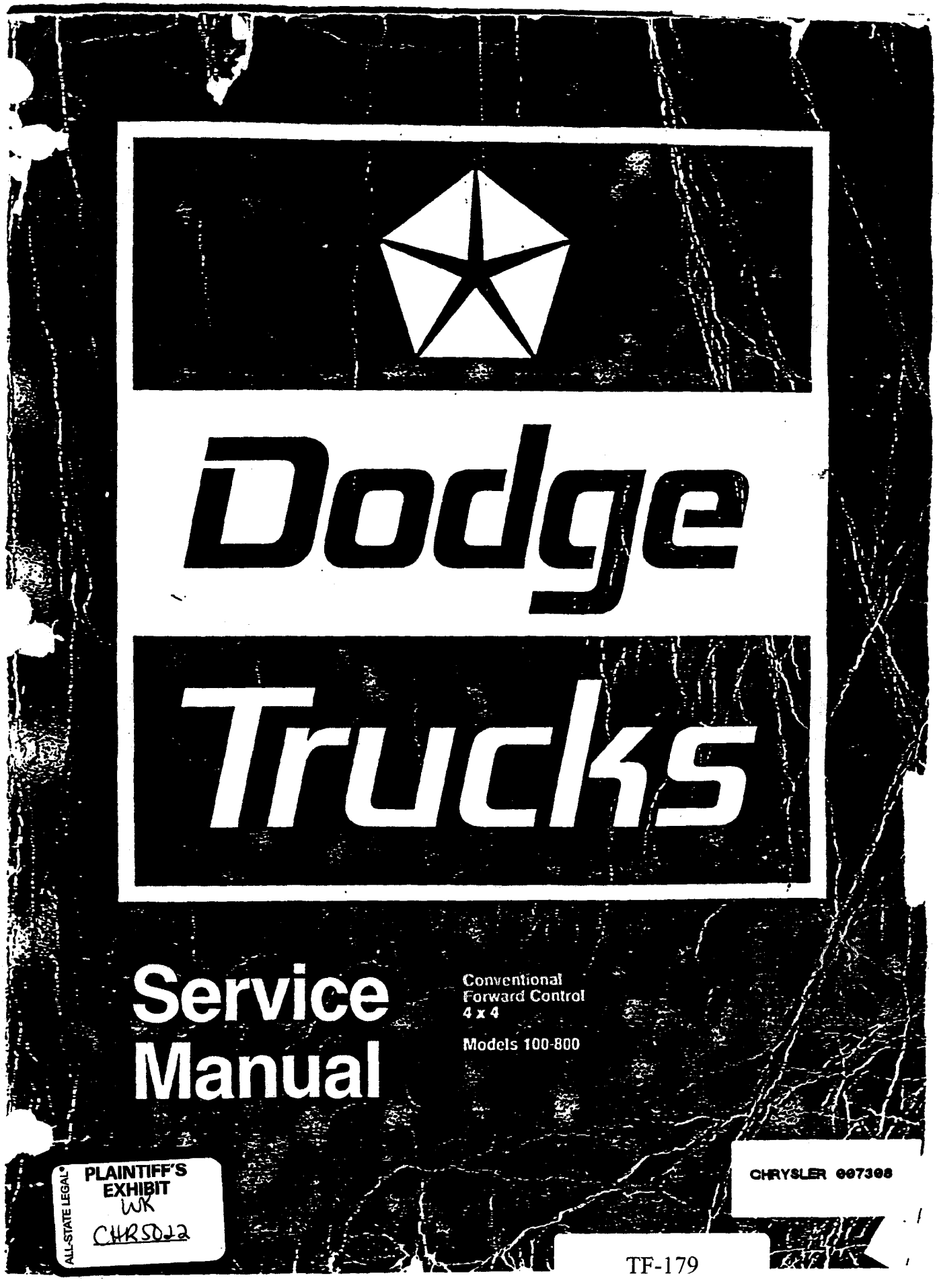
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Dodge
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Service
Manual
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Forward Control
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Models 100-800
PLAINTIFF'S
EXHIBIT
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ALL-STATE LEGAL
CHRYSLER 007308

SAFETY NOTICE

The safe and reliable operation of motor vehicles depends on proper service and repair procedures. This service manual describes suggested and recommended methods for performing these service and repair procedures.

Special tools as required in performing certain service operations are so identified in the service manual and are recommended for use.

Use of tools or procedures other than those recommended in this service manual could be detrimental to the vehicle's safe operation as well as the safety of the person or persons servicing the vehicle.

1974

CHRYSLER 007300

Condition	Possible Cause	Correction
	(c) Sticking brakes.	(c) Lubricate brake pivots and support platforms.
	(d) Master cylinder low on brake fluid.	(d) Fill master cylinder and inspect for leaks.
BRAKES APPLY SLOWLY	(a) Improper brake adjustment or lack of lubrication.	(a) Adjust brakes and lubricate linkage.
SPONGY PEDAL	(a) Air in hydraulic system.	(a) Fill and bleed hydraulic system.
	(b) Swollen rubber parts due to contaminated brake fluid.	(b) Clean hydraulic system and recondition wheel cylinders and master cylinder.
	(c) Improper brake shoe adjustment	(c) Adjust brakes.
	(d) Brake fluid with low boiling point.	(d) Flush hydraulic system and refill with proper brake fluid.
	(e) Brake drums ground excessively.	(e) Replace brake drums.
ERRATIC BRAKES	(a) Linings soaked with grease or brake fluid.	(a) Correct the leak and replace brake lining.
	(b) Primary and secondary shoes mounted in wrong position.	(b) Match the primary and secondary shoes and mount in proper position.
CHATTERING BRAKES	(a) Improper adjustment of brake shoes.	(a) Adjust brakes.
	(b) Loose front wheel bearings.	(b) Clean, pack and adjust wheel bearings.
	(c) Hard spots in brake drum.	(c) Grind or replace brake drums.
	(d) Out-of-round brake drums.	(d) Grind or replace brake drums.
	(e) Grease or brake fluid on lining.	(e) Correct leak and replace brake lining.
SQUEALING BRAKES	(a) Incorrect lining.	(a) Install correct lining.
	(b) Distorted brake drum.	(b) Grind or replace brake drum.
	(c) Bent brake support plate.	(c) Replace brake support plate.
	(d) Bent brake shoes.	(d) Replace brake shoes.
	(e) Foreign material embedded in brake lining.	(e) Replace brake shoes.
	(f) Dust or dirt in brake drum.	(f) Use compressed air and blow out drums and support plate and shoes.
	(g) Shoes dragging on support plate.	(g) Sand support plate platforms and lubricate.
	(h) Loose support plate.	(h) Tighten support plate attaching nuts.
	(i) Loose anchor bolts.	(i) Tighten anchor bolts.
	(j) Loose lining on brake shoes or improperly ground lining.	(j) Replace brake shoes and cam-grind lining.
BRAKES FADING	(a) Improper brake adjustment.	(a) Adjust brakes correctly.
	(b) Improper brake lining.	(b) Replace brake lining.
	(c) Improper type of brake fluid.	(c) Drain, flush and refill hydraulic system.
	(d) Brake drums ground excessively.	(d) Replace brake drums.
DRAGGING BRAKES	(a) Improper brake adjustment.	(a) Correct adjust brakes.
	(b) Distorted cylinder cups.	(b) Recondition or replace cylinder.
	(c) Brake shoe seized on anchor bolt.	(c) Clean and lubricate anchor bolt.
	(d) Broken brake shoe return spring.	(d) Replace brake shoe return spring.
	(e) Loose anchor bolt.	(e) Adjust and tighten anchor bolt.
	(f) Distorted brake shoe.	(f) Replace defective brake shoes.
	(g) Loose wheel bearings.	(g) Lubricate and adjust wheel bearings.
	(h) Obstruction in brake line.	(h) Clean or replace brake line.

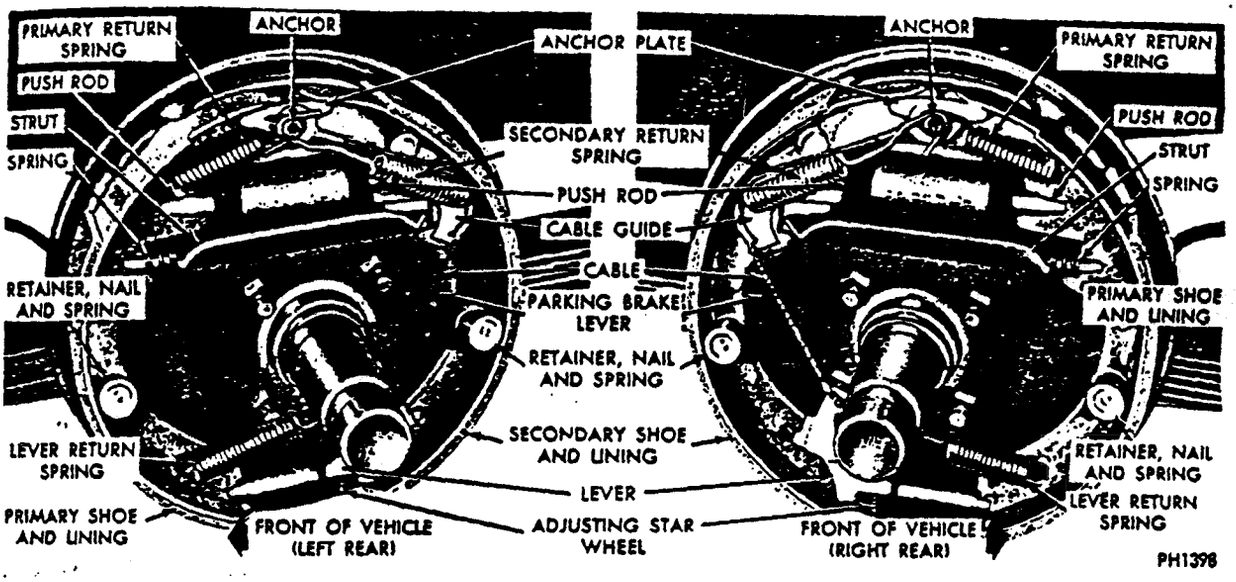


Fig. 9—Rear Brake Assemblies (D200)

lack of contact at toe and heel should be measured for proper grind.

Clean the support, using a suitable solvent, then inspect for burrs. Remove if necessary. Clean and lubricate threads of the adjusting screws, then inspect for pulled or stripped threads.

DRUM REFACING

Measure the drum runout with an accurate gauge. Drum runout should not exceed .006 inch out of round. If the drum runout is in excess of .006 inch, (total indicator run-out) the drum should be refaced. Remove only as much material as is necessary to clean up the drum. **Do not reface more than .060 inch over the standard drum diameter.**

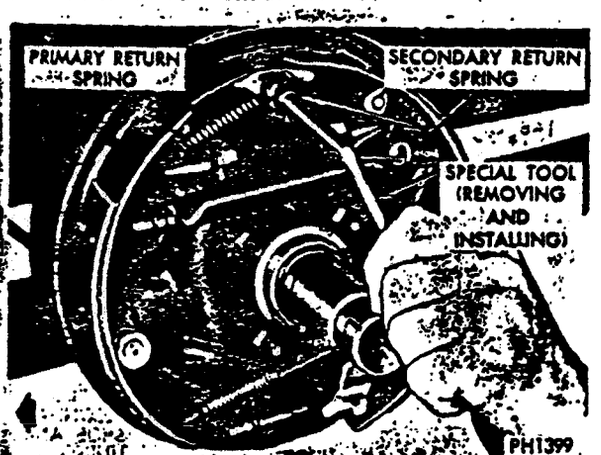


Fig. 10—Removing or Installing Shoe Return Springs (Left Rear)

SHOE INSTALLATION

Front Brake Shoes

(1) Match a primary with a secondary brake shoe and place them in their relative position on a work bench.

(2) Lubricate threads of adjusting screw and install it between primary and secondary shoes with star wheel next to secondary shoe. (Fig. 1). The star adjusting wheels are stamped "R" (right side) and "L" (left side), and indicate their location on the vehicle. Lubricate shoe tab contact area on support with MOPAR Multi-Purpose lubricant Part Number 2932524, or equivalent (Fig. 13).

(3) Overlap anchor ends of primary and secondary brake shoes and install adjusting spring and lever.

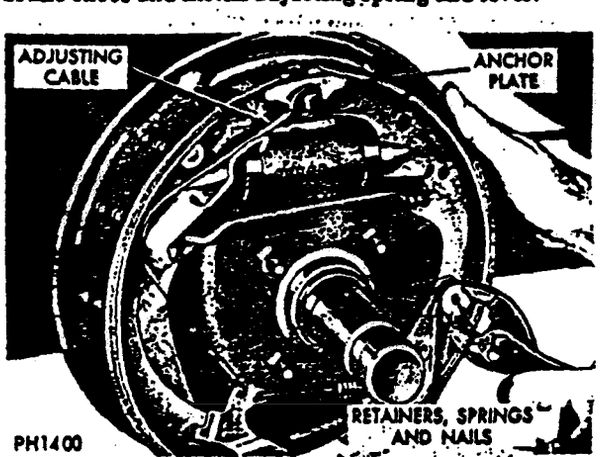


Fig. 11—Removing or Installing Shoe Retainers, Springs and Nails (Right Rear)

GENERAL INFORMATION

The Bendix BX Duo-Servo is a basic Duo-Servo single anchor brake of an advanced and improved design. Front and rear brake assemblies are basically the same except that the rears include a parking brake lever and cam plate. (Fig. 1). All are self adjusting.

A two-piston wheel cylinder is mounted in an indention on the support plate. The wheel cylinder must be removed from the support plate for servicing.

Each brake shoe is held against the support plate by a coil spring-hold down pin combination (Fig. 2).

Each support plate has six guide pads, three for each shoe (Fig. 3). The shoe webs ride against these pads.

Brake shoes are marked pri. (primary) and sec. (secondary) and also "This Side Out" for easy identification and application.

Typical front and rear assembly are shown in (Figs. 4 and 5).

SERVICE PROCEDURES

BRAKE DRUM REMOVAL

Front

(1) Raise vehicle on hoist or jacks and install jack stands for safety.

(2) Remove wheel and tire assembly.

(3) Remove dust cover, cotter key, nut, lock nut, washer and outer bearing. Carefully remove drum.

CAUTION: If there is interference between brake shoes and drum, remove hole cover and using a screwdriver and light piece of metal, release brake shoes (Fig. 6).

Rear

(1) Raise vehicle on hoist or jacks and install jack stands for safety.

(2) Remove wheel and tire assembly.

(3) Remove axle shaft nuts, washers and cones. Rap axle shaft sharply in center to release cones if they do not readily release. Remove axle shaft.

(4) Using Tool DD-1245 remove outer hub nut. Straighten lock washer, remove it, inner nut and bearing. Carefully remove drum.

CAUTION: If there is interference between brake shoes and drum, remove hole cover and using a screwdriver and light piece of metal, release brake shoes (Fig. 6).

BRAKE SHOES REMOVAL

Front

(1) Unhook adjusting lever return spring from the lever (Fig. 1). Remove lever and return spring from lever pivot pin. Unhook adjuster lever from adjuster cable assembly.

(2) Remove cable retaining clip (Fig. 7) and remove cable.

(3) Using brake spring pliers (Tool C-312) (Fig. 8) unhook upper shoe-to-shoe spring. Unhook and remove shoe hold down springs (Fig. 9).

(4) Remove shoes with lower shoe-to-shoe spring and star wheel as an assembly (Fig. 10).

Rear

(1) Unhook adjusting lever return spring from the lever (Fig. 1). Remove lever and return spring from lever pivot pin. Unhook adjuster lever from adjuster cable assembly.

(2) Using brake spring pliers (Tool C-312) (Fig. 11) unhook upper shoe-to-shoe spring. Unhook and remove shoe hold down springs (Fig. 12).

(3) Disconnect parking brake cable from parking brake lever.

(4) Remove shoes with lower shoe-to-shoe spring and starwheel as an assembly (Fig. 13).

DRUM REFACING

Measure the drum runout with an accurate gauge. Drum runout should not exceed .006 inch out of round. If the drum runout is in excess of .006 inch, (total indicator run-out) the drum should be refaced. Remove only as much material as is necessary to clean up the drum. **Do not reface more than .060 inch over the standard drum diameter.**

CLEANING AND INSPECTION

Wipe or brush clean (dry) the metal portions of the brake shoes. Examine the lining contact pattern to determine if the shoes are bent. The lining should show contact across the entire width, extending from heel to toe. Shoes showing contact only on one side should be replaced. Shoes having sufficient lining but lack of contact at toe and heel should be measured for proper grind.

Clean the support, using a suitable solvent, then inspect for burrs. Remove if necessary. Clean the threads of the adjusting screws, then inspect for pulled or stripped threads.

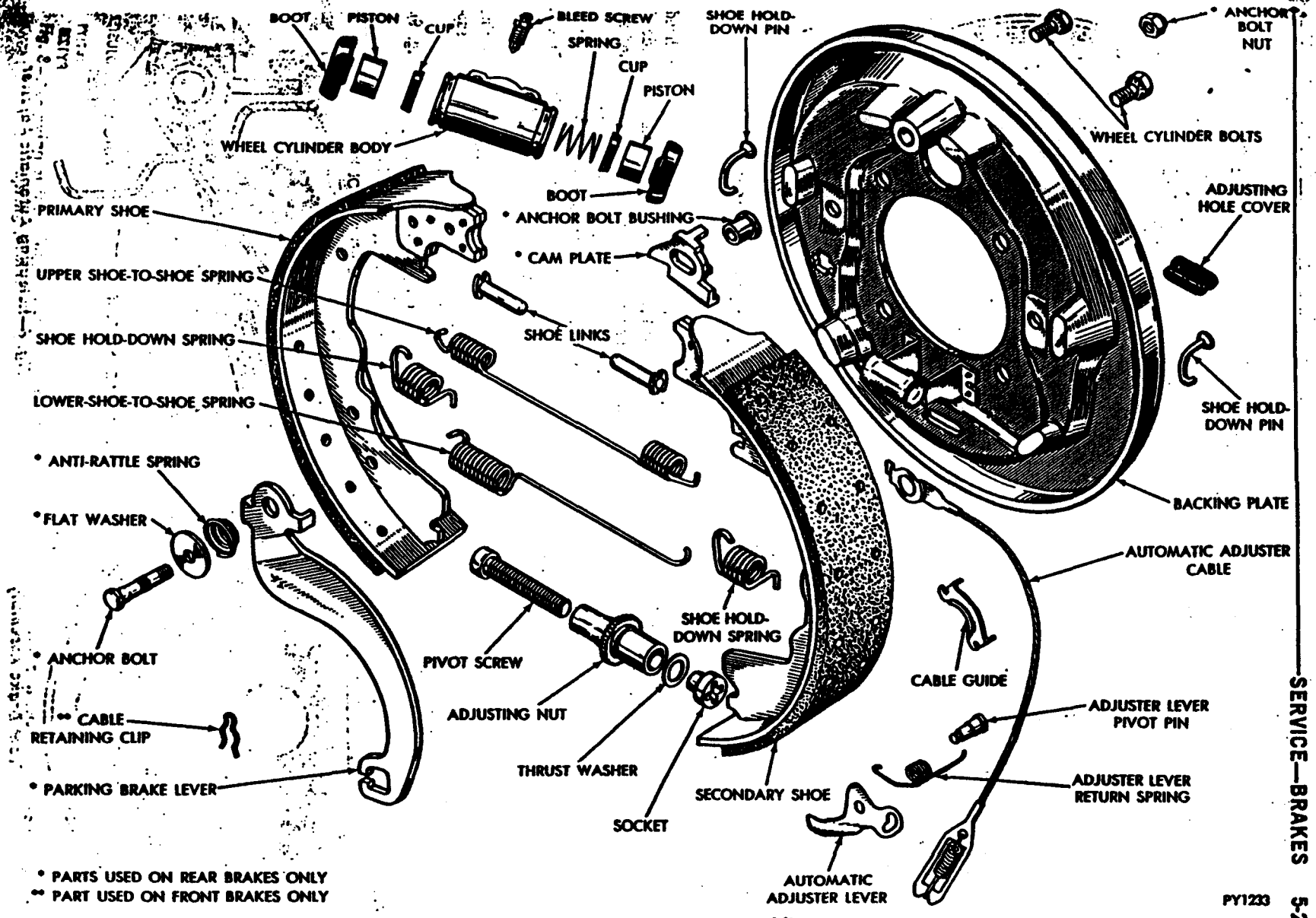


Fig. 1—Front and Rear Brake Assemblies