PREVIEW - YOUFIXTHIS.COM

Download full manual at youfixthis.com

PREVIEW - YOUFIXTHIS.COM

NOTE: CASE CORPORATION reserves the right to make improvements in design or changes in specifications at any time without incurring any obligation to install them on units previously sold.

Download full manual at youfixthis.com

CAMSHAFT

ID of Bushing Installed	54.107 to 54.133 mm
Maximum Service Limit	54.146 mm
ID of Camshaft Bore	54.089 to 54.139 mm
Maximum Service Limit	54.164
OD of Each Camshaft Bearing Surface	53.987 to 54.013
Minimum Service Limit	53.962 mm
Camshaft Thrust Clearance	0.130 to 0.340 mm
Minimum Service Limit	0.470mm
Cam Lobe Minimum Diameter At Peak	
Intake	47.265 mm
Exhaust	46.994 mm

GEAR TRAIN BACKLASH

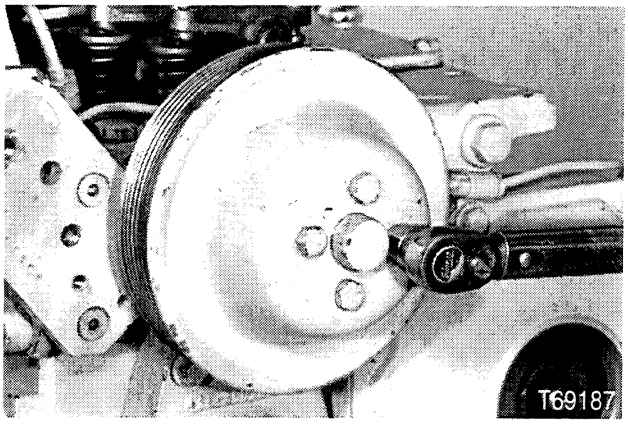
Crankshaft Gear to Camshaft Gear	0.08 to 0.33 mm
Maximum Service Limit (All Gears)	0.45 mm

SPECIAL TORQUES

Belt tensioner bolt	39 to 47 Nm
Camshaft plate bolts	21 to 27 Nm
Connecting rod bolts	60 Nm Plus 60 Degrees
Crankshaft pulley bolts	120 to 130 Nm
Fan Pulley Bolts	
Grade 8.8 Size M8	26 to 31 Nm
Grade 10.9 Size M8	37 to 43 Nm
Grade 8.8 Size M10	51 to 62 Nm
Grade 10.9 Size M10	51 to 62 Nm
Flywheel bolts	130 to 144 Nm
Flywheel housing bolts	54 to 66 Nm
Front cover bolts	21 to 27 Nm
Front housing bolts	21 to 27 Nm
Fuel inlet bolts	29 to 35 Nm
Fuel inlet nut	29 to 35 Nm
Fuel outlet bolt	29 to 35 Nm
Injection pump nut	55 to 65 Nm
Injection pump lock bolt	6 to 8 Nm
Injection pump mounting nuts	21 to 27 Nm
Injection pump bracket bolts	21 to 27 Nm
Main bearing bolts	80 Nm Plus 50 Degrees
Oil suction tube bolts	18 to 30 Nm
Seal carrier bolts	8 to 10 Nm
Starter retaining bolts	39 to 47 Nm

PREVIEW - YOUFIXTHIS.COM
Download full manual at youfixthis.com

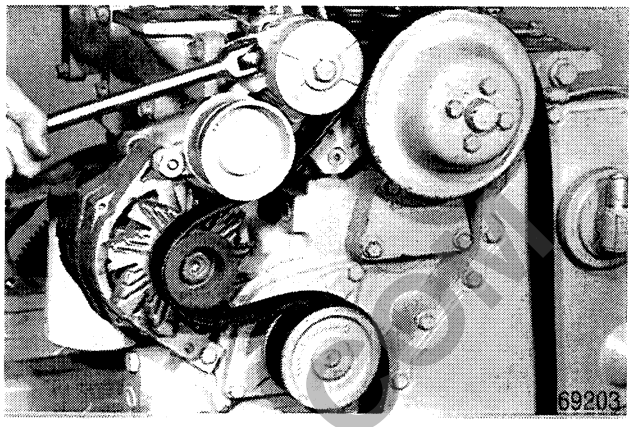
STEP 274



Install the fan pulley and bolts. Tighten the bolts to a torque of:

Grade 8.8 Size M8	26 to 31
Grade 10.9 Size M8	37 to 43
Grade 8.8 Size M10	51 to 62
Grade 10.9 Size M10	51 to 62

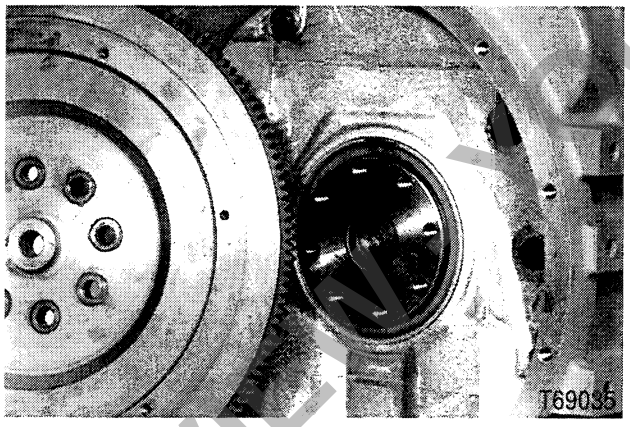
STEP 275



Lift the belt tensioner and install the fan belt.

FLYWHEEL
Removal

STEP 276

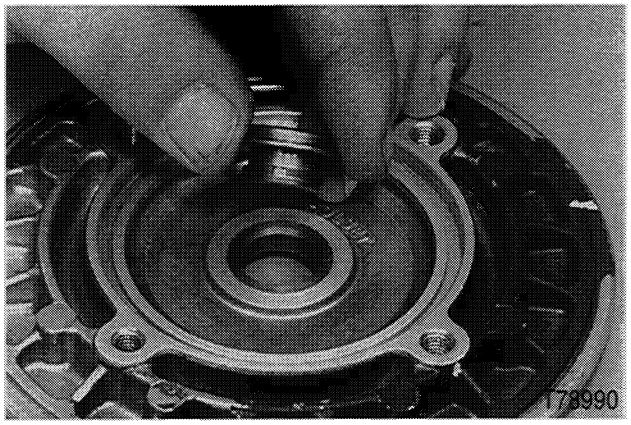


Remove the bolts and the flywheel from the engine.

PREVIEW YOUFIXTHIS.COM

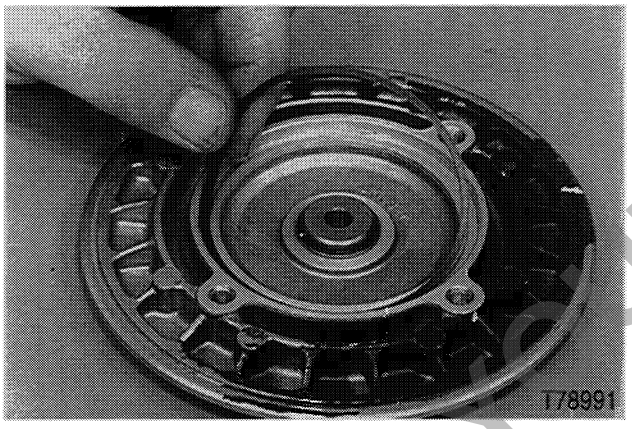
Download full manual at youfixthis.com

STEP 71



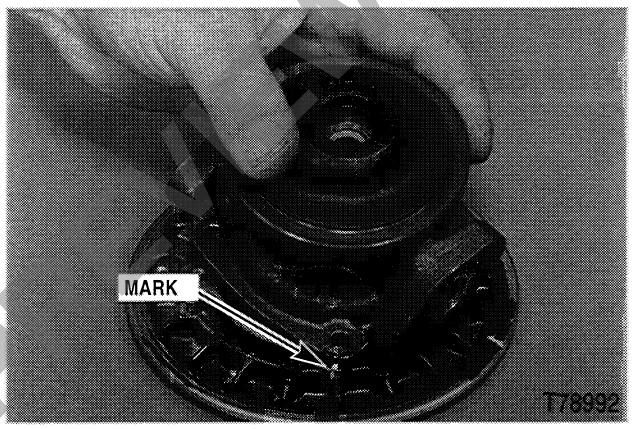
Carefully install the oil slinger in the back plate.

STEP 72



Install a new seal in the back plate.

STEP 73



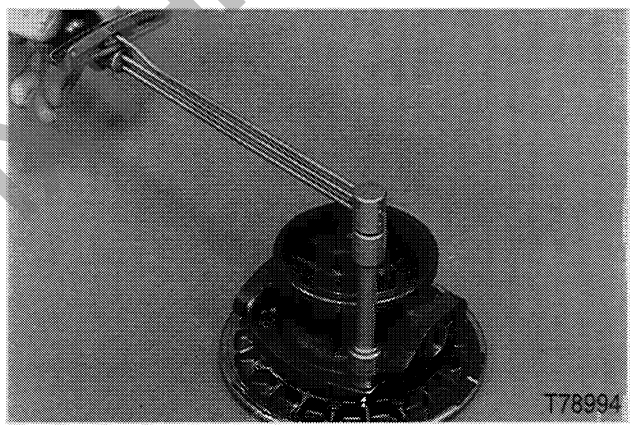
Install the center housing on the back plate. Make sure the mark on the back plate and the center housing are aligned.

STEP 74



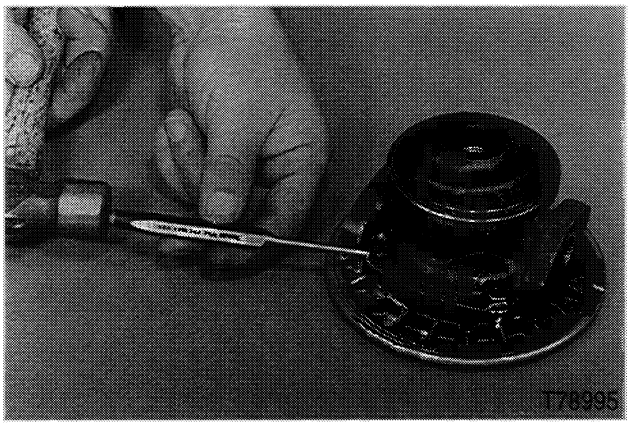
Install new lock plates and new mounting bolts.

STEP 75



Tighten the back plate mounting bolts to a torque of 48 lb in (6 Nm).

STEP 76

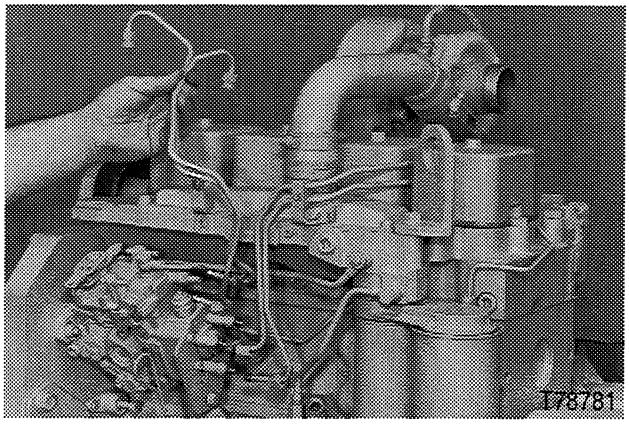


Bend the tabs on the lock plate.

Download full manual at youfixthis.com

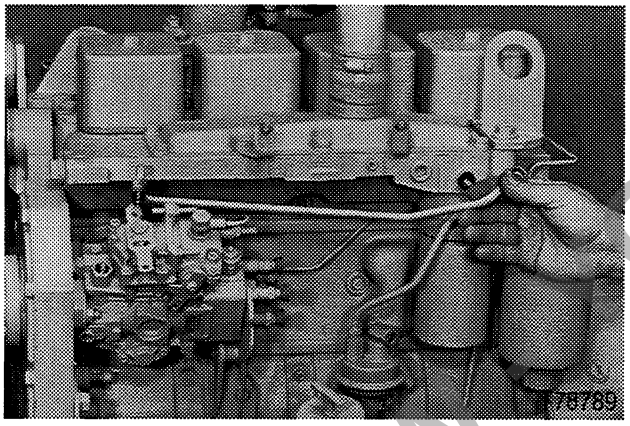
FUEL INJECTION PUMP
Removal

STEP 1



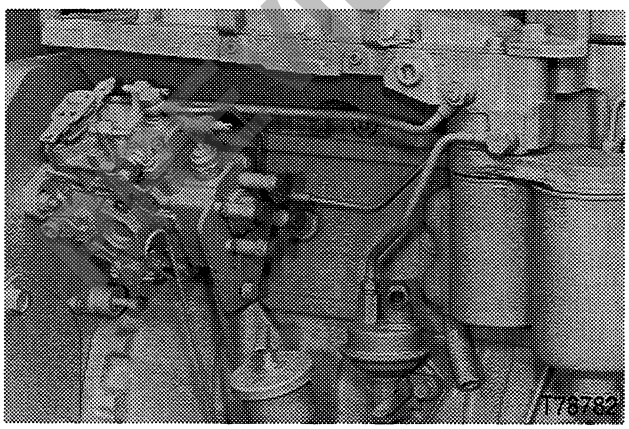
Clean the area around the fuel injection pump. Disconnect and remove the fuel injector tubes.

STEP 2



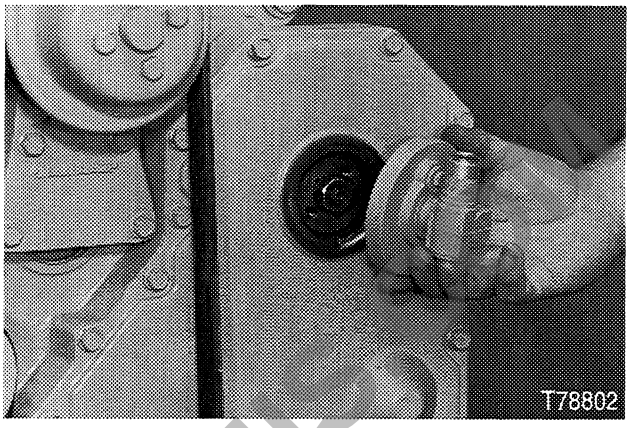
Disconnect and remove the fuel inlet tube.

STEP 3



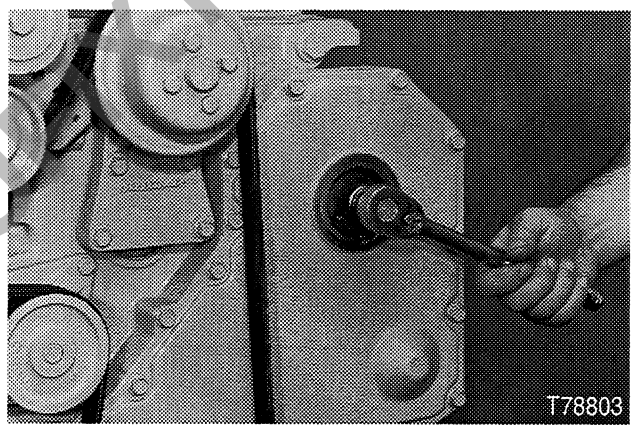
Remove the leak off fitting. Remove and discard the scaling washers.

STEP 4



Remove the tachometer drive assembly (if equipped).

STEP 5



Remove the nut and washer from the injection pump drive shaft

VIEW WITHOUT THIS

Download full manual at youfixthis.com

48 Air Conditioning Low Pressure Switch

The air conditioning low pressure switch is located above the headliner at the top of the right side of the cab.

Check Points	Reading	Possible Cause of Bad Reading
Terminal for wire 60A to ground.	Continuity	Bad ground circuit between the air conditioning low pressure switch and ground. Also check the air conditioning indicator lamp (49)

NOTE: *Turn the key switch to ON. Turn the blower switch to HIGH and the air conditioning temperature switch to COLD.*

Terminal for wire 60 to ground	12 volts	Bad circuit between the low pressure switch and the air conditioning temperature switch (50). Also check the air conditioning temperature switch (50).

NOTE: *Disconnect the wires from the low pressure switch.*

Between the terminals of the low pressure switch.	Open	Low charge in the air conditioning system. See Section 9002. Bad low pressure switch.

49 Air Conditioning High Pressure Switch

The air conditioning high pressure switch is located in front of the radiator behind the grille

Check Points	Reading	Possible Cause of Bad Reading
Terminal for wire 60A to ground.	Continuity	Bad ground circuit between the air conditioning high pressure switch and ground. Also check the air conditioning indicator lamp (49)

NOTE: *Turn the key switch to ON. Turn the blower switch to HIGH and the air conditioning temperature switch to COLD.*

Terminal for wire 60 to ground	12 volts	Bad circuit between the low pressure switch and the air conditioning temperature switch. Also check the air conditioning temperature switch (50).

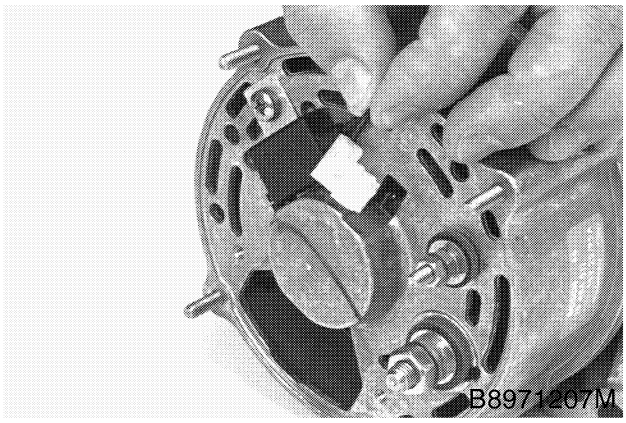
NOTE: *Disconnect the wires from the high pressure switch.*

Between the terminals of the high pressure switch.	Open	High charge in the air conditioning system. See Section 9002. Bad high pressure switch.

PREVIEW - YOUFIXTHIS.COM

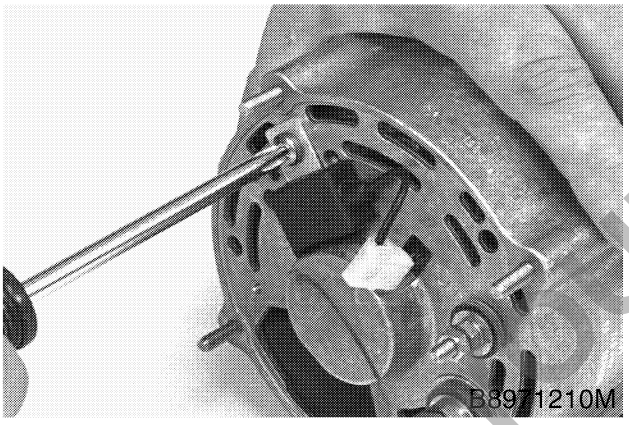
Download full manual at youfixthis.com

STEP 7



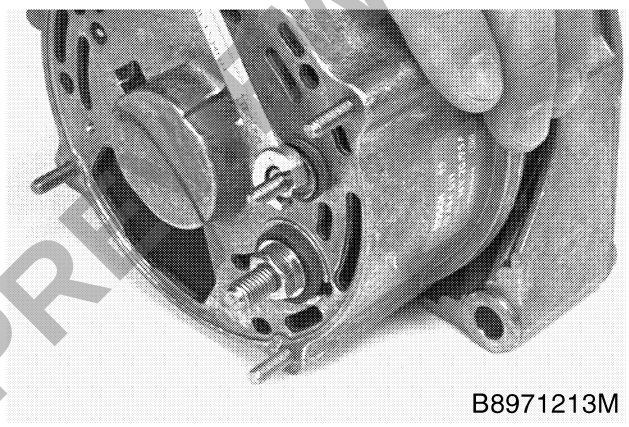
Disconnect the lead for the capacitor.

STEP 8



Loosen and remove the screw and remove the capacitor.

STEP 9



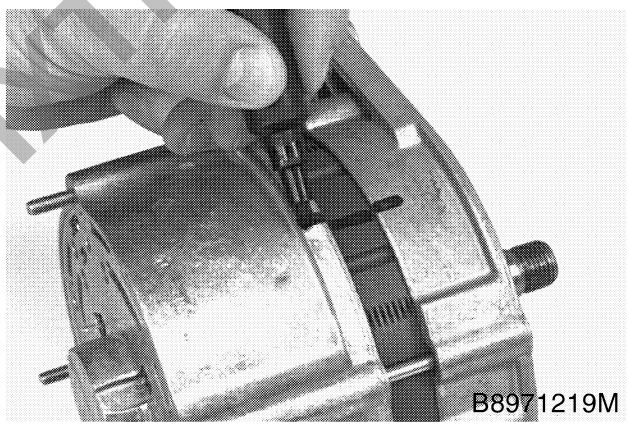
Loosen and remove the nut, flat washer, and fiber washers from the D+ terminal.

STEP 10



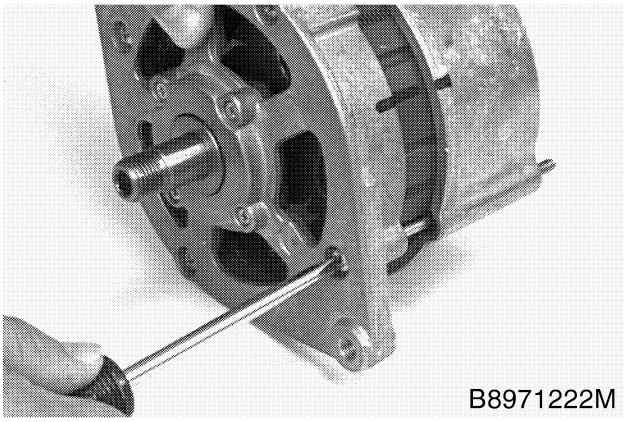
Loosen and remove the nut, flat washer, and fiber washers from the B+ terminal.

STEP 11



Make an alignment mark on the cover, the stator, and the housing.

STEP 12



Loosen and remove the screws that fasten the cover, stator, and housing together.

PREVIEW - YOUFIXTHIS.COM

Download full manual at youfixthis.com

Section

5002

5002

STEERING CONTROL VALVE

PREVIEW - YOUFIXTHIS.COM

CASE CORPORATION
700 STATE STREET
RACINE, WI 53404 U.S.A.

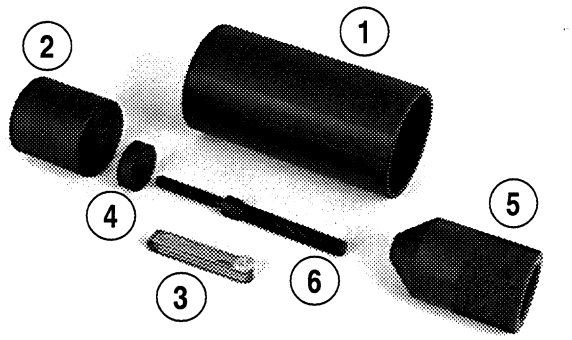
CASE CANADA CORPORATION
3350 SOUTH SERVICE ROAD
BURLINGTON, ON L7N 3M6 CANADA

Bur 7-49461

Copyright © 1995 Case Corporation
Printed in U.S.A.
Issued July 1995

Download full manual at youfixthis.com

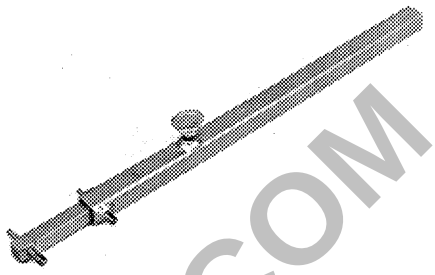
SPECIAL TOOLS



B875432M

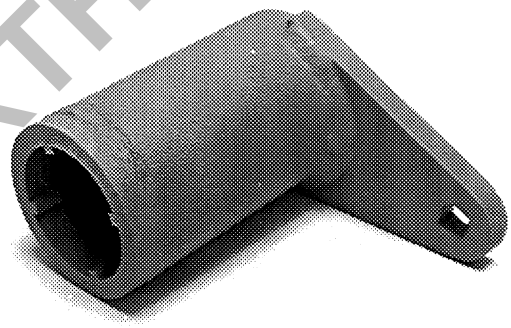
1. *CAS-1839-1 Gauge Tube*
2. *CAS-1839-2 Gauge Block*
3. *CAS-1668 Metric Feeler Gauge*
4. *CAS-2401 Pilot*
5. *CAS-1596A-4 Handle*
6. *CAS-1596A-7 Stud*

CAS-1839 Pinion Setting Kit.



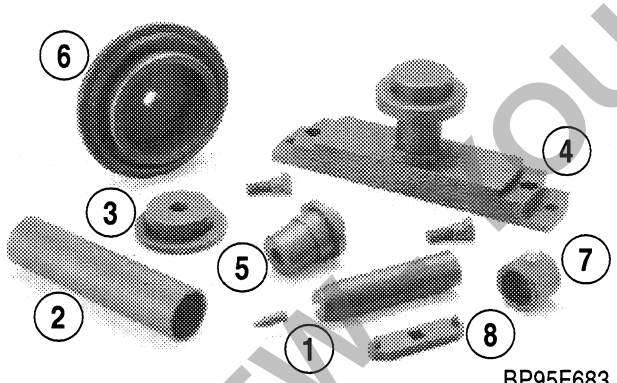
B4097388M

CAS-1840B Spanner Wrench.



B4086290M

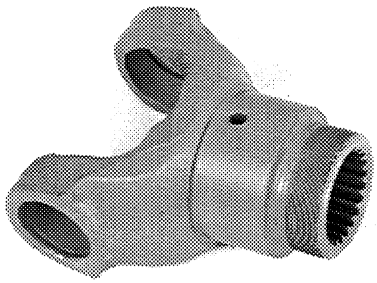
CAS-2151 Wrench For Pinion Nut.



BP95F683

1. *CAS-2369 Pinion Spline Seal Protector*
2. *CAS-2370 Inner/Outer Pinion Bearing Cone Installer*
3. *CAS-2371 Inner Pinion Bearing Cup Installer*
4. *CAS-2372 Pinion Depth Gauge*
5. *CAS-2373 Axle Housing Bushing/Seal Installer*
6. *CAS-2374 Hub Cassette Seal Installer*
7. *CAS-2375 Bearing Preload/Backlash Wrench*
8. *CAS-2376 Differential Bearing Preload Wrench*
9. *CAS-2394 Axle Bushing Driver (Not Shown)*
10. *CAS-2395 Differential Bearing Cone Installer (Not Shown)*
11. *CAS-2396 Trunion Bushing Installer (Not Shown, See Line Art On The following Page)*
12. *CAS-2401 Aligning Disc*

CAS-40032, Carraro Axle Tool Kit.

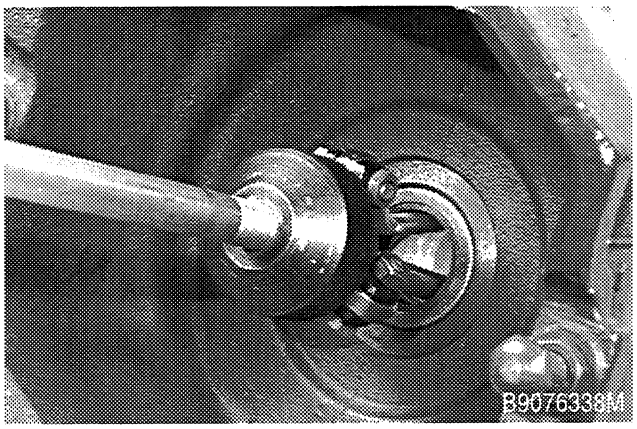


B4094788M

Yoke to hold shaft. Order D149861 from Case Corp.

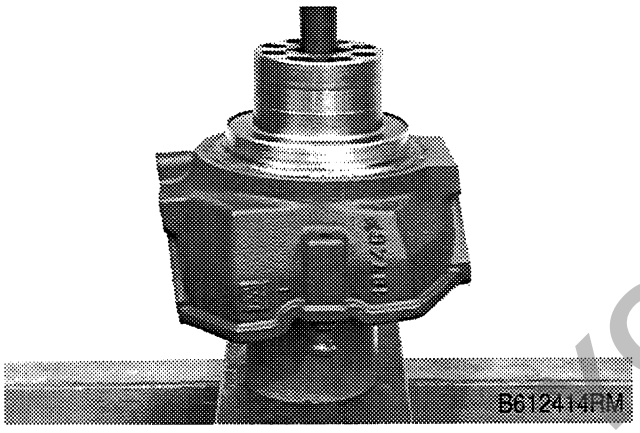
PREVIEW.YOUFIXTHIS.COM

STEP 63



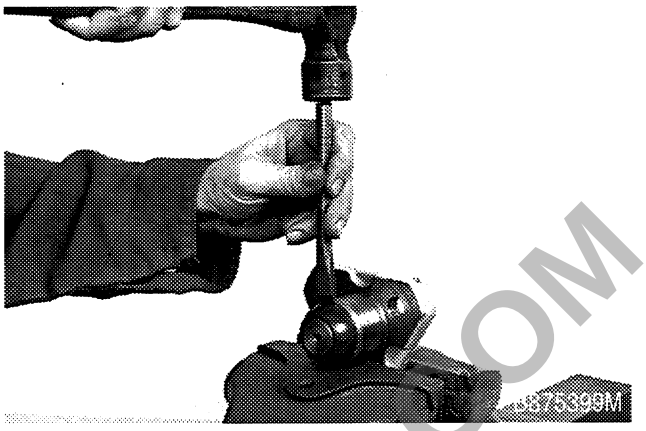
Use an acceptable puller and remove the seal from the swivel housing.

STEP 64



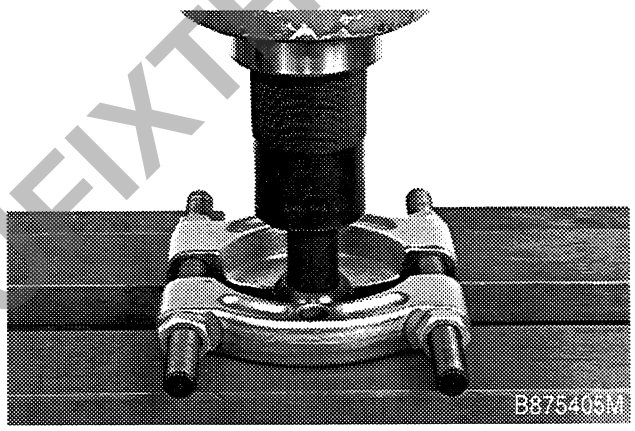
Support the swivel housing on a sleeve and press the bushing out of the swivel housing.

STEP 65



Use a hammer and a chisel that has a long taper to start the bushing off the bottom king pin.

STEP 66



Press the bottom king pin out of the bushing.

PREVIEW - YOUFIXTHIS.COM

Download full manual at youfixthis.com

Machine Hesitates When Shifting Between Forward and Reverse

Is oil level correct? Add oil as required. Is there still a problem?

NO → Troubleshooting complete. Find cause for loss of oil.

YES ↓

Check pump supply pressure at Test Port 21. See page 13. Is the pressure in the specified range?

NO → Inspect pressure regulator. See Section 6007 to repair or replace as required.

YES ↓

Check regulated clutch pressure at Test Port 24. See page 13. Is the pressure in the specified range?

NO → Inspect modulation spool and piston for sticking or damage.

YES ↓

See Section 6007 to repair as required.

NO ↓

Inspect input shaft sealing rings and forward and reverse clutch piston seals. See Section 6007 to repair as required.

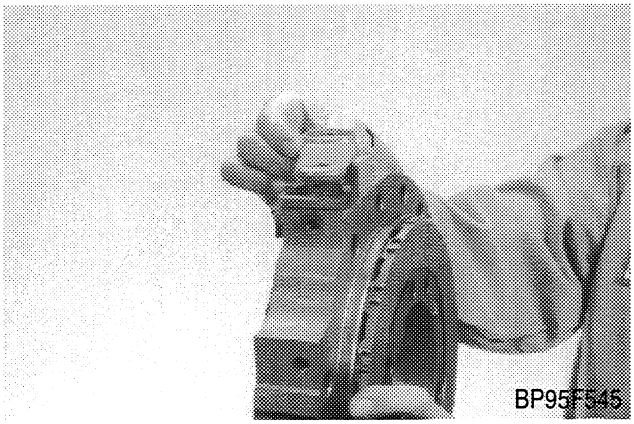
YES ↓

Troubleshooting complete.

PREVIEW - YOUFIXTHIS.COM

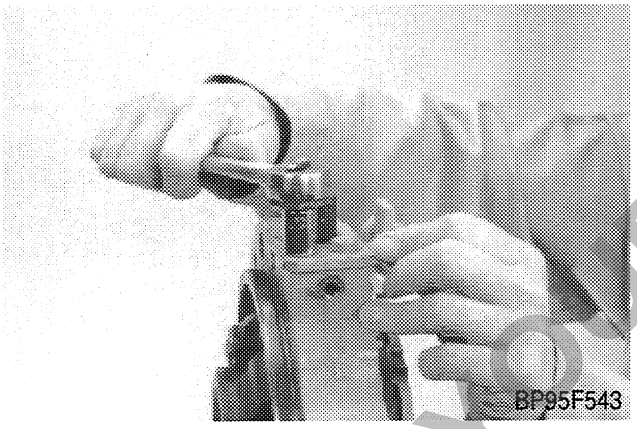
Download full manual at youfixthis.com

STEP 221



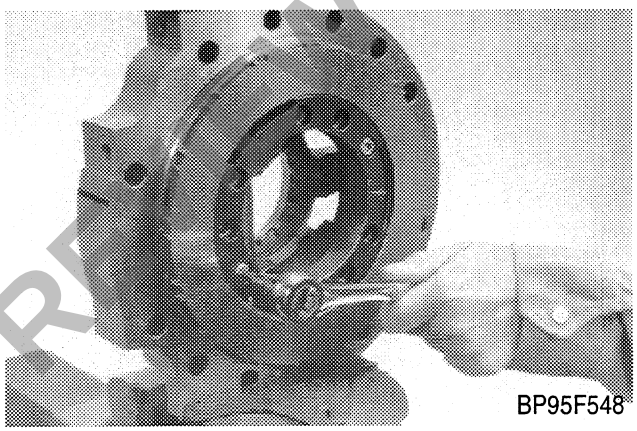
Remove the lever.

STEP 222



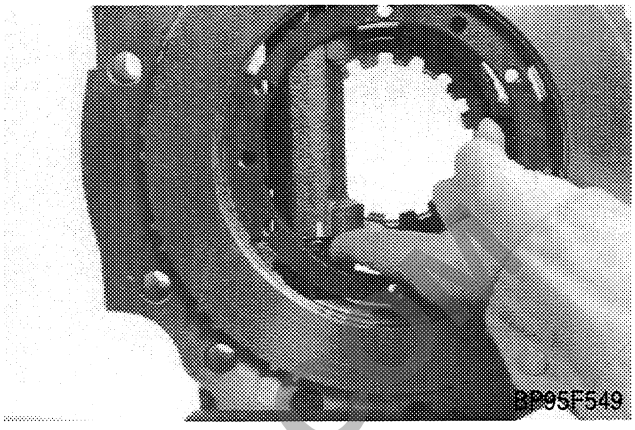
Remove the bracket.

STEP 223



Remove the retainer.

STEP 224

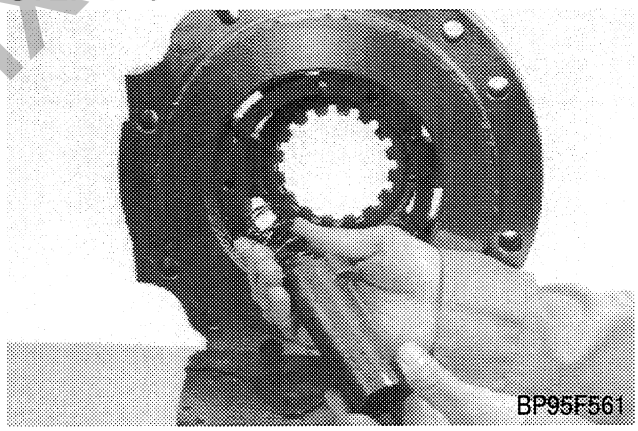


If you are assembling a brake housing using new parts that have no identification marks, mark the cam where it aligns with the hole for the roll pin.

STEP 225

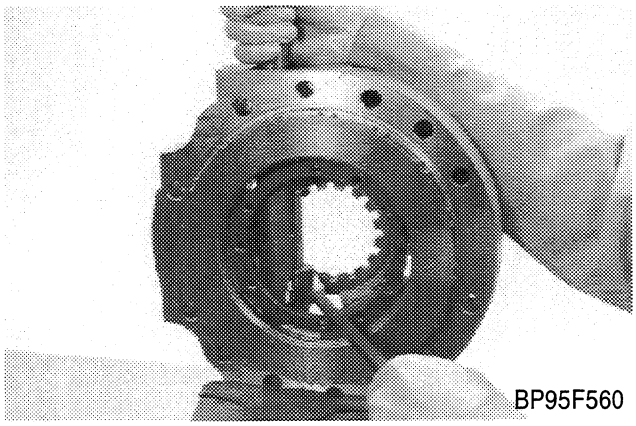
Remove the shaft and cam.

STEP 226



Put the spring and cam in position in the brake housing.

STEP 227



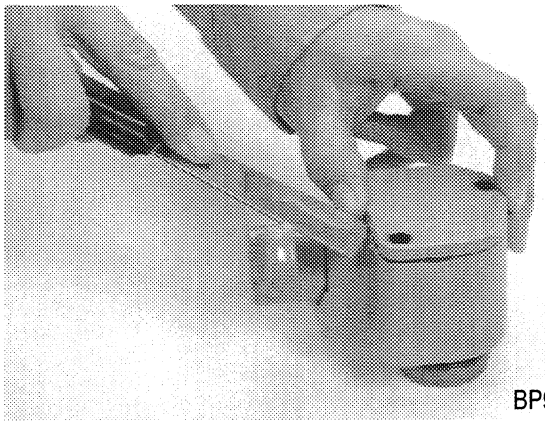
Hold the cam in the position shown and install the shaft. The alignment marks on the shaft and the cam or the alignment marks on the shaft and the hole for the roll pin in the cam must be aligned.

PREVIEW - YOUFIXTHIS.COM

Download full manual at youfixthis.com

Differential Lock Housing

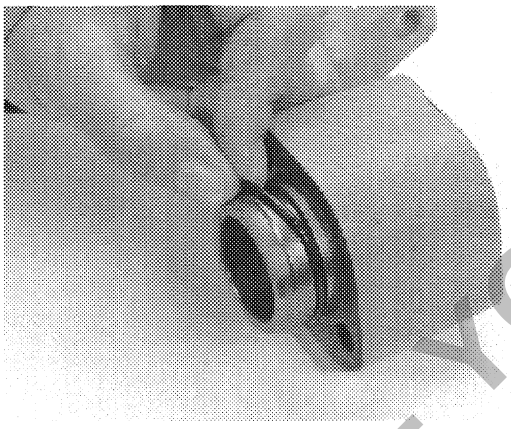
STEP 150



BP95F471

Remove the cover.

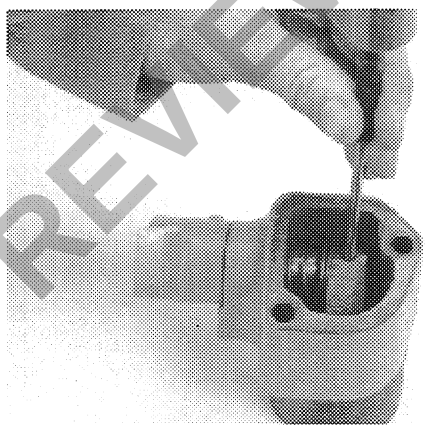
STEP 151



BP95F472

Remove the O-ring.

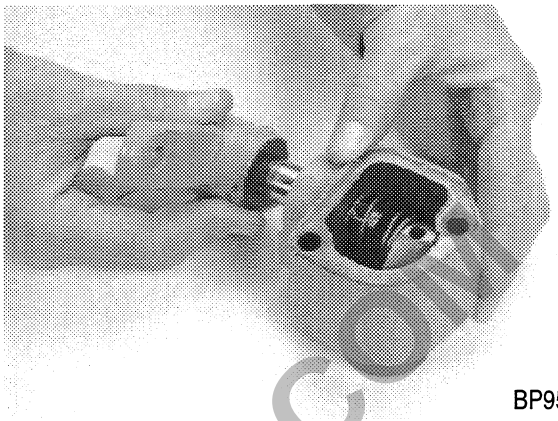
STEP 152



BP95F473

Drive the roll pin from the cam and differential lock lever assembly.

STEP 153

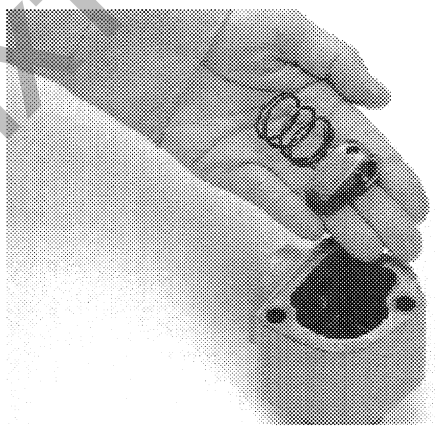


BP95F474

Remove the differential lock lever assembly from the housing.

NOTE: *Make a note of the orientation of the cam for use during assembly.*

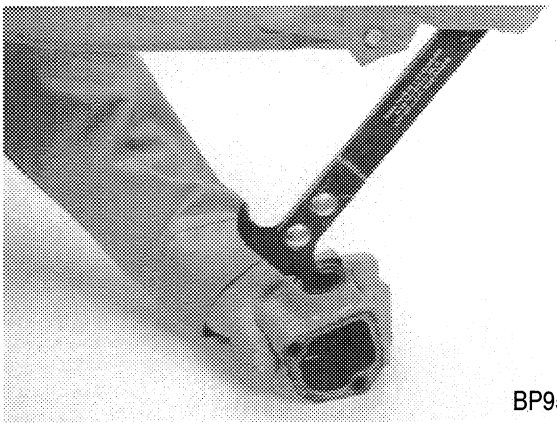
STEP 154



BP95F476

Remove the spring and cam.

STEP 155



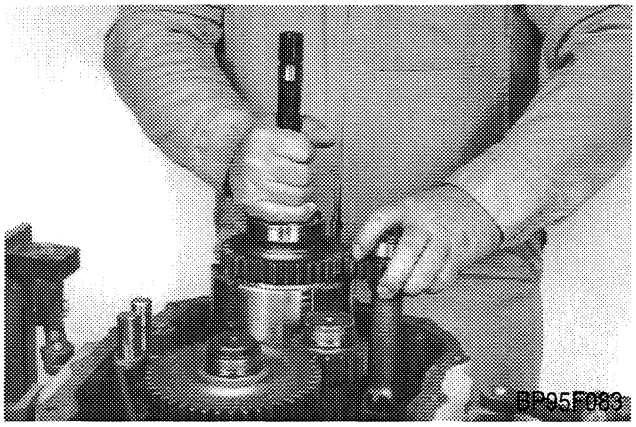
BP95F475

Remove the seal from the bore for the shaft

PREVIEW - YOUFIXTHIS.COM

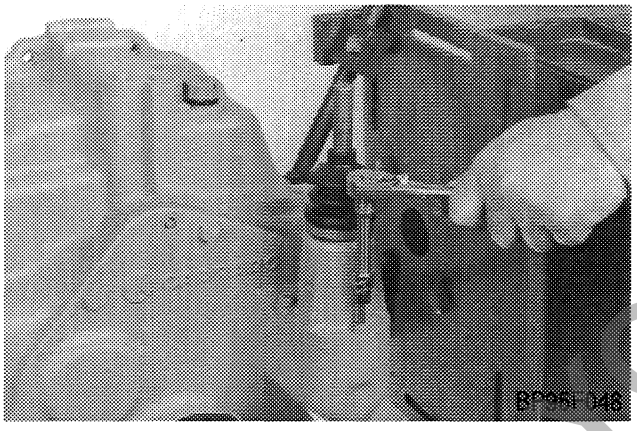
Download full manual at youfixthis.com

STEP 49



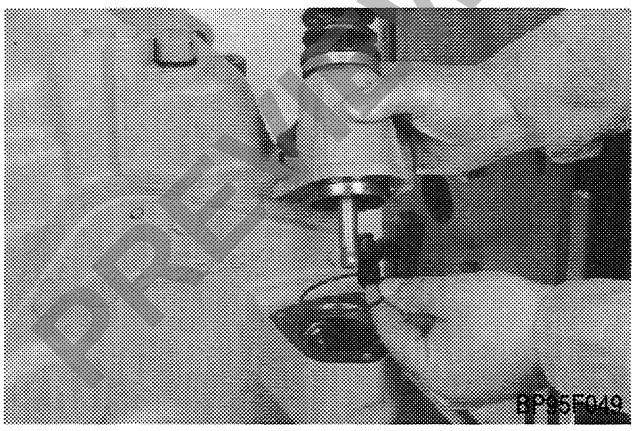
Remove the input shaft and the reverse shaft together.

STEP 50



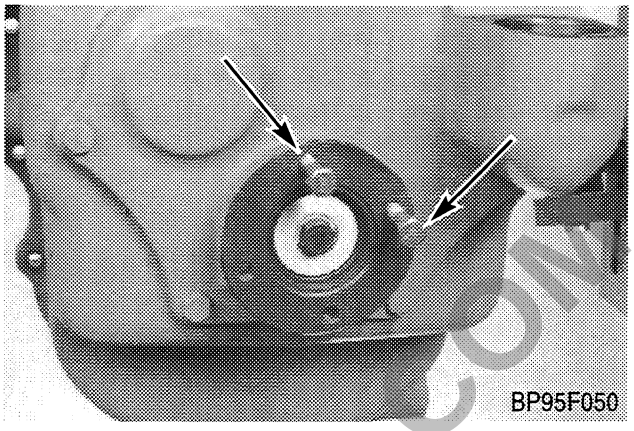
Remove the three Allen head screws which fasten the shifter housing to the rear cover.

STEP 51



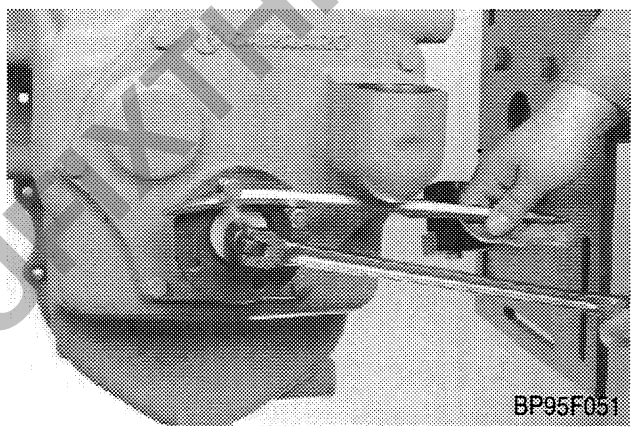
Remove the shifter assembly and the O-ring.

STEP 52



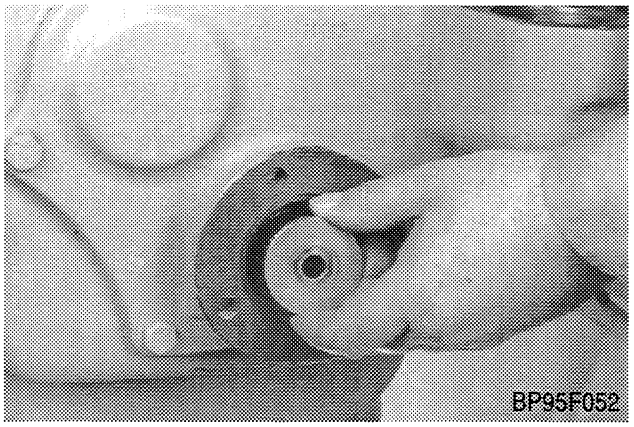
Install two cap screws in the output flange as shown.

STEP 53



Use a prybar between the two cap screws and against the rear housing to hold the output flange while you remove the cap screw from the secondary shaft.

STEP 54

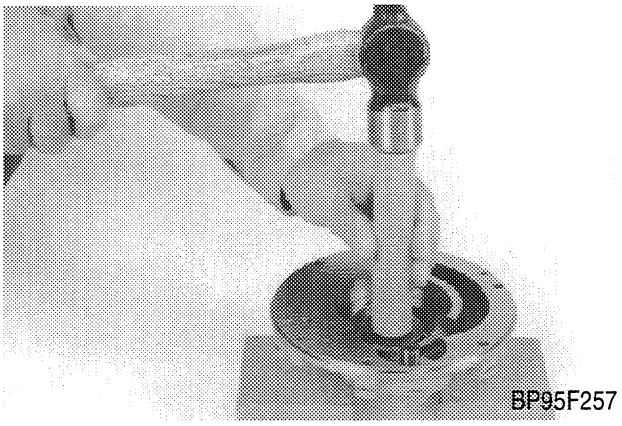


Remove the washer.

PREVIEW - YOUFIXTHIS.COM

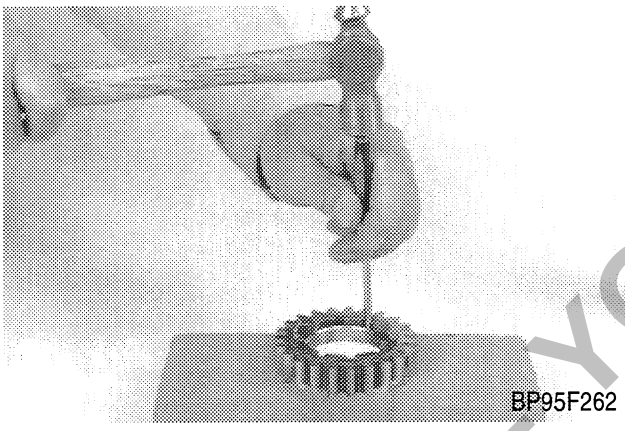
Download full manual at youfixthis.com

STEP 307



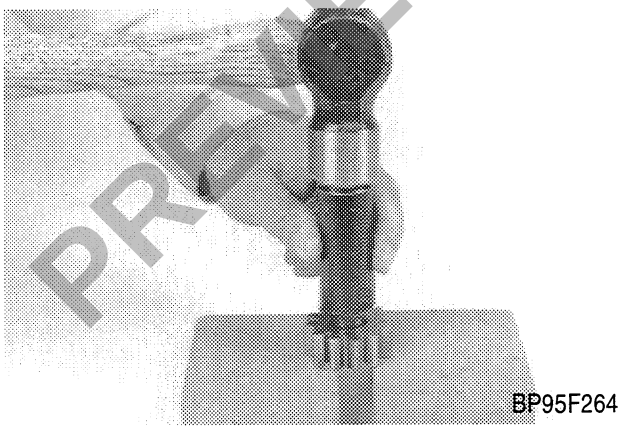
Turn the pump housing over and use blocks to support the pump housing. Use an acceptable driver to drive the bushing from the bore of the pump housing.

STEP 308



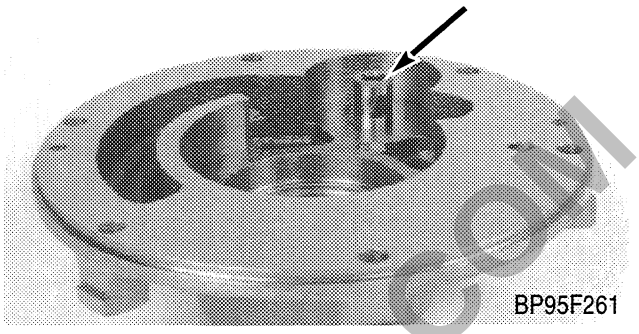
Support the large gear on blocks as shown. Use a punch and a hammer to drive the bushing from the large gear.

STEP 309



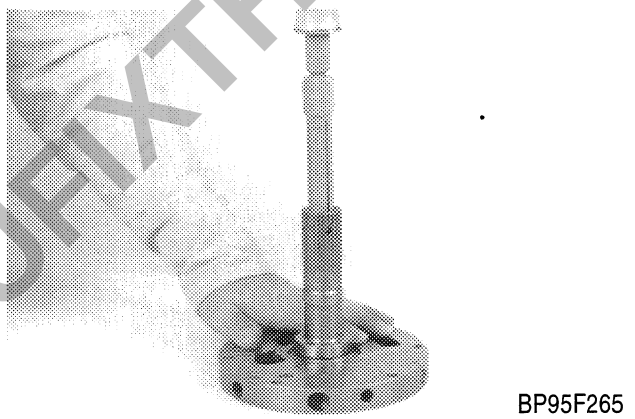
Use an acceptable driver to push the needle bearing out of the small gear.

STEP 310



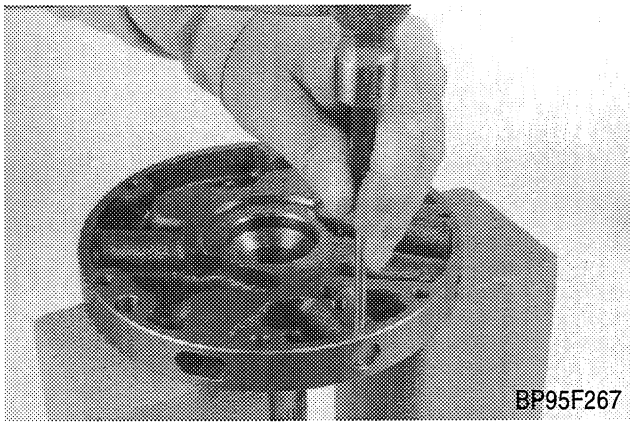
Remove the shaft for the small gear only if the shaft is damaged. The shaft will probably be difficult to remove.

STEP 311



Use a blind hole puller and a slide hammer to pull the bushing from the shaft of the pump support.

STEP 312



Remove the roll pin for the torque converter relief valve.

PREVIEW - YOUFIXTHIS.COM

Download full manual at youfixthis.com

Section

7000

REMOVAL AND INSTALLATION OF BRAKE COMPONENTS

PREVIEW - YOUFIXTHIS.COM

7000

CASE CORPORATION
700 STATE STREET
RACINE, WI 53404 U.S.A.

CASE CANADA CORPORATION
3350 SOUTH SERVICE ROAD
BURLINGTON, ON L7N 3M6 CANADA

Bur 7-49600

Copyright © 1995 Case Corporation
Printed in U.S.A.
Issued November 1995

Download full manual at youfixthis.com

Relief Valve for Backhoe Auxiliary Hydraulics (If Equipped)

Pressure Check

1. Park the machine on a level surface. Put the backhoe in the transport position and lower the loader bucket to the floor.

2. The oil must be at operating temperature. To heat the oil, do the following steps:

   A. With the engine running at full throttle, hold the loader control lever in the ROLLBACK position for 15 seconds.

   B. Put the loader control lever in the NEUTRAL position for 15 seconds.

   C. Repeat steps A and B until the temperature of the oil is 125˚F (51˚C) or the side of the reservoir is very warm.

3. See the illustration on page 8. Use a pressure gauge with a capacity of at least 4000 psi (27 580 kPa, 276 bar). Connect the pressure gauge to the quick disconnect fitting at Test Port 1. The quick disconnect fitting is located inside the LH frame rail to the left of the engine.

4. Run the engine at low idle. Actuate a backhoe auxiliary hydraulic attachment that will stop and run over relief in a safe position. When the attachment is in position, increase the engine speed to full throttle. Continue to hold the auxiliary controls in the power position while you read the pressure gauge. Then release the auxiliary controls and decrease the engine speed to low idle. Stop the engine.

5. Compare the reading with the specification on page 3. If the reading is not correct, adjust the relief valve for backhoe auxiliary hydraulics.

Adjustment

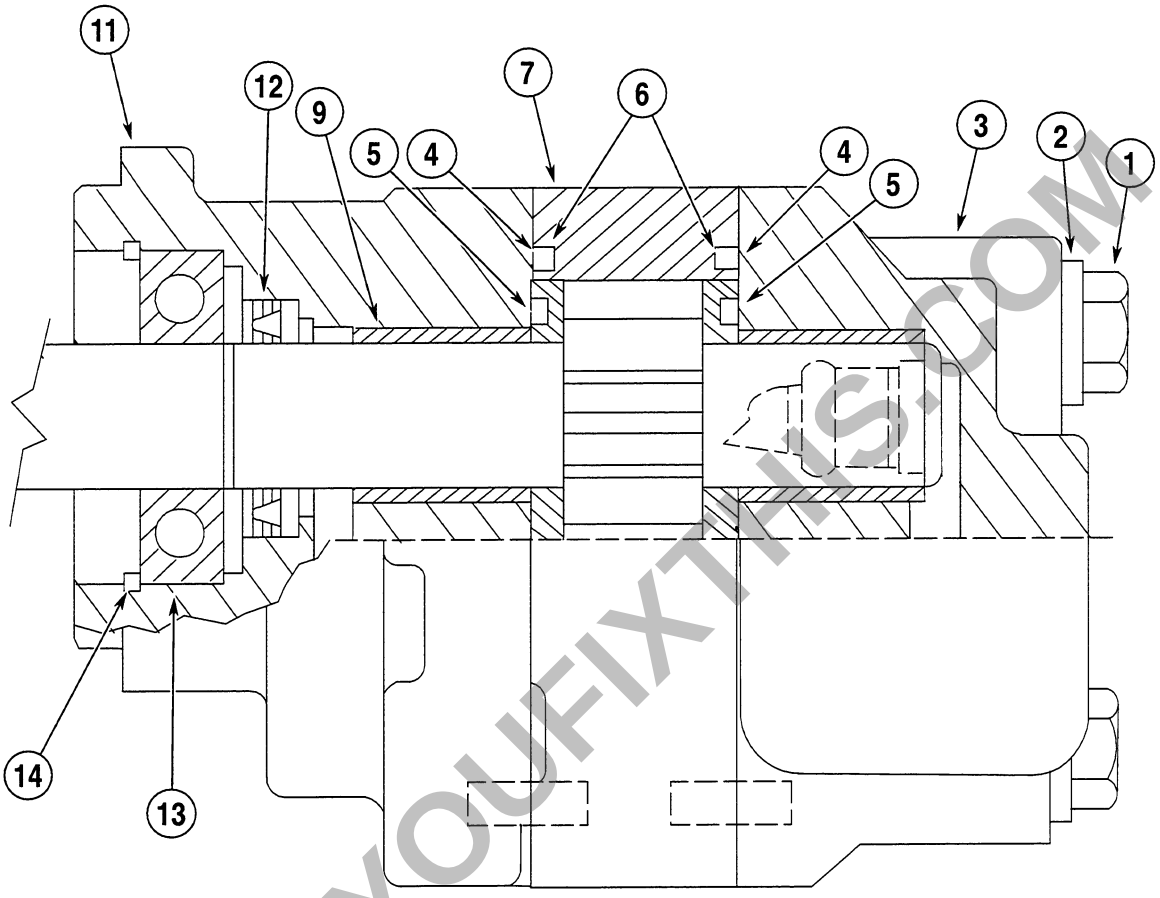
1. The relief valve for backhoe auxiliary hydraulics is in the inlet section of the loader control valve. Loosen the lock nut on the relief valve. Turn the adjusting screw clockwise to increase the pressure and counterclockwise to decrease the pressure.

2. Check the pressure again.

3. When the pressure is correct, tighten the lock nut.

PREVIEW - YOUFIXTHIS.COM

Download full manual at youfixthis.com



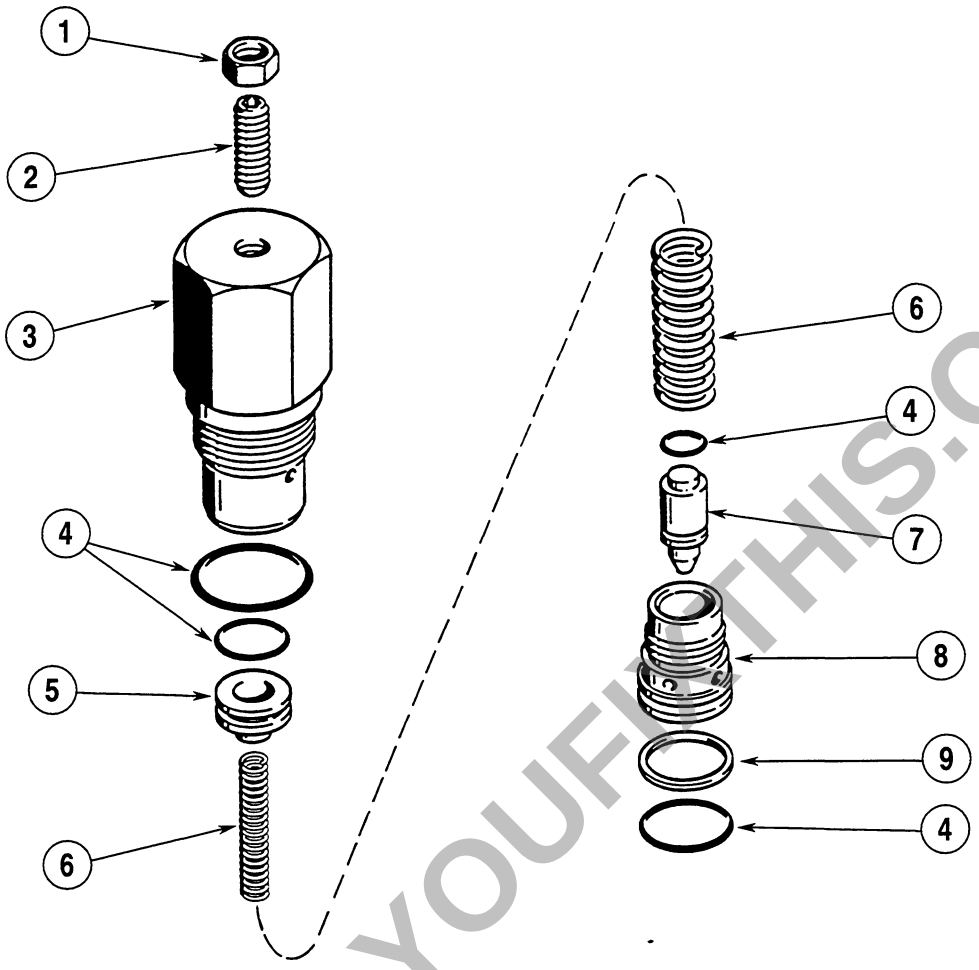
B9503169T

1. *Cap Screw*
2. *Flat Washer*
3. *Port End Cover*
4. *Quad Ring*
5. *Seal*
6. *Thrust Plate*
7. *Gear Housing*
8. *Dowel Pin, Not Shown*
9. *Drive Gear*
10. *Driven Gear, Not Shown*
11. *Shaft End Cover*
12. *Seal*
13. *Bearing*
14. *Snap Ring*

Hydraulic Pump - Cross Sectional View

PREVIEW - YOUFIXTHIS.COM

Download full manual at youfixthis.com

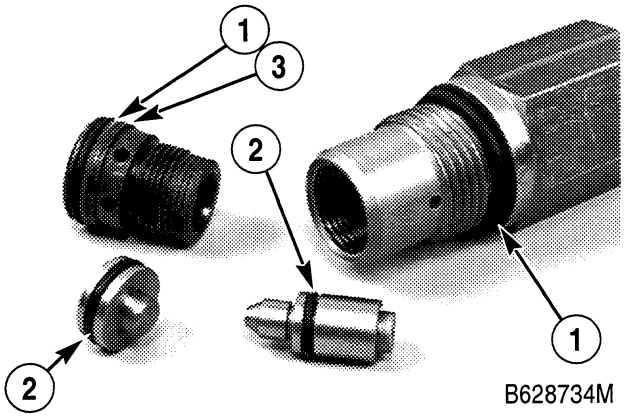


B870017J

1. Lock Nut
2. Adjusting Screw
3. Body
4. O-Ring
5. Spring Seat
6. Spring
7. Poppet
8. Poppet Seat
9. Backup Ring

Inspection

STEP 184
Inspect the parts of the circuit relief valve. The lock nut, the adjusting screw, the two external O-rings, and the backup ring are the only parts available separately. If any other parts are damaged, order a new circuit relief valve.



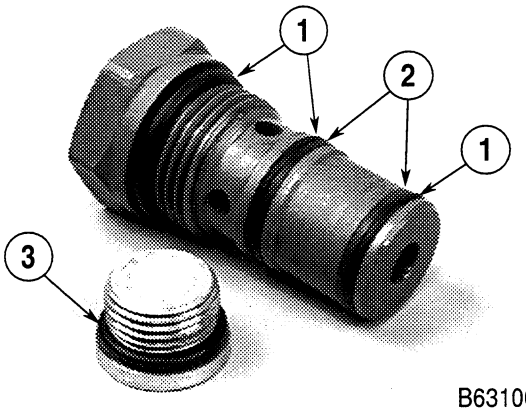
B628734M

1. External O-Ring
2. Internal O-Ring
3. Backup Ring

PREVIEW - YOUFIXTHIS.COM
Download full manual at youfixthis.com

Assembly

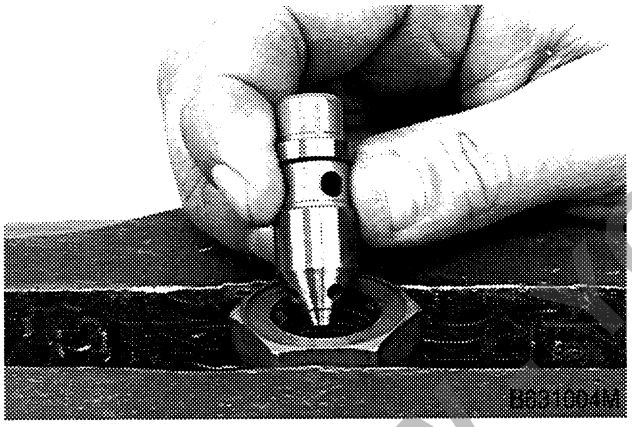
STEP 158



B631008M

Install new O-rings (1) and backup rings (2) on the body of the check valve. Install a new O-ring (3) on the plug.

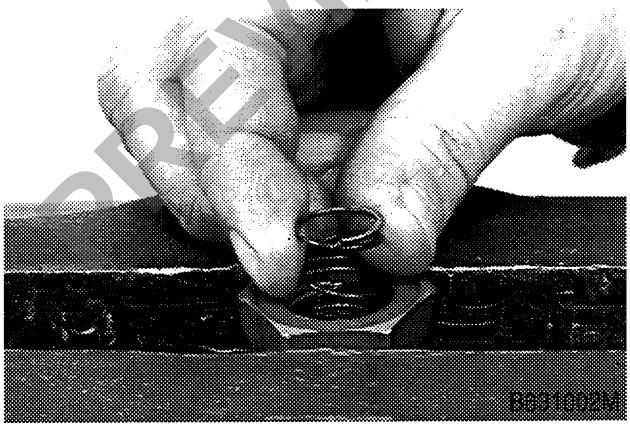
STEP 159



B631004M

Fasten the body of the check valve in the vise with soft jaws. Install the plunger.

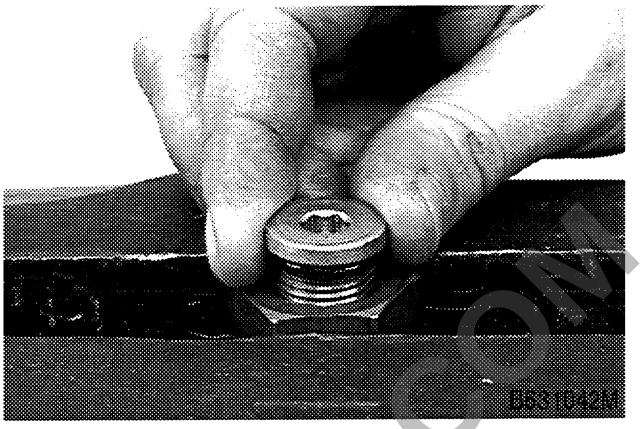
STEP 160



B631002M

Install the spring.

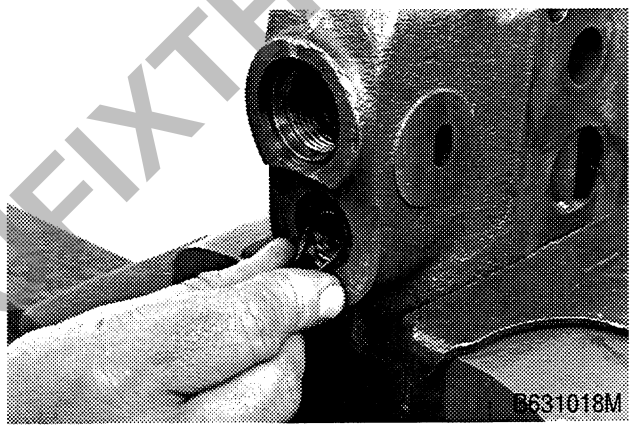
STEP 161



B631042M

Use clean hydraulic oil to lubricate the O-ring on the plug. Install the plug in the body.

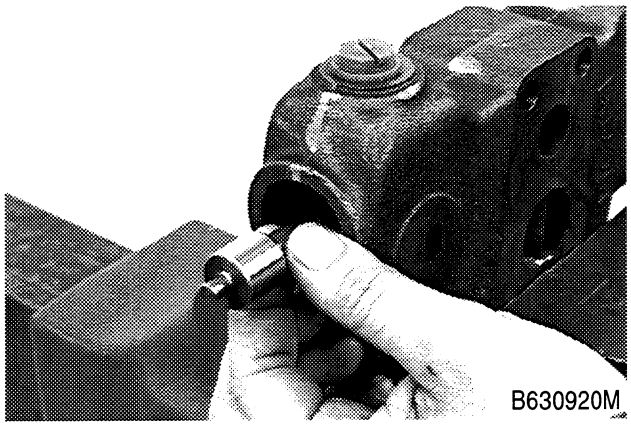
STEP 162



B631018M

Install a new O-ring in the A port end of the spool bore.

STEP 163



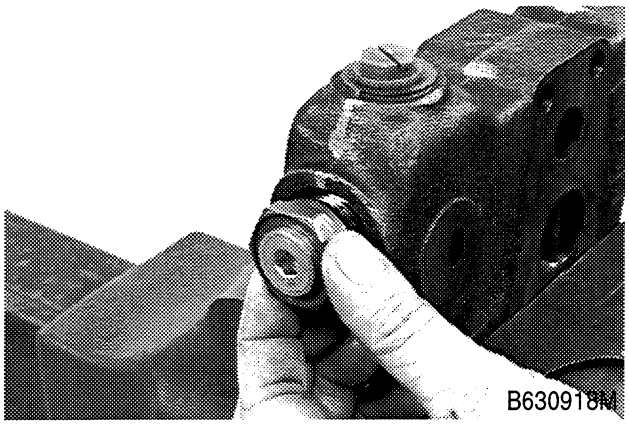
B630920M

Use clean hydraulic oil to lubricate the spool. Install the spool in the body.

PREVIEW OF OUFIXTHIS.COM

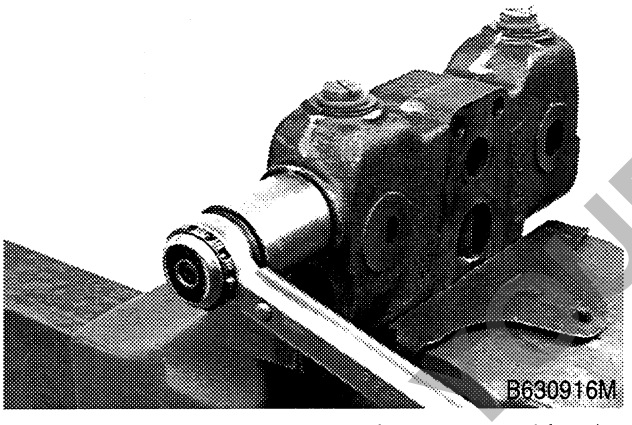
Download full manual at youfixthis.com

STEP 135



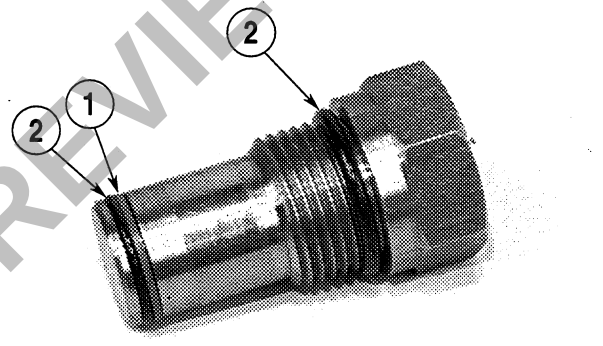
Use clean hydraulic oil to lubricate the O-rings and backup rings on the check valve. Install the check valve.

STEP 136



Tighten the check valve to a torque of 65 to 80 pound-feet (88 to 108 Nm).

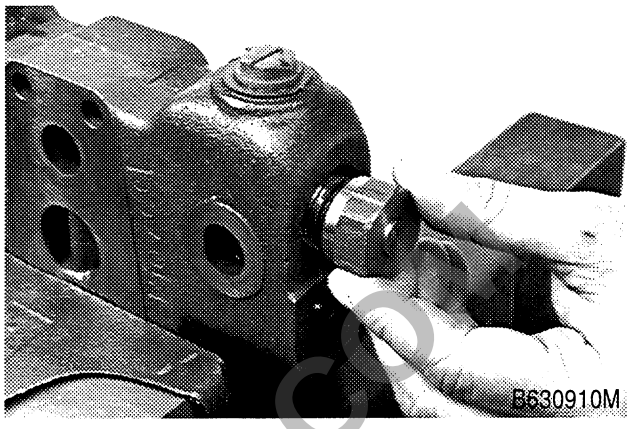
STEP 137



B415420M

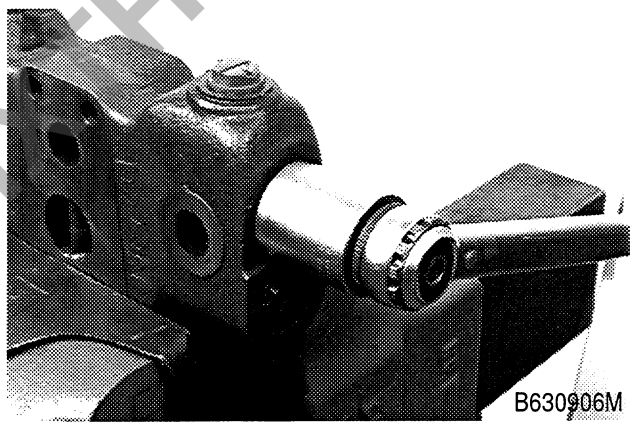
Install a new backup ring (1) and new O-rings (2) on the plug.

STEP 138



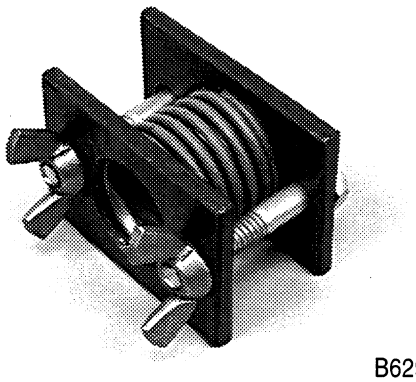
Use clean hydraulic oil to lubricate the O-rings and the backup ring on the plug. Install the plug.

STEP 139



Tighten the plug to a torque of 65 to 80 pound-feet (88 to 108 Nm).

STEP 140



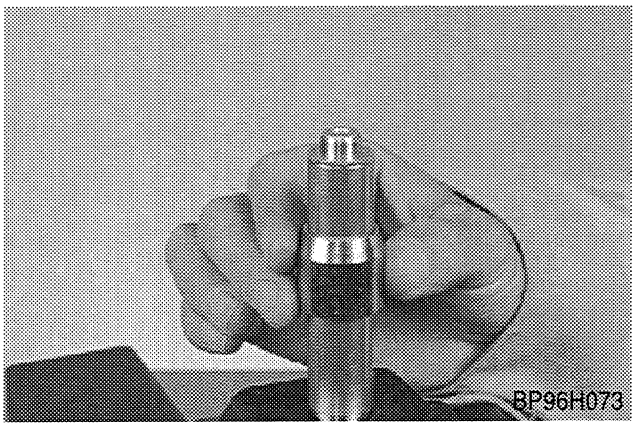
B629302M

Assemble the spring seats and the spring. Use the spring compressing plates to compress the spring.

PREVIEW - MODIFY THIS.COM

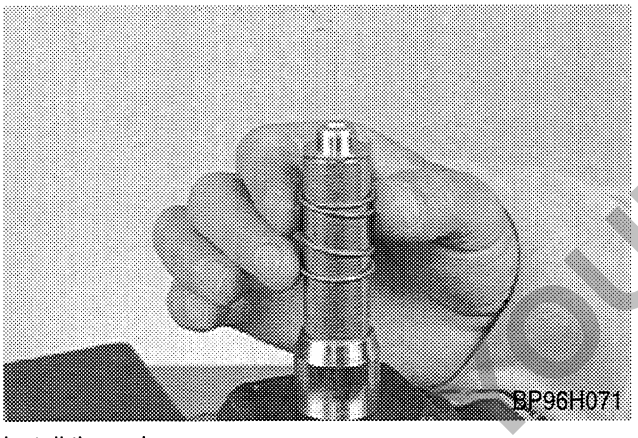
Download full manual at yourmanuals.com

STEP 19



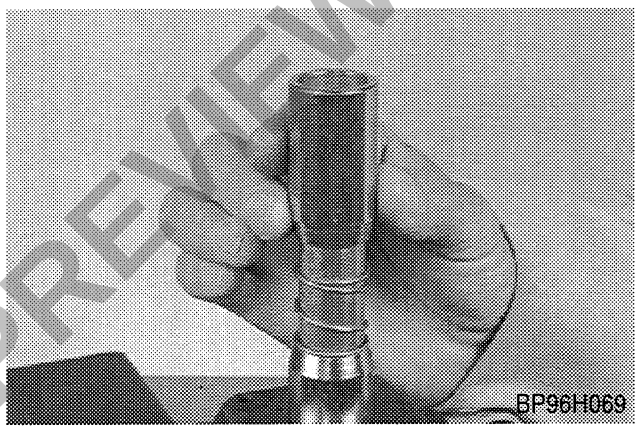
Install the short spacer.

STEP 20



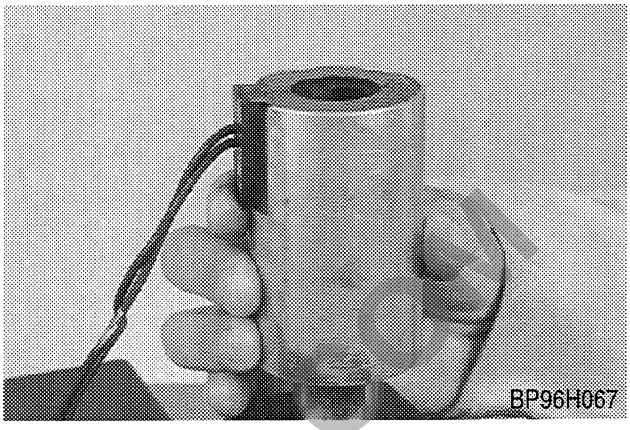
Install the spring.

STEP 21



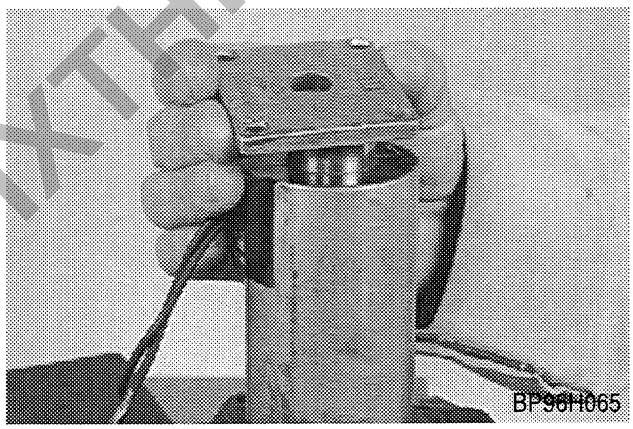
Install the long spacer.

STEP 22



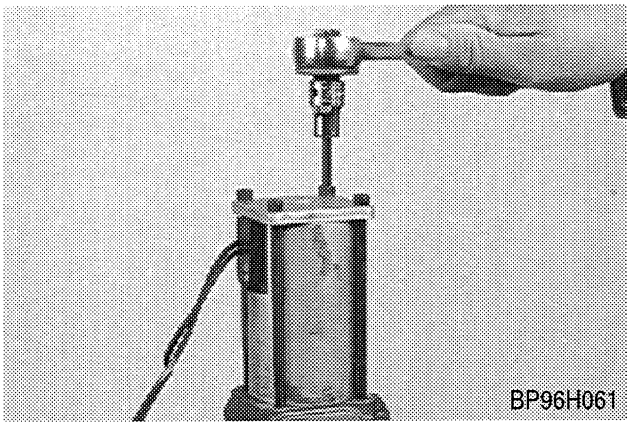
Install the coil.

STEP 23



Install the cover.

STEP 24



Install the Allen head screws. Tighten the Allen head screws to 40 to 50 pound-inches (650 to 813 Nm).

REVIEW - YOUFIXTHIS.COM

Download full manual at youfixthis.com

(Not Enough Cooling - Continued)

High Side Restrictions - Indications:

A. Discharge air from evaporator only a little cool.

B. Condensation or frost on receiver-drier.

C. Liquid line to receiver-drier cool, with frost or condensation.

1. Remove the refrigerant from the system. The restriction in the receiver-drier must be removed.
2. Remove and replace part with restriction.
3. Remove air and moisture from the system. See Section 9004 in this manual.
4. Charge the system with new refrigerant. See Section 9004 in this manual.
5. Continue performance test for other possible problems.

Expansion Valve not Operating - Indications:

A. Discharge air from evaporator warm or cool - not cold.

B. Condensation or frost on expansion valve inlet.

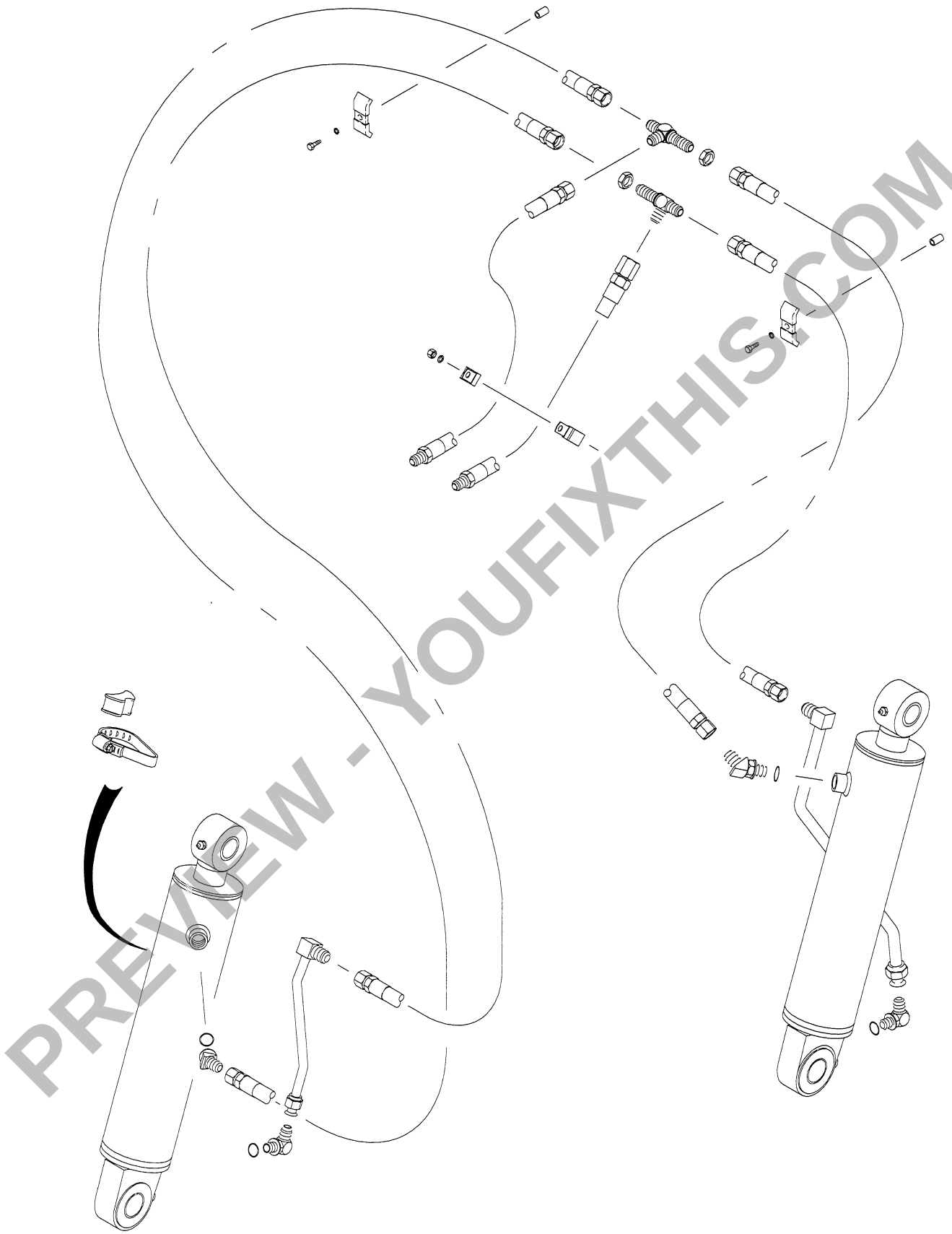
C. Inlet end of expansion valve is warm.

1. Expansion valve inlet with condensation or frost is an indication of a restriction in the expansion valve.
   A. Remove refrigerant from system. See Section 9004 in this manual.
   B. Remove and replace expansion valve. See Section 9005 in this manual.
   C. Remove air and moisture and charge the system. See Section 9004 in this manual.
   D. Continue performance test for possible other problems.

(Continued on next page)

PREVIEW - YOUFIXTHIS.COM

Download full manual at youfixthis.com



BT95J190

Clam Cylinder Hydraulic Installation

PREVIEW - YOUFIXTHIS.COM

Download full manual at youfixthis.com

PREVIEW ONLY

You're viewing 25 of 1468 pages

The full manual includes:

- All 1468 pages, complete
- Searchable PDF (find any keyword)
- No watermarks
- Instant download
- Print-ready quality

GET FULL MANUAL NOW

Case 580L, 580 Super L, 590 Super L Service Manual

Scan or click anywhere
youfixthis.com

Click anywhere on this page to get the full manual