

CLEANING AND INSPECTION (Continued)

5. Do not attempt to clean or restore oil or grease-soaked brake linings. When contaminated linings are found, brake linings must be replaced in complete axle sets and the rotor braking surfaces wiped clean.
6. Calipers must be installed with bleed screws in upward position for proper bleeding of air from brake system.
7. Always replace rubber caliper pin insulators when replacing linings.

Disc Brakes

1. Raise vehicle on hoist. Refer to Section 00-02.
2. Remove wheel and tire from hub and rotor.
3. Inspect brake shoes and lining for wear. If the lining is worn to within 3mm (1/8-inch) of the shoe, replace all four shoe and lining assemblies (complete axle set) on front or rear wheels as required.
4. Visually check caliper. If caliper housing is leaking, it should be replaced. If a seal is leaking, caliper must be disassembled and new seals installed. If a piston is seized in bore, a new caliper housing is required. Care should be taken not to dent, scratch or chip the plastic piston.

5. Lower vehicle.

Refer to Section 06-03 for disc brake rotor service procedure.

Drum Brakes

Tools Required:

- Rotunda Brake Vacuum 091-00001 or Rotunda Brake Parts Washer 065-00016
 - Rotunda Brake Drum Micrometer 010-00010
1. Raise vehicle on hoist. Refer to Section 00-02.
 2. Remove wheel and tire assembly from spindle.
 3. Remove drum assembly from spindle. Use an industrial vacuum cleaner such as Rotunda Brake Vacuum 091-00001 or Rotunda Brake Parts Washer 065-00016 or equivalent, to remove all dust from backing plates and interior of the brake drums.

4. Inspect brake shoes for excessive lining wear or shoe damage. If lining is damaged or worn within 0.794mm (1/32-inch) of the rivet heads on riveted linings or within 1.524mm (0.060-inch) of the shoe on bonded linings, they must be replaced. Replace any lining that has been contaminated with oil, grease or brake fluid. Replace lining in axle sets. Prior to replacement of lining, drum diameter should be checked using Rotunda Brake Drum Micrometer 010-00010 or equivalent to determine that brake drum braking surface diameter is within specification. If braking surface diameter exceeds specification, drum must be replaced.
5. Check condition of brake shoes, retracting spring, hold-down springs, and drum for signs of overheating. If shoes have a slight blue coloring, indicating overheating, retracting and hold-down springs should be replaced. **Overheated springs lose their pull and could cause new lining to wear prematurely, if not replaced. If brake drums are heat spotted, indicating an overheated condition, they should be replaced.**
6. Lower vehicle.
7. Refer to Section 04-02 for hub and drum installation and bearing adjustment procedure.

Brake Booster

Check booster operation as noted under Power Brake Functional Test. If brake booster is damaged or inoperative, replace it with a new booster. **The brake booster is serviced only as an assembly, including the check valve.**

Hydraulic Lines

Double wall steel tubing is used throughout the brake system with the exception of the flexible hoses at the front and rear wheels.

Always bleed the applicable primary or secondary brake system after primary or secondary brake system hose or line replacement.

When connecting a tube to a hose, tube connector or brake cylinder, tighten the tube fitting nut to specification.

Brake Tubing

Tools Required:

- Brake Line Flaring Tool D81L-2268-A
- Lb-In Torque Wrench D81L-600-A

WARNING: COPPER TUBING SHOULD NOT BE USED IN A HYDRAULIC SYSTEM.