

ENGINE CARBETS
18 then last both

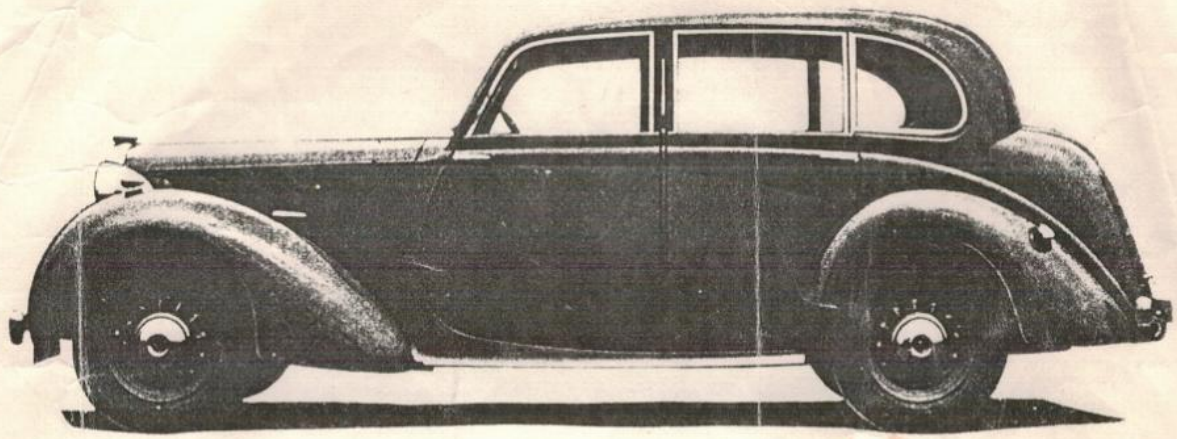
M. JOSEPH.

GIRLING EQUIPMENT ON THE

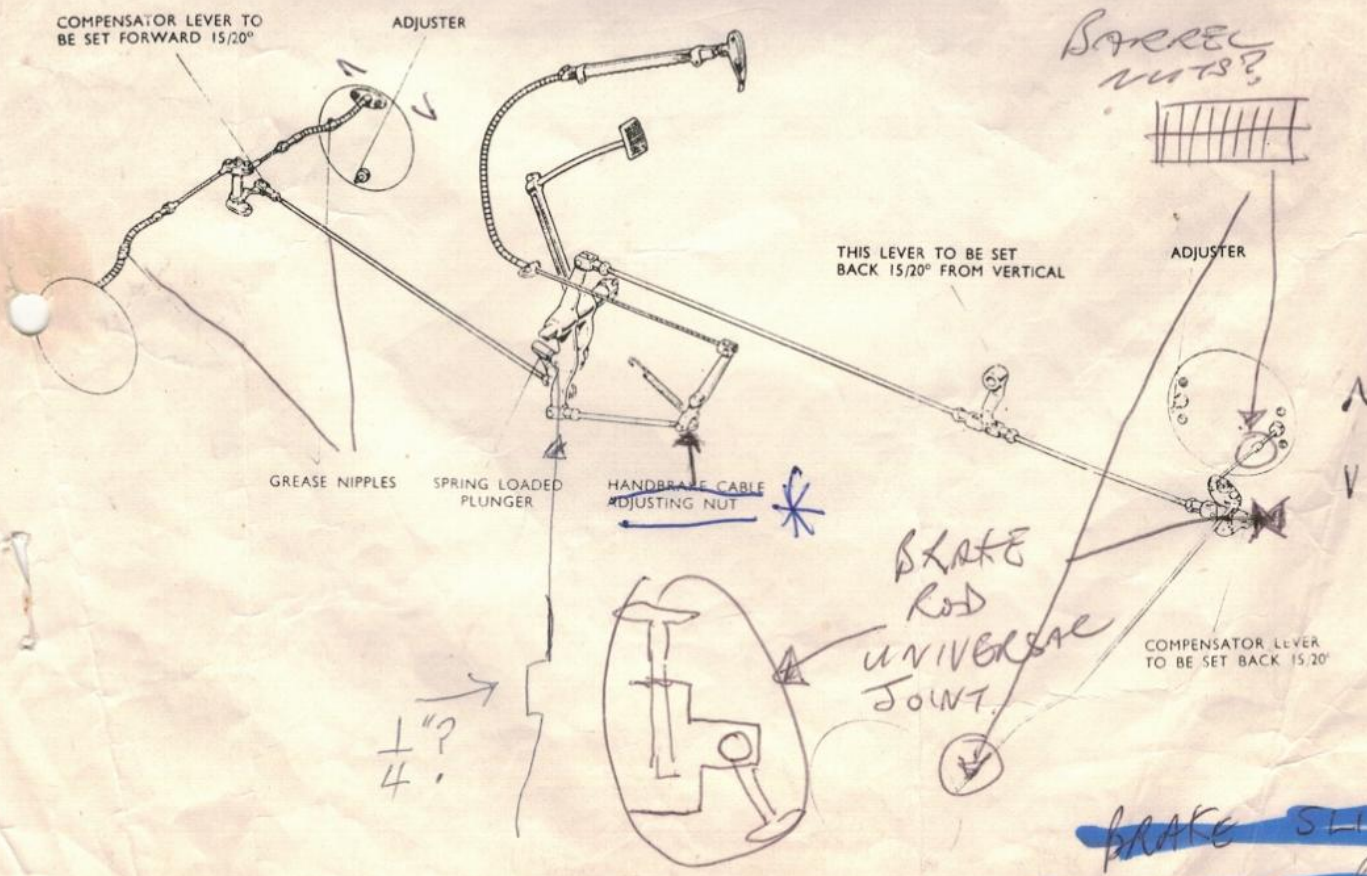
DAIMLER

DB.18 2 1/2 litre
Chassis 50050 to 53749
1946-49

WIRE BLUE WITH SHOWN
OUT?



MODEL	FRONT AND REAR BRAKES
DB.18 2 1/2 litre Chassis 50040 to 53749 1946-49	11 x 1 1/2 GNS Section 2, Page 1



BRAKE SLIDE IN
SLOTS IN BACK PRG

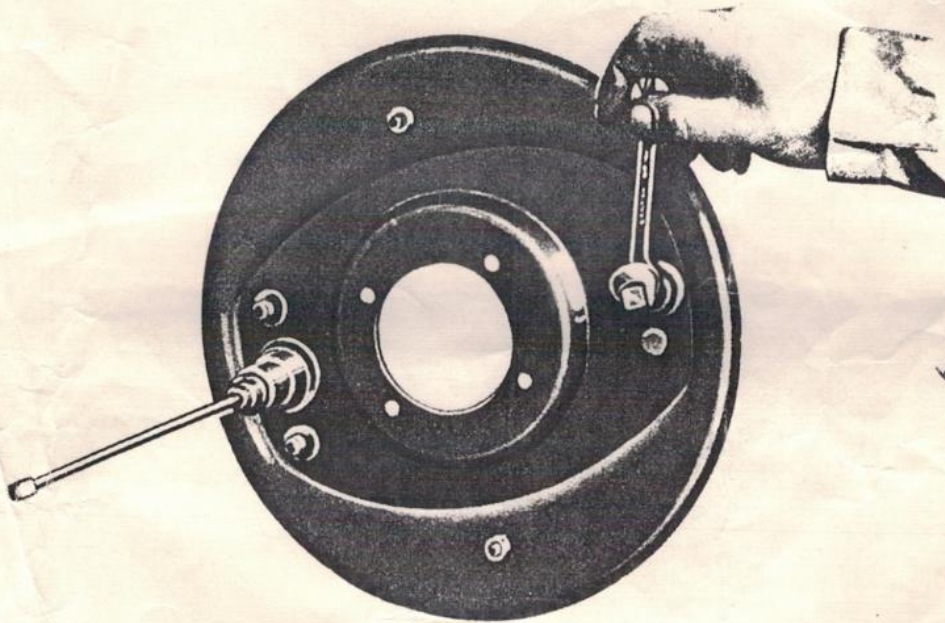
INSTALLATION

The Braking system is fully mechanical, the Brakes on both front and rear wheels are operated by foot pedal application with additional mechanism for handbrake actuation on the rear wheels for parking purposes, applied by a pistol grip lever situated under the fascia panel.

GENERAL MAINTENANCE

The Brakes are adjusted for lining wear at the Brakes only, and no attempt should be made to alter the operating linkage for this purpose.

To adjust the front Brakes jack up the wheels clear of the ground and turn the adjuster (situated at the bottom of the Backplate) in a clockwise direction until the Shoes are locked up in the Drum, slack back one or two clicks, when wheel should rotate freely.



← REAR BRAKES

To adjust the rear Brakes scotch the front wheels and proceed as for front Brakes. The adjuster on the rears is situated immediately in front of the axle.

The linkage is set by Daimler Limited before the car leaves the Works, and should not normally need adjustment unless replacement parts are being fitted or for the reason of a complete overhaul

For this purpose slacken off the Handbrake Cable adjusting nut until the Cable is quite free, and lock up the Shoes in all four Drums. Set the compensators and idle lever in accordance with the dimensions shown on the Brake layout illustration and adjust the Brake Rods to suit. Apply the Handbrake one notch and remove the slack in the Handbrake Cable by means of the adjusting nut. Then slack off the Brakes one or two clicks until wheels rotate freely and test.

NOTE :

It is of importance to ensure that the spring loaded plunger on the Footbrake lever is working freely and correctly as this can upset the balance of the Braking if out of order

THE GIRLING

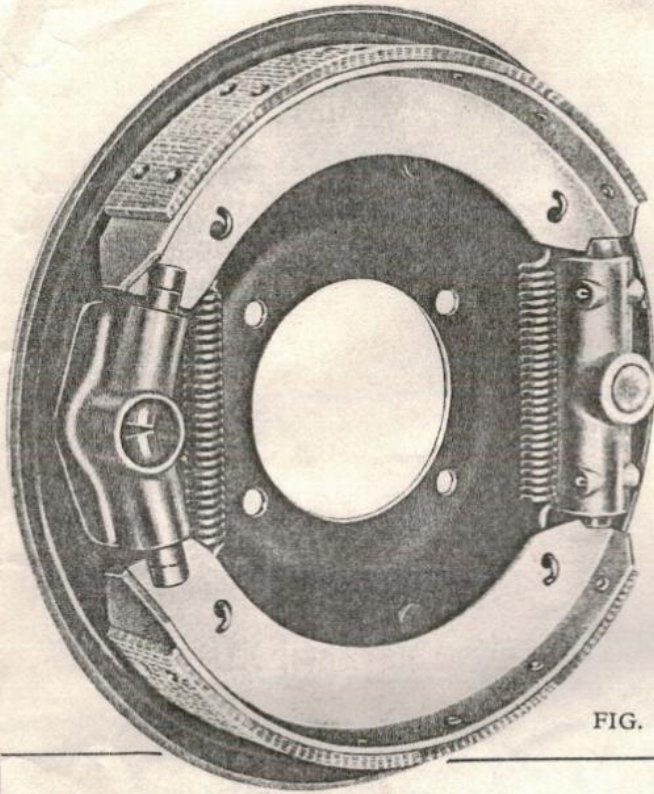
NON-SERVO
BRAKE

FIG. 1

This was introduced in 1930 and was first of a long line of Girling Brakes. It proved to be a reliable and efficient unit simple to adjust and maintain. It would stand up to arduous conditions and periods of neglect in a manner superior to any then on the market. Even now, some thirty years later there are applications for which it has not been superseded.

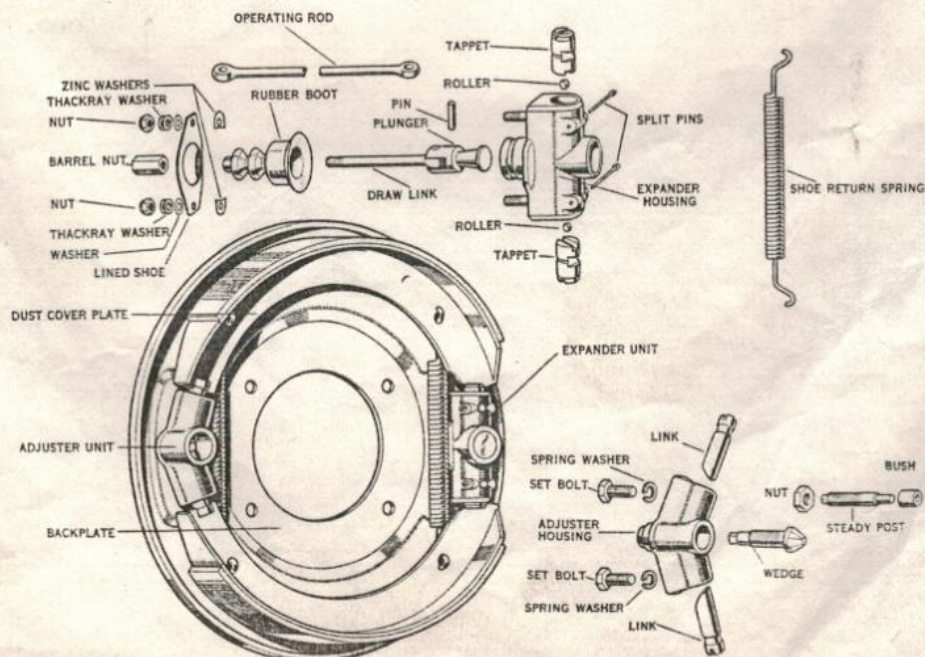


FIG. 2

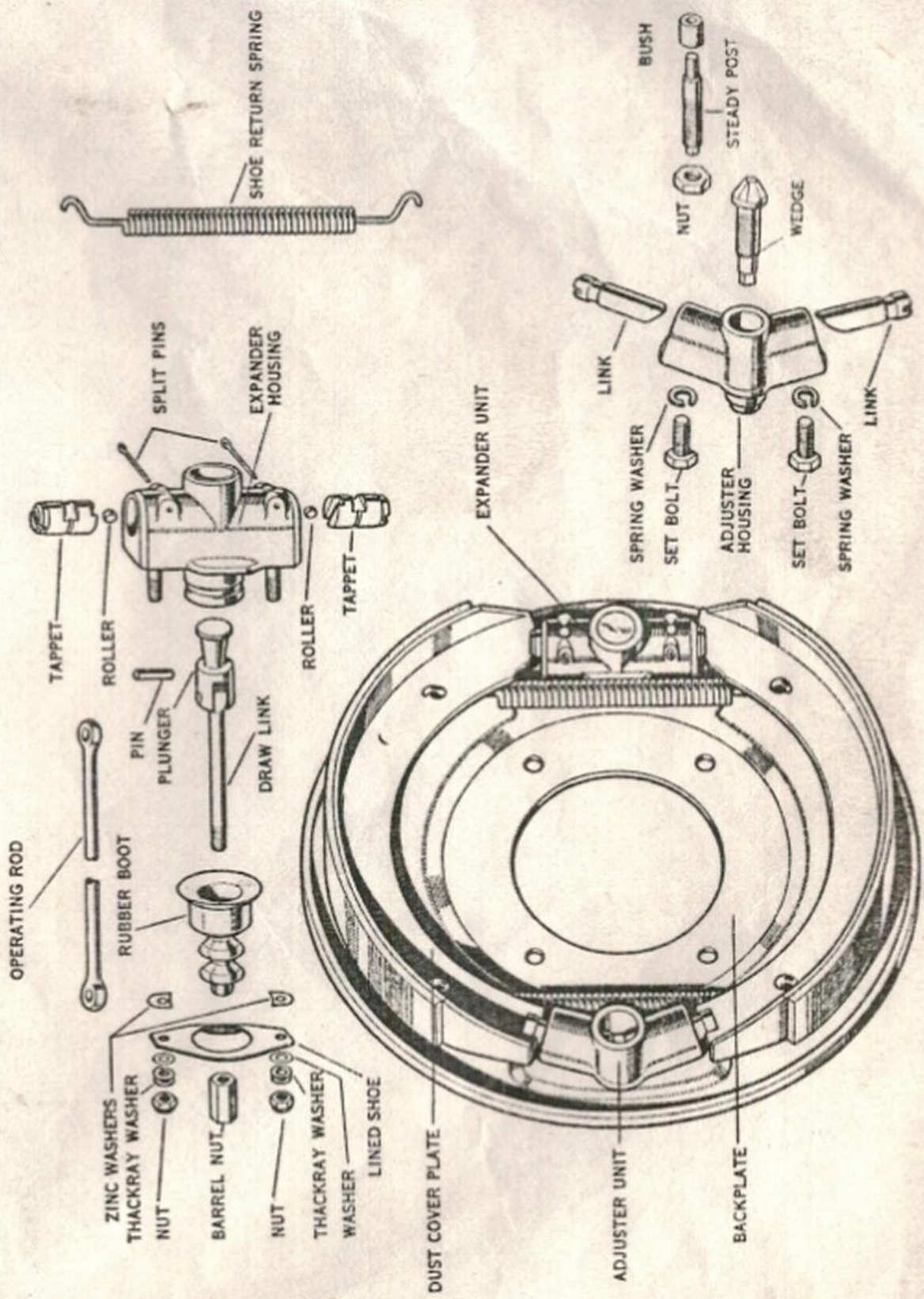


FIG. 2

DESCRIPTION

The brake consists of two brake shoes resting in expander and adjuster units affixed to a backplate, supported by steady posts and retained by two shoe return springs.

THE BRAKE SHOES

The brake shoes are solid drawn T section steel with a woven or moulded lining bonded or riveted to the platform. The lined shoe is ground to an exact contour before fitting and when worn should be replaced by new Factory Lined Shoes, which are ground in the same manner and will restore the original efficiency.

THE EXPANDER UNIT

The expander unit, Fig. 3, has a die-cast body, housing two opposed tappets in which the shoes rest. Between inner ends of the tappets is the expander cone operated by the draw link. Hardened steel rollers eliminate friction between the taper sides of the cone and grooves cut into the ends of the tappets. This unit is free to float to a certain extent and the nuts holding the unit to the backplate should be half to one turn slack. A thackray washer under nut prevents vibration from altering this adjustment.

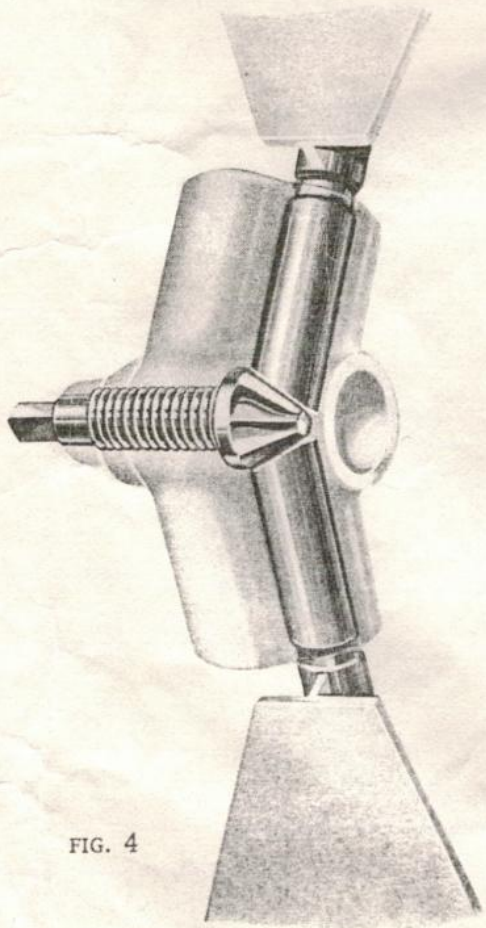


FIG. 4

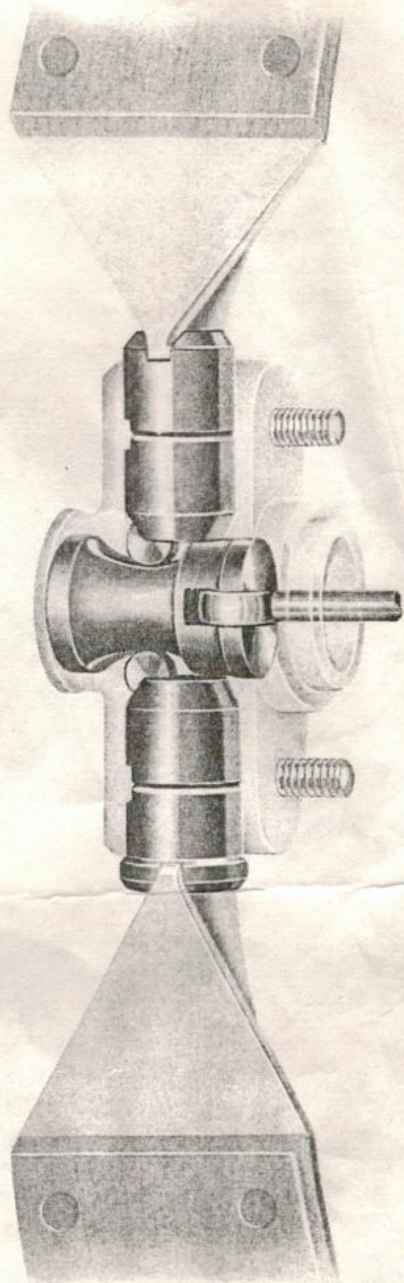


FIG. 3

The reason for this slight movement is to allow automatic centralization of the brake unit. As more braking effort is generated by the leading shoes, there is inevitably more lining wear than on the trailing shoes, and a slight movement of the expander towards the leading shoe is constantly needed to equalise the pressure of the two shoes on the drum.

THE ADJUSTER UNIT

The adjuster unit Fig. 4, has a steel body spigoted and bolted firmly to the backplate and houses two links slotted to locate the shoes, and at right angles to the links, the adjuster wedge. The wedge has a cone shaped end with four flats and the inner ends of the links are machined to rest on two faces. The stem of the wedge has a fine thread and a squared end which projects through the backplate. On turning the wedge in a clockwise direction the links are forced apart and lining wear compensated.

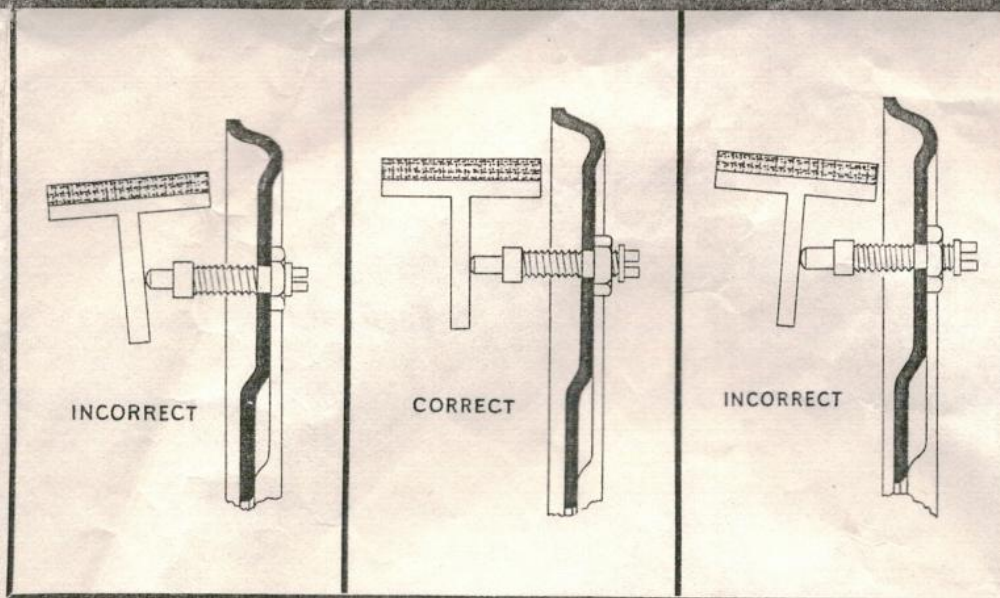


FIG 5

To ensure correct location between shoes and drum:—

- A** Loosen locknut.
- B** Unscrew (screwdriver in the slot) the adjustable steady posts two turns anti-clockwise.
- C** Adjust shoes to the drum by the normal shoe adjusters until the drum cannot be turned.
- D** Turn the steady post clockwise until it just contacts the shoe. Light contact only is required.
- E** Tighten locknut.
- F** Adjust shoes by releasing the brake adjuster to give correct clearance between shoe and drum.

THE STEADY POSTS

The steady posts, Fig. 5, hold the shoes square with the drum. In some brakes they are posts riveted in the backplate and are not adjustable while in others they are simply threaded posts screwed into the backplate and locked in position by a locknut on the outside. Adjustment should not be necessary until new shoes are fitted and is described in "Fitting Replacement Shoes."

THE SPRINGS

The springs are fitted from shoe to shoe and should be between shoe and backplate. When correctly fitted the shoes should be pulled down onto the steady posts. New springs should be fitted when fitting new lined shoes.

MAINTENANCE

RUNNING ADJUSTMENT

To take up lining wear turn the adjuster wedge clockwise until the shoes are locked in the drum and slack back two clicks. Examine operating linkage and lubricate as necessary.

FITTING REPLACEMENT SHOES

- 1** Remove wheel and brake drum. With a large screwdriver prise one shoe out of the expander tappet and remove the worn shoes with springs attached. Remove links from adjuster housing.
- 2** Clean down backplate, dismantle, grease and re-assemble expander unit and adjuster unit as described below. Make sure the expander is not seized to backplate and the nuts are half to one turn slack, and turn adjuster wedge anti-clockwise to the full off position. Lightly grease the tops of the steady posts.
- 3** Fit new springs to the new shoes making sure that they will be between shoe web and backplate (Fig.6.). Fit the ends of the webs with the half round slot into the adjuster links and insert the other end of one shoe into the expander tappet and ease the other shoe into the tappet with the screwdriver. Keep all grease off the linings and do not handle any more than necessary.
- 4** Check that drums are clean and free from grease and refit.

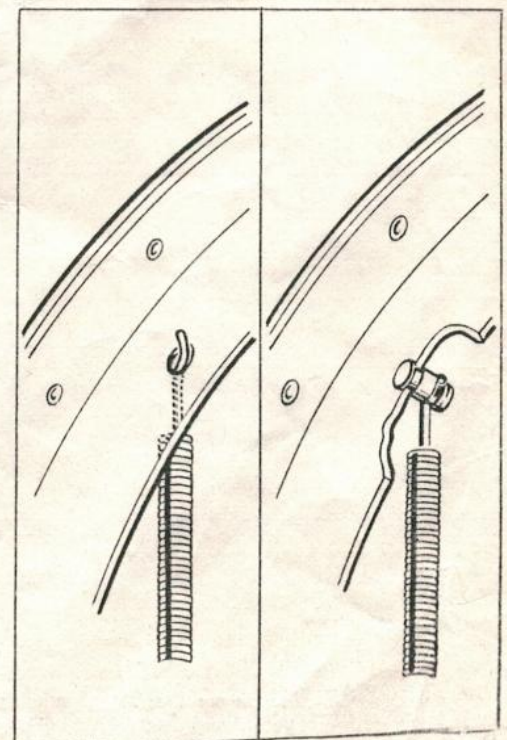


FIG. 6

- 5 Adjust the steady posts as follows. Slack off the locknuts on the two steady posts and with a screwdriver screw back the posts two turns anti-clockwise. Apply the brakes hard several times to centralise the expander unit and lock up the shoes in the drum by turning the adjuster stem clockwise as far as it will go. Screw in the steady posts until they just touch the shoe webs and tighten locknuts.
- 6 Finally adjust the brakes by slacking off the adjuster three "clicks." The standard adjustment is two "clicks" but slight extra clearance is needed to allow for possible lining expansion on new shoes.

EXPANDER UNIT

Release the drawlink by screwing back the locknut and barrel nut, or if the brake rod is as illustrated with an eye at each end (Fig. 2.), remove the clevis pin from the compensater end.

Detach the unit by removing the nuts from studs projecting through the backplate noting the order of the spring washers, spacing washers and dust cover plate. If the drawlink or brake rod end is too large to work through the dust cover release the expander cone from the body by extracting the split pins which restrict the tappet movement and the cone can be pushed through the housing far enough to press out the drawlink pin. When withdrawing the expander cone take care that the two small rollers are not lost.

Completely dismantle and clean, examine the tappets, rollers and cone for any sign of wear and if in doubt replace the parts. For most brakes a service kit can be obtained.

Apply liberally Girling White Brake Grease to all parts, remove any corrosion from the backplate which may interfere with the movement of the unit, grease the plate and reassemble in reverse order. Fit a new dust cover whenever a unit is dismantled for maintenance.

Replace the packing washers, dust cover plate and spring washers in the correct order on the studs. Tighten the nuts and slack back half to one turn. It should now be possible to move the expander on the backplate by gently tapping with a mallet.

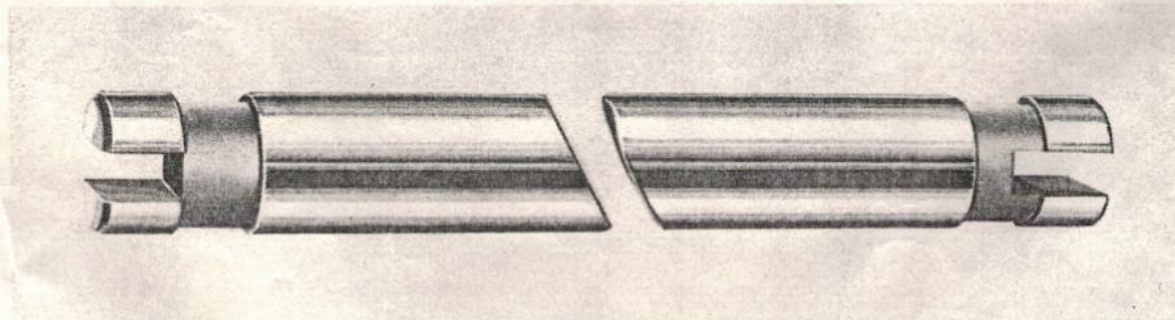


FIG. 7

ADJUSTER UNIT

Detach the unit by removing the bolts. Take out the links, screw the wedge right through the unit, clean all parts and examine for wear. If necessary replace the parts from a service kit. Smear with Girling White Grease and reassemble. Fit the unit to the backplate and tighten the fixing studs.

In straight adjusters both links are identical but in angled adjusters (as on brake illustrated) the links are "handed," and it is important that they are replaced in their correct positions. Care must be taken to ensure that handed pairs are fitted, and a quick check on this point is by placing the links end to end (Fig. 7) with the machined flats mated exactly, and correct pairs will show the slots parallel with each other. With a pair of links chosen it will still be necessary to ensure that they are fitted in the correct bores. The links must be located with their flats to face with the flats of the adjuster wedge, and the slots of the links parallel to the backplate. When fitted correctly four distinct "clicks" will be felt and heard, for one complete turn of the wedge.