5. Disconnect brake cables to all four wheels at the cross-shaft.

6. Screw in brake adjusting screw until wheel cannot be turned by hand.

7. Adjust length of cables at cross-shaft so that clevis pin can be installed with 25-lb. pull on cable.

8. Back off adjusting screw on each wheel until free.

9. Equalize brakes by backing off adjusting screw on tight wheel.

SERVICE HELPS

In cases on 1937 Fords where the brakes are too effective or grabby, the pedal leverage can be changed to remedy this. The pedal rod which connects the cross-shaft lever and the pedal lever can be placed in the bottom hole on the cross-shaft lever. This will make a harder pedal action necessary for a given deceleration.

There has been some confusion in the brake service field regarding the correct manner in which to install the various colored springs in the 1937 Ford brake. In each brake assembly there are seven springs and the correct position of these springs may be determined by referring to Figure 15.

It will be noted that there are two long and two short brake shoe return springs. The two short brake shoe return springs are attached at the top of the brake assembly and go from the shoes to the adjusting screw bracket with the red spring on the primary shoe and the black spring on the secondary shoe.

The two long brake shoe return springs are attached at the bottom of the brake assembly and go from the shoes to the eccentric anchor pin with the orange spring on the primary shoe and the green spring on the secondary shoe.

The primary shoe is the first shoe we come to after leaving the anchor pin and traveling in the direction of forward drum rotation. Thus we see that starting at the anchor pin and moving in the direction of forward drum rotation the order of the brake shoe return springs is ORANGE, RED, BLACK, GREEN.

Then there are two short black hold-down springs, one going to each shoe.

The last spring is a long, small diameter, black spring which is attached to the operating return lever.

The 1937-1938 Ford brakes have a certain amount of transfer of force from one shoe to the other. If the springs are not correctly installed, this transfer of force will not take place and the brake will be ineffective.

Another cause of hard pedal through reduction in force transfer on 1937 Ford brakes is due to improper setting of the adjusting wedge mechanism. The adjusting wedge is covered by a small metal disc as shown in Figure 15. On the early 1937 models when the shoes were not in place it was possible to turn the adjusting nut and destroy the setting of the adjusting mechanism. On these cars, the adjusting nut should not be turned unless the shoes are in place. In case of doubt regarding the correct setting of the adjusting mechanism, it is necessary to remove the metal disc covering the adjusting wedge. The ends of adjustment pins A and B (Fig. 15) fit into half-round depressions in the adjusting wedge mechanism. The adjustment pin A (front shoe) should always fit into the smallest depression with the rear shoe adjusting pin B fitting into the larger depression. This allows both pins to protrude an equal amount from the adjusting wedge housing when the springs are correctly installed.

It is especially important to have 1937-38 Ford brakes well lubricated and properly adjusted with all slack removed from the brake pedal in order to eliminate hard pedal complaints.

When the eccentric anchor pin needs adjusting it is best to do this by using a dummy drum or brake shoe concentricity gauge.

With the dummy drum or concentricity gauge installed, the adjusting screw and the eccentric anchor pin should be set to obtain .005″ clearance at the upper and lower ends of both brake shoes.

American Brakeblok furnishes special material in boxed car sets for 1937 and 1938 Ford brakes, but Standard American Brakeblok roll material may be used if desired.

HUCK Brakes—Mechanically Operated

Several different types of Huck brakes are found on General Motors cars and while there is a slight difference in design the general operating principle is the same and adjustments are made substantially in the same manner. In one type of this

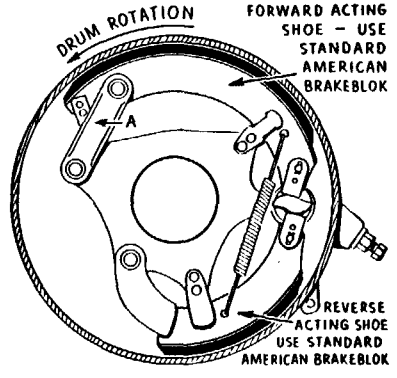


Figure 16
Huck Brake—Long and Short Shoe Type Mechanically Operated

brake a long brake shoe anchors against the backing plate by means of articulated link A (Fig. 16). Therefore, when the brakes are applied with the brake drum revolving in the forward direction there is a tendency to swing the shoe more tightly against the drum. This brake is highly energized. The later models of this brake have two long shoes instead of a long and short shoe.

MINOR ADJUSTMENTS

1. Jack up all four wheels.

2. Loosen lock nut B (Fig. 17) on brake cam operating lever and turn the adjusting screw C (Fig. 17), to the right until wheel can barely be turned by hand. Release drag and then tighten lock nut B. Repeat on other wheels.

3. Equalize brakes at adjusting nuts C (Fig. 17) by leaving off on tight wheel. (A pedal jack for exerting pressure on the brake pedal can be used to apply the brakes.)

MAJOR ADJUSTMENT

1. Jack up all four brakes.

2. Adjust front wheel bearings to proper tension.

3. Disconnect rods or cables at clevises.

4. Loosen centralizer clamp bolt D (Fig. 17) making sure that the centralizer is free to move by tapping cam operating lever lightly with hammer.

5. Adjust screw C (Fig. 17) until wheel can just be turned by hand. Tighten centralizing bolt D (Fig. 17).

6. Adjust cables or rods for this setting and reconnect them.

7. Back off adjusting screw C (Fig. 17) until wheel is free.

8. Check brakes for equal drag making final adjustment at adjusting screw C (Fig. 17).