



Allis Chalmers

Service Manual

5015 Compact

Service Manual

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AC-S-5015

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SERVICE MANUAL

MODEL 5015 COMPACT DIESEL TRACTOR

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3) Oil Pump Assembly

Disassembly

1. Remove oil cleaner.
2. Remove capscrews.
3. Pull out oil pump.

Assembly

Apply oil to oil cleaner gasket, and tighten oil cleaner firmly by hand.

Check

Remove bolt and pump cover, and measure clearance at the following points.

- * Tip clearance: .0028" — .0047" (0.07 ~ 0.12mm)
Max limit: .0079" (0.2mm)



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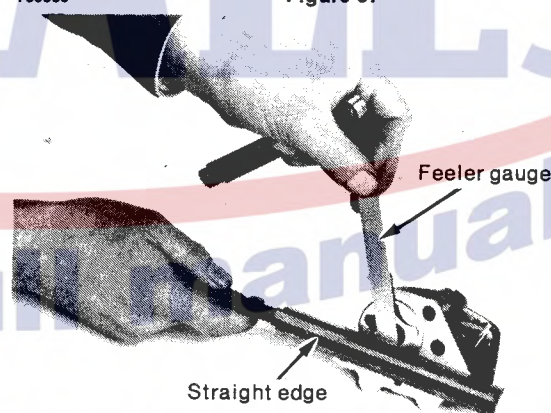
Figure 56



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Figure 57

- * Side clearance: .0012" — .0024" (0.03mm ~ 0.06mm)
Max limit: .0029" (0.1mm)



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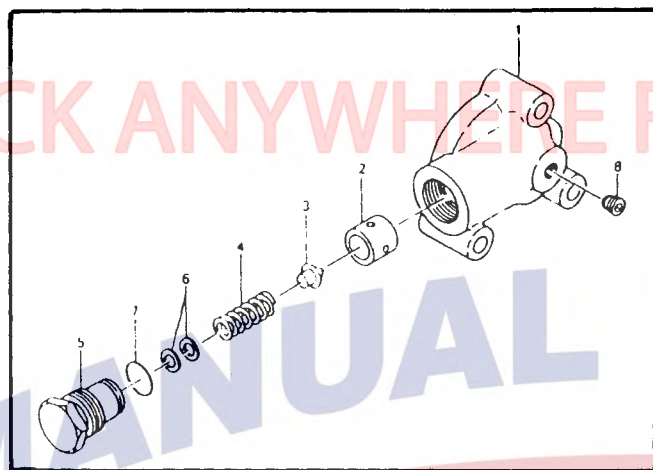
Figure 58

- * Rotor clearance: .0039" — .0071" (0.10 ~ 0.18mm)
Max limit: .0079" (0.2mm)



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Figure 59



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Figure 9

Cover assembly disassembly.

1. Cover
2. Seat
3. Poppet
4. Spring
5. Plug
6. Shim
7. O-ring
8. Plug

Disassemble the cover assembly as follows.

- (1) Remove the cover assembly from the hydraulic cylinder, and clean around the periphery.
- (2) Remove the plug, and take out the shims, spring, poppet and seat.

j. Cover assembly inspection

Clean each part with light oil. If parts are left disassembled for an extended period, coat with hydraulic oil or other oil to protect against rusting. Check each part for burrs, scratches, scoring and other defects. All burrs must be removed by oil stone or lapping. If badly matted, replace. Pay special attention when checking seat surfaces of the seat and the poppet for scratches.

k) Cover assembly reassembly

Reverse the disassembly procedures for reassembly, paying special attention to the following points.

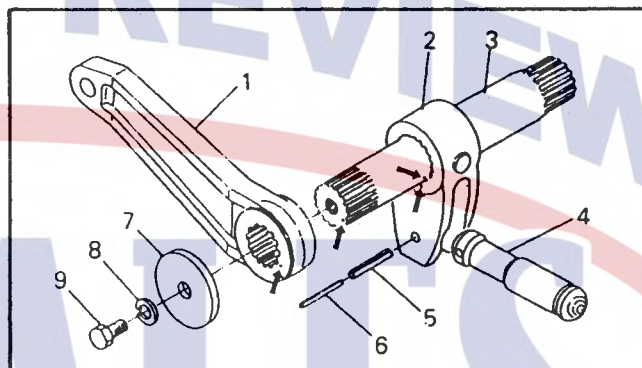
- (1) Use new O-rings coated with grease.
- (2) Place the seat and poppet in the cover, and install shims (thinner shims first) and spring in the plug. Then screw the plug into the cover and tighten to a torque of 25 to 33 ft. lbs. (34 to 44 N·m).
- (3) Connect a pressure gauge (having a maximum reading of about 2800 to 3600 psi (19306 to 24822 kPa) to the cover after removing the blind plug (PTI/8) to adjust the relief set pressure. Set pressure can be changed with shims. A shim thickness of 1mm changes set pressure by approximately 199 psi (1372 kPa).

l) Hydraulic cylinder reassembly

Reverse disassembly procedure for reassembly and mounting of the hydraulic cylinder to the body.

Observe the following precautions.

- (1) Align punches, as shown in Fig. 10, when assembling the hydraulic arm, lifter shaft, and lift arm into the hydraulic cylinder. Apply quality grease in the bearing sections when assembling the lifter shaft into the hydraulic cylinder.
- (2) When the bushing at the rear shaft in the hydraulic cylinder is to be replaced, press-fit the new bushing as shown in Fig. 11.

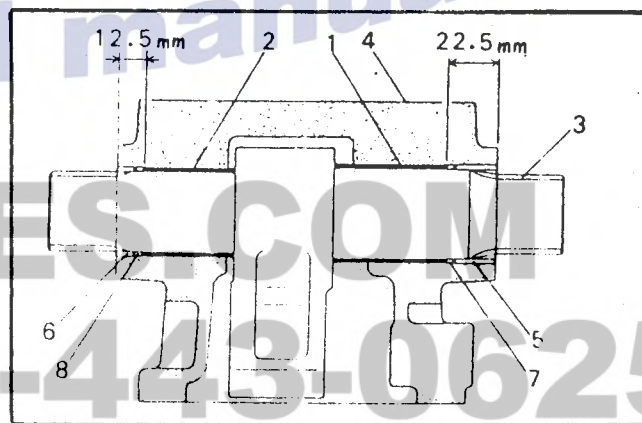


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Figure 10

Punch alignment for spline.

1. Lift arm
2. Hydraulic arm
3. Lifter shaft
4. Push rod
5. Roll pin
6. Roll pin
7. Washer
8. Lockwasher
9. Bolt



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Figure 11

Bushing press-fitting depth.

1. Bushing A
2. Bushing B
3. Lifter shaft
4. Lift housing
5. Collar A
6. Collar B
7. O-ring
8. O-ring

POWER TRAIN

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POWER TRAIN

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MANUAL PREVIEW

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