FORD MOTOR CO. FLOATING CALIPER DISCS

F-250/350 (1968-72)
F-250/350 – Over 6200 GVW (1973-74)

DESCRIPTION

Floating caliper disc brake assembly uses a two piston caliper mounted to an anchor plate which is bolted to steering spindle. As brake pedal is depressed, hydraulic pressure is passed through a proportioning valve to brake caliper pistons. This force is transmitted to inboard brake pad and against braking surface. Pressure then moves outer caliper housing and pad inward on caliper mounting pins, forcing outer pad against outer braking surface. When brakes are released, all pressure is removed from cylinders and rotor runout moves pistons back into cylinders to maintain rotor-to-pad clearance.

ADJUSTMENT & SERVICING

DISC PAD ADJUSTMENT

Pad wear is automatically compensated for by pistons moving outward in cylinder bore; therefore, no disc pad adjustment in service is required. *NOTE – Inspect condition of disc pads whenever wheels are removed. If any pad shows signs of excessive wear, replace complete disc pad set.*

PRESSURE DIFFERENTIAL VALVE

With ignition switch in "ON" or "ACC" position, slowly depress and release brake pedal until pressure differential valve is centered and warning light goes off. Bring fluid level in master cylinder to within ¼" of top and turn ignition switch to "OFF" position.

BLEEDING SYSTEM

See Hydraulic Brake Bleeding in this Section.

REMOVAL & INSTALLATION

DISC BRAKE PADS

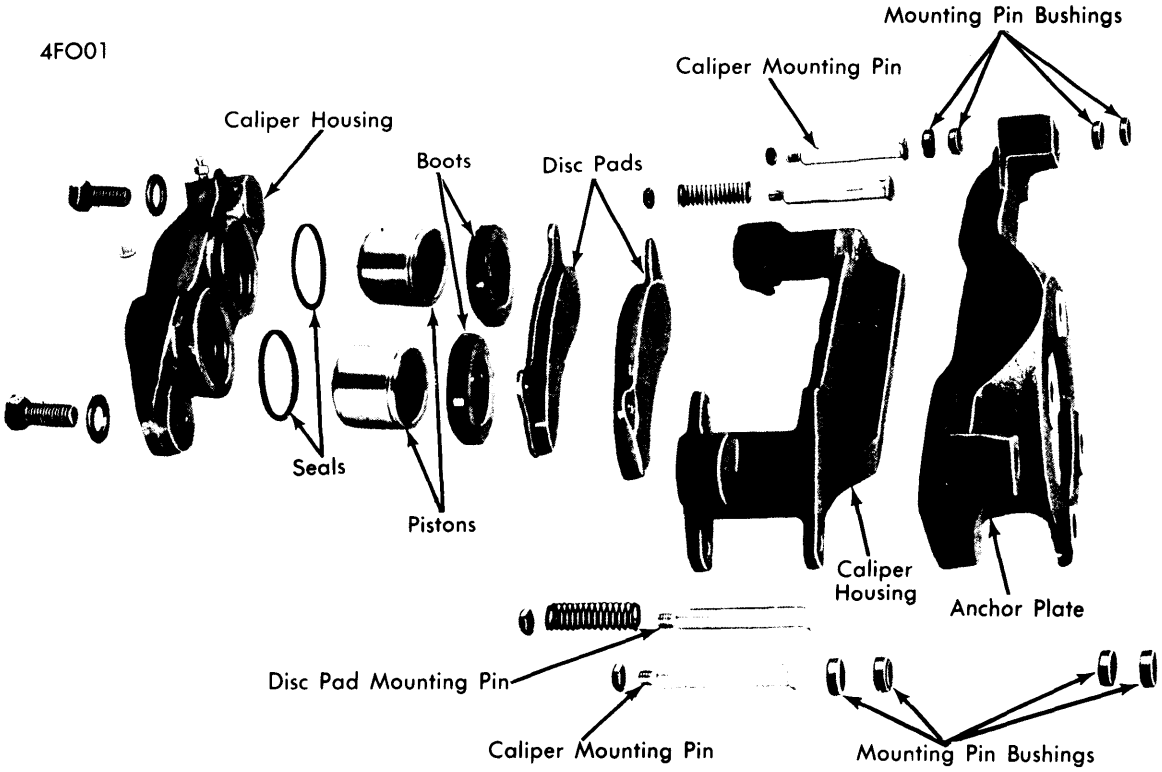
Removal – Raise vehicle and remove wheel. Remove disc pad mounting pins, anti-rattle springs and disc pads.

Installation – 1) Remove master cylinder cover. Loosen caliper housing bolts just enough to allow for installation of new disc pads. *CAUTION – Do not move pistons.* Install new pads, pad mounting pins and anti-rattle springs.

2) Tighten disc pad mounting pins and caliper housing bolts. *NOTE – Check master cylinder for fluid overflow.* Install wheel, refill master cylinder to within ¼" of top, install master cylinder cover and lower vehicle.

BRAKE CALIPER

Removal & Installation – Raise vehicle and remove wheel. Disconnect brake hose from caliper and remove caliper mounting pins. To install, reverse removal procedure, using new copper washer at brake hose connection, and bleed brake system.



FLOATING CALIPER ASSEMBLY

FORD MOTOR CO. FLOATING CALIPER DISCS (Cont.)

OVERHAUL

BRAKE CALIPER

Disassembly – Remove caliper mounting pins and brake hose, and plug end of hose to prevent fluid leakage. Drain fluid from cylinder bores and remove disc pads. Place a suitable wood block between caliper halves and apply low air pressure to brake hose inlets to force pistons out against block. Remove wood block and pistons, then separate caliper halves. Remove and discard seals from pistons.

Inspection – Clean all parts with denatured alcohol or brake fluid and wipe dry, using clean, lint free cloth. Blow out all passages with compressed air. Inspect bore for scoring, pitting, or corrosion. A corroded caliper should be replaced. Polish any lightly scored or discolored area with crocus cloth. Check piston for similar abnormalities.

Reassembly – Lubricate all rubber parts, cylinder bore and piston with clean brake fluid. Install new seals in grooves in cylinder bores. Install boots into retaining grooves in cylinder bores. Insert pistons into dust boots and start them into cylinders until they are beyond piston seats. Place wood block over each piston and press piston into cylinder until bottomed, being careful not to cock piston in bore. Install disc pads and assemble caliper halves. Install brake hose and bleed system.

DISC ROTOR SERVICING

Maximum of .020" material may be taken equally off each braking surface. Finished braking surfaces of rotor must be parallel within .001". Lateral runout must not exceed .003".

BRAKE SPECIFICATIONS

Application	Dimension
Disc Pad Wear Limit	1/32"
Rotor Thickness (Minimum)	.940"
Rotor Thickness Variation (Maximum)	.001"
Lateral Rotor Runout (Maximum)	.003"

TIGHTENING SPECIFICATIONS

Application	Ft. Lbs.
Disc Pad Mounting Pin	17-23
Caliper Half Bolts	155-185
Caliper Mounting Pins	17-23
Anchor Plate-to-Spindle Bolts	55-72