# \*\* CAUTION

Older brake pads or shoes may contain asbestos, which has been determined to be cancer causing agent. Never clean the brake surfaces with compressed air! Avoid inhaling any dust from any brake surface! When cleaning brake surfaces, use a commercially available brake cleaning fluid.

## Brake Drums

**REMOVAL & INSTALLATION** 

See Figure 37

### SS CAUTION

Older brake pads or shoes may contain asbestos, which has been determined to be cancer causing agent. Never clean the brake surfaces with compressed air! Avoid inhaling any dust from any brake surface! When cleaning brake surfaces, use a commercially available brake cleaning fluid.

- 1. Raise and safely support the vehicle securely on jackstands.
- 2. Remove the tire and wheel assembly.
- 3. Remove the three retaining clips (if equipped), then remove the brake drum.

▶It may be necessary to back off the brake shoe adjustment in order to remove the brake drum. This is because the drum might be grooved or worn from being in service for an extended period of time.

≈Before installing a new brake drum, be sure to remove any protective coating with brake cleaner or a suitable fast-drying degreaser.

4. Install the brake drum in the reverse order of removal, then adjust the brakes as outlined later in this section.

## INSPECTION

## See Figures 38 and 39

Check that there are no cracks or chips in the braking surface. Excessive bluing indicates overheating and a replacement drum is needed. The



Fig. 37 Lift the brake drum from the shoes and backing plate

drum can be machined to remove minor damage and to establish a rounded braking surface on a warped drum. Never exceed the maximum oversize of the drum when machining the braking surface.

# SE CAUTION

Older brake pads or shoes may contain ashestos, which has been determined to be cancer causing agent. Never clean the brake surfaces with compressed air! Avoid inhaling any dust from any brake surface! When cleaning brake surfaces, use a commercially available brake cleaning fluid.

The brake drum inside diameter and run-out can be measured using a brake drum micrometer. The drum should be measured every time a brake inspection is performed. Take the inside diameter readings at points 90° apart from each other on the drum to measure the run-out. The maximum inside diameter is stamped on the rim of the drum or on the inside above the lug nut stud holes and is also contained in the brake specifications chart at the end of this section.

# **Brake Shoes**

#### INSPECTION

## ) See Figure 40

# \*\* CAUTION

Older brake pads or shoes may contain asbestos, which has been determined to be cancer causing agent. Never clean the brake surfaces with compressed air! Avoid inhaling any dust from any brake surface! When cleaning brake surfaces, use a commercially available brake cleaning fluid.

Inspect the brake shoes for wear using a ruler or Vernier caliper. Compare measurements to the brake specifications chart. If the lining is thinner than specification or there is evidence of the lining being contaminated by brake fluid or oil, repair the leak and replace all brake shoe assemblies (a complete axle set). In addition to the shoes inspect all springs and brake shoe hardware for wear and replace as necessary.

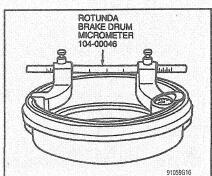


Fig. 38 Measure the drum using a micrometer made especially for brake drums

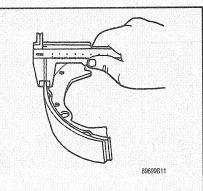


Fig. 40 Measure brake shoe thickness in several places around the shoe

#### REMOVAL & INSTALLATION

## > See Figures 41 thru 59

- 1. Raise and safely support the vehicle securely on jackstands.
- 2. Remove the wheel and tire assembly, then remove the brake drum.

→When servicing drum brakes, only dissemble and assemble one side at a time, leaving the remaining side intact for reference.

## \* CAUTION

Older brake pads or shoes may contain asbestos, which has been determined to be cancer causing agent. Never clean the brake surfaces with compressed air! Avoid inhaling any dust from any brake surface! When cleaning brake surfaces, use a commercially available brake cleaning fluid.

- 3. Contract the brake shoes by pulling the selfadjusting lever away from the starwheel adjustment screw and turn the starwheel up and back until the pivot nut is drawn onto the starwheel as far as it will come.
- 4. Pull the adjusting lever, cable and automatic. adjuster spring down and toward the rear to unhook the pivot hook from the large hole in the secondary shoe web. Do not attempt to pry the pivot hook from the hole.
- 5. Remove the automatic adjuster spring and the adjusting lever.
  - 6. Remove the secondary shoe-to-anchor

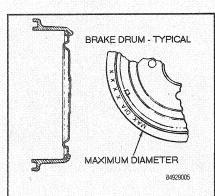


Fig. 39 Brake drum maximum diameter location