



LOTUS CARS LTD.



15th October 2001

Attention Service Manager

Elise 2001 M.Y. Onwards Service Notes Manual A117T0327J – Update package 2001/02

Dear Sir/Madam,

Please find the enclosed update package 2001/02 for the Elise 2001 M.Y. Onwards Service Notes manual A117T0327J. Insert this package into your manual as follows:

Discard

Section BO page 13/14

-

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Section MO page 33

Insert

Section BO page 13/14
(stamped '2001/02')

Section BP page 4a
(stamped '2001/02')

Section MO page 4a
(stamped '2001/02')

Section MO page 33/34
(stamped '2001/02')

Please take time to correctly update this manual, and ensure that all service personnel are made aware of the new content. Additional copies of the update are available under part number **A117T0327/01/02**, which should be used to update any copies of the manual held in dealer stock.

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Yours faithfully

Dave Massey – Senior Technical Author

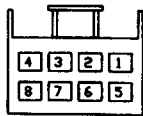
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INTER-HARNESS CONNECTORS

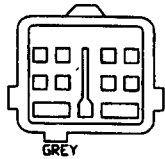
CONNECTOR ON
MAIN HARNESS

CONNECTOR ON
MATING HARNESS



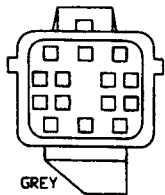
YAZAKI H 7283-5560-40

REAR
HARNESS CONNECTORS
(RHC)



GREY
SUMITOMO H 6189-0555 X 1

ENGINE HARNESS
CONNECTOR 1 (EHC 1)



GREY
SUMITOMO H 6189-0136 X 1

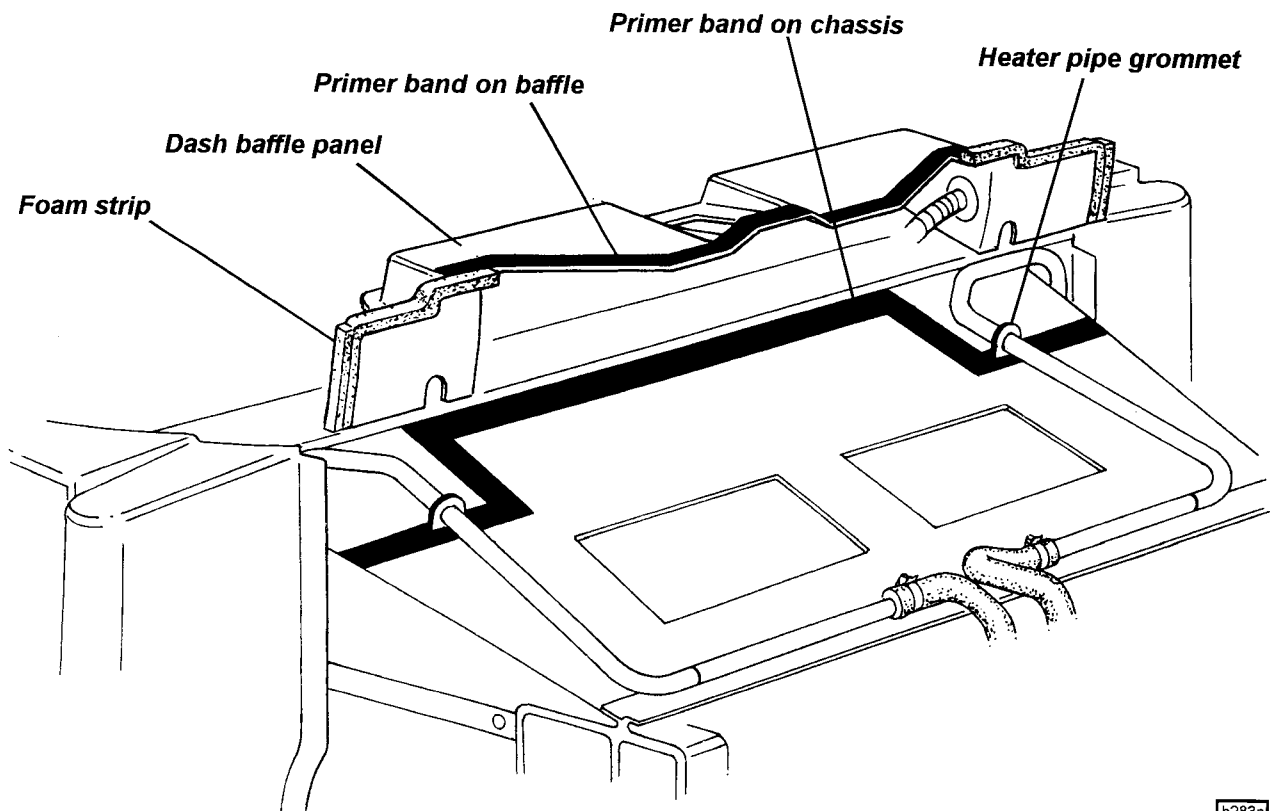
ENGINE HARNESS
CONNECTOR 2 (EHC 2)



The shape of the frame is critical to the windscreen fit, and structural repairs to the frame itself are not recommended. It is not generally economic to attempt to remove the windscreen frame intact for refitment, as the elastomeric adhesive bonding the frame to the chassis requires cutting with a reciprocating knife, and access to the joints is sometimes obscured. The recommended procedure is to cut the frame as necessary to allow its removal without damage to the dash baffle panel. If the sills are to remain fitted, it will be necessary to carry out some minor work on the screen buttress to sill panel joint, where a panel overlap occurs.

To Replace Windscreen Frame

1. Remove the front wheelarch liners and front clamshell (see sub-section BP.5), and for improved access, the two doors.
2. Remove the windscreen (see sub-section BP.14).
3. Remove the instrument binnacle and fascia top panel (see sub-section BP.13), and release the fixings between dash upper extrusion and screen frame.
4. Release the brake hose/pipe connector at the front end of each buttress on the windscreen frame. Release all harnesses and other components from the windscreen frame buttresses as necessary.
5. Remove the wiper motor mechanism from the windscreen frame.
6. Use a sealant cutting tool to cut the bond between the windscreen frame buttresses and chassis, and between the frame and 'B' posts, and between the frame underside and dash baffle panel. Remove the windscreen frame.
7. Cut the adhesive securing the drainage gutter around the front of the frame, to allow transfer to the new frame.
8. If the dash baffle panel is to be replaced, the clutch pipe and climate control cables must be released and threaded through the panel before cutting the adhesive.

**b283a**



9. To fit a new dash baffle:
 - Ensure the heater feed and return pipes are fitted.
 - Dry fit the panel and mark up the bonding surface on the chassis scuttle.
 - Prepare and re-activate the surface of the old adhesive on the chassis using Betawipe 4000 (see sub-section BO.5).
 - Clean and prime the upper and lower bonding faces on the new baffle panel using Betaclean 3900 and Betaprime 5404 (see sub-section BO.5).
 - Apply a bead of Betaseal/mate adhesive (see sub-section BO.5) to the baffle lower flange.
 - Position the panel and press along the length of the joint to ensure sufficient spread of adhesive. Clamp the panel in position until the adhesive cures.
 - Apply self adhesive foam strip A082U6065V to each vertical end face of the baffle panel, wrapping over onto the top edge and along to the primed surface. Apply a second strip up each vertical face.
10. Prepare the old adhesive bead on the chassis for fitment of the windscreen frame by removing excess sealant from all the bonding areas on the chassis, sill panels and dash baffle to leave a consistent and level bonding surface for the new frame. It is not necessary to remove all traces of old adhesive, but a uniform surface must be available for the new adhesive bead. The remaining adhesive must be securely bonded and be cut with a scalpal blade to leave an even thickness of 1 - 2 mm.
11. Fit the wiper motor assembly and windscreen washer jets to the windscreen frame.
12. If necessary, fit the roof side rail latch plate to the windscreen header rail:
 - Abrade the bonding surface on latch plate and header rail.
 - Clean the surfaces with Betaclean 3900 and prime with Betaprime 5404 (see sub-section BO.5).
 - Bond the latch plate to the header rail using a 50/50 mix of Betamate 7064S (A116B0159V) and Betamate 7014 (A116B0158V).
13. Before fitting the windscreen frame, ensure that two setting rods are available for positioning the frame:
 - Cut two 670mm lengths of locally sourced 10mm diameter steel rod.
14.
 - Prepare and re-activate the old adhesive bead on the chassis using Betawipe 4000 (see sub-section BO.5).
 - Clean and prime the bonding area on the new windscreen frame with Betaclean 3900 and Betaprime 5404 (see sub-section BO.5).
 - Apply a bead of Betaseal/mate adhesive (see sub-section BO.5) to the whole of the bonding flange on the windscreen frame and buttresses, including the mating face between frame underside and baffle panel.
 - Carefully fit the windscreen frame onto the chassis and press into position to ensure adequate adhesive compression. Ensure the frame is positioned correctly in relation to the roll-over bar by fitting the two setting rods in the roof siderail locating slots. The rods should locate snugly in the slots with no end play.
 - Clamp the frame into position until the adhesive cures.
 - Ensure good adhesion between the frame and baffle panel.
 - Use a spatula to smooth out or remove any excess or extruded adhesive.
15. Seal the frame panel to the top of the door hinge post at each side by extruding a bead of Betaseal, and smoothing with a spatula to obtain a neat finish.
16. Examine the whole of the bonding jointline for sealing integrity, and if necessary apply additional adhesive to seal any gaps. Use a spatula to smooth any visual areas to a neat finish.
17. Do not disturb the frame until the adhesive has fully cured (see sub-section BO.5).
18. Fit the windscreen (see sub-section BP.14), dash panel and instrument pack (BP.13), front clamshell (BP.5), and other components as necessary.



LOTUS CARS LTD.

2nd July 2001

Attention Service Manager

Elise 2001 M.Y. Onwards Service Notes Manual A117T0327J – Update package 2001/01

Dear Sir/Madam,

Please find the enclosed update package 2001/01 for the Elise 2001 M.Y. Onwards Service Notes manual A117T0327J. This package comprises the first issue of the body repair and clutch sections, and an update to section BP. Insert this package into your manual as follows:

Discard

Introduction page 1/2
-
Section BP pages 1 to 4
-

Insert

Introduction page 1/2
(stamped '2001/01')
Section BO - file after section AG
Pages 1 to 18 (stamped '2001/01')
Section BP pages 1 to 4
(stamped '2001/01')
Section QG - file after section PI
Pages 1 to 12 (stamped '2001/01')

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Yours faithfully

Dave Massey – Senior Technical Author

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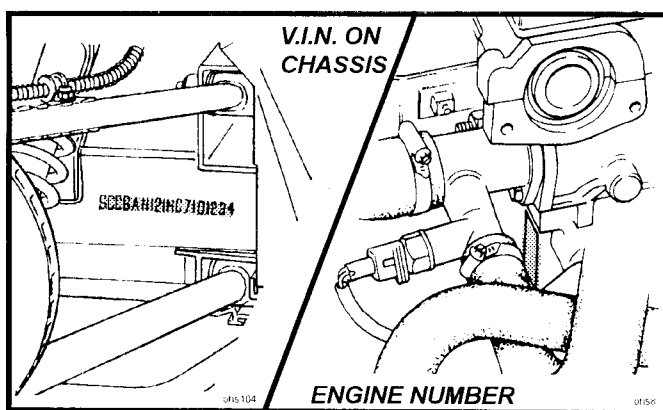
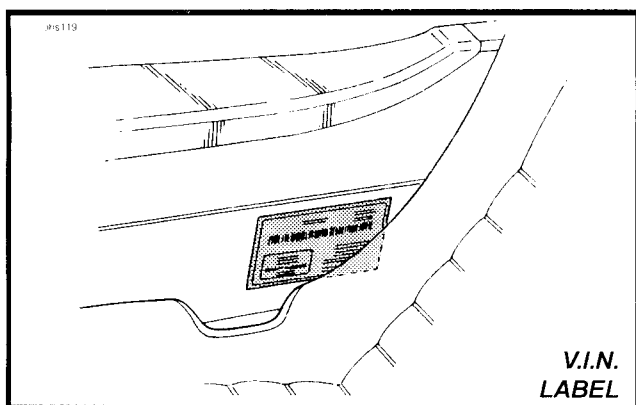
	<u>Section</u>
Technical Data	
- Engine	TDN
- Vehicle	TDO
Chassis	AG
Body Fittings	BP
Front Suspension	CH
Rear Suspension	DG
Engine (inc. Rover publication RCL 0057ENG)	EG
Engine Management	EMO
Transmission (inc. Rover publication RCL 0124ENG)	FI
Wheels & Tyres	GG
Steering	HF
Brakes	JI
Engine Cooling	KG
Fuel System	LI
Electrics	MO
Maintenance & Lubrication	OH
Heating & Ventilation	PI



VEHICLE IDENTIFICATION NUMBER & ENGINE NUMBER

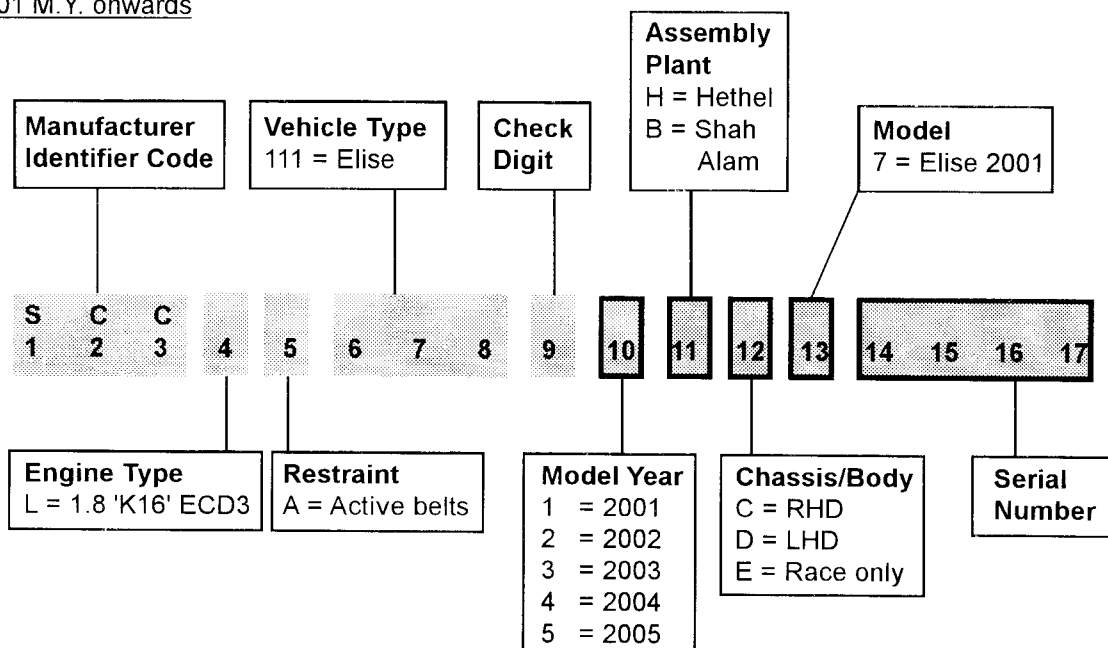
The Vehicle Identification Number (V.I.N.) is stamped on the chassis in the right hand front wheelarch area, viewable with the front wheels turned to right full lock, and is also printed on a label stuck to the inside of the chassis sideframe alongside the driver's seat. The engine number is marked on a vertical patch at the left hand end of the forward face of the cylinder block, and is most easily viewed using a mirror.

Both numbers should always be quoted with any vehicle enquiries, as Factory records are filed against V.I.N., and specification change points are identified by V.I.N. or engine number. The vehicle licence number may not accurately reflect vehicle age, may also be changed during the car's life, and is an unreliable method of vehicle identification.



The V.I.N. comprises 17 characters, coded in accordance with European Economic Community (EEC) directives. For change point identification in Service Notes, Service Bulletins and Service Parts Lists, normally, only characters 10 to 17 will be quoted.

'2001 M.Y. onwards



**BODY FITTINGS****SECTION BP - ELISE 2001 M.Y. Onwards**

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BP.1 - ROOF

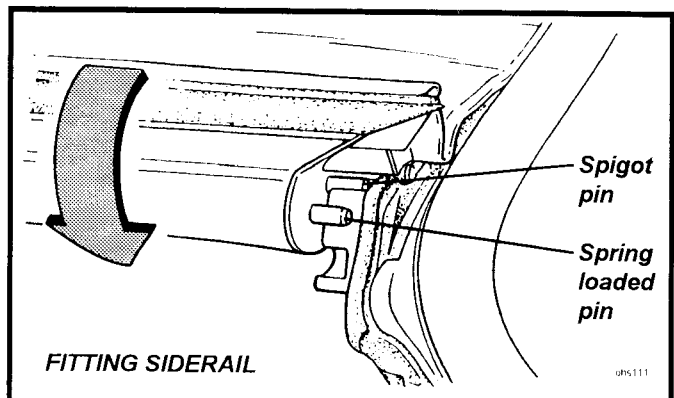
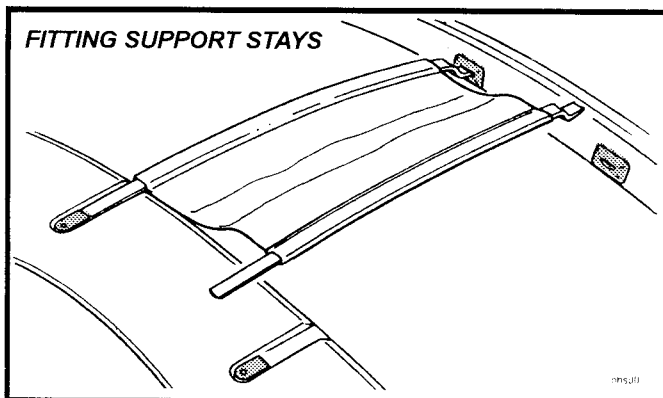
The Lotus Elise has been designed to exploit the pleasures of open top motoring, the better to enjoy exposure to the natural environment, unencumbered by the restrictions and confinement bestowed by a cockpit roof. In order to provide some weather protection to the occupants and vehicle interior, and allow the continued enjoyment of the car in unfavourable weather conditions, two roof configurations are provided; a soft top canopy, and a hard roof option comprising a pair of 'Targa' panels supported from a central spar.

Soft Top Canopy

The soft top roof is used in conjunction with a body colour composite panel (rear window shroud) fixed over the roll over bar and extending for a short distance over each rear clamshell buttresses. The rear window shroud incorporates on its underside, a roof tensioning push rod mechanism. A hollow composite roof siderail is used to bridge each top corner of the windscreen frame to the roll over bar, and provide a mounting for a weatherstrip seal, against which the top edge of the door glass abuts. The soft top roof canopy is fixed to each siderail, with each siderail using a spigot pin at the front and rear to engage with a slot in a latch plate on the header rail and roll over bar. A second, spring loaded spigot pin at each end of the siderails, is arranged to slide into a ramped hole on the latch plates to secure and tension the soft top.

Soft Top - Fitting

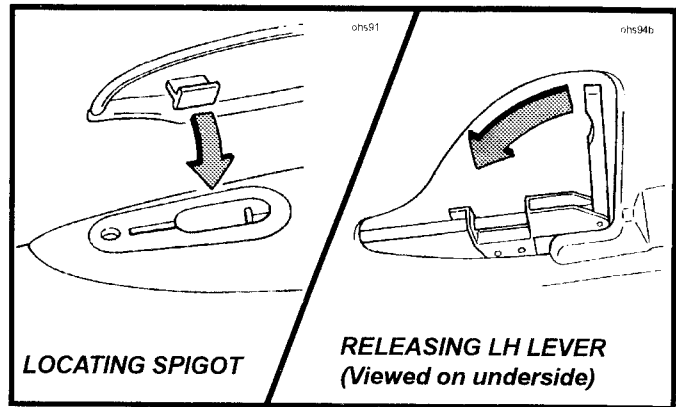
1. From its stowage bag in the rear luggage compartment, withdraw the roof assembly and support stays. Lower both door windows, or open both doors.
2. Insert the two support stays, with the cranked ends foremost, into the roof slots above the rear window, and in the windscreen header rail.



3. Lay the soft top roof onto the support diaphragm, and unroll the canopy with the tails towards the rear, taking care not to damage the paintwork with the tail spigots.
4. Taking one of the roof side rails, engage the spigot pin on the front and rear end of the rail, into the uppermost slot in the latch block on the windscreen header rail and roll over bar. Rotate the side rail downwards until both spring loaded pins 'click' into their ramped slots indicating that latching is complete. Pull up on the side rail to check security.
5. On the opposite side of the car, repeat step (4) for the second side rail, ensuring that the tensioning wire at the front edge of the canopy is located in the channel ahead of the windscreen header seal.

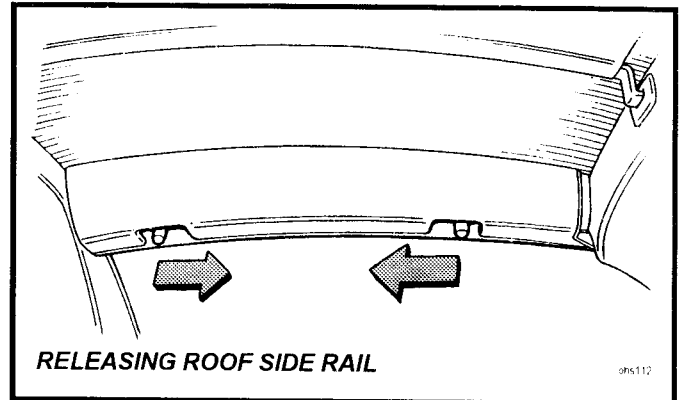
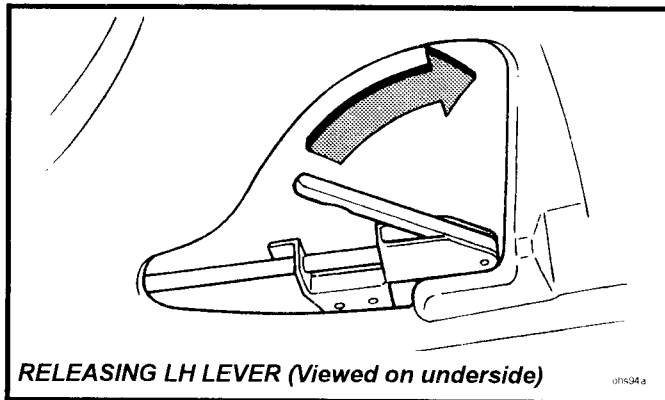


6. Locate the spigot on the underside of each soft top tail into the keyhole slot in the body buttress.
7. Beneath each side of the rear window shroud, locate the tensioning lever, and pull rearwards to tension the canopy.



Soft Top - Removal

1. Open both doors or lower both door windows.
2. Beneath each side of the rear window shroud, locate the tensioning lever, and press the lever fully forwards to release the tension from each tailpiece of the soft top canopy.
3. Unhook each tailpiece from the body buttress slot and fold back to guard against paint damage.



4. On the inside face of one of the roof side rails, locate the two latch release levers: Pull the two lever handles towards each other to release the side rail latches, and rotate the rail upwards to release the canopy tension.
5. Repeat step (4) for the opposite side rail.
6. Carefully roll up the roof canopy and stow in the roof bag.
7. Unhook the two roof stays and stow in the roof bag.

Important Note: If the roof is not fully dry, it should be stowed for no longer than a few days before unrolling or refitting and allowing to air dry completely. Prolonged stowage of a wet or damp roof will promote rotting of the fabric.

Rear Window Shroud: The rear window shroud is secured by two fixings accessible from within the cabin above the rear window, and by one screw behind each keyhole slot in the shroud tail. The side rail latch plates must also be released from the roll over bar.

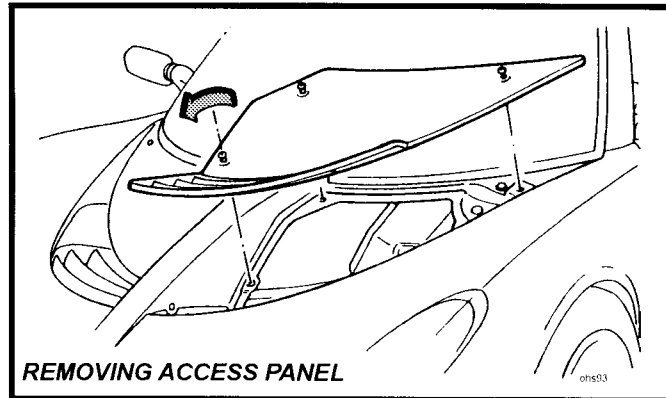
Roof Cables: The steel cables running through the front and rear edges of the roof canopy are set for length at the factory and should need no attention in service.

Side Rail Front Latch Plates: The latch plates on the windscreen header rail are secured using a two part adhesive. If necessary, use Betaclean 3900 (A100B6008V), Betaprime 5404 (A082B6337V), and a 50/50 mix of two part adhesive Betamate 7064S (A116B0159V) and Betamate 7014 (A116B0158V) to refix.



BP.2 - FRONT BONNET PANELS

Two removeable panels are provided in the front body to allow access to the windscreen washer reservoir and the front fusebox and relays. Each panel consists of a glass fibre composite moulding painted body colour, to which is bonded a black plastic slatted grille, providing an outlet for air exhausting from the radiator finning. Each panel is fixed to the clamshell by three screw fasteners, with a spigot at the inboard front of the grill engaging with a hole in the clamshell spine.

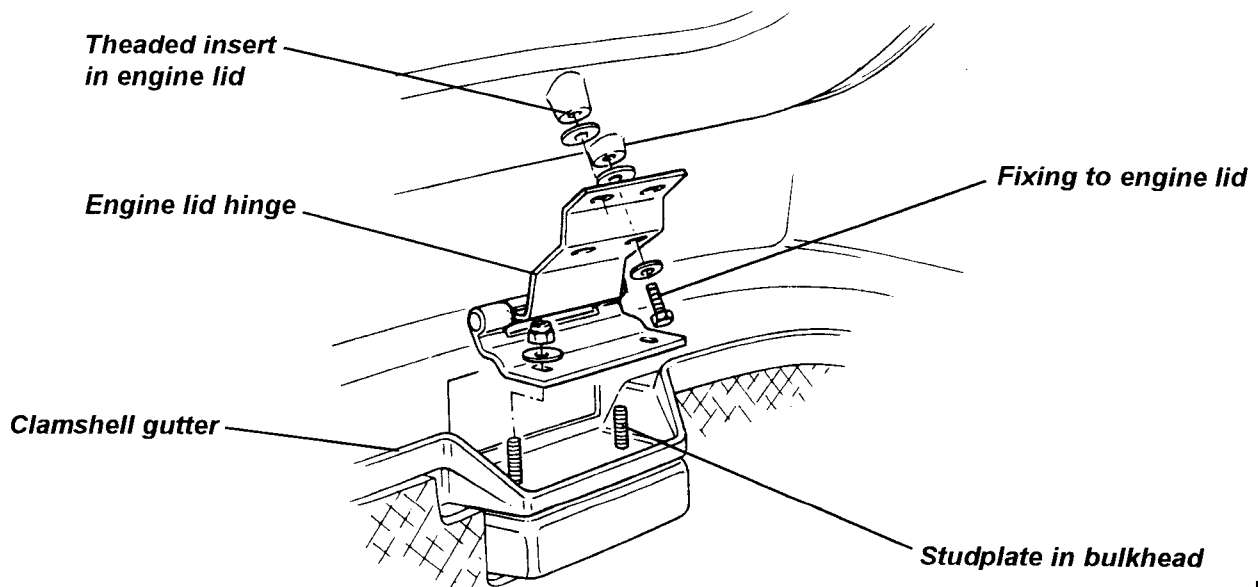


BP.3 - ENGINE COVER LID

The engine cover is moulded from glass fibre composite and incorporates 4 engine cooling outlet grilles bonded into recessed apertures. Two hinges are used to attach the lid to the rear bulkhead, and a single, key operated latch mechanism secures the lid to a striker pin mounted on the clamshell engine/boot bulkhead. The latch is released by inserting the ignition key into the lock and turning clockwise. When closing, fully engage the latch mechanism by pressing down on the cover only immediately above the latch. Note that the lock mechanism plastic cover plate on the inside of the engine lid, serves also to channel any rain water into the engine bay.

To remove the engine cover, disconnect the aerial co-axial cable and amplifier lead, and release the cover from the two identical hinges. Note that the hinges also serve to clamp the clamshell front edge to the cabin rear bulkhead.

Beware that the engine cover is locked whenever it is closed, and always requires the use of the ignition key to release. Owners should be made aware of the importance of having a spare key available in case of inadvertently locking the keys in the boot.



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