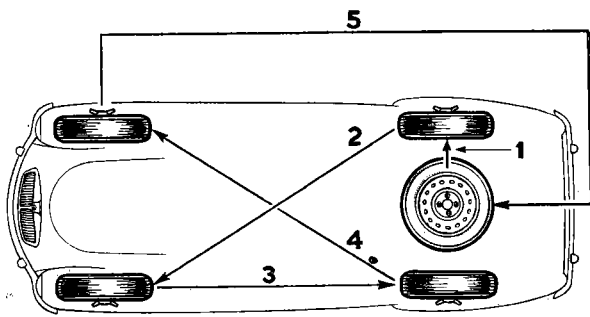


SECTION O

THE WHEELS, TYRES AND JACKING

General.

- Section No. O.1 Tyre maintenance.
- Section No. O.2 Jacking up the car.
- Section No. O.3 Removing and replacing road wheels.
- Section No. O.4 Valves.
- Section No. O.5 Tyre removal.
- Section No. O.6 Importance of balance.
- Section No. O.7 Fitting tyres and tubes.



3830BW

Fig. O.1

Change the position of the tyres in the order shown

GENERAL

The spare wheel is housed in the luggage compartment and clamped in position beneath the cover.

Remember that the spare wheel tyre pressure should be maintained at the correct running pressure for the rear wheels.

Pressures are given in 'GENERAL DATA' on page 7.

The jack and tyre pump are contained in the tool roll strapped above the spare wheel in the luggage compartment.

Section O.1

TYRE MAINTENANCE

Even tyre wear is promoted by changing the positions of the tyres on the car at intervals of about 3,000 miles (5000 km.). The spare tyre should take its turn with the others.

Attention should be paid to the following points with a view to obtaining the maximum mileage from the tyre equipment of the vehicle:

Test the pressures of the tyres weekly by means of a suitable gauge and restore any air lost. It is not sufficient to make a visual examination of the tyre for correct inflation. Inflate the spare wheel to the correct rear wheel pressure.

Keep the treads free from grit and stones and carry out any necessary repairs. Clean the wheel rims and keep them free from rust. Paint the wheels if required.

Keep the brakes and clutch adjusted correctly and in good order. Fierceness or uneven action in either of these units has a destructive effect on the tyres.

O.2

Misalignment is a very costly error. Suspect it if rapid wear of the front tyres is noticed, and correct the fault at once.

Should the tyres get oily, petrol (gasoline) should be applied sparingly and wiped off at once.

Avoid under- and over-inflation.

Avoid kerbing and other causes of severe impact.

Have damaged tyres repaired immediately.

Section O.2

JACKING UP THE CAR

When jacking a front wheel the jack pad should be engaged in the depression in the lower suspension arm between the spring seating and the lower link.

At the rear the jack should be placed below the rear spring centre plate or under the spring as close to the axle as possible

Always apply the hand brake and place blocks each side of the wheels remaining on the ground when the front or rear of the car is to be raised.

The car must not be jacked under the frame side-members.

Section O.3

REMOVING AND REPLACING ROAD WHEELS

Use the copper mallet provided in the tool kit to slacken the winged hub nut securing the wheel on the hub. The hub nuts on the left-hand side of the car have right-hand threads (unscrew anti-clockwise) and the nuts on the right-hand side of the car have left-hand threads (unscrew clockwise).

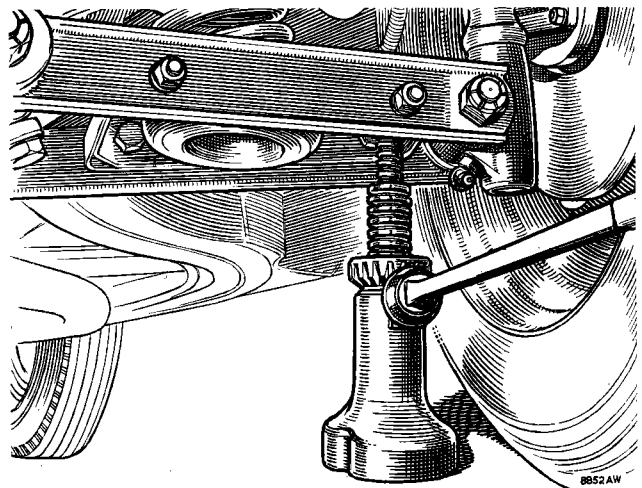


Fig. O.2

Jacking a front wheel

Each road wheel is fitted with four large pegs which locate in holes in the face of each wheel hub. Make certain that these pegs register correctly in the holes before applying the wheel locknut.

If the wheel is fitted correctly the nut should go on approximately six turns.

Section O.4

VALVES

Valve caps, in addition to preventing dirt from entering the valve, form a secondary air seal and should always be fitted. The valves may be tested for airtightness by rotating the wheel until the valve is at the top and inserting its end in an eggcup full of water. If bubbles appear the seating is faulty and should be removed and a new one fitted. It is advisable to change the valve interiors every 12 months.

Section O.5

TYRE REMOVAL

Remove all valve parts to deflate the tyre completely, and push both edges into the base of the rim at a point diametrically opposite the valve. Lever the cover edge, near the valve, over the rim of the wheel, using two levers at intervals of 6 in. (15 cm.) apart.

NOTE.—Do not attempt to stretch the edges of the tyre cover over the rim edge.

Force is entirely unnecessary and is detrimental, as it tends to damage the wired edges. Fitting or removing is quite easy if the tyre edges are carefully adjusted into the rim base; if found difficult, the operation is not being performed correctly.

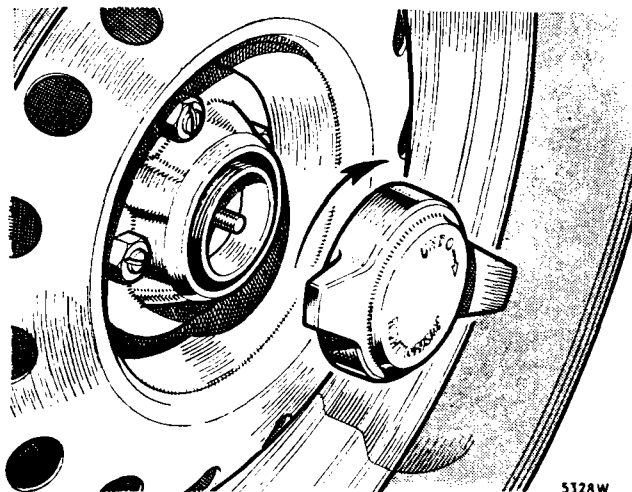


Fig. O.3

Removing a winged hub nut

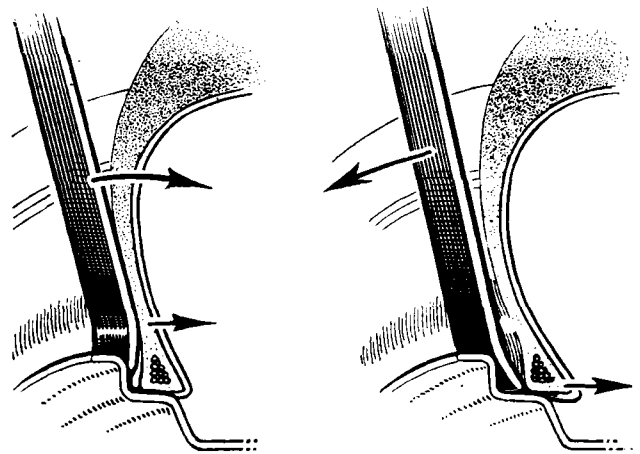


Fig. O.4

1846 C

The use of a tyre lever to ease the tyre bead from the wheel rim

Remove the tube carefully; do not pull on the valve. Stand the tyre and wheel upright, keeping the bead on the base of the rim. Lever the bead over the rim flange and at the same time push the wheel away from the cover with the other hand.

Section O.6

IMPORTANCE OF BALANCE

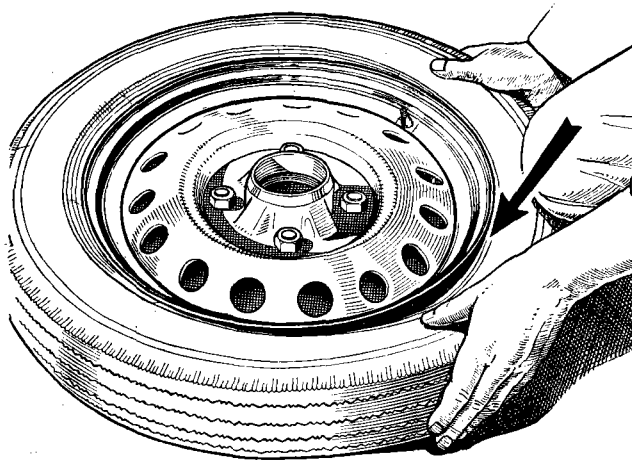
In order to obtain good steering it is of importance to ensure that the wheels, with tyres fitted, are in good balance. To assist this the tyre manufacturers are now marking their tyres with a white spot in the neighbourhood of the bead at the lightest point of the cover; similarly, they are marking the inner tubes with spots to indicate their heaviest point. When tyres are assembled care must therefore be taken to see that they are assembled with the spots on the cover coinciding with the spots on the tube.

It must be noted, in addition, that special balancing discs are fitted to the inside of the cover casing in some cases and that these should on no account be removed as the tyre balance will be upset if this is done. These balance discs are not repair patches and do not indicate any fault in the tyre.

Special balance weights, which cover a range of weights weighing from $\frac{1}{2}$ oz. to $3\frac{1}{2}$ oz. in steps of $\frac{1}{2}$ oz. are supplied by the Dunlop Rubber Co. for attachment to the wheel rim under Part Nos. WBW/1 to 7.

Their use is advised to maintain the correct balance for the wheels, which must be within 8 to 12 in. oz. (.56 to .85 cm. kg.).

The balance weights are fitted to the outside rim of the wheel.



1836 E

Fig. O.5

Pushing the tyre bead into the well

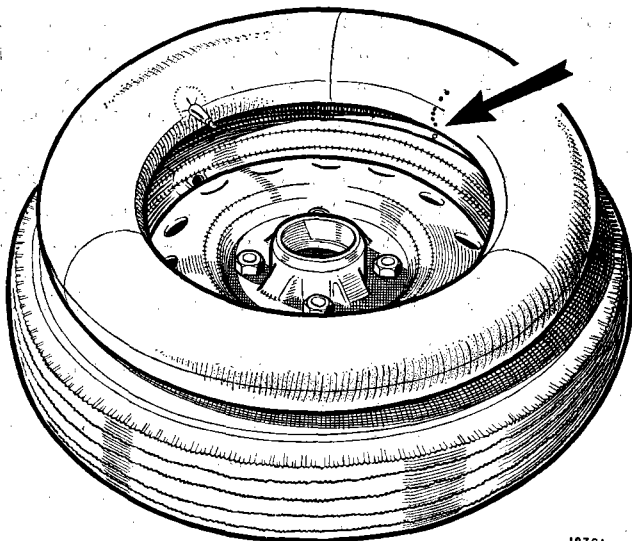
Section O.7

FITTING TYRES AND TUBES

Inspect the inside of the cover carefully and remove all dirt. The wheel rim must be clean, free from dust, and undamaged.

Dust the inside of the cover with french chalk. Inflate the tube until it begins to round out, then insert it in the cover.

Apply a frothy solution of soap and water generously around the centre base of the **tube**, extending upwards between the tyre beads and the tube itself for at least 2 in. (50.8 mm.) on both sides. Also apply the solution to the bottom and outside of the tyre beads. Do not



1838 I

Fig. O.6

The balance marks on the tyre and tube

allow the solution to run into the crown of the tyre. The solution must be strong enough to feel slippery when the fingers are wetted with the solution and rubbed together.

Mount the tyre on the rim immediately, whilst the soap solution is still wet.

Push one edge of the cover over the edge of the rim. It will go quite easily if the part first put on is fitted on the opposite side of the valve and is pushed right down into the rim base. Move it round so that its balance spots coincide with those of the inner tube when it is inserted with the valve passing through the hole in the rim. (Take care that the valve, fitted in the side of the tube, is on the correct side of the rim.)

Before inflating be sure that the tyre beads are clear of the well of the rim all the way round, and **push the valve into the tyre as far as possible in order to ensure that the tube is not trapped between the bead and the rim, then pull it out again into its correct position.**

Inflate slowly until the beads are fully seated.

Remove the valve core to **deflate the tube completely.**

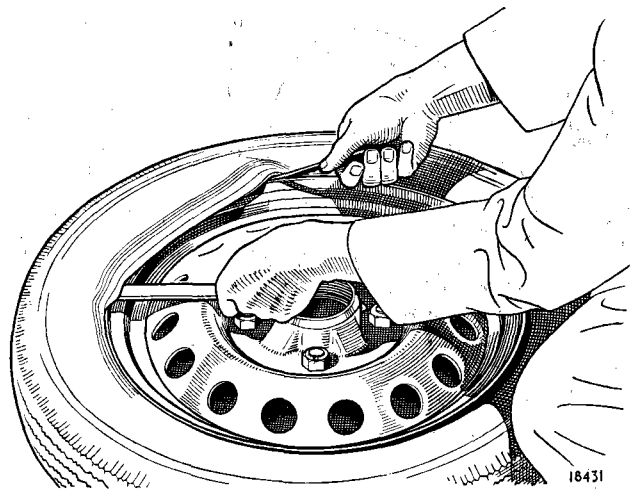
Reinflate to the correct working pressure (see 'GENERAL DATA'). This procedure must be followed whenever a tube is fitted.

The object of the double inflation is to permit any stretched portions of the tube to readjust themselves in the cover and relieve any local strains in the tube.

In an emergency french chalk may be used as a substitute for the soap solution, provided it is evenly and generously applied. This practice, however, is not recommended.

Repairing tubes

Punctures or injuries must be vulcanized. Ordinary patches should only be used for emergencies and cannot be relied upon.



1843 I

Fig. O.7

Refitting the tyre to the wheel