SECTION L

FRONT SUSPENSION AND FRONT HUBS

SERIES BN4

Section No. L.1  Independent front suspension
Section No. L.2  Coil springs
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Section L.1

INDEPENDENT FRONT SUSPENSION

Description

The independent front suspension is known as the “wishbone” type, since the top and bottom linkages roughly conform to the shape of a wishbone. Between these two wishbones is the coil spring, held under compression between the top spring plate and the lower spring plate which is secured to the lower wishbone by four bolts.

The top wishbone is formed by the lever arms of a double-acting hydraulic shock absorber which is anchored to the top spring plate bracket by four bolts. At the swivel end, the top wishbone is secured to the swivel pin trunnion by means of a fulcrum pin and tapered rubber bushes. The bottom wishbone is secured by a single lower link spindle and tapered rubber bushes to two mounting plates, bolted to the front suspension member, and by two screwed bushes and a screwed fulcrum pin to the lower end of the swivel pin.

Checking for Wear

The following tests should be made to check for wear in various components of the front suspension unit.

1. Wear of the swivel pin, or bushes, or both, may be checked by jacking up the front of the car and endeavouring to rock the wheel by grasping opposite points of the tyre in a vertical position. If any sideways movement can be detected between the swivel axle assembly, the swivel pin or the swivel pin bushes are worn and must be stripped for examination.

2. Up and down, or sideways movement of the shock absorber cross shaft, relative to the shock absorber casting, denotes wear of the shock absorber shaft bearings which can only be remedied by refitting a new shock absorber. These bearings are best checked when the suspension is dismantled and when with some freedom of movement, it is possible to move the top wishbone arms, which are attached at their inner ends of the shock absorber cross shaft.

3. The rubber bearing bushes used for the upper wishbone arm outer bearings and for the lower wishbone arm inner bearings may in time deteriorate and need renewing. Excessive sideways movement in either of these bearings would denote softening of the rubber bushes.

4. The screwed bushes or the screwed trunnion fulcrum pin of the lower wishbone arm outer bearing assembly may develop excess free play due to wear of either of these parts. This assembly can best be checked when the suspension has been dismantled.

Section L.2

COIL SPRINGS

To Remove

1. Place a jack under the chassis front cross-member and raise the car until the front wheels are clear of the ground.

2. Remove the appropriate wheel by unscrewing the five securing nuts, or the “knock-on” hub cap if wire wheels are fitted.

3. Release the compression of the coil spring using Service Tool 18G 37. If this tool is not available use two ½ in. B.S.F. slave bolts of high-tensile steel, 4 in. long and threaded their entire length.

4. The bottom spring plate is secured to the suspension lower links by four self-locking nuts. Unscrew the nuts from two diagonally opposite bolts, remove the bolts and insert the two slave bolts in the vacated holes.
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Fig. L2. Illustrating the coil spring compressor (Service Tool 18G.37) in position.

(5) Screw two nuts down securely onto the slave bolts and remove the remaining two short nuts and bolts.
(6) Unscrew the nuts from the slave bolts, each, a little at a time.
(7) When the spring is fully extended, release the bolts and remove the spring plate and coil spring.

To Replace
The replacement of the coil springs is a reversal of the procedure to remove, making sure that all securing nuts and bolts are fully tightened.

Section L.3 FRONT SUSPENSION

To Remove
(1) Remove the coil spring as described in Section L.2.
(2) Disconnect the steering side tube from the steering arm by withdrawing the split pin and unscrewing the nut, see Section K.
(3) Disconnect the flexible brake pipe from the brake backplate, tying it to some higher point to prevent unnecessary loss of fluid.
(4) With the suspension unit supported, remove the fulcrum pins securing the lower wishbone arms to their brackets on the frame, taking care to retrieve the two rubber bushes and special washers from each bearing.
(5) Unscrew the four set pins securing the shock absorber to the top spring bracket.
(6) Lift the suspension unit clear of the car.

To Dismantle
(1) Unscrew the nut from the clamping bolt connecting the top wishbone arms together.
(2) Remove the split pin and nut from the upper trunnion fulcrum pin on the outer end of the top wishbone arms.
(3) The forward arm (left-hand suspension unit) of the top wishbone is secured to the shock absorber spindle by a clamping bolt. Slacken the clamping bolt and partially withdraw the arm. The trunnion fulcrum pin can now be withdrawn and the shock absorber removed complete with the top wishbone arms.
(4) Withdraw the rubber bearing from each end of the upper trunnion. The bearings fit into a groove in the swivel pin and must be taken out before the swivel pin is removed.
(5) Take out the split pin and unscrew the nut from the top of the swivel pin.
(6) Remove the upper trunnion and the three thrust washers and lift off the swivel axle and hub assembly.
(7) Detach the cork washer from the lower end of the swivel pin.
(8) Slacken the nut on each of the half moon cutters located in the ends of the lower wishbone arms, screw out the two threaded bushed and detach the arms.
(9) Unscrew the nut from the cotter, located in the centre of the lower trunnion, and tap out the cotter.
(10) Withdraw the fulcrum pin and remove the cork washer from each end of the trunnion.

Section L.4 EXAMINATION FOR WEAR

Swivel Pin
(1) Carefully examine the swivel pin for wear by checking for ovality with a micrometer.
(2) If the pin does not show any appreciable wear renewal of the swivel bushes may effect a satisfactory cure. The bushes can easily be driven out or replaced with a suitable drift.
NOTE.—When refitting the top bush the greasing hole must locate with the grease hole in the swivel housing. The second bush must be flush with the recessed housing and protrude about ¼ in. above the lower housing upper face.
(3) Ream the bushes from the bottom as necessary using Service Tools 18G 64 and 18G 65.
(4) Check the efficiency of the dust covers and renew if necessary.
Wishbone Arm Screwed Bush Bearing

(1) Test to see if the screwed bushes can be moved backwards or forwards on the fulerum pin thread.
(2) If such movement is detected replace the bushes and if movement is still detected replace the fulerum pin.

Shock Absorbers

(1) If any up and down or sideways movement of the cross shaft is detected the shock absorbers must be completely renewed.
(2) Carefully examine the shock absorbers for any leaks and test for effective damping. Secure the
Front Suspension and Front Hubs


Fig. L.4. Lower wishbone inner bearing assembly.

Shock absorber mounting plate in a vice and move the wishbone arms up and down through a complete stroke. A moderate resistance should be felt throughout the whole stroke.

If resistance is erratic it may mean that the fluid level is too low and that there are air-locks in the shock absorber. To rectify this remove the shock absorber filler plug and maintain the fluid at the correct level whilst the arms are moved steadily up and down through full strokes. If this treatment does not effect a cure the shock absorber must be renewed as a complete unit.

Section L.5

Front Suspension

To Reassemble

(1) Fit the screwed fulcrum pin into the lower trunnion at the bottom end of the swivel pin, ensuring that it is centralised and secured by means of its cotter pin.

(2) Fit a cork ring into the recess provided at each end of the lower trunnion and place the lower wishbone arms in their respective positions. Ensure that the half-moon cotters are correctly positioned to receive the steel bushes which should be greased and partially screwed home.

(3) Service Tool 18G 56 should be used to ensure that the alignment of the lower wishbone arm is correct. If this Service Tool is not available bolt the lower spring plate securely in position.

(4) Screw the threaded bushes home evenly, then slacken them back one flat. Finally secure the bushes by tightening the nuts on each of the half-moon cotters. Do not overtighten the cotter nuts as this may cause distortion of the bushes. If the assembly has been correctly carried out it will be possible to insert a -002 in. feeler gauge between the inner shoulder of the bush and the outer face of the wishbone arm on each side. The lower trunnion assembly should now operate freely in the screwed bushes.

(5) Place the cork washer on the swivel pin with its chamfered face downwards and smear the swivel pin with a little clean engine oil.

(6) Position the swivel axle and hub assembly on the swivel pin.

(7) Refit the thrust washers.

Note—The three thrust washers are made up of an “Oilite” washer interposed between two “Staybrite” washers. The “Staybrite” washers are supplied in varying thicknesses to permit adjustment, as it is necessary to provide easy operation of the swivel axle with the minimum amount of lift; the maximum permissible lift being -002 in.

(8) Fit the upper trunnion and swivel nut, and check the clearance, correcting it if necessary by means of the “Staybrite” washers. Then slacken the swivel pin nut to permit further assembly.

(9) Moisten the upper trunnion rubber bearings with water and place them in position.

(10) Place the trunnion, with its bearings, in position between the two upper wishbone arms.

(11) Refit the fulcrum pin, re-position and tighten the slackened upper wishbone arm to the shock absorber arms.

NOTE.—The swivel pin and upper trunnion fulcrum pin nuts must not be tightened at this stage.

Fig. L.5. This exploded view shows the screwed bush housing and assembly at the lower end of the wishbone arms.
To Replace

1. Fit one rubber bearing to each of the suspension lower links, on the side which corresponds to the small hole in each of the frame brackets.

2. Raise the links to the frame brackets, insert the fulcrum pins and slide the second bearing and special washer over the protruding end of each pin. Fit the nut but do not screw it home. Position the shock absorber on its top bracket and partially tighten the four setscrews.

3. The assembly must next be set in the normal loaded position. This can be accomplished by placing a distance piece between the shock absorber wishbone arm and the upper spring plate at a point opposite the rubber buffer. The length of the distance piece must be 2 in.

4. Tighten the nuts on the fulcrum pins securing the lower wishbone arms to the frame brackets. Do not forget to lock them with the split pins.

5. Tighten the four setscrews securing the shock absorber to its bracket on the frame.

6. Tighten the upper transverse fulcrum pin nut and secure with a split pin.

7. Tighten the swivel pin nut and lock with a split pin.

8. Service Tool 18G 56, or the lower spring plate, whichever used, should now be removed from the lower wishbone arms and the coil spring refitted as described in Section L.2.

9. Connect the brake fluid pipe to the brake backplate, secure the steering side tube to the steering arm, refit the road wheel, lower the car to the ground and remove the distance piece used to retain the suspension in the normal loaded position.

10. Finally, bleed the brakes as described in Section M.

Fig. L.7. When building up the suspension, the arms must be correctly set by the distance piece A (2 in.) before the various bearings are tightened.

Section L.6
CASTOR AND CAMBER ANGLES AND SWIVEL PIN INCLINATION

Description
The castor and camber angles and the swivel pin inclination are three design settings of the front suspension assembly. They have a very important bearing on the steering and general riding of the car. Each of these settings is determined by the machining and assembly of the component parts during manufacture. They are not therefore adjustable.

However, should the car suffer damage to the suspension affecting these settings, the various angles must be verified to ascertain whether replacements are necessary.

A. Castor angle 2°.  B. Swivel pin inclination 65°.  C. Camber angle 1°.
FRONT SUSPENSION AND FRONT HUBS

Camber Angle
This is the outward tilt of the wheel and a rough check can be made by measuring the distance from the outside wall of the tyre, immediately below the hub, to a plumb line hanging from the outside wall of the tyre above the hub. The distance must be the same on both wheels. Before making this test, it is very important to ensure that the tyres are in a uniform condition and at the same pressure. Also that the car is unladen and on level ground.

Damage to the upper and lower wishbone arms may well affect the camber angle.

Caster Angle
This is the tilt of the swivel pin when viewed from the side of the car. This also is only likely to be affected by damage to the upper and lower wishbone arms.

Swivel Pin Inclination
This is the tilt of the swivel pin when viewed from the front of the car and is again only likely to be affected by damage to the wishbone arms.

A useful tool which can be used for checking these settings is the Dunlop “wheel camber, caster and swivel gauge”. With the car standing on level ground this gauge will give readings enabling the caster, camber and swivel pin angles to be quickly verified.

Section L.7
FRONT HUBS
(Disc Wheels)

To Check for Wear
The inner and outer ball bearings of the front hub are non-adjustable, the amount of thrust being determined by a distance piece. To check for wear of these bearings, the car should be jacked until the wheel of the front hub is clear of the ground. Then grasp the tyre with both hands in the vertical position and rock the wheel. Movement between the wheel and the back plate denotes wear of the hub bearings. Should a very positive movement be apparent, the front hub bearings will need renewing.

To Remove and Dismantle
(1) Jack the car until the wheel is clear of the ground and then place blocks under the independent suspension spring plate. Lower the car on to the blocks.
(2) Remove the wheel and the countersunk screw holding the brake drum. If the drum appears to bind on the brake shoes, the shoe adjusters should be slackened.
(3) Lever off the hub cap, and then extract the split pin from the swivel axle locking nut. Using a box spanner and tommy bar remove the axle nut and ease the flat washer, under the nut, clear of the axle thread.
(4) The front hub can now be withdrawn by using an extractor, 19G 220, which fits over the wheel studs. The hub is withdrawn complete with the inner and outer bearings, the distance piece and the oil seal. Should the inner bearing race remain on the swivel axle it can be removed by carefully inserting a narrow rod into the two small holes, in turn, in each side of the swivel axle and tapping the race lightly.
(5) With the hub removed, the outer bearing and the distance piece can be dismantled by inserting a drift through the inner bearing and gently tapping the outer bearing clear of the hub. The inner bearing and oil seal can then be removed by inserting the drift from the opposite side of the hub.
FRONT SUSPENSION AND FRONT HUBS

(6) The removal of the brake backplate is described fully in the section on brakes.

To Assemble and Replace

(1) Repack the inner ball bearing race with a recommended grease and insert it into the hub with the side of the race marked “thrust” facing the distance piece.

(2) Insert the distance piece so that the domed end faces the outer bearing.

(3) Pack the outer bearing with a recommended grease and replace the bearing in the hub so that the “thrust” side faces the distance piece. Use a soft metal drift to replace both bearings, tapping them gently and alternately on diametrically opposite sides of the bearing to ensure they move evenly into their respective housings on the hub.

Fig. 1.9. Front hub exploded (for wire wheels).

1. Grease cup.
2. Axle nut.
3. Split pin.
4. Washer.
5. Outer bearing.
8. Bearing outer race.
9. Inner bearing.
10. Oil seal.
11. Swivel axle.

Insert shows distance piece and shims.

(4) Fill the cavity between the inner bearing and the oil seal with a recommended grease and replace the hub oil seal. Renew the seal if it is damaged.

(5) Replace the hub on the swivel axle, using a hollow drift which will bear evenly on both the inner and outer races of the outer hub bearing. Gently tap the hub into position until the inner race bears against the shoulder on the swivel axle.

(6) Place the swivel axle flat washer into position and tighten the nut. The split pin should be inserted to lock the nut.

(7) Tap the hub cap on to the hub: do not put grease in the hub or cap.

(8) Replace the brake drum and secure with the countersunk screw. It is important that the drum is fully home before this screw is tightened and, if necessary, the drum should be pressed in position by tightening two wheel nuts.

(9) Refit the wheel. The wheel nuts are best finally tightened when the car is off the jacking blocks, but re-adjust the brake shoes if necessary before the car is lowered to the ground.

Section L8

FRONT HUBS

(Wire Wheels)

To Check for Wear

The inner and outer bearings of the front hub are of the taper roller type and are therefore adjustable. To check for wear of these bearings the car should be jacked up until the wheel of the front hub to be checked, is clear of the ground. Movement between the wheel and the back plate denotes wear of the hub bearings. Should a very positive movement be apparent, the front hub bearings will need renewing.

To Remove and Dismantle

(1) Jack up the car until the wheel is clear of the ground and then place blocks under the independent spring plate. Lower the car on to the blocks.

(2) Remove the “knock-on” hub cap (direction of rotation marked on cap) and pull the wheel off the splines.

(3) Release the nuts and washers holding the brake drum, then gently tap the brake drum clear of the

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FRONT SUSPENSION AND FRONT HUBS

front hub assembly. If the drum appears to bind on the brake shoes, the shoe adjusters should be slackened.

(4) Use the extractor provided in the tool kit to extract the grease retaining cup from within the hub.

(5) Straighten the end of the split pin and then prise it out through the hole provided in the hub.

(6) Using a box spanner and tommy bar remove the hub securing nut and flat washer from the swivel axle.

(7) Withdraw the front hub using an extractor. It is preferable to use an extractor which screws into position on the hub cap thread (see Fig. L.12), but an extractor which locates over the hub studs may also be used. The hub is withdrawn complete with the inner and outer bearings and oil seal.

(8) With the hub removed, dismantle the outer bearing by inserting a drift through the inner bearing and gently tapping the outer bearing clear of the hub. The inner bearing and oil seal can then be removed by inserting the drift from the opposite side of the hub.

To Reassemble and Replace

The end-float in the hub bearings must be checked and adjusted whenever the hub has been dismantled for attention or when play in the hub bearings has become excessive. The end-float is adjustable by means of shims situated between the outer bearing and the bearing distance piece.

(1) Press the two bearing outer rings into the hub. Insert the inner race and rollers of the inner bearing and the bearing spacer into the hub, packing the bearing and the cavity between the inner bearing and the oil seal with a recommended grease.

(2) Fit the oil seal to the hub and mount the hub assembly on the stub axle. Pack the inner race and rollers of the outer bearing with a recommended grease and position them in the hub without fitting shims at this stage.

(3) Fit the stub axle nut and washer. Tighten the nut and at the same time rotate the hub back and forth to achieve the correct end-float.
forth until there is noticeable drag. This ensures that the bearing cones are properly seated.

(4) Unscrew and remove the stub axle nut. Extract the washer and the centre of the outer bearing. Insert a sufficient thickness of shims to produce an excessive amount of end-float. Note the total thickness of shims used. Replace the bearing centre, the washer, and tighten the stub axle nut.

(5) Measure accurately the total amount of end-float in the bearings. Remove the stub axle nut, washer, and outer bearing centre. Reduce the number of shims to eliminate end-float, while still allowing the hub to rotate freely, when the stub axle nut has been refitted and tightened to a torque wrench reading of 40 to 70 lb/ft. (5-53 to 9-68 kg.m.). Latitude for this reading is given so that the nut may be aligned with the split pin hole in the stub axle.

(6) Insert a new split pin through the hole provided in the hub and lock the stub axle nut.

(7) Remove any surplus grease to allow room for expansion and, using a drift, tap the grease retaining cap gently but firmly up against the outer bearing. Do not put grease in the cap.

(8) Replace the brake drum and secure with the four spring washers and self-locking nuts.

(9) Grease the wheel hub splines, refit the road wheel and replace the knock-on hub cap.

### Section L.9  FAULT DIAGNOSIS

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<td>8</td>
<td>Loose or broken shackles</td>
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<td>2</td>
<td>Front suspension and rear axle mounting points out of alignment</td>
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<td>2</td>
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<td>(d) Tyre Squeal</td>
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Section L.10

SHOCK ABSORBERS

For a general description and details of maintenance and topping-up shock absorbers refer to Section J.9. See also items (2) and (3) in “Checking for Wear” of Section L.1 and “Shock Absorbers” of Section L.4 for information on the testing of shock absorbers.

To Remove

(1) Jack up the car and place stands under the chassis in safe positions.
(2) Remove the road wheel. Place a jack beneath the outer end of the lower wishbone arm and raise it until the shock absorber arms are clear of their rebound rubber.
(3) Remove the clamp bolt connecting the two shock absorber arms together.
(4) Remove the split pin and castellated nut on the upper fulcrum pin and withdraw the pin.
(5) One arm of each shock absorber unit is secured to the shock absorber spindle by a clamp bolt. When the clamp bolt has been removed the arm may be partially withdrawn. This allows the trunnion link and its rubber bushes to be separated easily from the shock absorber arms.
(6) Retrieve the trunnion link rubber bushes.
(7) Once the four shock absorber fixing bolts and their spring washers have been unscrewed the unit may be removed from car.

NOTE.—The jack must be left in position under the suspension wishbone while the top link remains disconnected in order to keep the coil spring securely in position and to avoid straining the steering connections.

To Replace

Replacement is a reversal of the above procedure, but attention must be given to the following points:

(1) Having bolted the shock absorber to the chassis frame and before fitting the upper trunnion fulcrum pin, work the arms of the unit three or four times through their full travel to expel any air which may have found its way into the operating chamber.
(2) The fulcrum pin bushes must be renewed if softening of the rubber or side movement is evident.
(3) Fit the trunnion with its bushes between the shock absorber arms and refit the fulcrum pin before pushing the loosened arm home on the shock absorber spindle and replacing the clamp bolt.
(4) Tighten the fulcrum pin nut and the clamp bolt connecting the two shock absorber arms only when the load is on the suspension, i.e., with the jack in position under the lower suspension arm or a 2 in. (5-08 mm.) distance piece interposed between the shock absorber arm and the chassis frame (see Fig. L.7).
SECTION LL

FRONT SUSPENSION AND FRONT HUBS

SERIES BN6

NOTE

For details of the front suspension and front hubs fitted to BN6 cars refer to Section L.

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SECTION LLL

FRONT SUSPENSION AND FRONT HUBS

Mk. I and II (SERIES BN7 and BT7)
AND Mk. II and Mk. III (SERIES BJ7 and BJ8)

Section No. LLL.1. Front hubs
Section No. LLL.2. Modified front springs

NOTE

This section should be used in conjunction with Section L, particular attention being given to Sections L.1, 2, 3, 4, 5, 6, 9 and 10.

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Section LLL.1

FRONT HUBS

To Check for Wear
The inner and outer bearings of the front hub are of the taper roller type and are therefore adjustable. To check for wear of these bearings the car should be jackd up until the wheel of the front hub to be checked is clear of the ground. Movement between the brake disc and the steering arm denotes wear of the hub bearings or incorrect adjustment. Should a very positive movement be apparent, the front hub bearings will need renewing. The amount of movement present may be checked by a dial gauge.

Fig. LLL.1. Front hub exploded and brake disc.
1. Grease cup.
2. Axle nut.
3. Split pin.
4. Washer.
5. Outer bearing.
8. Bearing outer race.
9. Inner bearing.
10. Oil seal.
Inset shows distance piece and shims.

To Remove and Dismantle

(1) Jack up the car until the wheel is clear of the ground and then place blocks under the spring plate. Lower the car on to the blocks.

(2) **Wire wheels**
Remove the “knock-on” hub cap (direction of rotation marked on cap) and pull the wheel off the splines.

*Disc wheels*
Remove the hub cover, unscrew the securing nuts and pull the wheel off the hub studs.

(3) Remove the brake calliper unit as described in Section MMM.7.

(4) Use the extractor provided in the tool kit to extract the grease retaining cup from within the hub (Fig. L.11).

(5) Straighten the end of the split pin and then prise it out through the hole provided in the hub.

(6) Using a box spanner and tommy bar remove the hub securing nut and flat washer from the swivel axle.

(7) Withdraw the front hub using one of the following procedures, but do not attempt to remove the hub by pulling on the brake disc. Withdraw the hub complete with the inner and outer bearings and oil seal.

*Disc wheels*
Withdraw the front hub using Service Tool 18G 220 as described in Section L.7, item 4.

*Wire wheels*
Screw Service Tool 18G 363 on to the hub cap thread (12 T.P.I.): the tool is marked for right and left-hand threads.

From chassis No. 26705 (Mk. III) use Service Tool 18G 1032, the right hand thread end of the tool being knurled to distinguish it from 18G 363 (as the hub now has 8 T.P.I.).

(8) With the hub removed, withdraw the inner race and rollers of the outer bearing together with the shims fitted between the bearing and the distance piece. Remove the oil seal. Withdraw the inner race and rollers of the inner bearing and the bearing distance piece. The bearing outer rings may be removed from the hub using Service Tool 18G260 with adaptors 18G260J (inner bearing) and 18G260K (outer bearing).

To Reassemble and Replace
The end-float in the hub bearings must be checked and adjusted whenever the hub has been dismantled for attention or when play in the hub bearings has become...
excessive. The end-float is adjustable by means of shims situated between the outer bearing and the bearing distance piece.

(1) Fit the bearing outer rings to the hub using service tool 18G 260 with adaptors 18G 260J and 18G 260K. Insert the inner race and rollers of the inner bearing and the bearing spacer into the hub packing the bearing and the cavity between the inner bearing and the oil seal with a recommended grease.

(2) Fit the oil seal to the hub and mount the hub assembly on the stub axle. Position the inner race and rollers of the outer bearing, packed with a recommended grease, in the hub without fitting shims at this stage.

(3) Fit the stub axle nut and washer. Tighten the nut and at the same time rotate the hub back and forth until there is noticeable drag. This ensures that the bearing cones are properly seated.

(4) Unscrew and remove the stub axle nut. Extract the washer and the centre of the outer bearing. Insert a sufficient thickness of shims to produce an excessive amount of end-float. Note the total thickness of shims used. Replace the bearing centre, the washer, and tighten the stub axle nut.

(5) Measure accurately the total amount of end-float in the bearings. Remove the stub axle nut, washer, and outer bearing centre. Reduce the number of shims to eliminate end-float, while still allowing the hub to rotate freely, when the stub axle nut has been refitted and tightened to a torque wrench reading of 40 to 70 lb/ft. (5.53 to 9-68 kgm). Latitude for this reading is given so that the nut may be aligned with the split pin hole in the stub axle.

(6) Insert a new split pin through the hole provided in the hub and lock the stub axle nut.

(7) Remove any surplus grease to allow room for expansion and, using a drift, tap the grease retaining cap gently but firmly up against the outer bearing. Do not put grease in the cap.

(8) Replace the calliper assembly and tighten the securing bolts to a torque reading of between 45 to 50 lb./ft. (6.22 to 6.91 kgm.).

(9) Wire wheels
Grease the hub splines, refit the road wheel and tighten the knock-on hub cap.

Disc wheels
Refit the road wheel and tighten the wheel nuts.

Section LLL.2

MODIFIED FRONT SPRINGS

To improve road holding, modified front suspension springs were fitted at car numbers BT7. 10303 ; BN7. 10329.

The modified springs are interchangeable with the earlier type only in pairs.