

FLOATING CALIPER SINGLE PISTON DISC

American Motors
Chrysler Corp.
Barracuda, Challenger, Charger,
Coronet, Satellite
Jeep
Cherokee, Wagoneer

SERVICING

BLEEDING SYSTEM

See *Hydraulic Brake Bleeding* in this section.

SHOE & LINING INSPECTION

Inspect condition of disc pad assemblies any time wheels are removed, or at least every 12,000 miles (more often under severe conditions). If any disc pad lining measures .030" at any point, or total shoe and lining thickness measures .230", complete disc pad set must be replaced.

SHOE & LINING REPLACEMENT

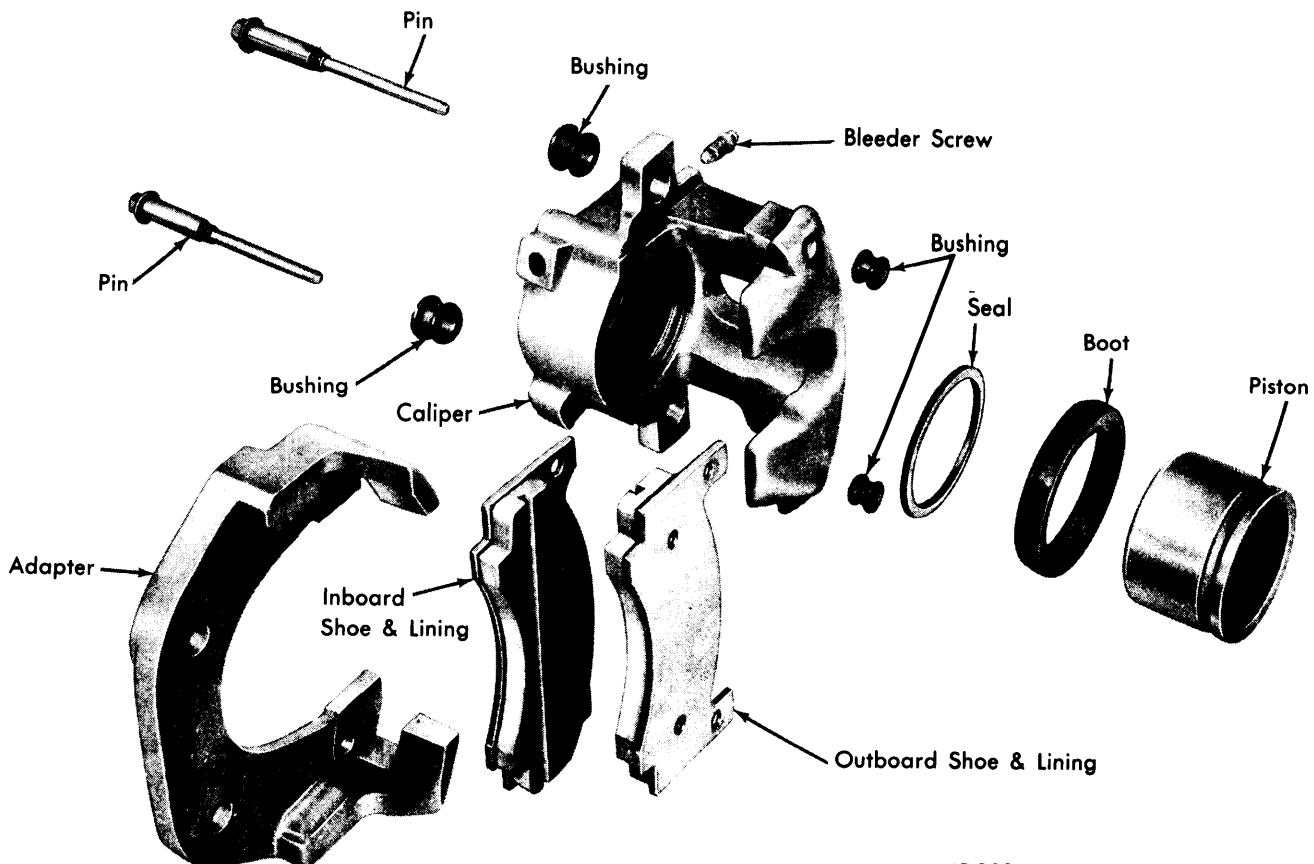
Removal — Remove approximately $\frac{2}{3}$ of fluid from master cylinder. **NOTE** — Do not completely empty master cylinder or disconnect hydraulic lines, as air will enter system. Raise and support vehicle, then remove wheels and tires. Remove caliper guide pins, positioners that attach caliper to adapter, and anti-rattle spring. Lift caliper assembly from rotor, then support to prevent damage to brake hose. Remove inner and outer disc pad assemblies, inner and outer bushings, and positioners. Discard all bushings and positioners.

DESCRIPTION

Brake unit consists of hub and rotor, floating caliper, disc pad assemblies, splash shield, and adapter or support assembly. Caliper assembly floats through four rubber bushings on two steel guide pins. Guide pins are threaded into adapter and are also used to radially locate and retain both disc pad assemblies.

ADJUSTMENT

Shoe wear is automatically compensated for by floating caliper feature; therefore, no adjustment, in service, is necessary.



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FLOATING CALIPER ASSEMBLY

Brake Systems

FLOATING CALIPER SINGLE PISTON (Cont.)

Installation — Push piston to bottom of bore. Install new inner guide pin bushings (flanged end inboard). Compress flange of outboard bushings and work into position from outside. Slide new pad assemblies into position, ensuring metal plate in pad is fully recessed in caliper. **NOTE** — On Chrysler Corp. models, thinner shoe is on outboard side. Install new positioners over guide pins (open end toward outside). Insert assembled pins from inboard side, press in, and thread into adapter and tighten. Refill master cylinder, and pump brakes until firm pedal is obtained. Bleed system if necessary.

ROTOR SERVICING

Lateral Runout — Tighten wheels 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, replace rotor assembly. Readjust bearings.

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, replace with new assembly.

Rotor Specifications

Discard Thickness	
American Motors940"
Chrysler Corp.940"
Jeep	1.215"
Lateral Runout	
American Motors & Jeep005"
Chrysler Corp.004"
Parallelism	
All0005"

REMOVAL & INSTALLATION

BRAKE CALIPER

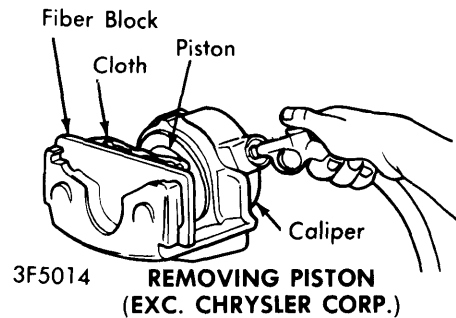
Caliper assembly removal and installation is same procedure as for shoe and lining replacement, except that it will be necessary to disconnect brake hose at caliper. **NOTE** — On Chrysler Corp. models, do not disconnect brake hose until piston is removed from caliper.

OVERHAUL

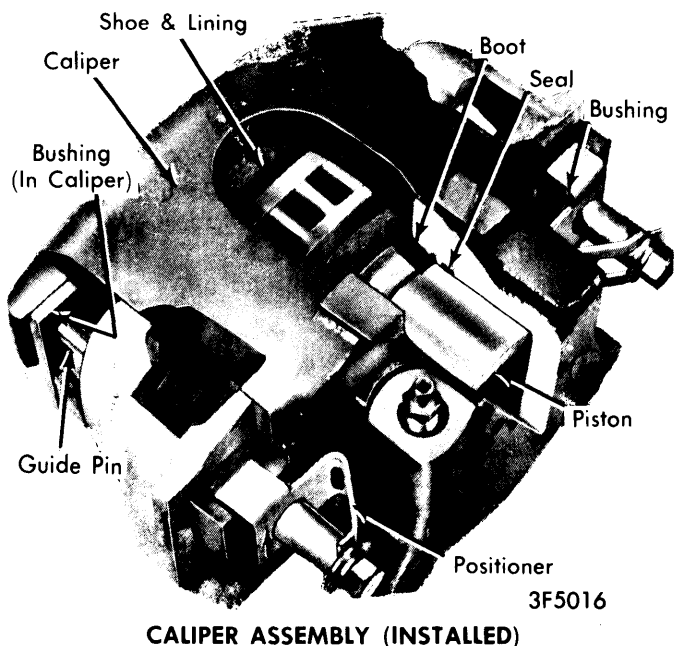
BRAKE CALIPER

Disassembly (American Motors & Jeep) — Clean exterior of unit with clean brake fluid. Open bleeder screw and drain residual fluid from caliper. Place on clean working surface. Pad interior of caliper with clean shop towels, then gently apply air pressure to inlet hole of caliper to push piston out of

bore. **CAUTION** — Use only enough air pressure to ease piston out of bore. Do not blow piston out of bore. Remove dust boot and piston seal from bore using a small wooden or plastic stick, then discard. Remove bleeder screw and rubber bushings.



Disassembly (Chrysler Corp.) — With caliper assembly removed from rotor (brake hose still attached), support caliper and remove dust boot. Carefully depress brake pedal, to hydraulically push piston out of bore. **NOTE** — Chrysler Corp. recommends that compressed air not be used to remove piston from caliper. Brake pedal will fall away when piston has passed bore opening. Prop pedal to any position below first inch of pedal travel (to prevent fluid loss). Disconnect and plug brake hose from tube at frame bracket. **NOTE** — Hose must be plugged before piston can be removed from caliper on other wheel. Mount caliper in padded vise. Do not clamp too tightly. Using small wooden or plastic stick, work piston seal out of bore groove. Discard seal. Remove bleeder screw.



FLOATING CALIPER SINGLE PISTON (Cont.)

Cleaning & Inspection (All) – Clean all components with denatured alcohol or clean brake fluid, then dry using dry, filtered compressed air. Blow out all passages and bores. Inspect piston bore for scoring, pitting, or corrosion. A corroded or deeply scored caliper should be replaced. Polish any lightly scored or discolored area with crocus cloth. **CAUTION** – *DO NOT attempt to refinish piston in any way; replace if damaged.* Flush caliper with brake fluid after polishing.

Assembly (All) – Coat new piston seal and new boot with clean brake fluid and install in bore groove. Coat piston generously with brake fluid, spread boot with fingers, work piston into boot, and press down until piston bottoms. Install new inner guide pin bushings in caliper, with flanged end on inboard side. Compress flanges of outboard bushings in fingers and work into position in hole from outboard side. Install disc pad assemblies. **NOTE** – *Before installing caliper, check rotor specifications.*

TIGHTENING SPECIFICATIONS

Application	Ft. Lbs.
American Motors	
Caliper Mounting Bolt.....	80
Brake Hose-to-Caliper.....	25
Wheel Attaching Nuts.....	75
Chrysler Corp.	
Brake Hose-to-Tube.....	80-150 INCH Lbs.
Adapter Mounting Bolt.....	75-100
Guide Pins.....	25-35
Splash Shield.....	220 INCH Lbs.
Combination Valve-to-Frame.....	200 INCH Lbs.
Jeep	
Brake Line-to-Caliper.....	120-200 INCH Lbs.
Caliper Mounting Bolts.....	35
Wheel Attaching Nuts.....	65-80