

JENSEN-HEALEY

Jensen-Healey

DESCRIPTION

Brake system is hydraulically actuated, using a tandem master cylinder and a power brake booster. Front brakes are Girling model 14F dual piston fixed caliper disc type. Rear brakes are leading-trailing shoe/drum type, actuated by a sliding single piston wheel cylinder. Parking brake is cable actuated, operating sliding wheel cylinders of rear brake assemblies.

ADJUSTMENT

FRONT DISC BRAKE PADS

Front disc brakes are self-adjusting, therefore, no adjustment in service is required.

REAR BRAKE SHOES

With vehicle raised and parking brake released, turn adjuster on backing plate clockwise until shoes are locked against drum, preventing rotation. Loosen adjuster by single notch increments until drum is free to rotate.

PARKING BRAKE

With rear brake shoes adjusted, rear wheels should be locked when parking brake lever is pulled through four or five notches. If adjustment is required, fully release parking brake lever, remove cotter pin, and loosen clevis pin. Loosen lock nut and adjust clevis nut. **CAUTION** — Do not over-tighten cable. Operate parking brake lever, fully release lever, and check that rear wheels rotate freely with parking brake released.

HYDRAULIC SYSTEM BLEEDING

Three bleed screws are provided: One at each front wheel, and one at right-rear wheel. When bleeding system, engine must not be run, and all vacuum must be exhausted from power brake unit by depressing pedal several times.

REMOVAL & INSTALLATION

FRONT DISC BRAKE PADS

Removal — Raise and support vehicle and remove front wheels. Remove sufficient fluid from master cylinder reservoir so reservoir is half-full. Release retaining clips and remove pad retaining pins. Remove disc pads and anti-squeal shims from caliper. **CAUTION** — Do not apply brake pedal with disc pads removed.

Installation — Clean exposed faces of pistons and pad recesses in caliper, then push pistons to bottoms of bores. Install disc pads and anti-squeal shims into caliper making sure arrows on shims are pointed in direction of wheel rotation. Install pad retaining pins and spring clips. Pump brake pedal several times to position pistons, then refill master cylinder reservoir.

FRONT DISC BRAKE CALIPER

Removal — Raise and support vehicle and remove front wheels. Disconnect hydraulic line at caliper, remove bolts retaining caliper to steering knuckle, and remove caliper. **CAUTION** — Do not remove bolts attaching caliper halves.

Installation — Reverse removal procedure and note the following: Always use new attaching bolts and bleed hydraulic system.

FRONT DISC BRAKE ROTOR

Removal — With caliper assembly removed, remove grease cap, cotter pin, nut retainer, and bearing adjustment nut. Remove hub and rotor assembly from spindle, remove bolts attaching rotor to hub, and separate.

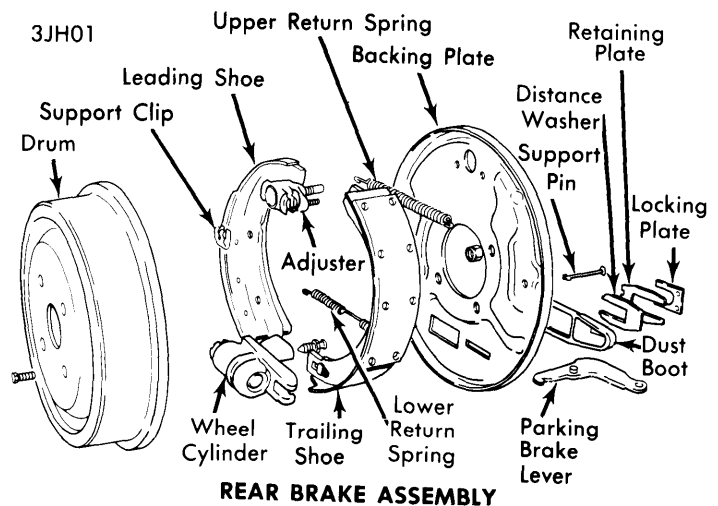
Installation — Make sure mating surfaces of hub and rotor are clean and free of burrs and grease. Coat threads of hub-to-rotor bolts with Loctite, install and tighten. Install hub and rotor assembly and adjust wheel bearings. See *Wheel Bearing Adjustment* in **WHEEL ALIGNMENT** Section.

REAR BRAKE DRUM

Removal & Installation — Raise and support vehicle and remove tire and wheel assembly. Remove bolts retaining brake drum to axle shaft flange and withdraw brake drum. To install, reverse removal procedure.

REAR BRAKE SHOES

Removal — With rear brake drum removed, remove clips and steady pins, pull toe of leading shoe and heel of trailing shoe clear of wheel cylinder, remove return springs and lever tension spring, and remove brake shoes from backing plate.



Installation — Reverse removal procedure and note the following: Upper return spring is fitted inboard. Do not lubricate teeth on brake shoe adjuster plates. With shoes and drum installed, adjust brake shoes.

REAR BRAKE WHEEL CYLINDER

Removal — With rear drum and brake shoes removed, remove dust boot and depress tangs on locking plate to disengage from slots in retaining plate. Hold in this position by inserting a thin rod between plates. Pry out retaining plate and remove distance washer, locking plate, and wheel cylinder.

Installation — Apply a light coat of grease to both sides of backing plate at wheel cylinder slot, and to fulcrum pin of parking brake operating lever. Position wheel cylinder to slot and install locking plate and distance washer with closed ends toward parking brake operating lever. Press in retaining plate until tangs of locking plate engage slots in end of retaining plate. Install dust boot over parking brake operating lever and retaining plate.

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MASTER CYLINDER

Removal — Disconnect hydraulic lines from master cylinder, remove nuts attaching cylinder to power unit, and remove cylinder from vehicle.

Installation — Mount master cylinder to power unit, install attaching nuts, and connect hydraulic lines. **NOTE** — Connect line for rear brakes to front outlet of cylinder, and line for front brakes to rear outlet. Bleed hydraulic system.

POWER BRAKE UNIT

Removal — 1) Raise and support front of vehicle. Disconnect clutch cable from release lever, remove clip securing cable to engine, and disengage cable from clutch housing. Disconnect throttle cable from carburetor and vacuum line from power brake unit.

2) Disconnect hydraulic lines from master cylinder and plug openings to prevent loss of fluid. Remove bolts attaching pedal box to firewall and remove pedal box with throttle and clutch cables attached. Remove nuts attaching power unit to pedal box, and nuts attaching master cylinder to power unit, then separate power unit.

Installation — Reverse removal procedure and note the following: Apply a suitable sealing compound evenly around pedal box joint face before installing. Bleed hydraulic system.

Filter Replacement — Power brake unit must be removed from vehicle to remove and install air filter. Pull back rubber dust cover, remove end cap, and withdraw filter. Cut new filter diagonally to center hole, install over push rod into housing, then install a new end cap and rubber dust cover.

OVERHAUL

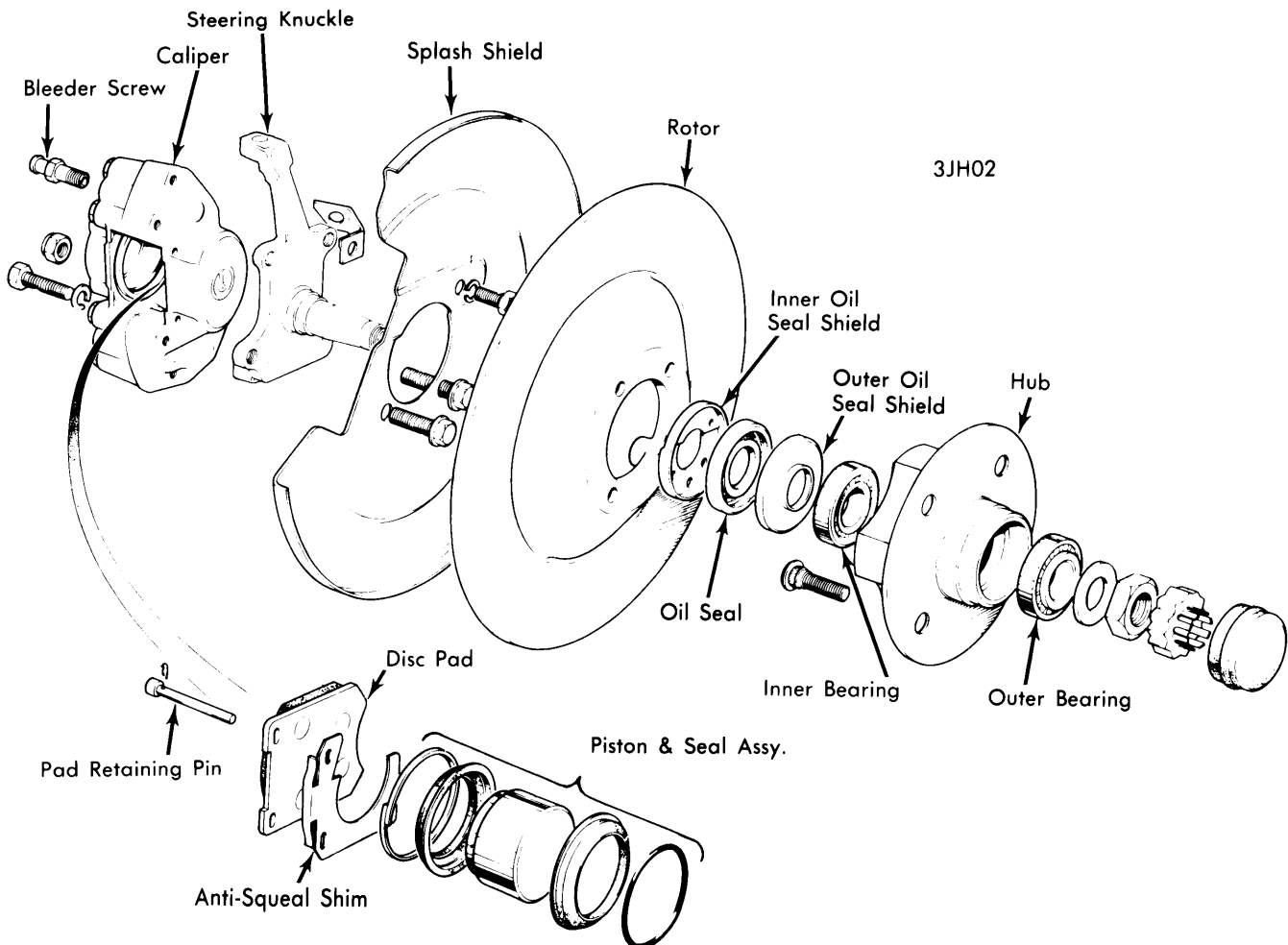
FRONT DISC BRAKE CALIPER

Disassembly — **NOTE** — **DO NOT** separate caliper halves. Remove spring rings and rubber dust covers, then tie a piece of cloth around inlet port piston and caliper body. Remove opposite piston by applying air pressure to inlet port. Remove cloth and place inside caliper bore before removing inlet port piston. Remove seals from caliper taking care not to damage bores or grooves.

Reassembly — Install new seals making sure they are correctly positioned in caliper bore grooves. Lubricate seals, bores, and pistons with brake fluid, and push pistons squarely into bores. Install dust covers and spring rings.

REAR WHEEL CYLINDER

Disassembly — Remove clip retaining dust boot to cylinder, remove dust boot, and remove piston and seal assembly from cylinder. Carefully remove seal from piston.



FRONT DISC BRAKE ASSEMBLY

JENSEN-HEALEY (Cont.)

Reassembly — Install new piston seal so larger diameter of seal is toward inner end of piston. Install new dust boot to piston, coat cylinder bore and piston with brake fluid, and ease piston into cylinder bore. Fill dust boot with rubber grease and secure to cylinder body with clip.

MASTER CYLINDER

Disassembly — 1) Drain fluid from reservoir, remove attaching bolts, and pivot reservoir at center valve end to gain access to tipping valve. *NOTE — Reservoir is retained at center valve end by an internal circlip and should not be removed.* Remove tipping valve securing nut and face seal.

2) Depress primary piston and remove tipping valve, then remove primary piston, primary spring, and secondary piston assembly. Pry up leaf of secondary spring retainer to release spring. Remove spring, valve spacer and spring washer from valve stem, and seal from valve head. Remove seals from primary and secondary pistons.

Reassembly — 1) Install new seals to primary and secondary pistons. With smallest diameter leading, install new seal to valve head. Position new spring washer on valve stem so flare

is away from stem shoulder, then install spacer, legs first. Attach spring retainer to valve stem, slide secondary spring over retainer, position sub-assembly on secondary piston, and place this assembly between protected jaws of a vise.

2) Compress spring and press spring retainer against secondary piston. Depress leaf of spring retainer behind head of plunger. Make sure leaf is straight and firmly located behind plunger head before releasing assembly from vise. Lubricate cylinder bore and piston seals with brake fluid, then insert secondary piston (valve end leading), primary spring, and primary piston into cylinder bore. Press down on primary piston and install tipping valve, seal, and nut. Secure reservoir to cylinder using two retaining screws.

TIGHTENING SPECIFICATIONS

Application	Ft. Lbs. (mkg)
Tipping Valve Nut	36-40 (4.9-5.5)
Caliper Mounting Bolts	33 (4.6)
Rotor-to-Hub Bolts	18 (2.5)