

**View of the jack installed to the front jacking point.**

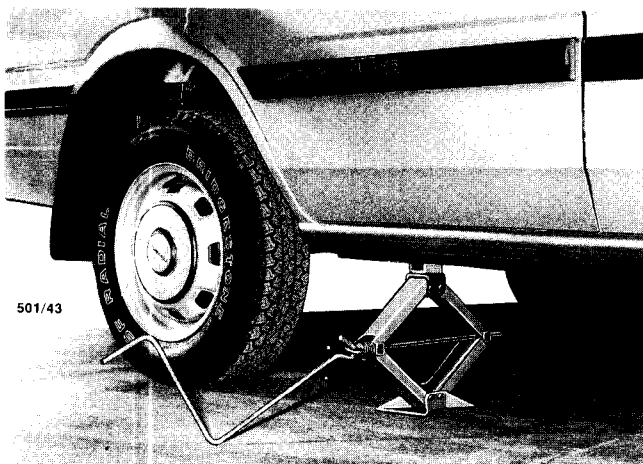
(9) Chock the road wheel diagonally opposite to the road wheel being removed. Ensure that the road wheel is chocked at the front and rear.

(10) Instal the wheel spanner to a road wheel nut in such a manner that the bar end of the spanner is horizontal and on the left hand side of the road wheel nut. Apply pressure to the end of the wheel spanner in an anti-clockwise direction and slacken the road wheel nut approximately half a turn. Carry out the above procedure on the remaining wheel nuts.

(11) Instal the jack to the relevant jacking point under the body sill panel, ensuring that the edge of the body sill panel fits into the jackhead slot.

(12) Fit the jack handle to the screw mechanism on the jack. Rotate the jack handle in a clockwise direction and slightly raise the vehicle. Check that the jack is still positioned correctly on the jacking point.

(13) Raise the vehicle so that the road wheel and tyre clears the ground. Allow enough clearance between the tyre and the ground for the spare road wheel to be installed.



**View of the jack installed to the rear jacking point.**

*NOTE: Under no circumstance get under the vehicle whilst the jack is the only means of support.*

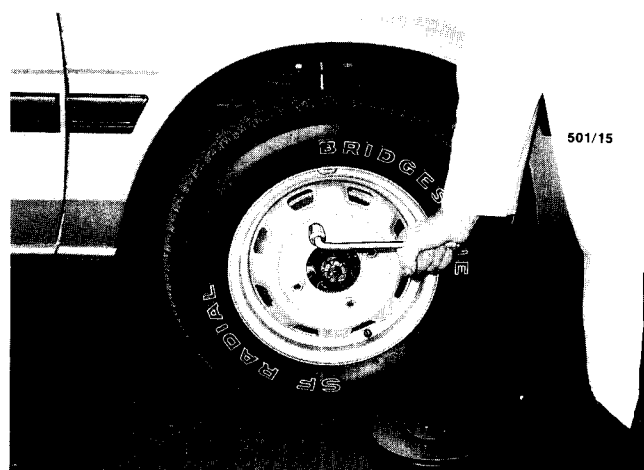
(14) Unscrew the road wheel nuts and remove the road wheel. Where fitted remove the cap from the centre of the road wheel and attach it to the spare road wheel.

(15) Fit the spare road wheel to the wheel hub and loosely instal the road wheel nuts. Where applicable, ensure that the taper on the wheel nuts faces towards the road wheel.

(16) Using the wheel spanner, tighten the road wheel nuts as much as possible.

(17) Lower the vehicle to the ground, by rotating the jack handle anti-clockwise and remove the jack from under the vehicle.

(18) Using the wheel spanner tighten the road wheel nuts in a diagonal sequence. It will be necessary to repeat the above procedure several times until the road wheel nuts are securely tightened.



**Tighten the wheel nuts in a diagonal sequence.**

(19) Remove the chocks from the road wheel.

(20) Instal the jack, jack handle and wheel spanner to their respective mounting brackets. Rotate the jack handle adaptor on the jack to secure it in the mounting bracket.

(21) Instal the defective road wheel to the carrier and tighten the T bolt securely.

(22) On 1985-1986 models fitted with small hub cap, place the hub cap on the wheel and rotate it in a clockwise direction until it locks into place.

On 1985-1987 models fitted with full wheel covers, locate the hole in the cover with the tyre valve stem and bump the cover onto the wheel.

*NOTE: Repair the defective road wheel as soon as possible and check the tyre pressure on the road wheel just installed.*

## WHEELS AND TYRES

### SPECIFICATIONS

Refer to the tyre placard on the vehicle for tyre pressures and tyre sizes. Refer to local regulations regarding maximum wheel width and offset if fitting non standard wheels.

Wheel nut tightening torque . . . . . 98 Nm

#### 1. HOW TO CHANGE A ROAD WHEEL

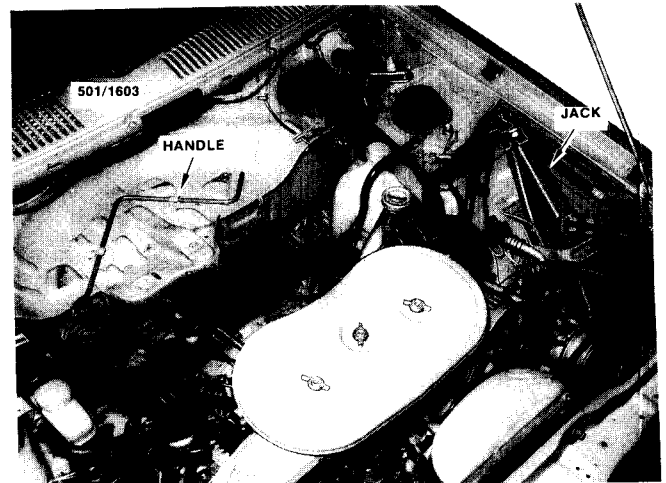
- (1) Ensure that the vehicle is on level, firm ground and clear from any passing traffic.
- (2) If necessary switch on the hazard flashers.
- (3) Place the transmission in the P (Park) position on automatic transaxle models or reverse gear on manual transaxle models.
- (4) Firmly apply the handbrake.
- (5) Open the bonnet and remove the T bolt retaining the spare wheel to the carrier.

*NOTE: If the vehicle has been in use prior to changing the wheel, the spare wheel may be quite hot, therefore use care when removing the T bolt and the spare wheel.*

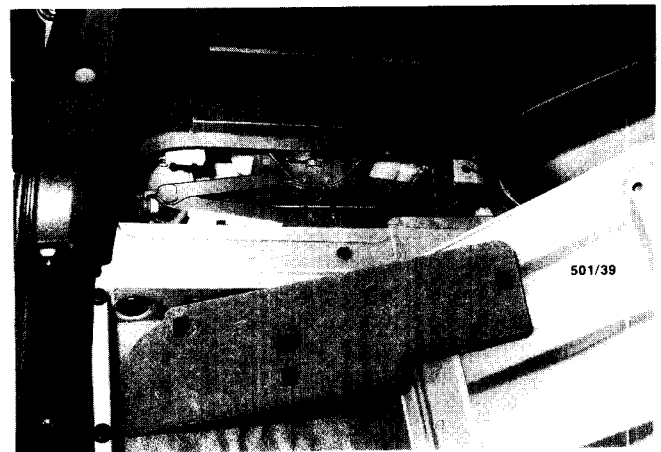


The spare wheel is located in the engine compartment. Take care when removing the T bolt and the spare wheel as they may be quite hot if the vehicle has been in use.

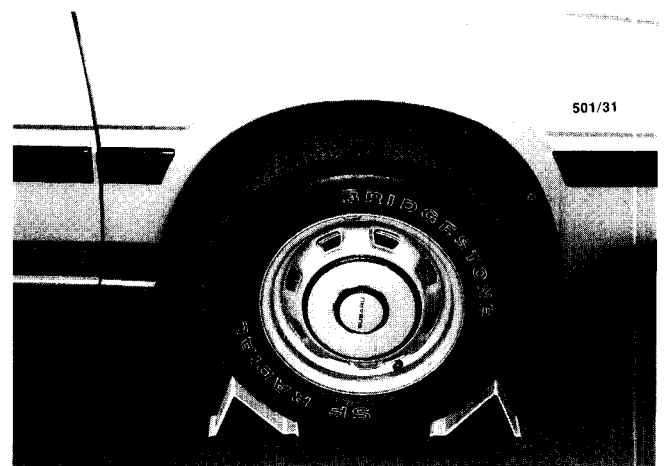
- (6) Lift the spare wheel from the carrier and out of the engine compartment.
- (7) On 1979–1984 and Utility models, remove the jack and jack handle from their mounting brackets in the engine compartment. Remove the wheel spanner from the tool kit in the luggage compartment.
- On 1985–1987 models, remove the jack, jack handle and wheel spanner from their positions in the luggage compartment.
- (8) Where fitted, remove the hub cap by engaging a screwdriver with one of the slots at the outer edge of the hub cap and prising it from the wheel.



View showing the location of the jack and jack handle, 1983 model shown.



View of the jack and handle storage location, 1985–1987 Station Wagon.

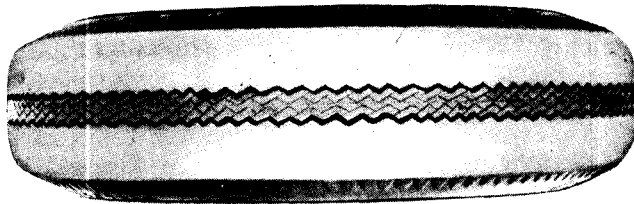


Chock the front and rear of the wheel diagonally opposite the wheel being changed.

## 2. TYRE WEAR TROUBLE SHOOTING

### ABNORMAL WEAR ON BOTH SIDES OF TREAD

- (1) Under inflation of tyres: Check and inflate to recommended pressures.
- (2) Overloading: Reduce maximum loading.



### ABNORMAL WEAR IN CENTRE OF TREAD

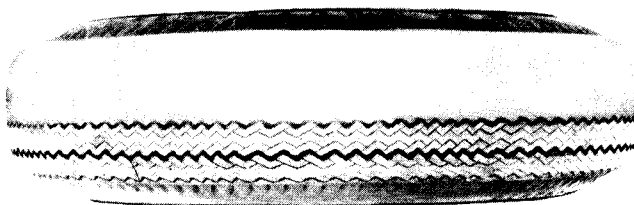
- (1) Over inflation of tyres: Check and reduce to recommended pressure.



### ABNORMAL WEAR ON INSIDE OF TREAD

#### Front Tyres

- (1) Insufficient camber angle: Check front end alignment.
- (2) Sagging front coil springs: Check and renew faulty springs.
- (3) Loose or worn front hub bearings: Check and renew front hub bearings.
- (4) Loose or worn suspension components: Check and renew faulty components.
- (5) Bent steering knuckle: Check and renew steering knuckle.
- (6) Incorrect ground clearance: Adjust ground clearance.



#### Rear Tyres

- (1) Bent stub axle/suspension control arm: Check and renew stub axle/control arm.

- (2) Loose or worn suspension components: Check and renew faulty components as necessary.

- (3) Loose or worn rear hub bearings: Check and renew hub bearings.

- (4) Incorrect ground clearance: Adjust ground clearance.

### ABNORMAL WEAR ON OUTSIDE OF TREAD

#### Front Tyres

- (1) Excessive camber angle: Check front end alignment.

- (2) Incorrect coil springs fitted: Check and install recommended replacement springs.

- (3) Excessive speed when cornering: Revise driving habits.

- (4) Incorrect ground clearance: Adjust ground clearance.

#### Rear Tyres

- (1) Loose or worn suspension components: Check and renew faulty components as necessary.

- (2) Bent stub axle/suspension control arm: Check and renew stub axle/control arm.

- (3) Incorrect ground clearance: Adjust ground clearance.

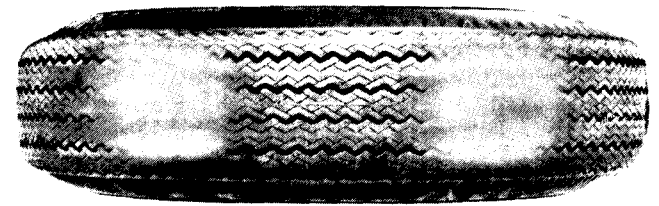
### SPOTTY OR IRREGULAR WEAR

- (1) Static or dynamic unbalance of wheel and tyre assembly: Check and balance wheel and tyre assembly.

- (2) Lateral run out of wheel: Check and true up or renew wheel.

- (3) Excessive play in hub bearings: Check and adjust or renew hub bearings.

- (4) Excessive play in front suspension ball joints: Check and renew ball joints.



### LIGHTLY WORN SPOTS AT CENTRE OF TREAD

- (1) Static unbalance of wheel and tyre assembly: Check and balance wheel and tyre assembly.

- (2) Radial run out (eccentricity) of wheel: Check and renew wheel.

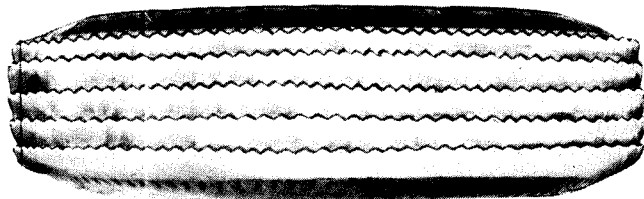
### FLAT SPOTS AT CENTRE OF TREAD

- (1) Repeated severe brake application: Revise driving habits.

- (2) Lack of tyre rotation: Periodically rotate wheel and tyre assemblies.

**HEEL AND TOE WEAR (SAWTOOTH EFFECT)**

- (1) Overloading: Revise maximum loading.
- (2) High speed driving: Avoid as far as possible.
- (3) Excessive braking: Revise driving habits.

**FEATHERED EDGE ON SIDE OF TREAD****Front Tyres**

- (1) Sharp inside edge, excessive toe in: Check and adjust wheel alignment.
- (2) One tyre sharp inside edge, other tyre sharp outside edge: Check for bent steering knuckle and renew.

**Rear Tyres**

- (1) Loose or worn suspension components: Check and renew faulty components as necessary.
- (2) Stub axle bent/suspension control arm: Check and renew stub axle/control arm.

**3. CARE AND MAINTENANCE****Steel Wheels**

Steel wheels should be regularly cleaned of all foreign matter, such as dirt and mud. If foreign matter is allowed to build up it will affect the balance of the wheel and may cause vibrations and uneven tyre wear. If the paint has been chipped or scratched it should be touched up as soon as possible to prevent rust.

Any minor damage to the wheel rim can usually be removed using a suitable hammer after the wheel has been removed from the vehicle. However any major rim damage or buckling of the wheel will necessitate renewing the wheel. It is good policy to occasionally remove the wheels from the vehicle and inspect them for damage, cracks or corrosion.

**Alloy Wheels**

Alloy wheels should be regularly cleaned of all foreign matter, such as dirt and mud. If foreign matter is allowed to build up it will affect the balance of the wheel and may cause vibrations and uneven tyre wear. Alloy wheels are particularly susceptible to corrosion damage particularly if exposed to salt water.

Alloy wheels being relatively soft in comparison to steel are easily scuffed, however this will not affect the serviceability of the wheel. Where heavy damage has been sustained to the wheel it should be renewed. Buckling or cracking of an alloy wheel cannot be repaired.

**Tyres**

The depth of the tyre tread grooves should never be allowed to be less than 1.5 mm before the tyres are renewed. The tyres should also be renewed when any damage, whether it be internal or external, is evident. Minor punctures or leaks should be properly repaired. Refer the tyre to a tyre specialist if there is any doubt about the serviceability of the tyre.

The tread, tread grooves and sidewalls should be regularly inspected for foreign matter, i.e.: nails, stones etc. Where foreign matter is detected it should be removed from the tyre and if necessary the puncture repaired.

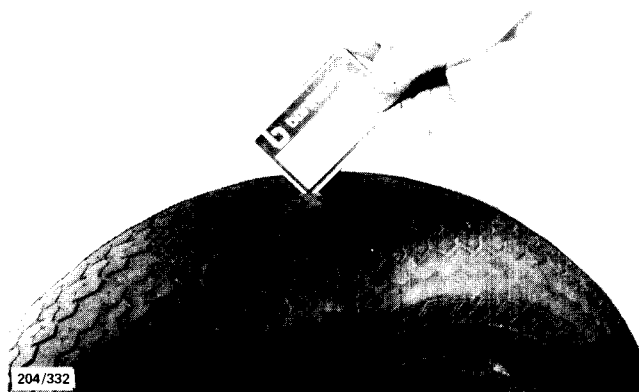
The tyre valves should always have the caps installed, be regularly cleaned of dirt or dust and be inspected for wear, leaks or damage every time the tyre pressures are checked.

Regularly inspect the tread of the tyres for signs of uneven wear, if uneven wear is apparent refer to the heading Tyre Wear Trouble Shooting in this section for possible causes and cures. If the uneven tyre wear is noticed early enough, the cause correctly identified and the necessary cure carried out, the life of the tyre should be extended.

To preserve tyre life it is good policy to periodically have the front wheels balanced and the front end alignment checked on a reliable wheel alignment machine.

The air pressure in the tyre is probably the single most important aspect of tyre care, too little or too much pressure in the tyre can cause rapid wear or complete failure through overheating. Where possible the tyre pressures should be checked and adjusted when the tyres are cold.

As a rule, different tyre types, tread patterns or sizes should never be used in the vehicle at one time. All the tyres on the vehicle, including the spare, should be a matched set to prevent the vehicle behaving erratically under certain conditions. Under no circumstances mix radial ply and conventional ply tyres.



The white edge of a Bankcard can be used to gauge the tread depth of the tyre. The width of the edge of the Bankcard is the same as the minimum legal tread depth.