KELSEY-HAYES SINGLE PISTON DISC

Chrysler Corp.
Charger SE, Cordoba, Coronet, Fury

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.

SERVICING

BLEEDING SYSTEM

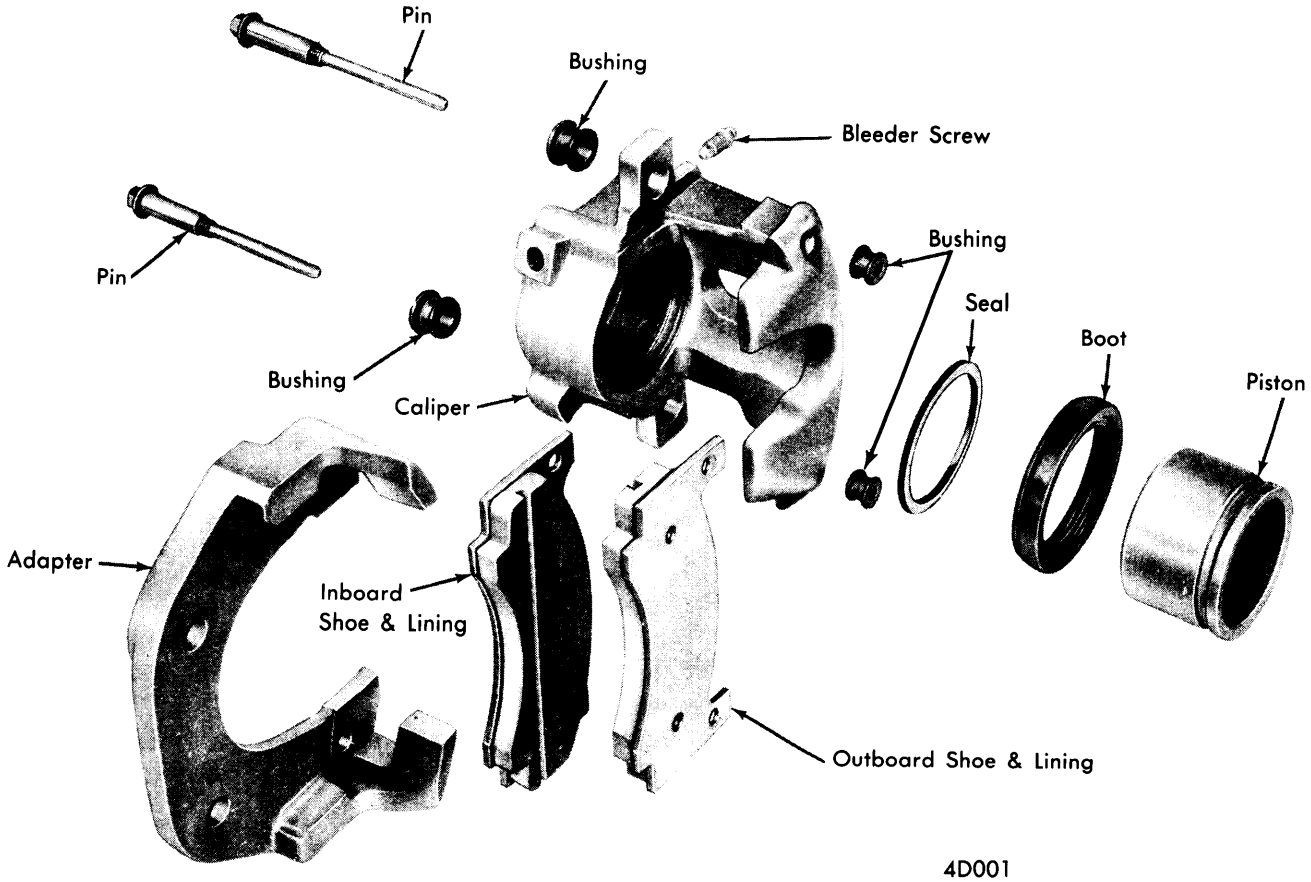
See Hydraulic Brake Bleeding in this section.

SHOE & LINING INSPECTION

Inspect condition of disc pad assemblies any time wheels are removed, or at least every 10,000 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 – 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 assmblies, inner and outer bushings and positioners. Discard all bushings.



FLOATING CALIPER ASSEMBLY

KELSEY-HAYES SINGLE PISTON DISC (Cont.)

Installation – Push piston to bottom of bore and watch for possible brake fluid reservoir overflow. 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 – Thinner pad is on outboard side.* Holding outboard lining in position, carefully slide caliper down into position in adapter and over disc. Align guide pin holes of adapter and brake pad. Insert assembled pins from inboard side, press in and carefully thread into adapter and tighten. Pump brakes until firm pedal is obtained and add fluid, as necessary, to master cylinder. Reinstall wheel and tire assembly.

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, refinish or replace rotor assembly as necessary.

Parallelism – Measure thickness of rotor at 12 equal points around rotor, 1" from edge. If rotor does not meet specifications, refinish or replace rotor assembly as necessary.

Rotor Specifications

Discard Thickness	.940"
Lateral Runout	.004"
Parallelism	.0005"

REMOVAL & INSTALLATION

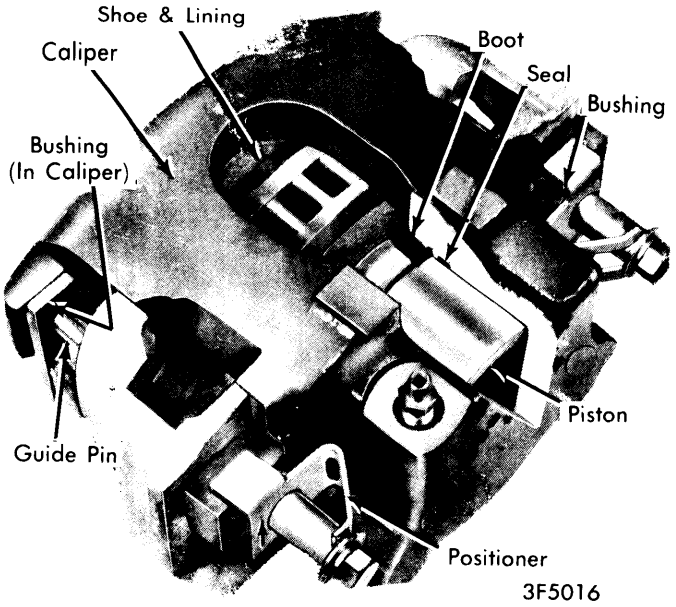
BRAKE CALIPER

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 – Do not disconnect brake hose until piston is removed from caliper.*

OVERHAUL

BRAKE CALIPER

Disassembly – 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. does not recommend that compressed air 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 other caliper.* Mount caliper in padded vise, do not clamp too tightly. Using a small wooden or plastic stick, work piston seal out of bore groove. Discard seal and remove bleeder screw.



CALIPER ASSEMBLY (INSTALLED)

Cleaning & Inspection – Clean all components with denatured alcohol or clean brake fluid, then dry using clean 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. Bores may be hones, provided bore is not increased more than .002". Polish any lightly scored or discolored area with crocus cloth. *CAUTION – DO NOT attempt to refinish piston in any way; replace if damaged. Black stains on piston are caused by seal and will do no harm.* Flush caliper with brake fluid after polishing.

Assembly – Coat new piston seal and boot with suitable lubricant (Ucon LB1145Y24) and carefully install seal in bore groove using clean fingers. Spread boot with fingers and install in caliper. Slide finger around inside of boot to ensure that it is properly installed. Plug high pressure inlet to caliper and bleeder screw hole, then work lubricated piston into boot and press down piston (entrapped air below piston will force boot around piston and into groove as piston is depressed). Remove plug, then carefully push piston down into bore until bottomed. Compress flanges of outboard bushings in fingers and work into position from outboard side. Install bleeder screw and disc pad assemblies. Check rotor specifications and install caliper.

TIGHTENING SPECIFICATIONS

Application	Torque
Brake Hose-to-Tube	80-150 INCH lbs.
Adapter Mounting Bolt	95-125 ft. lbs.
Guide Pins	25-35 ft. lbs.
Splash Shield	220 INCH lbs.
Combination Valve-to-Frame	200 INCH lbs.