

Brake Systems

JEEP SLIDING CALIPER DISCS

CJ Models

DESCRIPTION

Sliding caliper disc brake assemblies used on CJ models are the single piston type. Calipers are mounted to an anchor mount connected to front drive axle. As brake pedal is depressed, hydraulic pressure is passed to brake caliper piston. This force is transmitted to inboard disc pad and against inner braking surface. As force increases against inner side, caliper slides inward, providing vise-like clamping action on rotor.

ADJUSTMENT & SERVICING

DISC PAD ADJUSTMENT

Pad wear is automatically compensated for by piston moving outward in cylinder bore; therefore, no disc pad adjustment in service is necessary. **NOTE** — *Inspect condition of disc pads whenever wheels are removed.*

BLEEDING SYSTEM

See *Hydraulic Brake Bleeding in this Section*

REMOVAL & INSTALLATION

DISC BRAKE PADS

Removal — 1) To prevent master cylinder overflow when caliper piston is depressed, remove two-thirds of the brake fluid from master cylinder reservoir. Raise vehicle and remove wheel.

2) Using a screwdriver, press caliper piston to bottom of bore. Remove support key retaining screw. Drive out support key with a punch and hammer. Lift caliper assembly off anchor mount. Do not let caliper hang from brake line.

3) Remove inner disc pad from anchor mount. Remove anti-rattle spring from inner disc pad. Note position of spring for installation. Remove outer disc pad from caliper.

Installation — 1) Install anti-rattle spring on rear flange of inner disc pad. Make sure looped section of spring faces away from rotor. Install inner disc pad in anchor mount. Make sure anti-rattle spring stays in place.

2) Install outer disc pad in caliper. Place caliper in position over rotor and onto anchor mount. **CAUTION** — *Care must be taken not to tear or dislodge dust boot when installing caliper.*

3) Align caliper with anchor mount and install support key and support spring between abutment surfaces at trailing end of caliper and anchor mount. Drive support key into place with a punch and hammer.

4) Install support key screw and tighten to 15 Ft. Lbs. Fill master cylinder with new brake fluid. Press on brake pedal several times to seat disc brake pads. Install wheel and lower vehicle.

BRAKE CALIPER

Removal & Installation — Caliper removal and installation procedures are same for disc pad replacement, except it will be necessary to disconnect brake hose.

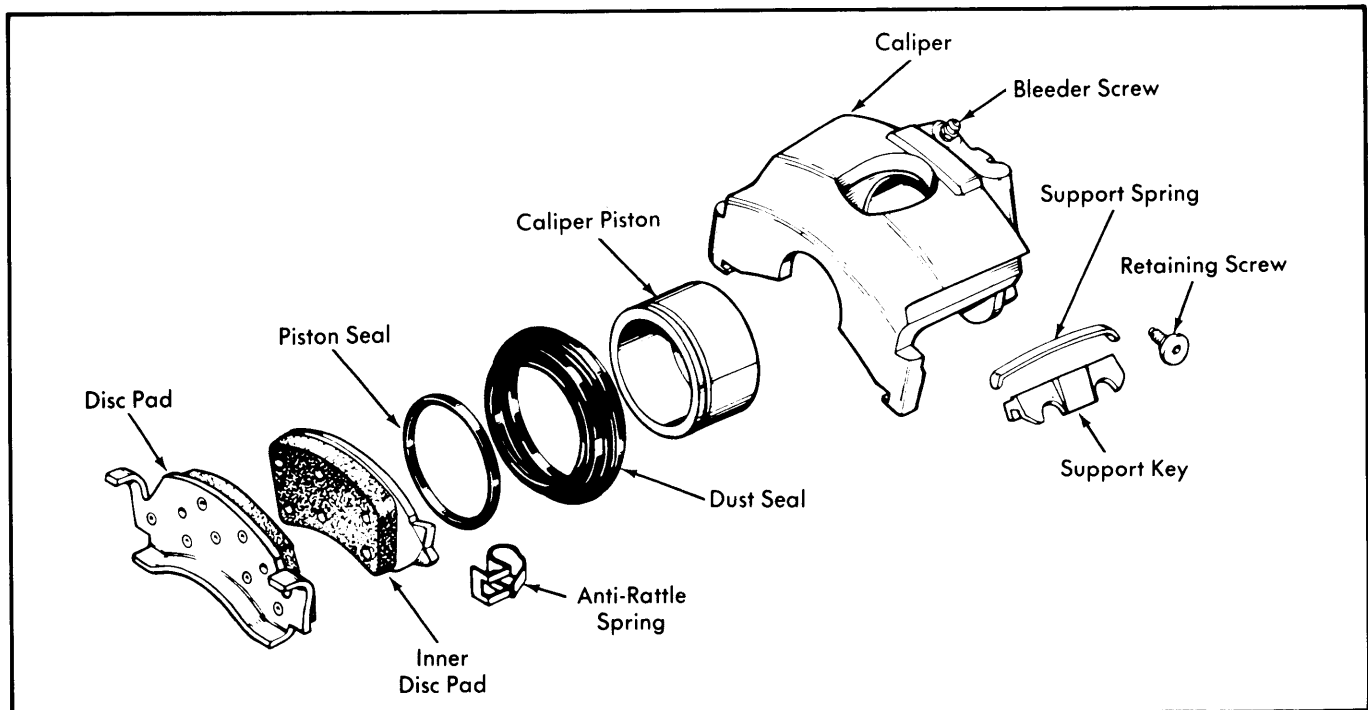


Fig. 1 Exploded View of Sliding Caliper Assembly

JEEP SLIDING CALIPER DISCS (Cont.)

OVERHAUL

BRAKE CALIPER

Disassembly – 1) With caliper removed, drain fluid from caliper. Place caliper assembly on bench, piston side up. Place several shop towels between piston and outer legs of caliper housing.

2) Slowly and carefully apply air pressure to caliper inlet port until piston comes out of caliper housing. **CAUTION** – Use low air pressure to remove piston. High pressure may cause piston to pop out with considerable force.

3) Remove dust seal from piston. Remove piston seal from piston bore using a plastic or wooden tool to pry seal out. **CAUTION** – A metal tool may scratch or score piston bore or seal groove. Remove bleeder screw and plastic cap.

4) Clean caliper housing and piston with denatured alcohol. Check cylinder bore, seal groove, and boot groove for damage and excessive wear. Replace piston if pitted.

Reassembly – 1) Lubricate piston seal with clean brake fluid and install seal in piston bore groove. Work seal into groove with finger. Install bleeder screw and plastic cap.

2) Place dust seal on piston bore. Do not lubricate seal. Reaching through top of seal, work large lip of seal into seal groove at top of piston bore. Make sure seal is completely seated in groove.

3) Lubricate caliper piston and small lip of dust seal with brake fluid and position piston over seal lip. Hold piston in place on dust seal. Apply reduced air pressure into caliper inlet port. **NOTE** – Air pressure should not exceed 15 psi.

4) As air pressure expands dust seal, carefully work caliper piston into dust seal until small lip of seal seats in caliper piston groove. With seal seated in groove, release air pressure and push piston to bottom of bore using a hammer handle.

5) Install caliper as previously outlined. Install brake hose on caliper using a new washer. Tighten fitting to 25 Ft. Lbs. Fill master cylinder and bleed brake system. Check brake application and recheck master cylinder level.

DISC ROTOR

Lateral Runout – Adjust wheel bearings until all endplay is eliminated. Attach dial indicator with contact tip of indicator on braking surface approximately one inch from rotor edge. Set indicator to zero and turn rotor through one revolution noting indicator reading. If runout exceeds specifications, replace or refinish rotor.

Parallelism – Check thickness of rotor at four or more points around circumference of rotor. Make all measurements at same distance from edge of rotor. If thickness variation exceeds specifications, replace or refinish rotor.

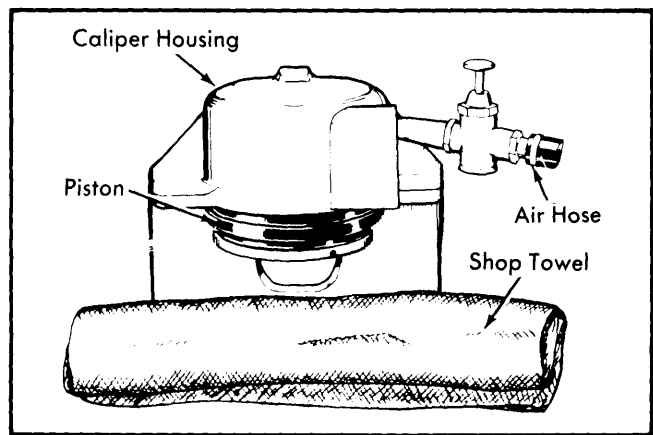


Fig. 2 Using Compressed Air to Remove Caliper Piston

TIGHTENING SPECIFICATIONS

Application	Ft. Lbs.
Brake Hose-to-Caliper	25
Support Key Retaining Screw	15

DISC BRAKE ROTOR SPECIFICATIONS

Application	Disc Diameter	Lateral Runout	Parallelism	Original Thickness	Minimum Refinish Thickness	Discard Thickness
CJ Models	11.7"	.003"	.005"	1.120"	1.119"