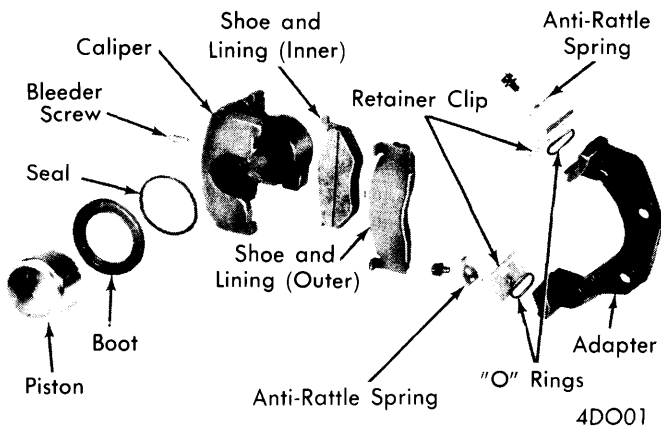


## CHRYSLER CORP. SINGLE PISTON DISC

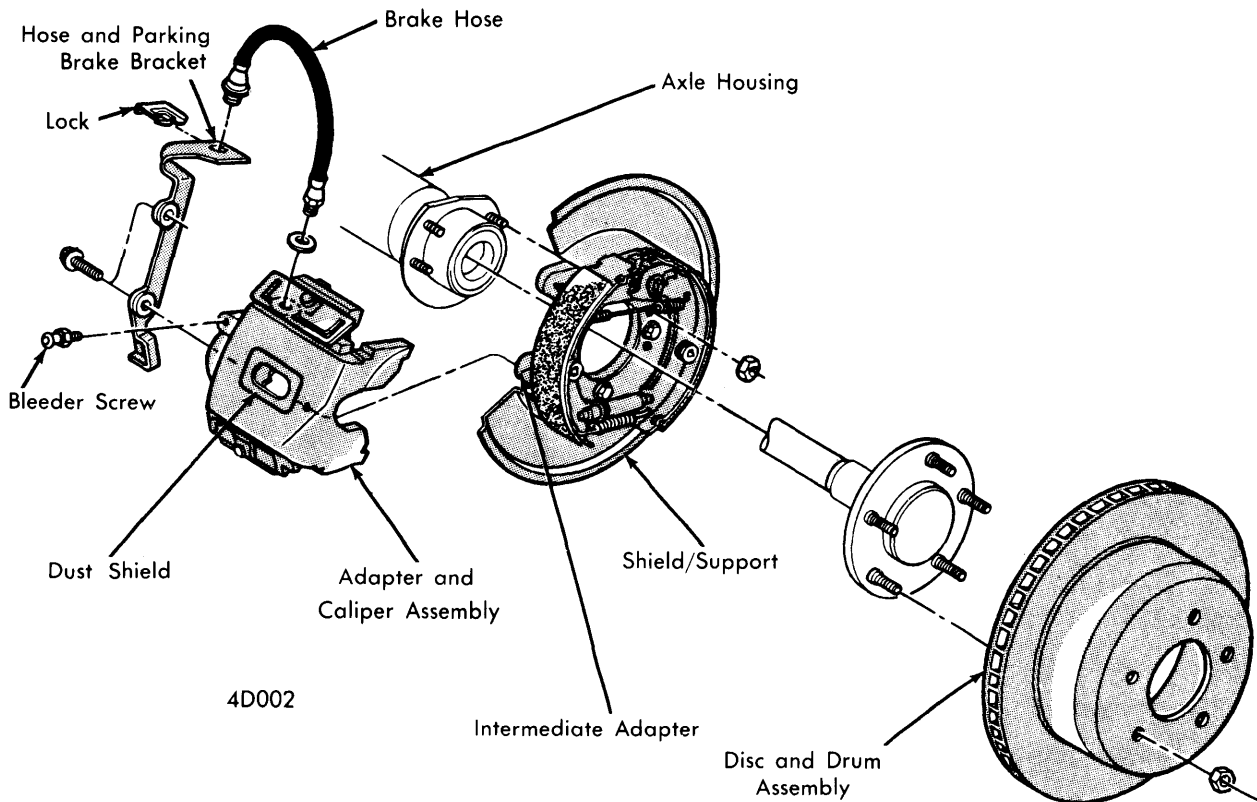
**CHRYSLER CORP.**  
**Dart & Valiant**  
**Gran Fury & Monaco**  
**Chrysler & Imperial**

### DESCRIPTION

The disc brake assembly consists of a caliper, disc pads, splash shield, adapter, and rotor. The rotor has integrally cast cooling fins between machined braking surfaces. As the brake pedal is depressed, hydraulic pressure is applied against the piston located in the caliper assembly. This force is transmitted to the inboard disc pad and against the braking surfaces. As the forces increase against the inboard side, the caliper slides inward providing full clamping forces on the rotor.



**SLIDING CALIPER ASSEMBLY (TYPICAL)**



**CHRYSLER IMPERIAL REAR BRAKE ASSEMBLY**

### PARKING BRAKE (CHRYSLER IMPERIAL)

Parking brake assembly consists of conventional type shoe brake mounted on axle flange and intermediate disc brake adapter. Braking disc used for service brakes has separate internal seven inch drum surface for internal expanding parking brake shoes.

### ADJUSTMENT

#### SERVICE BRAKES

Disc brakes are self-adjusting. Caliper piston seals are designed to retract pistons just enough to allow brake lining to lightly brush disc without any drag.

#### PARKING BRAKE (CHRYSLER IMPERIAL)

**Shoe Adjustment** — Release parking brake lever and loosen cable adjusting nut to insure cable is slack. Using suitable tool (C-4223), rotate star wheel until brake shoes seat against drum surface. Back off star adjuster 12 notches or "clicks" to insure a free wheel with no drag.

**Cable Adjustment** — Release parking brake cable and loosen cable adjusting nut to insure cable is slack. Tighten cable adjusting nut until a slight drag is felt while rotating wheel, then back off nut until wheel can be rotated freely. Back off nut an additional two full turns. Apply and release parking brakes several times to see that wheels rotate freely with no drag.

## CHRYSLER CORP. SINGLE PISTON DISC (Cont.)

### SERVICING

#### BLEEDING SYSTEM

See *Hydraulic Brake Bleeding* in this section.

#### SHOE & LINING INSPECTION

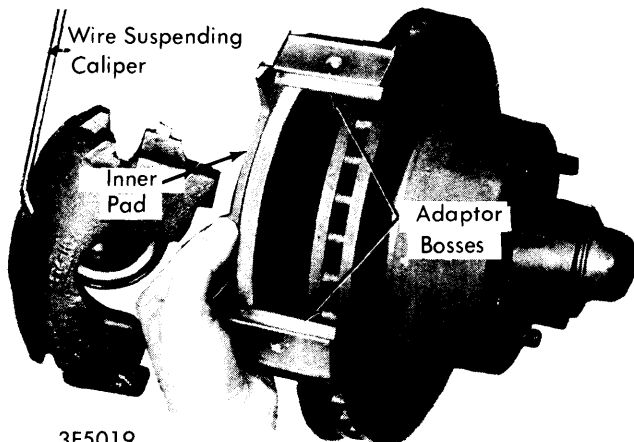
Inspect condition of disc pad assemblies any time wheels are removed. If any disc pad wears to the following limits, replace complete disc pad set.

Application	Wear Limit
Chrysler Corp.	
All (Exc. Dart, Valiant) .....	$15/64$ "
Dart, Valiant	
Inner Disc Pad .....	$3/16$ "
Outer Disc Pad .....	$1/4$ "

#### BRAKE PAD REPLACEMENT

**Removal** — Remove approximately two-thirds of brake fluid from master cylinder. Raise and support vehicle. Remove all necessary wheels. Remove caliper retaining clips and anti-rattle springs. Remove caliper from rotor by sliding caliper out and away from assembly. Remove outboard pad by prying between pad and caliper fingers. Support caliper to eliminate strain on brake hose.

**Installation** — Push piston to bottom of bore. Slide new outboard disc pad into recess of caliper. Ensure that no free play exists between pad flanges and caliper fingers, bend flanges as necessary. Position inboard pads in adaptor and over rotor. Align caliper on machined bosses of adaptor. Install anti-rattle springs and retaining clips. Tighten retaining screws to specifications. Refill master cylinder, pump brake pedal until firm braking is obtained. Bleed system if necessary.



REMOVING OR INSTALLING INNER PAD

#### ROTOR SERVICING

**Lateral Runout** — Tighten wheel bearings until all endplay is eliminated. Attach dial indicator to suspension such that dial pointer contacts rotor face approximately one inch from outer edge. Turn rotor through one complete revolution, checking indicator as rotor moves. If runout exceeds specifications, refinish or replace rotor assembly as necessary.

**Parallelism** — Measure thickness of rotor at four or more points around rotor. Make all measurements at same distance from edge of rotor. If rotor does not meet specification, refinish or replace rotor assembly as necessary.

### REMOVAL & INSTALLATION

#### BRAKE CALIPER

Caliper removal and installation procedures are same as for disc pad assembly replacement, except it will be necessary to disconnect brake hose. See *Shoe & Lining Replacement*.

#### HUB & ROTOR

**Chrysler Corp. Removal (Front)** — Raise and support vehicle, then remove wheel and tire assembly. Remove caliper assembly and suspend with wire or hook to avoid damage to brake hose. Remove grease cap, cotter pin, nut lock, thrust washer and outer wheel bearing, then remove hub from wheel spindle.

**Chrysler Corp. Installation (Front)** — Slide rotor and hub assembly onto spindle. Install outer wheel bearing, thrust washer and nut. Tighten nut to 90 INCH lbs. while rotating hub. Back off nut to release all preload, then tighten nut finger tight. Position lock on nut, then install cotter pin and grease cap. Clean both sides of rotor with alcohol or suitable solvent, then install caliper assembly.

**Chrysler Imperial Removal (Rear)** — Raise and support vehicle, then remove wheel and tire. Remove caliper assembly and suspend with wire or hook to avoid damage to brake line. Loosen parking brake star adjusting wheel using suitable tool (C-4223). Remove retaining clips, then remove rotor and drum assembly from axle flange.

**Chrysler Imperial Installation (Rear)** — Clean both sides of rotor with alcohol or suitable solvent, then install on axle flange. Install caliper and wheel and tire assembly, then adjust parking brake. See *Parking Brake Adjustment*.

### OVERHAUL

**Disassembly** — With caliper removed from rotor (brake hose still attached), carefully depress brake pedal to hydraulically force piston out of bore. Pedal will fall away when piston has passed bore opening. Support brake pedal to any position below first inch of pedal travel to prevent fluid loss. **NOTE** — Chrysler Corp. recommends that compressed air not be used to remove piston from caliper. Disconnect brake hose from caliper, mount caliper in padded vise. Do not clamp unit too tightly. Remove dust boot, and using a small wooden or plastic stick, pry seal from caliper bore groove. Discard seal.

**Cleaning & Inspection** — Clean all components, using denatured alcohol, and air dry. Blow out all passages and bores. Inspect piston and bore for scoring or pitting. Clean light scoring or corrosion with crocus cloth. On Chrysler Corp. vehicles, bores with deep scoring may be honed, providing diameter of bore is not increased more than .002". If specification is exceeded, replace caliper.

## CHRYSLER CORP. SINGLE PISTON DISC (Cont.)

**Assembly (All)** – Dip new piston seal in clean disc brake fluid or other specified fluid and install in bore groove. Coat piston boot with lubricant (leave generous amount in boot). Install boot in caliper outer groove. Plug fluid inlet port and bleeder screw hole, coat piston with disc brake fluid, spread boot with fingers, and insert piston. Entrapped air below piston will force boot around piston. Remove plugs and push piston to bottom of bore. *NOTE – Before installing caliper, check condition of rotor, as described under ROTOR SERVICING.*

TIGHTENING SPECIFICATIONS	
Application	Ft. Lbs.
Chrysler Corp.	
Brake Hose-to-Caliper .....	25
Adapter Mounting Bolts .....	75-100
Caliper Retaining Screws .....	180 INCH lbs.
Splash Shield Bolts .....	220 INCH lbs.
Wheel Attaching Bolts .....	65

DISC BRAKE ROTOR SPECIFICATIONS						
Application	Disc Diameter	Lateral Runout	Parallelism	Original Thickness	Minimum Refinish Thickness	Discard Thickness
Chrysler Corp.						
Dart, Valiant	10.98"	.004"	.0005"	1.000-1.010"	.....	.940"
Imperial (Rear Disc)	11.63"	.004"	.0005"	1.000-1.010"	.....	.940"
All Others	11.75"	.004"	.0005"	1.250-1.400"	.....	1.180"