CTL Harvester
PIN: 1WJ1270G_ _C003505-
PIN: 1WJ1270G_ _D003505-

OPERATOR'S INSTRUCTIONS
John Deere 1270G
Tier 3 and Tier 2

F691043 (02/2020) ENGLISH

Worldwide Construction
And Forestry Division

Published in Finland

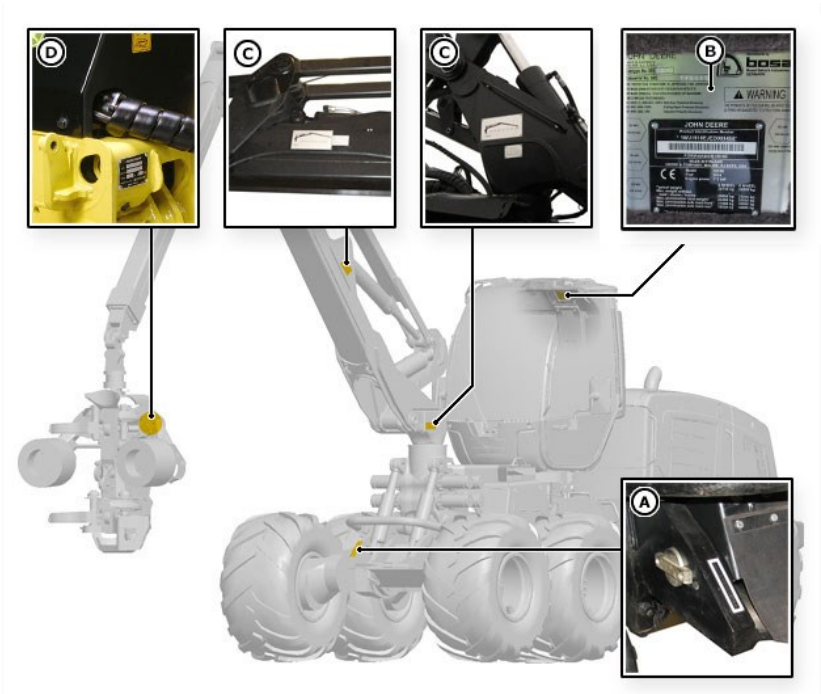
Original Instructions

MACHINE IDENTIFICATION

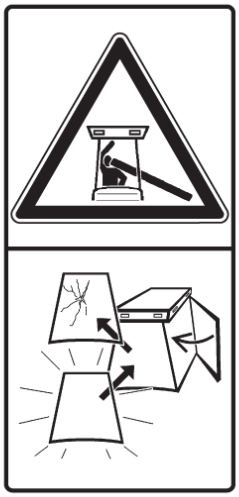
A. The punched serial number is located on the front frame.
B. The machine type plate is located inside the cabin, behind the first aid kit.
C. The boom type plate is located on the left side of the main boom or boom pillar.
D. The harvester head type plate is located on the head frame.

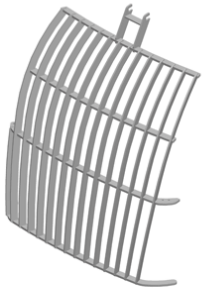
Punched serial number identification, for example 1WJ1470GJEF002001, where:

1	Character placeholder	Always 1
WJ	Factory code	Joensuu
1470G	Model number	1470G wheeled harvester
J	Check letter	
B	Year manufactured	F = 2015, G = 2016, H = 2017, J = 2018, K = 2019, L = 2020, M = 2021, N = 2022, etc.
F	Engine emission level	C = Tier 2, D = Tier 3, E = Interim Tier 4, F = Final Tier 4 / Stage IV, L = Final Tier 4 / Stage V
00	Character placeholder	Always 00
2001	Serial number	



CABIN PROTECTIVE STRUCTURES





Cabin is tested according to international ROPS, FOPS and OPS standards.

Do not operate the machine with the door open, secondary exit open or any of the safety covers or protective devices removed.

It is important to keep the operator protective structure in place (doors, screens, windows, windshield, etc.) to minimize hazards from whipping or intruding objects.

The protection offered by ROPS, FOPS and OPS will be impaired if cabin

- is subjected to structural damage
- is involved in an overturn incident
- is in any way altered by welding, bending, drilling, or cutting

To maintain ROPS, FOPS and OPS protection, replace damaged cabin parts immediately. A damaged structure should be replaced, not reused. It is forbidden to modify the window fastening.

Following issues must be considered when the machine is used or equipped for other purpose than it is designed for by the manufacturer:

- Overall weight of the machine without load (towed equipment and any load excluded) must not exceed the maximum weight defined for the cabin and mentioned below the machine type plate (ROPS-weight, Roll Over Protection Structure). Contact manufacturer's representative to clarify the demands of the ROPS standard when necessary.
- If the machine's center of gravity is changed due to machine buildup the maneuverability of the machine will also change and does not necessarily correspond to the original demands determined by the manufacturer.

The manufacturer can not guarantee machine safety if the machine has been used contrary to the operator's instructions given or has been equipped with accessories not approved by the manufacturer.

NOTE: *An optional heavy duty window guard is recommended for operations in late thinning and regeneration felling sites.*

ROPS LEVELS

Cabin type plate defines approval levels and standards for ROPS (Roll-Over Protective Structures).

⚠ CAUTION

the operating environment.

When the temperature drops below 5°C (41°F) we strongly recommend that you use the pre-heating (if equipped) of the engine coolant 1/2 — 1 hour before starting the engine.

NOTE: *Follow cold weather starting sequence in this manual.*

ENSURE SAFETY BEFORE DRIVING ON FROZEN WATERS

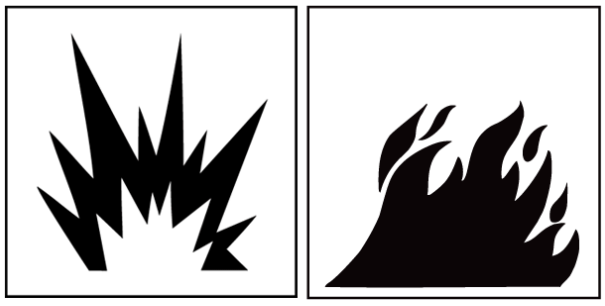
Secure, that ice cover is strong enough before driving machine over frozen waters.

- Be ready for quick evacuation from the cabin before driving on a frozen lake.
- Release your safety belt.
- Disarm the security exit.
- Ensure that there is nothing to obstruct quick evacuation.
- Restore the above precautions on reaching firm ground.
- Never park the machine on a frozen lake.

AVOID FIRES AND EXPLOSIONS

When working in a forest environment, it is impossible to prevent combustible debris from collecting in tight corners of the machine. This debris, in itself, may cause a fire; however, when mixed with fuel, oil, or grease in a hot or confined place, the danger of fire is very much increased.

To reduce the chance of a fire starting, observe the following instructions:



SERVICE TIRES SAFELY

Explosive separation of a tire and rim parts can cause serious injury or death.

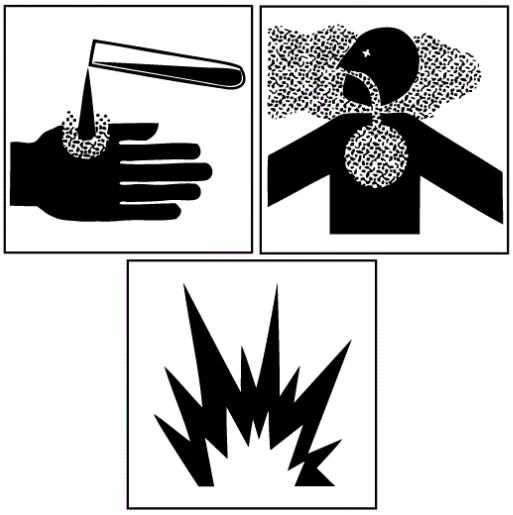
Do not attempt to mount a tire unless you have the proper equipment and experience to perform the job.

Always maintain the correct tire pressure. Do not inflate the tires above the recommended pressure. Never weld or heat a wheel and tire assembly. The heat can cause an increase in air pressure resulting in a tire explosion.

When inflating tires, use a clip-on chuck and extension hose long enough to allow you to stand to one side and NOT in front of or over the tire assembly. Use a safety cage if available.

Check wheels for low pressure, cuts, bubbles, damaged rims or missing lug bolts and nuts.

SERVICE AIR CONDITIONER SAFELY



The air conditioner must be serviced and repaired by authorized personnel only.

Air conditioner fluid (R134a) contains fluorinated greenhouse gases. 2.3 kg air conditioner fluid contains 3.0 equivalent tonnes of carbon dioxide.

Heating of the refrigerant cylinder implies increase of pressure and the danger of explosion. The refrigerant dryer must not be heated above 50°C (122°F), as this may otherwise cause it to explode due to excessive pressure of the refrigerant. In the event of fire spray the dryer liberally with water to keep it cool.

The gas is asphyxiating without forewarning. The gas is colourless, it is heavier than air and spreads close to the ground.

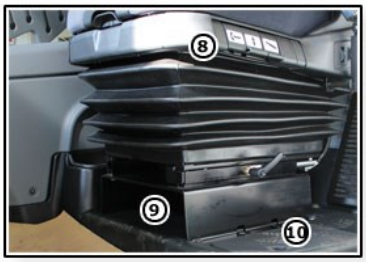
Splashes of the fluid cause frost injuries to the skin and serious eye damage. Spilled refrigerant fluid has extremely low temperature and it vaporizes quickly. Dissipates in contact with fire, giving off toxic fumes.

ROTATING AND LEVELING CABIN

The cabin can be equipped with optional equipment according to base machine and operator requirements.

1. Keyboard and mouse
2. HPC and integrated screen for control system
3. Radio (remote is attached to the right arm rest)
4. Right-hand side storage box (accessory switches and connectors)
5. Dashboard
6. Bracket for scaler calliper or boom weight scale
7. Food heater
8. Seat
9. Printer
10. Floor storage box
11. Fire extinguisher
12. Storage compartments

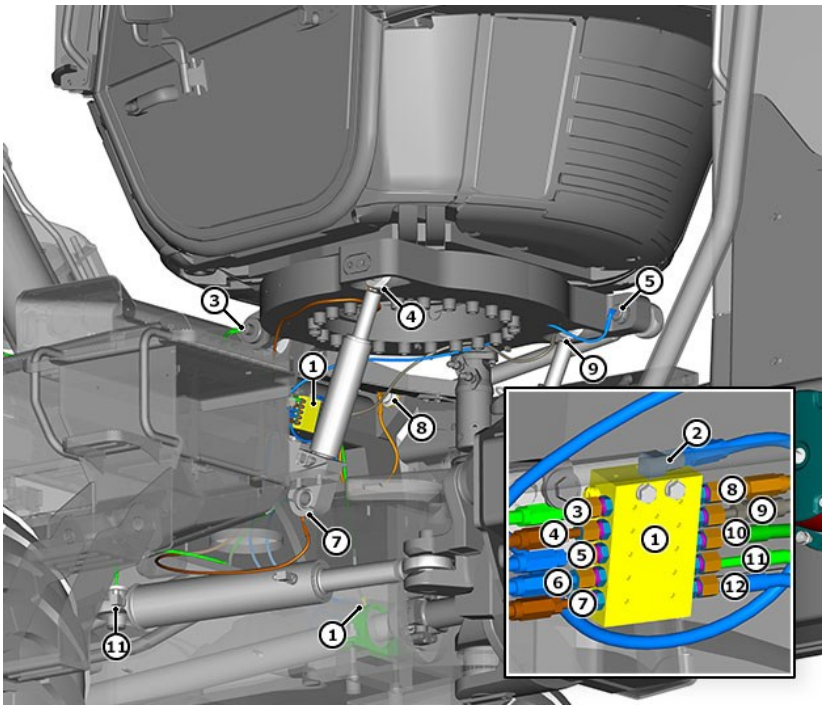
The first aid kit, preheater control panel and fire protection control panel are located on the cabin ceiling.



FRONT FRAME DISPENSER

Grease dispenser blocks and their output ports on the front frame are following:

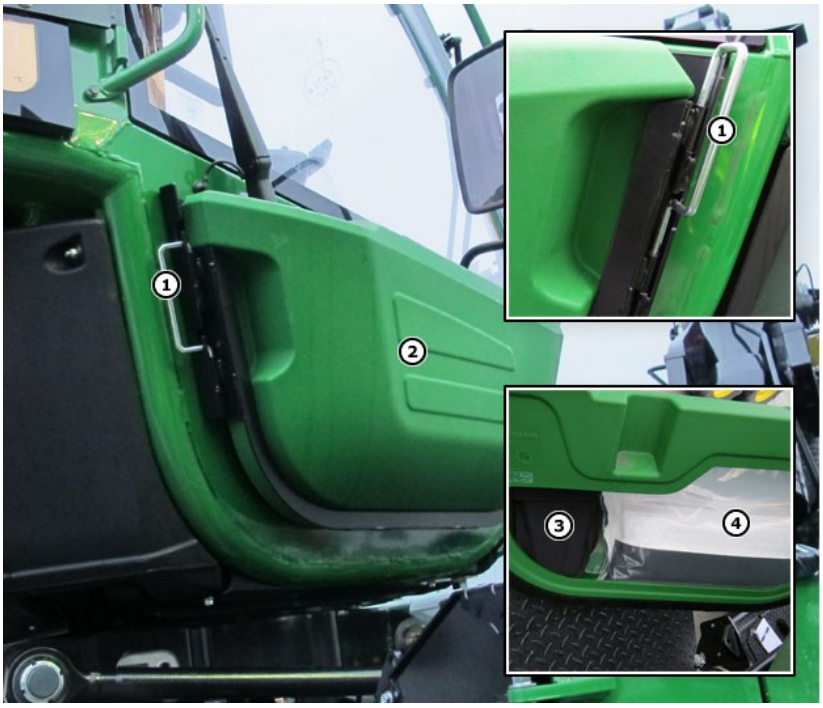
1. SSV10 dispenser for front frame
2. Supply from main dispenser block SSV6-K
3. Port 10, front levelling bearing
4. Port 8, upper end of the left levelling cylinder
5. Port 6, rear end of the levelling rod
6. Port 4, lower end of the right levelling cylinder
7. Port 2, lower end of the left levelling cylinder
8. Port 9, front end of the levelling rod
9. Port 7, upper end of the right levelling cylinder
10. Port 5, cardan shaft bearing
11. Port 3, front end of the left steering cylinder
12. Port 1, front end of the right steering cylinder



ENVIRONMENTAL KIT

The environmental kit is optional equipment. Remove the locking pins (1) and use the cover (2) as a container for leaking fluids. The environmental kit includes also a shovel (3) and absorption mats (4) to protect environment from leaking fluids.

1. Locking pins
2. Cover / Container
3. Shovel
4. Absorption mats



DASHBOARD

The following items are found on cabin dashboard.

1. Indicator light for hydraulic tank vacuum pump.

   NOTE: *The light is on when the pump is used.*

2. Indicator light for diesel engine glow.

   NOTE: *John Deere 9.0L engines are not equipped with the glow function and in these models the light is not in use.*

3. Pre-heater reset switch

   NOTE: *Pre-heater fault memory reset. Only in machines equipped with pre-heater remote control.*

4. Forced central greasing switch

   NOTE: *When the button is held down continuously for 2 seconds the greasing unit runs for 4 minutes.*

5. Head lights switch

   NOTE: *The switch has three different positions. When the switch is in middle position the approach light function is activated. In the two other positions the lights are on or off.*

6. Cabin inside lights switch
7. Air conditioner control panel
8. 24 V power outlet
9. Ignition switch
10. 12 V power outlet
11. Emergency stop switch
12. Cigarette lighter (24 V)
13. On-road driving switch

    NOTE: *When the switch is on, cabin rotating and levelling, cabin work lights and boom cannot be operated.*

14. Filter cleaning switch (only FT4 and IT4 engines)

    NOTE: *Three-position (Manual – Auto – Disabled) switch for the filter regeneration. Keep the switch in the auto position for optimal engine operation and use the disabled and manual position only when required.*

    IMPORTANT: *Do not use air conditioner during manual regeneration.*

15. Stair sticker or Stair switch

    NOTE: *In harvesters, the stairs are operated by the parking brake switch. When parking brake is engaged, the stairs are automatically lowered.*

16. Parking brake switch

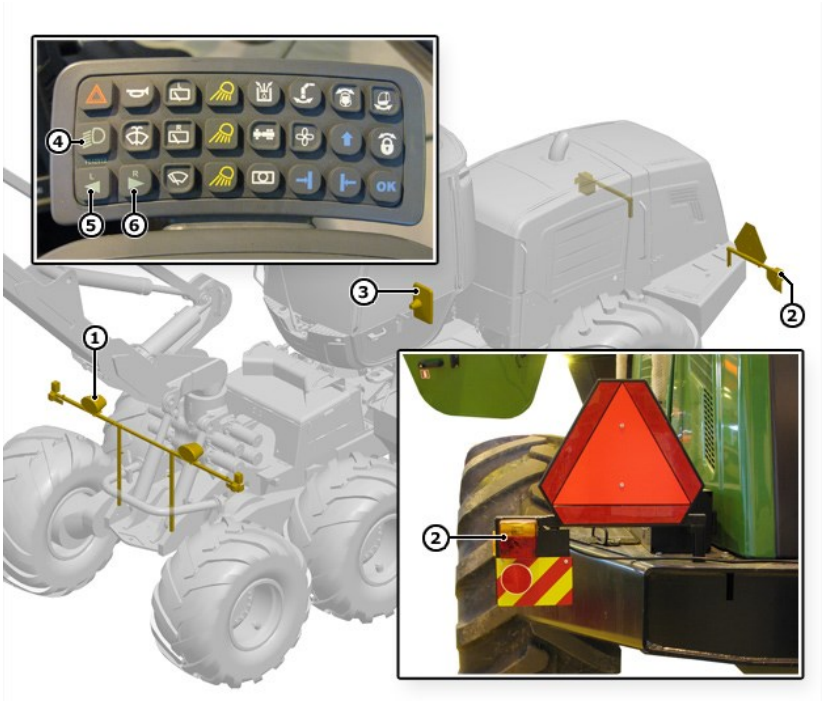
    NOTE: *Check that the stairs raise up position before driving the machine.*

ON ROAD DRIVING LIGHTS

To drive the machine on public roads additional driving lights must be installed on it. The lights are controlled from right arm rest panel.

Machine on-road driving equipment and operating switches are following:

1. Front driving lights
2. Rear driving lights
3. Side-view mirrors
4. Switch for front and rear driving lights
5. Left blinker switch
6. Right blinker switch



SETTING THE TIME

NOTE: *The time and date must be always set after the battery switch is activated.*

Use the browse buttons (3, 4) to select the tool icon (5) in the menu bar. Press the Confirm button (1).

Use the browse buttons (3, 4) to select the time format (6) or set the time (7) or set the week day (8) icon.

Return to the previous menu by pressing the Cancel button (2) or wait until

- If the ignition of the machine is ON, the menu returns to previous menu.
- If the ignition of the machine is OFF the display lightning will go OFF.

Change the time format

Select the time format icon (6) and press the Confirm button (1).

Use the browse buttons (3, 4) to select the time format (9). Press the Confirm button (1).

Change the time

Select the set the time icon (7) and press the Confirm button (1).

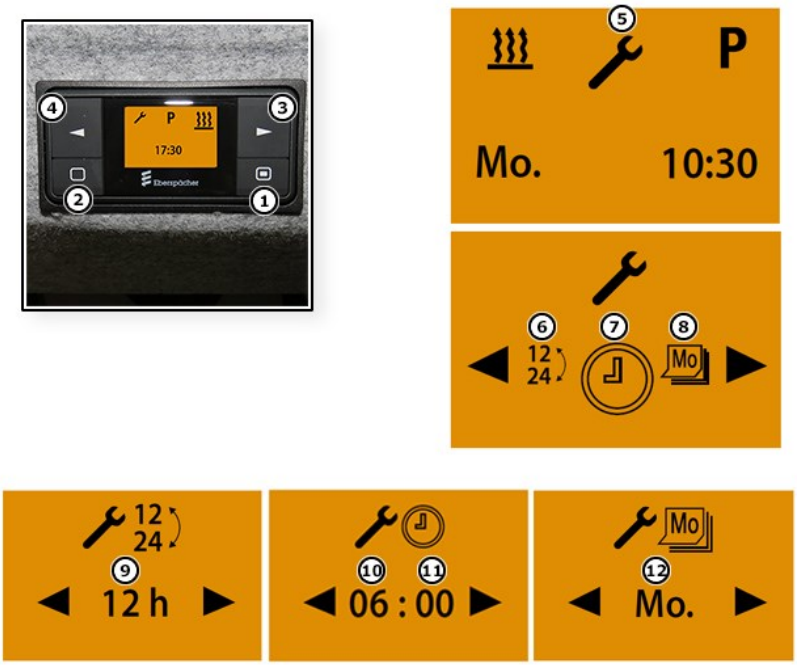
Use the browse buttons (3, 4) to adjust the hours (10). Set the hours by pressing the Confirm button (1).

Use the browse buttons (3, 4) to adjust the minutes (11). Set the minutes by pressing the confirm button (1).

Change the weekday

Select the set the weekday icon (8) and press the Confirm button (1).

Use the browse buttons (3, 4) to adjust the weekday (12). Press the Confirm button (1).



CABIN ROTATING AND LEVELING

AUTOMATIC CABIN LEVELING

Long press on button "R59" activates automatic cabin leveling. Automatic leveling works only when driving with the low gear. When the work brake engages the cabin leveling is disengaged after it has finished the on-going movement.

AUTOMATIC BOOM FOLLOWING

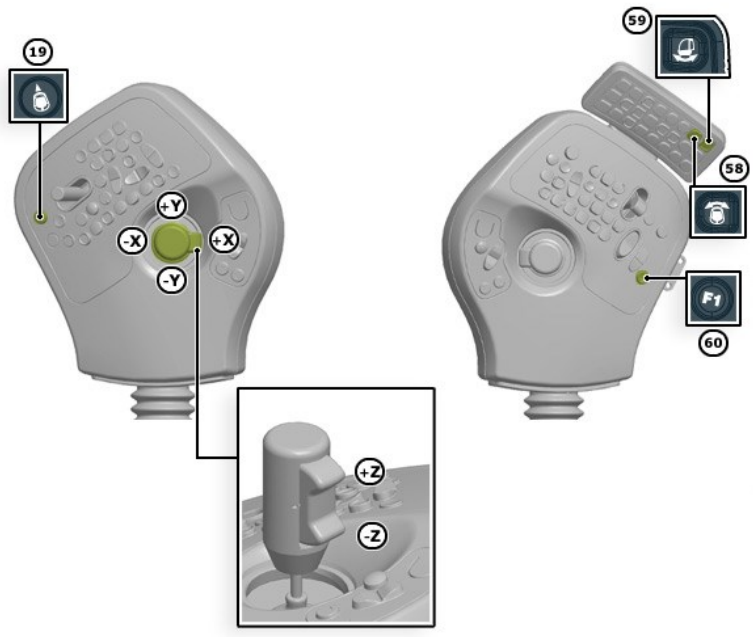
Long press button on button "R58" activates and deactivates automatic boom following. Cabin turns towards the boom as soon as it is moved.

MANUAL

Keep button "R60" pressed and use the left joystick X, Y and Z.

COMMANDS

- Forward; long press on button "L19"
- Exit position when cabin is forward; long press on button "L19"
- Exit position when cabin is backward; two long presses on button "L19"
- Backward; short press on button "L19"



HIGH/LOW GEAR AND FRONT WHEEL DRIVE

The machine is equipped with mechanical high/low gear. Shifting high/low gear happens with the switch "R35" on the right keypad. This is only possible when the machine stands still, the work brake is engaged and the drive direction switch "R31" is in neutral.

When any gear is engaged, short pulses are sent forward and backward to the pump to ensure that the gear will engage. If the gear does not engage instantly, wait 5 seconds. When the gear is engaging, the speed range symbol flashes on the display and the work brake remains on. If high gear does not engage, low gear is engaged.

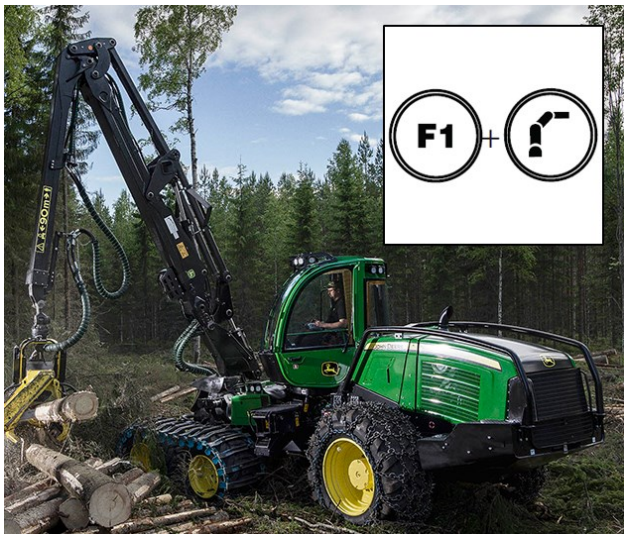
If the driving direction has been selected and the switch "R35" is pressed, the system switches between normal and ECO drive modes.

SYSTEM BACKUP

The IBC system was designed in a failure proof way and thus cannot cause machine down faults.

In the event of a sensor failure in the IBC system, the operator can change software to traditional controls by switching off the IBC system with a specific button combination – R60 (F1) + L18 (boom icon). When switching off the IBC system, the control system bypasses IBC activities with traditional controlling directly via the boom valve.

IMPORTANT: *In the event of a CAN bus failure in the IBC sensor bus. Sensor bus can be by-passed to restore CAN data connection for RLC and VSS.*



- Cold weather flow degradation
- Stability and storage issues (moisture absorption, oxidation, microbial growth)
- Possible filter restriction and plugging (usually a problem when first switching to biodiesel on used engines.)
- Possible fuel leakage through seals and hoses
- Possible reduction of service life of engine components

The following must also be considered when using biodiesel blends above B20.

- Possible coking and/or blocked injector nozzles, resulting in power loss and engine misfire if John Deere approved fuel conditioners containing detergent/dispersant additives are not used
- Possible crankcase oil dilution, requiring more frequent oil changes
- Possible corrosion of fuel injection equipment
- Possible lacquering and/or seizure of internal components
- Possible formation of sludge and sediments
- Possible thermal oxidation of fuel at elevated temperatures
- Possible compatibility issues with other materials (including copper, lead, zinc, tin, brass, and bronze) used in fuel systems and fuel handling equipment
- Possible reduction in water separator efficiency
- Potential high acid levels within fuel system
- Possible damage to paint if exposed to biodiesel

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.*

MINIMIZING THE EFFECT OF COLD WEATHER ON DIESEL ENGINES

John Deere diesel engines are designed to operate effectively in cold weather.

However, for effective starting and cold weather operation, a little extra care is necessary. The information below outlines steps that can minimize the effect that cold weather may have on starting and operation of your engine.

USE WINTER BLEND DIESEL FUEL

When temperatures fall below -10ºC (14ºF), winter blend diesel fuel is best suited for cold weather operation. Winter blend diesel fuel has a lower cloud point and a lower pour point.

Cloud point is the temperature at which wax will begin to form in the fuel and this wax causes fuel filters to plug. Pour point is the lowest temperature at which movement of the fuel is observed.

NOTE: *On an average, winter blend diesel fuel has a lower BTU (heat content) rating. Using winter blend diesel fuel may reduce power and fuel efficiency, but should not cause any other engine performance effects. Check the grade of fuel being used before troubleshooting for low power complaints in cold weather operation.*

SEASONAL VISCOSITY OIL AND PROPER COOLANT CONCENTRATION

Use seasonal grade viscosity engine oil based on the expected air temperature range between oil changes and a proper concentration of low silicate antifreeze as recommended. (See DIESEL ENGINE OIL and ENGINE COOLANT requirements this section.)

DIESEL FUEL FLOW ADDITIVE

Use John Deere Premium Diesel Fuel Conditioner (winter formula) which contains anti-gel chemistry, or equivalent to treat Grade No.2-D fuel during the cold weather season. This generally extends operability about 10ºC (18ºF) below its Cloud Point. For operability at temperatures further below, winter grade fuel (a blend of No.2-D and No.1-D, or straight No.1-D fuel) is best suited for cold weather operation.

IMPORTANT: *Treat fuel when outside temperature drops below 0ºC (32ºF). For best results, use with untreated fuel. Follow all recommended instructions on label.*

BIODIESEL

When running with BIODIESEL blends wax formation can generate at warmer temperatures. Begin to use

ELECTRICAL COMPONENTS

Electrical systems do not have fixed maintenance intervals. Check the systems and components as required and repair any loose or broken connectors and cables to avoid short circuits. Clean and grease the battery terminals when needed.

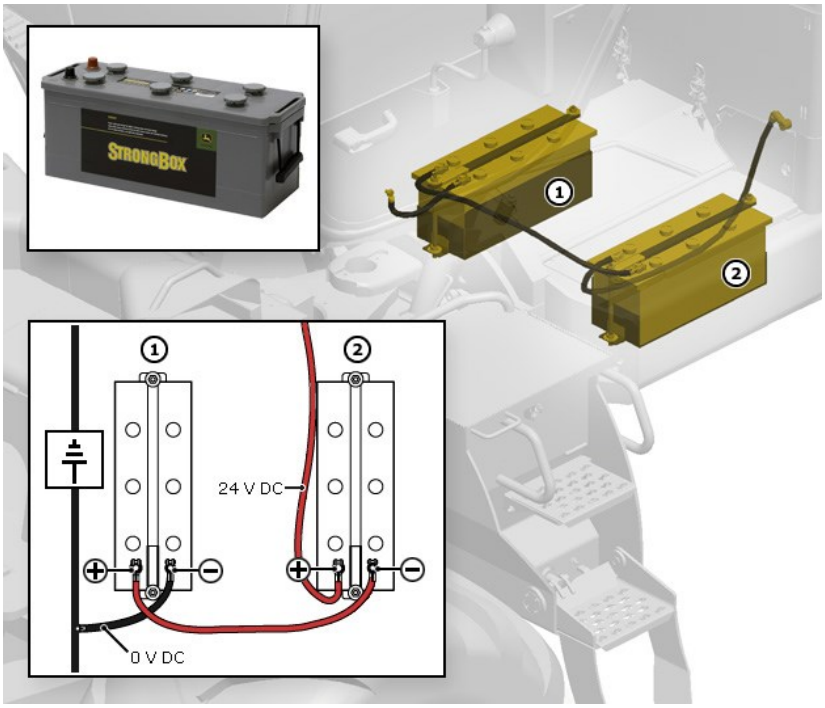
BATTERIES

Harvesters are equipped with two 12 V lead/acid batteries. The first battery (1) supplies 12 V and it is connected through cascading connection to the second battery (2), which totally supplies 24 V.

In harvesters batteries are located both sides of the rear frame.

Battery nominals:

- Capacity: 154 Ah
- Cold crank (EN): 1150 A
- Top dimensions (mm): 513x178x223



WIRING HARNESS FUSES AND RELAYS

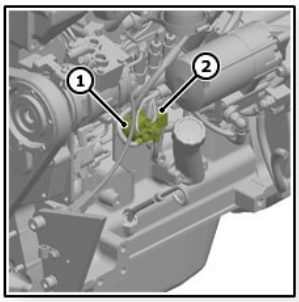
Some fuses and relays of special equipment are located near each equipment.

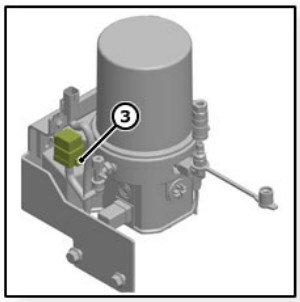
Glow relay and fuse, K49 (1) and F49 (2), are only on the 4.5 liter and 6.0 liter engines.

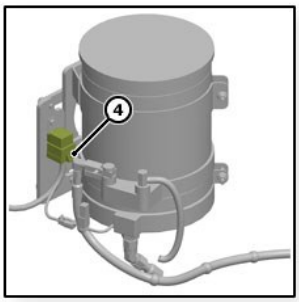
Centralized lubrication system relay K55 (3) is located next to the lubrication pump.

Puradyn filter relay K56 (4) is located next to the puradyn filter.

Position	Relay number	Object
1.	K49	Glow relay
2.	F49	Glow fuse (50A)
3.	K55	Centralized lubrication system relay
4.	K56	Puradyn filter relay







ENGINE SENSORS 1/4

Oil pressure sensor (A)

Oil pressure sensor is located in the main oil gallery of the cylinder block. The ECU constantly monitors oil pressure and is a part of the engine protection system.

Crankshaft position sensor (B)

Crankshaft position sensor is located at the rear of the engine, near the oil pressure sensor.

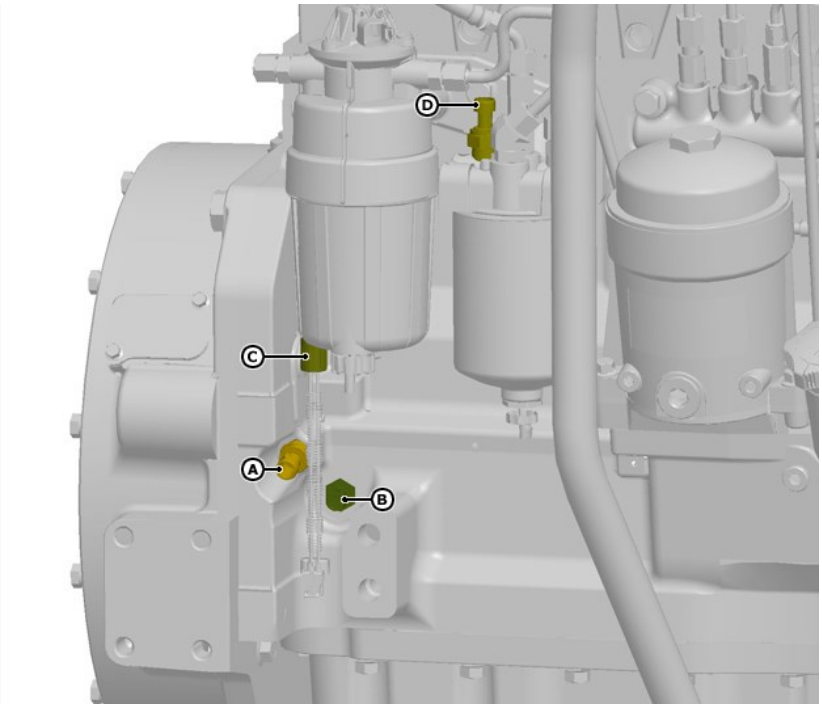
Inductive type of pickup sensor that detects teeth on the crankshaft gear. The ECU uses the crank position input to determine engine speed and precise piston position in relation to the firing order.

Water-in-fuel sensor (C)

WIF sensor measures fluid resistance to detect the presence of water in the fuel. Sensor information is used by the ECU for engine protection purposes. If water is detected, the ECU will derate the amount of fuel supplied to the engine.

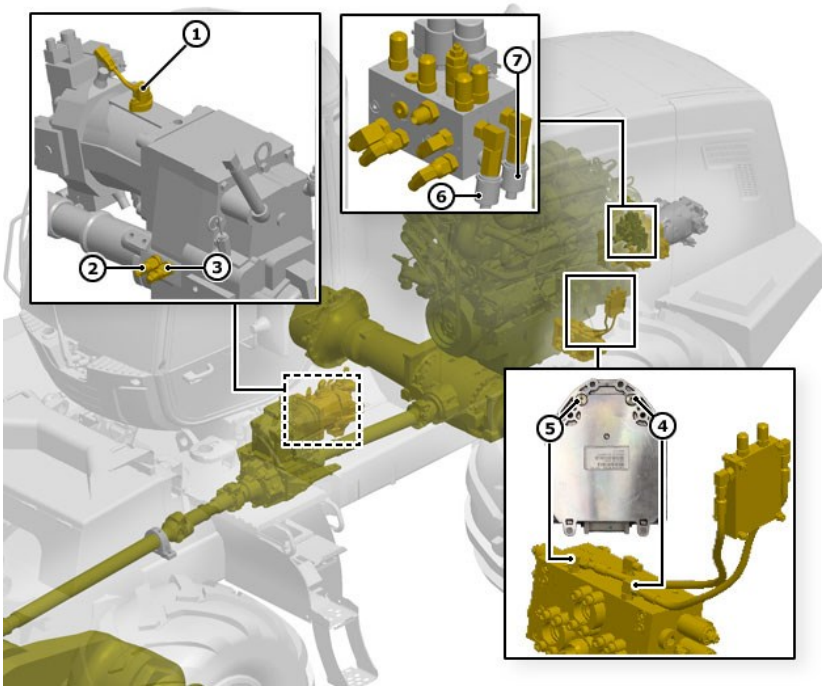
Fuel pressure sensor (D)

Sensor is located on top of the final fuel filter. The ECU communicates with this sensor to monitor the final filter outlet fuel pressure.



SENSORS, TRANSMISSION

1. Hydraulic motor speed sensor (B14)
   - The pulse sensor signal is used for calculation of speed and distance and for controlling of work brake.
2. Low gear sensor (S82)
   - The sensor detects whether low gear is engaged.
3. High gear sensor (S81)
   - The sensor detects whether high gear is engaged.
4. Transmission pressure A
   - The sensor is in the CAN transducer. Measures driving pressure when driving forward or backward, depending on which line is connected to the sensor.
5. Transmission pressure B
   - The sensor is in the CAN transducer. Measures driving pressure when driving forward or backward, depending on which line is connected to the sensor.
6. Drive pump (A11) LS pressure sensor (B89B)
   - The sensor is used to control the drive pressure.
7. Drive pump (A11) charge pressure sensor (B90B)
   - The sensor measures drive pump charging pressure supplied for the drive valve.



This section includes instructions for measuring and adjusting of hydraulics pressures using a separate pressure gauge or by utilizing on-board pressure sensors connected to TimberMatic™. Further information over TimberMatic™ measurements can be obtained from TimberMatic ™ manuals.

⚠ DANGER

Carry out pressure checks on a flat surface and ensure there is sufficient space around the machine in case it moved. No-one should be allowed near the machine.

⚠ CAUTION

Due to safety reasons, only authorized and trained professionals are allowed to adjust hydraulic pressures of the machine.

⚠ CAUTION

Always switch off the diesel engine when a gauge is connected to the machine.

⚠ CAUTION

Inspect pressure gauges regularly and do not use damaged fittings or hoses.

IMPORTANT: *Use calibrated pressures gauges only. If you are unsure about adjusting pressures, contact an authorized service workshop.*

DRIVE HYDRAULICS (A11 PUMP)

NOTE: *When the machine moves, A11 main pressure relief valve is for driving. When the machine is still, A11 main pressure relief valve is main pressure of the harvester head functions.*

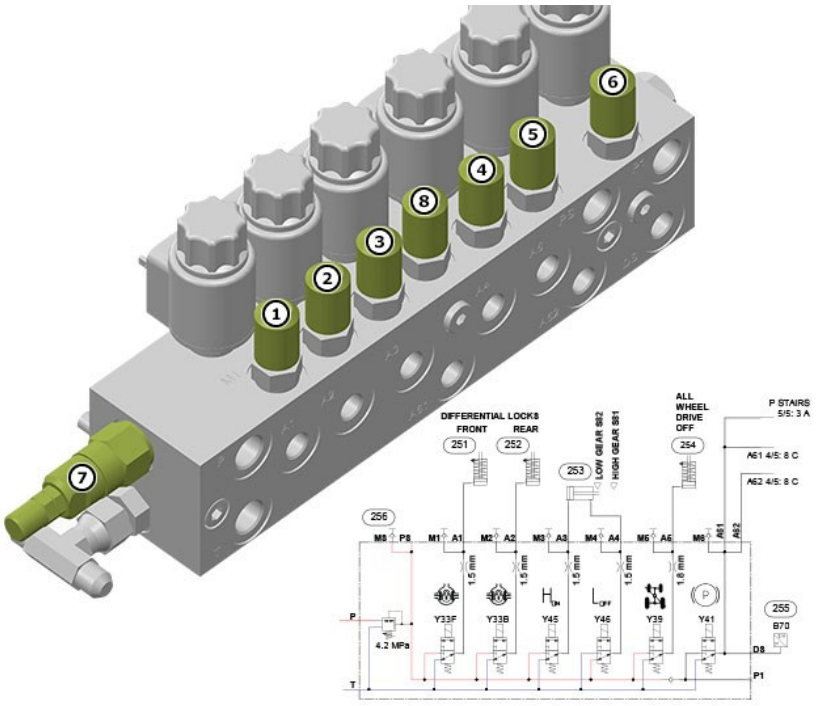
- A11 main pressure relief valve
- Maximum drive pressure
- A11 maximum work pressure settings
- A11 LS pressure difference Delta P
- Drive motor pressure cut-off

AUXILIARY VALVE PRESSURE

1. Connect a 10 MPa gauge (1450 psi) to the measuring point MS (8), on the auxiliary valve.
2. Start the machine.
3. Activate the boom on by pressing L18 button.
4. Use the extension in function and take a pressure reading from the gauge. The pressure must be 4.2 ± 0.3 MPa (609 ± 43 psi).
5. If necessary, adjust from the screw (7).

The auxiliary valve contains also following measuring points:

- Front differential lock (1)
- Rear differential lock (2)
- High gear (3)
- Low gear (4)
- All wheel drive engagement (5)
- Parking brake (6)



ENGINE HOODS

Like in E-models the engine covering consists of steel manufactured front (1) and rear (2) hoods that are operated by the electric spindle motors (5, 6).

The front hood is redesigned and larger to accommondate the larger aftertreatment system.The spindle motor of the front hood is also relocated to the top allowing more space for components and easier serviceabilty on the left side of the engine. The front hood is equipped also with locking latches (4).

The service hatches (3) on both sides of bulkhead are larger compare to E-models. The service hatches can be removed and this enables better access to the engine compartment components.

1. Front hood
2. Rear hood
3. Service hatches
4. Locking latches
5. Front hood spindle motor
6. Rear hood spindle motor

NOTE: *The hood hinges have grease fittings and the hinges should be greased once a year or when necessary.*

CAUTION: *Be aware that the engine hood may hit the cabin (window) in extreme positions. Keep this in mind when performing cabin manouvers while the engine hood is fully opened.*

CAUTION: *Do not use spindle motors as a handle.*

FAULT DIAGNOSIS (EASYSTART)

If the pre-heater is switched on five times in a row without result or if the pre-heater overheats three times in a row, the operation will be disabled and fault codes activates. After the root cause of fault is fixed, empty the fault memory.

If machine is equipped with pre-heater remote control, empty the fault memory using the pre-heater system fault memory reset (1) button on the dashboard.

Empty the fault memory using the timer panel via hidden Workshop menu.

- Select the setting view (2) using the browsing buttons (3 and 4)
- Press the Cancel button (5) for longer than five seconds.
- Use browsing buttons (3 and 4) to select the menu item 1.1.1 to display the current fault.
- Use browsing buttons (3 and 4) to select the menu item 1.2.1 to display the fault memory F1 - F5.
- Use browsing buttons (3 and 4) to select the menu item 1.3.1 to delete fault memory F1 - F5.
- Select the delete by pressing the Confirm button (6).
- The DEL display appears, flashing, press the Confirm button (6) to delete.

NOTE: *"no diag" is displayed if no dia gnostics cable is connected.*

NOTE: *Not only the defective component, but also a defective current circuit results in a fault being displayed.*

EVERY 12 MONTHS

The system must be inspected once a year by service personnel authorized by Dafo Brand Ab. This inspection is a condition of the insurance companies.

IBC MAINTENANCE

When the boom is equipped with IBC system, perform all the same procedures as for the normal boom maintenance.

NOTE: *Refer to the regular maintenance steps and intervals for the boom service.*

The IBC system has cylinders with embedded sensoring and cable routings that require special attention compared to the normal boom maintenance.

NOTE: *Welding in the proximity of cylinders with embedded sensors can cause damage to the sensors.*

EVERY 10 HOURS OR DAILY

- Check hydraulic oil level
- Check engine oil level
- Check boom structures visually

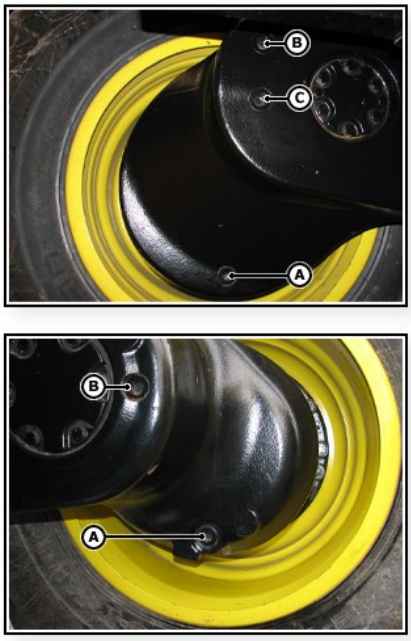
CHECK BOGIE CASING FOR LEAKS

Check oil leaks in both bogie casings as follows:

1. Check visually the surrounding area of the bogie casing for oil leaks.
2. If the surrounding is wet and oily, locate and repair the leak.
3. If refill is required, clean the surrounding area of the bogie casing level, drain and filling plugs.
4. Refill from the filling port (plug) with new oil to the level of the level port to compensate the leaked oil.
5. Carry out the same procedure at both ends of the bogie casing.

A. Bogie casing drain plug
B. Bogie casing filling plug
C. Bogie casing level plug

Purpose	Tool	Size
Bogie casing drain, filling and level plugs	Allen key	17 mm



CHECK THE DOOR SWITCH

Check that the door switch functions correctly. When the door is open, the following functions should be disabled:

1. Harvester head / grapple functions
2. Boom functions
3. Cabin levelling functions
4. Steering
5. Transmission

NOTE: *When the door is opened the machine's functions cease. If the door is opened when the machine is moving, the machine keeps moving normally. Once the acceleration pedal is lifted up, a new pedal press will have no effect.*

CHECK COOLING SYSTEM

⚠ CAUTION

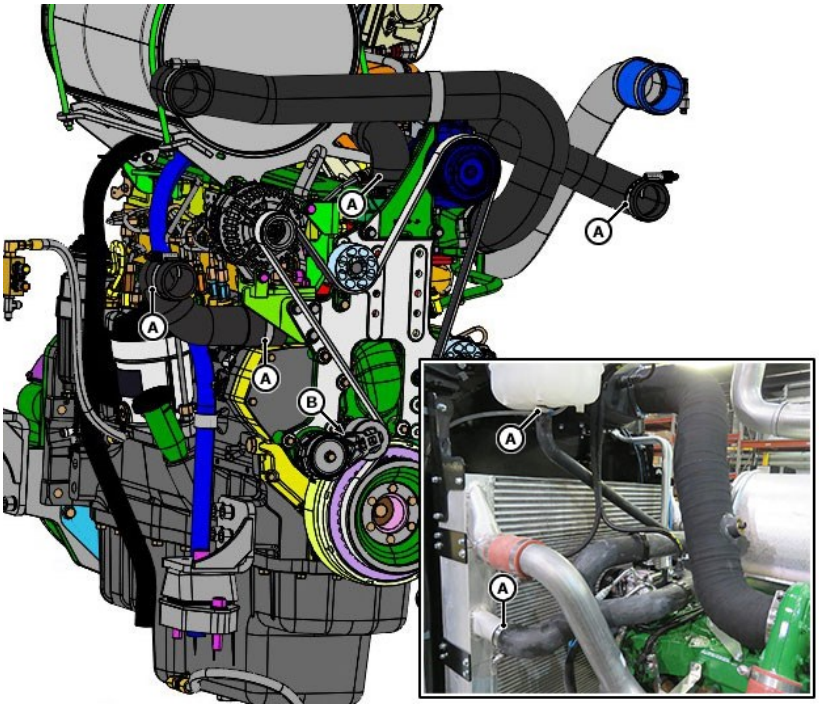
Explosive release of fluids from pressurized cooling system can cause serious burns. Shut off engine and let the cooling system pressure even for a while. Slowly loosen the expansion tank to relieve pressure before removing completely.

1. Check entire cooling system for leaks. Tighten clamps as necessary.
2. Thoroughly inspect all cooling system hoses. Replace hoses when hard, flimsy, or cracked.
3. Visually Inspecting Coolant Pump. Inspect weep hole (B) for oil or coolant leakage.

   NOTE: *Oil leakage indicates a damaged rear seal. Coolant leakage indicates a damaged front seal.*

   NOTE: *Replace complete coolant pump assembly if leakageis detected. A slight weeping of oil or coolant isnormal. If enough oil or coolant leaks from the weephole that it drips from the engine, the coolant pumpassembly should be replaced. Individual repair partsare not available.*

A. Cooling system hose clamps
B. Cooling pump weep hole



GREASE THE DRIVESHAFTS

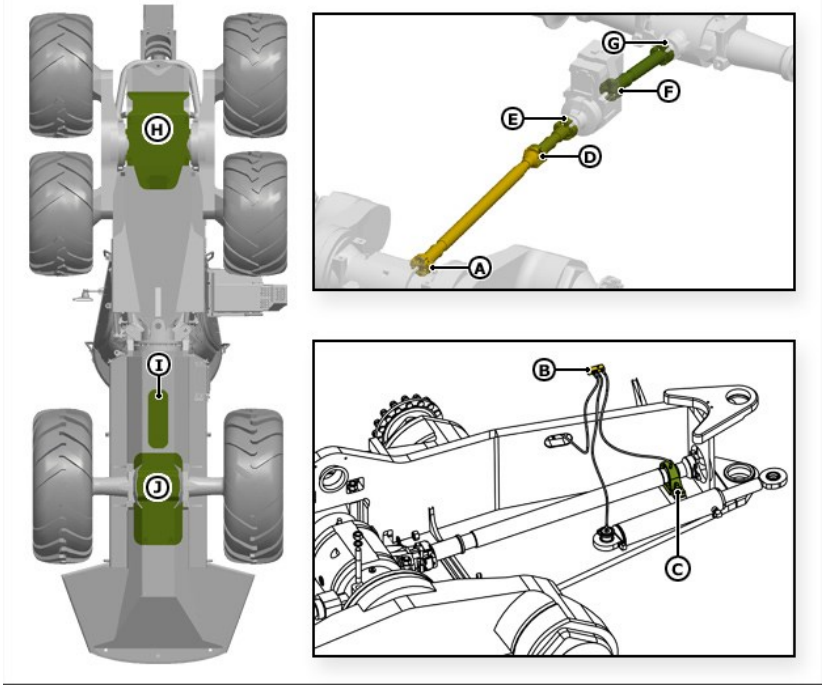
IMPORTANT: *Driveshaft greasing interval must be reduced to 500 hours if machine is operating on soft and wet terrain.*

To grease the driveshafts, proceed as follows:

1. Front driveshaft: Open the front frame belly plate H plate for access to the grease fitting. Add grease to fitting A. Also grease the shaft support bearing C through the greasing block fitting B located on right side of the machine, under the cabin. To access the greasing block, remove black cover plate located next to the hydraulic compartment.
2. Middle joint driveshaft: Add grease to fittings D and E.
3. Rear driveshaft: Open the access cover I and optionally also rear frame belly plate J for access to the grease fittings. Add grease to fittings F and G.

A. Front driveshaft grease fitting
B. Shaft support bearing grease fitting
C. Shaft support bearing
D. Middle joint driveshaft grease fitting
E. Middle joint driveshaft grease fitting
F. Rear driveshaft grease fitting
G. Rear driveshaft grease fitting
H. Front frame belly plate
I. Rear frame access cover
J. Rear frame belly plate

Usage	Tool	Size
Belly plate / access door locking screws	Allen key	14 mm
Belly plate operating winch	Ratchet spanner	½ in



EVERY 2000 HOURS

- Check valve clearance
- Change coolant
- Change hydraulic oil
- Check vibration damper
- Change high/low gear oil
- Change differential oil
- Drain brake cylinders
- Change bogie casing oil
- Change hub gear oil
- Change boom slew housing oil
- Grease cabin door hinges

CHANGE HIGH/LOW GEAR OIL

IMPORTANT: *Before changing the oil, let the machine stand still for at least 30 minutes to make sure that all impurities of the oil sink to the bottom. Change the oil while it is still warm.*

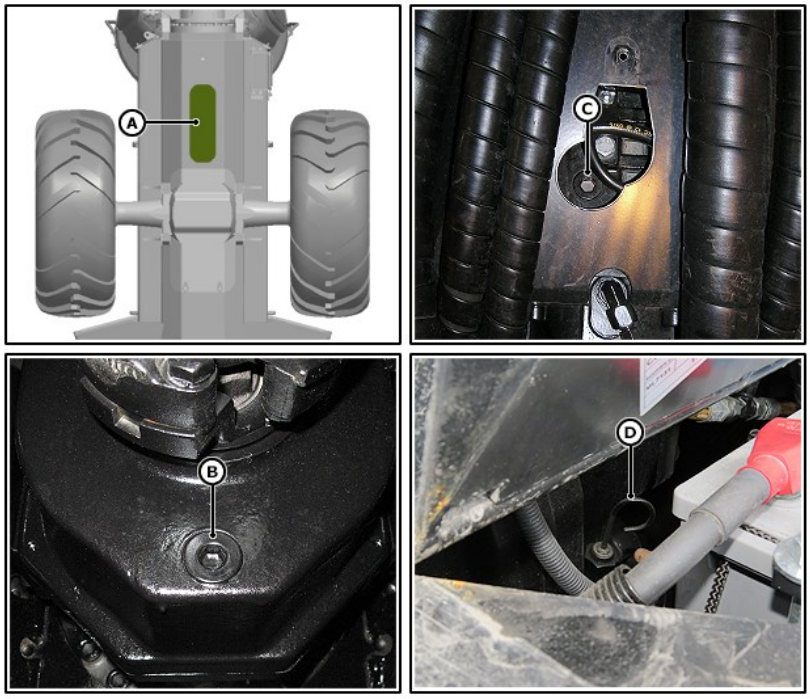
NOTE: *To even the pressure at the oil space, open the filling plug before opening the drain plug.*

Change high/low gear oil as follows:

1. Open the access cover located under the high/low gear.
2. Clean the exterior of drain plug and surrounding area.
3. Open the drain plug. Drain oil completely into a suitable container. Clean the drain plug. Close and tighten the plug.
4. Refill oil to the high/low gear through the filling plug, until there is oil up to the mark on the dipstick. Oil level should be within ± 5mm from the dipstick mark. Close the filling plug.
5. Check that drain plug is not leaking and close the access cover.

A. High/low gear access cover
B. Drain plug
C. Filling plug
D. Dipstick

Usage	Tool	Size
Access cover fastening screws	Allen key	14 mm
High/low gear drain plug	Allen key	12 mm
High/low gear filling pipe plug	Socket wrench	32 mm



REPLACE DRIVE BELT

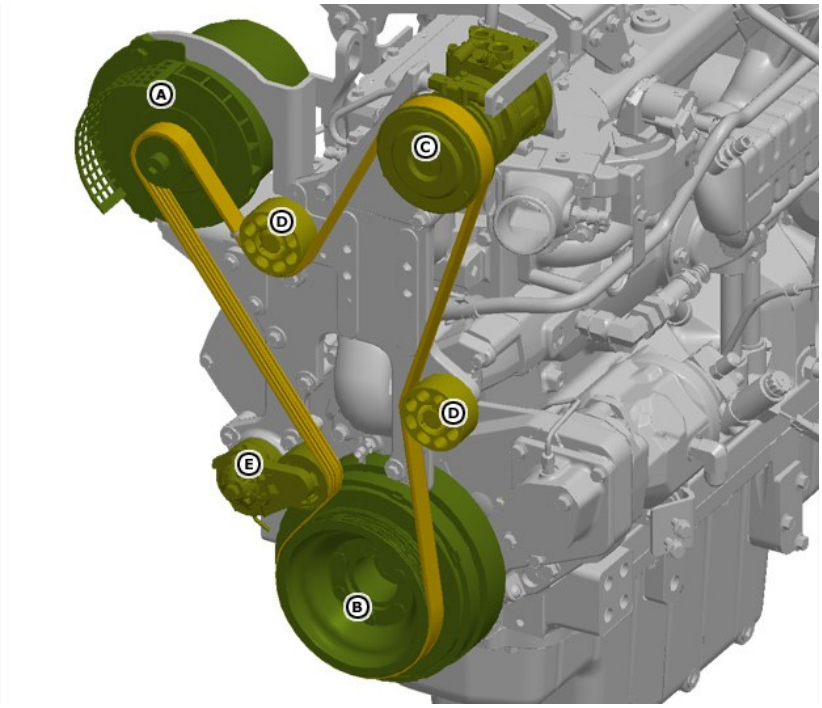
NOTE: *While belt is removed, inspect pulleys and bearings. Rotate and feel for hard turning or any unusual sounds. If pulleys or bearings need replacement, see your John Deere dealer.*

Replace the drive belt as follows:

1. Release tension on belt using a long-handle ½ inch breaker bar in tension arm. Remove belt from pulleys and release tension on tension arm.
2. Install new belt, be sure that belt is correctly seated in all pulley grooves.
3. Apply tension to belt with tensioner. Remove the breaker bar.
4. Start engine and check belt alignment.

A. Alternator
B. Crankshaft pulley
C. A/C compressor
D. Idler
E. Tensioner

Usage	Tool	Size
Drive belt tensioner	Ratchet spanner	½ in

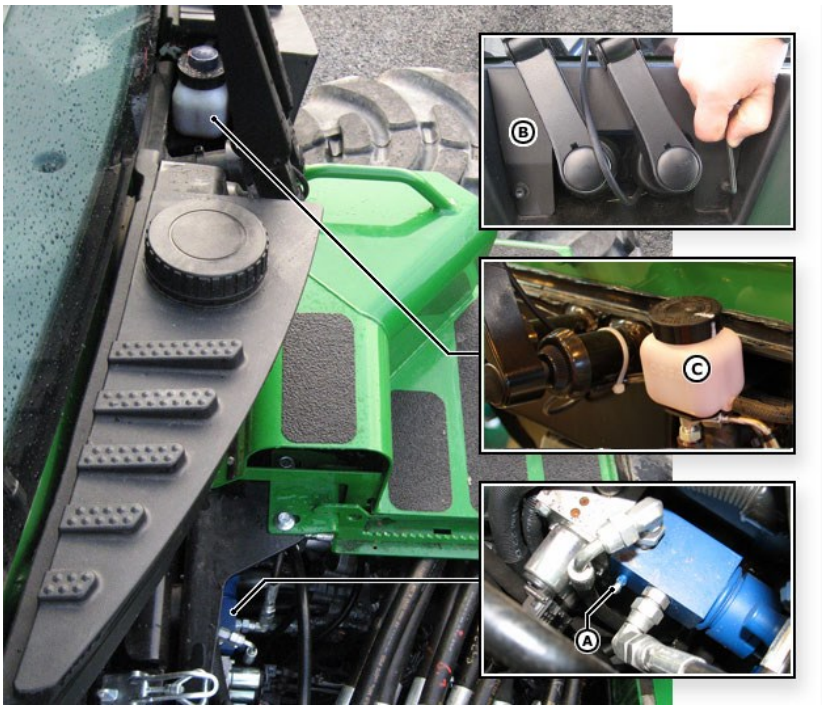


CHANGE BRAKE PEDAL CIRCUIT OIL

1. Open the bleed screw on the brake valve and connect a bleed hose. Brake valve is located in the front frame hydraulic compartment.
2. Drain old oil into a suitable container. Pump the brake pedal until there is no more oil flowing out from the bleed screw.
3. Fill up the fluid container with sufficient oil.
4. Bleed the brake pedal circuit using the bleed screw on the brake valve. The process is the same as for a normal fluid brake.
5. Finally check the oil level in the fluid container. The brake fluid container is located on the front of the cabin under protective cover.

A. Brake valve bleed screw
B. Protective cover
C. Fluid container

Usage	Tool	Size
Brake valve bleed screw	Ring spanner	7 mm
Protective cover	Allen key	4 mm



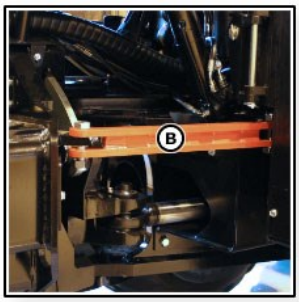
HARVESTER TRANSPORTATION POSITION

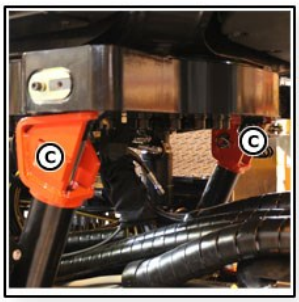
Lay the tip of the boom (A) to ground. The tip should hold all the weight, not the link.

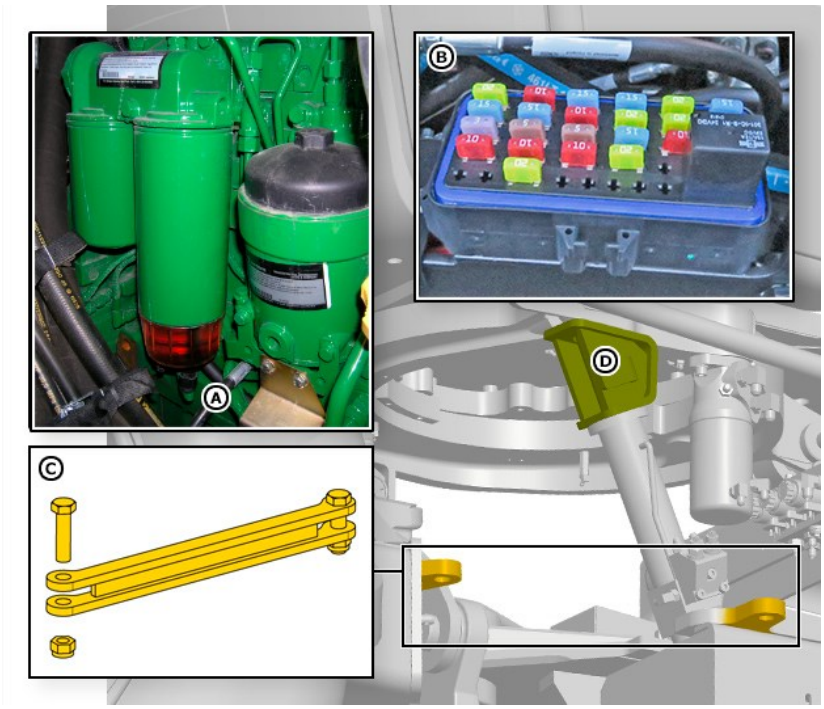
IMPORTANT: *Use some timber under the tip (A) when laying the boom to hard ground e.g. on trailer or asphalt.*

Fit the steering interlock (B) to secure the center hinge.

Lock the cabin levelling cylinders by using locking devices (C).






A
B
C
D

1270G

JOHN DEERE


F657913
OK
N1
N2
N3
N4
n/min
F3
S7
S6
S5
S4
S3
S2
S1
S8
F2
F676317
F676318
F642911
STOP
1
2
3
4
5
6
7
8
9
0
H
G
A
B
C
D
E
F
F4
F1
F642910