input Button (5)—Press to select auxiliary input mode. To connect a portable device to radio, connect device to the auxiliary audio input jack (15).
6. Weather Band Button (6)—Press to access the weather band mode from any other function mode.
7. Timer Button (7)—Press to access timer mode. Press timer button again to start the timer function; TIMER message flashes in the display. Press timer button again to stop timer (TIMER icon remains in the display without flashing). Press and hold timer button for 3 seconds to reset timer to zero and to remove icon from display.
8. Auxiliary Audio Input Jack (15)—Use to connect portable audio devices.
9. Preset Buttons (16—21)—Six numbered preset buttons store and recall stations for each AM and FM band. To store a station, select a band and then select a station. Press and hold a preset button for 3 seconds. Current station is stored and the corresponding preset number appears in display. To recall a station, select a band and then press a preset button. Radio automatically tunes to the stored station.

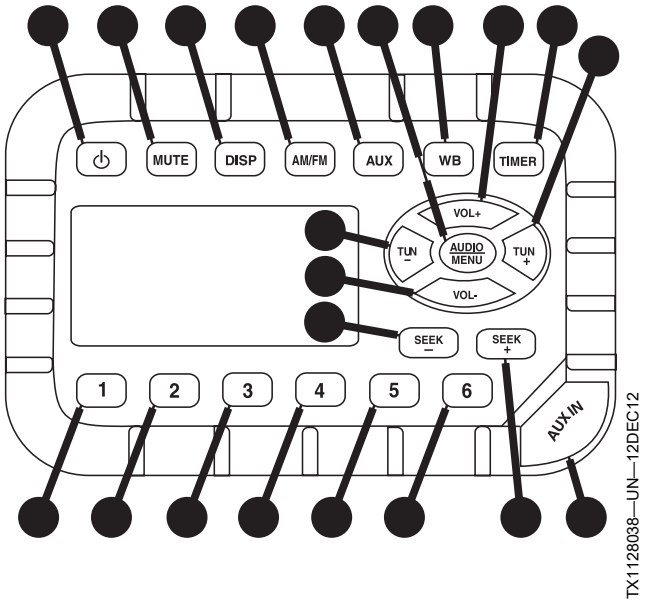
Volume Adjustment:

Use the adjustment buttons to increase or decrease volume setting.

- Increase Volume Button (9)—Press to increase the volume setting.
- Decrease Volume Button (10)—Press to decrease the volume setting.

Tuning Radio:

- Increase Manual Tune Frequency Button (11)—Press to tune the next higher radio frequency. Press and hold increase manual tune frequency button for more than 1 second to tune continuously in selected direction.
- Decrease Manual Tune Frequency Button (12)—Press to tune the next lower radio frequency. Press and hold decrease manual tune frequency button for more than 1 second to tune continuously in selected direction.
- Increase Automatic Tune Frequency Button (14)—Press to tune the frequency automatically up to the next strong station.
- Decrease Automatic Tune Frequency Button (13)—Press to tune the frequency automatically down to the next strong station.



Radio

1— Power Button
2— Mute Button
3— Display Button
4— AM/FM Button
5— Auxiliary Input Button
6— Weather Band Button
7— Timer Button
8— Audio and Menu Adjustment Button
9— Increase Volume Button
10— Decrease Volume Button
11— Increase Manual Tune Frequency Button
12— Decrease Manual Tune Frequency Button
13— Decrease Automatic Tune Frequency Button
14— Increase Automatic Tune Frequency Button
15— Auxiliary Audio Input Jack
16— Preset Button 1
17— Preset Button 2
18— Preset Button 3
19— Preset Button 4
20— Preset Button 5
21— Preset Button 6

Audio Adjustment:

1. Press audio and menu adjustment button (8) to step through the audio adjustment options. The following options can be adjusted:
   - Bass
   - Treble
   - Balance (left to right)
2. When desired option appears on display, press increase volume button or decrease volume button to adjust audio feature.
3. When no adjustments have been made for 3 seconds, radio resumes normal operation.

Menu Adjustment:

1. Press and hold audio and menu adjustment button for more than 3 seconds to enter menu adjustment mode.
2. Press audio and menu adjustment button to step through

Continued on next page

Warning indicator illuminates when a condition exists which requires operator action.

RG22492—UN—21AUG13

Warning Indicator

TX,MACH,STOP,WARNING-19-23JUN20-3/7

Engine stop indicator illuminates when a condition exists which requires immediate operator action and service.

RG22493—UN—21AUG13

Engine Stop Indicator

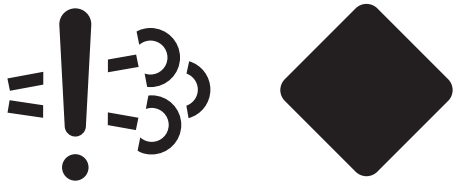
TX,MACH,STOP,WARNING-19-23JUN20-4/7

Emission System Fault Has Occurred

Four hours or less remaining, engine emissions system malfunction and warning indicators are illuminated to warn operator of emissions-related fault. Two hours or less when pop-up is displayed.

- Engine power is normal.
- Machine operation is normal.
- Place machine in a safe state.
- Contact service provider.

RG26361—UN—04SEP14



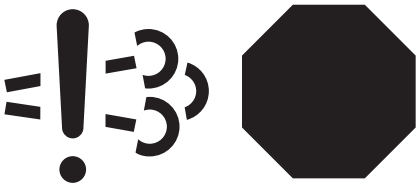
Engine Emissions System Malfunction and Warning Indicators

TX,MACH,STOP,WARNING-19-23JUN20-5/7

Sixty minutes remaining, engine emissions system malfunction and engine stop indicators are illuminated and alarm sounds to warn operator of emissions-related fault. Sixty minutes or less from when pop-up is displayed until final power restriction.

- Engine power and torque will be reduced.
- Key Off—Key On will temporarily provide full power.
- Place machine in a safe state.
- Contact service provider.

RG26972—UN—26MAR15



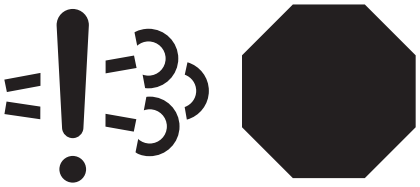
Engine Emissions System Malfunction and Engine Stop Indicators

TX,MACH,STOP,WARNING-19-23JUN20-6/7

Two minutes or less remaining, engine emissions system malfunction and engine stop indicators are illuminated and alarm sounds to warn operator of emissions-related fault which has not been corrected. “DEF System Fault-Engine Power and Speed Limited” is displayed on machines with monitors.

- Engine power is idle only.
- Place machine in a safe state.
- Contact service provider.

RG26972—UN—26MAR15



Engine Emissions System Malfunction and Engine Stop Indicators

TX,MACH,STOP,WARNING-19-23JUN20-7/7

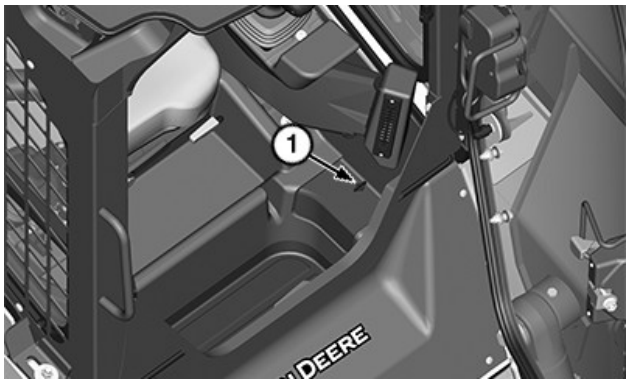
1. Close cab door if equipped.
2. Fasten seat belt.
3. Lower interlocking seat bar.
4. Loosen retainer clip (1) from boom release cover in lower left side of cab. Remove cover.
5. Pull boom release valve (2) and hold.

NOTE: Boom lower function will vary based on machine control pattern.

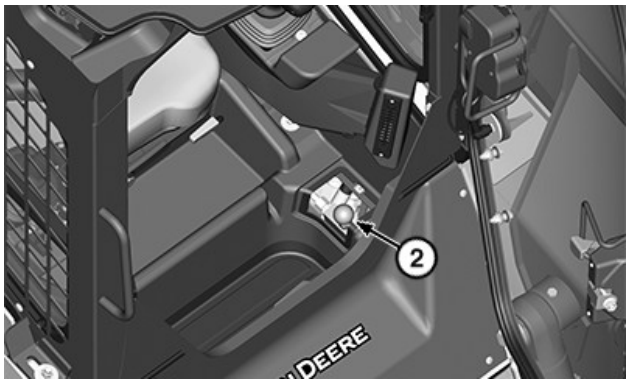
6. Lower boom.

   If boom does not lower, see an authorized John Deere dealer.

1—Retainer Clip **2—Boom Release Valve**



Boom Release Cover



Boom Release Valve

JB92884,000013B-19-15JUN16-2/2

Steering—EH Controls

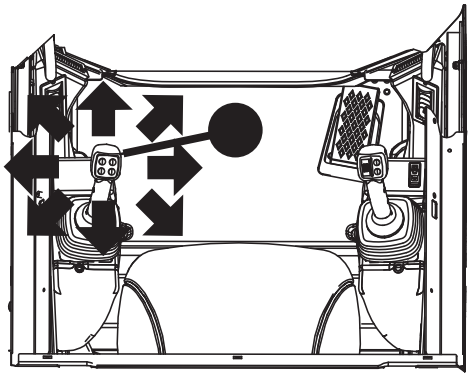
CAUTION: Avoid possible injury from unexpected machine movement. If machine is equipped with joystick performance package, be aware that there are three control patterns available. Always verify control response before operating machine.

Depending on machine configuration, there are four possible control patterns: electrohydraulic (EH) hands only (ISO pattern) controls, EH hands only (H pattern) controls, EH hand and foot controls, and (when enabled in the engagement and monitor unit [EMU]) EH hand and foot (ISO pattern) controls.

EH Hands Only (ISO Pattern), EH Hand and Foot (ISO Pattern) Controls, and Dozer Mode (if equipped)

NOTE: The left joystick (1) controls left and right drive.

- Move left joystick (1) in the direction of desired travel.
- Slowly return left joystick to neutral position to stop.



EH Hands Only (ISO pattern) and EH Hand and Foot (ISO pattern) Controls

1—Left Joystick

Continued on next page

RE59955,000118F-19-30SEP20-1/3

Creep Mode—If Equipped

NOTE: When creep mode is active, machine control pattern cannot be changed.

CAUTION: Prevent injury from unexpected machine movement. Keep bystanders clear of machine. Pressing the left joystick trigger for less than 1 second without creep mode active will activate two-speed mode (if equipped). Do not release left joystick trigger until monitor displays CREEP LIMIT indicating that creep mode is activated.

Creep mode is only available with electrohydraulic (EH) controls and is included as part of the optional joystick performance package.

Creep mode is used to limit the forward and reverse travel speeds of the machine when the joystick is at full travel.

NOTE: For wheeled machines, shifting to high speed is allowed regardless of hydraulic oil temperature. Shifting to low speed is allowed during normal operation if hydraulic oil temperature is 40°C (105°F) or greater. If hydraulic oil temperature is less than 40°C (105°F), then shifting to low speed requires machine to be stopped and park brake applied. If hydraulic oil is too cold for down shift without park brake applied, HYD TEMP TOO LOW FOR SHIFT pop-up will display on engagement and monitor unit (EMU).

There are two methods to activate creep mode:

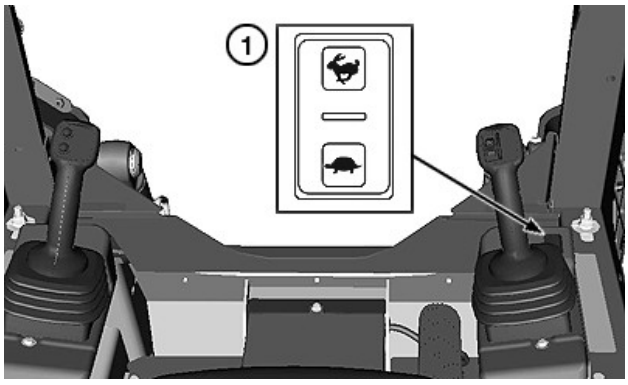
- Press creep mode speed switch (1) in either direction.
- Press and hold the left joystick trigger (2) switch for a minimum of 1 second.

The monitor alarm beeps to alert the operator that creep mode has been enabled. For two-speed machines, when the machine is in high range prior to actuation of the switch, the machine will also shift to low range when the joystick is in neutral.

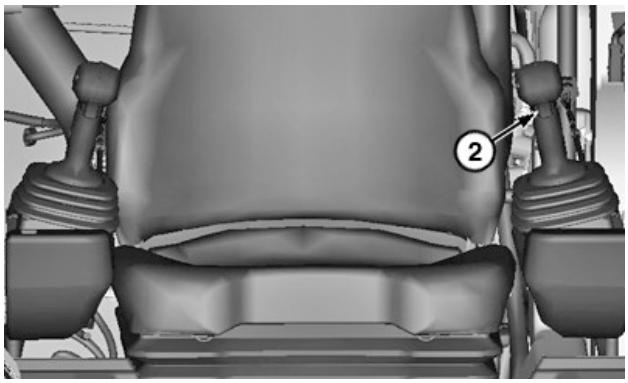
Once creep mode is activated, the engagement and monitor unit (EMU) will display the speed limit setting screen. The creep mode limit will display the last saved setting.

Change the speed limit setting by pressing the upper or lower portion of creep mode speed switch.

Speed limit can be adjusted while the machine is moving.



Creep Mode Speed Switch



Left Joystick

1—Creep Mode Speed Switch 2—Left Joystick Trigger

The setting selected will become active immediately. The display will show the percentage of allowed maximum speed in increments of 10% above 20%, and in increments of 1% below 20%. If the MENU or SELECT button is pressed, the display will return to the previous menu display and the operator is allowed to navigate the display as normal. The operator can return to the speed limit setting screen by either cycling creep mode off and then on again or by navigating the menus and selecting creep mode.

When machine is in creep mode, the creep mode indicator (snail) will illuminate on EMU.

To deactivate creep mode and return to travel speed, press the left joystick trigger switch.

CN93077,0000702-19-05AUG21-1/1

1. With engine running, press hydraulic enable switch (2).
2. Press return-to-carry (RTC) switch (1) on the sealed switch module (SSM) (light-emitting diode [LED] illuminated) to turn on RTC.
3. To set a different height, move boom to new desired height.
4. Press and hold RTC switch until LED flashes, which indicates that position has been set.
5. Raise boom.

NOTE: Moving joystick during automated RTC function cancels the boom and bucket movement.

6. Move joystick to the boom down detent position and release to neutral to check new height.

1—Return-to-Carry (RTC) Switch

2—Hydraulic Enable Switch

Sealed Switch Module (SSM)

JB38880,0001361-19-12MAR18-2/2

Onboard Grade Indicator—If Equipped

Onboard grade indicator is optionally equipped for electrohydraulic (EH) machines with an inertial measurement unit (IMU). With this sensor connected, the engagement and monitor unit (EMU) can display the overall machine pitch (fore-and-aft) and roll (side to side) on the EMU runtime screen. For more information, see Grade Control. (Section 2-3.)

JB38880,0001362-19-27AUG20-1/1

Self Leveling Hydraulics—If Equipped

Hydraulic Self Leveling—Self Leveling Up (SLU)

If the machine is equipped with hydraulic self leveling—self leveling up (SLU) option, the attachment remains level as the boom is moved up only when self leveling is activated.

NOTE: When ride control and self leveling are both enabled (left light-emitting diode [LED] illuminated on both icons), pressing the right joystick trigger will toggle the activation between ride control and self leveling. Right LED on respective switch illuminates to indicate which function is activated.

Continued on next page

JB38880,0001363-19-06DEC18-1/3

Exhaust Filter Parked Cleaning (EMU)

CAUTION: Servicing machine during exhaust filter parked cleaning can result in serious personal injury. Avoid exposure and skin contact with hot gases and components.

During exhaust filter parked cleaning, the engine may run at elevated idle and hot temperatures for an extended period of time. Exhaust gases and exhaust filter components may reach temperatures hot enough to burn people and ignite or melt common materials.

IMPORTANT: Avoid machine damage. Always park machine in a safe location and check for adequate fuel level before beginning exhaust filter parked cleaning.

IMPORTANT: Avoid machine damage. Engine cover must be closed during exhaust filter cleaning.

PARKED CLEANING allows operator to manually initiate an exhaust filter cleaning. Certain conditions must be met before a parked cleaning will proceed, display monitor will warn operator of these conditions if not met. Once a filter cleaning cycle is started a status bar and percentage complete is displayed.

For more information on exhaust filter cleaning, see Exhaust Filter. (Section 2-2.)

Initiate PARKED CLEANING:

1. Navigate through menu: **MAIN MENU >> EXHAUST FILTER >> PARKED CLEANING**.

NOTE: PARKED CLEANING can only be performed when filter soot levels are LOW or MODERATE.

2. View FILTER SOOT LEVEL in menu to verify filter soot levels are appropriate for filter cleaning.
3. Select PARKED CLEANING from menu.
4. Display monitor prompts operator if machine shutdown is desired after cleaning.
5. The following conditions must be met before exhaust filter cleaning proceeds:
   - Park brake engaged.
   - Engine speed at slow idle.
6. Machine will prepare exhaust filter for cleaning then proceed with cleaning cycle.

   If necessary, an in process exhaust filter cleaning may be canceled by releasing park brake, shifting to forward or reverse, or increasing engine speed but is not suggested.

   If machine detects any of the following, exhaust filter cleaning will abort:
   - LOW FUEL SELECT GO.
   - LOW FUEL BACK STOP.
     SELECT requests parked cleaning.
     BACK cancels parked cleaning.

CN93077,00006C2-19-06DEC18-1/1

Courtesy Lighting (EMU)

The COURTESY LIGHTING menu allows operator to set amount of time front cab lights and the taillights remain illuminated when the machine is turned off and the engine is not running.

Navigate through menu: **MAIN MENU >> COURTESY LIGHTING**.

COURTESY LIGHTING Menu Items

Menu Items		Value	Description
COURTESY LIGHTING	>>	• OFF • 30 SEC • 45 SEC • 60 SEC • 90 SEC	Current courtesy lighting delay off time displays. Pressing NEXT scrolls through the list. As the operator scrolls through the list, the monitor sets the delay time when the menu is exited.

Press SELECT or MENU button to return to MAIN MENU.

CN93077,00006C3-19-20NOV15-1/1

(including copper, lead, zinc, tin, brass, and bronze) used in fuel handling, distribution, and storage equipment
- Possible reduction in water separator efficiency
- Possible damage to paint if exposed to biodiesel
- Possible corrosion of fuel injection equipment
- Possible elastomeric seal and gasket material degradation (primarily an issue with older engines)
- Possible high acid levels within fuel system
- Because biodiesel blends above B20 contain more ash, using blends above B20 can result in more rapid ash loading and require more frequent cleaning of the Exhaust Filter (if present)

IMPORTANT: Raw pressed vegetable oils are NOT acceptable for use as fuel in any concentration in John Deere engines. Their use could cause engine failure.

DX,FUEL7-19-13JAN18-2/2

Testing Diesel Fuel

A fuel analysis program can help to monitor the quality of diesel fuel. The fuel analysis can provide critical data such as calculated cetane index, fuel type, sulfur content, water content, appearance, suitability for cold weather operations, bacteria, cloud point, acid number, particulate contamination, and whether the fuel meets ASTM D975 or equivalent specification.

Contact your John Deere dealer for more information on diesel fuel analysis.

DX,FUEL6-19-13JAN18-1/1

Fuel Filters

The importance of fuel filtration cannot be overemphasized with modern fuel systems. The combination of increasingly restrictive emission regulations and more efficient engines requires fuel system to operate at much higher pressures. Higher pressures can only be achieved using fuel injection components with very close tolerances. These close manufacturing tolerances have significantly reduced capacities for debris and water.

John Deere brand fuel filters have been designed and produced specifically for John Deere engines.

To protect the engine from debris and water, always change engine fuel filters as specified in this manual.

DX,FILT2-19-14APR11-1/1

Diesel Exhaust Fluid (DEF) — Use in Selective Catalytic Reduction (SCR) Equipped Engines

In order to maintain the emissions performance of the engine, it is essential to use and refill DEF in accordance with the specification.

Diesel exhaust fluid (DEF) is a high purity liquid that is injected into the exhaust system of engines equipped with selective catalytic reduction (SCR) systems. Maintaining the purity of DEF is important to avoid malfunctions in the SCR system. Engines requiring DEF shall use a product that meets the requirements for aqueous urea solution 32 (AUS 32) according to ISO 22241-1.

AdBlue is a trademark of VDA, the German Association of the Automotive Industry.

The use of John Deere Diesel Exhaust Fluid is recommended. John Deere Diesel Exhaust Fluid is available at your John Deere dealer in a variety of package sizes to suit your operational needs.

If John Deere Diesel Exhaust Fluid is not available, use DEF that is certified by the American Petroleum Institute (API) Diesel Exhaust Fluid Certification Program or by the AdBlue™ Diesel Exhaust Fluid Certification Program. Look for the API certification symbol or the AdBlue™ name on the container.

DX,DEF-19-13JAN18-1/2

In some cases, DEF is referred to by one or more of these names:
- Urea
- Aqueous Urea Solution 32
- AUS 32
- AdBlue™
- NOx Reduction Agent
- Catalyst Solution

RG30211—UN—08MAR18

DX,DEF-19-13JAN18-2/2

Alternative and Synthetic Lubricants

Conditions in certain geographical areas may require lubricant recommendations different from those printed in this manual.

Some John Deere brand coolants and lubricants may not be available in your location.

Consult your John Deere dealer to obtain information and recommendations.

Synthetic lubricants may be used if they meet the performance requirements as shown in this manual.

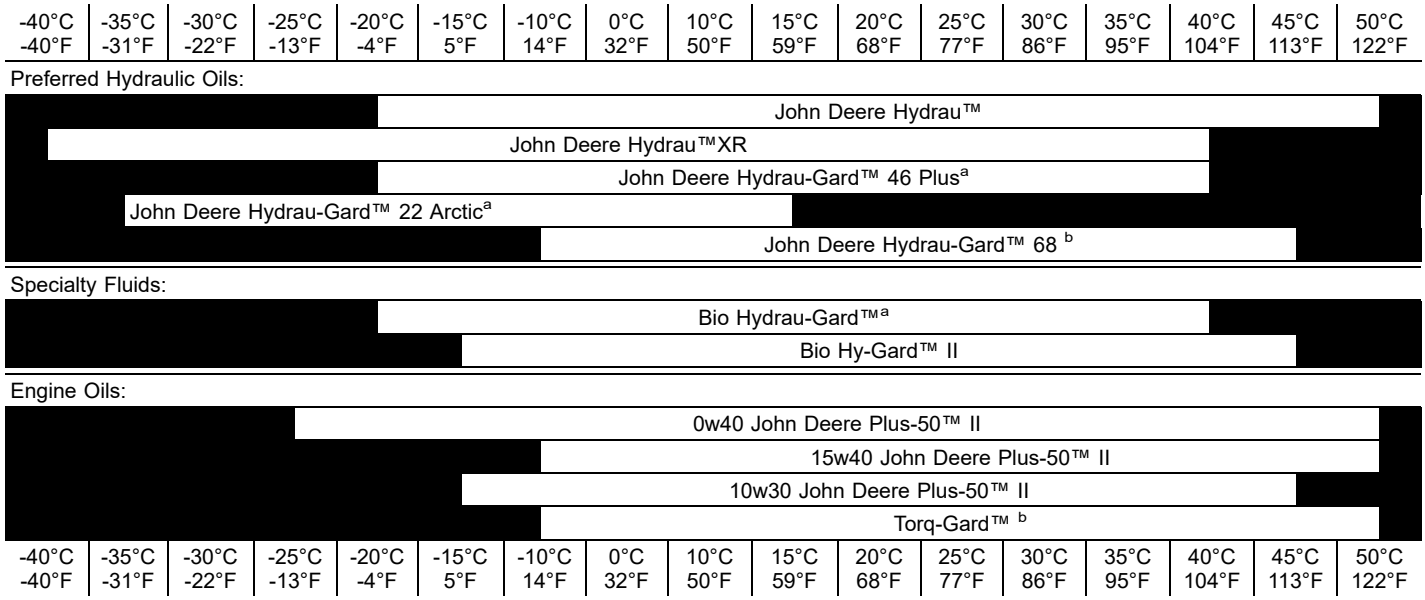
The temperature limits and service intervals shown in this manual apply to John Deere branded fluids or fluids that have been tested and/or approved for use in John Deere equipment.

Re-refined base stock products may be used if the finished lubricant meets the performance requirements.

DX,ALTER-19-13JAN18-1/1

Hydraulic and Hydrostatic Oil

Use oil viscosity based on the expected air temperature range during the period between oil changes.



[a] *Not available in the United States or Canada*
[b] *Brazil only.*

Hydrau is a trademark of Deere & Company
Hydrau-Gard is a trademark of Deere & Company
Hydrau-Gard is a trademark of Deere & Company
Bio Hydrau-Gard is a trademark of Deere & Company
Bio Hy-Gard is a trademark of Deere & Company
Plus-50 is a trademark of Deere & Company
Torq-Gard is a trademark of Deere & Company

IMPORTANT: To avoid machine damage. Do not mix fluids of different type or brand. Do not mix zinc-free and zinc-based. Mixing fluids can result in additive fall-out and lubricant degradation.

Other hydraulic oils may be used, at a reduced service interval, if they meet the following specification.

- Anti-Wear Hydraulic Oils (AWHO):
  - ISO 11158 Category HV
  - DIN 51524-3

TX,HYDOIL,G-19-26OCT20-1/1

Fluid Analysis Program Test Kits and 3-Way Coolant Test Kit

Fluid Analysis Program Test Kits and the 3-Way Coolant Test Kit are John Deere fluid sampling products to help you monitor machine maintenance and system condition. The objective of a fluid sampling program is to ensure machine availability when you need it and to reduce repair costs by identifying potential problems before they become critical.

Engine, hydraulic, power train, and coolant samples should be taken from each system on a periodic basis, before a filter or fluid change interval. Certain systems require more frequent sampling. Consult your authorized John Deere dealer on a maintenance program for your specific application. Your authorized John Deere dealer has the sampling products and expertise to assist you in lowering your overall operating costs through fluid sampling.

TX1003513A—UN—20FEB06

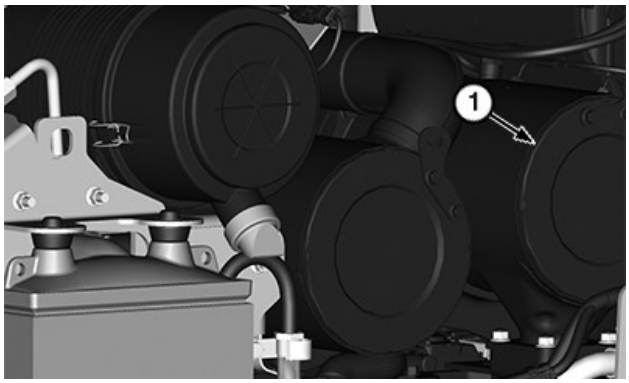
TX,ANALYSIS-19-20JAN11-1/1

Service Exhaust Filter

CAUTION: Under federal, state, and/or local laws or regulations, exhaust filter ash may be classified as a hazardous waste. Hazardous waste must be disposed of in accordance with all applicable federal, state, and local laws or regulations governing hazardous waste disposal. Only a qualified service provider should remove ash from the exhaust filter. See an authorized dealer for exhaust filter ash handling and disposal.

The exhaust filter (1) is designed to retain residual ash, which is a noncombustible result of additives used in crankcase lubrication oils and the fuel. As ash levels rise, the capacity for soot storage is reduced. Engine performance can be reduced due to increased exhaust system back pressure. The residual ash must be removed from the filter. Ash removal is performed by removing the exhaust filter from machine and having it cleaned by specialized equipment or replacing the exhaust filter.

Do **NOT** attempt to remove exhaust filter from machine. **Contact an authorized dealer to remove exhaust filter for ash removal or replacement.**



Exhaust Filter

1—Exhaust Filter

Failure to follow the approved ash removal methods may violate U.S. federal, state, and local hazardous waste laws, along with damage to the exhaust filter, resulting in potential denial of the emissions warranty.

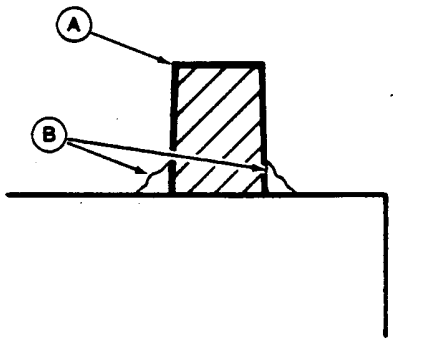
JB92884,000013A-19-13JUN16-1/1

Clean and Tighten Battery Terminals

CAUTION: Battery gas can explode. Keep sparks and flames away from batteries. Always remove grounded (-) battery clamp first and replace it last.

1. Disconnect battery clamps, grounded clamp first.
2. Clean terminal (A) and clamp with a stiff brush.
3. Apply lubricating grease (B) where battery terminal meets top of battery case to prevent grease from escaping.
4. Install and tighten clamps, grounded clamp last.

A—Terminal **B—Lubricating Grease**



Battery Terminal

TX,55,FF765-19-30NOV16-1/1

Check Coolant Condition

CAUTION: Prevent possible injury from hot, spraying fluids. Shut off engine. Remove filler cap only when cool enough to touch with bare hands. Slowly loosen cap to relieve pressure before removing completely.

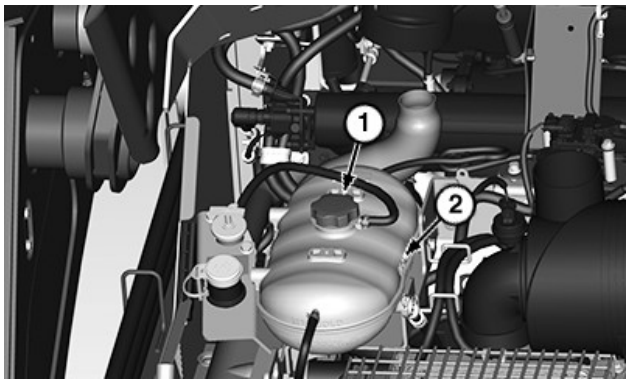
NOTE: Check coolant every 1000 hours, yearly, or when replacing 1/3 or more of coolant using SERVICEGARD™ tool program.

1. Park machine on level surface.
2. Engage park brake and stop engine.
3. Open engine cover to access surge tank (2). See Opening and Closing Engine Cover. (Section 3-2.)
4. Test engine coolant. See Testing Coolant Freeze Point. (Section 3-1.)
5. Install surge tank cap (1).
6. Close engine cover.

1—Surge Tank Cap **2—Surge Tank**

TS281—UN—15APR13

Pressurized Fluids



TX1215571—UN—17MAY16

Surge Tank

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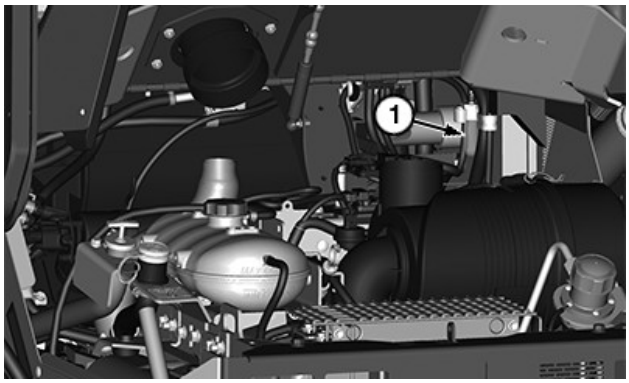
JB38880,000115E-19-13FEB18-1/1

Replace Fuel Tank Breather

1. Park machine on level surface.
2. Engage park brake and stop engine.
3. Open engine cover to access fuel tank breather (1). See Opening and Closing Engine Cover. (Section 3-2.)
4. Rotate fuel tank breather counterclockwise to remove.
5. Discard fuel tank breather.
6. Install new fuel tank breather.
7. Close engine cover.

1—Fuel Tank Breather



TX1215576—UN—18MAY16

Fuel Tank Breather

JB38880,000115F-19-28SEP20-1/1

Fill Cooling System

IMPORTANT: Use only permanent-type, low silicate, ethylene glycol base antifreeze in coolant solution. Other types of antifreeze may damage cylinder seals.

If not using premixed coolant, use only distilled water when mixing with ethylene glycol concentrate.

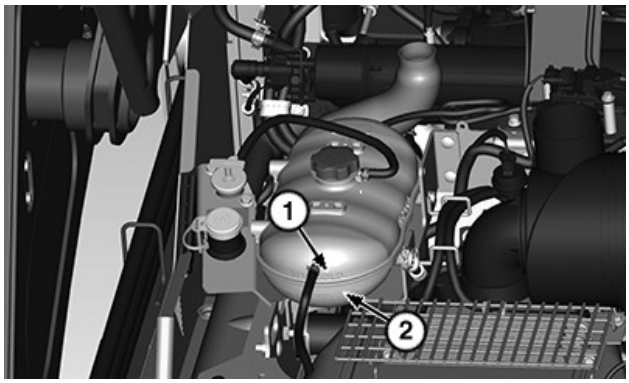
NOTE: John Deere COOL-GARD™ II Pre-Mix coolant is recommended when adding new coolant to cooling system.

Follow directions on container for correct mixture ratio.

1. Check condition of coolant system hoses. If new hoses are needed, see an authorized John Deere dealer.
2. Fill system with coolant. For recommended coolant, see Diesel Engine Coolant (engine without wet sleeve cylinder liners) (Section 3-1).

Specification	
Cooling System—Capacity	14.9 L 3.9 gal

3. Install surge tank cap.
4. Start engine and run until engine reaches operating temperature, allowing entire system to be filled with coolant.
5. Stop engine.
6. Allow engine to cool.
7. Check coolant level in surge tank. Coolant should be to the MAX COLD mark (1) on the surge tank.



Surge Tank

1—MAX COLD Mark **2—MIN COLD Mark**

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JB38880,0001164-19-17NOV22-4/4

Using Battery Charger

12-Volt System

CAUTION: Prevent possible injury from exploding battery. Do not charge a battery if ambient temperature is below 0°C (32°F). Warm battery to 16°C (60°F) before charging.

Turn off charger before connecting or disconnecting it.

IMPORTANT: Do not use battery charger as a booster if a battery has a 1.150 specific gravity reading or lower.

Disconnect battery ground (-) clamp before charging batteries in the machine to prevent damage to electrical components.

NOTE: Some battery chargers may also be used as a booster to start the engine. Follow battery charger manufacturer's operating instruction before boosting.

1. Turn the battery disconnect switch (if equipped) to the OFF position.
2. Ventilate the area where battery is being charged.
3. Connect positive (+) cable to the positive (+) terminal of machine battery.
4. Connect negative (-) cable to the negative (-) terminal of machine battery.

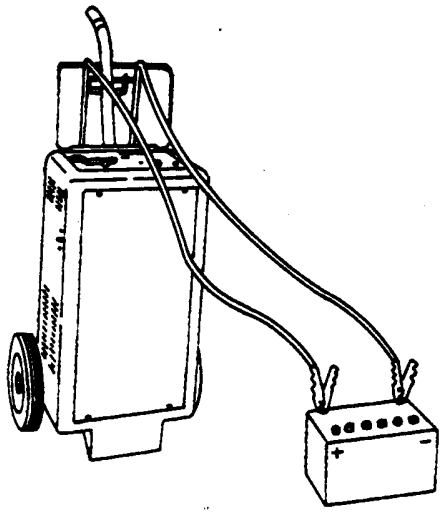
CAUTION: Prevent possible injury from exploding battery. Follow battery charger manufacturer's operating instructions before charging.

IMPORTANT: Prevent battery or machine damage from improper use of charger. Follow battery charger manufacturer's operation instruction before charging.

5. Stop or cut back charging rate if battery case becomes hot or is venting electrolyte. Battery temperature must not exceed 52°C (125°F).
6. Remove charger cables in reverse order of connection.

TS204—UN—15APR13

Prevent Battery Explosions



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Charger

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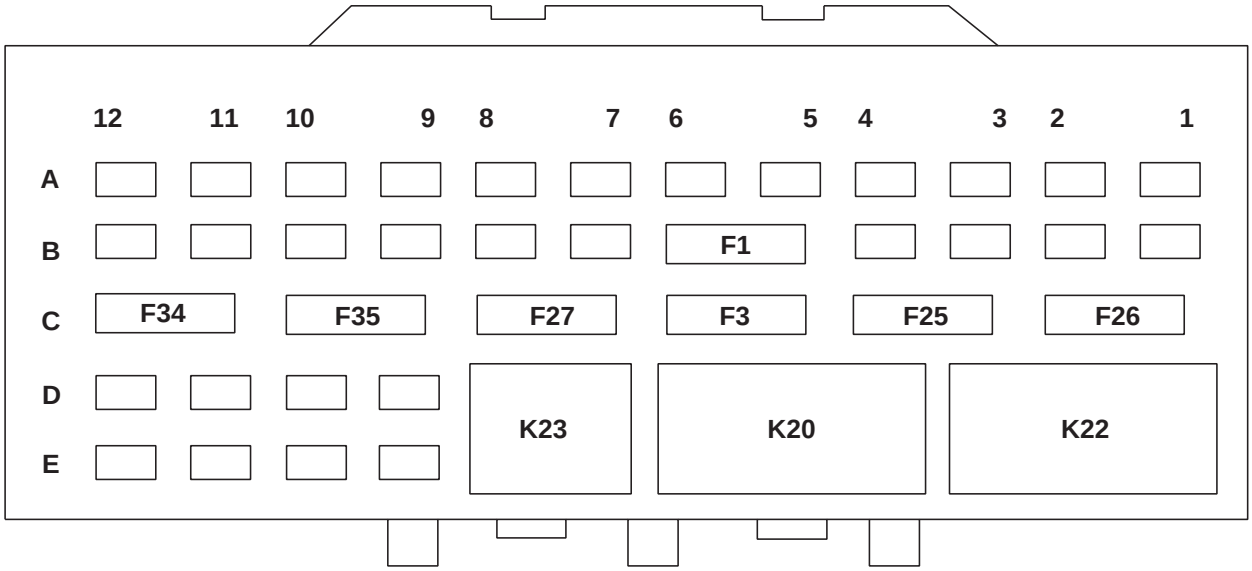

TX1217153

TX1217153—UN—09JUN16

Fuse Block (left side)

F1—Unswitched Power 7.5 A Fuse
F3—Engine Control Unit (ECU) Unswitched Power 25 A Fuse
F25—Diesel Exhaust Fluid (DEF) Heater 25 A Fuse
F26—Dosing Control Unit (DCU) 25 A Fuse
F27—NOx Sensor 15 A Fuse
F34—JDLink™ Switched Power 5 A Fuse
F35—JDLink™ Predisconnect 5 A Fuse
K20—Engine Control Unit (ECU) Relay
K22—Diesel Exhaust Fluid (DEF) Heater Relay
K23—NOx Sensor Relay

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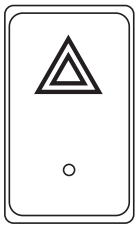
JB38880,0001156-19-21JUL21-2/4

Dual Flasher Light (if equipped) Check



TX1125311—UN—06NOV12

Dual Flasher Light Switch

Press dual flasher switch to the upper position.

LOOK: Do the dual flashers come on?

YES: Go to next check.

NO: Check left flasher light in-line 5 A fuse (F10). Check right flasher light in-line 5 A fuse (F11). Check switched power 20 A fuse (F15).

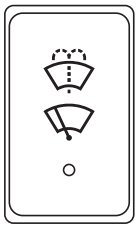
NO: Check dual flasher relay (K5).

NO: Check dual flasher switch (S7).

IF OK: See an authorized John Deere dealer.

JB38880,0001180-19-06OCT20-15/44

Windshield Wiper Circuit (if equipped) Check



TX1125050—UN—02NOV12

Windshield Wiper and Washer Switch

Close cab door.

Press windshield wiper and washer switch to the middle position.

LOOK: Does wiper operate?

YES: Go to next check.

NO: Check accessory 20 A fuse (F7).

NO: Check windshield wiper and washer switch (S12).

NO: Check accessory relay (K4).

NO: Check unswitched power 7.5 A fuse (F1).

IF OK: See an authorized John Deere dealer.

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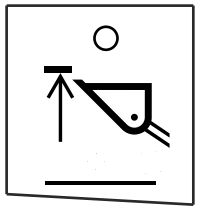
JB38880,0001180-19-06OCT20-16/44

Boom Height Kickout (BHKO) (if equipped) Check



T194316—UN—11SEP03

Boom Height Kickout (BHKO) Switch

NOTE: To verify proper operation, ensure return-to-dig (RTD), return-to-carry (RTC), and self leveling functions are turned off.

Lower boom to the ground.

BHKO requires a programmed position to operate, see Boom Height Kickout (BHKO)—If Equipped. (Section 2-2.)

Press boom height kickout enable switch on sealed switch module (SSM) to enable boom height kickout function (LED on).

Move joystick controller to boom up detent position and return to neutral.

LOOK: Does boom up command activate, and then stop upon reaching BHKO position?

YES: Go to next check.

NO: See an authorized John Deere dealer.

JB38880,0001180-19-06OCT20-38/44

Heating and Air Conditioning System (if equipped) Check

TX1200985A—UN—09SEP15

Heater and Air Conditioner Controls

R3—Heater Temperature Control Switch
S9—Blower Motor Speed Switch
S19—Air Conditioner Switch

NOTE: Engine will need to be at operating temperature for this check.

Position engine speed control dial in slow idle position.

Turn blower motor speed switch (S9) from off to slow, medium, and high speeds.

LISTEN/FEEL: Does fan speed increase and/or decrease as switch is moved?

Turn blower speed switch to medium speed.

Turn heater temperature control switch (R3) to hot (red).

FEEL: Does warm air come out of air ducts?

Turn heater temperature control switch (R3) to cold (blue).

FEEL: Does cool air come out of air ducts?

Turn on air conditioner switch (S19).

FEEL/LISTEN: Does cold air come out of air duct after a couple of minutes?

YES: Go to next check.

NO: Check air conditioner and heater 30 A fuse (F8).

IF OK: See an authorized John Deere dealer.

Continued on next page

JB38880,0001180-19-06OCT20-39/44

Hydraulic System

Symptom	Problem	Solution
Boom and Bucket Will Not Move	Joysticks not in neutral	Move joysticks to neutral position.
	Interlocking seat bar switch is not activated	Lower interlocking seat bar to activate seat switch.
	Park brake engaged	Disengage park brake.
Excessive Pump Noise	Low hydraulic oil level	Check hydraulic oil level. See Check Hydraulic Oil Level. (Section 3-4.)
	Suction line restricted	Check for line restriction or replace hose as necessary.
	Air leaks at pump inlet line fittings	Check all hydraulic connections and tighten as necessary.
Slow Hydraulic Function	Auxiliary hydraulic roller locked in detent position	Return roller to neutral position.
	Low engine speed	Increase engine speed.
	Cold oil	Warm oil to operating temperature by operating hydraulic functions.
	Boom or bucket overloaded	Lighten load on hydraulic function.
	Low hydraulic oil level	Check hydraulic oil level. See Check Hydraulic Oil Level. (Section 3-4.)
	Cylinder, hose, or line leakage	Inspect and tighten fittings.
	Air leaks at pump inlet line fittings	Check all hydraulic connections and tighten as necessary.
	Restricted hydraulic oil filter	Replace hydraulic oil filter. See Drain and Refill Hydraulic Oil and Replace Filter Elements. (Section 3-8.)
	Restricted hydrostatic oil filter	Replace hydrostatic oil filter. See Drain and Refill Hydraulic Oil and Replace Filter Elements. (Section 3-8.)
	Hydraulic oil aerated	Drain hydraulic oil and refill with correct oil. See Drain and Refill Hydraulic Oil and Replace Filter Elements. (Section 3-8.)
	Stuck pivot pins	See an authorized John Deere dealer.
	Bent or damaged cylinder rods	See an authorized John Deere dealer.
Machine Loses Power	Low hydraulic oil level	Check hydraulic oil level. See Check Hydraulic Oil Level. (Section 3-4.)

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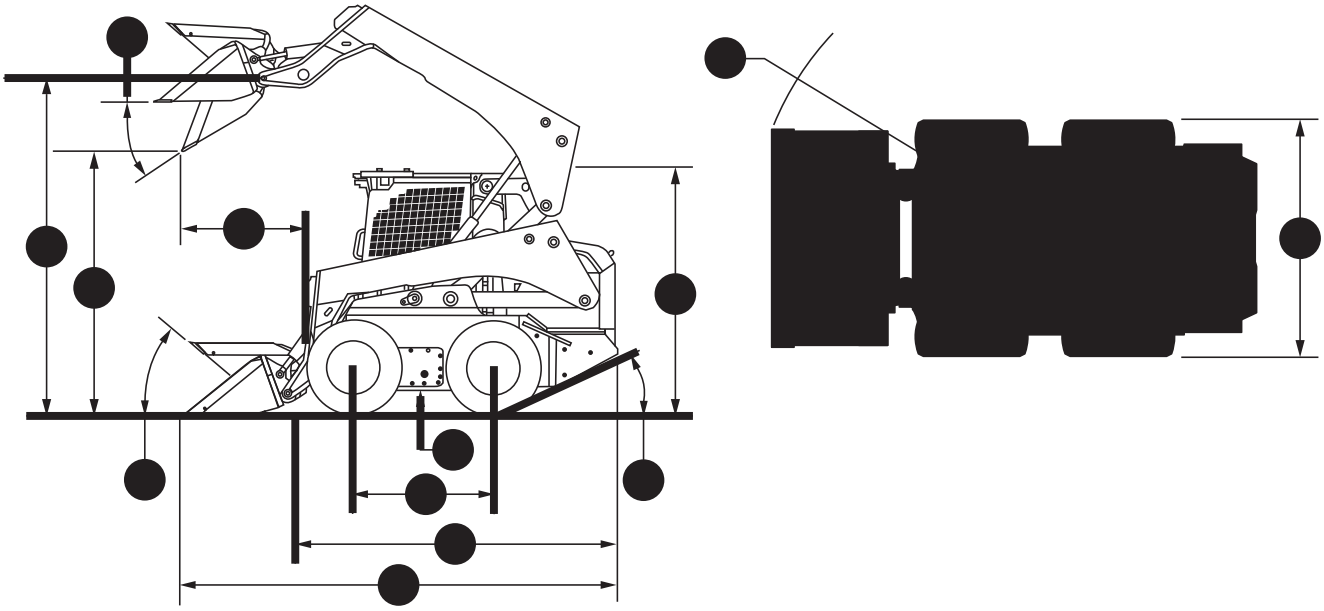
332G Machine Dimensions



TX1215124

TX1215124—UN—05MAY16

Machine Dimensions

NOTE: Specifications and design are subject to change without notice. Whenever applicable, specifications are in accordance with ISO and SAE standards. Except where otherwise noted, these specifications are based on a machine equipped with standard tires and bucket.

Item	Measurement	Specification
1—Dump (full lift height)	Angle	48°
2—Hinge Pin	Height	3.35 m 11 ft 0 in
3—Dump With Foundry Bucket	Height	2.68 m 8 ft 10 in
3—Dump With Construction Bucket	Height	2.49 m 8 ft 2 in
4—Bucket Rollback (ground level)	Angle	35°
5—Dump With Foundry Bucket	Reach	0.71 m 2 ft 4 in
5—Dump With Construction Bucket	Reach	0.88 m 2 ft 11 in
6—Ground Clearance	Height	0.25 m 0 ft 10 in
7—Wheel Base	Distance	1.27 m 4 ft 2 in
8—Overall Without Bucket	Length	3.10 m 10 ft 2 in
9—Overall With Foundry Bucket	Length	3.71 m 12 ft 2 in

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