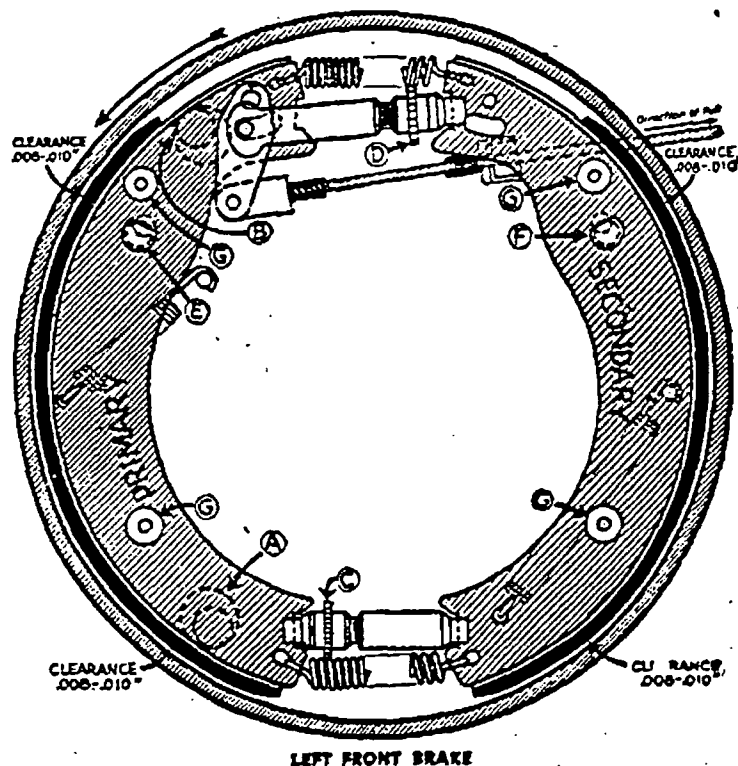


BENDIX DUO-POWER BRAKE



THIS brake is used on the 1933 and 1934 Studebaker cars equipped with BK Power Cylinder Units.

Although similar in appearance to a two-shoe Duo Servo Bendix brake, it differs in that the two anchors are **NON-ADJUSTABLE** and are located nearer the center of the length of each shoe. The primary shoe lining makes contact with the rotating drum, which forces the primary shoe into the secondary shoe through the articulating link (star gear assembly). The construction of the mechanism is such that this is a sliding action, so that the same clearance between lining and drum at toe and heel of shoe is correct.

Dense rigid moulded linings such as supplied in Multibestos **TAILORED** Sets assure good performance and long life. Two different types of lining are supplied for this brake mechanism, as the action is essentially the same as the Bendix Two-Shoe Single or Double Anchor.

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 Duo-Power Brake Adjustments

Adjustment (for normal wear)

1. With all wheels jacked up disconnect cables at cross shaft levers.
2. Adjust front shoes of front brakes and rear shoes of rear brakes by loosening eccentric locknuts and turning eccentrics (A) and (B) in direction of rotation of wheel until a clearance of .008"-.010" is obtained between the lining and the drum at point one inch from each end of the lining. Tighten locknut.
3. Adjust rear shoes of front brakes and front shoes of rear brakes by turning

star gears (C) and (D) until a clearance of from .008" to .010" is obtained between lining and drum at points one inch from each end of these shoes.

4. Make sure cross shaft is in fully released position against stop and reconnect cables. Be sure to adjust cable clevises so that cable slack is entirely removed when clevis pin is replaced. (See Note 1.)
5. Equalize by backing off the same number of notches on both star gears of heaviest wheel.

Average time for a complete four wheel brake reline—5½ to 6¼ hours.

NOTE 1: Although the instructions given in Paragraph 4 concerning the setting of the cables to the correct length usually give satisfactory results, the Multibestos Institute men have found that the following arrangements eliminate all difficulty of maladjustment as regards the setting of cables. After clearances have been obtained in accordance with Paragraph 3 of the Brake Adjustments, both star gears should be turned until the shoes are tightly wedged in the drum. This should be done by turning the two star gears simultaneously, or—first a notch on one star gear and then a notch on the other. The number of notches turned on each star gear should be recorded. When the shoes are fully expanded in the drum, all the slack may be taken out of the cables and they may be re-assembled to exactly the correct length. The star gears are then backed off the same number of notches as they were set out. This method of adjustment assures perfect results as regards the setting of the cables.

Maintenance Suggestions

Anchor Pins (E) and (F) are in fixed locations and should never have to be loosened—check occasionally to make sure anchor nuts are tight.

The primary shoe of front and rear brakes is the forward shoe. Primary and secondary shoes are interchangeable.

Always follow the directions for locating the primary shoe as shown on Page 18. The primary shoe is not necessarily the shoe which moves first when the foot pedal is depressed.

Avoid harsh brake applications during breaking-in period of new linings. Remember it's a **POWER** brake.

Backing plates occasionally become rusted and corroded and shoes bind against the plates at certain points. A suitable lubricant, such as white lead, will overcome the sticking and will assure good brake performance.

Some of the first cars equipped with Bendix Duo Power Brakes have no peep holes in the drums. It is necessary in such cases to drill holes in the drum to adjust these brakes satisfactorily. As an expedient for brakes without peep holes adjustment may be made as follows:

1. Set top eccentric until shoe drags. Back off until just free.
2. Repeat with bottom eccentric.
3. Force shoes solid in drum by turning upper and lower star gears.
4. Back off each star gear six notches.
5. If wheel still drags, back off one notch at a time on upper and lower star gears.

A common difficulty encountered with this brake mechanism, causing chatters and squeals, is loose backing plates. If the holes in the backing plate have not worn so much as to be unduly elongated, tightening of the backing plate bolts and nuts will usually overcome any difficulty due to these loose backing plates.

See Page 47 for BK Power Cylinder Unit used with this brake.