NEW HOLLAND
CONSTRUCTION



SERVICE MANUAL

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NEW HOLLAND

SECTION 00 – GENERAL INFORMATION

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MINIMUM HARDWARE TIGHTENING TORQUES

IN FOOT POUNDS (NEWTON-METERS) FOR NORMAL ASSEMBLY APPLICATIONS

INCH HARDWARE AND LOCKNUTS

NOMINAL SIZE	SAE GRADE 2		SAE GRADE 5		SAE GRADE 8		LOCKNUTS		NOMINAL SIZE
	UNPLATED or PLATED SILVER	PLATED W/ZnCr GOLD	UNPLATED or PLATED SILVER	PLATED W/ZnCr GOLD	UNPLATED or PLATED SILVER	PLATED W/ZnCr GOLD	GR.B w/GR5 BOLT	GR.C w/GR8 BOLT	
1/4	55* (6.2)	72* (8.1)	86* (9.7)	112* (13)	121* (14)	157* (18)	61* (6.9)	86* (9.8)	1/4
5/16	115* (13)	149* (17)	178* (20)	229* (26)	250* (28)	324* (37)	125* (14)	176* (20)	5/16
3/8	17 (23)	22 (30)	26 (35)	34 (46)	37 (50)	48 (65)	19 (26)	26 (35)	3/8
7/16	27 (37)	35 (47)	42 (57)	54 (73)	59 (80)	77 (104)	30 (41)	42 (57)	7/16
1/2	42 (57)	54 (73)	64 (87)	83 (113)	91 (123)	117 (159)	45 (61)	64 (88)	1/2
9/16	60 (81)	77 (104)	92 (125)	120 (163)	130 (176)	169 (229)	65 (88)	92 (125)	9/16
5/8	83 (112)	107 (145)	128 (174)	165 (224)	180 (244)	233 (316)	90 (122)	127 (172)	5/8
3/4	146 (198)	189 (256)	226 (306)	293 (397)	319 (432)	413 (560)	160 (217)	226 (306)	3/4
7/8	142 (193)	183 (248)	365 (495)	473 (641)	515 (698)	667 (904)	258 (350)	364 (494)	7/8
1	213 (289)	275 (373)	547 (742)	708 (960)	773 (1048)	1000 (1356)	386 (523)	545 (739)	1

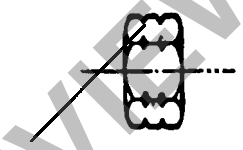
NOTE: Torque values shown with * are inch pounds.

IDENTIFICATION
CAP SCREWS AND CARRIAGE BOLTS



SAE GRADE 2 | SAE GRADE 5 | SAE GRADE 8 | REGULAR NUTS | SAE GRADE 5 HEX NUTS | SAE GRADE 8 HEX NUTS

LOCKNUTS



GRADE IDENTIFICATION
GRADE A NO NOTCHES
GRADE B ONE CIRCUMFERENTIAL NOTCH
GRADE C TWO CIRCUMFERENTIAL NOTCHES



GRADE IDENTIFICATION
GRADE A NO MARKS
GRADE B THREE MARKS
GRADE C SIX MARKS
MARKS NEED NOT BE LOCATED AT CORNERS



GRADE A NO MARK
GRADE B LETTER B
GRADE C LETTER C

GRADE IDENTIFICATION

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MODEL	LS180
OIL FILTER - ENGINE	NH#87800083

CAPACITIES

Cooling system	15.5 qt. (14.7 L)
Cooling system pressure	radiator cap 13 psi (89.5 kpa)
Engine crankcase w/filter	7 qt. (6.6L)
Fuel tank	18 Gal. (68 L)
Hydraulic system	11.3 Gal. (42.6 L)
Engine gearbox	1.4 qt. (1.32 L)
Common gearbox and final drive chain case (ea.)	9.6 qt. (9.1 L)

ELECTRICAL SYSTEM

Battery	BCI PC31 - 12V 925 amps @ 0° F (-18° C)
Alternator capacity	45 amps
Starter switch	Key start and relay
Ignition system protection	Fuse 15 amps
Headlights (work)	NH #86533429
Taillights (work)	NH #86533429
Taillights (road)	NH #86505510
Amber flasher	NH #529068

HYDRAULIC SYSTEM

Pump - Make or type	Gear pump
Output	18.5 GPM (70 LPM) @2350 RPM @1000 PSI (68 bar)
Optional high flow	32.3 GPM (122.8 LPM) @ 2350 RPM @ 1000 PSI (68 bar)
Hydraulic system	11.3 gal. (42.6 L)
Hydraulic fluid	API Service SH/CG4 10W-30
Control valve	3 Spool Open Center
Main system relief	2500 PSI - 2600 PSI (170 - 176 bar)
Circuit relief - boom	3500 PSI (238 bar)
Filter - Spin-on canister	NH #9842392

BOOM CYLINDERS

Double-acting	2.5″(6.4cm) Bore; 24.06″(61.1cm) Stroke
Raise	3.6 seconds
Lower	1.5 seconds

BUCKET CYLINDERS

Double-acting	2.5″ (6.4 cm) Bore
Cycle time	17.6″(44.7cm) Stroke
Dump	2.4 seconds
Curl	1.8 seconds

HYDROSTATIC TRANSMISSIONS

Pump	Variable displacement piston type
Motor (with single speed)	Fixed displacement piston type
Motor (with 2-speed)	Variable displacement piston type
Charge pressure	250 - 300 PSI (17 - 20.4 bar)
Relief pressure (transmission)	5000 PSI (344.7 bar)
Oil type	SAE 10W-30 API SH/CG4

TRAVEL SPEEDS - 12.00 X 16.5 Tires

Low range - MAX	7.2 MPH (11.6 KPH)
LS180 equipped with factory 2-speed	
High range - MAX	11.4 MPH (18.3 KPH)

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SPECIFICATIONS

MODEL	LS180
MANUFACTURER	NEW HOLLAND
MODEL	332T/JF Emissionized
CYLINDERS	3
ASPIRATION	TURBOCHARGED
CYCLE	4 Stroke
BORE AND STROKE	4.4″ X 4.2″(112x106.7)
DISPLACEMENT	192 cu.in. (3.15L)
COMPRESSION RATIO	17.5 to 1
SPEEDS	
-FAST (no load)	2350 to 2400 RPM
-IDLE (no load)	1000 to 1050 RPM
HORSEPOWER	
(GROSS) MFG rating	67 @ 2200 RPM
(SAE NET)	60 @ 2200 RPM
TORQUE (Mfg, rating) Gross	187 ft. lbs. (253 N·m)@1400RPM
VALVE CLEARANCE	
Intake (cold).	0.016″ (0.40 mm)
Exhaust (cold).	0.017″ - 0.021″(0.43 - 0.53mm)
FIRING ORDER	1-2-3
FUEL CONSUMPTION (approximate at continuous full load)	3.7 GPH (14 LPH)
IGNITION TYPE	Compression
GRADEABILITY (Intermittent duty)	
Left	30°
Right	30°
Front	20°
Rear	28°
AIR CLEANER	
Dry type dual element with plastic air cleaner canister	
(Primary element)	NH #86555826
(Safety element)	NH #86555827
FUEL SYSTEM	
Type of fuel	Diesel
Injector type	Direct
Cleaning system	
Filter with water trap (DIESEL)	NH#87801434
OIL TYPES - ENGINE	API SH/CG-4 SAE 10W-30

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TROUBLESHOOTING - LS180

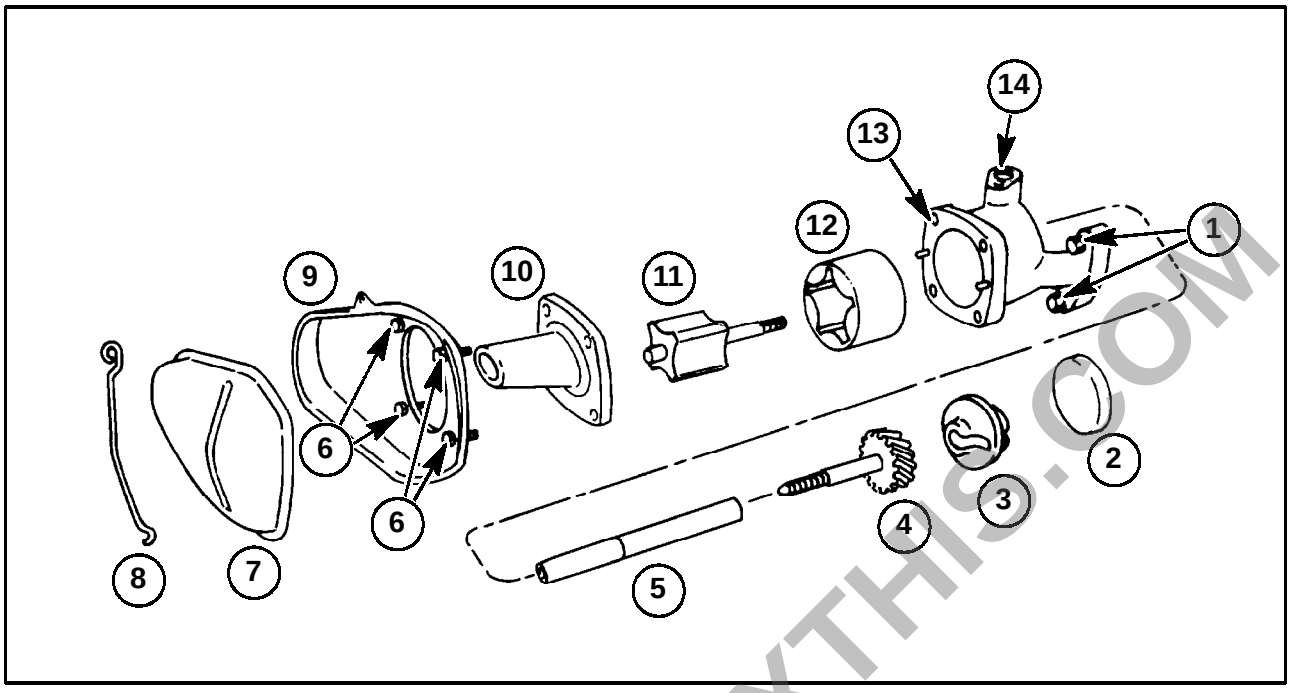
ENGINE SYSTEM

PROBLEM	POSSIBLE CAUSES	CORRECTION
Engine will crank but does not start	Faulty key switch	Correct the connection and/or replace switch
	Blown 5-amp electronic ignition fuse (cab fuse panel)	Replace fuse
	Fuel solenoid not operating	Check solenoid for battery voltage and correct
	Insufficient charging or complete discharging of the battery	Charge or replace battery
	Lack of fuel	Supply fuel
	Air mixed in the fuel system	Bleed the air
	Clogged fuel filter	Replace
	Irregular and faulty fuel supply (injection pump trouble)	Repair in an authorized service shop
	Improper viscosity of the lubricating oil	Inspect and replace
	Clogged air cleaner	Clean or replace
	No compression	Overhaul engine
Engine will not crank or start	Seat belt not fastened	Buckle seat belt
	Faulty key switch	Correct the connection or replace the switch
	Insufficient charging or complete discharging of the battery	Charge or replace battery
	Blown 5-amp electronic battery fuse (engine fuse panel)	Replace fuse
	Blown 15-amp key main fuse (engine fuse panel)	Replace fuse
Engine runs erratically	Air mixed in the fuel system	Bleed the air from the system
	Uneven fuel injection (faulty fuel injection pump)	Repair at authorized shop
	Clogged fuel filter	Replace
	Defective governor	Check and correct

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Disassembly

1. Remove the pump screen.
2. Withdraw the retaining screw and washer assemblies, then separate the inner and outer covers from the body and extract the rotor and shaft assembly.
3. Insert a self-tapping screw into the relief valve plug and pull the plug out of the body. Withdraw the relief valve and spring.

1. Oil pump retaining bolts
2. Plug
3. Drive shaft adapter mounting base
4. Oil pump drive shaft and gear assembly
5. Intermediate shaft
6. Screw and washer assemblies
7. Screen
8. Spring
9. Outer cover
10. Inner cover
11. Inner rotor and shaft assembly
12. Outer rotor
13. Body
14. Pressure relief valve assembly

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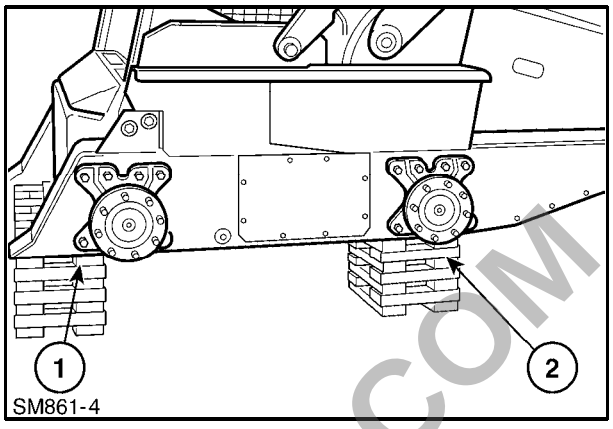
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PROPERLY SUPPORT A RAISED MACHINE

If servicing, neutral adjustment, final drive adjustment or repairs require the machine to be raised, securely support the machine with adequate jack stands or blocks as shown.

Support the machine at 1, to the front of the final drive cases and the rear at 2, making sure the supports are on the flat area of the final drive cases.

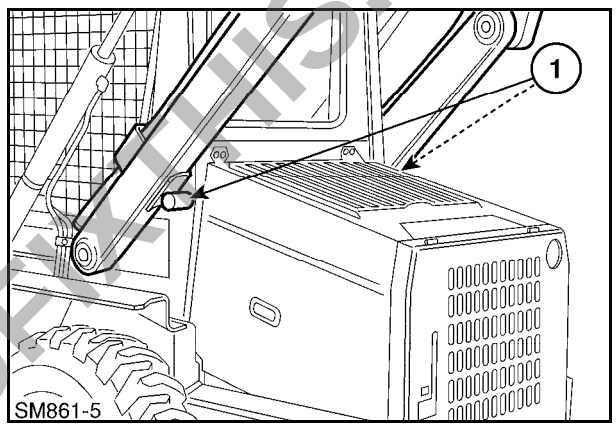


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PROPERLY SUPPORT BOOM ON BOOM LOCK PINS

Before servicing the machine or any of its attached equipment, be sure that the attachments are lowered to the ground or the boom arms are supported by the boom lock pins, 1.

If the boom is to be raised on boom lock pins, remove any attachment. Opening a hydraulic line could cause a mounted attachment to dump over unexpectedly.

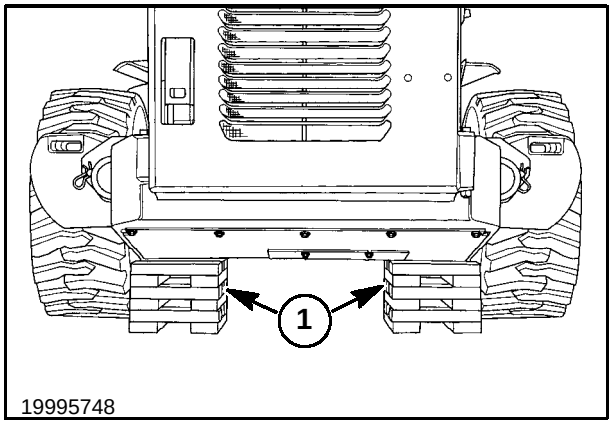


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RAISING BOOM WITHOUT HYDRAULIC OIL FLOW

(Engine or Hydraulic System not functioning)

1. Remove any attachment from the boom mounting plate.
2. Block the rear of the skid steer under the rear of the final drive cases, 1, as shown. This will prevent the front wheels from raising during boom lifting.



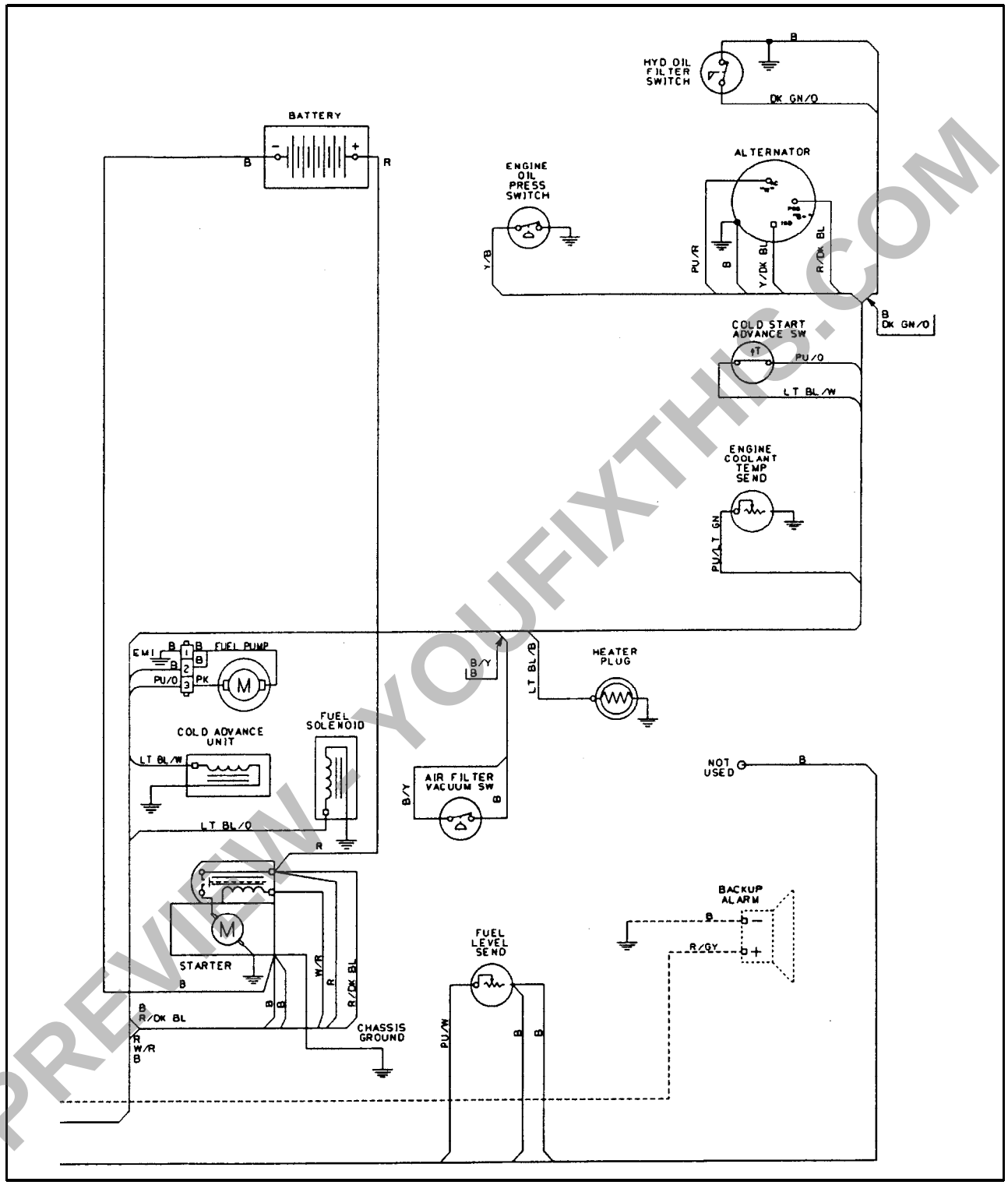
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ENGINE ELECTRICAL COMPONENTS - LS180



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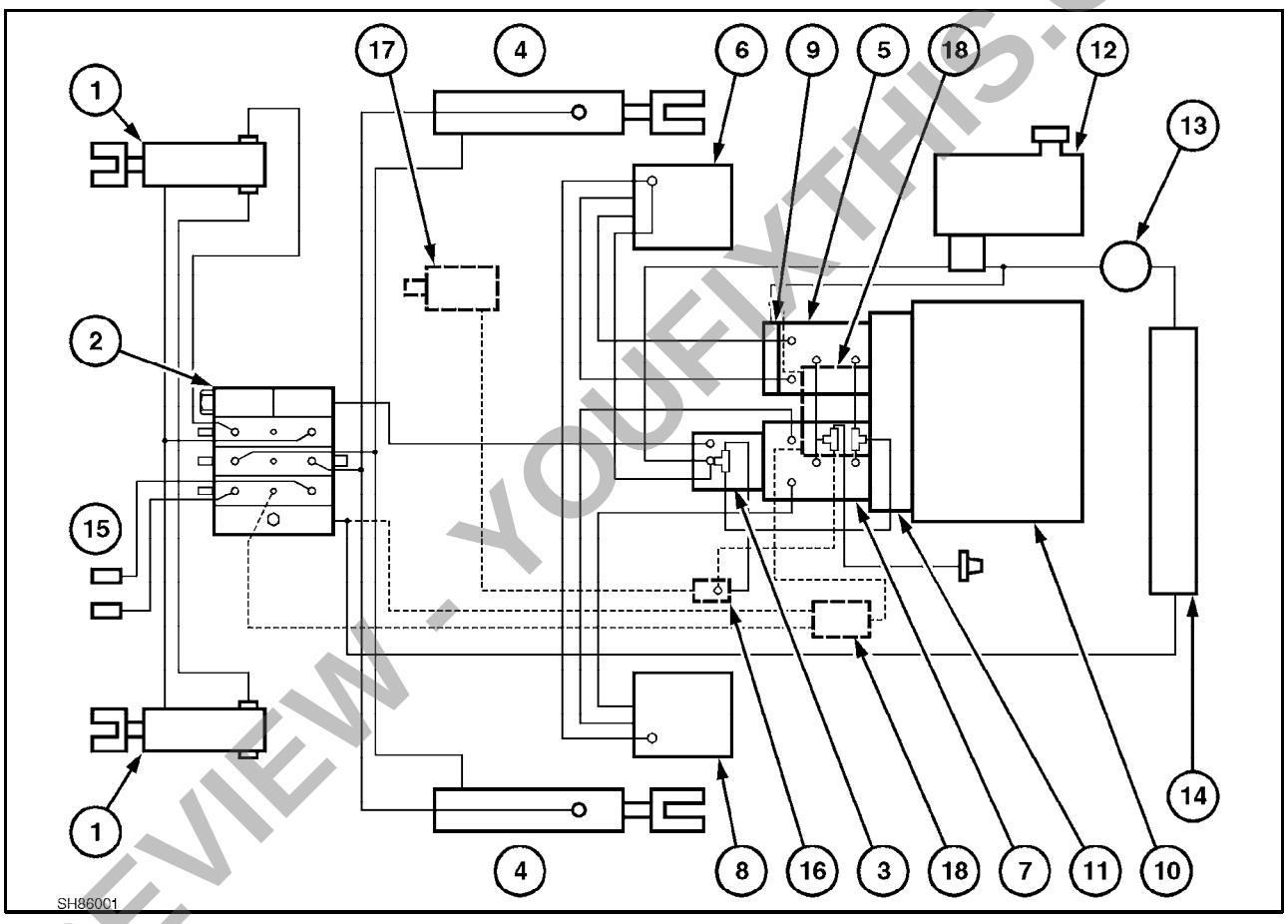
GENERAL INFORMATION

The hydraulic system provides hydraulic oil to the boom and bucket circuits. On skid steers equipped with the boom auxiliary hydraulic kit, system oil will also be supplied to quick couplers at the front of the boom to operate optional hydraulic attachments.

The hydraulic system on the LS180 and LS190 is an open center type hydraulic system. An open center system means that the first control valve function has priority over the next function in line.

The hydraulic gear pump, which is attached to the left-hand hydrostatic pump, provides continuous oil flow through the system to power the boom and bucket circuits and, if equipped, the auxiliary boom circuit.

Figure 1 shows the hydraulic circuit layout and system components for the LS180 and LS190 skid steers.



1

1. Bucket cylinders
2. Control valve (3 spool)
3. Hydraulic gear pump
4. Boom cylinders
5. Hydrostatic pump (RH)
6. Hydrostatic motor (RH)
7. Hydrostatic pump (LH)
8. Hydrostatic motor (LH)
9. Charge pump
10. Engine (power supply)
11. Engine gearbox
12. Hydraulic reservoir
13. Hydraulic filter
14. Hydraulic oil cooler
15. Auxiliary boom hydraulics
16. High/low control valve (if two-speed equipped)
17. High/low shift cylinder (if two-speed equipped)
18. Hydraulic high flow kit (optional)

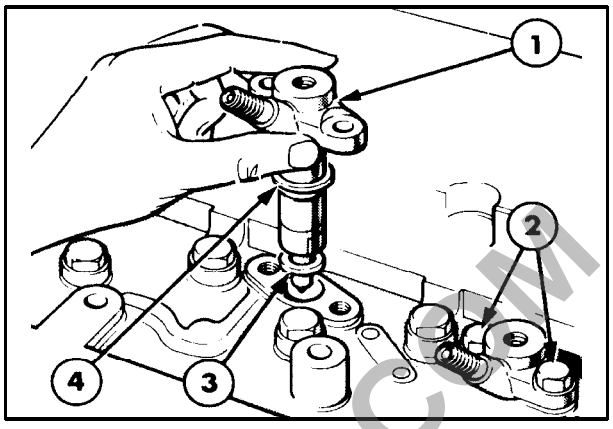
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18. Hold the leak-off pipe at each injector and carefully disconnect the fuel injector leak-off pipes. Clean the area surrounding the fuel injectors, then remove the bolts, 2, and carefully withdraw the fuel injectors, 1, and washers, 3 and 4.
19. Check the pushrods for straightness by rotating the rods with the valve closed and identify any bent rods.
20. Loosen the rocker shaft retaining bolts, which also serve as cylinder head bolts, evenly and alternately. Remove the rocker shaft assembly.

NOTE: *Leave the bolts in the rocker shaft supports during removal as they retain the supports on the shaft.*



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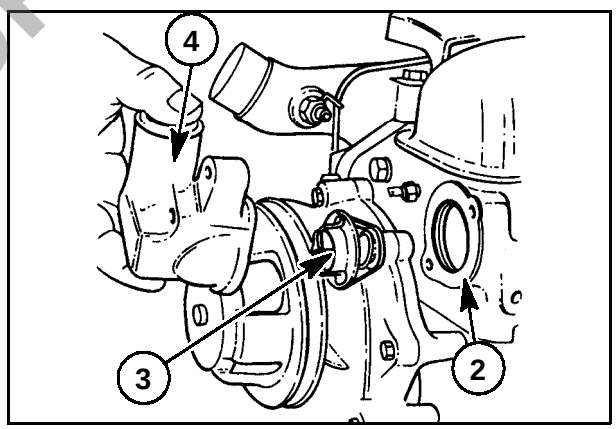
21. Remove the pushrods and place in a numbered rack.
22. Remove the remaining cylinder head bolts and washers working inward from the ends to the center of the head.
23. Lift the cylinder head from the block. If necessary, lever the head off on the pads provided, taking care not to damage the cylinder head or block faces.

DISASSEMBLY

Op. 10 402 30

Thermostat Removal

1. Remove the coolant outlet connection, 4; the thermostat, 3; and gasket, 2.



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Crankpin Journal Diameters

0.051 mm (0.002″) . . . . . 69.789 - 69.799 mm (2.7476″ - 2.7480″)

0.254 mm (0.010″) . . . . . 69.956 - 69.606 mm (2.7400″ - 2.7404″)

0.508 mm (0.020″) . . . . . 69.342 - 69.352 mm (2.7300″ - 2.7304″)

0.762 mm (0.030″) . . . . . 69.088 - 69.098 mm (2.7200″ - 2.7204″)

1.016 mm (0.040″) . . . . . 68.834 - 68.844 mm (2.7100″ - 2.7104″)

FLYWHEEL

Runout of Clutch Face . . . . . 0.127 mm (0.005″)

Ring Gear Runout . . . . . 0.64 mm (0.025″)

OIL PUMP

Rotor Clearance . . . . . 0.025 - 0.15 mm (0.001″ - 0.006″)

Rotor-to-Pump Housing Clearance . . . . . 0.15 - 0.28 mm (0.006″ - 0.011″)

Rotor End Play . . . . . 0.025 - 0.089 mm (0.001″ - 0.0035″)

Relief Valve Pressure . . . . . 4.1 - 4.8 bar (60 - 70 PSI) (4.2 - 4.9 kg/cm^2) at 2000 RPM

Relief Valve Spring Tension . . . . . 27.2 mm (1.07″) under 4.85 kg - 5.4 kg (10.7 lb. - 11.9 lb.) load

ENGINE OIL SPECIFICATIONS

Temperature	Oil Viscosity and Type	API Classification	Engine Oil & Filter Change Period (hours)
- 40°F - +30°F	SAE 5W	SH-CG4	100
- 20°F - +60°F	SAE 5W - 30	SH-CG4	100
- 10°F - +120°F	SAE 10W - 30	SH-CG4	100

When using diesel fuel with sulphur content between 0.5% and 1.0% use only oils listed above but reduce the oil and filter change period to every 50 hours.

When using diesel fuel with sulphur content between 1.0% and 1.3% use only oils listed above but reduce the oil and filter change period to every 25 hours.

Use of diesel fuel with a sulphur content above 1.3% is not recommended.

THERMOSTAT

Opening Temperature . . . . . 76°C (168°F)

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COMPANY POLICY

Company policy, which is one of continuous improvement, reserves the right to make changes in design and specifications at any time without notice and without obligation to modify units previously built.

All data given in this book is subject to production variations. Dimensions and weights are approximate only and the illustrations do not necessarily show skid steers in standard condition.

PARTS AND ACCESSORIES

Genuine NEW HOLLAND parts and accessories have been specifically designed for HEW HOLLAND MACHINES.

We would like to point out that “NON GENUINE” parts and accessories have not been examined and released by NEW HOLLAND. The installation and or use of such products could have negative effects upon the design characteristics of your machine and thereby affect its safety. NEW HOLLAND is not liable for any damage caused by the use of “NON GENUINE” NEW HOLLAND parts and accessories.

MODEL CODES

The range of Skid Steers described in this manual is identified in the text by the engine horsepower Pferdestarke. (PS). The skid steers listed below may not be available in all countries or markets.

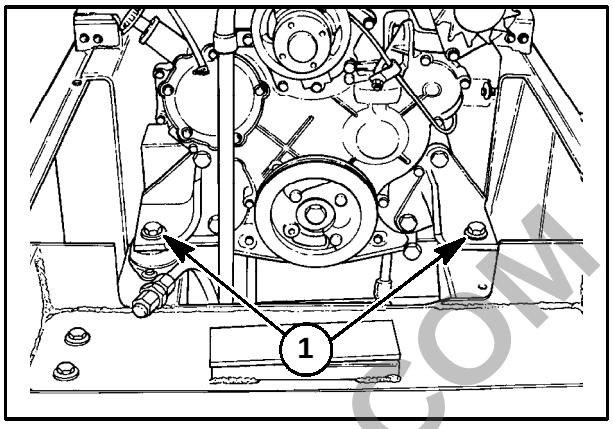
ENGINE	PS	MODEL
332T/JF	60	LS180
4501NC	75	LS190

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22. Remove the engine motor mount and splitter drive mount hardware, 1. Slide the engine to the rear to clear the hydrostatic pumps. Lift the engine assembly from the skid steer.

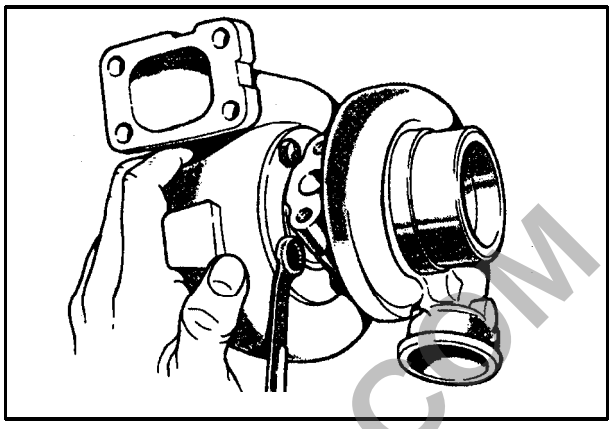


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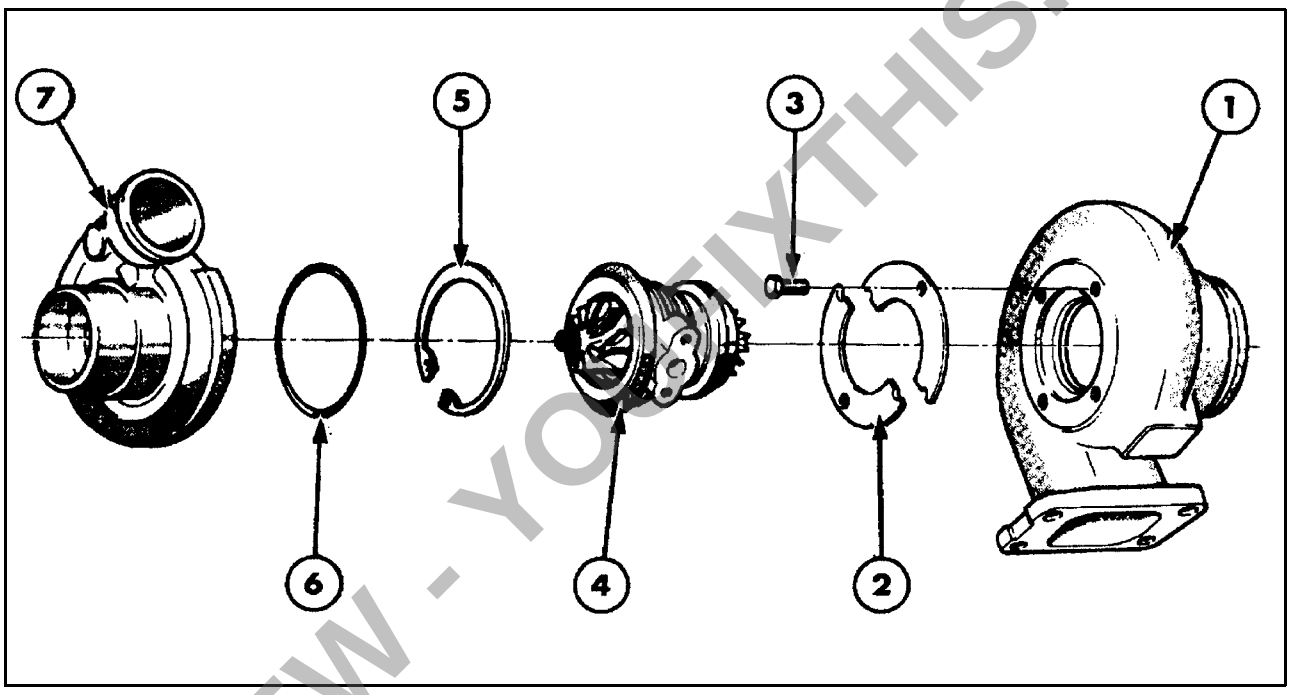
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4. Loosen and remove the bolts from the turbine housing exhaust side and lockplates.



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Exploded View of Turbocharger

1. Turbine housing
2. Retainer plates
3. Retainer bolts
4. Center housing and rotating assembly (CHRA)
5. C clip
6. O ring
7. Compressor housing

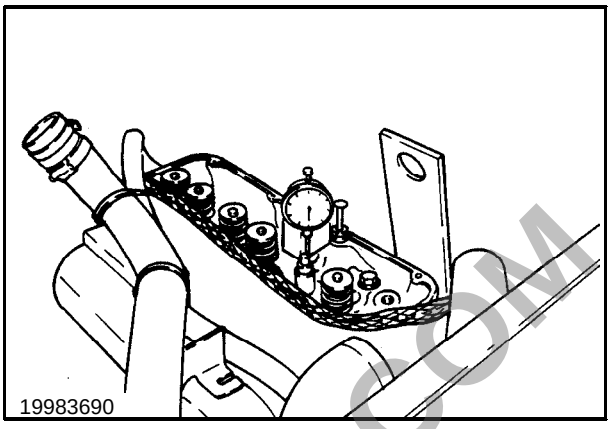
NOTE: *Exercise care when removing the compressor housing to avoid damaging the compressor wheel blades.*

Tap the turbine housing with a soft-faced hammer if force is needed to remove.

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5. Set a dial indicator over the valve stem and set it to zero. Turn the engine clockwise, then counterclockwise, moving several degrees each direction. Reset the dial indicator to zero with the valve stem at its highest point.
6. Turn the engine counterclockwise until the valve lowers and the dial indicator reads at least 12.52 mm (0.500 in.).
7. Turn the engine clockwise, keeping the valve against the piston, until the indicator shows the correct measurement.



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Pump Timing Degree Chart

No. of Cylinders	Engine Timing	Pump Lock Degree	#1 Piston Drop
4 N/A	29° BTDC	29°	10.39 ± 0.025 mm (0.409 ± 0.001 in.)

NOTE: *Piston drop distance includes the average protrusion of the piston above the block face as required when using the drop valve timing method.*

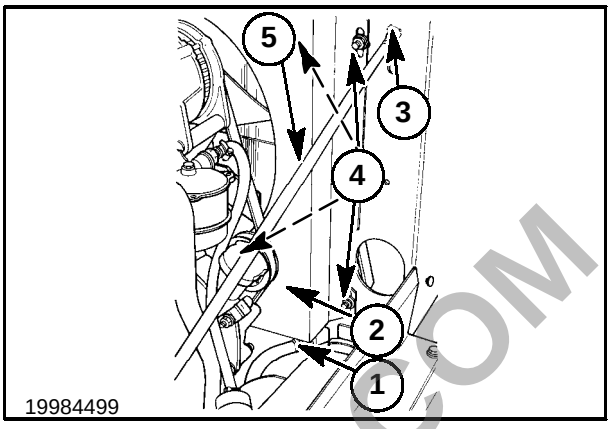
8. Install the locked, pre-timed fuel injection pump (see “Installing the Fuel Injection Pump”).

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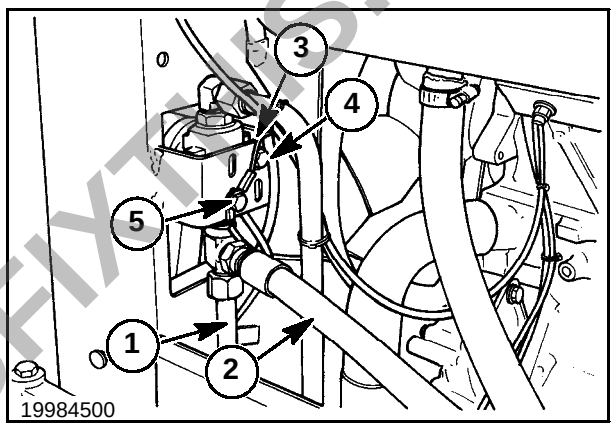
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13. Connect the oil cooler bottom left line, 1, and tighten.
14. Install the fan shroud, 2, onto the radiator housing 3, by installing the four (two per side) capscrews, 4, and tightening. Install the engine oil dipstick line, 5.
15. Install the upper and lower radiator hoses. If the unit is fitted with a Cab Heater/Defroster Kit, also reconnect the heater hose to the “T” connection in the lower radiator hose.



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16. Connect the hydraulic line, 1, to the oil filter base. If the unit is fitted with a High-Flow Hydraulic kit also connect the high flow hydraulic line, 2, to the “T” connection at the hydraulic oil filter base. Tighten all fittings.
17. Connect the hydraulic oil filter restriction switch wires, 3, harness clamp, 4, and ground wire connections, 5.



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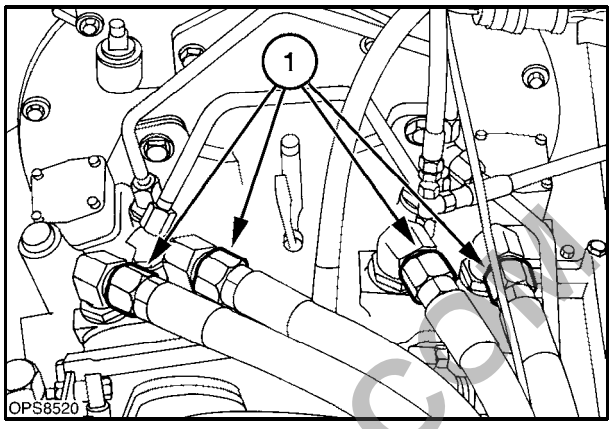
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6. Install a tee fitting, in the high-pressure loop being tested, at the pump outlet, 1.

IMPORTANT: *Check the hydraulic oil level and add if required to ensure sufficient oil for the test.*



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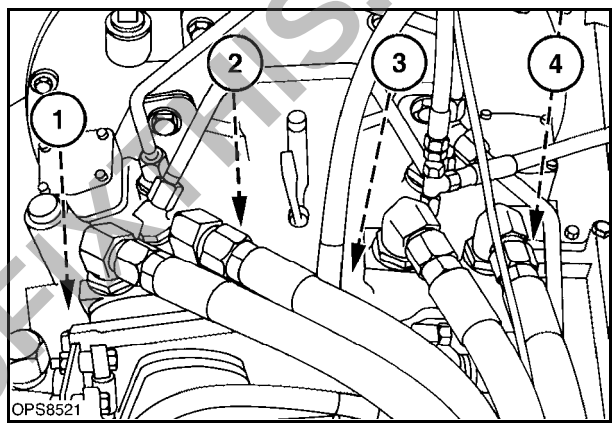
The following hydrostatic pump relief valves protect the forward and reverse direction of the hydrostatic drive motor (tire) rotation.

Right pump controls the right motor

1 - Forward
2 - Reverse

Left pump controls the left motor

3 - Reverse
4 - Forward



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7. Start the engine and run it at full throttle (2225 - 2275 RPM).
8. Stroke the hydrostatic lever on the side being tested and in the direction being tested, and take a pressure reading. The pressure should be 345 bar (5000 PSI). If the pressure is not at specification of 345 bar (5000 PSI), replace the suspect relief valve.

⚠ CAUTION ⚠

Always stay clear of moving parts during testing or serious injury could occur.

NOTE: *All four directional relief valves can be tested in this manner.*

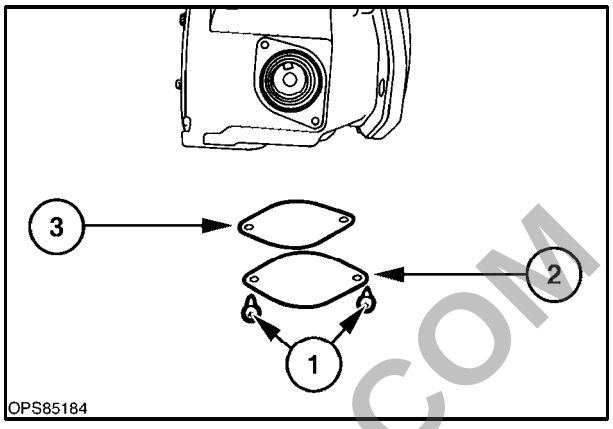
If the pressure is within specification, refer to the pump/motor case drain test for further testing to locate the problem.

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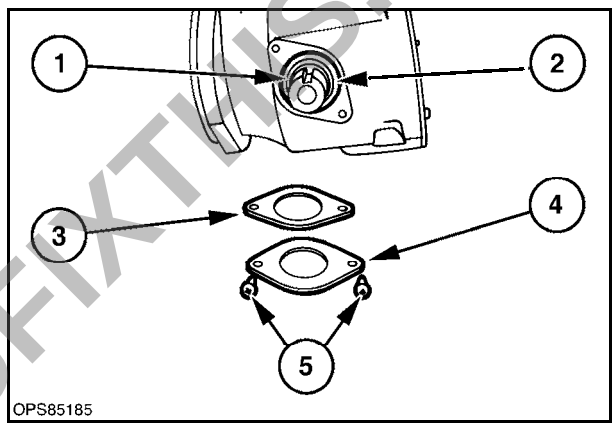
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f. Install gasket, 1, and trunnion cover plate, 2. Secure with two torx head screws, 3, on the stub shaft end of the camplate. Torque the screws to 4 - 5 N·m (36 - 48 in lbs.).



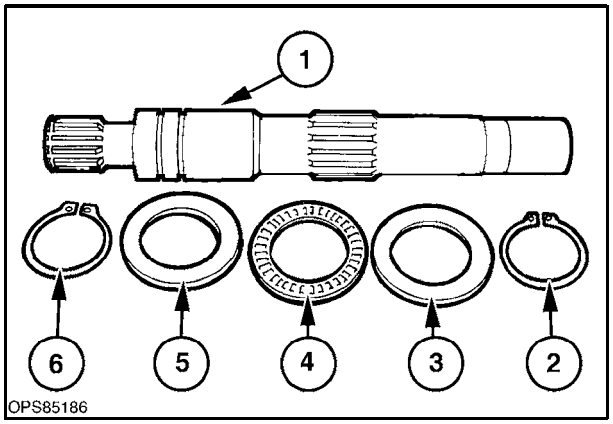
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g. Install flat washer, 1, new pintle shaft seal, 2, gasket, 3, and seal cover plate, 4. Secure with two torx head screws, 5, on the pintle shaft end of the camplate. Torque the screws to 4 - 5 N·m (36 - 48 in. lbs).



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6. Reassemble the motor drive shaft, 1, by installing a new retaining ring, 2; thrust washer, 3; thrust bearing, 4; and second thrust washer, 5. Secure with a second new retaining ring, 6.



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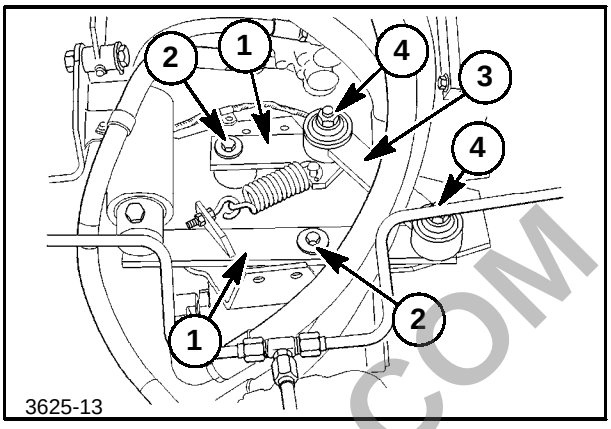
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High/Low Linkage Adjustment

1. Control arms, 1, clamped tight onto the motor cam plate shafts, 2.
2. Spring adjusted to the proper length.
3. Loosen the control link, 3, on the control arms at 4.
4. Rotate both control arms, 1, clockwise and hold firmly against the internal motor stops by the spring.
5. With both arms, 1, firmly against the internal motor stops, tighten link, 3, and retaining hardware, 4.



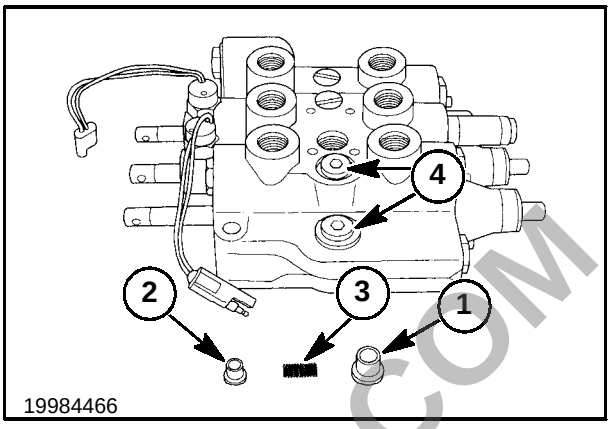
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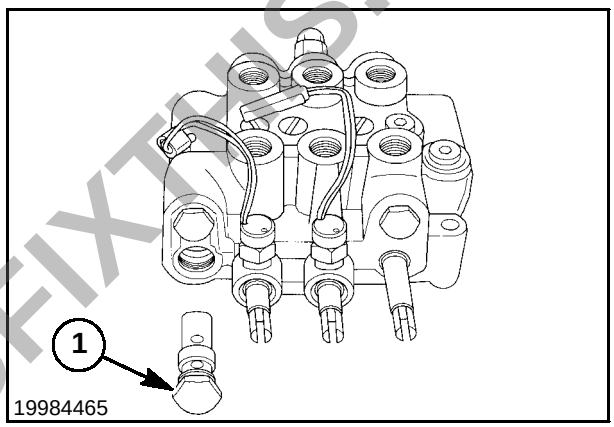
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14. Add O rings to the lift check valve caps, 1. Install the lift checks, 2, springs, 3, and caps.
15. Install the two caps, 4, with O rings into the valve body.



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16. Install an O ring on the main system relief valve, 1, and install into the valve body.



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SPECIFICATIONS

Drive Axles

Wheel Nut Torque . . . . . 170 N·m (125 ft. lbs.)

Mounting Bolt Torque (Axle housing to case) . . . . . 190 N·m (140 ft. lbs.)

Lubrication . . . . . High temperature lithium grease

Chain Case and Gearbox

Side Cover Bolt Torque . . . . . 11 ft. lbs. (15 N·m)

Drive Chain . . . . . #100

Front Chain Length (64 links) . . . . . 80″ (2032 mm)

Rear Chain Length – LS180 (58 links) . . . . . 72.5″ (1841.5 mm)

Rear Chain Length – LS190 (64 links) . . . . . 80″ (2032 mm)

Chain Tension . . . . . 0 to 6 mm (0″ to 1/4″) movement at tire tread

Other Materials

Description	Use
Ultra/Blue Silicone Sealer	Gearbox mounting bolts Axle housing bolts Chain case cover bolts Gearbox to chain case Gearbox cover and bolts
Sealing Material	NH Ultra Blue silicone sealer NH #L81724 - 3.35-oz. tube (cord) NH #L82519DS - 8-oz. tube NH #L58775 - 10.2-oz. cartridge
Gear Oil	80W-90 API Service GL-5 Gear Oil NH #9613295 - 1 qt. NH #9613294 - 5 gal. NH #9613375 - 4 L
Grease	High viscosity lithium base NH #9613310 - tube

NOTE: *Always use a noncorrosive silicone sealer to seal where required to prevent corrosion during the silicone curing process.*

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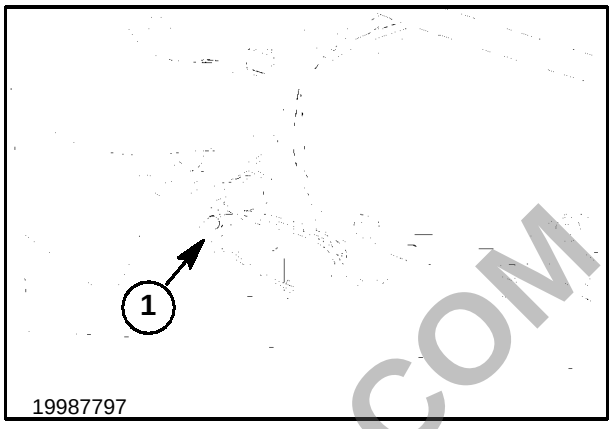
5. Coolant Temperature Sensor



Remove the PU/LTGN wire, 1, from the sensor and short the wire to ground.

The EIC board will light and beep when the wire is removed from the sender and grounded.

If the EIC board lights and beeps, the EIC and circuit wire to the sensor is OK. The problem is in the sensor; replace the sensor. If the EIC board fails to light and beep, check the wires from the sensor to the EIC board.



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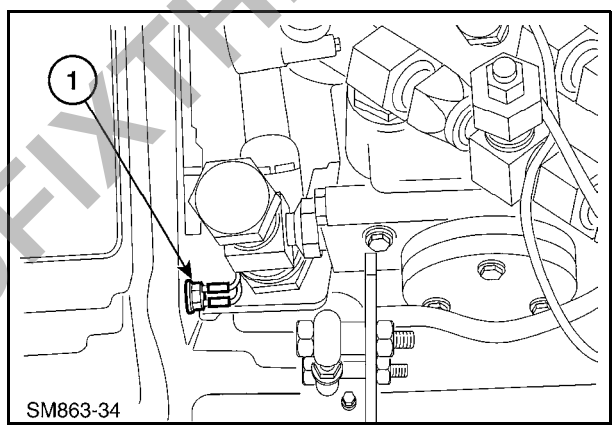
6. Transmission/Hydraulic Oil Temperature Sensor



Remove the PU/LTBL wire from the sensor, 1, and short the wire to ground.

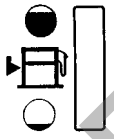
The EIC board will light and beep when the wire is removed from the sender and grounded.

If the EIC board lights and beeps, the EIC and circuit wire to the sensor is OK. The problem is in the sensor; replace the sensor. If the EIC board fails to light and beep, check the wires from the sensor to the EIC board.

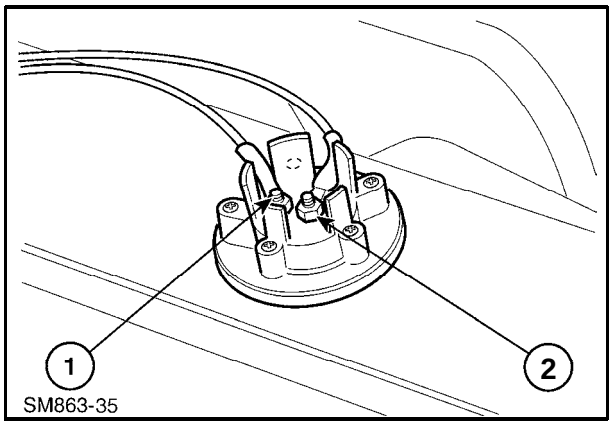


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7. Fuel Gauge



Disconnect one wire, 1, and use a jumper wire and connect sender terminal to other terminal, 2, and the EIC board will light and beep. If the EIC board lights and beeps, the EIC and circuit wires to the sender are OK. If the EIC board fails to light, check the wires to the EIC board.



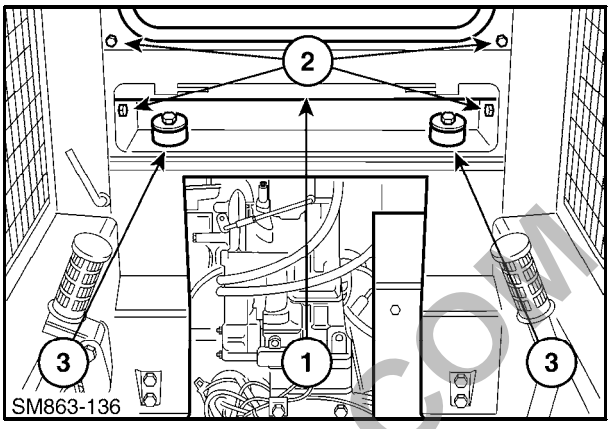
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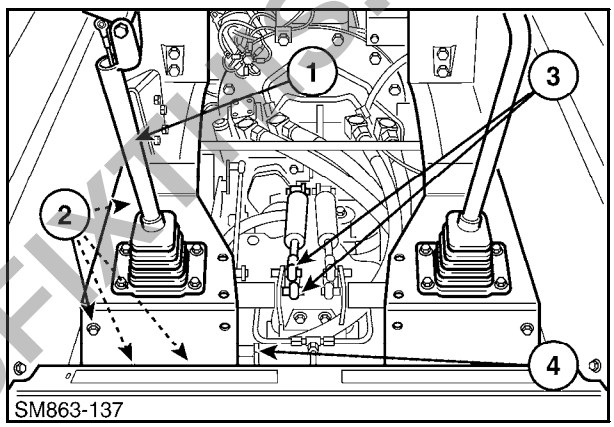
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15. Remove the rear seat support, 1, hardware at 2, and the isolator mount hardware, 3.



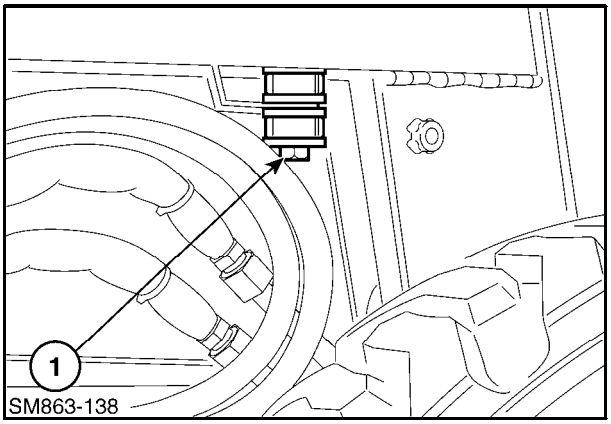
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16. Remove the right hydrostatic control handle assembly, 1, retaining hardware, 2. Unhook the hydrostatic control linkage, 3, and auxiliary boom hydraulic linkage, 4, (if equipped). Lift the control assembly from the loader.



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17. Remove the right fender to access and loosen the right front isolator mount bolt, 1.



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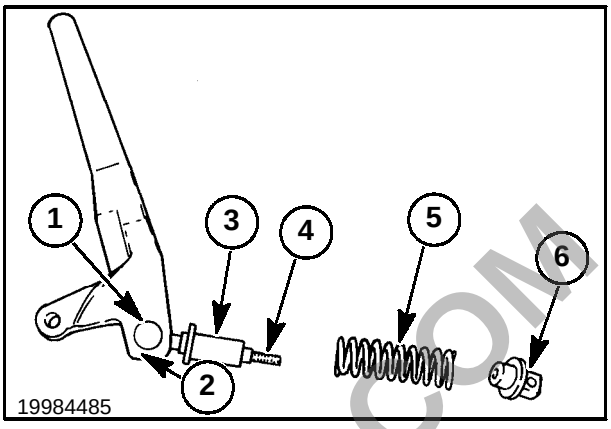
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Reassembly

1. Insert the pivot block, 1, and step bolt, 4, into the handle, 2. Install the upper spring guide, 3, onto step bolt, 4.

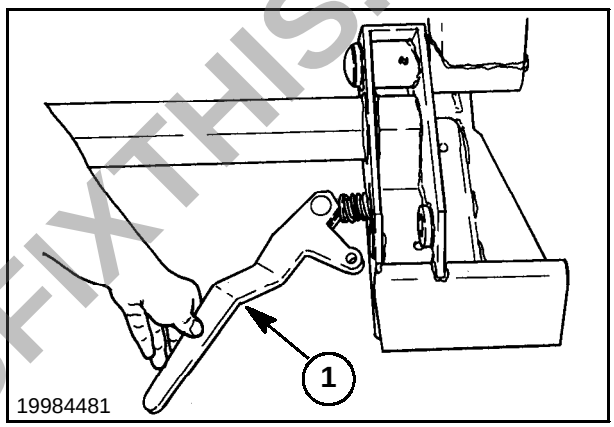
2. Install spring, 5, over the upper spring guide, 3. Install the lower spring guide, 6, onto step bolt, 4, and tighten.

NOTE: *Apply slight pressure to the lower spring guide to compress the spring slightly and start threading the lower guide onto the step bolt.*



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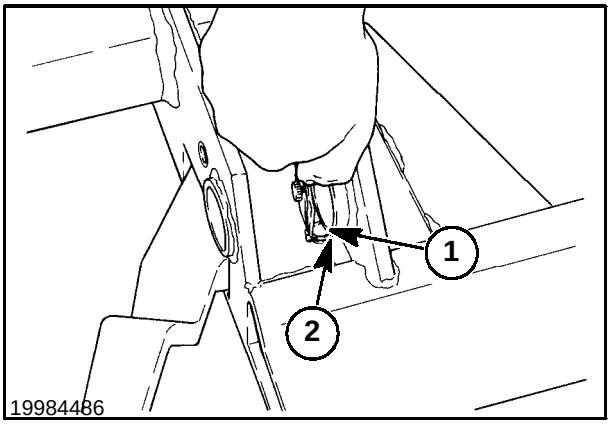
3. Slide the latch handle/spring assembly, 1, into the mounting plate, pointing the spring down.



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4. Install the handle pivot pin, 1, from the front of the plate and install the snap ring retaining clip, 2. The pivot pins will have a snap ring on both ends of the pins.

NOTE: *The handle pivot pin should have one snap ring retaining clip already installed prior to reinstallation in the attachment plate. If the snap ring retaining clip is not present, install the clip prior to pin installation.*



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