DESCRIPTION AND OPERATION

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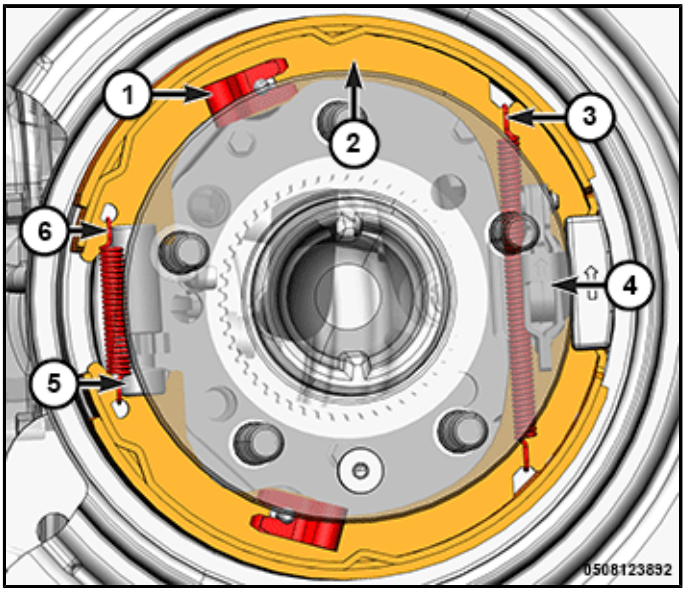

Drum in hat park brakes are dual shoe, internal expanding units with an adjuster mechanism and consist of the following major components:

1. Park brake shoe retainers
2. Park brake shoes
3. Park brake shoe return spring
4. Park brake shoe actuator
5. Park brake shoe adjuster
6. Park brake shoe spring

OPERATION

When the parking brake lever is pulled up the brake cable pulls the actuator which applies the park brake shoes outward against the brake drum-in-hat. When the brake lever is released, the return springs attached to the brake shoes pull the shoes back to their released position.

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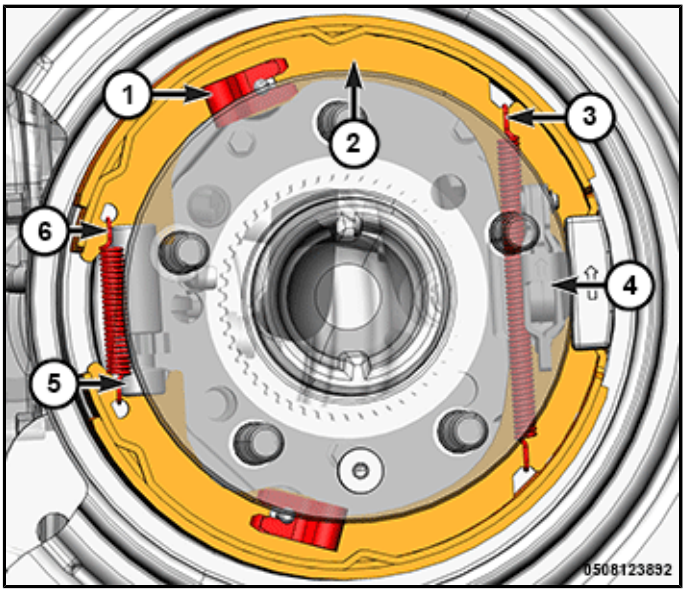

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CLEANING

Clean the individual brake components, including the support plate exterior, with a water dampened cloth or with brake cleaner. Do not use any other cleaning agents. Remove light rust and scale from the brake shoe contact pads on the support plate with fine sandpaper.

ROTOR INSTALLED

Adjustment can be made with a standard brake gauge or with adjusting tool. Adjustment is performed with the complete brake assembly installed on the backing plate.

1. Be sure parking brake lever is fully released.
2. Raise and support the vehicle (Refer to 04 - Vehicle Quick Reference/Hoisting/Standard Procedure).
3. Remove the plug from each access hole in brake support plates.
4. Remove the floor console (Refer to 23 - Body/Interior/CONSOLE, Floor/Removal and Installation) .
5. Loosen the park brake cable adjustment nut until there is slack in the front cable.
6. Insert the adjusting tool through the support plate access hole and engage the tool in the teeth of the adjusting screw star wheel.
7. Rotate the adjuster screw star wheel (move the tool handle upward) until slight drag can be felt when the wheel is rotated.
8. Back off the adjuster screw star wheel until brake drag is eliminated.
9. Repeat the adjustment at the opposite wheel. Be sure the adjustment is equal at both wheels.
10. Install the support plate access hole plugs.
11. Adjust the park brake cable (Refer to 05 - Brakes, Base/Parking Brake/Adjustments).
12. Remove the support and lower the vehicle.
13. Apply the park brake lever and make sure the park brakes hold the vehicle stationary.
14. Release park brake lever.

ROTOR REMOVED

Special Tools:

Click here to launch the form to order any tools you need.

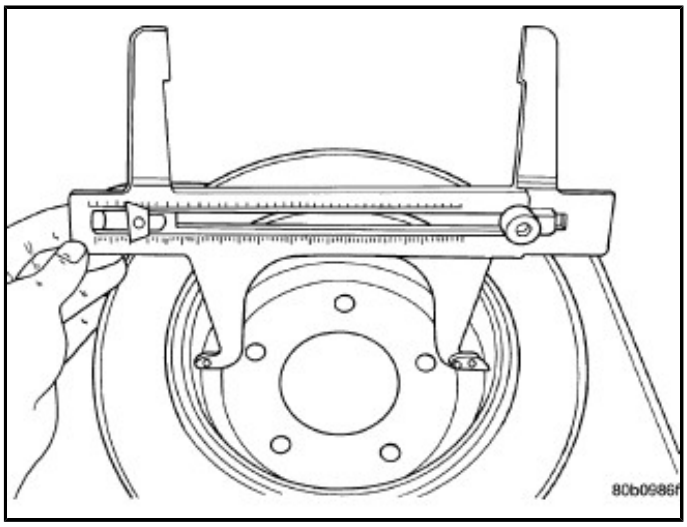
	C-3919 - Gauge, Brake Shoes

Adjustment can be made with a standard brake gauge or with adjusting tool. Adjustment is performed with the complete brake assembly installed on the backing plate.

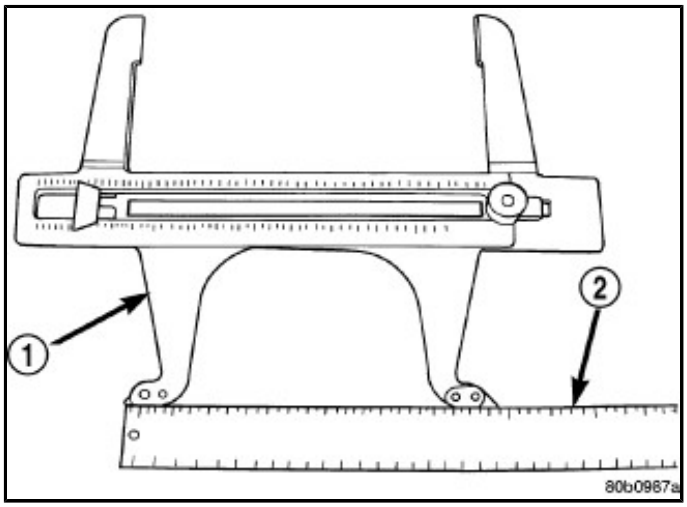
CAUTION: Before adjusting the park brake shoes be sure that the park brake lever is in the fully released position. If the park brake lever is not in the fully released position, the park brake shoes can not be accurately adjusted.

1. Raise and support the vehicle (Refer to 04 - Vehicle Quick Reference/Hoisting/Standard Procedure).
2. Remove the tire and wheel (Refer to 22 - Tires and Wheels/Removal and Installation).
3. Remove the disc brake caliper from the caliper adapter (Refer to 05 - Brakes, Base/Hydraulic/Mechanical/CALIPER, Disc Brake, Front/Removal and Installation).
4. Remove the rotor from the axle shaft (Refer to 05 - Brakes, Base/Hydraulic/Mechanical/ROTOR, Brake/Removal and Installation).

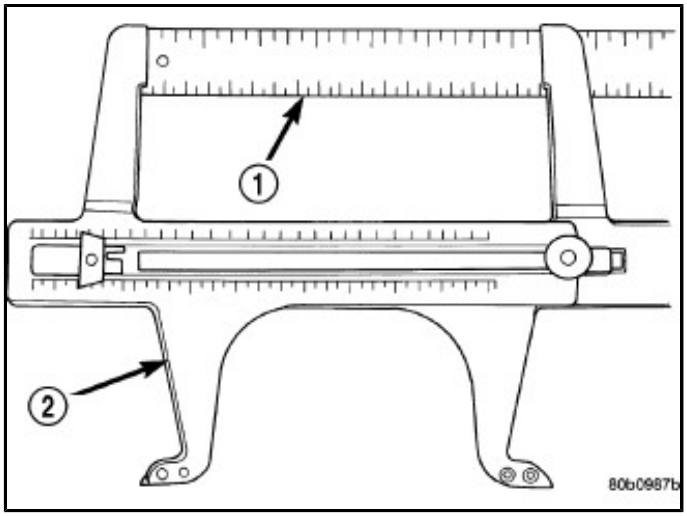
   NOTE: When measuring the brake drum diameter, the diameter should be measured at the center of the area in which the park brake shoes contact the surface of the brake drum.
5. Using C-3919 , or equivalent, **accurately** measure the inside diameter of the park brake drum portion of the rotor.



6. Using a ruler that reads in 64th of an inch, accurately read the measurement of the inside diameter of the park brake drum from the special tool.



7. Reduce the inside diameter measurement of the brake drum that was taken using C-3919 by 1/64 of an inch. Reset C-3919 or the equivalent used, so that the outside measurement jaws are set to the reduced measurement.



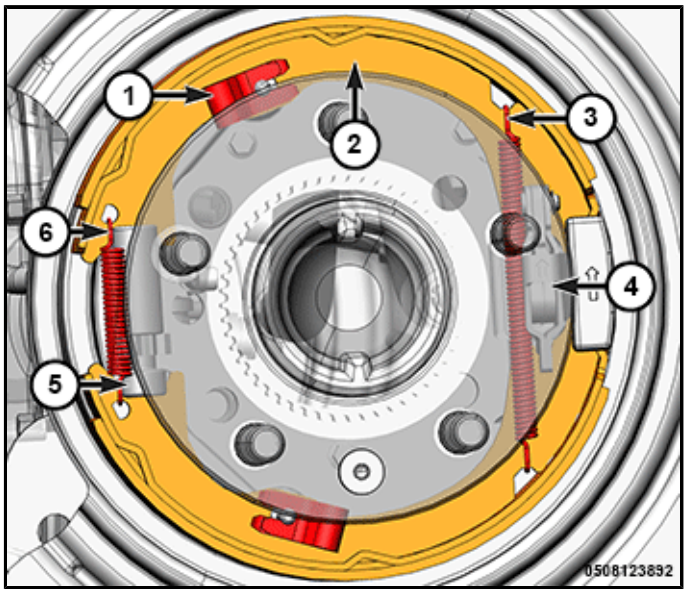
8. Place C-3919 , or equivalent over the park brake shoes. The special tool must be located diagonally across at the top of one shoe and bottom of opposite shoe (widest point) of the park brake shoes.
9. Using the star wheel adjuster, adjust the park brake shoes until the lining on the park brake shoes just touches the jaws on the special tool.
10. Repeat step 8 above and measure shoes in both directions.
11. Install the brake rotor on the axle shaft (Refer to 05 - Brakes, Base/Hydraulic/Mechanical/ROTOR, Brake/Removal and Installation).
12. Rotate the rotor to verify that the park brake shoes are not dragging on the brake drum. If park brake shoes are dragging, remove rotor and back off star wheel adjuster one notch and recheck for brake shoe drag against drum. Continue with the previous step until brake shoes are not dragging on brake drum.
13. Install the disc brake caliper on the caliper adapter (Refer to 05 - Brakes, Base/Hydraulic/Mechanical/CALIPER, Disc Brake, Front/Removal and Installation).
14. Install the wheel and tire (Refer to 22 - Tires and Wheels/Removal and Installation).
15. Remove the support and lower the vehicle.

CAUTION: Before moving vehicle, pump brake pedal several times to ensure the vehicle has a firm enough pedal to stop the vehicle.

NOTE: After park brake lining replacement, it is recommended that the park brake system be conditioned prior to use. This is done by making one stop from 25 mph on dry pavement or concrete using light to moderate force on the park brake lever.

16. Road test the vehicle to ensure proper function of the vehicle's brake system.

INSPECTION



As a general rule, riveted brake shoes (2) should be replaced when worn to within 0.78 mm (1/32 in.) of the rivet heads. Bonded lining should be replaced when worn to a thickness of 1.6 mm (1/16 in.).

Examine the lining contact pattern to determine if the shoes are bent or the drum is tapered. The lining should exhibit contact across its entire width. Shoes exhibiting contact only on one side should be replaced and the drum checked for runout or taper.

Inspect the adjuster screw assembly (5). Replace the assembly if the star wheel or threads are damaged, or the components are severely rusted or corroded.

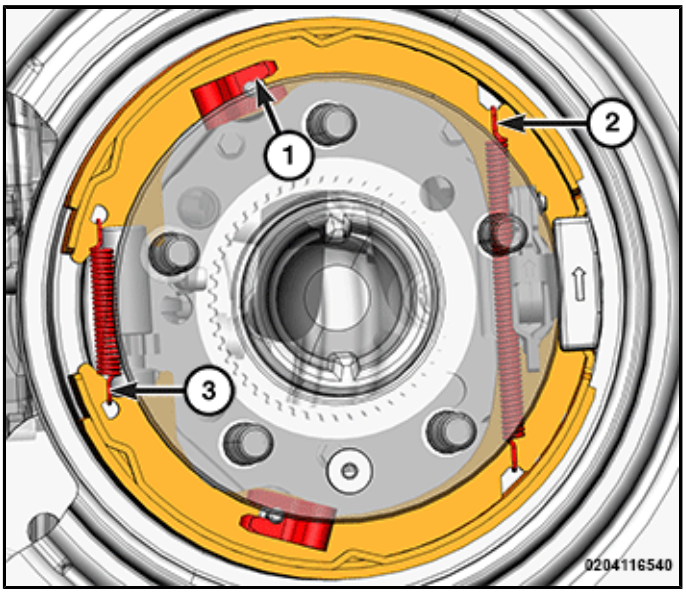
Discard the brake springs (3 and 6) and retainer components (1) if worn, distorted or collapsed. Also replace the springs if a brake drag condition had occurred. Overheating will distort and weaken the springs.

Inspect the brake shoe contact pads on the support plate, replace the support plate if any of the pads are worn or rusted through. Also replace the plate if it is bent or distorted.

REMOVAL AND INSTALLATION

REMOVAL

1. Raise and support the vehicle (Refer to 04 - Vehicle Quick Reference/Hoisting/Standard Procedure).
2. Remove the rear wheel speed sensor from the brake backing plate (Refer to 05 - Brakes, ABS/Electrical/SENSOR, Wheel Speed, Rear/Removal and Installation).
3. Remove the rear axle shaft (Refer to 03 - Differential and Driveline/Rear Axle/SHAFT, Axle/Removal and Installation).
4. Remove both springs (2), (3) from the brake shoes.
5. Remove the two brake shoe hold down springs (1).
6. Remove both brake shoes taking care to retain all hardware such as the hold down pins and springs, the adjuster assembly, and the actuator assembly.



INSTALLATION

NOTE: After park brake lining replacement, it is recommended that the park brake system be conditioned prior to use. This is done by making one stop from 25 mph on dry pavement or concrete using light to moderate force on the park brake lever.

1. Position the lower rear park brake shoe to the brake backing plate and install the hold down pin and spring (1).
2. Position the adjuster assembly, and the actuator assembly to the lower park brake shoe.
3. Position the upper rear park brake shoe to the brake backing plate and install the hold down pin and spring (1).

   NOTE: Be sure the brake shoe actuator and the adjuster are properly mated to the brake shoes.

4. Install both springs (2, 3) to the brake shoes.
5. Install the rear axle shaft (Refer to 03 - Differential and Driveline/Rear Axle/SHAFT, Axle/Removal and Installation).
6. Install the rear wheel speed sensor to the brake backing plate (Refer to 05 - Brakes, ABS/Electrical/ SENSOR, Wheel Speed, Rear/Removal and Installation).
7. Adjust the rear brake shoes (Refer to 05 - Brakes/Parking Brake/SHOES, Parking Brake - Adjustments).
8. Remove the support and lower the vehicle.
9. Check the operation of the park brake system.