

162 MAINTENANCE

WARNING

When working with the disc brake, observe the precautions listed below.

1. Never reuse old brake fluid.
2. Do not use fluid from a container that has been left unsealed or that has been open a long time.
3. Do not mix two types of fluid for use in the brake. This lowers the brake fluid boiling point and could cause the brake to be ineffective. It may also cause the rubber brake parts to deteriorate. Recommended fluids are given in the table.

NOTE: The type of fluid originally used in the disc brake is not available in most areas, but it should be necessary to add very little fluid before the first brake fluid change. After changing the fluid, use only the same type thereafter.

Table 94 Recommended Disc Brake Fluid

- Atlas Extra Heavy Duty
- Shell Super Heavy Duty
- Texaco Super Heavy Duty
- Wagner Lockheed Heavy Duty
- Girling Amber

The correct fluid will come in a can labeled **D.O.T.3**. Do not use fluid that does not have this marking.

•Replace the dust seal if damaged.

Caliper parts wear

Inspect the pads for wear. If either pad is worn down through the red line, replace both pads as a set. If any grease or oil spills on the pads, wash it off with trichloroethylene or a high flash-point solvent. Do not use one which will leave an oily residue. If the oil cannot be thoroughly cleaned off, replace the pads.

The fluid seal around the piston maintains the proper pad/disc clearance. If this seal is not satisfactory, one pad will wear more than the other, pad wear will increase, and constant pad drag on the disc will raise brake and brake fluid temperature.

Replace the fluid seal under any of the following conditions: (a) fluid leakage around pad A; (b) brakes overheat; (c) there is a large difference in A and B pad

4. Don't leave the reservoir cap off for any length of time to avoid moisture contamination of the fluid.

5. Don't change the fluid in the rain or when a strong wind is blowing.

6. Except for the disc pads and discs, use only disc brake fluid, isopropyl alcohol, or ethyl alcohol for cleaning brake parts. Do not use any other fluid for cleaning these parts. Gasoline, motor oil, or any other petroleum distillate will cause deterioration of the rubber parts. Oil spilled on any part will be difficult to wash off completely and will eventually reach and break down the rubber used in the disc brake.

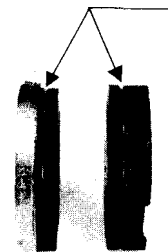
7. When handling the disc pads or disc, be careful that no disc brake fluid or any oil gets on them. Clean off any fluid or oil that inadvertently gets on the pads or disc with a high flash-point solvent. Do not use one which will leave an oily residue. Replace the pads with new ones if they cannot be cleaned satisfactorily.

8. Brake fluid quickly ruins painted surfaces; any spilled fluid should be completely wiped up immediately.

9. If any of the brake line fittings or the bleed valve is opened at any time, **AIR MUST BE BLED FROM THE BRAKE.**

10. When installing or assembling the disc brake, tighten the disc brake fittings to the values given in Table 6. Improper torque may cause the brake to malfunction.

Red Line



wear; (d) the seal is stuck to the piston. If the fluid seal is replaced, replace the dust seal as well. Also replace both seals every other time the pads are changed.

Table 95 Master Cylinder Parts

	Measurement	Standard	Service Limit
Front	Cylinder inside diameter	14,000-14.043 mm	14.08 mm
	Piston outside diameter	13.957-13.984 mm	13.90 mm
	Primary, secondary cup diameter	14.65-15.15 mm	14.50 mm
	Spring free length	51.1 mm	48.0 mm
Rear	Cylinder inside diameter	15.870-15.913 mm	15.95 mm
	Piston outside diameter	15.827-15.854 mm	15.75 mm
	Primary, secondary cup diameter	16.45~16.95 mm	16.30 mm
	Spring free length	41.2 mm	39.0 mm