450J, 550J, and 650J Crawler Dozer

(Serial No. - 159986)

OPERATOR'S MANUAL

450J, 550J, and 650J Crawler Dozer (S.N. —159986)

OMT204685 ISSUE F3 (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.

Additional Proposition 65 Warnings can be found in this manual.

Worldwide Construction And Forestry Division

LITHO IN U.S.A.

Contents

Continued on next page

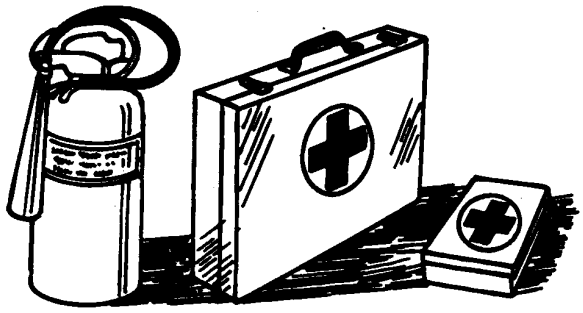
Original Instructions. All information, illustrations and specifications in this manual are based on the latest information available at the time of publication. The right is reserved to make changes at any time without notice.

Prepare for Emergencies

Be prepared if an emergency occurs or a fire starts.

Keep a first aid kit and fire extinguisher handy.

Keep emergency numbers for doctors, ambulance service, hospital, and fire department near your telephone.



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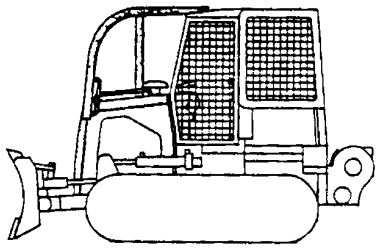
Add Cab Guarding For Special Uses

Special work situations or machine attachments may expose the operator to intruding or flying objects. Using this machine in a forestry application or woods environment, or with attachments such as a winch, requires added guarding to protect the operator.

Forestry protection packages or special screens should be installed when working in areas where logs or branches may strike the operator. A rear screen should always be used with a winch to protect against a snapping cable. Contact your authorized dealer for information on protective guarding before operating in any hazardous environment.



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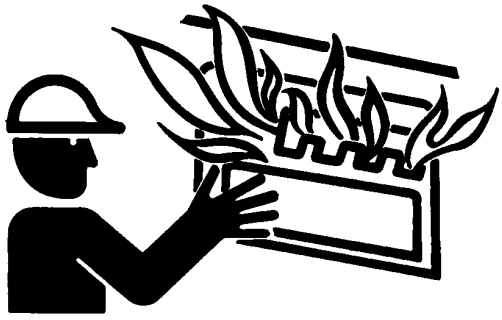
Clean Debris from Machine

Keep engine compartment, radiator, batteries, hydraulic lines, exhaust components, fuel tank, and operator's station clean and free of debris.

Clean any oil spills or fuel spills on machine surfaces.

Temperature in engine compartment may go up immediately after engine is stopped. BE ON GUARD FOR FIRES DURING THIS PERIOD.

Open access door(s) to cool the engine faster, and clean engine compartment.



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13—Engine Alternator Voltage Indicator: Indicator will light when battery/alternator is below 12-volts. It is not necessary to stop operation, but the cause should be investigated as soon as possible.

14—Seat Belt/Park Brake Indicator: Indicator will light when key switch is ON and park lock lever is in up LOCKED position.

15—Start Aid Switch: Push upper half of switch when engine is cold and cranking to inject starting fluid into engine during cold weather start-up.

16—Under-Seat Heater ON/OFF Switch: Push upper half of switch to turn heater on. Push lower half to turn heater off.

17—Not Used

18—Front and Rear Work Lights Switch: Push upper half of switch to turn front and rear work lights on. Push lower half to turn lights off.

19—Optional Lights Switch: Push upper half of switch to turn optional lights on. Push lower half to turn lights off.

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Inspect Machine Daily Before Starting

Safety and Protective Devices Checks

Walk around machine to clear all persons from machine area before starting machine.

Check condition of guards, shields, and covers.

Overall Machine Checks

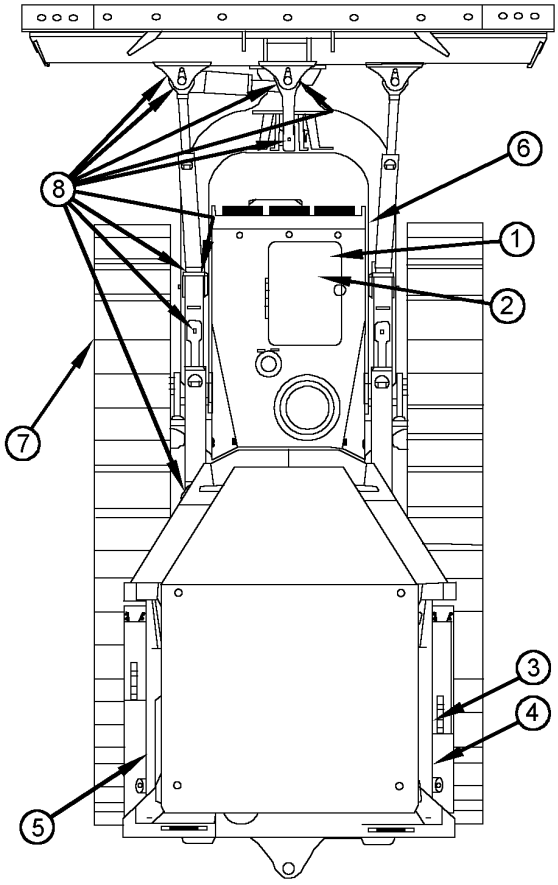
Check for worn or frayed electrical wires and loose or corroded connections.

Check for bent, broken, loose, or missing boom, bucket, sheet metal, track parts.

Check for loose or missing hardware.

Check for oil leaks, missing or loose hose clamps, kinked hoses, and lines or hoses that rub against each other or other parts.

1— Check engine coolant level in coolant recovery tank.
2— Check engine oil level.
3— Drain sediment from water separator.
4— Check hydraulic system oil level.
5— Check transmission oil level.
6— Check air cleaner dust unloader valve.
7— Check track sag.
8— Grease dozer linkage.



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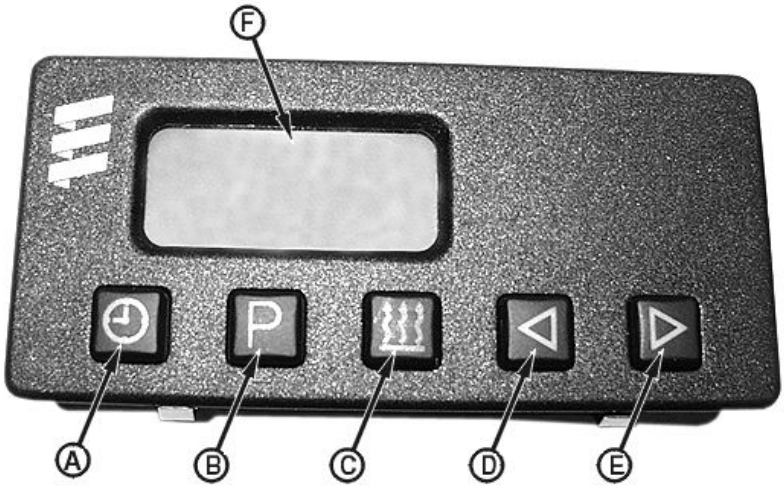
Heating Without Programming (Time ON):



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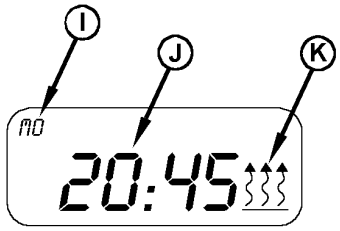
1. **Switch On Heating:** Briefly press (C).
2. Display window (F) will display status (K), time (J) and weekday (I).
3. Heating remains operational until the time is switched off. If the time is switched off, the heating remains switched on for 15 minutes. This time can be increased (maximum of 120 minutes), by pressing (E) or decreased in one minute increments by pressing (D).

1. **Switch Off Heating:** Briefly press (C).
2. The status display (K) disappears. Automatic after-run for cool-down purposes will begin.



T121394

T121394 —UN—11MAY99

A—Time
B—Program
C—Heating On
D—Backwards
E—Forwards
F—Display Window
I— Weekday Display
J— Time Display
K—Heat Status Display

Continued on next page

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Parking the Machine

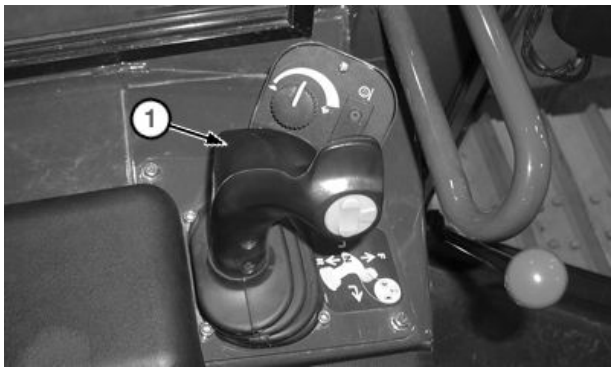
1. Park machine on a level surface.
2. Lower equipment to the ground.
3. Move Transmission Control Lever (1) to N.

NOTE: Park brake automatically engages when engine is not running or park lock lever is in up LOCKED position.

4. Move park lock lever (2) to up LOCKED position.

IMPORTANT: To avoid damage to turbocharger (if equipped), run engine at 1/2 speed no load for two minutes.

5. Run engine at 1600 rpm no load for 2 minutes.
6. Turn key switch to OFF to stop engine.
7. Remove key from switch.
8. Release hydraulic pressure by moving control lever until equipment does not move.
9. Turn battery disconnect switch off.



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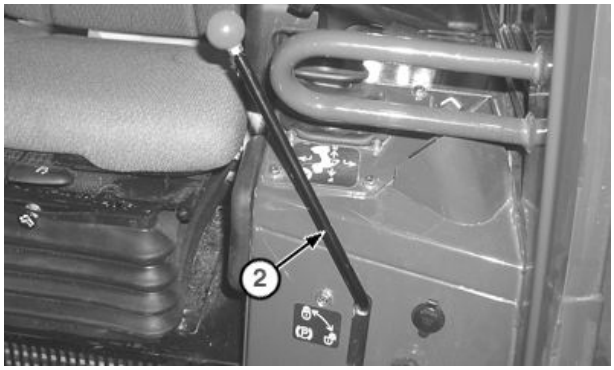

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1— Transmission Control Lever (TCL) **2— Park Lock Lever**

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Blade Pitch Operation

You may want to change the pitch of the blade depending on the type of work you are doing and the soil conditions you are dozing, or to change the feel of the dozer to operator's preference.

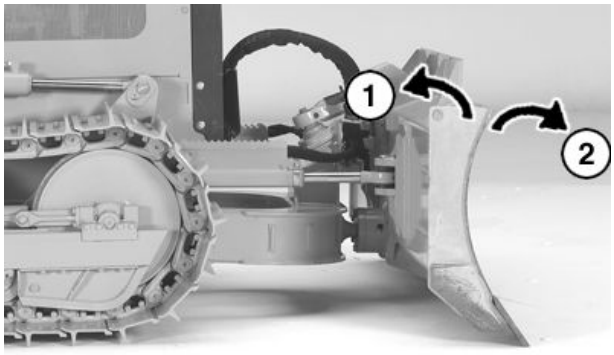
Pitching the Blade Forward Advantages:

With the top of blade pitched forward (2), the blade will not carry as much soil. The weight of the soil carried by the blade adds to the weight of the dozer and moves the balance of weight on the tracks forward. This can cause the front idlers of the crawler to sink in loose or soft soils. When the idlers sink, the blade cuts unevenly into the soil. With the blade forward, the dozer balance does not change as much with a full blade; therefore, the tendency for idlers to sink is reduced.

With the blade forward, there is less of a tendency for dirt to come over the back of the blade when dozing uphill. It is also easier to drop dirt at the end of a push when dozing uphill or when dozing very sticky materials.

Pitching the Blade Back Advantages:

With the blade pitched back (1), the cutting edge lies more horizontally resulting in a heavier cut into soils. Having the cutting edge more horizontal also provides a smoother cut in heavy soils. More soil is carried by the blade when it is pitched back. Carrying more soil on the blade adds to the weight of the dozer. This added weight can increase push force in heavy soils. The soil carried by the blade also moves the balance of weight forward on the machine. In heavy soils, this can be an advantage because the increased weight can help keep the front of the machine down and keep the cutting edge penetrating during heavy cutting.



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A—Forward Pitch **B—Back Pitch**

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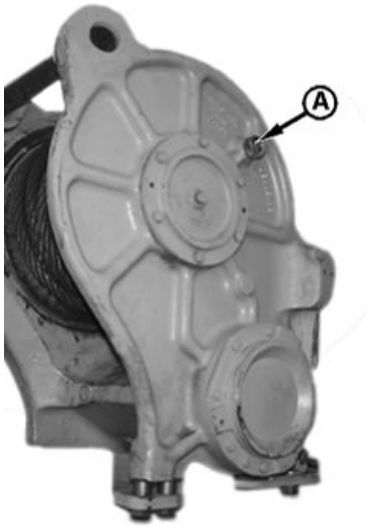
TX,35,RR,798 -19-07JAN12-4/3

Winch Free Spool Drag Adjustment

The winch drum drag can be adjusted to operator's preference.

1. Start engine.
2. Lower equipment to ground.
3. Engage park brake.
4. Place winch control handle in FREE SPOOL position.
5. Loosen nut (A).
6. Adjust slotted shaft to desired winch drum drag.
7. Tighten nut.

A—Nut



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Winch (right side)

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Biodiesel Fuel

Biodiesel fuel is comprised of mono-alkyl esters of long chain fatty acids derived from vegetable oils or animal fats. Biodiesel blends are biodiesel mixed with petroleum diesel fuel on a volume basis.

Before using fuel containing biodiesel, review the Biodiesel Use Requirements and Recommendations in this Operator's Manual.

Environmental laws and regulations can encourage or prohibit the use of biofuels. Operators should consult with appropriate governmental authorities prior to using biofuels.

All John Deere Engines with Exhaust Filter (Released 2011 and After)

While 5% blends (B5) are preferred, biodiesel concentrations up to a 20% blend (B20) in petroleum diesel fuel can be used. Biodiesel blends up to B20 can be used ONLY if the biodiesel (100% biodiesel or B100) meets ASTM D6751, EN 14214, or equivalent specification. Expect a 2% reduction in power and a 3% reduction in fuel economy when using B20.

Biodiesel concentrations above B20 can harm the engine's emission control systems and should not be used. Risks include, but are not limited to, more frequent stationary regeneration, soot accumulation, and increased intervals for ash removal.

John Deere approved fuel conditioners, which contain detergent and dispersant additives, are required when using B20, and are recommended when using lower biodiesel blends.

All John Deere Engines Excluding Exhaust Filter (Primarily Released Prior to 2012)

While 5% blends (B5) are preferred, biodiesel concentrations up to a 20% blend (B20) in petroleum diesel fuel can be used. Biodiesel blends up to B20 can be used ONLY if the biodiesel (100% biodiesel or B100) meets ASTM D6751, EN 14214, or equivalent specification. Expect a 2% reduction in power and a 3% reduction in fuel economy when using B20.

These John Deere engines can operate on biodiesel blends above B20 (up to 100% biodiesel). Operate at levels above B20 ONLY if the biodiesel is permitted by law and meets the EN 14214 specification (primarily available in Europe). Engines operating on biodiesel blends above B20 might not fully comply with or be permitted by all applicable emissions regulations. Expect up to a 12% reduction in power and an 18% reduction in fuel economy when using 100% biodiesel.

John Deere approved fuel conditioners, which contain detergent and dispersant additives, are required when using B20, and are recommended when using lower biodiesel blends.

Biodiesel Use Requirements and Recommendations

The petroleum diesel portion of all biodiesel blends must meet the requirements of ASTM D975 (US) or EN 590 (EU) commercial standards.

Biodiesel users in the U.S. are strongly encouraged to purchase biodiesel blends from a BQ-9000 Certified Marketer and sourced from a BQ-9000 Accredited Producer (as certified by the National Biodiesel Board). Certified Marketers and Accredited Producers can be found at the following website: http://www.bq9000.org.

Biodiesel contains residual ash. Ash levels exceeding the maximums allowed in either ASTM D6751 or EN14214 can result in more rapid ash loading and require more frequent cleaning of the Exhaust Filter (if present).

The fuel filter can require more frequent replacement, when using biodiesel fuel, particularly if switching from diesel. Check engine oil level daily prior to starting engine. A rising oil level can indicate fuel dilution of the engine oil. Biodiesel blends up to B20 must be used within 90 days of the date of biodiesel manufacture. If used, biodiesel blends above B20 must be used within 45 days from the date of biodiesel manufacture.

When using biodiesel blends up to B20, the following must be considered:

- Cold weather flow degradation
- Stability and storage issues (moisture absorption, 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 (primarily an issue with older engines)
- Possible reduction of service life of engine components

Request a certificate of analysis from your fuel distributor to ensure that the fuel is compliant with the specifications provided in this Operator's Manual.

Consult your John Deere dealer for approved fuel conditioners to improve storage and performance with biodiesel fuels.

The following must also be considered if using biodiesel blends above B20:

- Possible coking or blocked injector nozzles, resulting in power loss and engine misfire if John Deere approved fuel conditioners are not used
- Possible crankcase oil dilution (requiring more frequent oil changes)
- Possible lacquering 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 handling equipment
- Possible reduction in water separator efficiency
- Possible damage to paint if exposed to biodiesel

Continued on next page

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, usually prior to a filter and/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.

Fluid Analysis Kits

TX1003513A —UN—20FEB06

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Check Engine Oil Level

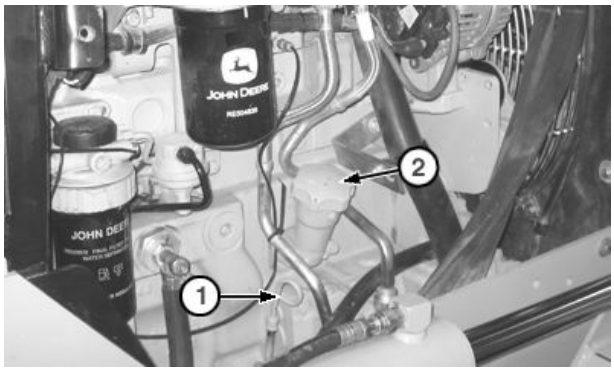
IMPORTANT: Do not run engine when oil level is below the ADD mark.

The most accurate oil level reading is obtained when the engine is cold before starting the engine for the day's operation.

1. Park machine on a level surface.
2. Engage the park lock lever in the up LOCKED position.
3. Make sure dipstick is fully seated.
4. Remove dipstick (A) to check oil level.

   BEFORE THE ENGINE IS STARTED: The engine is full when oil level is in the cross-hatch area (C). It is acceptable to run the engine when the oil level is above the ADD mark.

   AFTER THE ENGINE HAS BEEN RUN: Allow the oil to drain into the oil pan for 10 minutes before checking the oil level. Ten minutes after shutdown the engine oil level must be above the ADD mark.
5. If necessary, remove the filler cap (B) to add oil. See Diesel Engine Oil. (Section 3-1.)
6. Check oil on dipstick again.



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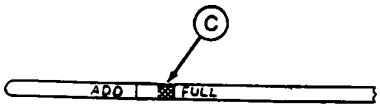


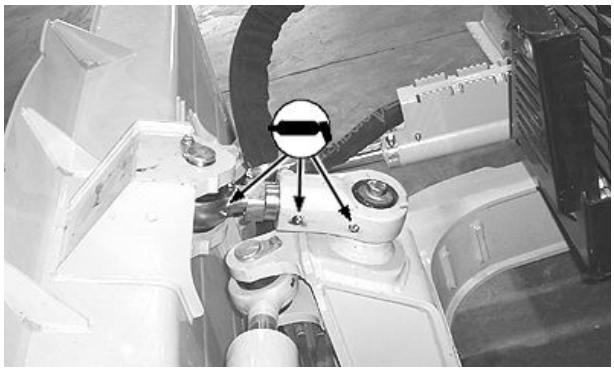
RG5421 —UN—15DEC88

1— Dipstick
2— Filler Cap
C—Dipstick Cross-Hatch Area

03T,60,K96 -19-14JAN08-1/1

Grease Adjustable Pitch Link

1. Lower blade to ground.
2. Using a grease gun, lubricate each grease fitting until grease escapes at joints. See Grease. (Section 3-1.)



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Replace Final Fuel Filter

1. Turn retaining ring (A) counterclockwise and remove filter element (B). Allow sediment to drain into a container.

NOTE: Dispose of waste properly.

2. Remove fuel drain knob (C) from filter element and install on new filter.
3. Clean filter base (D).

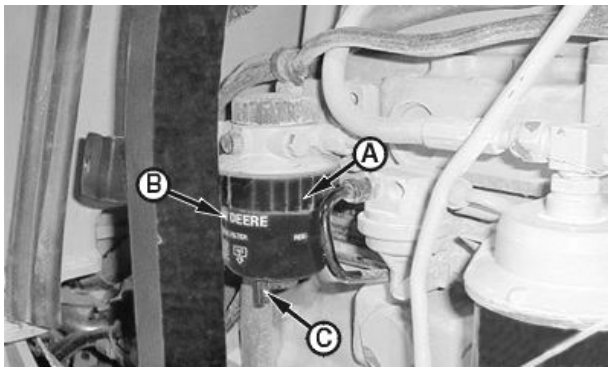
NOTE: Do not attempt to turn filter element into base.

4. Install new fuel element by aligning vertical locators (F) into slots (E) on filter base. Push filter element up firmly until filter snaps against base.
5. Turn retaining ring clockwise into filter base until retaining ring clicks tightly into place.
6. Loosen bleed screw (G) by turning knob counterclockwise.
7. Operate primer lever (H) until fuel flow from bleed screw is free of air bubbles.

NOTE: If there is no fuel flow, push primer lever up and turn crankshaft using start motor to reposition camshaft. Repeat step 7.

8. Tighten bleed screw.
9. Push primer lever up as far as possible.

A—Retaining Ring
B—Filter
C—Drain Knob
D—Filter Base
E—Slots
F—Vertical Locators
G—Bleed Screw
H—Primer Lever



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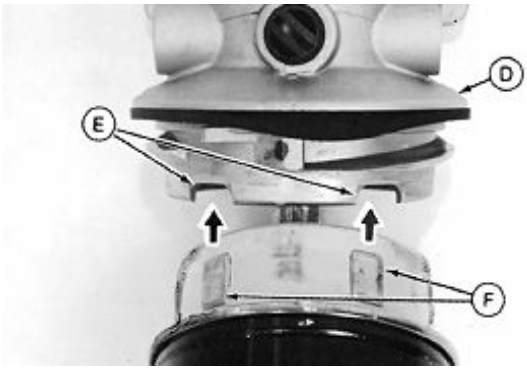

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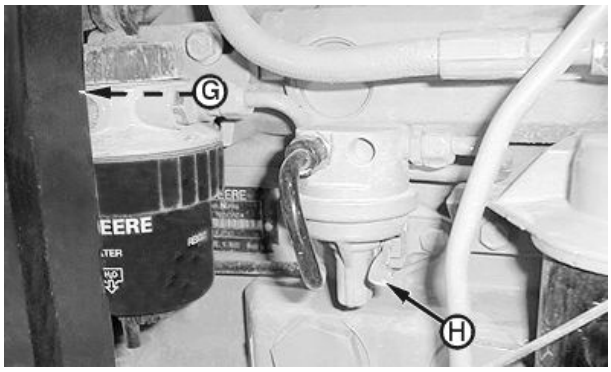

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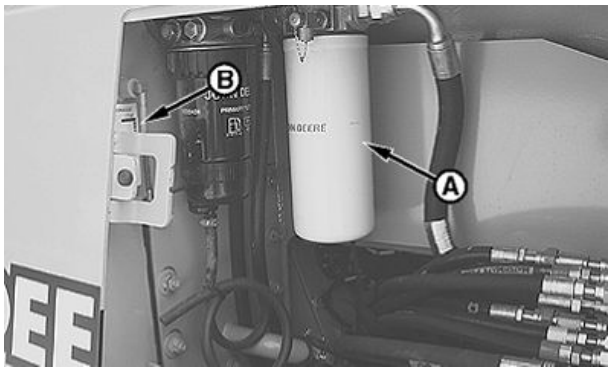
4. Remove filter (A) by turning counterclockwise.
5. Apply thin film of oil to gasket of new filter.
6. Install new filter. Turn filter clockwise by hand until gasket touches mounting surface.
7. Tighten additional 1/2 turn.
8. Fill reservoir with oil. See Transmission and Hydraulic Oil. (Section 3-1.)

Specification

Hydraulic Oil
Reservoir—Capacity..... 32 L Approximate
8.5 gal. Approximate

9. Check O-ring on fill cap and install fill cap.
10. Start engine and run for 2 minutes. Stop engine and check for leaks around filter base. Tighten filter only enough to stop leaks.
11. Check oil level in sight tube (B). Oil level must be between the ADD and FULL marks on tube. If necessary, add more oil.



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Hydraulic Oil Filter

A—Filter **B—Sight Tube**

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See your authorized dealer for JT05460 SERVICEGARD™ battery and coolant tester. Follow directions included with the tester.

A fully charged battery will have a corrected specific gravity reading of 1.260. If the reading is below 1.200, charge the battery.

T85402 —UN—10NOV88

Battery And Coolant Tester

SERVICEGARD is a trademark of Deere & Company

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Using Battery Charger

CAUTION: Prevent possible injury from exploding battery. Do not charge a battery if the battery is frozen or it may explode. 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 you charge batteries in the machine to prevent damage to electrical components.

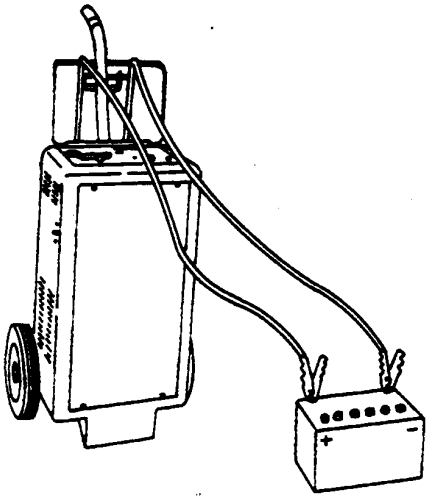
A battery charger may be used as a booster to start engine.

Ventilate the area where batteries are being charged.

Stop or cut back charging rate if battery case feels hot, or is venting electrolyte. Battery temperature must not exceed 52°C (125°F).

TS204 —UN—15APR13

Prevent Battery Explosions



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Charger

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F1— Start 10 A Fuse
F2— Power Outlet 10 A Fuse
F3— Start Aid/Alternator Excitation 15 A Fuse
F4— Horn 10 A Fuse
F5— Trans Controller 10 A Fuse
F6— Monitor 7.5 A Fuse
F7— Heater Blower 15 A Fuse
F8— Condenser Fan 15 A Fuse
F9— Condenser Fan 15 A Fuse
F10— A/C Compressor 10 A Fuse
F11— Front/Rear Wipers 15 A Fuse
F12— Door Wipers 15 A Fuse
F13— CB Lights (Optional) 25 A Fuse
F14— Air Seat 15 A Fuse
F15— Rops Heater 20 A Fuse
F16— CB Light 20 A Fuse
F17— Radio/Dome Light 10 A Fuse
F18— Radio Unswitched 10 A Fuse
F19— Service Expert 10 A Fuse
F20— ECU Switched 5 A Fuse
F22— Spare 15 A Fuse
F23— Spare 10 A Fuse
F24— JDLink™ Switched Power 5 A Fuse (If Equipped)
F25— JDLink™ Unswitched Power 5 A Fuse (If Equipped)
F26— IGC 5 A Fuse
K1—Start Relay (located by starter) (not shown)
K2—Accessory Relay #1
K3—Accessory Relay #3
K4—Heater Blower Relay
K5—A/C Relay
K6—Accessory Relay #2
K7—Horn Relay
K8—Trans Controller/Monitor Relay

IMPORTANT: Install fuse with correct amperage rating to prevent electrical system damage from overload.

The fuse block is located on right side of machine through access cover.

JDLink is a trademark of Deere & Company

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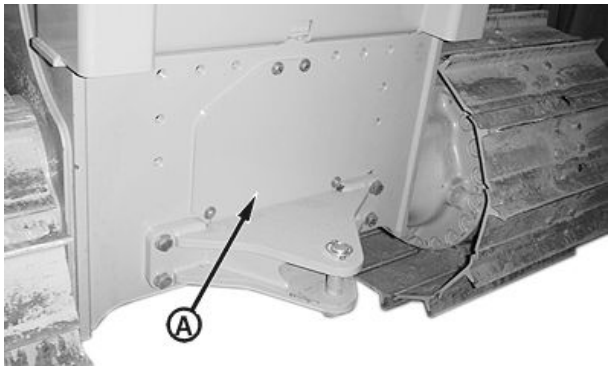
Drain Fuel Tank Sump

⚠ CAUTION: Handle fuel carefully. Shut the engine OFF. Do not smoke while you work on fuel system.

1. Remove rear access panel (A).
2. Remove left fuel sump access panel (B). If equipped with winch, remove both left and right fuel sump access panels.
3. Attach hose to drain valve (C) and route through sump opening. Open drain valve for several seconds to drain water and sediment.
4. Close drain valve. Replace fuel sump panel(s) and tighten cap screws.
5. Install rear access panel, if removed. Tighten cap screws.

A—Rear Access Panel
B—Left Fuel Sump Access Panel
C—Drain Valve



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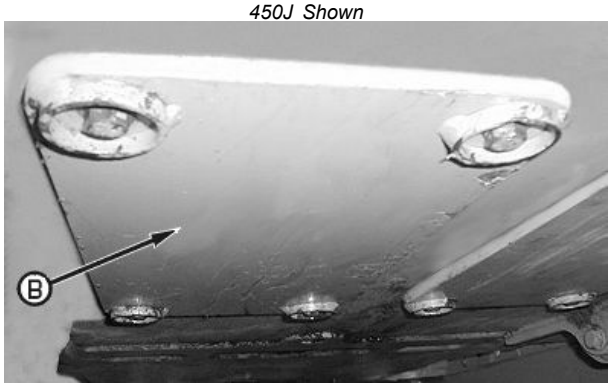
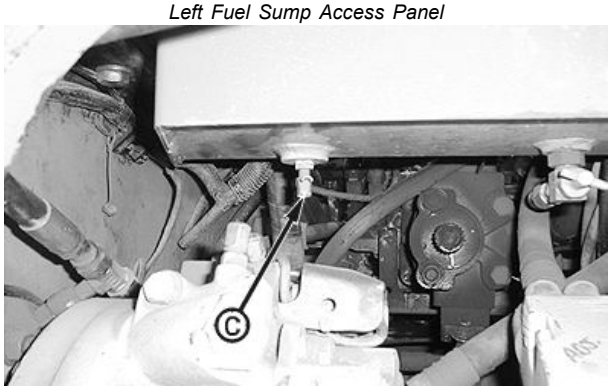
450J Shown



T117852B —UN—26OCT98

Left Fuel Sump Access Panel

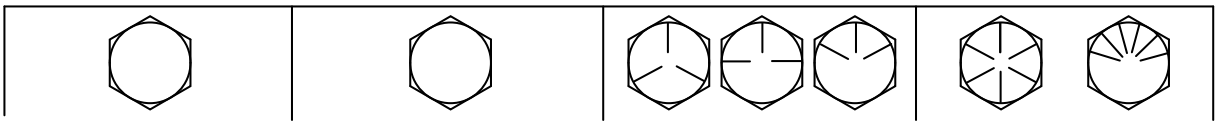


T117853B —UN—26OCT98

03T,55,K88 -19-13JUN11-1/1

Unified Inch Bolt and Screw Torque Values

TS1671 —UN—01MAY03



Bolt or	SAE Grade 1				SAE Grade 2[a]				SAE Grade 5, 5.1 or 5.2				SAE Grade 8 or 8.2			
Screw	Lubricated[b]		Dry[c]		Lubricated[b]		Dry[c]		Lubricated[b]		Dry[c]		Lubricated[b]		Dry[c]	
Size	N·m	lb-in	N·m	lb-in	N·m	lb-in	N·m	lb-in	N·m	lb-in	N·m	lb-in	N·m	lb-in	N·m	lb-in
1/4	3,7	33	4,7	42	6	53	7,5	66	9,5	84	12	106	13,5	120	17	150
													N·m	lb-ft	N·m	lb-ft
5/16	7,7	68	9,8	86	12	106	15,5	137	19,5	172	25	221	28	20.5	35	26
									N·m	lb-ft	N·m	lb-ft				
3/8	13,5	120	17,5	155	22	194	27	240	35	26	44	32.5	49	36	63	46
			N·m	lb-ft	N·m	lb-ft	N·m	lb-ft								
7/16	22	194	28	20.5	35	26	44	32.5	56	41	70	52	80	59	100	74
	N·m	lb-ft														
1/2	34	25	42	31	53	39	67	49	85	63	110	80	120	88	155	115
9/16	48	35.5	60	45	76	56	95	70	125	92	155	115	175	130	220	165
5/8	67	49	85	63	105	77	135	100	170	125	215	160	240	175	305	225
3/4	120	88	150	110	190	140	240	175	300	220	380	280	425	315	540	400
7/8	190	140	240	175	190	140	240	175	490	360	615	455	690	510	870	640
1	285	210	360	265	285	210	360	265	730	540	920	680	1030	760	1300	960
1-1/8	400	300	510	375	400	300	510	375	910	670	1150	850	1450	1075	1850	1350
1-1/4	570	420	725	535	570	420	725	535	1280	945	1630	1200	2050	1500	2600	1920
1-3/8	750	550	950	700	750	550	950	700	1700	1250	2140	1580	2700	2000	3400	2500
1-1/2	990	730	1250	930	990	730	1250	930	2250	1650	2850	2100	3600	2650	4550	3350

Torque values listed are for general use only, based on the strength of the bolt or screw. DO NOT use these values if a different torque value or tightening procedure is given for a specific application. For plastic insert or crimped steel type lock nuts, for stainless steel fasteners, or for nuts on U-bolts, see the tightening instructions for the specific application. Shear bolts are designed to fail under predetermined loads. Always replace shear bolts with identical grade.

Replace fasteners with the same or higher grade. If higher grade fasteners are used, tighten these to the strength of the original. Make sure fastener threads are clean and that you properly start thread engagement. When possible, lubricate plain or zinc plated fasteners other than lock nuts, wheel bolts or wheel nuts, unless different instructions are given for the specific application.

[a]Grade 2 applies for hex cap screws (not hex bolts) up to 6. in (152 mm) long. Grade 1 applies for hex cap screws over 6 in. (152 mm) long, and for all other types of bolts and screws of any length.

[b]"Lubricated" means coated with a lubricant such as engine oil, fasteners with phosphate and oil coatings, or 7/8 in. and larger fasteners with JDM F13C zinc flake coating.

[c]"Dry" means plain or zinc plated without any lubrication, or 1/4 to 3/4 in. fasteners with JDM F13B zinc flake coating.

TORQ1 -19-24APR03-1/1

Decelerator/Brake Pedal and Park Brake Operational Check

CAUTION: Prevent possible injury from unexpected machine movement. Pressing decelerator/brake pedal beyond a point of increased resistance will apply brakes and stop machine abruptly.

Operate machine slowly in forward. Fully depress decel/brake pedal and then release.

LOOK: Machine must stop when pedal is depressed and must move when pedal is released.

Start engine.

Park lock lever down.

Depress decel/brake pedal until spring resistance is felt.

Adjust engine speed to fast idle.

Transmission speed to 3.0.

TCL in forward.

Release decel/brake pedal.

LOOK: Does machine accelerate smoothly to maximum speed?

YES: Check complete.

NOTE: Decel/brake response time can be set to operator preference.

NO: Inspect park brake valve and calibrate machine. See your authorized dealer.

MD04263,0000384 -19-13APR09-27/31

Park Brake Valve Leakage Check

Hydraulic oil must be at operating temperature 66°C (150°F).

Adjust engine speed control to slow idle with park lock lever up.

LOOK: Observe charge pressure reading on Transmission Control Unit (TCU) display.

LOOK: Pressure should drop as park lock lever is moved down, then return to original value.

Fully depress decel/brake pedal.

YES: Isolate park brakes, brake valve to locate leakage.

LOOK: Pressure should drop as decel/brake pedal is released, then return to original value.

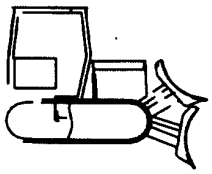
YES: Tracks move in neutral. Inspect park brake valve.

LOOK: Do tracks creep or move?

NO: Check complete.

MD04263,0000384 -19-13APR09-28/31

Hydraulic Pump Performance Check



T6583AE —UN—23AUG93

Hydraulic oil must be at operating temperature 66°C (150°F).

Operate engine at fast idle.

Place blade on ground.

YES: Go to next check.

Record time required to raise blade.

NO: Check oil level and condition. See Check Hydraulic Oil Level. (Section 3-4.)

LOOK: Is maximum cycle time 2.2—2.5 seconds?

NO: See your authorized dealer.

Continued on next page

MD04263,0000384 -19-13APR09-29/31

Gauges and Indicators

Symptom	Problem	Solution
Engine Coolant Temperature Indicator Light Does Not Indicate Overheating or Bulb Does Not Light in BULB CHECK Position	Indicator light open circuit	Turn key to BULB CHECK. If no light, see your authorized dealer.
Transmission Temperature Indicator Light Bulb Does Not Indicate Overheating or Bulb Does Not Light in BULB CHECK Position	Indicator light open circuit	Turn key to BULB CHECK. If no light, see your authorized dealer.
Engine Oil Pressure Indicator Will Not Light	Indicator light open circuit	Turn key to BULB CHECK. If no light, see your authorized dealer.
Alternator Indicator Will Not Light	Indicator light open circuit	Turn key to BULB CHECK. If no light, see your authorized dealer.
Horn Does Not Sound	Horn ground	Ground horn to tractor frame. See your authorized dealer.
	Horn	Replace horn. See your authorized dealer.
	Horn Relay	Replace relay.
	Horn fuse.	Replace fuse.
	Horn button	Replace horn button. See your authorized dealer.
Windshield Wiper Does Not Operate	Wiper fuse	Check and replace.
Heater Fan Does Not Operate	Heater fuse	Check and replace.
No Work Lights	Bulb burned out	Replace bulb.
	Poor ground light switch	Inspect and tighten. See your authorized dealer.
Rear Light Does Not Operate	Loose connector in wiring harness of ROPS	Inspect and reconnect. See your authorized dealer.
Dim Lights	Low battery charge	Check battery connections.
	Low alternator output	Check belt tension.
	Poor ground at lights	Clean and tighten.

NOTE: If any other problems are encountered which require special tools or machine knowledge to correct, see your authorized dealer.

HG31779,00000D6 -19-14JAN08-1/1

Item	Measurement	Specification
97 inch (Standard) Blade (Left Side)	Distance	337 mm 1 ft 1.3 in.
115 inch Blade (Left Side)	Distance	400 mm 1 ft 3.8 in.
G—Overall (Without Winch)	Length	4013 mm 13 ft 2 in.
G—Overall (With Winch)	Length	4496 mm 14 ft 9 in.
H—Blade Width (90 inch Blade)	Width	2286 mm 7 ft 6 in.
H—Blade Width (97 inch Blade)	Width	2464 mm 8 ft 1 in.
H—Blade Width (115 inch Blade)	Width	2921 mm 9 ft 7 in.
I—Blade Angle (90 inch Blade)	Width	2106 mm 6 ft 10.9 in.
I—Blade Angle (97 inch Blade)	Width	2267 mm 7 ft 5.3 in.
I—Blade Angle (115 inch Blade)	Width	2680 mm 8 ft 9.5 in.
90 inch (Narrow) Blade	Capacity	1.4 m^3
97 inch (Standard) Blade	Capacity	1.5 m^3
115 inch Blade	Capacity	1.75 m^3

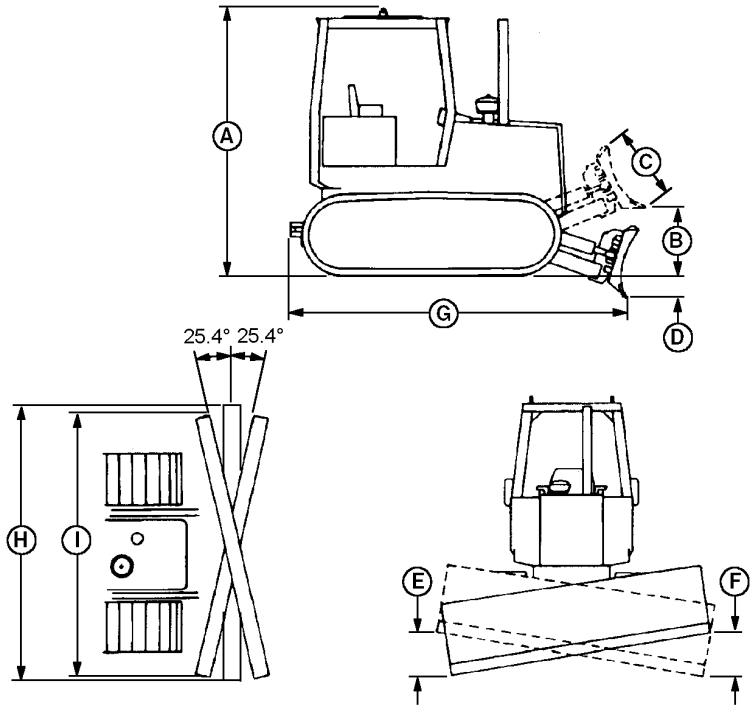
CED,OUO1032,1353 -19-21JAN13-2/2

550J-LT Crawler Dozer Weights

Item	Measurement	Specification
SAE Operating Weight	Weight	7620 kg 16 800 lb
Optional Equipment		
Rock Guards (4)	Weight	131 kg 288 lb
Deluxe Seat (add)	Weight	9 kg 20 lb
Cab with Heater (add)	Weight	268 kg 590 lb
Cab with Air Conditioning (add)	Weight	306 kg 675 lb
ROPS Heater	Weight	12 kg 26 lb
High Intensity Lights	Weight	4 kg 9 lb
Retrieval Hitch	Weight	23 kg 50 lb
Extended Draw Bar	Weight	33 kg 72 lb
4000S Winch	Weight	653 kg 1437 lb
Winch Fairlead, Four Roller	Weight	85 kg 187 lb
Parallelogram Ripper	Weight	981 kg 2163 lb

OUT4001,0000018 -19-14JAN08-1/1

650J-LGP Crawler Dozer Dimensions



T118300

T118300 —UN—11NOV98

NOTE: Specifications and design 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 unit with roll-over protective structure, full fuel tank, 80 kg (175 lb) operator, and standard equipment.

Item	Measurement	Specification
A—Overall Height—ROPS or Cab	Height	2768 mm 9 ft 1 in.
B—Blade	Height	826 mm 2 ft 8.6 in.
C—Blade Lift	Height	819 mm 2 ft 8.2 in.
D—Digging	Depth	500 mm 1 ft 7.7 in.
E—Blade Tilt		
115 inch Blade (Right Side)	Distance	399 mm 1 ft 3 in.
128 inch Blade (Right Side)	Distance	444 mm 1 ft 5.5 in.
F—Blade Tilt		
115 inch Blade (Left Side)	Distance	399 mm 1 ft 3 in.
128 inch Blade (Left Side)	Distance	444 mm 1 ft 5.5 in.

Continued on next page

CED,OUO1032,1384 -19-14JAN08-1/2

4000S Winch

Maximum Cable Capacities	
Cable Size	**Winch Capacity**
15.88 mm (0.625 in.)	77.4 m (254 ft)
19.05 mm (0.75 in.)	54.6 m (179 ft)
22.23 mm (0.875 in.)	39.3 m (129 ft)

TX,115,RR2763 -19-14JAN08-1/1