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Owners Handbook

TVR S

TVR S Convertible

From V.I.N. SA9DS29P4KB019101

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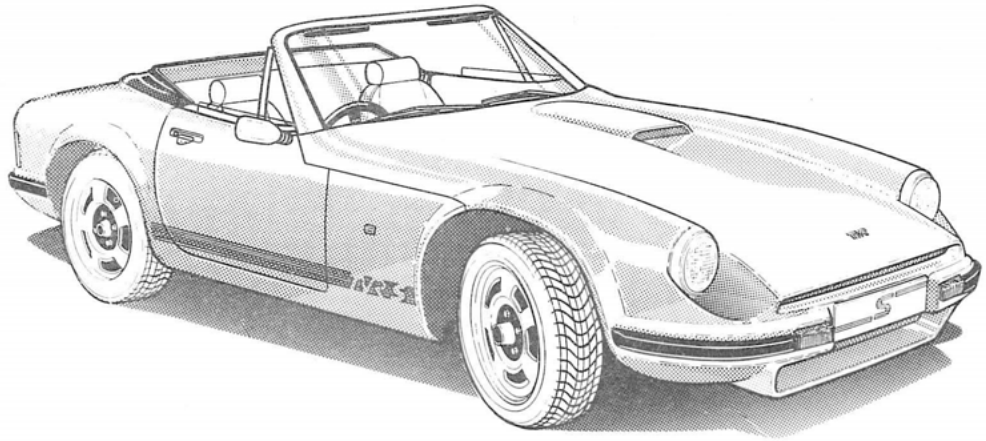

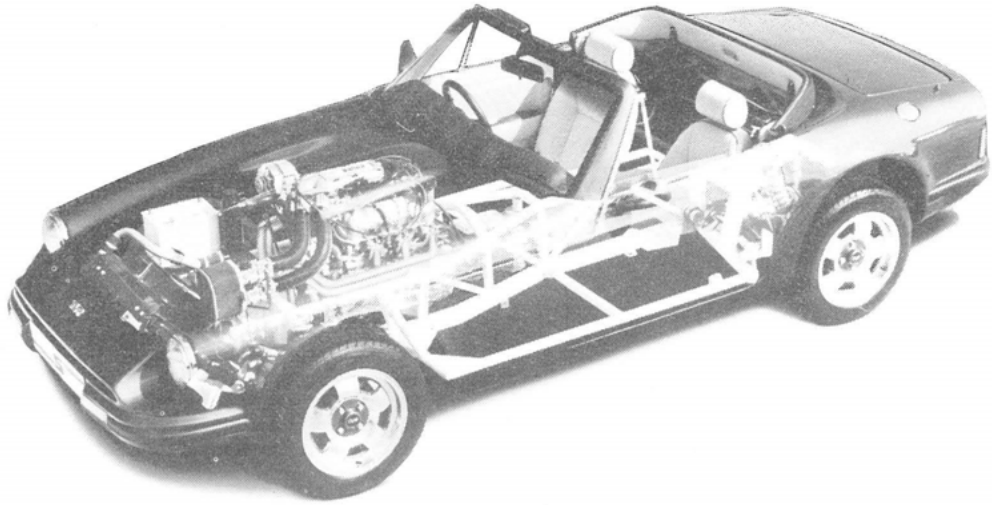

ALSO CONTAINED IN THE OWNERS HANDBOOK PACKAGE

i) TVR "S" Service Schedule & Record Book
ii) TVR New Vehicle Limited Warranty
iii) TVR "S" Electrical Wiring Diagram
iv) Stereo/Radio Cassette Operators Instructions (& Aerial Key)
v) Vehicle P.D.I. Sheet and Owners Details Registration
vi) "Change of Ownership" Registration Card & Current U.K. Dealer Details

Issued by:
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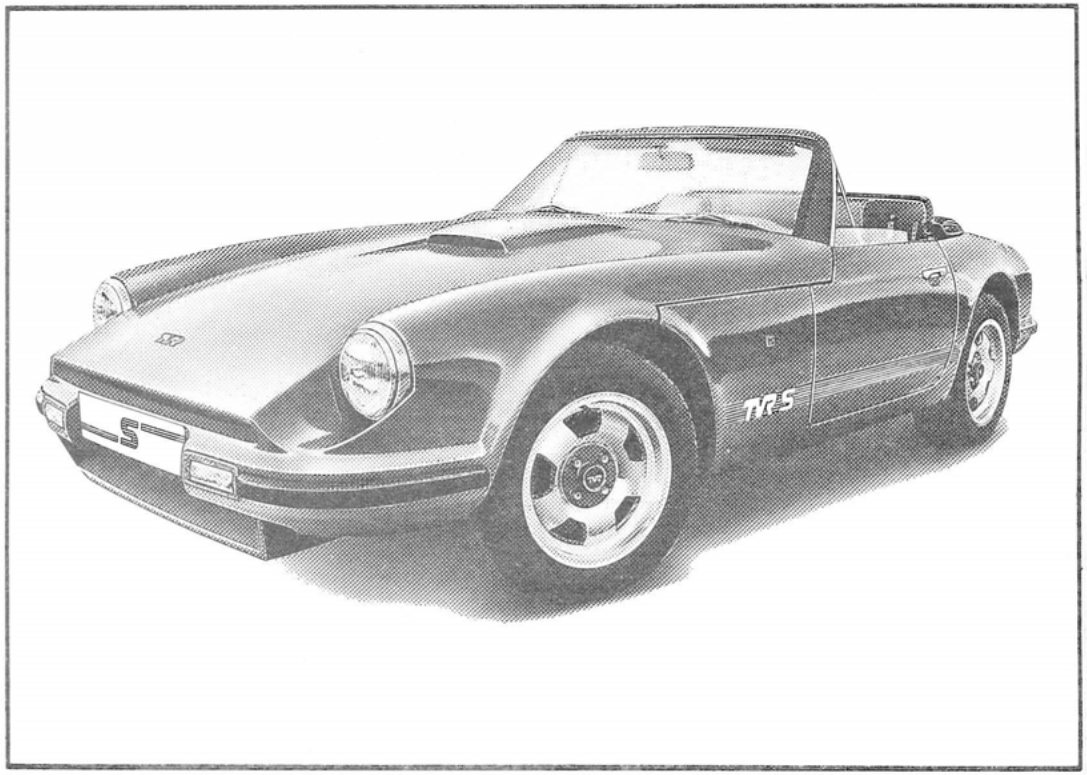

Dear New Owner,

I would like to take this opportunity to thank you for your purchase of the new S Convertible.

TVR have been manufacturing sportscars since 1947 and over the past few years these have become faster and more expensive, while maintaining superb handling and driving characteristics. Larger powerplants, more luxury fitted items and a wider customer option list have seen the prices slowly rise. However these are still tremendous value when compared with imported sportscars although new TVR's can now sometimes be out of reach for the first time buyer.

This was the main reason for the introduction of the S. We wanted to construct and sell an "entry level" model that would be the introduction to the TVR line up. The prime consideration was however to maintain a powerful, well handling driving machine in keeping with other TVR's and attention was focused onto the all new chassis and suspension. Styling was to be more traditional and the car convertible.

All of this we feel we achieved with the S. I hope you the customer can look forward to sharing in the pleasures of open top motoring in a product that is getting more and more difficult to manufacturer in today's fast moving world. If you've never owned a TVR before, you will experience a unique contrast to other motor cars that will eventually further justify your purchase. If you had TVR's before you already know all about this! Either way I hope you enjoy all the benefits and thank you for your purchase.

Yours sincerely,
PETER WHEELER – CHAIRMAN TVR

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"A" OWNERS RECORD

It is advisable to have the supplying dealer fill in these details.

Owners Name .....

Address .....

.....

.....

County ..... Post Code.....

Vehicle Registration No. .....

Model .....

Vin No. .....

Engine No. .....

Paint Colour ..... TVR Code.....

Roof Colour ..... TVR Code.....

Carpet Colour ..... TVR Code.....

Trim Colour ..... TVR Code.....

Trim Material .....

Decal colour .....

Door Lock No. .....

The description and codes above are relevant to all TVR dealers and are necessary in the order or rectification of any materials listed.

Change of ownership.
Any change of ownership should be registered with the factory. This means full details with respect of all aspects of this vehicle can be kept up to date.

Dealer's Stamp

"B" INTRODUCTION

The contents of the handbook include detailed information, emergency procedures, explanation of equipment and basic data which should be read at the earliest opportunity by yourselves. By carrying out these carefully, maximum life, trouble free service and full enjoyment will be gained from this true thoroughbred sportscar.

The service intervals stated should be adhered to as strictly as possible and carried out by the TVR Factory appointed Service Centres (See Dealer List), to ensure they are carried out correctly. Failure to do so will invalidate the warranty.

In all Dealer/Factory communications relating to service, spare parts or optional extras fitted always quote the Vehicle Identification Number and specification listed under the "S" Owners details listed in the front of this handbook or stated on the VIN plate directly behind the Oil Dipstick mounted vertically on the bulkhead. (See Engine Bay).

Replacement parts, optional extras, service requirements and full after sales service are made available through the Dealer. The fitting of any components and accesssories not approved by TVR the manufacturers will invalidate the warranty.

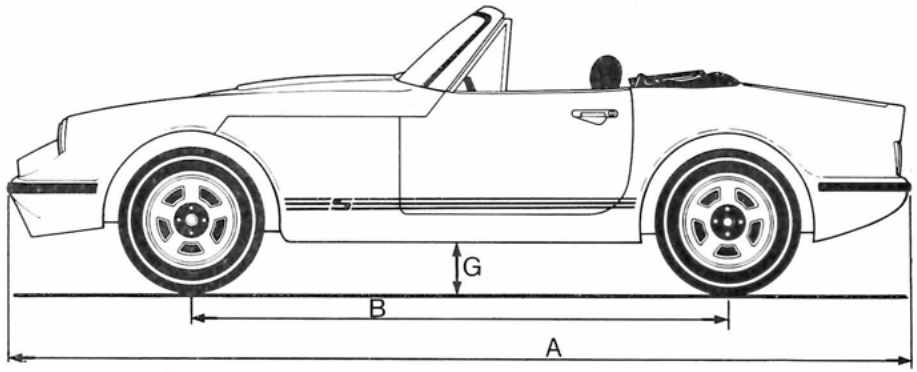
This handbook does not in any way define a vehicle specification. TVR Engineering Ltd. reserve the right to alter the specification at any time in accordance with their policy of constant product development.

Running In

To gain maximum performance from the main components of the TVR "S" it is essential that when driving the vehicle from new these various components i.e. Engine, Brakes, Gearbox, Tyres and Differential are allowed to "Bed-In" with reference to their respective performance. To extend this performance and reliability the section "Driving from New" under the General chapter should be read carefully and fully understood. Any queries should be referred to your dealer or alternatively TVR Engineering.

It is important to keep this handbook with the vehicle for easy reference at all times. In the event of resale the handbook is considered an integral part of the vehicle and should remain with it.

"C" DIMENSIONS



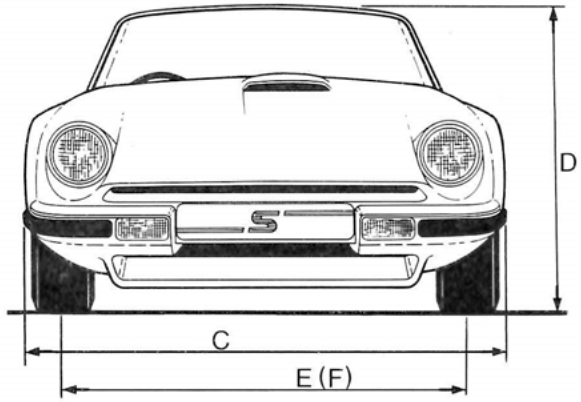


Fig. 1 Front, Side & Rear View

The item letters correspond with Fig. No. 1

		mm	ins
Overall Length	(A)	3958	155.82
Wheelbase	(B)	2286	90.00
Width Overall	(C)	1665	65.55
Height Overall	(D)	1223	48.14
Front Track	(E)	1398	55.03
Rear Track	(F)	1398	55.03
Ground Clearance	(G)	140	5.60
Luggage Capacity		0.225 cu m	8 cu ft
Fuel Capacity		54.5 litres	12 gallons
Vehicle Weight Dry		940 kg	1984 lbs

"D" CONTROLS & INSTRUMENTS

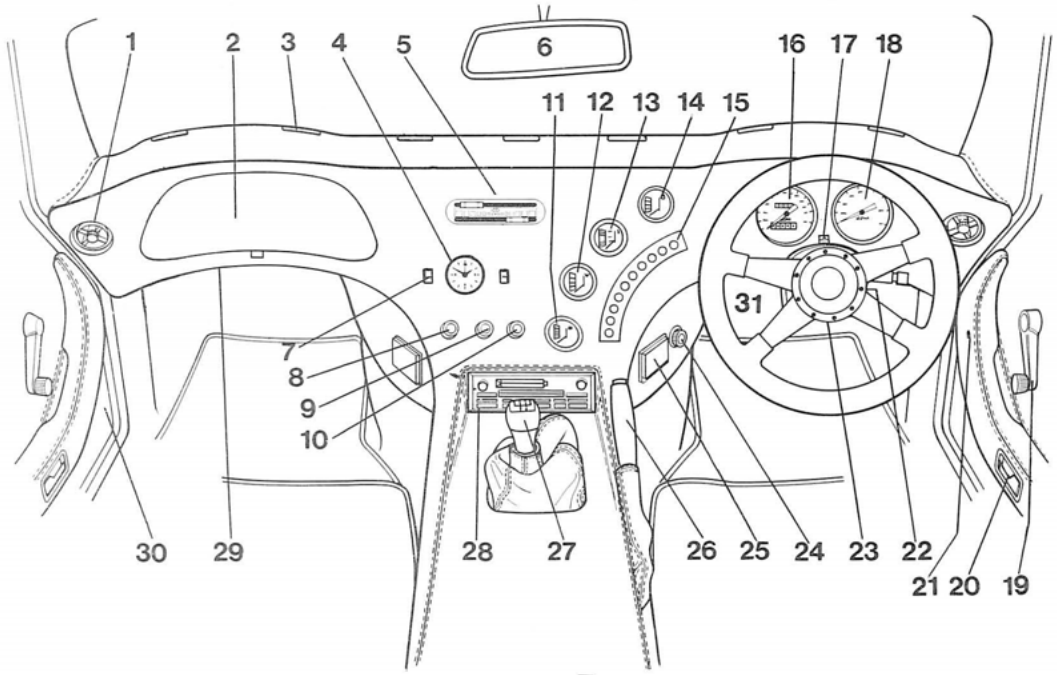


Fig. 2 Dashboard Facia. Right Hand Drive.

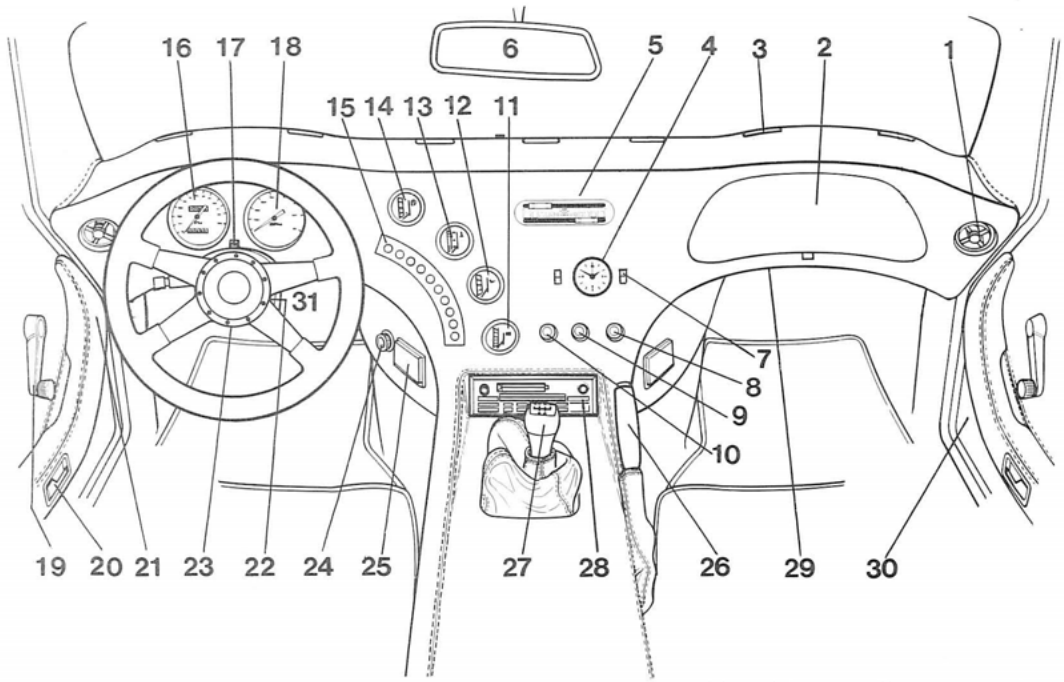


Fig. 3 Dashboard Facia. Left Hand Drive.

i) Dashboard Facia Layout. Left & Right Hand Drive.

Item No's correspond to the Dashboard facia's, Right and Left Hand Drive Illustrations, Fig. No's 2 & 3 on page 5.

Item

1. Occupant and side window demist vents
2. Glove Compartment
3. Windscreen Demist Vents
4. Clock
5. Ventilation/Demist Temperature & Direction Controls
6. Drivers Rear View Mirror
7. Electric Window Switch
8. 2 Speed Ventilation/Demist Fan Switch
9. 2 Setting Instrument Illumination Switch
10. Front & Rear Fog Lamp Switch
11. Battery Voltmeter
12. Oil Pressure Gauge
13. Water Coolant Temperature Gauge
14. Fuel Gauge
15. Warning Light Cluster (See separate details on page 11)
16. Speedometer
17. Hazard Light Switch
18. Tachometer (Rev. Counter)
19. Drivers and Passenger Door Window Wind Handle (x2)
20. Drivers and Passenger Door Actuator (x2)
21. Electric Wing Mirror Switch
22. Ignition Switch/Steering Lock
23. Boot Release (Located Under Steering Column)
24. Cigar Lighter
25. Ashtray
26. Handbrake
27. Gear Lever
28. Stereo Radio/Cassette
29. Fuse Board (Located in Bulkhead over Passengers Footwell)
30. Stereo Door Speakers (x2)
31. Bonnet Release Lever
32. N/I Twin Driving Ligghts (if fitted)
33. N/I Headlamps High Pressure Wash (if fitted)
34. N/I Interior Light

1. Occupant & Side Window Demist Vents. The vents located on either side of the dashboard are connected directly to the exterior of the car. They are not boosted by the fan nor have any temperature control. They are directional and can be positioned to demist the inside of both passenger and drivers side windows. Alternatively they can be positioned to provide fresh air to the occupants. Ventilation can be cut off completely by turning the small circular knob located on the centre of the vent.

2. Glove Compartment: The lid is opened by pulling the loose tag from the bottom of the lid. The lid is hinged at the top and opens from the bottom upwards. Please ensure the tag is left protruding when the lid is closed.

3. Windscreen Demist Vents: By setting the central ventilation controls items 6 & 8, air is directed through these vents to demist the windscreen. It is advisable to set the ventilation controls to demist as soon as you enter the vehicle in any damp conditions and as soon as the windscreen is clear to constantly leave the setting on minimum. Please note none of these vents should be obstructed in any way to enable the system to work at full capacity.

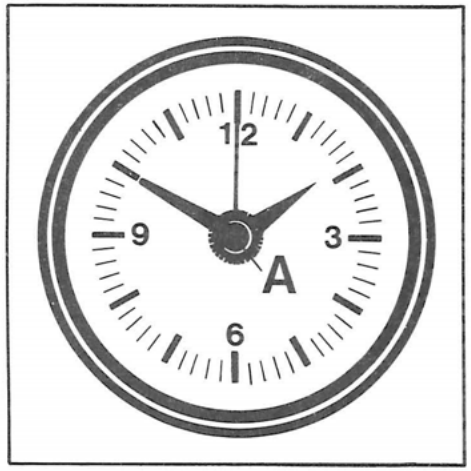


Fig. 4 Clock

4. The time is altered by depressing the central button 'A' on the face and rotating, this moves the hands to the desired time.

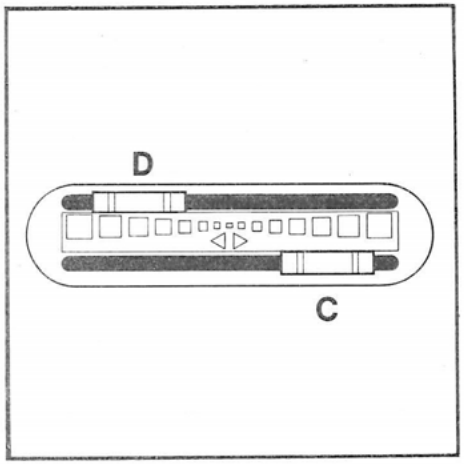


Fig. 5 Ventilation Controls.

Temperature Selection and Air Distribution Controls Fig.

Lever C controls the temperature setting from hot to cold.
Lever D controls the air distribution from demist to cabin.
These controls are boosted by a twin speed fan – Item 8 and suggested settings are as follows;-
For MAXIMUM DEMIST of the windscreen set Lever C to the Red section and Lever D to DEMIST In addition set the fan to Position 2 for maximum air flow.

For MAXIMUM CABIN temperature set Lever C to the Red section and Lever D to the CABIN. In addition set the fan to Position 2 for maximum air flow.

Depending on ambient temperature, the position of Lever D can be set in the middle of the scale to provide DEMIST to the screen and a bleed of air to the CABIN. This can be again aided by the fan.

7. **Drivers Rear View Mirror:** The mirror can be set to suit your driving height and position. For protection against vehicles, with full beam headlights blinding you from behind in the rear view mirror, push forward the small lever underneath the rear view mirror. This will cut out the glare, but all rear view vision will not be lost. Pull the small lever back to position to regain full rear view vision when the obstruction is gone.

8. **2 Speed Fan Switch:** To operate ventilation set the switch to suit requirements as stated in the instructions above. The switch settings are as follows:-
Low Speed – 1st position – Clockwise
High Speed – 2nd position – Clockwise
Off – Anticlockwise two settings.
The fan will only work with ignition ON.

9. **2 Setting Instrument Illumination Switch:** To illuminate the dials, gauges and clock when light fades the side lights or main beam lights have to be on. Rotate the switch clockwise: 1st setting – Intermediate illumination/2nd setting – Full illumination.

10. **Front & Rear Fog Lamps Switch**
To illuminate the foglamps turn the switch clockwise.
1st. Position – Rear fog lamps ON
The rear fog lamps will only work if either side or main lights are ON and should be used when visibility is poor. They should not be used in heavy rain conditions due to the glare created for other road users.
2nd. Position – Front fog lamps ON.
This position controls the optional front fog lamps if fitted and is reserved for their use.

11. **Battery Voltmeter:** Indicates the battery operating voltage. When the engine is running in excess of the idling speed, the gauge should register between 11 and 13 volts approximately, according to the use of auxiliary equipment. If the reading should become extreme i.e. above 15 volt or below 10 after 10 minutes of running investigate the cause.

12. **Oil Pressure Gauge:** The pressure in the engine lubricating system is indicated on the oil pressure gauge. When the engine is first started the gauge takes several seconds to register. Under normal working conditions the pressure should be 30/50 lb/in.sq. at 2000 rpm.
Should the gauge fail to register, or there is an appreciable difference from the normal working pressure the engine must be stopped and the cause investigated immediately. Irreparable damage could result if action is not taken.

13. **Water Temperature Gauge:** Indicates the temperature of the engine coolant at all times when the ignition is on. The normal working temperature should register approx 90 on the gauge. Should the engine reach the RED sector and remain in that position stop the engine immediately, investigate and rectify the cause.

14. **Fuel:** Indicates the approx fuel content in the tank and reads off in calibrations of 1/4, 1/2, 3/4 and full. Please note when the gauge registers EMPTY there is no reserve Tank facility.

15. **Warning Light Cluster:** All the warning lights within the cluster are explained under their own section heading.

16. **Speedometer:** The speedometer reads off the vehicles speed in miles per hour (mph). The gauge is calibrated in 10 mph calibration. the vehicles total miles driven are recorded on the odometer.

17. **Hazard Warning Switch:** Should the vehicle become immobile, present a hazard to other road users, or be towed all four turn signal indicators may be operated in unison as a hazard warning. To operate the hazard warning signals depress switch item 17 and release. This actuates the hazard signals and the switch itself will flash simultaneously to indicate the hazards signals are in operation. To cancel the hazard signals depress the switch item 17 and release, the switch will stop flashing to show cancellation.

18. **Tachometer (Rev. Counter):** The gauge indicates the engine revolution per minute (rpm). Each figure indicated should be multiplied by one hundred (x100) to give a true figure. Maximum rpm "S" 6,000. When the engine is cold should not exceed 3000 rpm, or when the vehicle is being "run-in" (see separate chapter) the rpm should not exceed 2500 when cold and 3000 rpm maximum.

19. **Driver & Passenger Door Window Wind Handles** Right hand door.
To lower window turn lever in anti clockwise direction. To raise window turn lever in clockwise direction. Left hand door. To lower window turn lever in clockwise direction. To raise window turn lever in anti clockwise direction.

20. **Door Handle (x2):** To open either door pull the leading edge of the lever.

21. **Electric Wing Mirror Switch (if fitted):** As an optional extra the wing mirrors can be operated electrically from switches located in the arm-rests on the drivers side of the car.

22. **Ignition Switch/Steering Lock:** See **Fig. No. 6** The combined ignition switch/steering lock enables the steering to be locked, for safety precautions when the key is withdrawn. The switch/lock face bears the marking O, I, II & III.

O – Key can be inserted and removed. Steering lock is on with the key removed.
I – Accessories can be operated.
II – Ignition and Accessories ON.
III – Engine is started.

Warning under no circumstances should the key be turned to the locked position "O" or any attempt be made to withdraw the key whilst the vehicle is in motion.

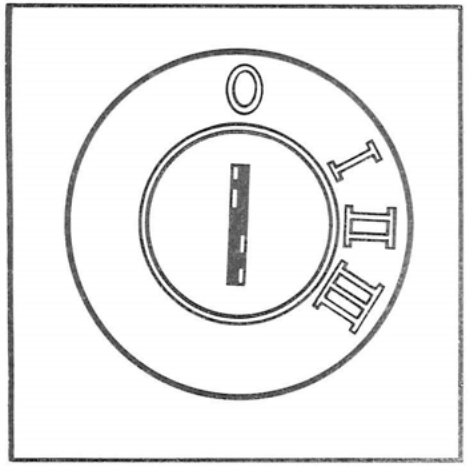


Fig. 6 Ignition / Steering Lock.

23. **Boot Release (Located under the steering column):** Pull down the forward edge of the lever **Fig. No. 7** to release the boot. Lift the rear edge of the boot lid. To keep the lid open lift the boot lid until the stay on the left hand side of the vehicle engages the restrainer. To close slightly lift the boot to disengage the restrainer and lower the boot lid. Apply weight to the centre rear of the lid when partially close to ensure the boot is closed.

24. **Cigar Lighter:** The cigar lighter is operated by fully depressing the knob in the centre and releasing. The knob will eject back to its original position when ready (approx 10 seconds). Withdraw the complete unit to reveal the "RED" heat element.

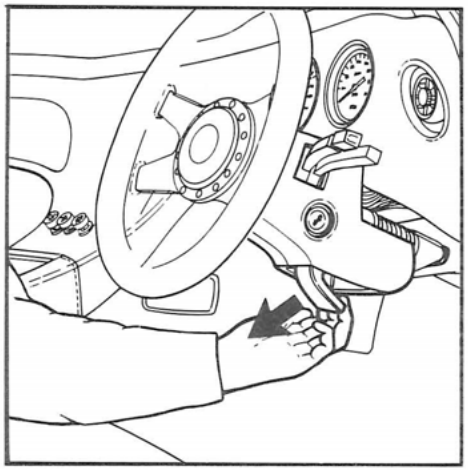


Fig. 7 Boot Release.

25. **Ashtray:** Push the right hand side of the ashtray in to revolve the ashtray and reveal the tray. To close revolve back into position.

26. **Handbrake:** To apply the rear wheel brakes, pull the lever up whilst depressing the button at the end. Release the button when the travel of the lever becomes stiff, with the lever in that position the brakes are ON. Press the button at the end of the lever, lower the lever to its resting position and the brakes are OFF. A warning light on the dash will illuminate when the brakes are ON.

27. **Gear Lever: Fig. No. 8** To engage gears follow the "gate" pattern on the top of the gear lever. Always select neutral when starting the vehicle or the vehicle is stationary with the engine running for long periods.

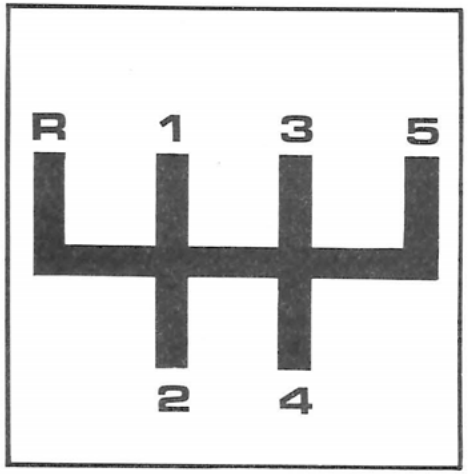


Fig. 8 Gear Lever "Gate".

28. **Stereo Radio/Cassette:** All the operating details are listed in the Radio Manufacturers Instructions contained in the Owner's Handbook pack.

29. **Fuse Board** (Located in the bulk head over the passengers footwell) for fuse panel layout see all details listed under the Electrics chapter in this handbook.

30. **Stereo Door Speakers (x2):**

31. **Single Bonnet Release Lever** The bonnet release lever is located to the left of the steering column on R.H.D. cars, and to the right of the column on L.H.D. cars. Slowly pull lever to release both bonnet catches. To open the bonnet lift the rear edge up. Lift the bonnet stay out of the clip holder and position the angled edge of the stay into the hole on the bonnet locater **Fig. 9** . To lower the bonnet pull the stay from the hole and return into the clip. Lower the bonnet and apply weight to the rear right and left to ensure closure. See **Fig. 9A.**

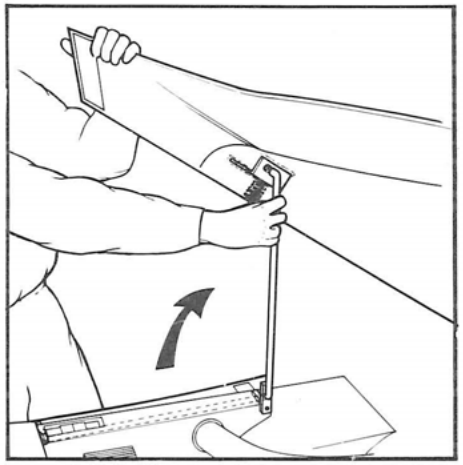


Fig. 9 Bonnet Stay.

32. **Front Fog / Driving Lights (if fitted)** As an option front fog/driving lights may be fitted. These are controlled by switch 10 and have a visible indication included in the bank of warning lights. These only operate when the ignition and main lights are on.

33. **Headlamp High Pressure Wash System (if fitted)** As an option a high pressure wash system may be fitted. This is operated automatically when the main lights are on and the windscreen wash system is in use. See Windscreen Wash page 12.

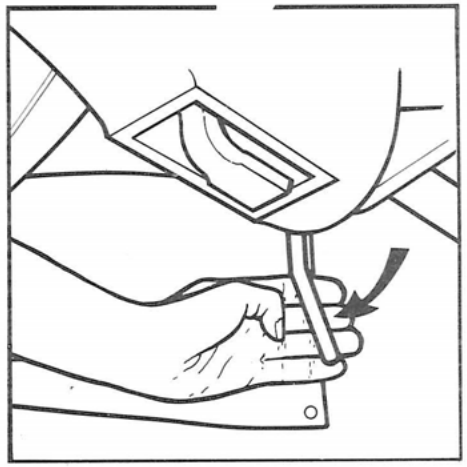


Fig. 9A Single Bonnet Release

34 **Interior Light:** Located above the driver and passenger in the rear header. The light has three settings. **See Fig. 10.**

a) **Map Reading:** Switch to position 1: Light On permanently when required.
b) **OFF:** Switch to position 2: Light OFF permanently.
c) **Courtesy light:** Switch to position 3: Light will come ON when Drivers or passenger door is open.

The light works independently of the ignition.

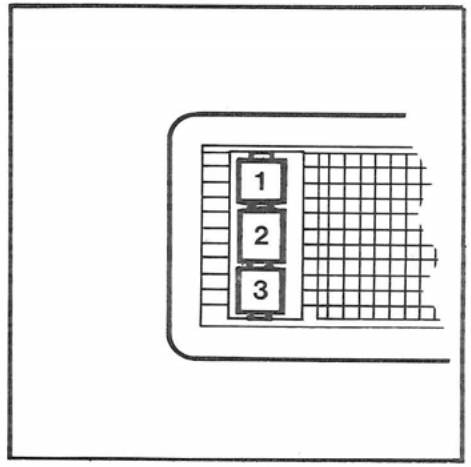


Fig. 10 Interior Light Switch Settings.

iii) Doors

Doors. Both drivers door and passenger door can be locked and unlocked from the outside by using the universal key. Insert the key in the lock and give it a quarter turn, i.e. anti clockwise to unlock & clockwise to lock. Both doors may be unlocked from the inside by pulling the door lever. Both doors can only be locked from the outside.

Door Mirrors:

The drivers door mirror is fully adjustable to suit your driving position and should be set to facilitate the minimum possible head movement to view through it. It is set by moving the complete housing manually. The same applies to the Passenger door mirror (if fitted).

iv) Seats / Head Restraints:

Seats. **Fig. No. 11.** To provide comfortable leg reach and back position to suit your driving follow these procedures.
Leg Reach Backward & Forward: Move lever located underneath the seat at the centre to the right and the seat will be released to position it closer or further away from the pedals / steering wheel.
Back position Tilt: Pull up the lever located at the outside edge at the apex of each seat. This releases the back to be tilted backward or forward to suit. Sit in the seat whilst obtaining a comfortable position. Pull the seat as far forward as possible to maximise access to the rear parcel shelf.

Head restraints Up Down: It is important that the head restraints are moved up and down to suit each individual driver and passenger. The ideal setting is as **Fig. 11.** this offers full restraint in the event of any accident. Failure to set correctly could result in personal injury from the slightest of accidents i.e. Neck "Whiplash". These should be set while the vehicle is stationary and re checked before the start of each journey.

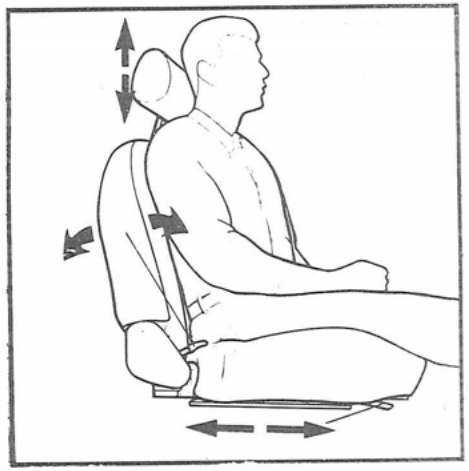


Fig. 11 Seat & Head Restraining.

v) Warning Lights.

Top to Bottom. For symbols See table **Fig. No. 12.**

Symbol	Colour	Function
	Green – Side Lights:	Side lights / Main Beam Lights ON
	Red – Battery:	Ignition ON Will illuminate when the engine is run and the rpm runs over 1400 the light will extinguish after several seconds. If the light stays on after that period, switch engine off and investigate and rectify the cause. Should the light come on while the vehicle is running, pull over immediately (when safe to do so). Switch off engine and investigate.
	Blue – Full Beam:	Full Beam Lights ON
	Amber – Rear Fog:	Rear Fog Light ON
	Red – Fuel Low: **Not Utilized on standard "S" models**	Will actuate when fuel is low. As there is no reserve fuel tank it is advisable to fill the vehicle with petrol as soon as possible.
	Blue – Front Fog: **Not Utilized on standard "S" models**	Front Fogs ON
(P)	**Red – Handbrake:**	Handbrake ON
(i)	**Red – Brake Fluid:**	Brake Fluid Level LOW Check level in Engine Bay See Engine Bay Chapter. **Also illuminates with handbrake to check circuit.**
	Red – Oil Pressure: **Not Utilized on standard "S" models**	Oil Pressure Low Will illuminate when ignition is switched ON. Will illuminate when the engine is first run for several seconds and extinguish. Failure to extinguish after that period switch off engine investigate and rectify cause. If light comes on whilst driving pull over (when safe to do so) switch off engine, investigate and rectify cause).
	Green – Indicators:	Work simultaneously with indicators.

Fig. 12 Warning Light Table.

vi) Steering Column Switchgear.

All three stalks are found behind the leather padded steering wheel.
Stalk Fig 13: Combined Turn Indicators, Horn, Full Beam and Flash Facility. **Stalk Fig 14:** Side Lights and Main Beam. **Stalk Fig 15:** Windscreen wipers – Incorporating single wipe facility, two speed wiper function and wash jet operation.

The following instruments will only operate when the ignition is ON.

Stalk Fig. 13: Single stalk on the left hand side of the steering column.
Horn: Push the end of the stalk in the direction of arrow "A" towards the steering to activate the horn.
Turn Indicators: To activate the direction indicators, move the lever upwards, arrow "B", for a right turn and downwards, arrow "C" for a left turn. An easy way to recall this is to move the lever in the same direction as the steering wheel needs to be turned to go in the desired direction. The indicator automatically cancels on completion of turn.

Flash: Move the lever toward the steering wheel, arrow "D", to flash the headlights. The headlights will remain on as long as the lever is held. This operation works independently of the side lights and main beam.
Full Beam: Move the lever away from the steering wheel, arrow "E" to convert the main beam to full beam.

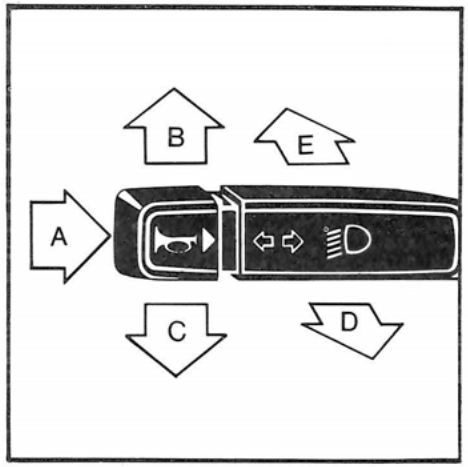


Fig. 13 Indicator Stalk.

Stalk Fig. 14: One of two stalks on the right hand side of the steering column, closest to the dash board.
Side Lights: Move the lever upwards, arrow "F", to the first setting to operate the side lights.
Main Beam: Move the lever upwards, arrow "G", to the second setting to operate the main beam on the headlights. it is only possible now to operate the full beam.

N.B. The rear fog light will only operate with the main lights on.

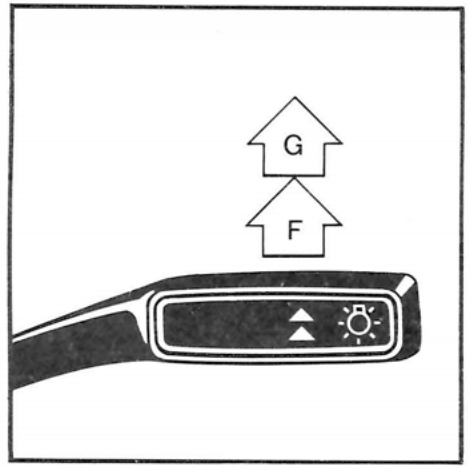


Fig. 14 Lighting Stalk.

Stalk Fig. 15: One of the two stalks on the right hand side of the steering column closest to the steering wheel.
Single Wipe: Move the lever downwards, arrow "G", and release for one single wipe of the windscreen wipers. Keep the lever depressed and the windscreen wipers will operate until the lever is released.
1st Setting windscreen wipers: Move the lever upwards, arrow "H", to its first position for normal speed. This setting is ideal for most weather conditions.
2nd Setting windscreen wipers: Move the lever upwards, arrow "J", to its second position for faster wipe. This will be sufficient for the worst weather conditions.

Windscreen Wash: Press the end of the lever toward the steering column, arrow "K", to operate the electrically driven water pump. The windscreen wipers should then simultaneously be operated at least once.

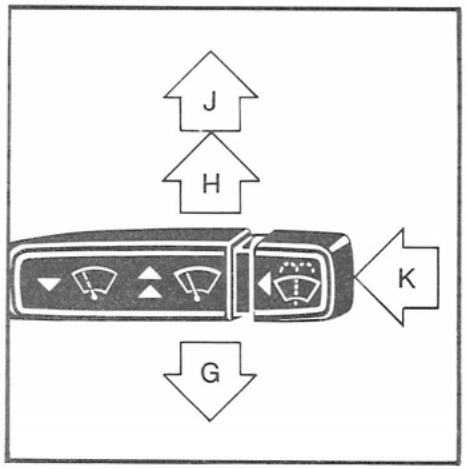


Fig. 15 Wash & Wiper Stalk.

Water Jet Nozzle: If the water jet should need any alteration to the direction of the spray inset a pin/needle into the hole in the end of the injector to redirect to its desired position.

Windscreen Wiper Replacement: Fig. No. 16.
Open the bonnet. Pull the wiper arm away from the windscreen. Rotate the wiper to form a "T" shape with the wiper arm. Force the two tabs on the housing outwards (See Fig. No. 16) and push the wiper blade down the wiper arm. Position the wiper blade as fig 16 and push the housing up into the "U" section on the wiper arm, until it "snaps" into position. Place arm and wiper to its rest position on the windscreen.

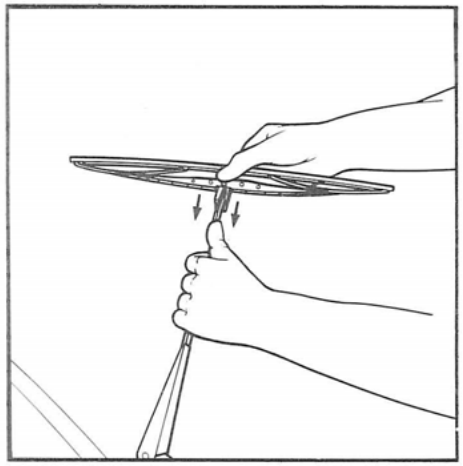


Fig. 16 Windscreen Wiper Blade

vii) Seat Belts

Inertia reel lap and diagonal combination seat belt, with automatic locking retractors. The belt will fully retract into the housing on the side window "B" post.

"SEAT BELTS HAVE TO BE WORN AT ALL TIMES"

Sitting in a comfortable driving position bring the seat belt attachment across the chest and down into the seat belt catch at the base of the seat in the middle of the vehicle.

Make sure none of the seat belt is twisted, and is positioned across the pelvis on the lap strap. The chest strap should fit across the shoulder and not too close to the neck. Any surplus belt will be retracted. Any form of damage to the belt i.e. abrasive fluid spilt on the belt, or the belt becoming frayed should result in the belt being changed as soon as the fault is noticed.

If the belt is worn whilst in any form of accident, no matter how severe, should result in the belt, the complete housing and fixtures being replaced.

Each belt assembly is designed for ONE occupant use and should be used accordingly. It should never be used to go around two occupants or even adult and child sat on the lap.

To release the belt press the red tab on the seat belt catch and the belt will automatically retract out of the way.

To ensure the belt is working correctly when the vehicle is stationary, fit the belt and pull yourself forward sharply and the belt should automatically restrain you from going forward.

"E" ENGINE BAY

For quick reference checks on fluid levels under the engine bay see **Fig. No. 17** and use the following procedure.

Fluid Levels:

All specifications on fluids and capacities are contained within the basic data and specification.

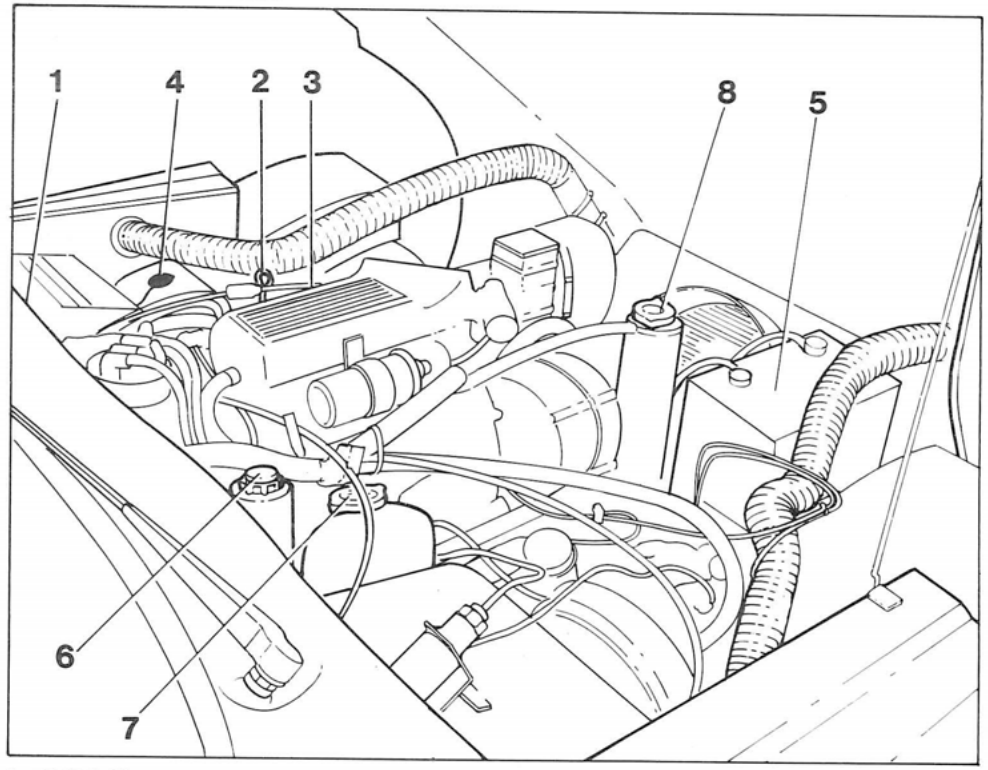
Windscreen Washer Reservoir: Refill with a mixture of clean water and Windscreen Washer Fluid.

Cooling System: The coolant level is visible through the transparent walls of the expansion tank. When the system is cold the level should read maximum, if not top up. The system should always be topped up when the engine is cold, through the expansion tank filler neck.

If the cooling system has been drained or a large amount of water has been lost the engine should be refilled with coolant through the swirl tank neck. This must be carried out in the following manner and only when the engine is cold.

With the engine cold fill through the swirl tank neck until no more coolant can be added.

Set the vehicle heater temperature control to maximum heat and start the engine. Run the engine at idle speed for 2-3 minutes adding coolant as necessary. Switch the engine off and replace the pressure cap on the swirl tank.



1. V.I.N. Plate
2. Oil Dipstick
3. Oil Filler Cap
4. Washer Reservoir
5. Battery
6. Brake Fluid Reservoir
7. Cooling System
8. Coolant Swirl Tank

Fig. 17 Engine Bay.

Completely fill the expansion tank and replace the none pressure cap. Run the engine at a fast idle speed (1000 – 1500 rpm) until normal operating temperature is achieved as indicated on the temperature gauge. When the temperature reaches a point between the highest white mark and the beginning of the red sector the electric colling fan should cut in. When his happens or in any case if the needle enters the red sector stop the engine, allow it to cool and repeat the filling procedure.

The swirl tank pressure cap should only be removed when the engine is cool to avoid the risk of injury due to expelation of scalding water.

The swirl tank should always be completely full of coolant and it is advisable to check this level periodically.

Engine Oil Filler Cap: Although this is a push fit, rotate and pull the top on removal. Top up with TVR specified engine oil.

Engine Oil Dipstick: see **Fig 18.** The oil should always be checked on level ground with the engine switched off. Pull the dip stick out and wipe clean to ensure a true reading. Re insert the dipstick and pull it out. The level of the oil in the sump will now register on the marked end of the dipstick. The level should read between the min and max. Over the max mark the oil will be wasted, below the mark will damage the engine and should be topped up immediately. Do not overfill. Use TVR specified oil.

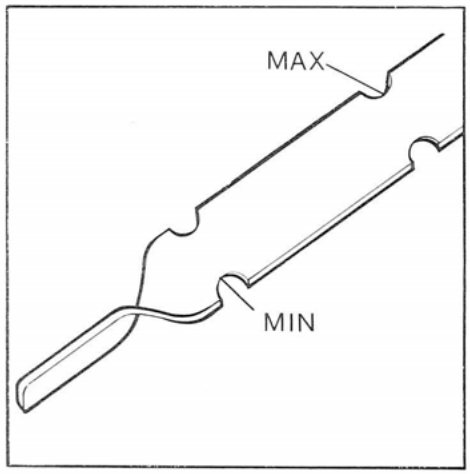


Fig. 18 Oil Level.

Brake Fluid Reservoir: Check that the fluid is up to MAX line on the reservoir. Only top up with the TVR specified fluid.

Battery: As the battery is "maintenance" free checking the engine is not necessary during the normal working life of the battery.

"F" ROOF

Removal & Storage

Both sets of instructions for roof removal and erection are to cater for single handed operation. The procedures are capable of being carried out single handed, but when possible they are easier carried out by two people. In which case the order of each procedure remains the same, they are just made easier.

a) Open both doors. Release the tension on both over-centre stays. Less force is required if the stay is held at the centre and pulled forwards. See **Fig. 19** Hold both roof panels at the front on the join line. Bring back both the roof panels and the rear header together as one unit, to fold the rear header into the parcel shelf. **See fig 20.** If the rear header is to be in this position for a long period make sure the rear window is not unduly creased while the vehicle is in transit especially if something is stored on the rear parcel shelf.

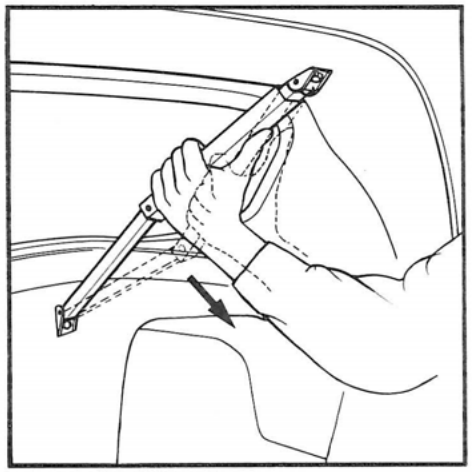


Fig. 19 Roof Stay Release.

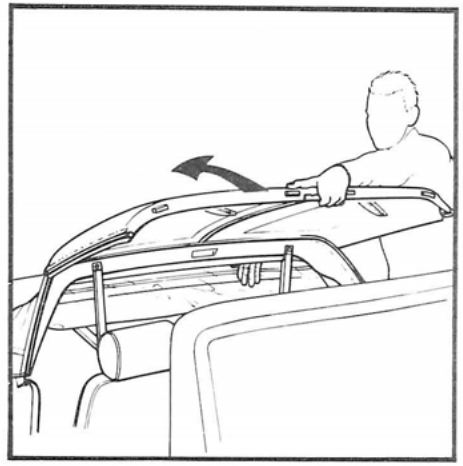


Fig. 20 Rear Header Collapse.

b) Remove one of the roof panels, whilst leaving the other roof panel upright and unsupported. Place the free standing roof panel on the ground, resting on the lugs on the floor to prevent damage to the roof material.

c) Remove the other roof panel. Place both roof panels in their separate protective covers to protect the roof material. Lay both roof panels in the boot beside the spare wheel one on top of the other. **See Fig. 21**

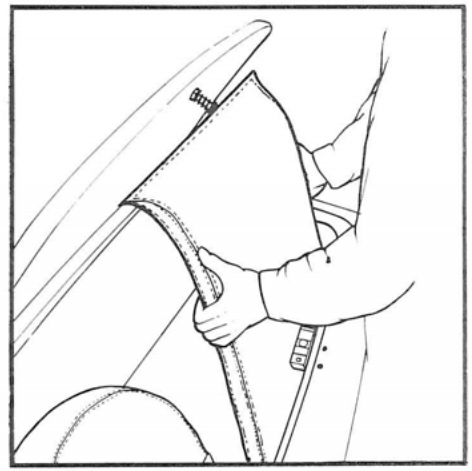


Fig. 21 Roof Panel Storage.

Roof Erection

d) Completely collapse the rear header. Open both passenger and drivers door. Take passenger side roof panel out of its protective cover. Offer the passenger side roof panel in an upright position to the rear header (See **Fig. 22**). Ensure that both locating lugs on the roof panel are positioned to fit into the recessed lugs in the rear header. The panel can now be left upright without support.

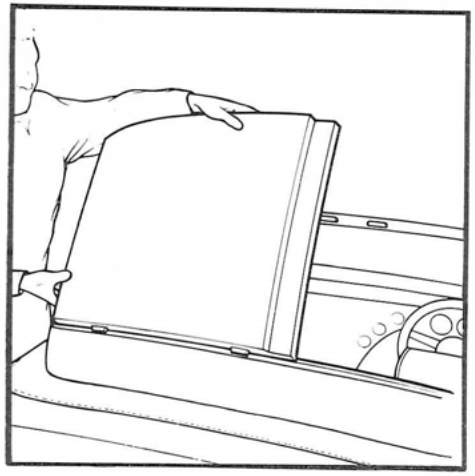


Fig. 22 Erecting Passenger Roof Panel.

e) Take the drivers side roof panel out of its protective cover. Offer the drivers side panel up to the rear header in an upright position. Ensure that the central overlap on both roof panels are positioned that drivers side is on top of the passenger side. See **Fig. 23.** Position the locating lugs on the roof panel into the recessed lugs in the rear header. Both panels can now be left in an upright position without support.

Fig. 23 Erecting Drivers Roof Panel.

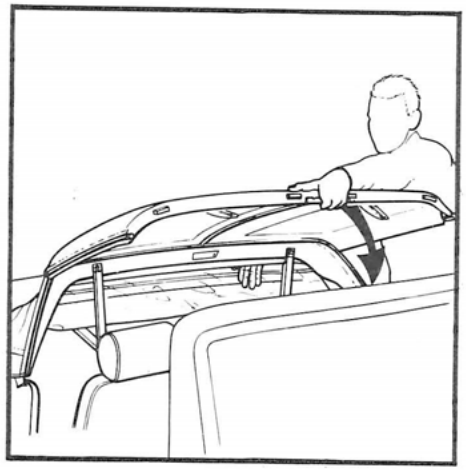


Fig. 24 Roof Panel – Windscreen Surroun

f) Open both drivers and passengers door. If this is not possible lower both side windows. Hold both roof panels at the front on the join line. See **Fig. 24.** Lift the rear header whilst holding the complete assembly as one unit. The movement of the rear header will bring the leading edge of both roof panels in contact with the top of the windscreen. Position all four locating lugs in both roof panels into the recessed lugs in the Body of the windscreen surround. See **Fig. 25.** PLEASE NOTE: This operation should not be attempted with both doors and windows closed.

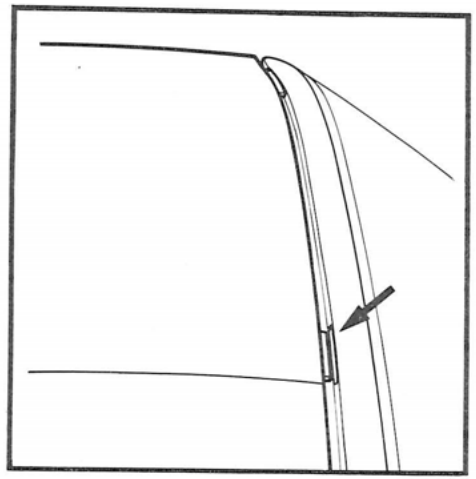


Fig. 25 Leading Edge Locating Lugs.

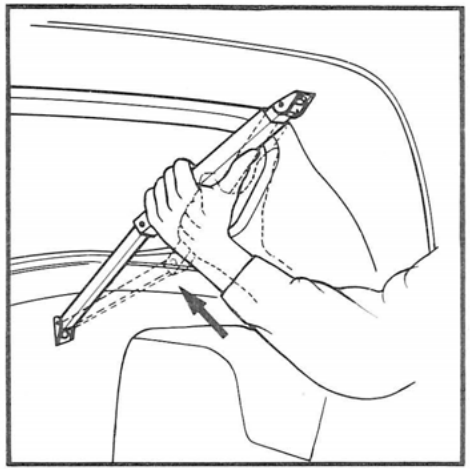


Fig. 26. Securing Roof Stays.

g) Ensure all eight locating lugs are in position. Lean inside the vehicle and push backwards the "over-centre" roof stay until it "snaps" into position. See **Fig. 26** Less force is required if the stay is pushed as close to the centre of the stay as possible. Repeat this operation on the other side.

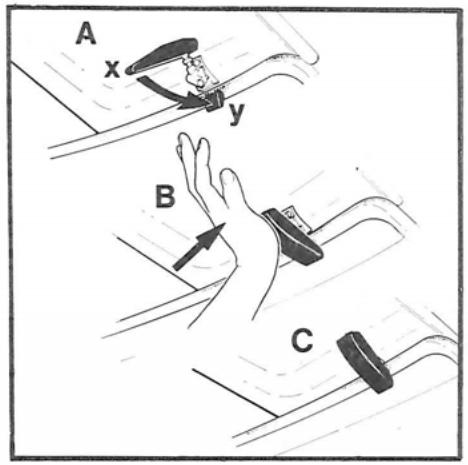


Fig. 26 A Roof Panel Security Fasteners.

h) To ensure that the roof panels are held in position securely, the "Roof Panel Security Fasteners" (one per panel) should be fastened using the following procedure.

(A) Pull edge (x) of the fastener to hook over edge (y) of the attachment on the car, (B) by applying pressure onto the other end of the fastener, the fastener should clip into position (C) to hold the roof panel securely in place. See **Fig. 26 A**

To release the security fastener, pull the edge of the fastener that is nearest to you, in order to release the fastener and unhook it from the car attachment.

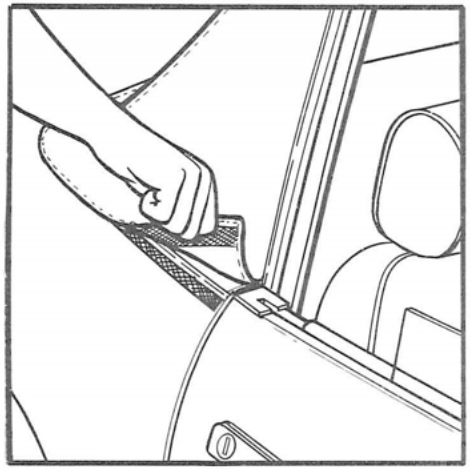


Fig. 27 Roof Material Base.

To ensure maximum protection against the elements, smooth the roofing material at the base of the rear header where it meets the body. See Fig. 27. This is secured in position with a velcro strip and can be re-positioned accordingly to achieve a smooth finish.

i) The vehicle can be driven "Targa" fashion. i.e. simply erect the rear header without any of the roof panels and "snap" in position both "over-centre" stays as described in section "g". Please do not attempt this operation with any of the doors and windows closed.

With the rear header erection with or without the roof panels it offers a large capacity for storage. Tilt both seat backs as far forward as possible to ease access. Make sure that nothing sharp is allowed to rub against the rear window in transit.

i) Fuse & Relays

S Fuse and relay panel Layout. Fuse and relays are located in the passenger footwell on the left hand side. Pull down the trim panel over the top of the footwell away from its Velcro fixing. See **Fig. No. 28.** See Panel Layout **Fig. No. 29.**

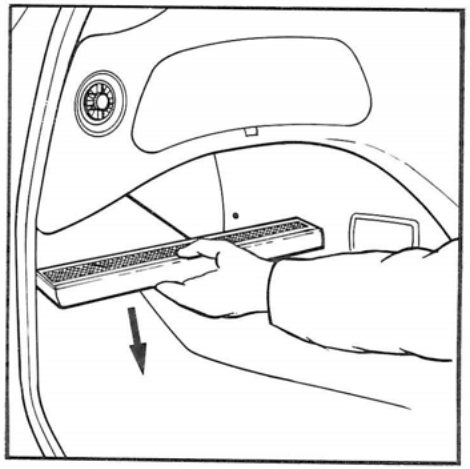


Fig. 28 Trim Panel Removal.

IGNITION CONTROL: 15 AMP	HEADLAMP CONTROL: 30 AMP	HEADLAMP MAINBEAM: 15 AMP	HEADLAMP DIP BEAM: 15 AMP
REVERSE AND BRAKE LIGHTS 10 AMP	INTERIOR FAN: 15 AMP	HAZARD INTERIOR LIGHTS HORN & CLOCK: 15 AMP	LEFT HAND SIDE LIGHTS: 7.5 AMP
WIPER WASH: 15 AMP	WARNING LIGHTS INSTRUMENTS & INDICATORS: 10 AMP	REAR FOG: 10 AMP	RIGHT HAND SIDE LIGHTS: 7.5 AMP
ENGINE RUN SENSOR, FAN & PRIMARY RELAY: 15 AMP	HEADLAMP FLASH: 15 AMP	ENGINE FAN: 25 AMP	FUEL PUMP: 25 AMP
ENGINE FAN RELAY			
DIM – DIP RELAY			

Fig. 29 Fuse / Relay Panel Layout.

The yellow fuel pump relay, brown injection relay/diode and 20A injection fuse are located in the injection wiring loom above the trim panel.

ii) Bulb Replacment:

Please note before attempting to replace any faulty bulb on the vehicle the battery should be disconnected.

Interior Light Bulb Replacement: Fig. 30. Insert a screw driver behind the lens of the interior light. Position a rag behind the screw driver to safeguard against marking the trim surround. Lever the unit out of the aperture to reveal the bulb. Replace the bulb. Place the assembly back into the aperture and push back in position.

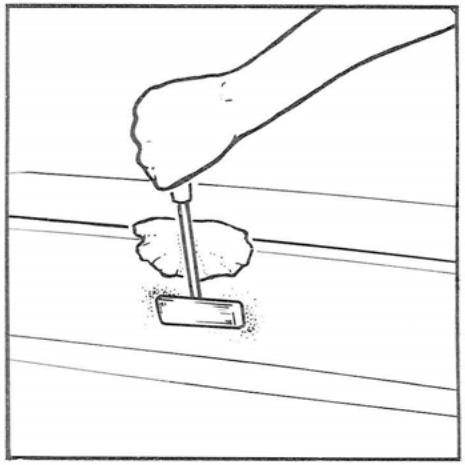


Fig. 30 Interior Light Bulb Replacement.

Sidelight Bulb Replacement: Fig. No. 31.
a) Remove headlamp rim by undoing the screw underneath. This exposes the lens retaining rim. Remove the three short screws 1, 2 & 3, to release the lens retaining rim and lamp unit.
b) Pull the assembly out for access.
c) Lever the side light attachment out to reveal bulb. See **Fig. 32.** Replace bulb. Insert bulb holder back into the aperture.
d) Reposition the lamp back into the headlight shell. Ensure the three outside lugs on the rear of the reflector seat correctly. **Fig. 33.** These make sure the light is upright. Replace headlamp retaining rim and secure with the screws 1, 2 & 3. Replace headlamp rim and secure with screw at the bottom.

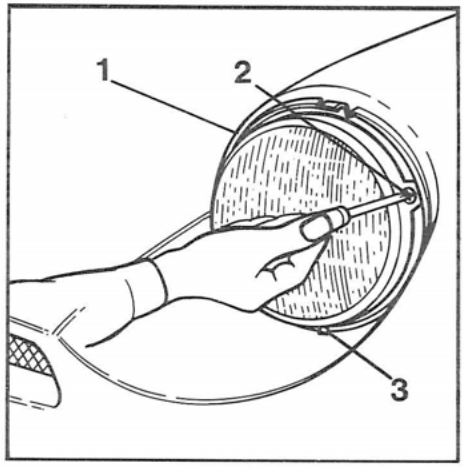


Fig. 31 Headlamp Retaining Screws.

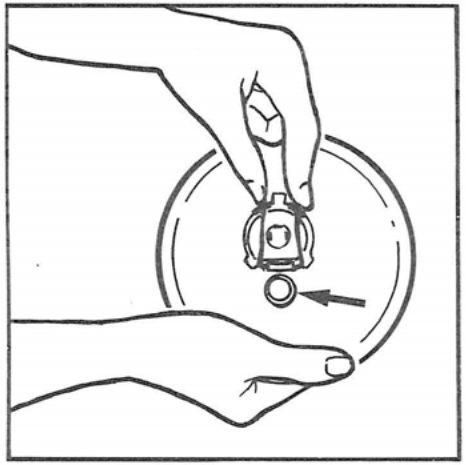


Fig. 32 Headlamp Rear.

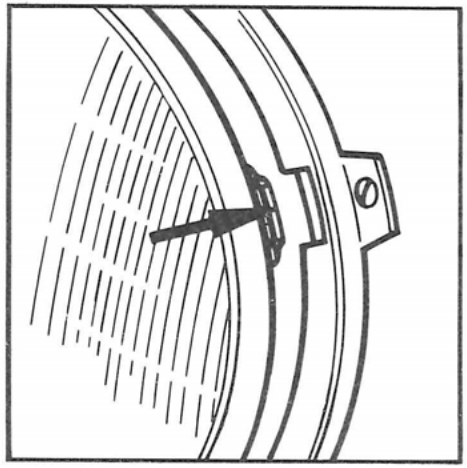


Fig. 33 Location of Headlamp Lugs.

Headlamp Bulb Replacement:
Repeat procedure a and b in previous section. Push together the bulb holder retaining spring to release. See **Fig. 34** Pull the bulb holder out of the aperture and replace the bulb. Push the bulb holder back into the aperture and reset the spring retainer. To replace the headlamp follow procedure in previous section.

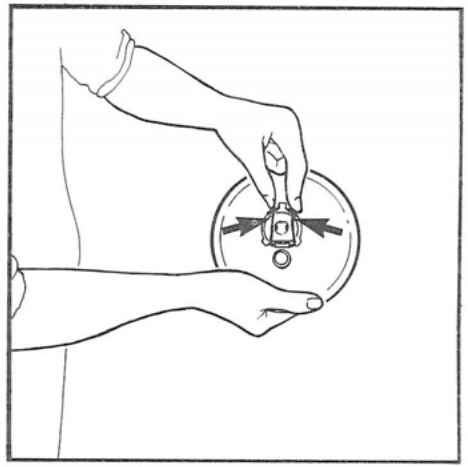


Fig. 34 Headlamp Bulb Retaining Spring.

Indicator bulb (front) **replacement:** The replacement of the front indicator bulb can be achieved in two ways. A and B.

A) Unscrew the two screws either side of the indicator lens and remove the complete assembly from the car body. Remove the bulb unit from the back of the assembly by giving the unit a quarter turn. The bulb holder can now be pulled out of the back of the unit. Replace the bulb and insert bulb holder back into the rear of the assembly. Feed the loose wire back into the aperture and screw the complete assembly back in position.

B) Open the bonnet. The back of the indicator assembly can be worked on by moving to the front of the vehicle, inside the bonnet where the back of the indicator assembly can now be reached. Give the bulb holder a quarter turn to release, and remove. Replace the bulb. Reposition the bulb holder into the aperture at the back of the indicator assembly, give the holder a quarter turn to secure in position.

Rear Light Cluster. Indicator, Brake Light/ Rear Light, Reversing Light and Rear Fog Light bulb replacement.

Press the tab lever "A" **Fig. 35.** on the edge toward the middle of the vehicle and open the back of the unit (it is hinged on the outside edge). This gives access to all the bulbs in the rear cluster. Replace the faulty bulb. The order of the bulbs looking down and working from the outside to the middle are as follows:

Outside position **1**– Indicator.
2– Brake light/rear light.
3– reversing light.
Middle **4**– Rear Fog Light.

With faulty bulb replaced close the back of the unit until it "snaps" shut.

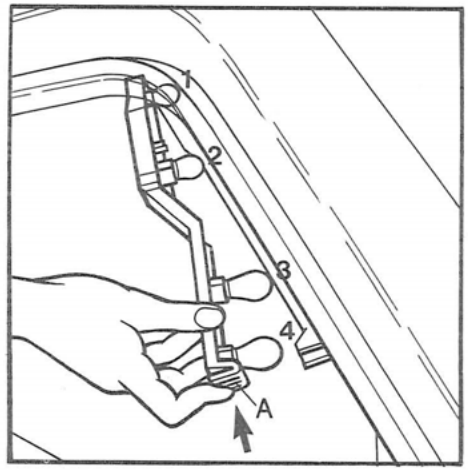


Fig. 35 Rear Light Back Release.

Rear Number Plate Bulb / Courtesy boot light Replacement: This is located directly underneath the locking mechanism in the boot. Lever open the bulb retaining tabs to release the bulb. Replace the bulb.

ii) Bulb Specification:

See Bulb Specification Table

Wiring System: A complete Wiring diagram is supplied within the Owners Handbook Pack. (See enclosed).

BULB SPECIFICATION TABLE

HEADLAMP	–	60/55W
SIDE LIGHTS	–	5W
INDICATORS (Front)	–	21W
SIDE MARKERS	–	5W Capless
BREAK LIGHTS	–	21/5W
INDICATORS (Rear)	–	21W
NUMBER PLATE	–	5W
FOG LIGHTS (Rear)	–	21W
FRONT FOG LIGHTS	–	55W Capless
INTERIOR LIGHTS	–	5W
WARNING LIGHTS	–	2.2W
GAUGE LIGHTS: Speedometer/Rev Counter	–	5W Capless
Voltmeter/Temperature/Fuel/Oil	–	5W Capless

"H" GENERAL

i) Driving From New.

"Running In"

Driving the vehicle from zero miles should be done with great regard for the vehicle, especially for the first 1,000 miles. If the following procedures are carried out as specified the overall maximum performance of the vehicle is maintained.

ENGINE: 0 – 1,000 miles When cold the engine rpm should not exceed 2,500 rpm. After the 1,000 mile service the engine rpm when cold should never exceed 3,000 rpm.

Immediately after the 1,000 mile service the full power, should, even then, only be used for short periods which may be lengthened as the engine becomes more responsive. responsive.

In low gears the engine should never be over revved. If the engine begins to "labour" select a lower gear. Never exceed 6,000 rpm in any situation.

GEAR CHANGE: 0 – 500 miles. When accelerating and changing gear i.e. 1st – 2nd, 2nd – 3rd and 3rd – 4th the engine rpm should not exceed 2,500 rpm. When the vehicle is cruising in 5th gear the rpm should not exceed 3,000 rpm. If the maximum rpm stated has to be increased do not exceed it for long periods and the engine is not labouring or pulling hard. The engine rpm, should run up and down rather than be left at the same rpm over a long distance.

500 – 1,000 miles. When accelerating and changing gear the engine rpm can be increased from 2,500 – 3,000 in stages as the vehicles mileage is increased. When cruising in 5th gear the engine rpm can be increased from 3,000 rpm at 500 miles, to 3,500 rpm at 1,000 miles.

Apart from the engine both the tyres and the brakes have to be allowed to "Bed In" before maximum performance can be obtained by either.

Tyres : 0 – 500 miles avoid excessive cornering, the tyres have to be given chance to set themselves to the particular "Ride" (i.e. weight distribution) offered by your vehicle. This procedure should also be maintained when driving on a newly changed wheel and tyre.

Brakes 0 – 500 miles. Between this mileage the brakes have to be "bedded in" to gain maximum performance. Any situation that may arise to cause you to brake suddenly may result in the braking performance of the vehicle not being as high as expected.

0 – 1,000 miles. Excessive braking will cause the tyres to run out of balance, so any situation that may cause you to brake suddenly, or stop the vehicle in a short distance should be avoided. If heavy braking has to be applied it may be necessary to have the wheels re balanced. It is an advantage to have the wheels balanced at the first thousand mile service.

ii) Cleaning the Vehicle

When cleaning the vehicle the following procedures must be noted. Cleaning the outside of the vehicle:-

1) **By Hand:** Any specialised Vehicle or mild detergent can be used on any section of the cars bodywork. The roof material can be cleaned with mild detergent, or if the material is dry a soft brush can be used and by far this is the best methods. When using a hose pipe to rinse the vehicle only a low pressure jet should be directed at the door / roof seals. Cleaning the wheels can be done with a specialised wheel cleaner which should be rinsed off throughly. To prevent brake dust from spoiling the overall appearance of the front wheels, "Brake Dust Shields" can be fitted. (See supplying dealer). Also to aid Driving conditions with respect to cleaning the headlamps while the vehicle is in motion "Headlamp High Pressure" jets can be fitted (see supplying dealer).

2) **By Power Jet Spray:** The vehicle can be washed with a power spray but under no circumstances should the jet be directed at any of the roof material and door/roof seals. The roof material should be washed or brushed at a later stage.

3) **Revolving Brush Car Wash: PLEASE NOTE:** Under no circumstances should the vehicle be washed by a revolving brush car cleaner. Neither the roof material or the door/seals are designed to cope with the direct water jets and heavy duty brushes. When cleaning the inside of the vehicle any standard leather or furniture cleaner can be used on the seats, centre console, inside door panels and instrument facia. Glass cleaner is suitable for the interior and exterior of the vehicle.

De-Icing. Proprietary de-icing fluids may be used on the rear window without risk of damage to the plastic surface. Do not scrape ice off the rear window as this will almost certainly cause surface scratching.

iii) Petrol Filling:

The fuel filler cap is on the left hand side (Passenger Side) of the vehicle. To open the cap press the rectangular section at the rear. See **Fig. 36.** This will release the cap and allow it to open. After refilling the tank close the cap and press firmly to ensure it is closed securely. Because of the design of the filler neck, hold the petrol filler nozzle slightly out and upward of the opening and you may have to trickle feed as the tank becomes full. Any petrol spilt could stain the paintwork and should be cleaned off.

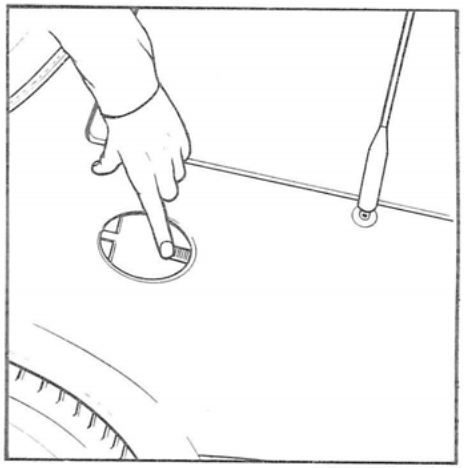


Fig. 36 Petrol Cap Release.

iv) Starting the Engine:

Check parking brake is on. Select neutral gear. Insert key and turn to position I. If this appears difficult move the steering wheel to help disengage the steering lock. Turn to position II and check the ignition light registers. Turn to position III against a spring retainer and the engine will "fire-up". As soon as the engine runs release the key to position II. Should the engine not fire up hold the key in position III (3) for about six seconds and allow the engine to come to rest before re-attempting. Should the engine, fail to start switch off completely and investigate reason.

Stop the engine engage steering lock. When the vehicle is stationary and the parking brake has been applied, turn the key to position I and the engine will stop running. To engage the steering lock turn the key to position O and remove the key, turn the steering wheel until the steering lock engages.

Choke: An Automatic choke is fitted as standard. To start the vehicle in extreme weather conditions slowly depress the accelerator pedal to the floor before starting the engine.

"I" WHEELS & TYRES

i) Full Size & Standard Space Saver

Full Size – Recommended Type:
205/60 VR 15 RE71 Bridgestone
Low Profile Tyres

Recommended Tyre Pressure:
Front: 22 lb/in.sq
Rear: 22 lb/in.sq
Spare: 60 lb/in.sq

For high speed running the tyre pressure should be increased by 2-4 lb /in.sq. all round.

Spare Wheel: Temporary "Space-Saver"
Spare Wheel and Tyre Recommended Type:
T 125/70 D15 Bridgestone

Recommended Tyre Pressure:
60 PSI (4.2 bar)

PLEASE READ THE "INSTRUCTIONS FOR VEHICLES FITTED WITH A TEMPORARY "SPACE SAVER' WHEEL" IN THE NEXT CHAPTER.

ii) Brake Dust Shields:

If Fitted. It is important that the "Brake Dust Shield" fits to the reverse side of the wheel without distortion. If necessary trim the rubber down following the guidelines to suit. After fitting the shield ensure there is no fouling by rotating the wheel by hand. If the shield has louvers in make sure the arrow on the shield follows the direction of the wheel when running.

"J" EMERGENCY

i) Wheel Change

CAUTION:
DO NOT ATTEMPT TO JACK THE VEHICLE IF NOT ON LEVEL GROUND. DO NOT ATTEMPT TO GO UNDER THE VEHICLE IF SUPPORTED BY THE VEHICLE JACK ALONE (Place the vehicle on axle stands on the same positions as used for the jacking points).

a) Set parking brake. Block diagonally opposite wheel as the wheel to replace. Select reverse.

b) Position Vehicle "scissor" jack (found in boot) on Front: Main chassis tube as **Fig. 37.** Back: Main Chassis Tube as **Fig. 38.**

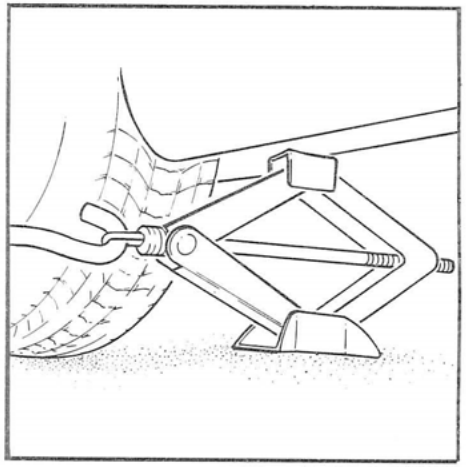


Fig. 37 Jacking Point – Front.

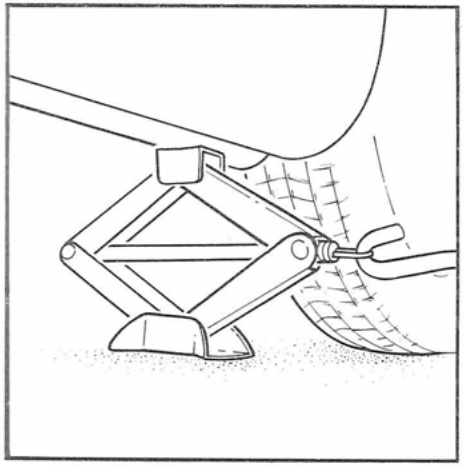


Fig. 38 Jacking Point – Back.

N.B. Do not position the jack on any part of the bodywork, only on the main chassis tubes.

c) Loosen wheel nuts.

d) Raise the vehicle until the wheel clears the ground.

e) Remove nuts and wheel.

f) Install spare wheel (space saver standard or full size optional extra). Tighten the nuts in sequence as **Fig. No. 39.**

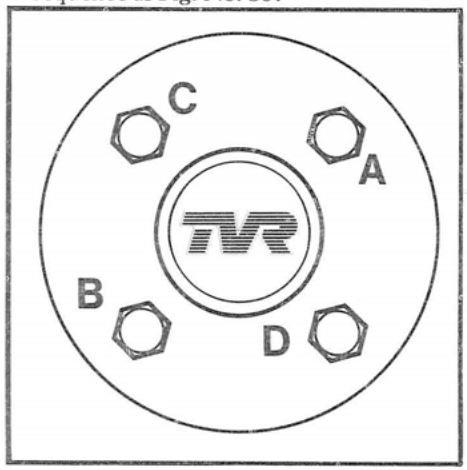


Fig. 39 Wheel Nut Tightening Sequence.

If brake dust shield is fitted see section for correct fitting.

g) Lower the vehicle until the tyre touches the ground, re-tighten nuts in same sequence securely.

h) Lower the vehicle completely.

j) Remove vehicle jack and store back in the protective bag and secure in the boot. See **Fig. No. 40.**

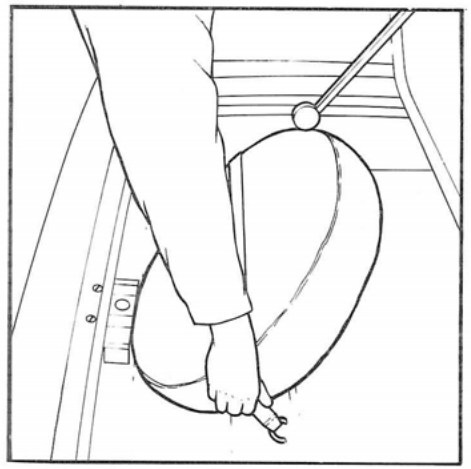


Fig. 40 Spare Wheel Storage.

This procedure applies to the Temporary "Space-Saver" wheel (as fitted for Standard Equipment) as well as the Full sized wheel fitted as as Optional Extra.

When the standard equipment "Space-Saver" spare wheel is fitted the following instructions should be read and fully complied with. Any queries on the fitting of the "Space-Saver" spare wheel please refer back to the supplying dealer or TVR Engineering.

Instructions for vehicles fitted with a temporary "space saver" wheel.

The narrow section space saver wheel is for temporary use only and when fitted, the vehicle must not be driven at speeds in excess of 50 mph (80 kph). In addition to the speed restriction the vehicle must not be subjected to fast cornerning, fierce acceleration or heavy braking, unless necessary to do so in emergency situations.

If the tread depth becomes less than the legal minimum or the tyre is damaged in any way then it should be replaced.

If the temporary spare wheel is used on the front axle, there may be a tendency, under braking, for the vehicle to pull to the side the temporary spare is fitted.

TVR recommend that the original wheel and tyre be repaired as soon as possible and refitted to the vehicle thus prolonging the useful life of the temporary spare and restoring the performance of the vehicle to normal.

Only one temporary spare wheel may be used on the vehicle at any one time.

ii) Towing

Tow rope attachment and towing the vehicle.

There is no provision on the TVR "S" to tow other vehicles, any damage caused in an attempt to tow any vehicle will result in warranty on the TVR becoming invalid.

Vehicles from chassis No. SA9DS28P7JB019157 have facilities to be towed. Two towing eyes are located at the front of the chassis behind the bottom edge of the radiator. See **Fig. No. 41.** Whenever possible both towing eyes should be used. It is illegal to have your Hazard Warning lights operating whilst the vehicle is in tow. A sign "ON - TOW" should also be displayed to inform other road users.

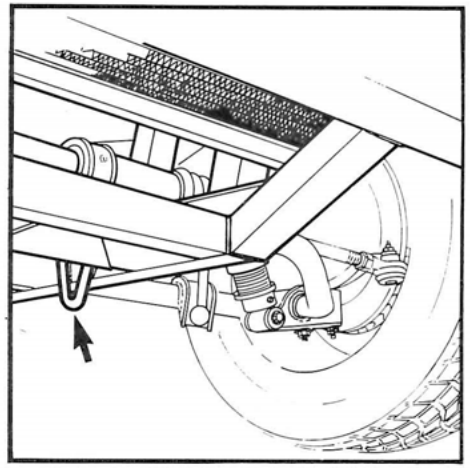


Fig. 41 Towing Eyes.

iii) Push/Tow start the Vehicle:

If the battery becomes flat i.e. Lights left on overnight, it is possible for the vehicle to be push started. If the battery is totally discharged i.e. even the interior lights fail to glow, the vehicle cannot be pushed / tow started and so must be started using jump leads or by replacing / re charging the battery.

a) Turn the ignition key to position II
b) Push down slightly on the accelerator pedal.
c) Depress the clutch and engage second gear.
d) Start to tow or push the vehicle.
e) Slowly engage the clutch. The engine will fire. If failure to fire occurs investigate the reason.

iv) Battery Charging:

If the battery needs charging disconnect both battery leads. If at all possible remove the battery from the vehicle completely.

Starting the vehicle using JUMP leads. A second battery can be used to assist starting the vehicle. This second battery must be connected to the car battery – See **Fig. No. 42.** – Negative terminals connected and positive terminals connected. If the original battery is replaced this must be done with the engine switched off.

positive terminals connected. Connect the jump leads to the vehicle battery first and after starting the engine disconnect the slave battery first. If the original battery is replaced this must be done with the engine switched off.

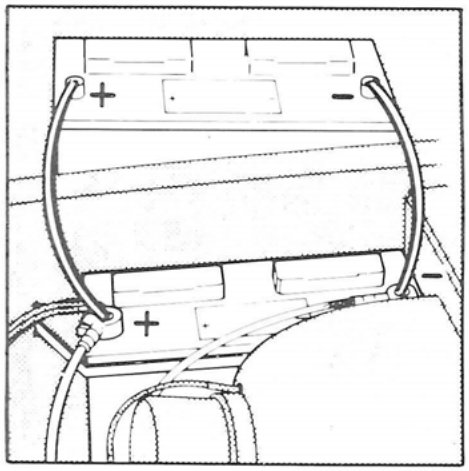


Fig. 42 Jump Lead Connections.

"K" CHECKS / SERVICING

i) Daily/Fuel Stop/ Weekly Checks

Daily:	All exterior lights
Fuel Stops:	Oil Level
	Tyre Pressure
	Windscreen Wiper Bottle
Weekly:	Coolant Level
	Brake Fluid
	Clutch Fluid
	Handbrake performance
	Spare Tyre Pressure
	Visually check for any fluid leaks.

If the vehicle is "Grounded" i.e. Chassis hits the ground or the vehicle is driven over any objects it is advisable to have the chassis checked for fractures or if any of the chassis coating has been displaced. If so refer to dealer.

ii) Service Intervals.

The recommended service intervals for the vehicle from new are:
1,000 mile
6,000 mile
12,000 mile
18,000 mile
24,000 mile
30,000 mile – Every 6,000 miles thereafter or every six months whichever comes sooner

All service proceedings should be carried out by Factory approved service centres, these outlets are 100% familiar with all TVR vehicles and have all the special equipment and knowledge to suffice.

A full list of specific service procedures can be obtained from the servicing dealer for any further reference you may require.

Full service requirements are listed in the Service Schedule book enclosed within the owners pack.

"L" OPTIONAL EXTRAS

The vehicle can be fitted with the following optional extras or bought items as part of the Dealer after sales service.

Wooden steering wheel and gear lever knob. To re-create the 60's feel to the interior of the vehicle the fitting of the wooden steering wheel and gear lever knob is essential.

Passenger door mirror. As an exact replica of the drivers side mirror the fitment of the extra mirror does nothing to spoil the magnificent looks of the vehicle.

Full Sized spare wheel The boot will take a full sized wheel if preferred, but boot luggage space is lost.

TVR "S" Side decals For design See **Fig. No. 40.**

Fig. 40 TVR's Side Decal

Twin Driving Lights To aid the lights in poor visibility conditions.

Headlamp High Pressure Wash: In bad weather these can be operated while the vehicle is on the move to clean the headlamps and aid high visibility.

Brake Dust Shields To keep the high appearance of the wheels these shields if fitted will save the laborious cleaning of the wheel rims.

Electric Windows

Electric Mirrors

Walnut Style Dashboard

"M" WARNINGS

Before undertaking any service checks, procedure or emergency preventions the following Warning descriptions should be read and fully understood.

Seat Belts – The seat belts are automatically retracting and self adjusting. To clean use only soapy water – DO NOT USE SOLVENTS OR ABRASIVES ON SEAT BELTS.
Ensure that the seat belts have fully retracted before leaving the vehicle.

Brake & Clutch – Certain Brake and Clutch components may contain Asbestos based materials. Precautions must be taken when servicing these components to avoid skin contact and inhalation of Brake and Clutch lining Dust.
Servicing of these components should only be carried out by qualified personnel.

Used Engine Oils – Prolonged and repeated contact may cause serious skin disorders, including dermatitis and cancer.
– Avoid excessive contact, wash thoroughly after contact.
– Keep out of reach of children.
PROTECTION AGAINST THE ENVIRONMENT – It is illegal to pollute drains, water courses or soil. Use authorised waste disposal facilities, including civic amenity sites and garages providing facilities for receipt of used oil. If in doubt, contact your Local Authority for advice.

Temporary "Space Saver" Wheel – The narrow section space saver wheel is for temporary use only and when fitted, the vehicle must not be driven at speeds in excess of 50 mph (80 kph). In addition to the speed restriction the vehicle must not be subjected to fast cornering, fierce acceleration or heavy breaking, unless necessary to do so in emergency situations. If the tread depth is less than the legal minimum or the tyre is damaged in any way then it should be replaced. If the temporary spare wheel is used on the front axle, there may be a tendency, under braking, for the vehicle to pull to the side the temporary space wheel is fitted.
TVR recommend that the original wheel and tyre be repaired as soon as possible and refitted to the vehicle thus prolonging the useful life of the temporary spare and restoring the performance of the vehicle to normal.
Only one temporary spare wheel may be used on the vehicle at any one time.

"N" BASIC DATA

Lubricants & Coolants

All lubricants listed below are TVR Specified Oils and are specially formulated by "CENTURY OILS" to enhance the vehicles overall performance. Any "Top-Up" or complete change should be carried out to meet TVR / "Century" Specifications.

Application	Type
Engine	Supreme SF 15 W/50 8.27 pts (4.7 Litres)
Differential	L.S.D. Gear Oil 2.5 pts (1.4 Litres)
Gear Box:– 5 Speed	S.S. 80 2.5 pts (1.4 Litres)
Brakes	Universal Brake & Clutch Fluid D.O.T. 4
Cooling System	Snowdrift All Seasons Coolant 18 pts (10.2 Litres)
Wheel Bearings & All Other Grease Points	Luplex M2
C.V. Joints	Lacerta P.M.2.

SPECIFICATION

BODYSHELL AND INTERIOR

The new S model continues the TVR tradition in being a two door, two seat Convertible body, manufactured in glass reinforced polyester resin. This is moulded in one piece for the forward opening bonnet and in four sections for the remainder of the vehicle. The style of the new car is quite a departure from that of the rest of the TVR range where angular features are still the norm. Special wrap around deformable rubber impact bumpers along with strategically designed internal body crumple zones protect front and rear portions of the vehicle.

The bodyshell is still combined with a jig formed, multi tubular steel spaceframe chassis with outriggers. This is now a mixture of 2⅜" rectangular and 1½" circular 16 gauge tubing, plastic coated for corrosion resistance.

A laminated front screen with semi frameless toughened door windows combine with twin detachable roof panels and fold down rear header to complete the roof structure. The twin roof panel operation is another first for TVR on the S model. This allows the driver an extra function. Not only can he have the vehicle completely open or targa style with the rear header up but also the option of removing only one of the two panels for a split roof effect. Roof material is a heavy duty vinyl material in a variety of colours. An optional extra available on the roof material is mohair in blue, black, grey, magnolia and brown colour schemes. The interior roof lining is in ambla to match the chosen interior colour scheme. The two roof panels are stowed in the boot when not in use. Access to the boot can also be obtained by a forward opening hatch located in the rear wall of the vehicle.

Individual seats with fore, aft and tilt movements are combined with an integral headrest. Upholstery is in contrasting Ambla and Moquette with cloth inserts in the lower dasgboard area. Ambla colours available are red, blue, light and dark grey, black, magnolia and dark tan. These can be combined with grey, blue, red, black and peat moquette. Carpets are a ribbed woven pile in black, brown, red, blue and grey colours.

Full or half leather upholstery is available as an optional extra. Connolly leather is a variety of colour schemes on the half hide specification utilises hide on the seat squab and backrest. Piping is available to contrast the seat colour chosen. Full hide specification trims all the interior with the exception of the top dash roll, the lower parts of the dashboard, the lower portions of the door trims and the rear of the seats. These are finished in either matching Moquette or Ambla.

Windows are manually operated from the interior door trims with an option for electrically operated units.
Twin manually operated exterior door mirrors are standard and also have the option for electrical operation.

A colour contrasting, wrap around dashboard houses full instrumentation of speedometer, electric tachometer, oil pressure, water temperature, fuel and voltmeter gauges. Located on the steering column are levers for headlight function and flash, indicators, hazard warning along with two speed windscreen wiper, delay flick and washers.

ENGINE

This is front mounted, behind the axle line and drives the rear wheels. The unit is Vee slanted, 6 cylinder with a total capacity of 2933 cc 179 cu. in. The bore and stroke is 93 x 72 mm 3.66 x 2.83 in with a compression ratio of 9.5 : 1. It features a central camshaft and rocker arms with overhead values and a four bearing crankshaft.
Maximum power : 168 bhp at 6000 rpm
Maxmium Torque : 170 Ibs/ft at 3000 rpm, 23.5 kgm at 3000 rpm.

FUEL SYSTEM

The 290S uses the Ford EEC IV engine management system to ensure accurate computer control of the fuel injection and ignition timing under all operating conditions. Fuel is drawn from an integral, tank mounted, anti surge pot by an electrically operated fuel pump and fed to the injectors via a high capacity filter.

UNLEADED FUEL

All 290S models may be run on unleaded fuel. Certain 290S models will require a small modification, (depending upon the specification of the EEC IV electronic control unit), which can easily be undertaken by your TVR Service Dealer. The EEC IV ECU is located by the fuse box.

Part No. 88BB 12A650JA – No modification necessary.
Part No. 86GB 12A650AC – Modification necessary.
It is advisable to have your TVR dealer carry out this check.

TRANSMISSION

A five speed manual gearbox with 9.44 in. 239.7mm hydraulically operated single dry plate diaphragm clutch is standard. No other manual or automatic transmissions are available.

Gear ratios: 1st 3.36:1, 2nd 1.81:1, 3rd 1.26:1, 4th 1.00:1, 5th 0.82:1, reverse 3.365:1

A Sachs centrally mounted hypoid bevel final drive is used with a ratio of 3.64:1 producing 23.39 mph 37.65 kph per 1000 rpm. in 5th gear.

PERFORMANCE

Maximum engine rpm: 6000
1st 34.2 mph, 55.13 kph; 2nd 63.5 mph, 102.3 kph; 3rd 91.3 mph, 147.0kph; 4th 115.06 mph, 185.24 kph; 5th 140 mph, 226 kph

0 – 60 mph : 6.8 seconds
Standing quarter mile : 98.0 mph
Power to weight ratio : 170.2 bhp/ton
Carrying capacity : 440 Ibs, 200 kg from kerb weight.

CHASSIS

Multi tubular steel backbone chassis with outriggers protected by an plastic coating for compllete corrosion resistance. This separate chassis concept ensures that loads from the all independent suspension are fed into a structure that is fully insulated by silent block mounts from the bodyshell.

Front suspension is by unequal length TVR fabricated wishbones, coil springs, telescopic shock absorbers and a forward running anti roll bar. Hubs are specially cast items with inner and outer tapered roller bearings.

Rear suspension is by TVR fabricated semi trailing arms, constant velocity sliding driveshafts, coil springs and telescopic shock absorbers.

WHEELS AND TYRES

Four stud aluminium alloy 15" x 7 J slotted road wheels are used with 205/60 VR 15 Bridgestone low profile tyres. An aluminium alloy slimline small diameter spacesaver roadwheel and tyre is fitted as standard and located in the engine compartment.

STEERING

The steering is rack and pinion with a collapsible steering column. This combines with a 13" leather trimmed steering wheel producing a tunring circle of 31.4ft 9.6 metres with 2⅝ turns lock to lock. There is no power assisted steering available as an option.

"O" BREAKDOWN COVER

When the vehicle is bought from new the vehicle has an automatic 12 month breakdown cover. This will be registered by the selling dealer to the factory and the cover will be applied for. Notification will then be forthcoming with registration card and full details enclosed. Should you require any further details with respect to the nature of the cover please refer to the selling dealer.

When you receive the registration card please place this in the pocket of the combined Tax Disc / Breakdown Cover holder supplied with the car. This ensures that the registration card is always sited in view within the vehicle as certain details are required from this in the unlucky event of any breakdown.

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