

installed. If a piston is seized in the bore, a new caliper housing is required.

Refer to Part 12-20 for disc brake rotor resurfacing procedure.

DISC BRAKE SERVICE PRECAUTIONS

1. Grease or any other foreign material must be kept off the linings surfaces of the rotor, and external surfaces of the hub during service operations. In handling the rotor and caliper assemblies, avoid deformation of the brake rotor and nicking or scratching of brake linings.
2. If a caliper piston is removed for any reason, the piston seal must be replaced.
3. During removal and installation of a wheel assembly, exercise care not to interfere with and damage the caliper splash shield or the bleeder screw fitting.
4. Front wheel bearing end play is critical and must be within specifications.
5. Be sure the vehicle is centered on the hoist before servicing any front end components, to avoid bending or damaging the rotor splash shield on full right or left wheel turns.
6. Riding of the brake pedal (common on left-foot applications) must be avoided during vehicle operation.
7. The wheel and tire must be removed separately from the brake rotor, unlike drum brakes where the wheel, tire and drum can be removed as a unit.
8. 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.
9. On Fairmont/Zephyr only, always replace rubber caliper insulators and plastic sleeves when replacing linings. Do not lubricate the slide pins.

DRUM BRAKES

1. Remove the wheel from the drum, and remove the drum as outlined in Part 12-02.
2. Use an industrial vacuum cleaner to remove all dust from the backing plates and interior of the brake drums.
3. Inspect the brake shoes for excessive lining wear or shoe damage. If the lining is worn within 1/32 inch of the rivet heads or if the shoes are damaged, 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, the drum diameter should be checked to determine that the brake drum braking surface diameter is within specification. If the braking surface diameter exceeds specification, the drum must be replaced.
4. Check the condition of brake shoes, retracting springs, hold-down springs, and drum for signs of overheating. If the shoes have a slight blue coloring, indicating overheating, the retracting and hold-down springs should be replaced. Overheated springs lose their pull and could cause the new lining to wear prematurely, if

not replaced. If the brake drums are heat spotted, indicating an overheated condition, they should be replaced.

5. Inspect all other brake parts and replace any that are worn or damaged.
6. Inspect the brake drum and, if necessary, refinish. The maximum inside braking surface diameter is shown on each brake drum (Fig. 33). If the maximum inside braking surface diameter shown on the drum is exceeded either by wear or refinishing, the drum must be replaced. Refer to Part 12-02 for refinishing.

BRAKE BOOSTER

Check the booster operation as noted under Power Brake Functional Test. If the 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.

BRAKE TUBING

If a section of the brake tubing becomes damaged, the entire section should be replaced with tubing of the same type, size, shape and length. Copper tubing should not be used in a hydraulic system. When bending brake tubing to fit underbody or rear axle contours, be careful not to kink or crack the tube.

HYDRAULIC LINES

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

Always bleed the applicable primary or secondary brake system after primary or secondary brake system hose or line replacement. Centralize the pressure differential valve after bleeding the system.

All brake tubing should be double flared properly to provide good leakproof connections. Clean the brake tubing by flushing with clean brake fluid before installation.

When connecting a tube to a hose, tube connector, or brake cylinder, tighten the tube fitting nut to specified torque with Milbor Tool 1112-144 or equivalent.

BRAKE HOSE

A flexible brake hose should be replaced if it shows signs of softening, cracking, or other damage.

When installing a new front brake hose, position the hose to avoid contact with other chassis parts. On all vehicles except Fairmont/Zephyr, place a new copper gasket over the hose fitting and thread the hose assembly into the front wheel cylinder or caliper. Fairmont/Zephyr front hose does not require a copper gasket and is reusable. Engage the opposite end of the hose to the bracket on the frame. The white stripe on the hose should show no evidence of twisting. Install the horseshoe-type retaining clip, and connect the tube to the hose with the tube fitting nut.