COMPACT LOADER WITH ACCESSORIES

SL65B

WORKSHOP MANUAL

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12602

IMPORTANT: *The information contained in this manual are valid at printing time. As the Manufacturer continuously improves his products, some information may not be updated. In case of discrepancies, apply to Sales and Service Department.*

FIAT KOBELCO CONSTRUCTION MACHINERY S.p.A. - ENGINEERING - PRINT 604.06.948.01
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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



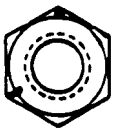
SAE GRADE 5



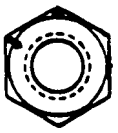
SAE GRADE 8



REGULAR NUTS



SAE GRADE 5 HEX NUTS



SAE GRADE 8 HEX NUTS

LOCKNUTS

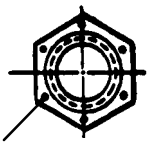


GRADE IDENTIFICATION

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	SL65B
CAPACITIES	
Cooling system	15.5 US. qt. (14.7 L)
Cooling system pressure	radiator cap 13 psi (89.5 kpa)
Engine crankcase w/filter	7 US. qt. (6.6L)
Fuel tank	18 US. Gal. (68 L)
Hydraulic system	11.3 US. Gal. (42.6 L)
Engine gearbox	1.4 US. qt. (1.32 L)
Common gearbox and final drive chain case (ea.)	9.6 US. 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
HYDRAULIC SYSTEM	
Pump - Make or type	Gear pump
Output	18.5 US. GPM (70 LPM) @2350 RPM @1000 PSI (68 bar)
Optional high flow	32.3 US. GPM (122.8 LPM) @ 2350 RPM @ 1000 PSI (68 bar)
Hydraulic system	11.3 US. 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)
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 Tyres	
Low range - MAX	7.2 MPH (11.6 KPH)
SL65B equipped with factory 2-speed	
High range - MAX	11.4 MPH (18.3 KPH)

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TROUBLESHOOTING - SL65B

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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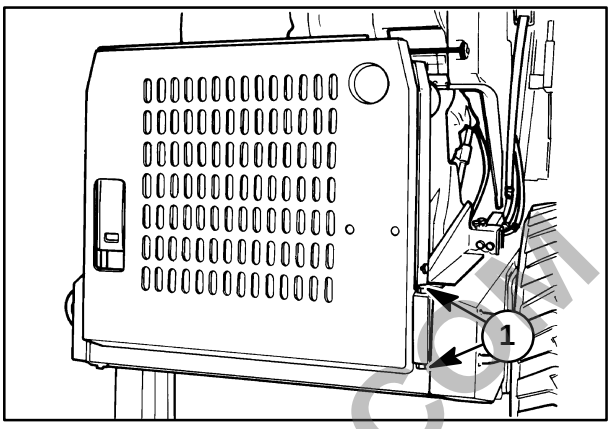
ENGINE REMOVAL BY TILTING THE CAB AND BOOM FORWARD - SL65B

1. Securely block the skid steer loader with all four wheels off the ground. Refer to Section 00 for more detailed information on properly supporting the skid steer loader.

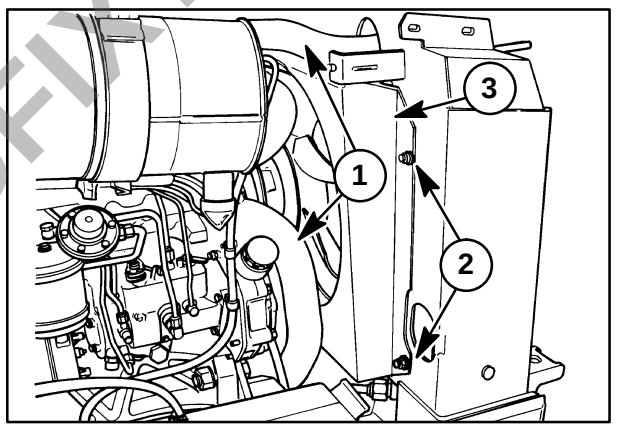
⚠ CAUTION ⚠

Failure to securely support the skid steer loader could result in movement of the loader causing serious injury or damage to the equipment.

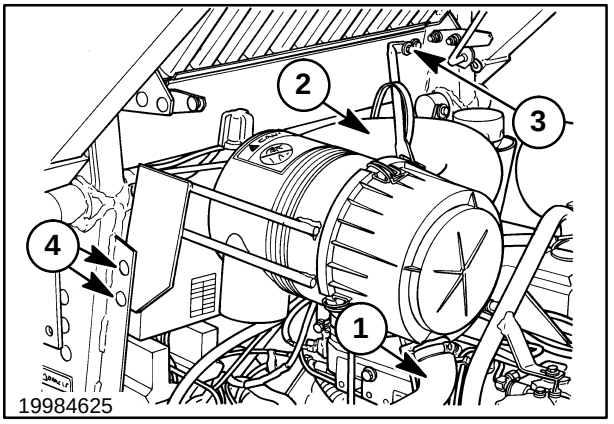
2. Tilt cab and boom forward. Refer to Section 00 for more detailed information on this procedure.
3. Remove the battery. Refer to Section 55 for the battery removal procedure.
4. Open the rear door and disconnect the radiator overflow hose at the overflow tank. Remove the cap screw and nut, 1. Remove the rear door.
5. Drain the engine cooling system.
6. Remove the upper and lower radiator hoses, 1, from the engine block and plug the hoses with plastic plugs.
7. Remove cap screws and nuts, 2. Slide fan shroud, 3, forward to access the oil cooler line connection.
8. Disconnect the oil cooler bottom left line and cap to prevent loss of oil.
9. Disconnect the air hoses, 1 and 2. Remove support rod hardware at 3. Remove air cleaner canister support hardware at 4.



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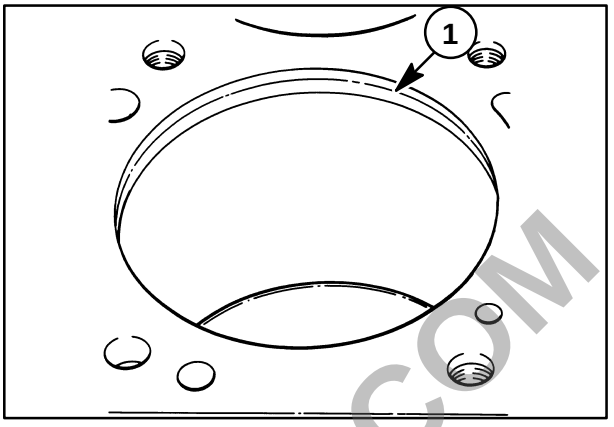
CYLINDER BLOCK, PISTONS, RINGS, RODS AND BEARINGS

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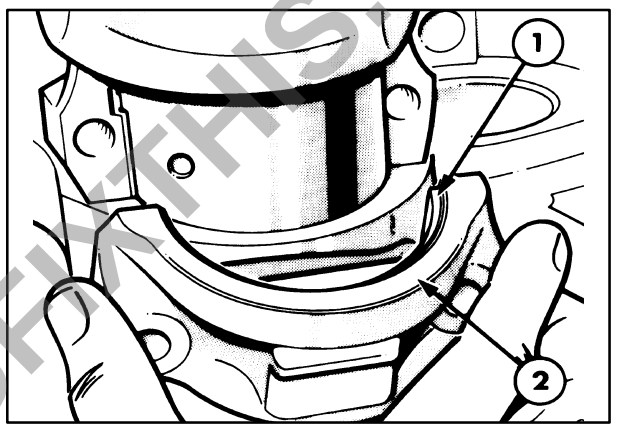
Removal

NOTE: *The connecting rods and pistons can only be removed after prior removal of the engine cylinder head, oil pan and oil pump assembly as described in this section.*

1. If necessary, remove any ridge from the top of the cylinder bores with a cylinder ridge, 1, reamer or hand scraper. Do not cut down into the piston ring travel area.
2. With the piston at the bottom of its stroke, remove the nuts from the bearing cap bolts and remove the bearing cap, 2, and liner, 1.
3. Use the handle end of a hammer to push the piston and rod assembly out of the top of the block. Remove the bearing liner from the connecting rod.
4. Turn the crankshaft to bring each piston to the bottom of its stroke and repeat this procedure. Keep the bearing caps and liners with their respective connecting rods.



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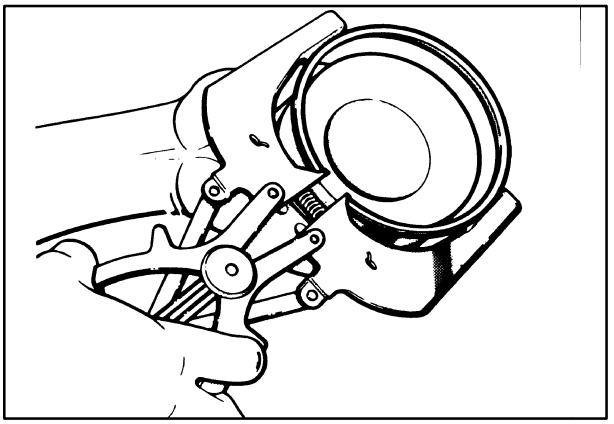


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Disassembly

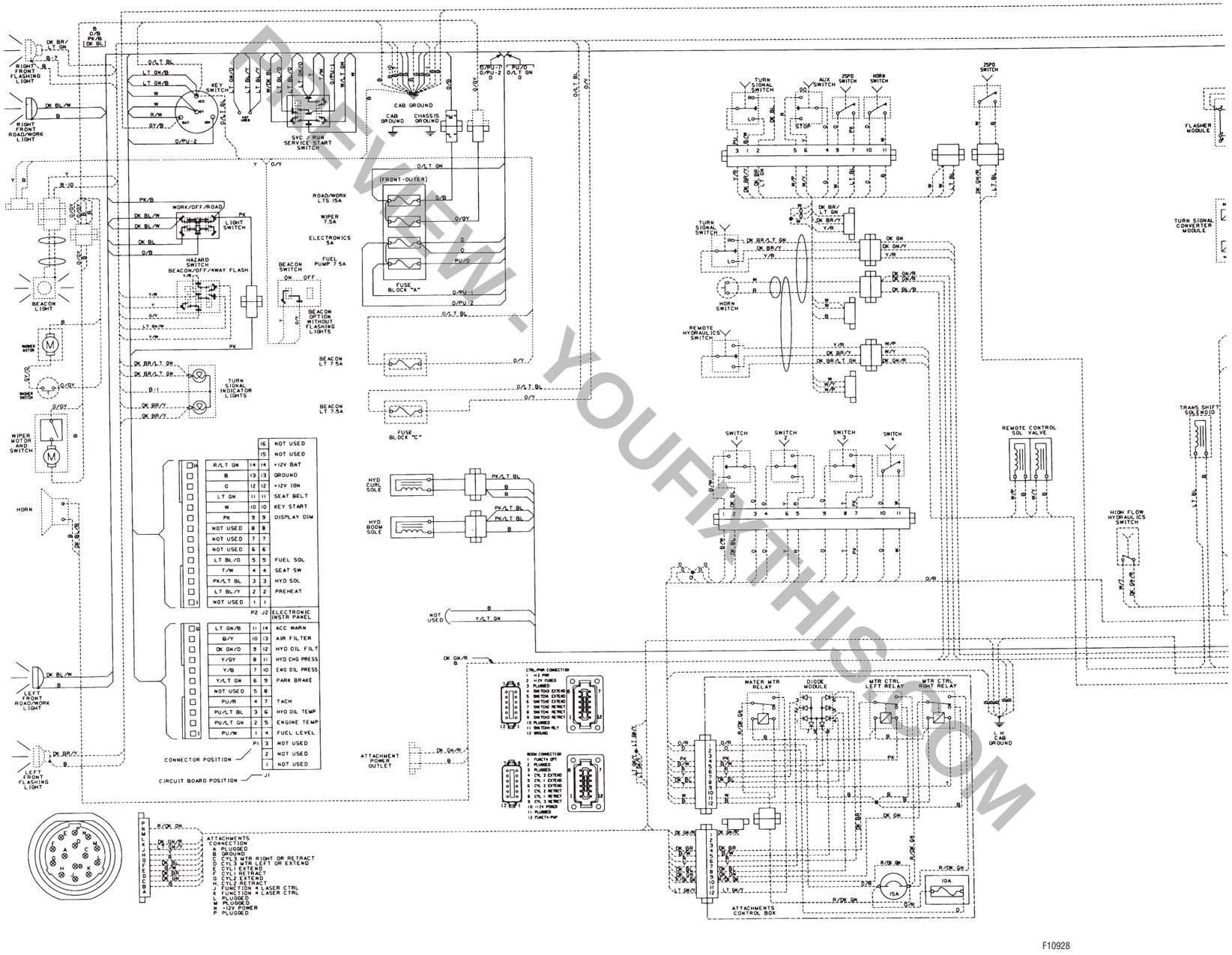
1. Remove the piston pin retainer (snap ring) from each side of the piston and remove the pin.
2. Use an expander to remove the piston rings.



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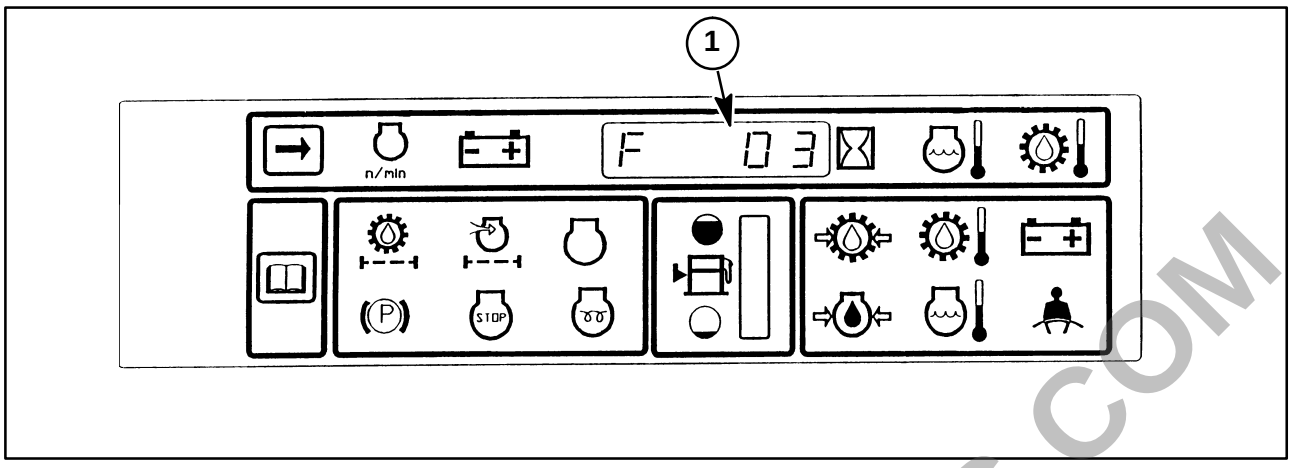
R/LT GN	14	14	+12V BAT
B	13	13	GROUND
O	12	12	+12V IGN
LT GN	11	11	SEAT BELT
W	10	10	KEY START
PK	9	9	DISPLAY DIM
NOT USED	8	8	
NOT USED	7	7	
NOT USED	6	6	
LT BL/O	5	5	FUEL SOL
T/W	4	4	SEAT SW
PK/LT BL	3	3	HYD SOL
LT BL/Y	2	2	PREHEAT
NOT USED	1	1	

LT GN/B	11	14	ACC WARN
B/Y	10	13	AIR FILTER
DK GN/O	9	12	HYD OIL FILT
Y/GY	8	11	HYD CHG PRESS
Y/B	7	10	ENG OIL PRESS
Y/LT GN	6	9	PARK BRAKE
NOT USED	5	8	
PU/R	4	7	TACH
PU/LT BL	3	6	HYD OIL TEMP
PU/LT GN	2	5	ENGINE TEMP
PU/W	1	4	FUEL LEVEL
	P1	3	NOT USED
		2	NOT USED
		1	NOT USED

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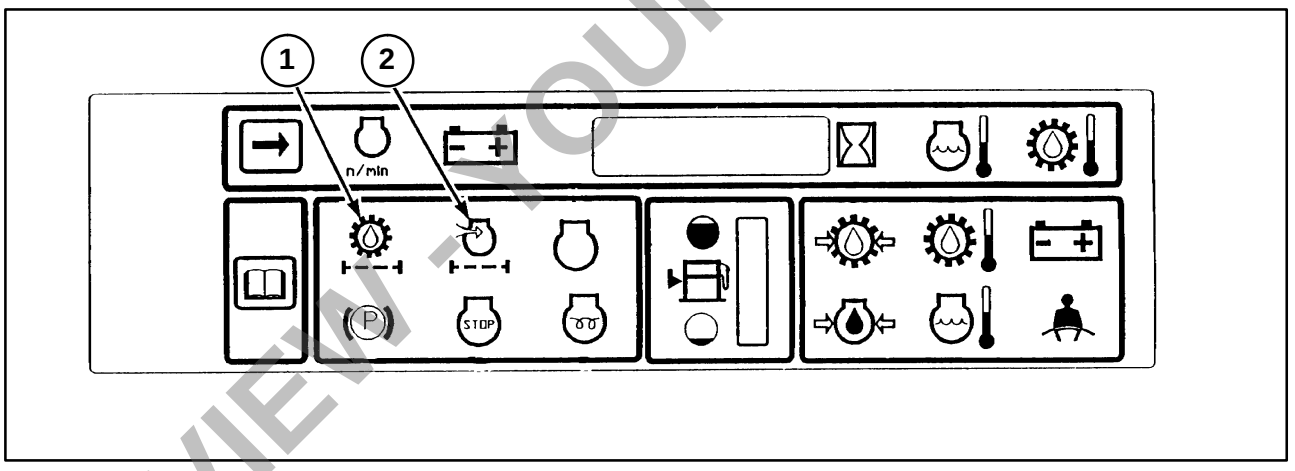
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If a fault occurs in the following monitored functions a fault code will appear in the EIC character display, 1, accompanied by a five second audible alarm. By turning the ignition key switch to the “OFF” position the EIC will return to the normal operating mode. If when the loader is restarted and the fault still exists, the code will reappear with an alarm indicating there is an open or short in that circuit. Contact your New Holland dealer for assistance.

FAULT	CODE
Hydraulic Boom/Bucket Solenoid	(F0A)
Engine Preheat Relay Coil	(F03)
Fuel Solenoid	(F04)



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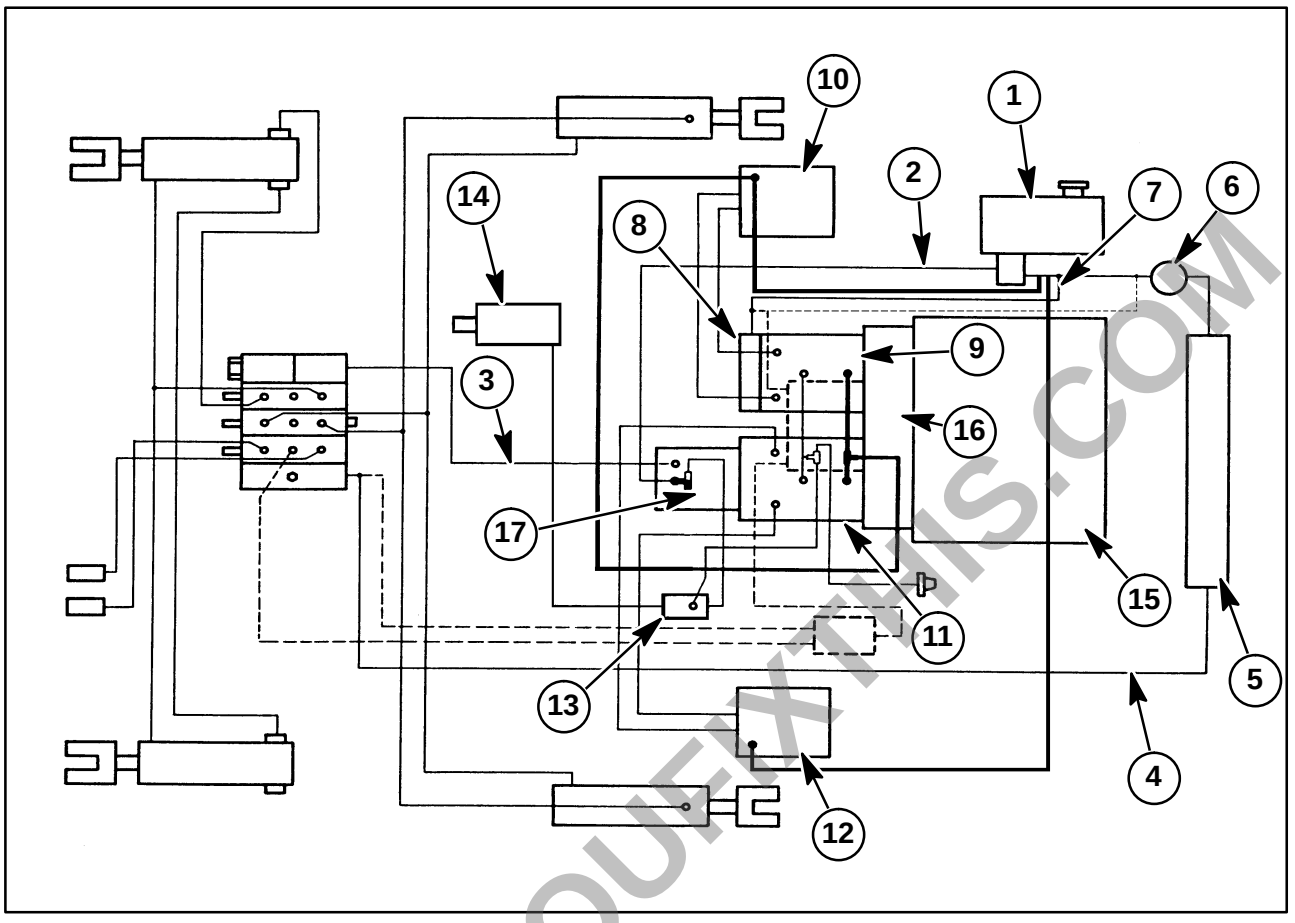
If a fault occurs in the following monitored functions the EIC will signal the operator with a flashing light accompanied by a five second audible alarm indicating the filter(s) require service.

FAULT

1. Hydraulic Oil Filter
2. Engine Air Cleaner

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Hydrostatic System Components:

1. Hydraulic reservoir - Right front of engine compartment.
2. Suction line - From the reservoir to the gear pump under the operator's seat.
3. Pressure line - From the gear pump to the control valve.
4. Return line - From the control valve to the oil cooler.
5. Oil cooler - Engine side of radiator in engine compartment.
6. Oil filter - After the oil cooler at the engine compartment rear door.
7. Charge pump suction line - From tee in the line from the oil filter to the hydrostatic charge pump.
8. Hydrostatic charge pump - Attached to the front of the right hydrostatic pump.
9. Hydrostatic pump for right drive - Under operator's seat.
10. Hydrostatic motor for right drive - Attached to the right gearbox assembly.
11. Hydrostatic pump for left drive - Under operator's seat.
12. Hydrostatic motor for left drive - Attached to the left gearbox assembly.
13. Two-Speed high/low control valve, if equipped.
14. Two-Speed high/low shift cylinder, if equipped.
15. Engine.
16. Engine to transmission gearbox.
17. Hydraulic gear pump.

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AVOID ACCIDENTS

Most accidents, whether they occur in industry, on the farm, at home or on the highway, are caused by the failure of some individuals to follow simple and fundamental safety rules or precautions. For this reason MOST ACCIDENTS CAN BE PREVENTED by recognising the real cause and doing something about it before the accident occurs.
Regardless of the care used in the design and construction of any type of equipment there are conditions that cannot be completely safeguarded against without interfering with reasonable accessibility and efficient operation.
Carefully read indications, cautions and safety warning quoted in the "SAFETY RULES" section.
A careful operator is the best insurance against an accident.
The complete observance of one simple rule would prevent many thousand serious injuries each year.
That rule is:
Never attempt to clean, oil or adjust a machine while it is in motion.

ATTENTION

On machines having hydraulically, mechanically and/or cable controlled equipment (such as showels, loaders, dozers, scrapers etc.) be certain the equipment is lowered to the ground before servicing, adjusting and/or repairing.
If it is necessary to have the equipment partially or fully raised to gain access to certain items, be sure the equipment is suitably supported by means other than the hydraulic lift cylinders, cable and/or mechanical device used for controlling the equipment.

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SECTION 10 – ENGINE

Chapter 1 – SL65B - 332T/JF

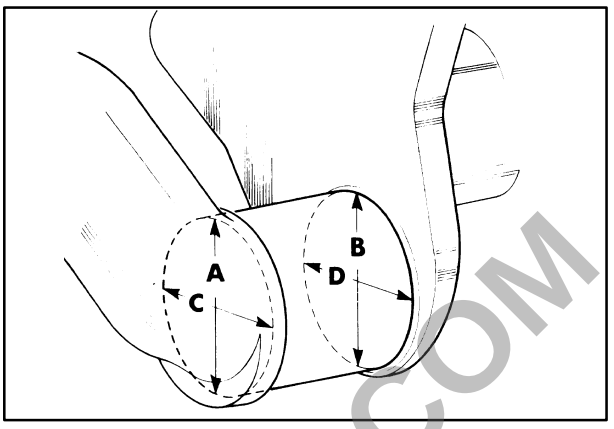
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3. Measure the diameter of each journal in four places to determine out-of-round taper or wear. Measurement A compared with B indicates vertical taper while measurement C compared with D indicates horizontal taper. Measurements A and B compared with C and D indicate journal out-of-round. If the journal exceeds the specified wear limit, refinish the journals to the next undersize bearing. See “Specifications Service Standards” in this section. Always reproduce the original journal side radii and after refinishing, chamfer the oil holes.
4. Examine the rear oil seal journal for score marks. Remove minor imperfections with fine emery cloth and, if severely damaged, replace the crankshaft.



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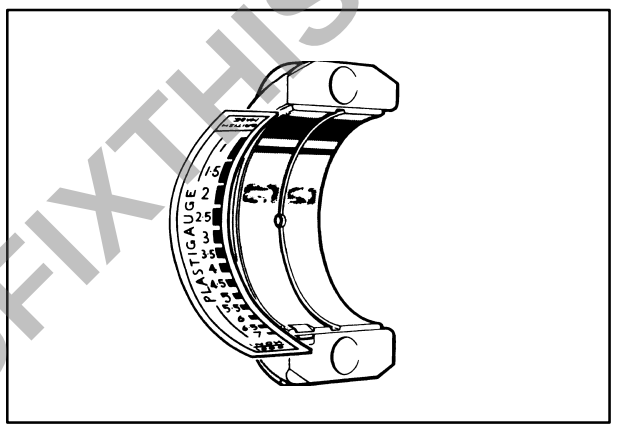
Reassembly

1. Check the crankshaft bearing clearance with micrometers or preferably using Plastigauge as follows:

   Position a piece of correct size Plastigauge across the full width of the bearing cap and approximately 6.0 mm (0.25″) off center.

   Install the cap and tighten the bolts to the specified torque.

   Remove the cap and use the scale to check the width of the flattened Plastigauge. The width of the Plastigauge at the widest point establishes the minimum clearance and, at the narrowest point, the maximum clearance. The difference between the two readings is the taper.



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NOTE: *Normally, main bearing journals wear evenly and will not be out-of-round. However, if a liner is fitted to an out-of-round journal which is within specifications, be sure to fit the bearing to the maximum diameter of the journal.*

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The oil blow-by is not staying inside the hose and tubing, but it is leaking to the outside surfaces, where it collects dirt and gives the appearance that something has failed. Oil leaking at this connection will also give the appearance that there is an oil leak between the turbine housing and the compressor housing at the retaining ring and O ring.

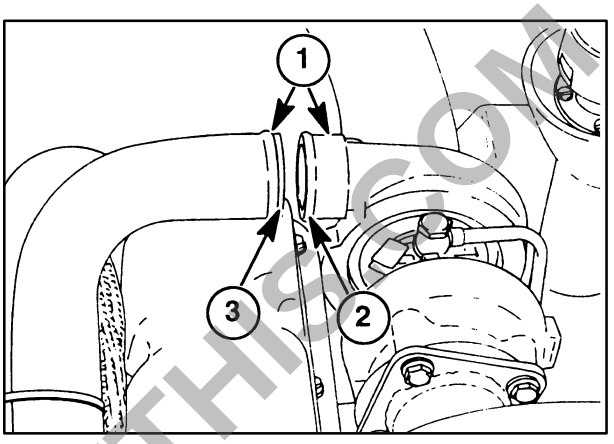
To correct a leak, remove the hose from the turbocharger and tube at 1, and thoroughly clean the connections. Remove and discard the original hose clamps. These clamps are not properly seating and sealing the hose to the rough casting of the turbocharger or steel tube.

NOTE: *When the hose is removed, there may be evidence of oil at this connection and inside of the hose and tube. This is normal in the skid steer application.*

Order and install two (2) new hose clamps, part #58880, and tighten them to 35 in. lbs.

Install the hose and clamp onto the turbocharger at 1, half the length of hose, making sure that the hose is positioned to allow enough area of hose past the rolled edge on the turbocharger at 2, to insure the hose clamp will properly seat the hose to the turbocharger.

Install the hose and clamp onto the crossover tube at 3, making sure the tube is fully inserted into the hose so the hose clamp will seal the hose and tube past the rolled edge on the tube.



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HYDROSTATIC DRIVE SYSTEM TESTING

Hand controls - forward and reverse

Pre-test instructions:

* Operator in seat
* Seat belt buckled
* Service/Run switch in “RUN” position
* Key switch in the “OFF” position

STEP	TEST	RESULT	PROBABLE CAUSE AND CORRECTION
1	Levers should move freely	NO YES	Check control linkage from levers to the pumps. System OK
2	Stroke both levers forward or reverse, the levers should return to neutral position	YES NO	System OK Check neutralizer system for binding or adjustment.
3	Stroke both levers forward or reverse and release one lever, both levers should stay in direction stroked	YES NO	System OK Check neutralizer system for binding or adjustment

Hand controls - forward and reverse

Pre-test instructions:

* Operator in seat
* Seat belt buckled
* Service/Run switch in “RUN” position
* Parking brake disengaged
* Key switch in the “RUN” position
* Engine operating at low idle speed

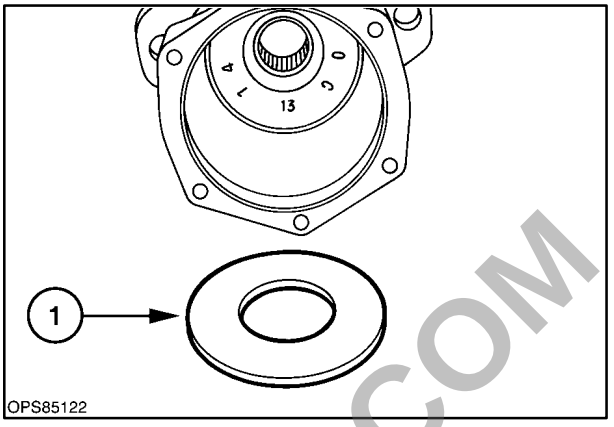
STEP	TEST	RESULT	PROBABLE CAUSE AND CORRECTION
1	Control levers in neutral, unit should not move	YES NO	System OK Check and adjust for neutral
2	Stroke both levers forward or reverse, unit should accelerate smoothly	YES NO	System OK Check for loose or damaged control linkage, if OK go to next step.
3			Check hydraulic oil level and add as required, if OK go to next step.
4			Check hydrostatic hoses, tubing, and connections for leaks, if OK go to next step.
5			Check parking brake for being engaged or correct adjustment, if OK go to next step.
6			Check hydrostatic charge pressure, if OK go to next step.
7			Check forward or reverse relief valve operation and pressure settings.
8	Control levers in neutral park brake engaged, pumps should be quiet	YES NO	Control System OK Check and adjust for neutral, if OK go to next step.
9			Check for loose or damaged control linkage, if OK go to next step.
10	Control levers in full forward, machine should go in straight line	YES NO	Control System OK Reset control lever stops

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Camplate

1. Shoes of the motor pistons rotate at high speeds against the camplate surface at, 1. The surface must be smooth with no metal flaked away and no scoring. Circular scratches centered on the machined surface are due to contamination. If scratches can be felt with your thumbnail, replace the camplate.
2. Check the camplate surface for smearing. The surface must be smooth and bright with no discoloration or brass color on the flat surface.

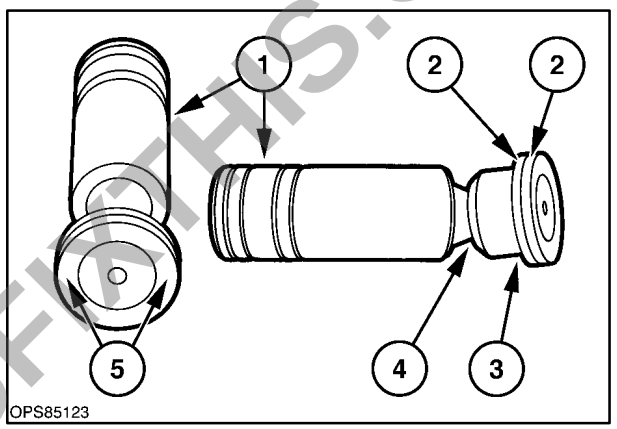


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Shoe and Piston Assemblies

Replace the rotating group if:

1. The piston skirt area, 1, shows signs of scratches or wear.
2. The edges of the shoes, 2, are worn (shoe roll) from contact with the camplate.
3. There is wear on the underside of the slipper, between the slipper and shoe plate at 3.
4. The shoes have a loose, sloppy fit on the ball end of the piston at 4.
5. The flat surfaces of the shoes, 5, show metal flaking or deeply scratched. Light or shallow scratches in the shoes will not cause any harm. Do not lap the shoes.



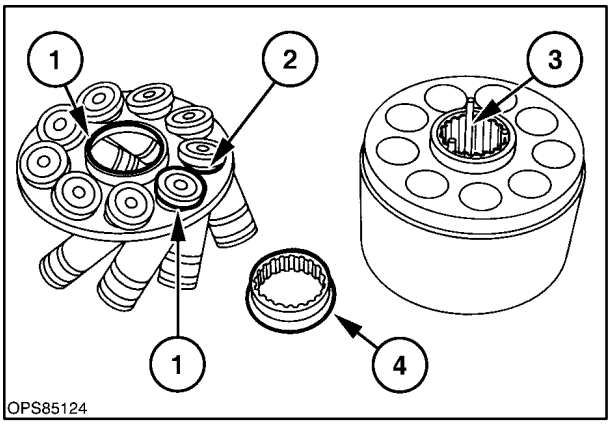
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Piston Plate (Spider)

1. Check for cracks at the holes for the spherical washer and shoes at 1. The shoe plate is only available as part of the rotating group.
2. Check for wear in the area of the slippers, 2. This area should be flat smooth and have no grooves.
3. Check the internal splines of the piston block, 3, for wear.

Spherical Washer (Pivot), 4

1. Check for wear on the top surface where the piston plate fits. The spherical washer is only available as part of the rotating group.
2. Check the sides or rolled area for cracks.

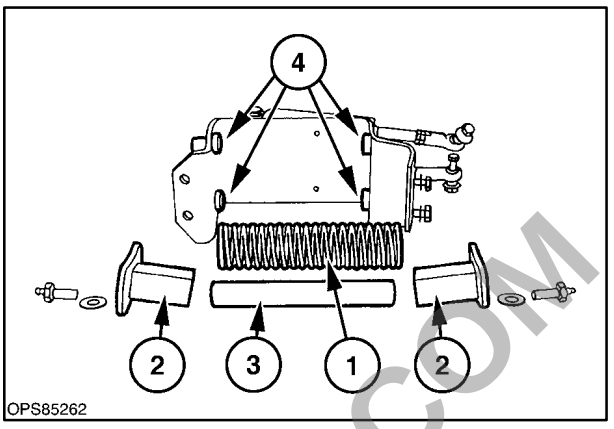


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6. Carefully remove the neutralizer spring, 1, the spring guides, 2, and shaft, 3.
7. Remove the four neutralizer rod bushings, 4, and set with the rod assemblies for inspection.

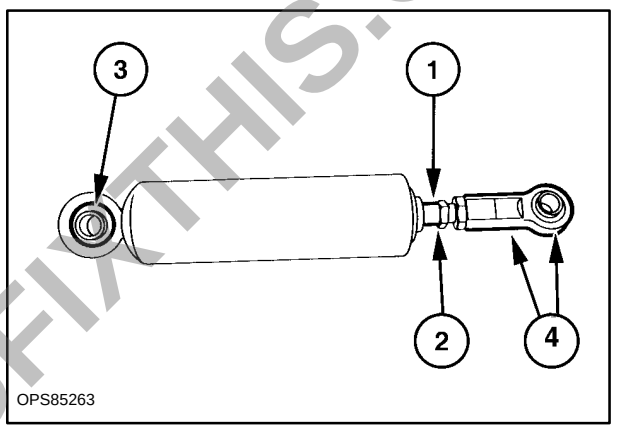


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INSPECTION

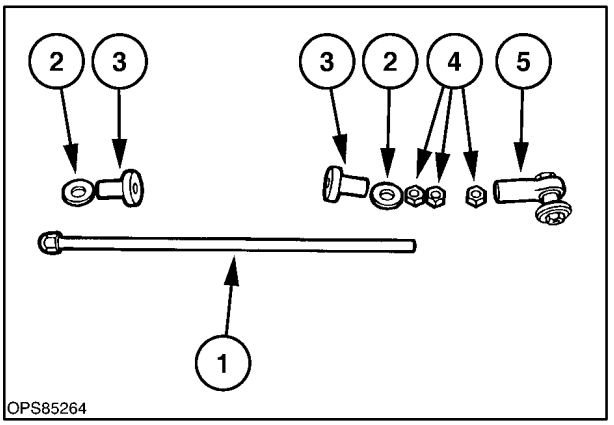
Thoroughly clean all parts before inspection.

1. Inspect the dampener shocks for equal pressures for both extending and retracting. Check for leakage around the rod seals at 1.
2. Check for a bent piston rod, 2, and for any binding.
3. Check the rubber bushing, 3, for wear and damage.
4. Replace dampener shock if worn or damaged.
5. Check the ball joint end, 4, for looseness and wear. Replace if worn.



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6. The neutralizer rod assembly consists of the following parts:
   a. Neutralizer rod, 1.
   b. Flat washers, 2.
   c. Nylatron bushings, 3.
   d. Jam nuts, 4.
   e. Ball joint end, 5.



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SPECIFICATIONS

MAIN CONTROL VALVE

Type . . . . . 3-spool open center

Relief Valve . . . . . 170-176.8 bar (2500 PSI-2600 PSI) Nonadjustable

Circuit Relief (boom) . . . . . 238 bar (3500 PSI) Nonadjustable

Electrical solenoid boom and bucket spool locks (controlled by the EIC) will lock the control valve spools when the operator is out of the seat or the ignition key is in the “OFF” position with the spools in the neutral position.

HYDRAULIC PUMP

Type . . . . . Gear pump

Output @ 2225 RPM - @ 1000PSI . . . . . 66.6 LPM (17.6 US. GPM)

BOOM CYLINDERS - SL65B

Type . . . . . Double Acting

Bore Diameter . . . . . 63.5 mm (2.50″)

Stroke . . . . . 611.12 mm (24.06″)

Cycle Times (Seconds)
- Raise 3.6
- Lower 1.5

BUCKET CYLINDERS - SL65B

Type . . . . . .Double Acting

Bore Diameter . . . . . 63.5 mm (2.50•)

Stroke . . . . . 447.04 mm (17.60•)

Cycle Times (Seconds)
- Raise 1.8
- Lower 2.4

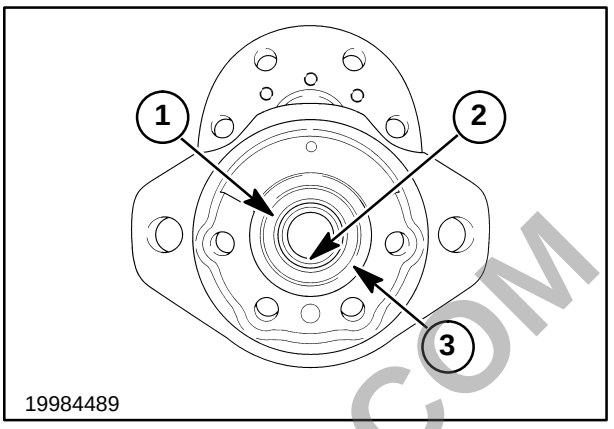
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REASSEMBLY

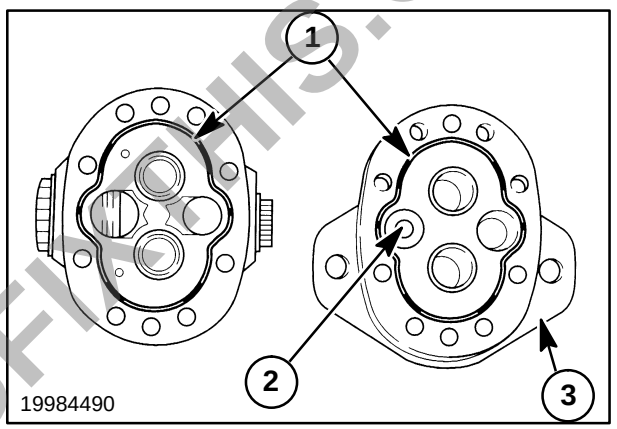
1. Coat all parts with a thin coat of petroleum jelly or oil to aid in reassembly.
2. Install a new washer, 1, and shaft seal, 2, in the pump front plate (drive end), 3. The seal is pressed into the housing to a depth of 6.35 mm (0.25″) from the outer seal housing lip.

NOTE: *Once the seal is installed, make sure that the washer can rotate freely. If the washer cannot rotate, reinstall the seal to a lesser depth to obtain freedom of movement for the washer.*



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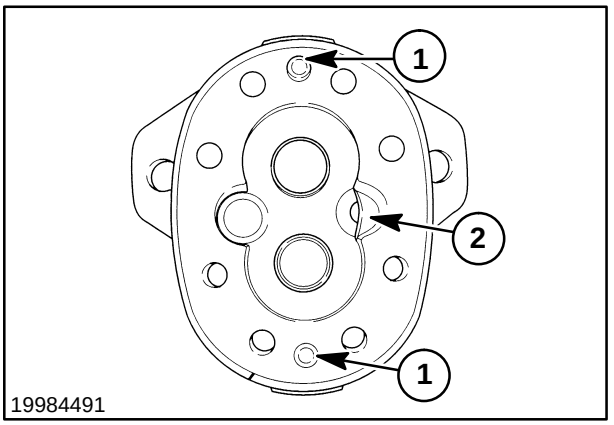
3. Install new O rings, 1, in the pump front and back plates. Ensure that the plug, 2, is installed on the pressure side of the pump front plate (drive end), 3.



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4. Make sure the dowel pins, 1, are in place and install the body on the pump front plate (drive end) with the half-moon cavities in the body facing away from the pump front plate. Check that the reference marks made during disassembly align correctly.

NOTE: *The small half-moon cavity, 2, must be on the pressure side (plugged side) of the pump.*



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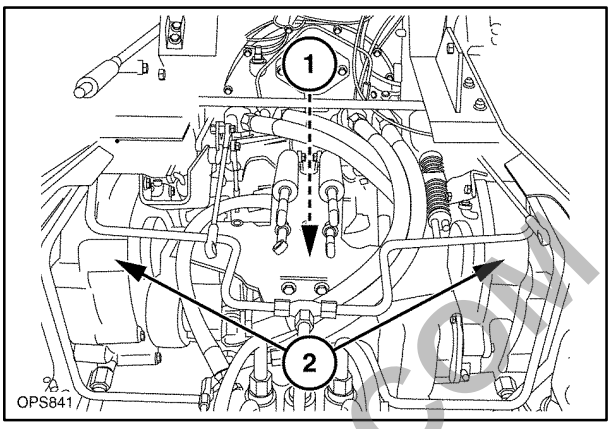
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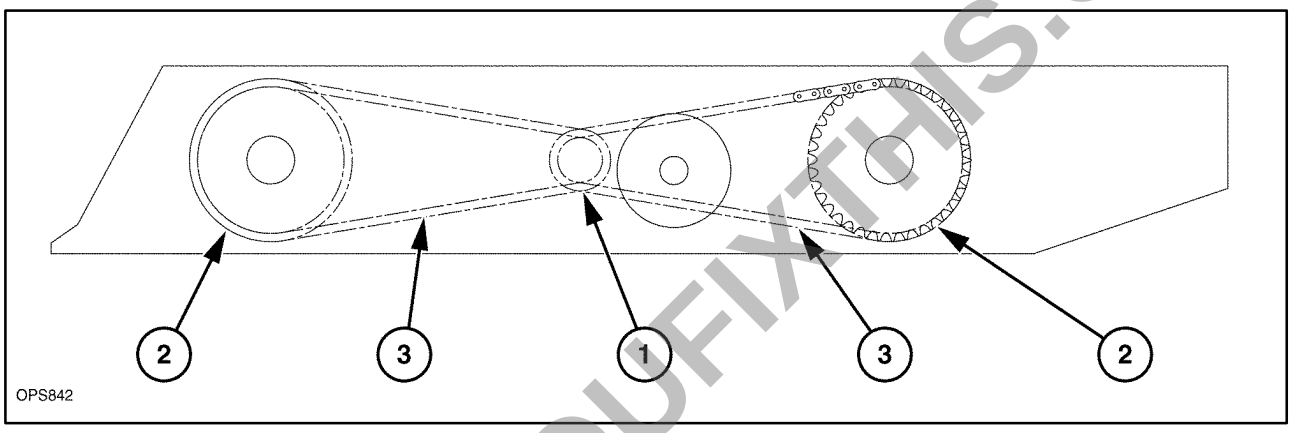
Op. 44 100

GENERAL INFORMATION

Each of the two hydrostatic pumps is driven by the engine through a spur gear configuration located in the engine-to-transmission gearbox. The hydrostatic pumps then transmit hydraulic power to the hydrostatic motors, 1, which are connected to gearboxes, 2, located on the inside of the final drive cases. The left and right drives are separate from each other and are operated independently.



1

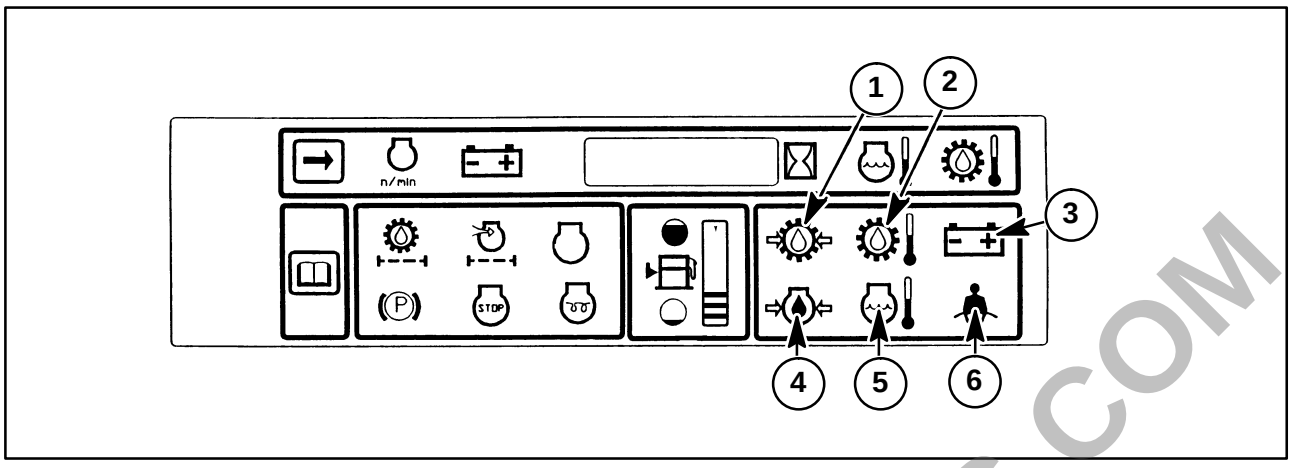


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Power is then transmitted through gears to a drive sprocket, 1, in the final drive case. The drive sprocket is connected to the axle sprockets, 2, with chains, 3, one endless chain to the front axle and one endless chain to the rear axle.

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FUNCTIONAL GROUP 4

Symbols in display group 4 are backlighted red.

When a fault occurs, the flashing lamp is accompanied by the audible alarm.



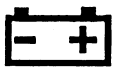
1. Transmission charge pressure.

   When the pressure drops below normal operating pressure, the lamp will flash with a continuous alarm.



2. Transmission/Hydraulic oil temperature.

   When the oil temperature is above operating temperature of 99°C (210° F), the lamp will flash with a 5-second alarm.



3. Battery voltage.

   When battery voltage drops below normal voltage, the lamp will flash with a 5-second alarm.



4. Engine oil pressure.

   When the engine oil pressure drops below normal pressure, the lamp will flash with a continuous alarm.



5. Coolant temperature.

   When the engine coolant temperature is above operating temperature of 102°C (216°F) the lamp will flash with a 5-second alarm.



6. Operator “FASTEN SEAT BELT” symbol.

   When the operator is in the seat, the lamp will flash until the seat belt is fastened.

   These symbols are backlighted RED and are intended to complement the audible alarm should a fault occur.

7. Alternator/water pump drive belt warning.

   If the drive belt breaks, the EIC will signal the operator with the battery symbol light, 3, flashing continuously and a 5 second audible alarm.

NOTE: *If during skid steer operation the Engine Coolant or Hydraulic Oil Temperatures show an overheat condition, the EIC will default to that function and read the temperature. When this happens, back off on loader operation and allow the systems to cool down to within normal operating temperature ranges. If the temperatures don’t cool down, stop operating the unit, find the cause and correct.*

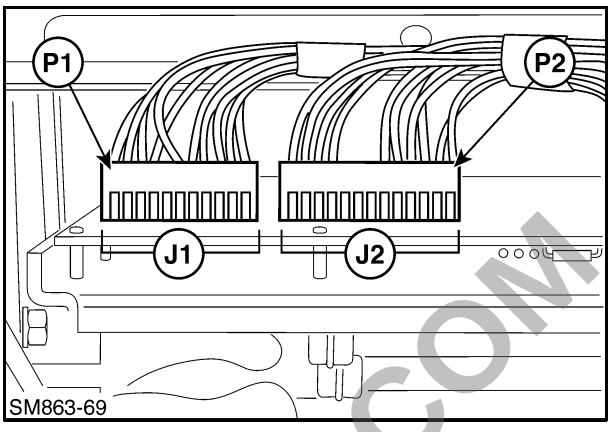
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EIC (ELECTRONIC INSTRUMENT CLUSTER) BOARD INSTALLATION

1. Connect the wire harness connectors P1 to J1 and P2 to J2 on the EIC board, making sure the connectors are properly aligned and fully seated.

IMPORTANT: *If the connector is not connected correctly, damage to the EIC may occur:*
1. Board circuits burned out.
2. Display will not light up.
3. Board memory may be lost.

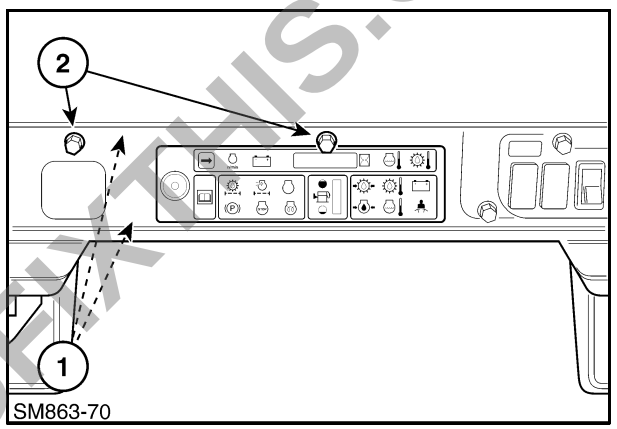


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2. Position the EIC board into the overhead dash flat against the support at 1, and secure with the hardware previously removed at 2. Make sure that wires are not pinched between the EIC board and dash frame.

IMPORTANT: *Do not force the EIC board into the overhead dash area or damage to the EIC board may occur.*

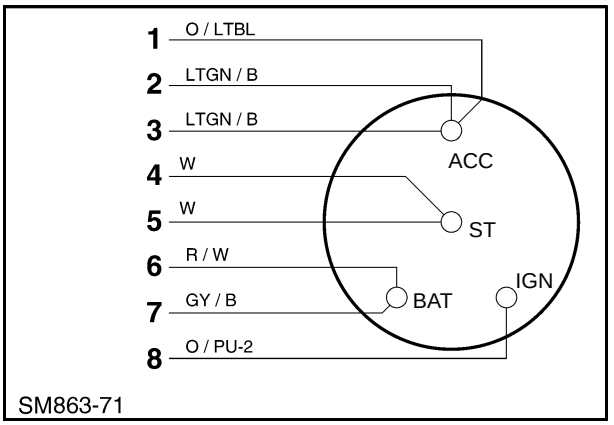
3. Reconnect the negative (-) battery cable.



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IGNITION (KEY) SWITCH WIRING

Ref	Color	Destination	Battery Voltage
1	O/LTBL	To Four-Way Flashing lights 10A Fuse (cab panel)- To Beacon Light 7.5A Fuse (cab panel)	Key “ON” position
2	LTGN/B	To EIC Board Pin #11 (small connector)	Key “ON” position
3	LTGN/B	To Accessory Relay (engine panel)	Key “ON” position
4	W	To Service/Run Switch	Key “START” position
5	W	To EIC Board Pin #10 (large connector)	Key “START” position
6	R/W	From 15A Fuse (engine panel)	All times
7	GY/B	Power to dome light (not available)	All times
8	O/PU-2	To Electronics 5A Fuse (cab panel)	Key “ON” position



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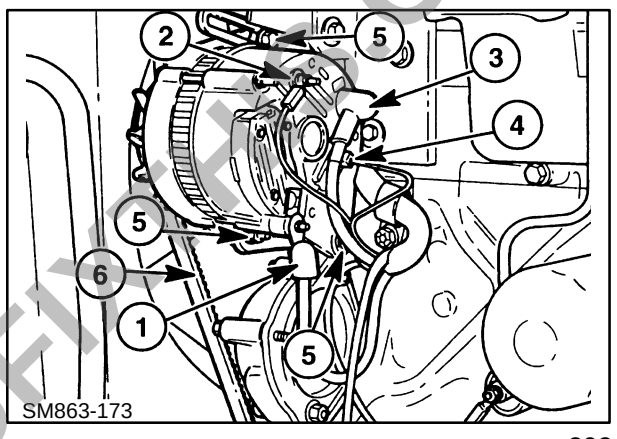
1. Reassembly of the alternator follows the disassembly process in reverse.

   On reassembly, observe the following precautions:

   – Use a low-wattage soldering iron and a heat sink when connecting the stator leads to the rectifier assembly to avoid damaging the diodes.
   – To avoid misalignment of the end brackets, install the stator assembly in the front-end bracket and then assemble the rear-end bracket to the stator assembly.

REINSTALLATION

1. Installation of the alternator is the reverse of the removal procedure.
2. Install the mounting bolts, nuts, and lock washers, 5. Install belt, 6.
3. Connect the RED/DKBL wiring lead, 3, to terminal B+ and PUR/RED wiring lead, 2, to terminal, W.
4. Reconnect BLK wiring lead, 1, and YEL/DKBL electrical connector to 4.
5. Reconnect the negative battery cable.



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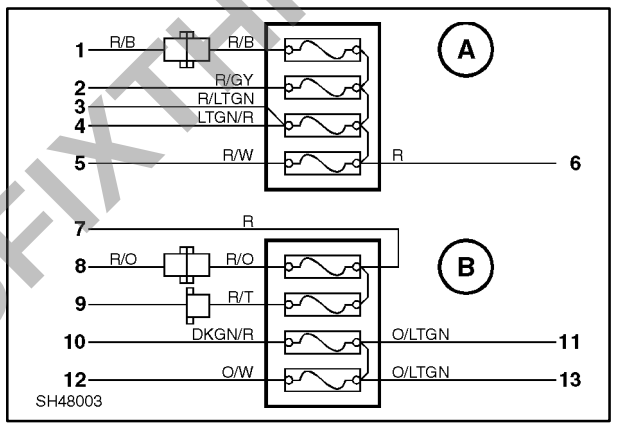
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Wire connections available if electrical attachments were not previously installed.

Engine Fuse Panel

Ref.	Color	Destination	Fuse	Battery Voltage	Status
1	R/B	To turn signal relay	10-amp	All times	Available
2	R/GY	To accessory relay	25-amp	All times	Available
3	R/LTGN	To EIC board pin #14 P2 connector	5-amp	All times	Occupied
4	LTGN/R	To seat switch(es)	5-amp	All times	Occupied
5	R/W	To key switch (battery terminal)	15-amp	All times	Occupied
6	R	From preheat circuit breaker	20-amp	All times	Occupied
7	R	From start relay		All times	Occupied
8	R/O	To heater power relay	20-amp	All times	Available
9	R/T	Spare	7.5-amp	All times	Available
10	DKGN/R	To high flow, horn, power outlet	15-amp	Key “ON” position	Available
11	O/LTGN	From accessory relay		Key “ON” position	Occupied
12	O/W	To Back-up alarm switch	5-amp	Key “ON” position	Available
13	O/LTGN	From road/work light fuse (cab panel)		Key “ON” position	Occupied



3

Engine Fuse Panle

A. Standard fuse block

B. Optional fuse block

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