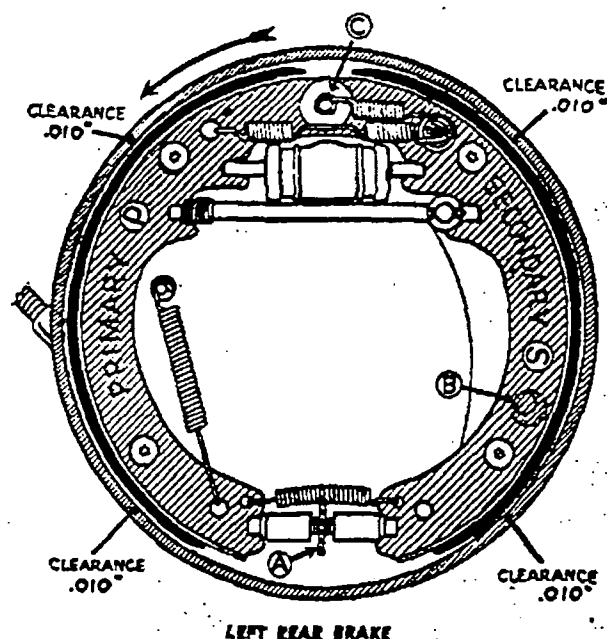


BENDIX HYDRAULIC DUO SERVO BRAKE

(Double Piston)



LEFT REAR BRAKE

THIS double piston Bendix Hydraulic Duo Servo brake is used on all Auburn-12, 1932, Model-103, 1933, and all 1934 and 1935 Auburn cars, as well as on the 1935 Graham 6, La Salle, Nash, Oldsmobile, Packard 120, and Pontiac. It operates on the same principle as other two-shoe Bendix single anchor brakes, except that it is actuated by a Hydraulic pressure system. This brake mechanism uses the double piston wheel cylinder similar to standard Hydraulic brake installations, and the same care must be given to this system as to all Hydraulic systems as shown on Pages 44-46.

HOW TO LOCATE PRIMARY SHOE

TO LOCATE THE PRIMARY SHOE START AT THE ACTUATING MECHANISM WITHIN THE BRAKE AND MOVE IN THE DIRECTION OF ROTATION OF THE WHEEL WHEN CAR IS MOVING FORWARD. THE FIRST SHOE ENCOUNTERED WILL BE THE PRIMARY SHOE.

Bendix Hydraulic Brake (Double Piston) Adjustments

Minor Adjustment

1. Same procedure as outlined for Bendix Duo Servo brake, single piston type.

Major Adjustment (after relining)

1. Assemble brake shoes as shown in sketch—primary shoe marked P, secondary shoe S. Be sure springs are correctly assembled. Close star gear (A) so that shoes will not be expanded and drag. (See Fig. 4, Page 11.)
2. Disconnect each parking brake lever from cross shaft at clevis end.
3. Loosen eccentric lock nut and turn eccentric (B) in direction wheel revolves when car is moving forward until a .010" feeler gauge is just snug between lining and drum at a point about $1\frac{1}{4}$ " from star gear (adjusting) end of secondary shoe.
4. Loosen anchor pin lock nut and turn

anchor pin (C) with screw driver in direction wheel revolves when car is moving forward until there is .010" clearance between lining and drum at a point $1\frac{1}{4}$ " from end of lining at anchor pin end of secondary shoe.

5. Readjust eccentric (B) if necessary to .010" clearance as in (3).
6. Lock anchor pin nut and eccentric lock nut tight, holding anchor pin and eccentric rigid while so doing.
7. Expand brake shoes by turning star gear (A) until shoes are pressed tightly against drum.
8. Take all slack out of parking brake cables and reassemble at clevis end.
9. Release star gear 8 notches at all four wheels.
10. Test car on brake machine or on road—equalize by releasing star gear on locking wheels.

Average time to reline four wheel brakes between $5\frac{1}{2}$ and $6\frac{1}{4}$ hours.

Maintenance Suggestions

See Page 15 on super-effective brakes.

If with this type brake the car persists in pulling to the left when brake is applied, the following methods will cure this trouble. We recommend method No. 1 as most satisfactory and easiest:

1. Replace Primary and Secondary Shoe Return Spring on left front brake mechanism with a heavier one. Tighten up on kick shackle as much as possible without affecting steering.
- or 2. Tighten up on kick shackle as much as possible without affecting steering. Mount on the frame directly in back of kick shackle on left front spring a bracket with adjusting screw to prevent excessive movement of kick shackle. Severe brake application will not cause too great a movement of the shackle and pulling to left will be avoided.
- or 3. Cut a groove $\frac{1}{4}$ " wide and $\frac{3}{32}$ " deep the full length of the lining on both shoes of left front brake and replace Hydraulic wheel cylinder with a smaller size.
- or 4. Use of Lower Friction Lining on the Primary Shoe of the Left Front Brake.

During 1935 there was a change in the specifications of the wheel cylinders of the 1935 Pontiac. Early in the year 1" bore cylinders were used on the front brakes and $1\frac{1}{2}$ " on the rear brakes. Later this was changed to $1\frac{1}{2}$ " bore cylinders front and rear.

Certain car owners do not like super-effective brakes, and use of smaller wheel cylinders in front is suggested as a remedy.

The 1935 Pontiac has a shorter piece of brake lining on the primary than is used on the secondary. Care should be taken to see that they are reassembled correctly.

Shortening of the lining on the primary shoes is suggested for overcoming grabby front brakes on certain lighter 1935 cars. Cut off lining $\frac{1}{4}$ " for second set of rivet holes and chamfer.