

## Introduction

In the event of a flat tyre, drivers should follow closely the procedure for wheel changing and jacking given in this section. The correct jacking points and how to locate them are shown. It is important that only the correct jacking points are used.

Where vehicles have the 'Temporary Use' spare wheel, drivers should be aware of the limitations of its use.

### Temporary-use Spare Wheel (where fitted)

Observe the following warnings before using the wheel.



#### **WARNING:**

1. **Please note temporary-use spare wheel warning label. Adhere to instructions on the label. Failure to comply can be dangerous.**
2. **When a temporary-use spare wheel is fitted, drive with caution and replace with the specified wheel and tyre as soon as possible.**
3. **Do not fit more than one temporary-use spare wheel and tyre assembly at one time.**
4. **The temporary-use spare wheel must be inflated to 60 lbf/in<sup>2</sup> (410 kPa, 4,1 bar).**
5. **Temporary-use spare wheel, maximum speed is 50 mph (80 km/h).**

**Note:** Maintenance information for the temporary-use spare wheel is the same as given for normal tyres in Section 5.

## Spare Wheel and Jacking Equipment

The spare wheel, jacking equipment and wheel chock are stored under the luggage compartment floor panel.

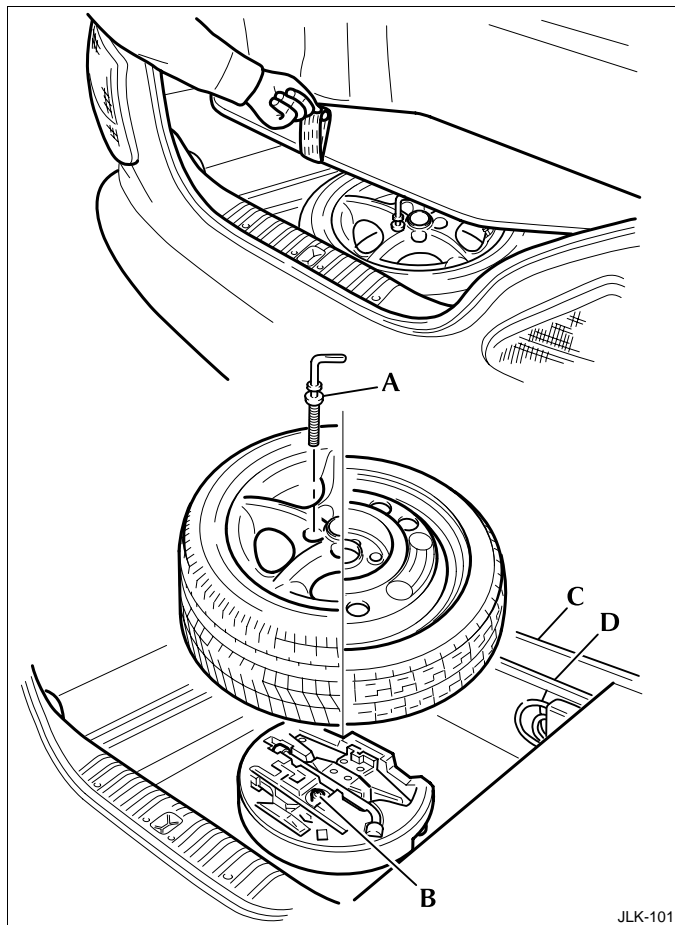
To remove the spare wheel, remove the luggage compartment floor panel and unscrew the retaining screw (see **A overleaf**).

The tray containing the jacking equipment kit can be removed from the luggage compartment by unscrewing the yellow securing bolt (see **B overleaf**).

The kit comprises: the jack; jack ratchet handle with socket extension; wheel nut wrench with telescopic extension; wheel chock; towing eye and a wheel locking nut extractor tube and key socket (where fitted).

**Note:** Examine the jack occasionally, clean and grease the threads to ensure it is always ready for an emergency.

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### Spare Wheel Stowage

When the temporary-use spare wheel is being used, stow the replaced road wheel in the luggage compartment so that it fits over the jacking equipment tray. Reposition the luggage compartment floor panel in the upper location slots (C).

When the temporary-use spare wheel is returned to the luggage compartment, position the wheel with one stud hole directly over the yellow plastic bolt. Fit the retaining screw through the stud hole into the bolt head and tighten down. Refit the luggage compartment floor panel in the lower position (D).

**Note:** Remove the centre badge, see illustration on page 4-3.

### Wheel Changing and Jacking

Be prepared for a flat tyre. Know where equipment is stowed and read the wheel changing and jacking instructions carefully.

#### Stopping the vehicle

Pull off the road completely, clear of all traffic and park on as level ground as possible. Switch on hazard warning lights.



**WARNING:**

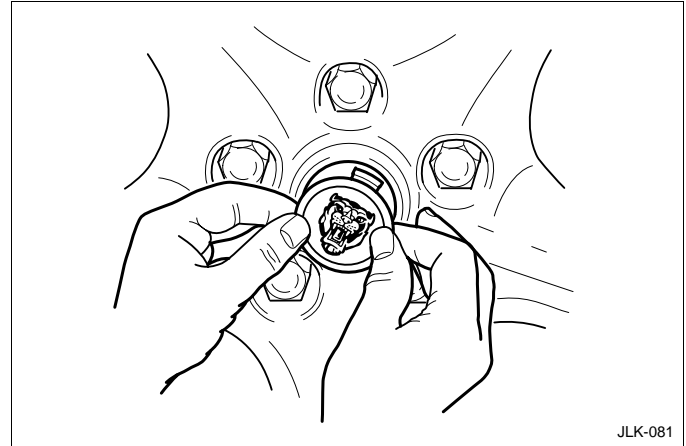
It can be dangerous to change a wheel when the vehicle is on a slope or soft, uneven ground.

## Wheel Changing and Jacking (continued)

Remove the temporary-use or full size spare wheel to obtain the jack and wheel changing tools.

### Alloy wheels with centre badge

When changing wheels, carefully remove the centre badge and transfer it to the replacement wheel (when a full size spare wheel is used).



### Loosening the wheel nuts

Always slightly loosen the wheel nuts before raising the vehicle.

A label showing correct use of the wheel nut wrench is printed on its shaft and states:

WHEEL NUT REMOVAL

WHEEL NUT TIGHTEN



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### Wheel Changing and Jacking (continued)

#### Removing locking wheel nuts (where fitted)

Some vehicles are fitted with one locking wheel nut on each wheel. These can only be removed using the extractor tube and key socket from the jacking equipment tray.

The locking wheel nut is provided with a cover which makes it visually similar to standard wheel nuts. The top of the cover has an indentation (A) to aid identification.

Push the extractor tube firmly over the locking wheel nut cover, as shown at (B), until it is fully located.

Withdraw the extractor tube to remove the cover.

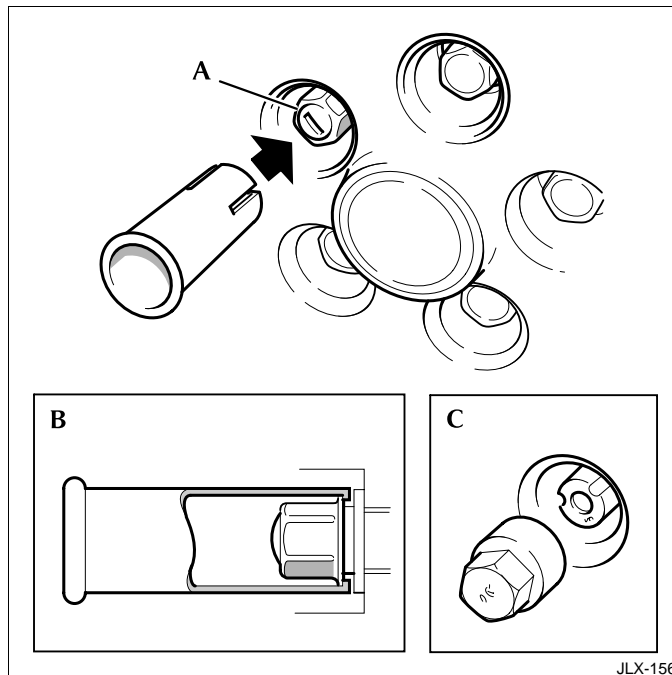
Fit the key socket over the locking wheel nut as shown at (C).

Fit the wheel nut wrench over the key socket and loosen the locking wheel nut.

#### Locking wheel nut security coding

Locking wheel nuts have a letter stamped on their upper surface. The key socket is stamped with a corresponding number. Only key sockets with the correct matching number will fit the locking wheel nut.

Should a new key socket be required, note the letter on the locking wheel nut and contact your Jaguar Dealer. Proof of vehicle ownership will be required.



## Wheel Changing and Jacking (continued)

### Before lifting the vehicle



#### WARNING:

**Before attempting to lift the vehicle with the jack, chock one of the front wheels to prevent the vehicle from rolling when jacked up.**

A folding wheel chock is supplied with the jacking equipment. The chock must be unfolded into a triangular form before use.

Chock the front wheel on the opposite side of the vehicle to the side being jacked up as shown below.:

#### Note:

1. Ensure that all passengers are in a safe place clear of the vehicle.
2. Ensure that the jack is on firm and level ground.
3. Firmly apply the handbrake and select position 'P' (Park).

Using the wheel nut wrench with the handle extended, slacken, but do not remove the wheel nuts

#### VEHICLE FACING DOWN A SLOPE

Chock the front of the front wheel

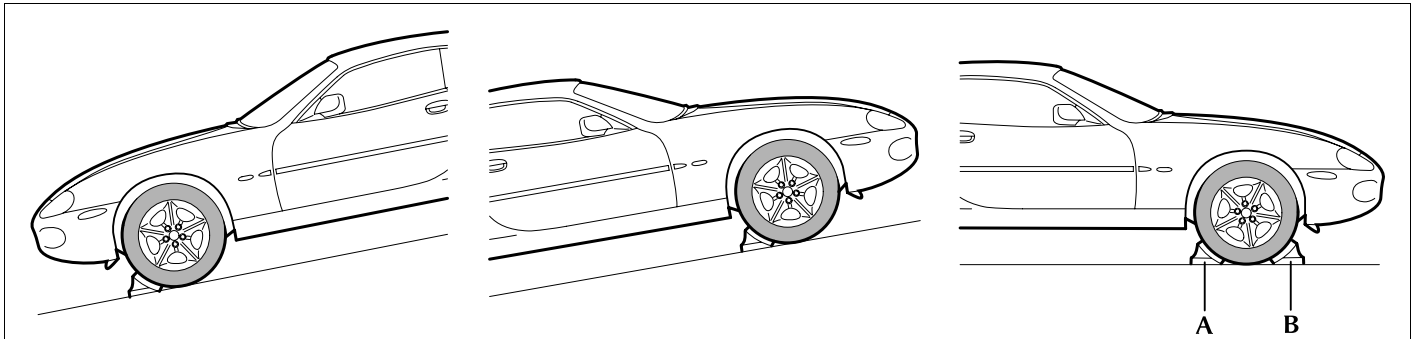
#### VEHICLE FACING UP A SLOPE

Chock the rear of the front wheel

#### VEHICLE HORIZONTAL

Front wheel change: Chock at A

Rear wheel change: Chock at B



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### Wheel Changing and Jacking (continued)

#### Jacking



#### WARNING:

**Never work under the vehicle using only the jack as a support, always use axle stands or suitable supports under the jacking points.**

Observe the instructions printed on the jack.

Use the jack only for lifting the vehicle during wheel changing, and only use the jack which is stored in the vehicle.

Do not start or run the engine while the vehicle is only supported by a jack.

**Note:** When one rear wheel is lifted off the ground the automatic transmission 'P' (Park) position will not prevent the vehicle from moving and possibly slipping off the jack.

There are four jacking points, two each side. These are reinforced metal plates (A) attached to the sill near each wheel.

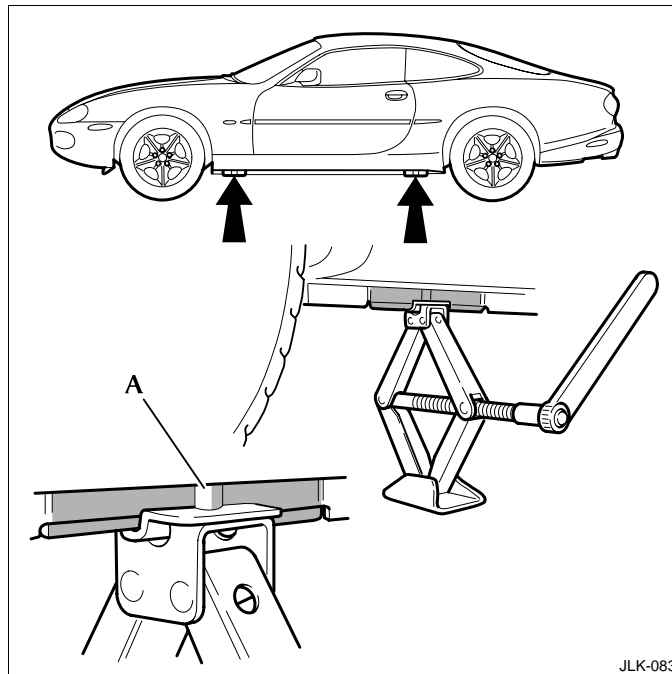
**Caution:** Never use bumpers or any other part of the body to lift the vehicle.



#### WARNING:

**Do not attempt to lift the vehicle unless the sill plate is fully engaged in the jack plate groove.**

Place the jack squarely beneath the appropriate jacking point. Fit the extension socket to the jack ratchet head and fit it to the jack. Ensure that the jack plate groove is fully engaged with the sill plate.



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Carefully raise the vehicle by turning the ratchet handle.

**Note:** Stop jacking the vehicle when the tyre just clears the ground. Minimum tyre lift gives maximum vehicle stability. Remove the wheel nuts and the wheel.

## Wheel Changing and Jacking (continued)

### Fitting the Spare Wheel



#### WARNING:

**When using the wheel nut wrench, only use the extension for removing wheel nuts, NOT for tightening.**

Fit the spare wheel and secure with the wheel nuts.

Using the wheel nut wrench, lightly tighten the wheel nuts alternately using the sequence shown. Ensure that the taper on the wheel nuts is seated fully onto the taper faces of the wheel disc.

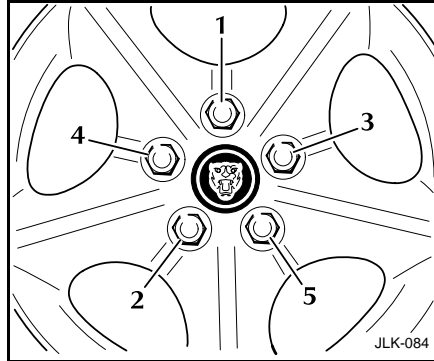
Lower the jack and with the wrench handle not extended, tighten the wheel nuts alternately. At the earliest opportunity have the wheel nuts tightened with a torque wrench to 65 – 75 lbf.ft (88 – 102 Nm). Do not exceed this torque.

Remove the jack from the vehicle.



#### WARNING:

**When the temporary-use spare wheel has been fitted, drive with caution and replace with the specified wheel and tyre as soon as possible.**



### Re-fitting centre badge

Press fit the centre badge into position on the wheel.

### Stowing the equipment

Remove the chock and fold flat.

Stow the jack, wheel chock and tools in the jacking equipment tray. If removed, refit the tray in the luggage compartment and secure with the yellow securing bolt.

Place the wheel over the tray and refit the luggage compartment floor panel.

**Note:** When the temporary spare wheel is returned to the luggage compartment, fit and tighten the retaining screw.

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### Emergency Starting

#### Rolling Start

A start by pushing or towing cannot be achieved on a vehicle with automatic transmission.

#### Emergency Starting Using Jump Leads

Both the booster and discharged battery should be treated with great care when using jump leads. Always use high quality leads capable of carrying the starter current of the vehicle to be started.

Before commencing, the following precautions must be taken:

1. When the battery of another vehicle is being used, ensure that the vehicles do not touch, or remove the charged battery and place near to, not on, the vehicle with the discharged battery.
2. Ensure that both vehicles have all electrical services OFF, the handbrake is ON and the transmission is in Park.
3. Where the jump leads are of a different colour, e.g. red and black, use red for positive (+). This aids identification and helps to avoid crossing positive (+) to negative (-). Take extra care to avoid crossing the polarity when using cables of the same colour.

#### Caution:

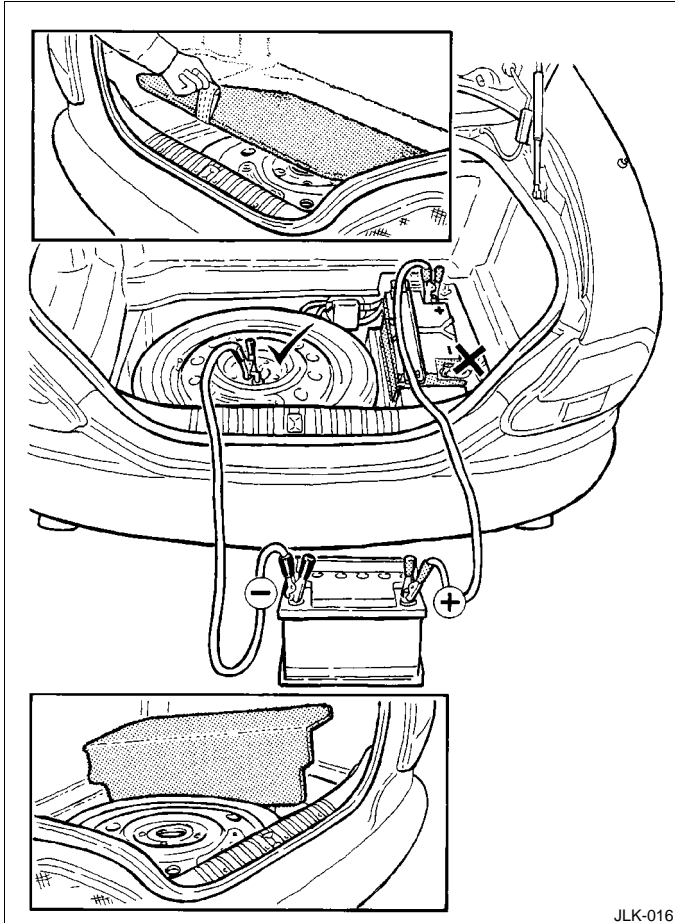
1. **If using a jump start vehicle, under no circumstances should the vehicles come into contact with each other. This could establish an earth connection, which may cause sparks and damage.**
2. **Do not run the jump start vehicle's engine when boost starting a Jaguar Vehicle. If the jump start vehicle's engine is running and the jump leads are disconnected, damage to the Jaguar vehicle's electrical system will result.**
3. **The booster battery voltage must not exceed 12 volts.**

The following procedure must be followed exactly, being careful not to cause sparks.

1. Apply the handbrake, select Park and turn off all the vehicles electrical services.
2. Remove the luggage compartment floor panels.
3. Unclip the positive (+) terminal cover.
4. Attach one end of the red jump lead to the positive (+) terminal of the **booster** battery and the other end to the positive terminal of the discharged battery. **Make sure that a good connection is made. Do not allow the vehicles to touch.**

Continued





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**Caution:** Do not connect the negative jump lead directly to the negative (-) terminal of the discharged vehicle.

5. Attach one end of the black jump lead to the negative (-) terminal of the **booster** battery and the other end to an earth point on the vehicle being started. (Use the spare wheel retaining bolt as shown.) The earth point must be at least 12 inches (305 mm) from the discharged battery. Make sure that a good connection is made.
6. When started allow the engine to idle for five minutes before disconnecting the cables.
7. Disconnect the black jump lead from the earthpoint and the booster battery negative (-) terminal. Disconnect the red jump lead from the positive (+) terminals of both batteries.

**Note:** Disconnection is done in the reverse order to the connecting procedure.

8. Refit the positive terminal cover and the floor panels.
9. Refit the luggage compartment floor panels.

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### Vehicle Recovery

The preferred vehicle recovery method is by using a flat bed transporter or rear suspended tow. The front and rear towing eyes are primarily for emergency use when towing for **SHORT DISTANCES**, e.g. removing the vehicle if it is causing an obstruction or for winching the vehicle onto a recovery transporter.

### Transporting

If the vehicle is being transported on a trailer or vehicle flat bed transporter, the handbrake must be applied, the wheels chocked and the gear selector lever moved to position 'N' or 'D' but **NEVER** to 'P'.

The vehicle must be securely tied down to the transporter or trailer. Do not attach tie-down hooks to the towing eyes.

### Suspended Towing

Ensure that the recovery team follow these instructions:

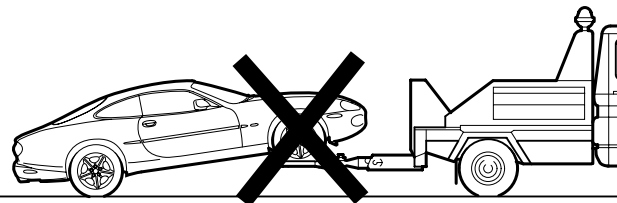
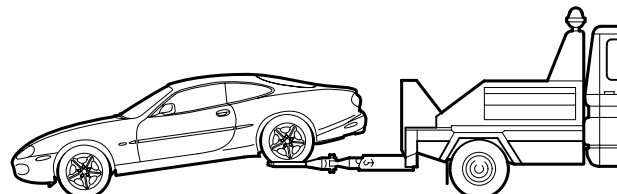
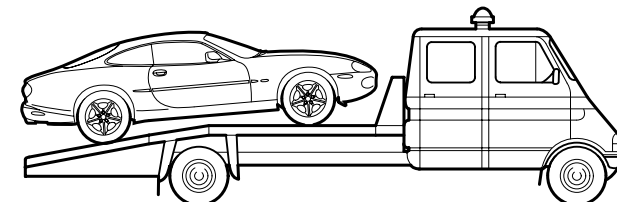
Do not tow with sling-type equipment since damage to the bodywork may result.

**Caution: Do not tow vehicle by suspending the front end.**

1. Remove the key from the ignition switch.
2. Raise the rear of the vehicle using a 'spectacle frame' type lifting device where a cradle is positioned under each rear wheel, as indicated.

### Vehicles with Defective Automatic Transmission

The vehicle must be towed with the rear wheels clear of the ground.



### Towing Eyes



#### **WARNING:**

The vehicle must not be driven with a towing eye fitted to a front tow point.

**Caution:** The towing eyes are not suitable for 'solid bar towing'.

Care must be taken to avoid damaging the bumpers and front apron.

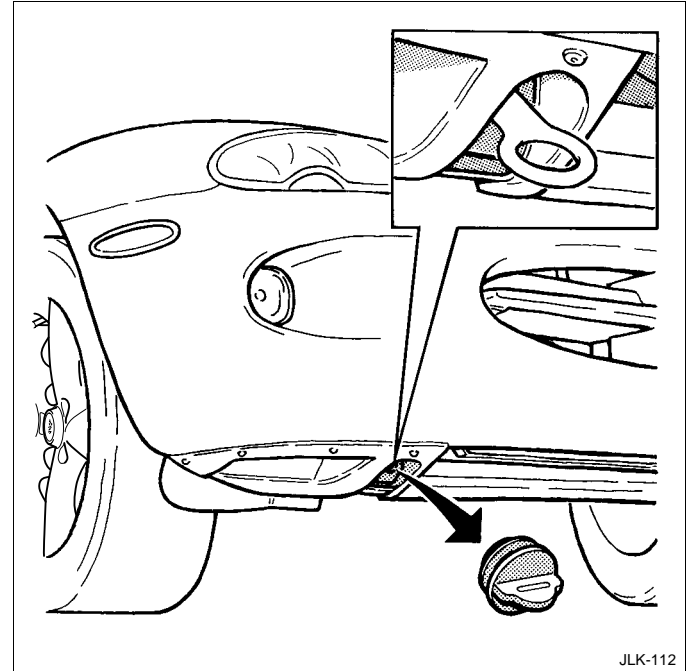
The front towing eye is detachable. When not in use it is stowed in the jacking equipment kit (see page 4-1). To use, remove the rubber blanking plug from the front cross-member, on the driver's side and screw the eye into the threaded drilling. The blanking plugs are a push-fit in the towing eye threads.

The rear eye is welded to the right-hand side of the luggage compartment underfloor panel.

Always obey towing regulations: In certain countries the registration number of the towing vehicle and an 'ON TOW' sign or warning triangle must be displayed in a prominent position at the rear of the vehicle being towed.

When being towed, the vehicle's gear selector lever must be in neutral (position 'N') with the ignition key turned to position 'II' to release the steering lock and render the indicators, horn and brake lights operational.

Vehicles may be towed for SHORT DISTANCES (maximum 0.5 miles/0.8 kilometres) with the gear selector lever in position 'N' provided a speed of (30 mph) 48 km/h is not exceeded.



#### **WARNING:**

When the engine is not running the steering and brakes will no longer be power-assisted. Therefore, be prepared for relatively heavy steering and the need for greatly increased brake pedal pressure.