

REMOVAL

Models up to end of December 1987

Remove the direction indicator light.

Remove the junction block from the bulb.

Unscrew the four screws (C).

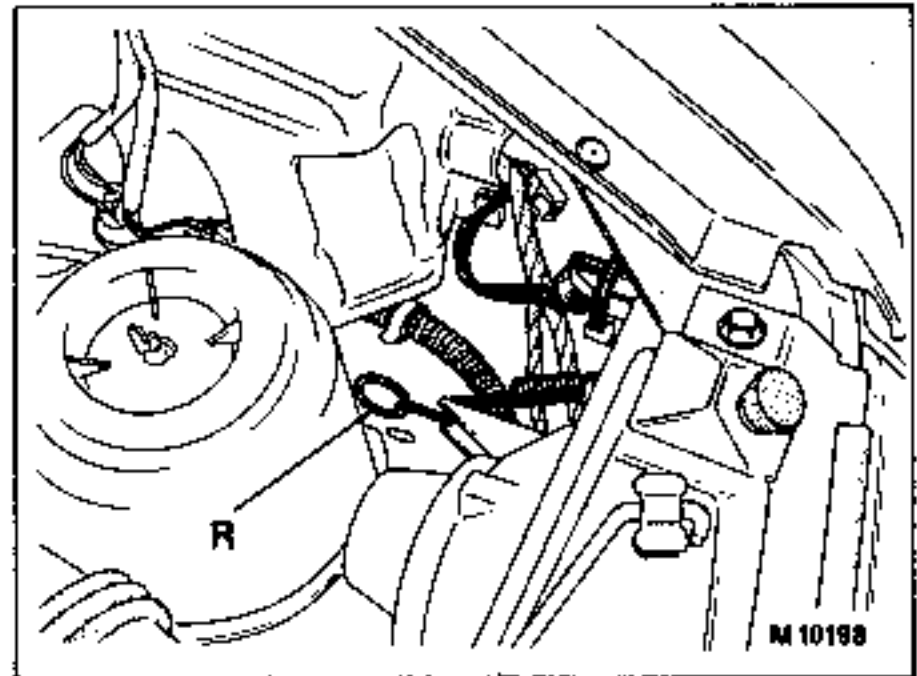
Models as from January 1988

Remove the junction block from:

- the light unit bulb;
- the sidelight bulb;
- the direction indicator bulb.

Unscrew the four screws (C).

Unhook spring (R) and move the light unit to the front to free it.



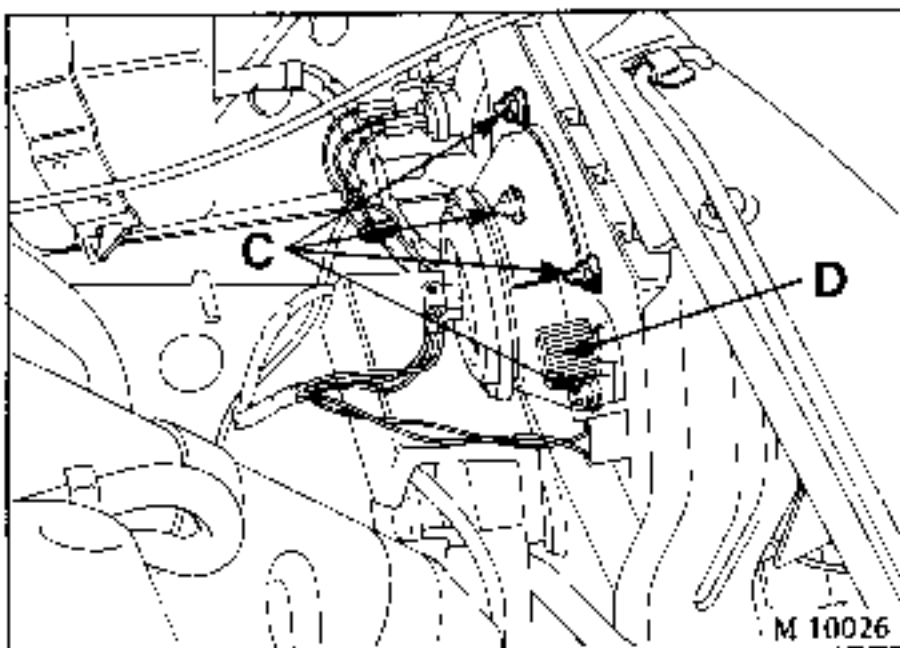
REFITTING

Special point:

The light unit must be adjusted when it has been refitted.

Vertical adjustment: screw D.

Lateral adjustment: screw on the lower section, near the direction indicator on the rear of the light unit.



DIRECTION INDICATOR

REMOVAL

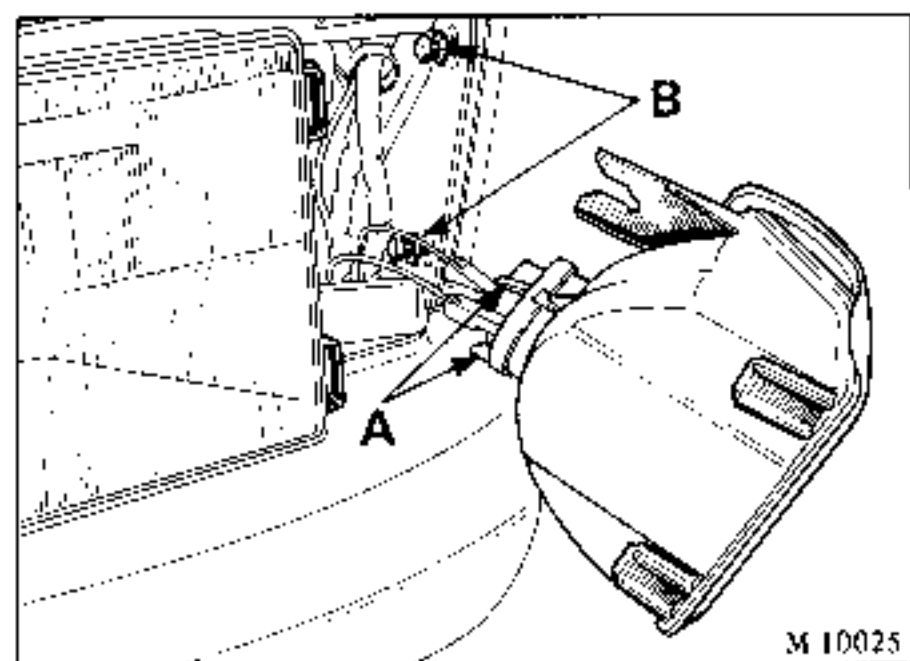
Up to end of December 1987

Disconnect the battery.

Remove the bulb-holder by pressing the two lugs (A).

Unfasten screws (B) part-way from inside the engine compartment.

Move the light forwards to free it.

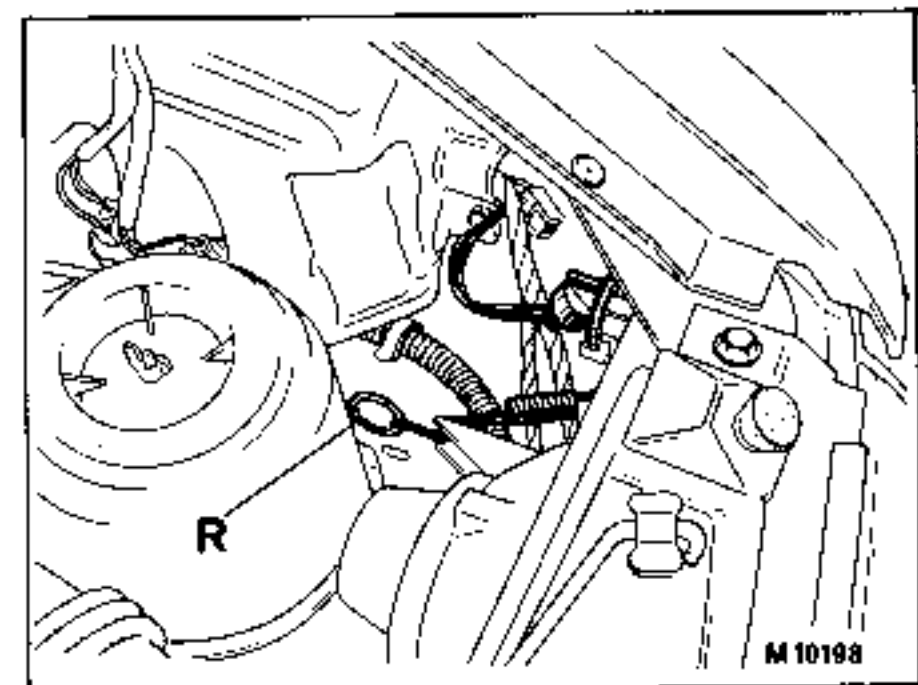


REMOVAL

From January 1988

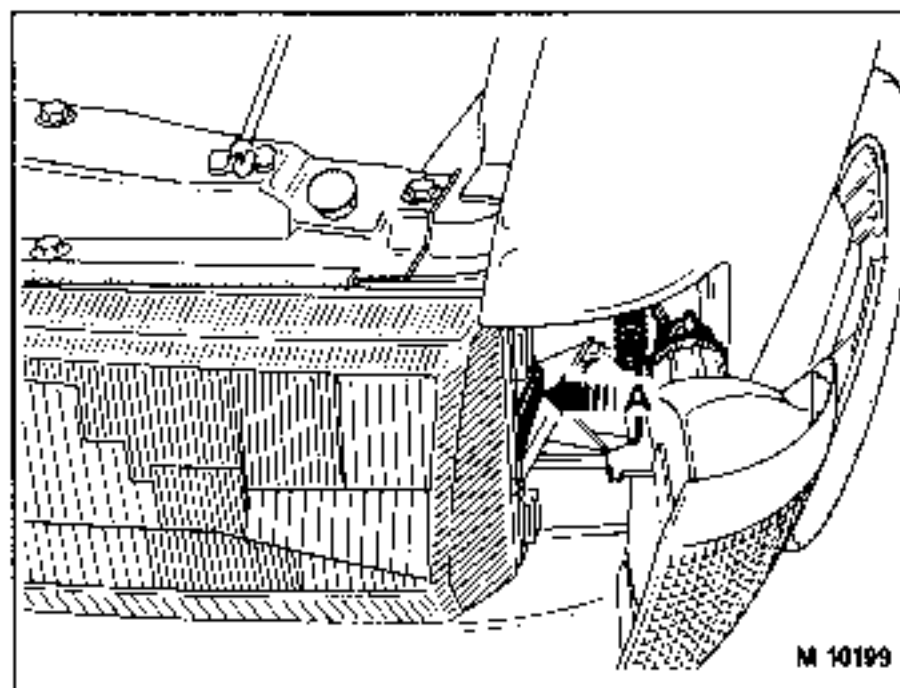
Unhook spring (R).

Turn the bulb-holder 1/8 of a turn to the outside to remove it.



Press on tab (A).

Move the light forwards to free it.



REFITTING

Proceed in the reverse order to removal.

REMOVING - REFITTING - REPLACING A BULB

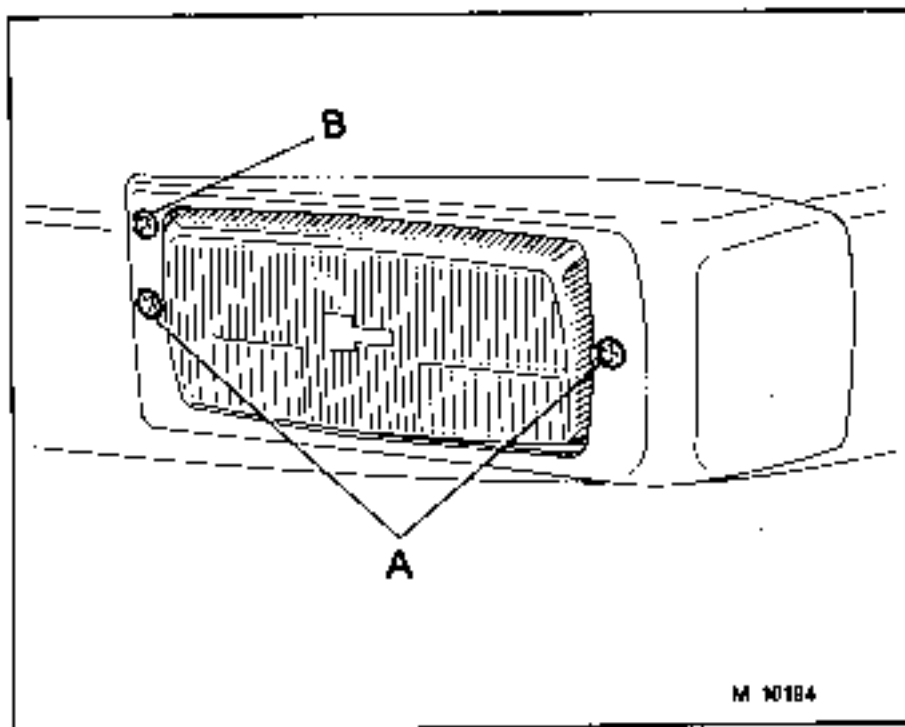
REMOVING

Disconnect the battery.

Remove the two securing screws (A).

Disconnect the connector.

Remove the foglight.



Release:

- the rubber protective cover;
- the clip securing the bulb.

REFITTING

Special points

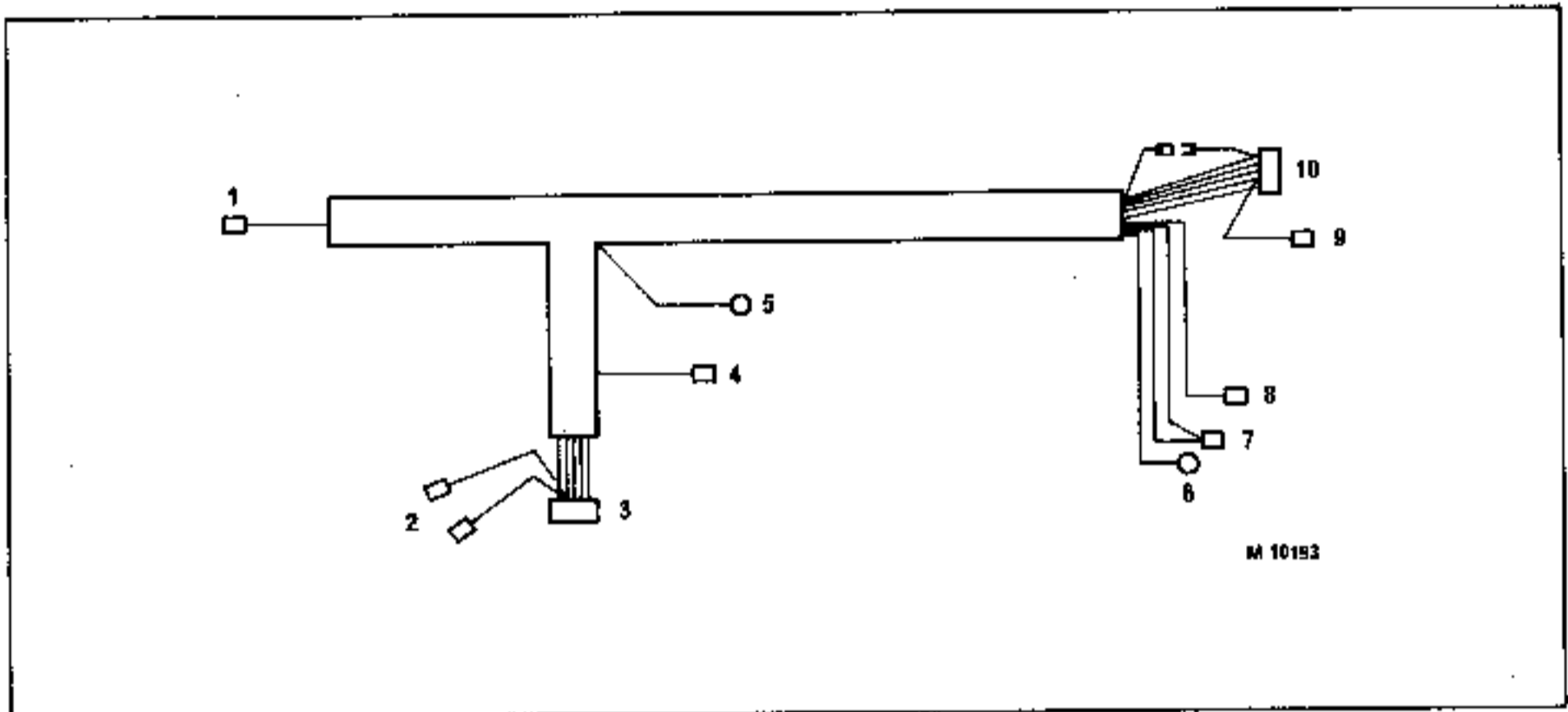
Refit the foglight.

Adjust the foglight by turning screw (B).

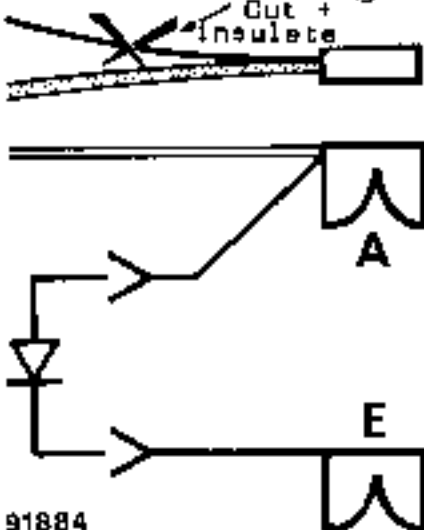
Fitting of front foglight assembly kit up to the end of December 1987.

Kit part number 60 25 070 465 can be fitted to all models provided that the additional harness under the dashboard is modified as follows:

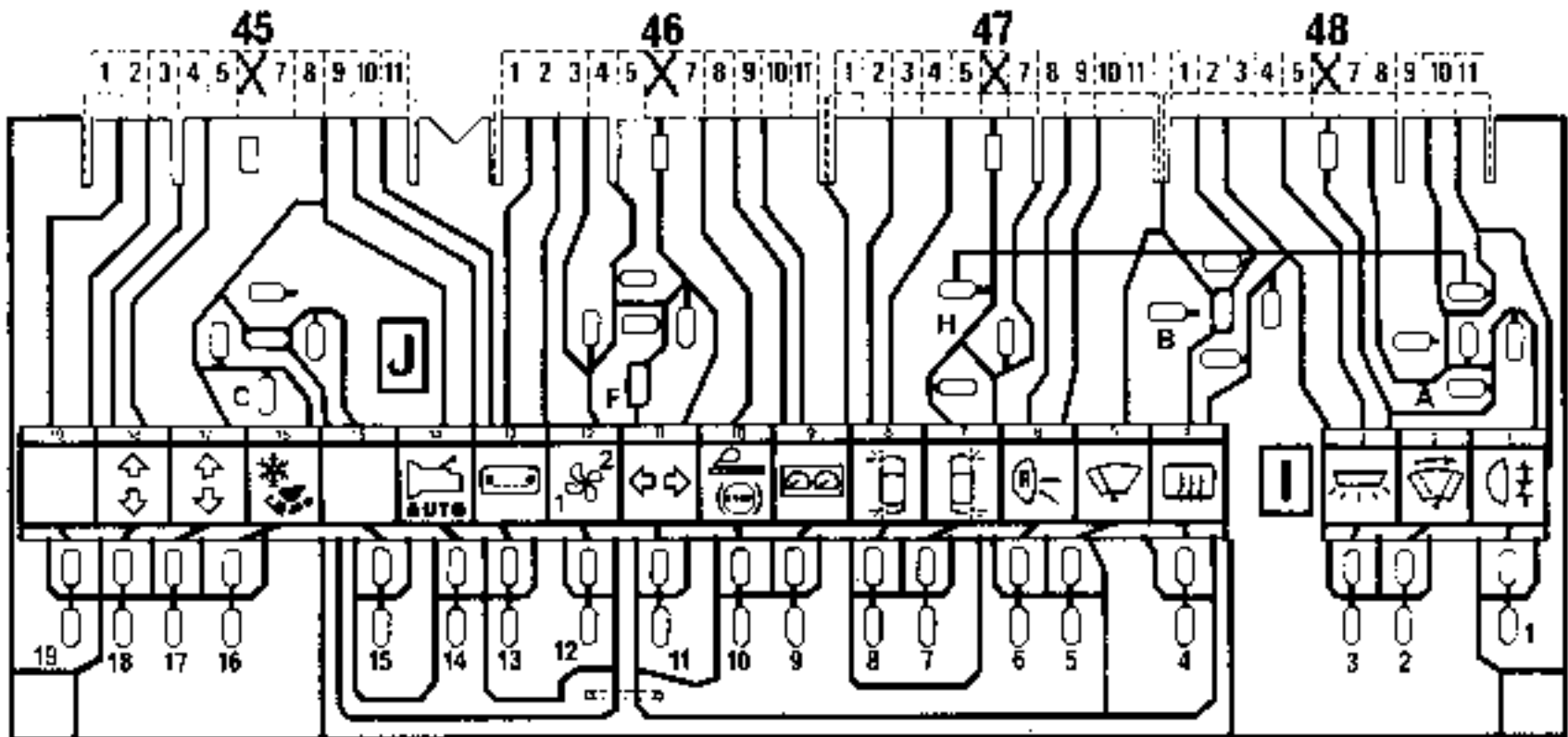
- Adaptor parts required: flag-shaped clip 77 03 097 393 (x 3)
- diode 77 00 614 940 (x 1)



Mark	Assembly on 85 mod.	Assembly on 86 mod.	Assembly on 87 model and 88 up to phase II	Comments
1	Connection to instrument panel loom	Eliminated: insulate the terminal and attach wire to loom.	Same as 86 assembly	Integral function
2-3	Connection to console loom and switch	Same as 85 assembly	Same as 85 assembly	
4	Connection to rear foglight switch	Eliminated: insulate the terminal and attach wire to loom.	Same as 86 assembly	Integral function
5	Earth on chassis	Same as 85 assembly	Same as 85 assembly	
6	Connection on + after ignition on accessories plate.	Same as 85 assembly	Same as 85 assembly	

Mark	Assembly on 85 mod.	Assembly on 86 mod.	Assembly on 87 mod. and 88 up to phase II	Comments
7 blue/ yellow leads	Connection to white connector	<ul style="list-style-type: none"> - Cut terminal flush with wires. - Insulate the blue/yellow wire (0.6 mm²) wire. - Make up a loom comprising: <ul style="list-style-type: none"> A - flag-shaped clip B - 1 wire, 1 mm² 140 mm long C - 1 diode D - 1 wire, 1 mm² 110 mm long  <p style="font-size: small; margin-left: 20px;">Cut + Insulate</p> <p style="font-size: small; margin-left: 20px;">91884</p> <ul style="list-style-type: none"> E - 1 "flag" clip <ul style="list-style-type: none"> - Connector A on terminal 2 of white connector. - Connector E on terminal 7 of yellow connector. - Clip diode onto diode-holder on plate. 	Same as 86 assembly	
8 green/ red leads	Connection on red connector	<ul style="list-style-type: none"> - Cut terminal flush with wire. - Fit a flag-shaped clip instead and place connector at terminal 10 of yellow connector. 	Same as 86 assembly.	

Mark	Assembly on 85 mod.	Assembly on 86 mod.	Assembly on 87 mod. and 88 up to phase II	Comments
9	Not used (to be insulated)	Same as 85 assembly	Same as 85 assembly	
10	Connection to relay	Same as 85 assembly	Same as 85 assembly	
11			Connect a shunt from A to H on accessories plate.	



88975

Remember to fit a 15 amp fuse on terminal 19 of the plate.

As from January 1988 (E1 version)

WIRING HARNESS

All vehicles not equipped with front foglights have the main wiring harness as far as the front righthand side of the engine compartment and the console.

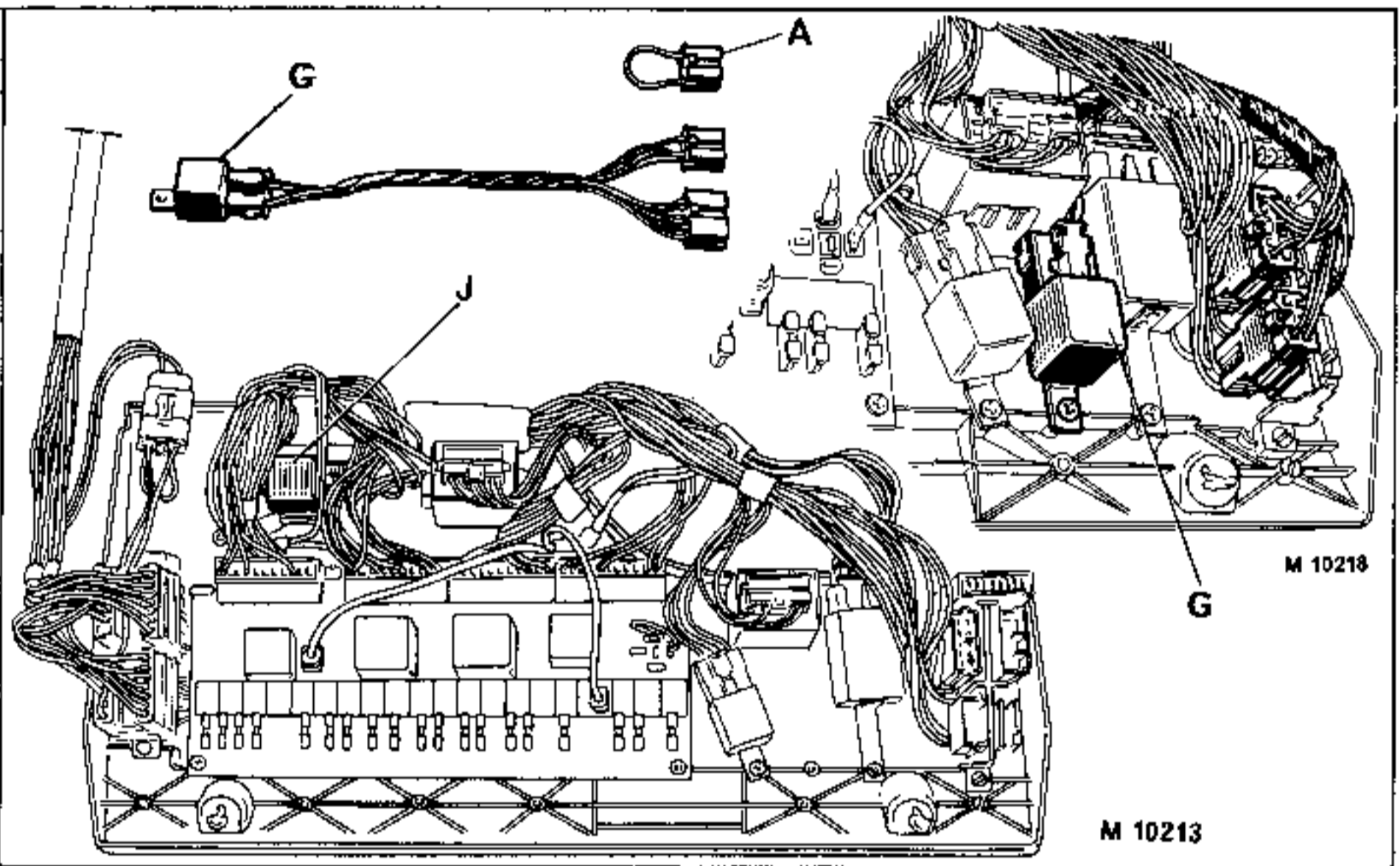
On E1 petrol-engined versions, the harness ends in a black 3-way connector to which the front foglight feed harness is connected.

On all other E1 vehicles the front foglight feed harness is fitted originally at the console end.

On all E1 models, the brown 5-way connector must be connected to the switch which is to be fitted.

On the accessories plate:

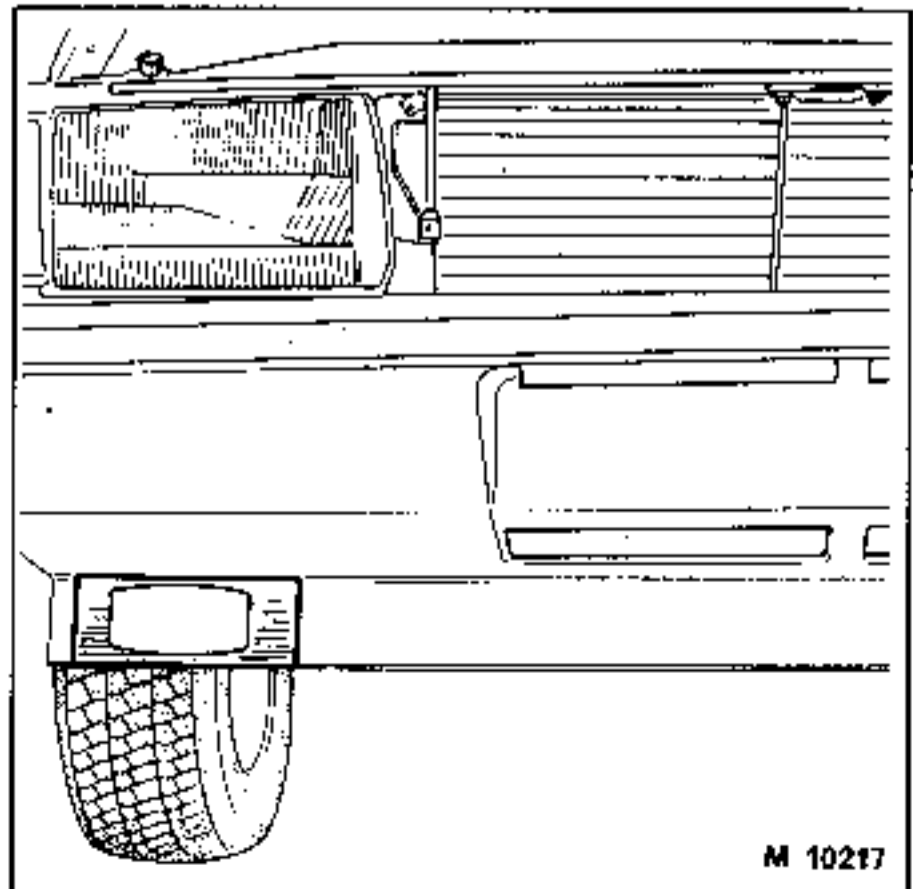
fit relays G and J and the additional wiring harness after removing socket A (see the sequence for all the connections).



FITTING FRONT FOGLIGHTS

Cut out a section from the lower lefthand and righthand sections of the front shield using the template provided.

Kit part number 60 25 071 048 must be used for fitting these foglights.

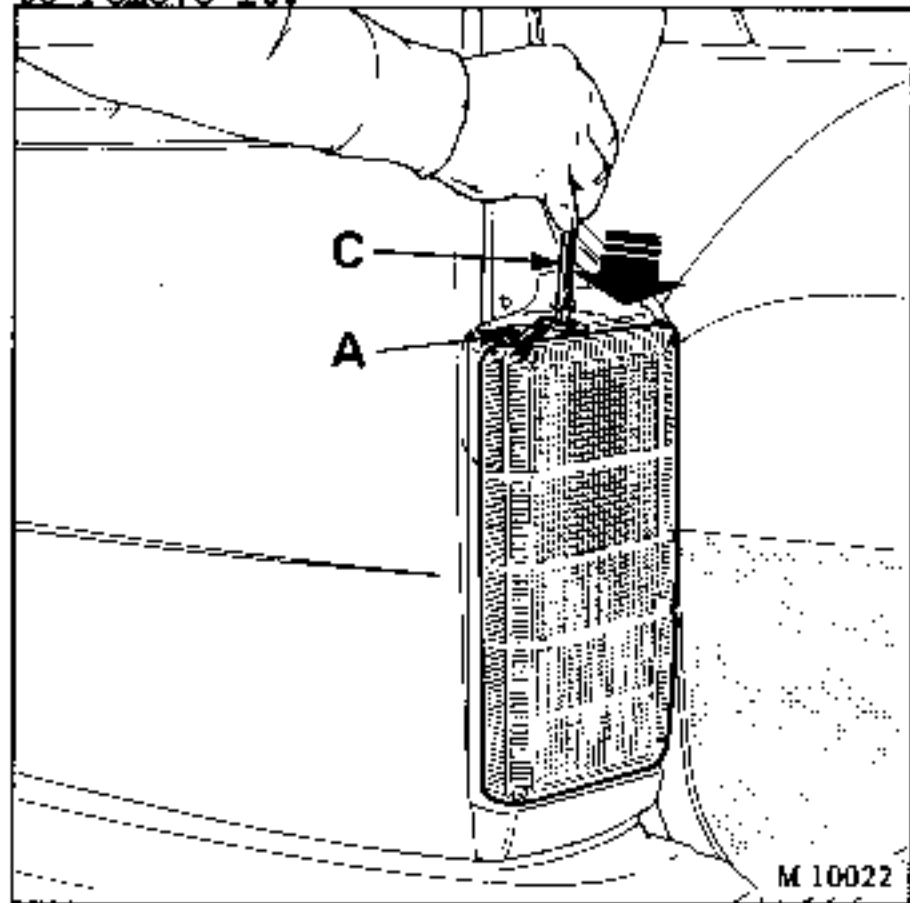


REMOVAL

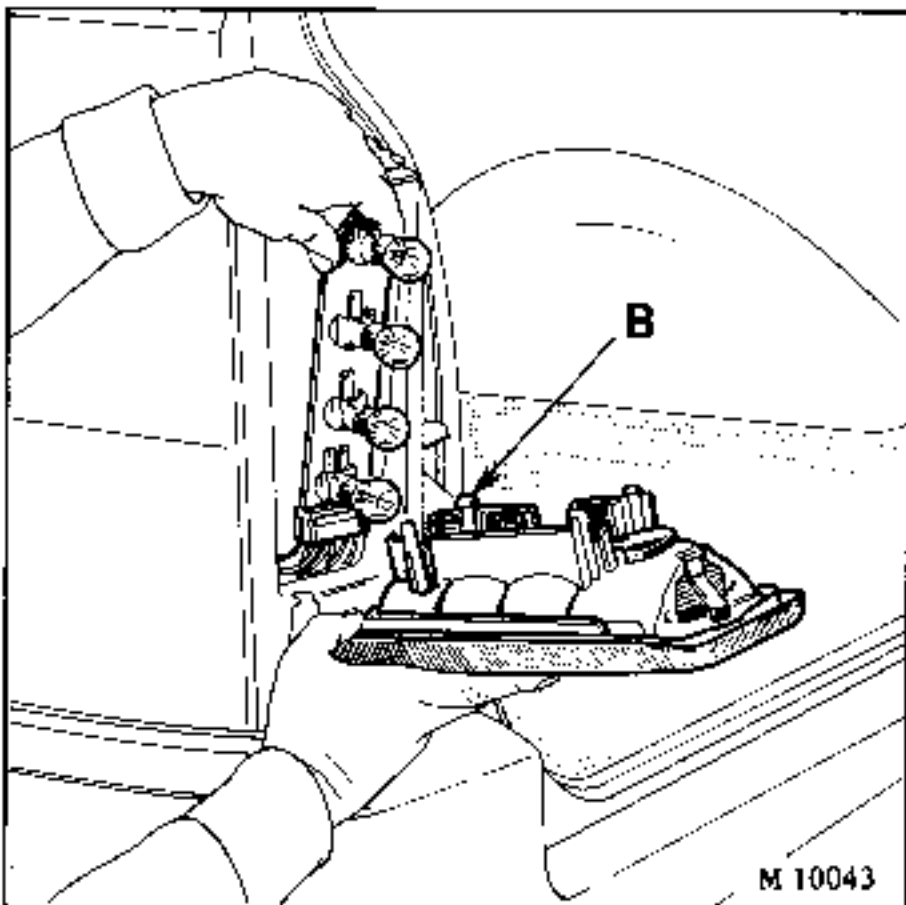
Models up to end of December 1987

Using a screwdriver (C) press on tab (A).

Tilt the light and pull it backwards to remove it.



Remove the bulb-holder plate by moving tabs (B).



REFITTING

Offer up the light to its lower notches.

Guide the loom through the passage in the light casing.

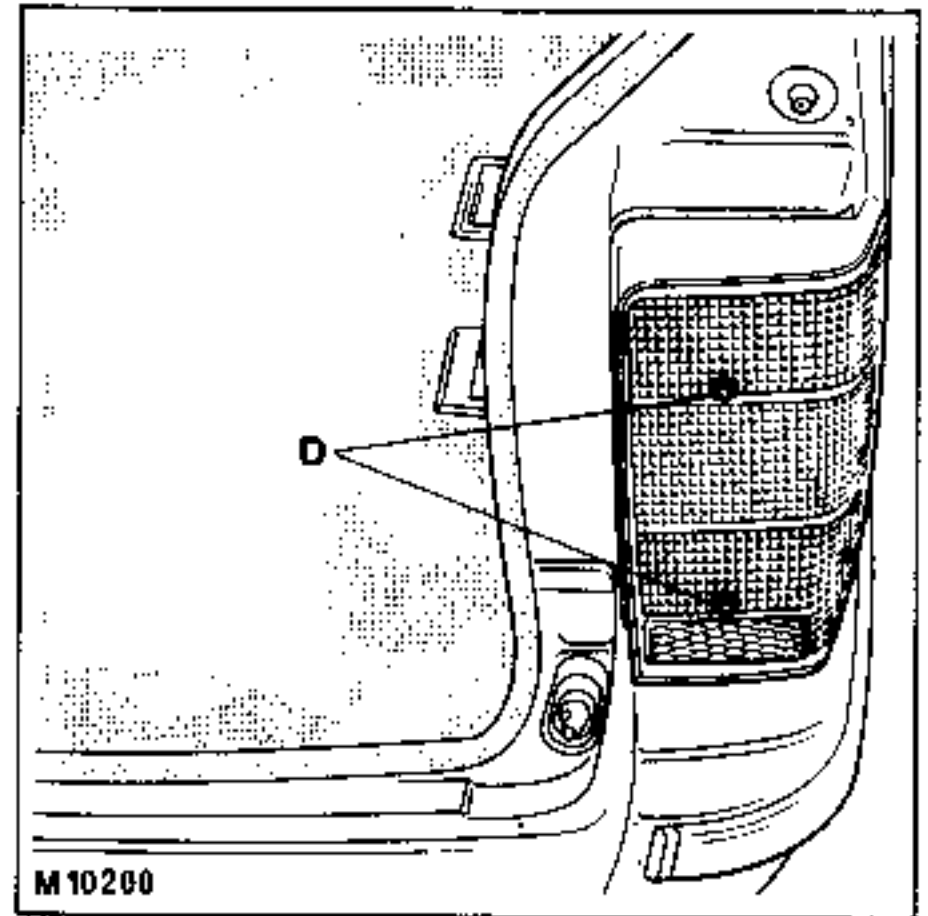
Push on the upper part of the light to clip it into place.

Note: Do not press too hard otherwise the light may break.

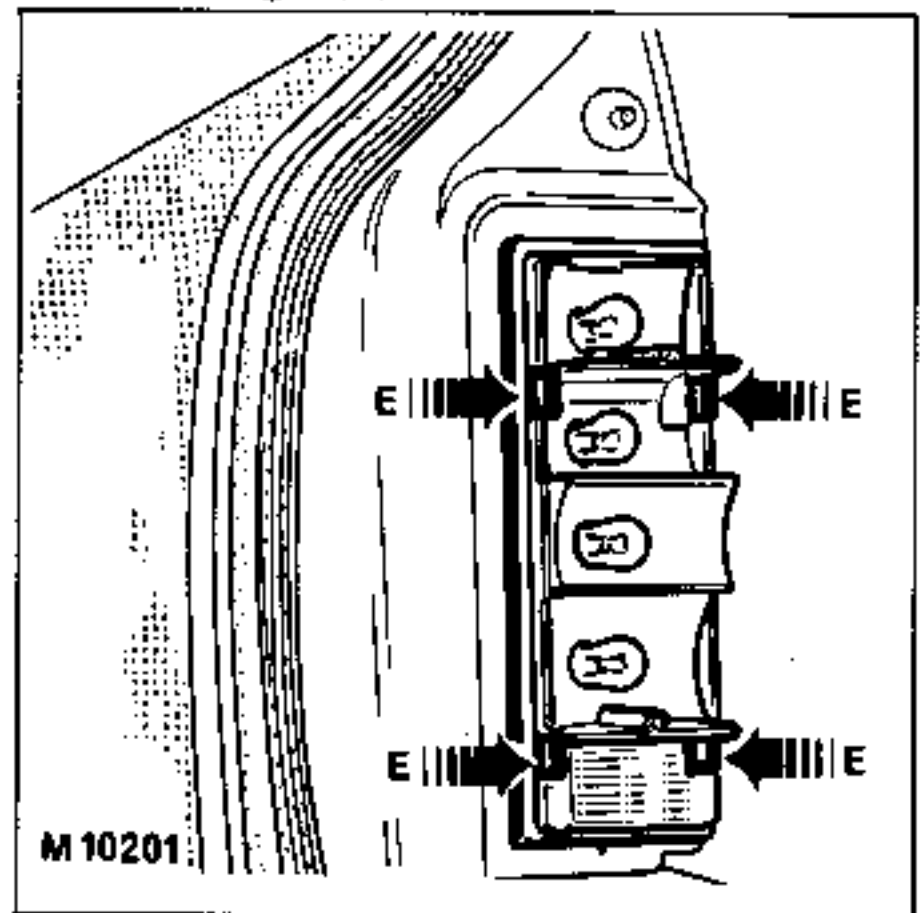
REMOVAL

Models as from January 1988

Unscrew the two screws (D).



Remove the mounting plate by pinching the four lugs (E).



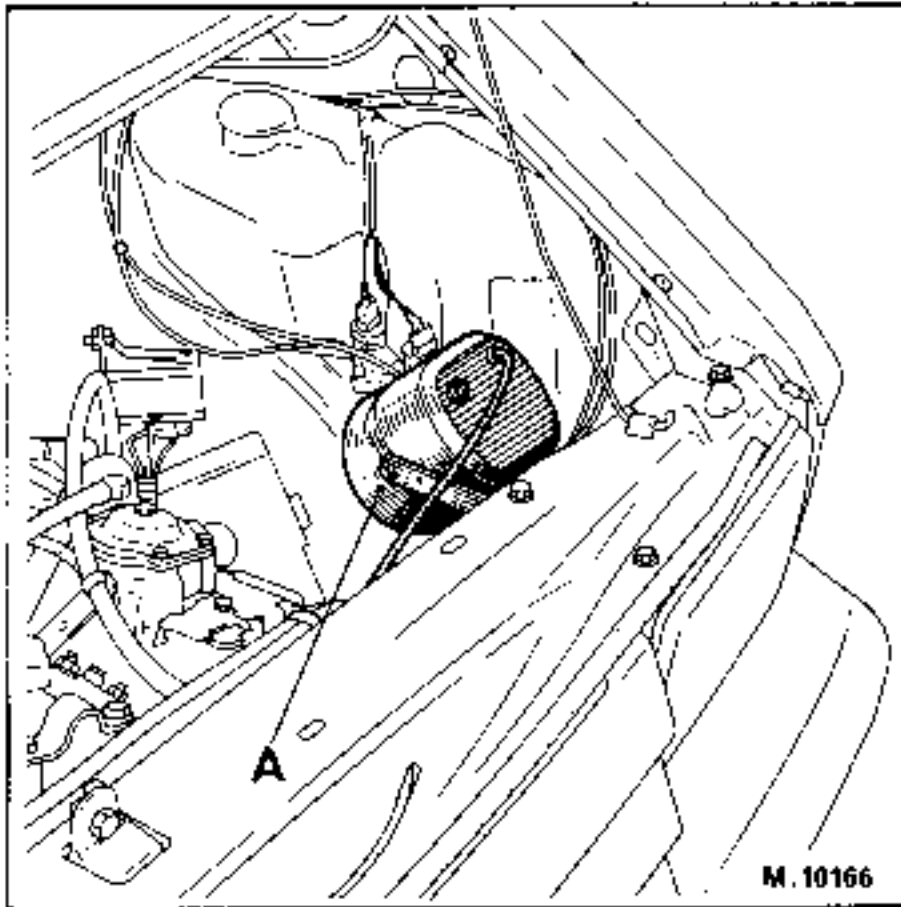
REFITTING

Press the light at each of its mounting lugs to clip it into place.

This section deals with the special features of ESPACE vehicles fitted with an anti-theft alarm (as a factory-fitted option).

For all additional information concerning the electrical connections, please consult technical note 8031 - 1987 Electrical system.

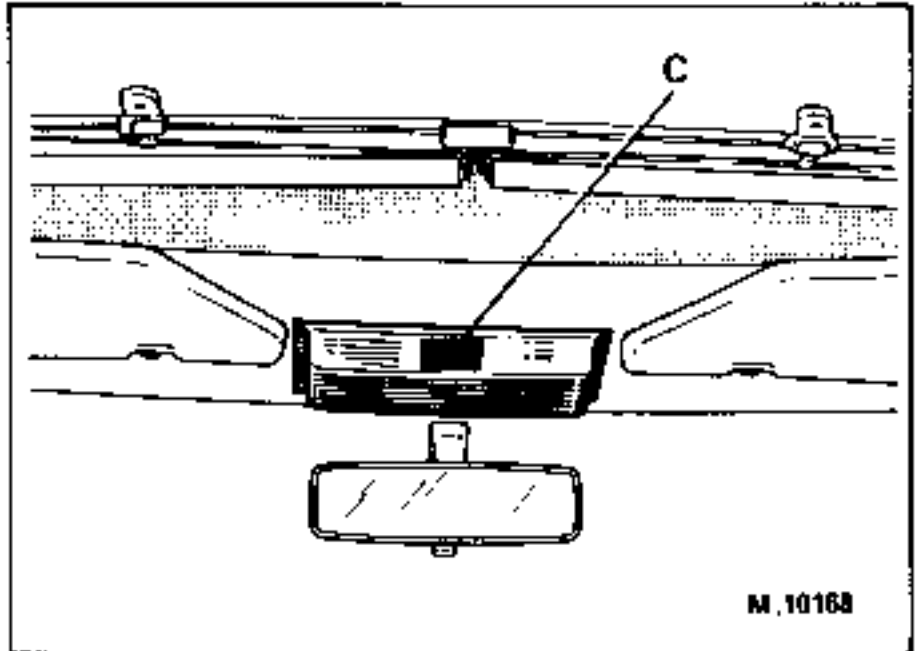
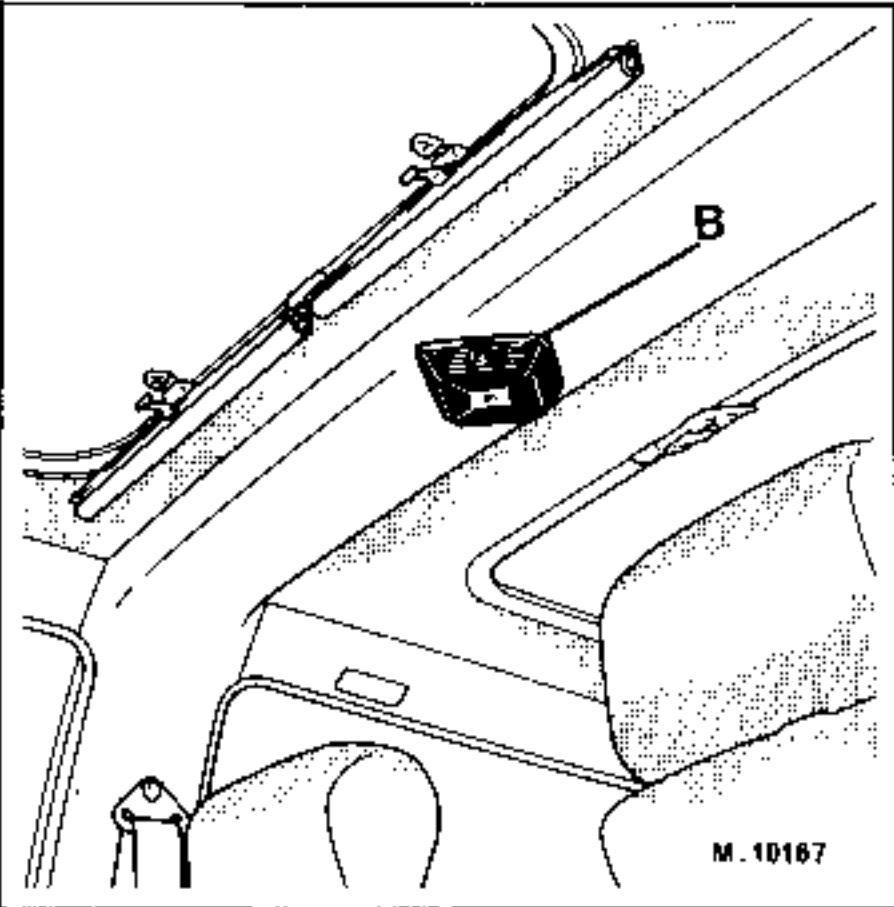
This system comprises:



1 - An automatically fed siren (A) in the engine compartment.

The siren is switched on or off by means of a key-operated switch on the siren.

- . RED MARK : system off
- . BLUE MARK : System on (set).



- 2 - A volumetric sensing module (B) in the centre of the roof inside the vehicle
- 3 - An infra-red remote control unit which locks the doors and sets and stops the system.

OPERATION

When the alarm is set, its operation may be triggered by:

- a door being opened, **EVEN** with the vehicles's keys;
- the bonnet being opened;
- a window being broken;
- a person or animal moving about inside the vehicle.

The only function of the alarm is to activate the siren.

USE

- Check that the siren is set (key-operated switch on blue mark).
- Close all the opening elements (windows, sunroof*, opening quarter windows*).

* If this option is fitted.

- Pressing the infra-red remote control unit once (while directing it towards cell (C)) locks the doors and ensures that the vehicle is being monitored by the alarm.
- Pressing the remote control unit once more unlocks the doors and cancels the alarm.
- To cancel the effects of the alarm completely, move the key-operated switch on the siren so that it is opposite the red mark.

IMPORTANT

When the siren is switched on, the system is set and stopped **ONLY** by the infra-red remote control unit.

When the alarm is set by means of the infra-red remote control unit, volumetric sensing by module (B) in the ceiling only starts **30 seconds** after the doors have been locked.

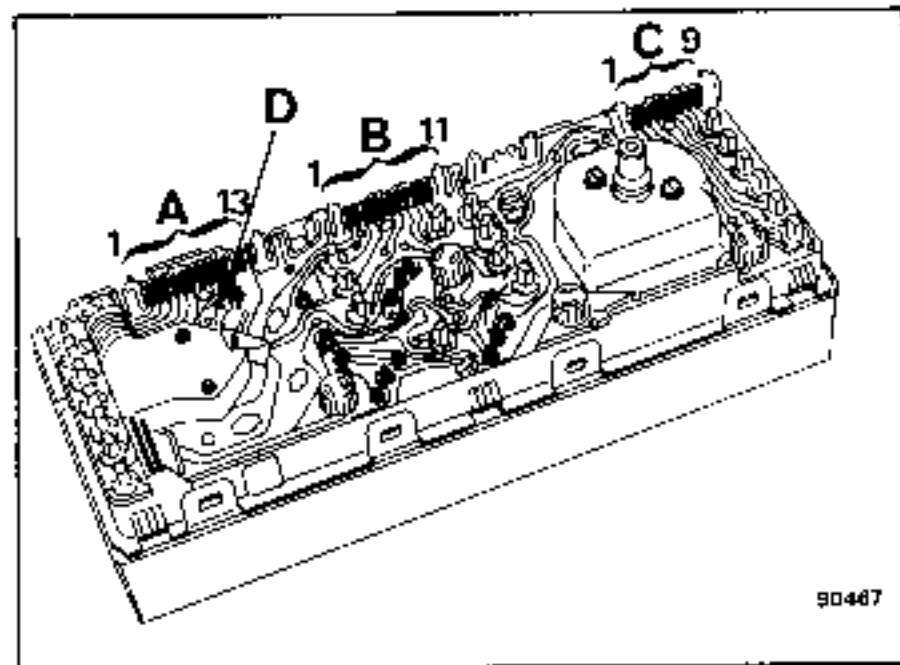
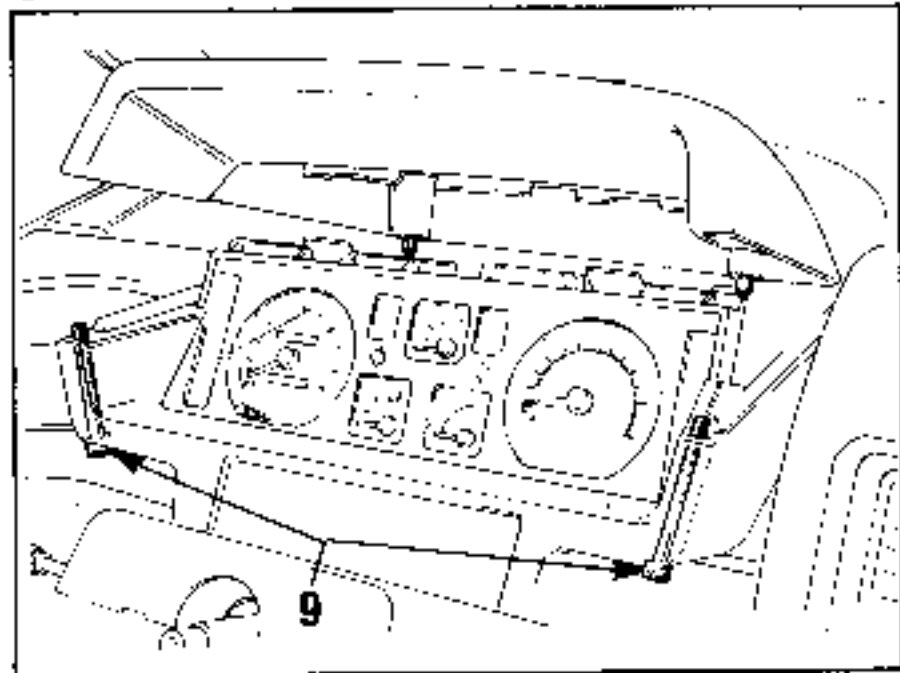
REMOVAL

Disconnect the battery.

Remove the two screws (9).

Raise the console visor and remove it.

Take out the instrument panel after disconnecting the connectors and speedometer cable.



REFITTING

Proceed in the reverse order to removal.

CONNECTIONS

Connector A

- 1 "Hazard" warning light tell-tale
- 2 Not used
- 3 Not used
- 4 Not used
- 5 Pre-heating warning light*
- 6 Injection defect warning light*
- 7 Not used
- 8 Rev. counter
- 9 Oil pressure switch*
- 10 Not used
- 11 Not used
- 12 Not used
- 13 Fuel level gauge

Connector B

- 1 Fuel level warning light
- 2 Oil pressure warning light
- 3 + after ignition
- 4 Brake pad wear and nivocode warning light
- 5 Lefthand direction indicator tell-tale
- 6 Direction indicator tell-tale feed
- 7 Righthand direction indicator tell-tale
- 8 Coolant temperature warning light*
- 9 Handbrake and drop in pressure warning light
- 10 Not used
- 11 Charging circuit warning light

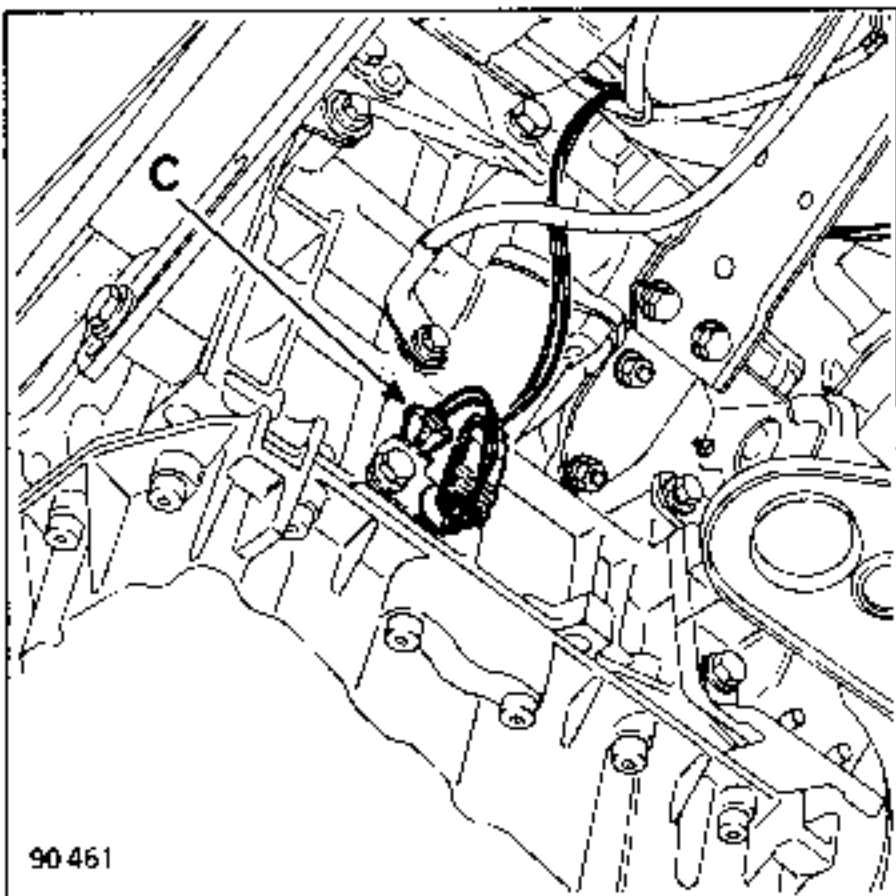
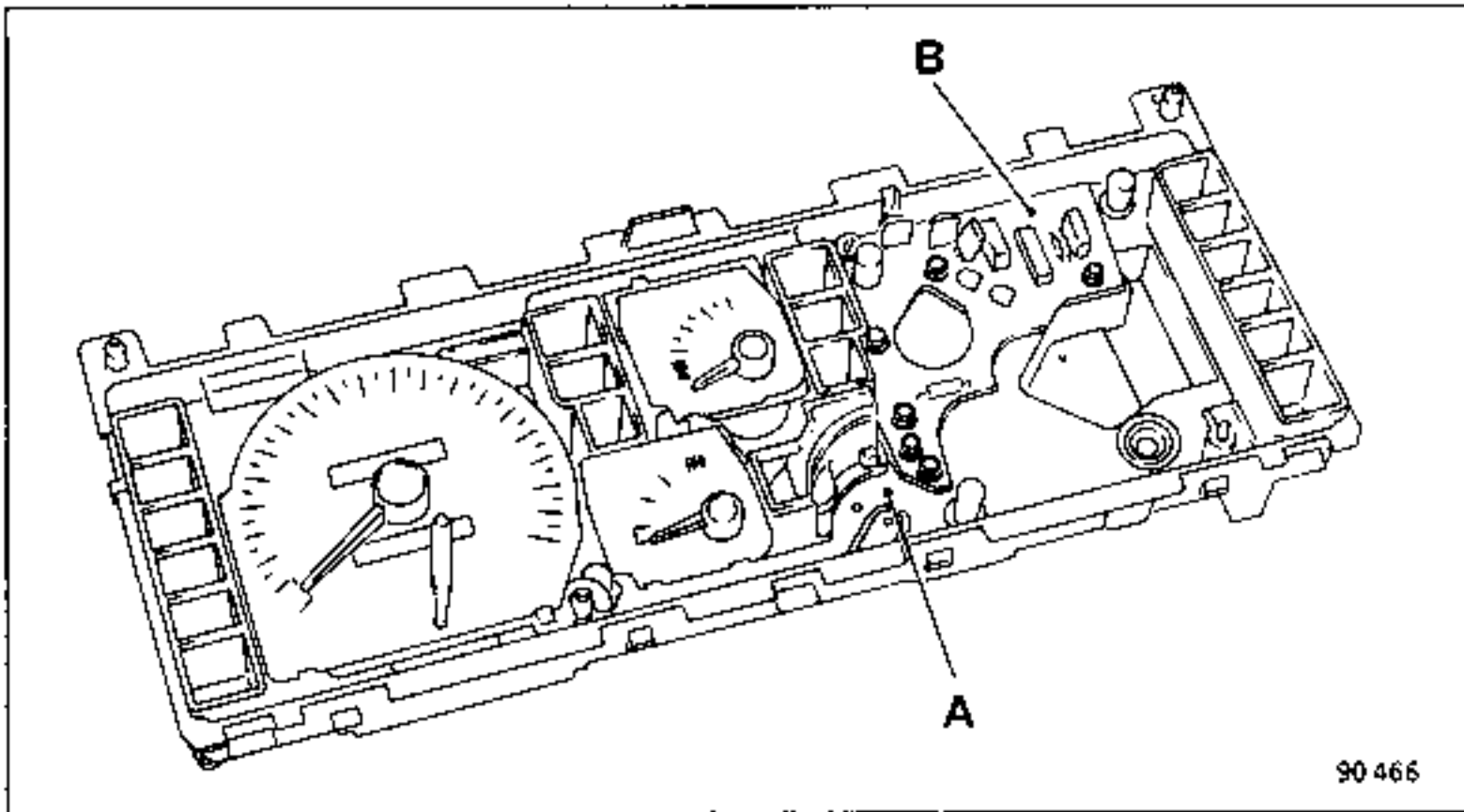
Connector C

- 1 Coolant temperature gauge
- 2 Instrument panel lighting
- 3 Main beam headlight tell-tale
- 4 Dipped beam headlight tell-tale
- 5 Side and rear lights tell-tale
- 6 Front foglight warning light
- 7 Rear foglight warning light
- 8 Heated rear screen warning light
- 9 Instrument panel earth

Connector D

- Oil level sensor
- Oil level sensor

* depending on version



- A Oil level receiver
- B Computer
- C Oil level sensor

Operation

The oil level sensor consists of a high-resistance lead. The lead, through which a current passes, does not have the same heat conductivity when it is immersed in a liquid or is in the air.

When the ignition is switched on, the oil pressure warning light illuminates; a computer (in the instrument panel) sends a current to the terminals of the oil level sensor.

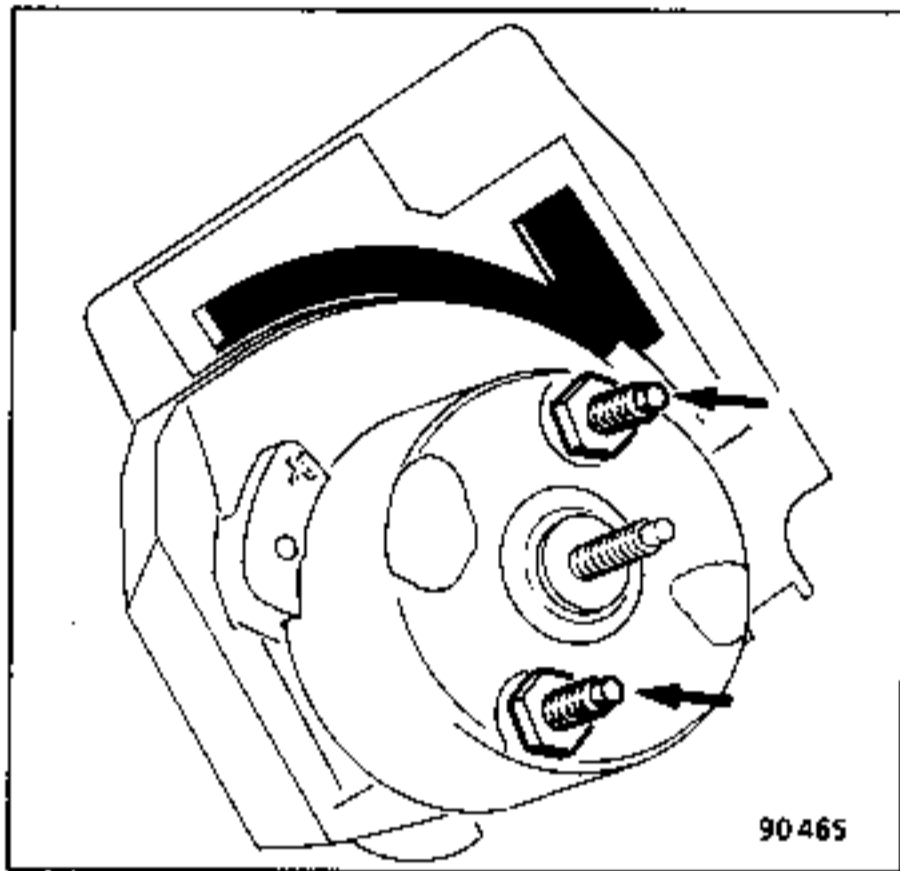
After a specified time, a difference in voltage is obtained at the sensor terminals depending on the extent to which the lead is immersed. This voltage difference is recorded by the computer which then transmits this data to the oil level gauge.

When the engine is running and the oil pressure is adequate the pressure switch cuts off the warning light circuit. The effect of this is also to block the computer and thus there is no oil level indication.

CHECKING

OIL LEVEL RECEIVER

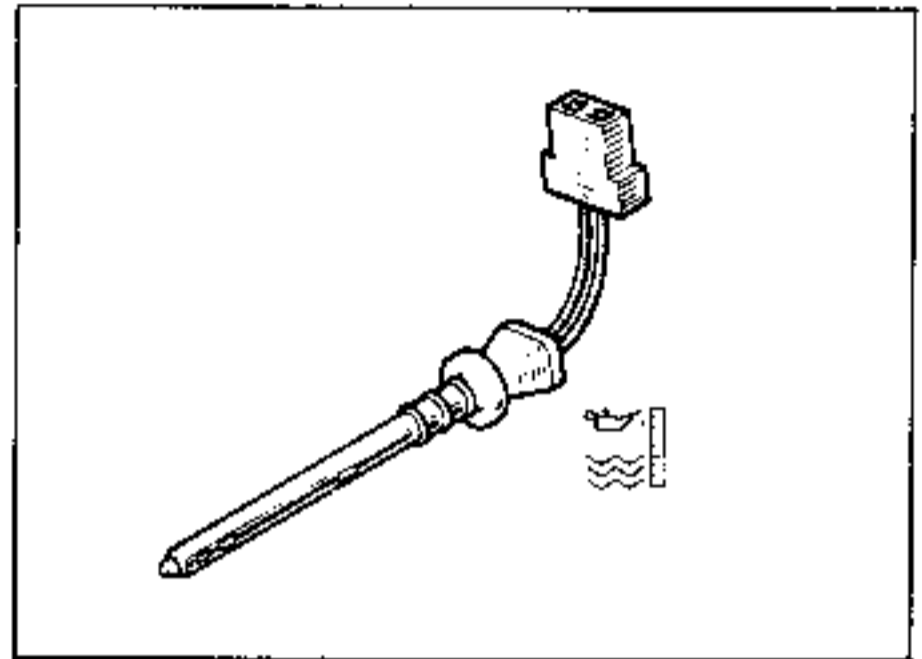
- Remove the receiver before performing the check.
- Connect an ohmmeter to the two terminals; the needle should move.



OIL LEVEL SENSOR

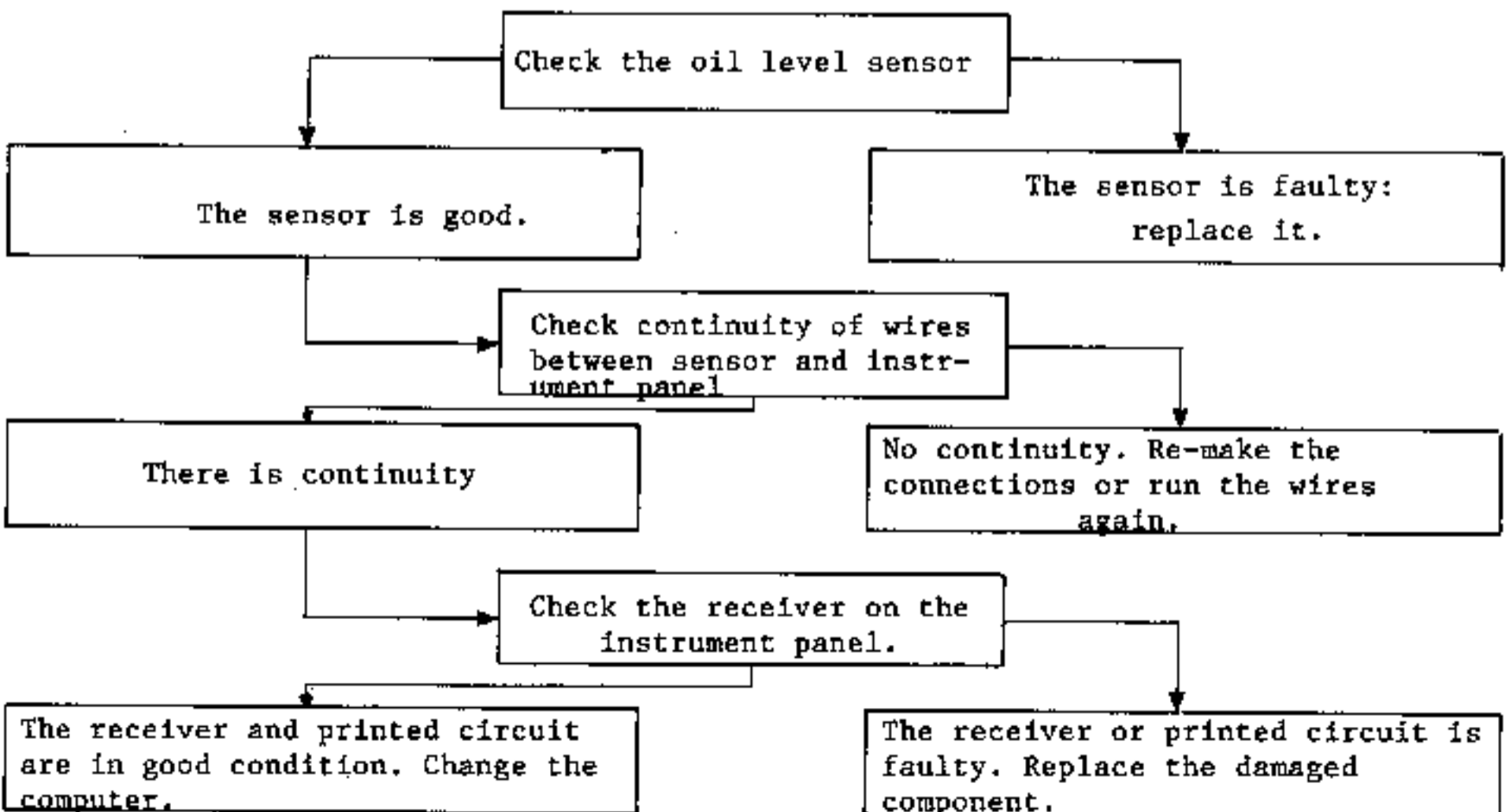
Connect an ohmmeter to the two terminals of the oil level sensor.

Correct value: 5 to 30 ohms.



FAULT-FINDING

The oil level sensor does not operate when the ignition is switched on (the oil pressure light illuminates).



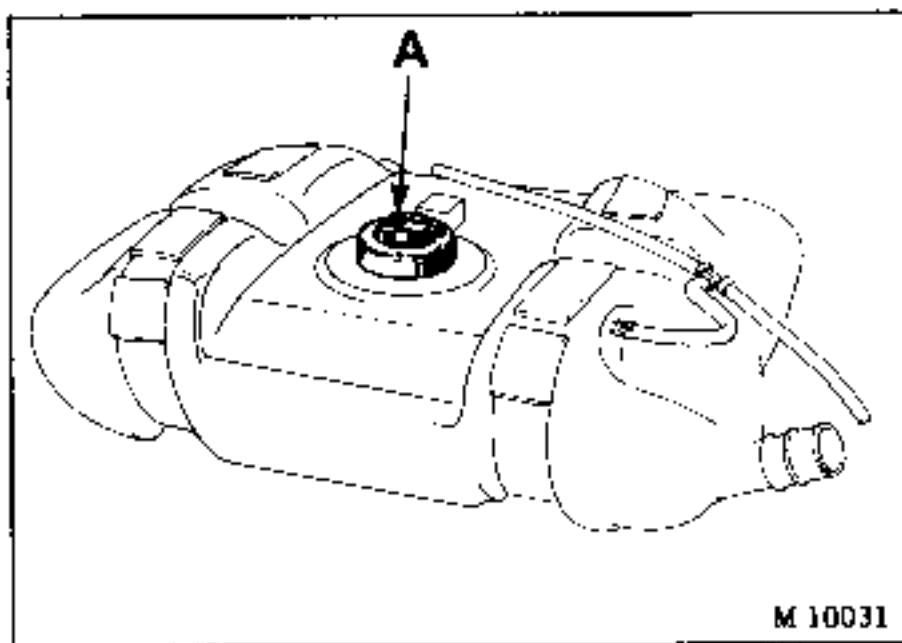
REMOVING

The sender unit can only be reached when the fuel tank has been removed.

Disconnect the battery.

Remove the fuel tank (see appropriate section).

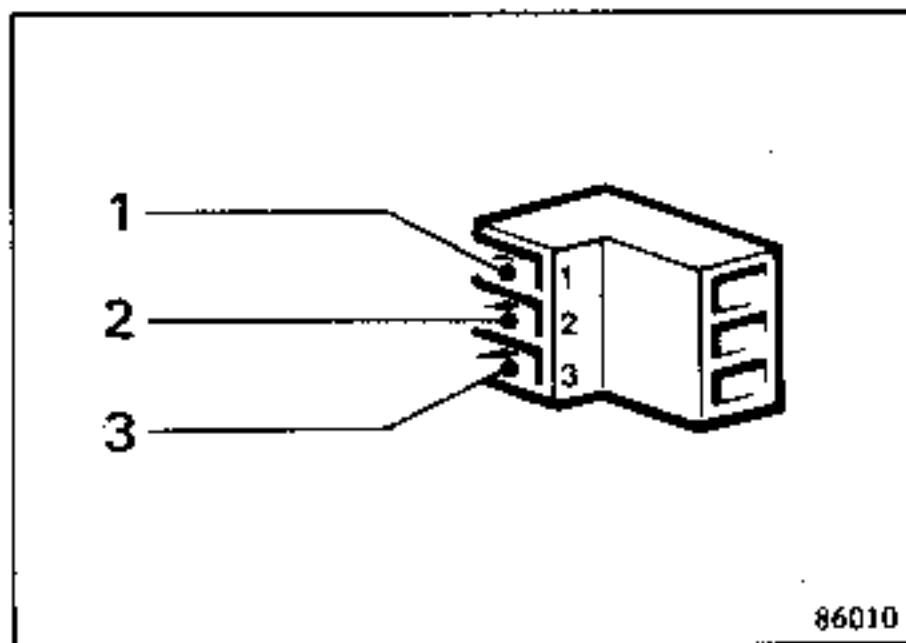
Unscrew nut (A).



Take out the fuel level sensor.

CHECKING

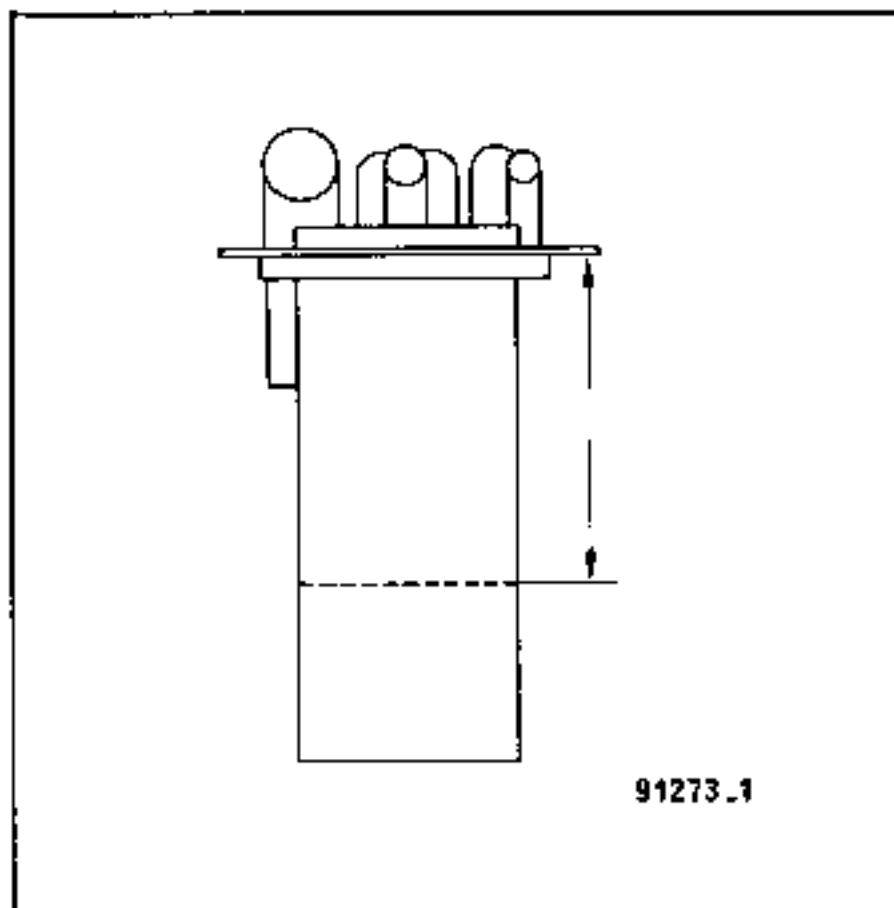
Connect an ohmmeter between feed terminal (3) and earth terminal (1).
Mark (2) is the fuel level.



Move the float slide and read off the corresponding resistance.

Up to end of June 1986		As from July 1986	
MONTEUX sender unit		JAEGER sender unit	
Height H in mm	Value of R in ohms	Height H in mm	Value of R in ohms
29	7 ± 7	29	7
72,5 ± 1	64	56	41 ± 4
105,5 ± 1	114 ± 15	92	92 ± 9
138 ± 1	164	125	142 ± 14
155 ± 1	280 ± 20	155	280 ± 20
180 ± 1	> 280	160	280

These values are given by way of example. Make sure that the resistance varies when the float is moved.



The level is measured between the lower part of the section of the sender unit which is in contact with the fuel tank and the position of the float (floating level ≈ 1/2 float).

LIGHTING SWITCH - DIRECTION INDICATOR SWITCH or WINDSCREEN WIPER SWITCH

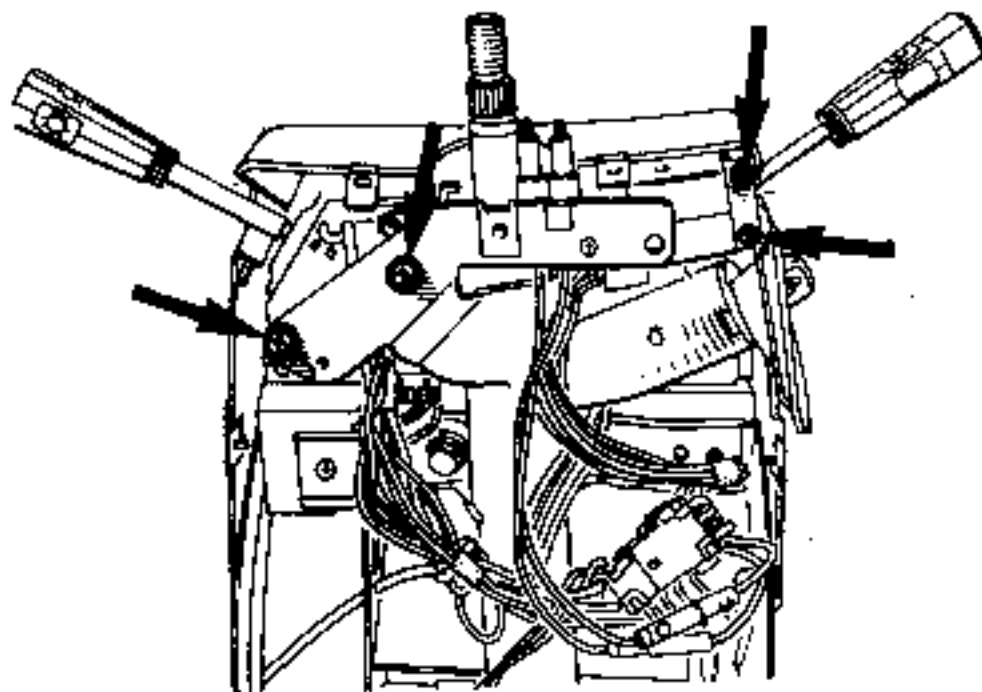
REMOVAL

Disconnect the battery.

Remove the two half-casings from around the steering wheel.

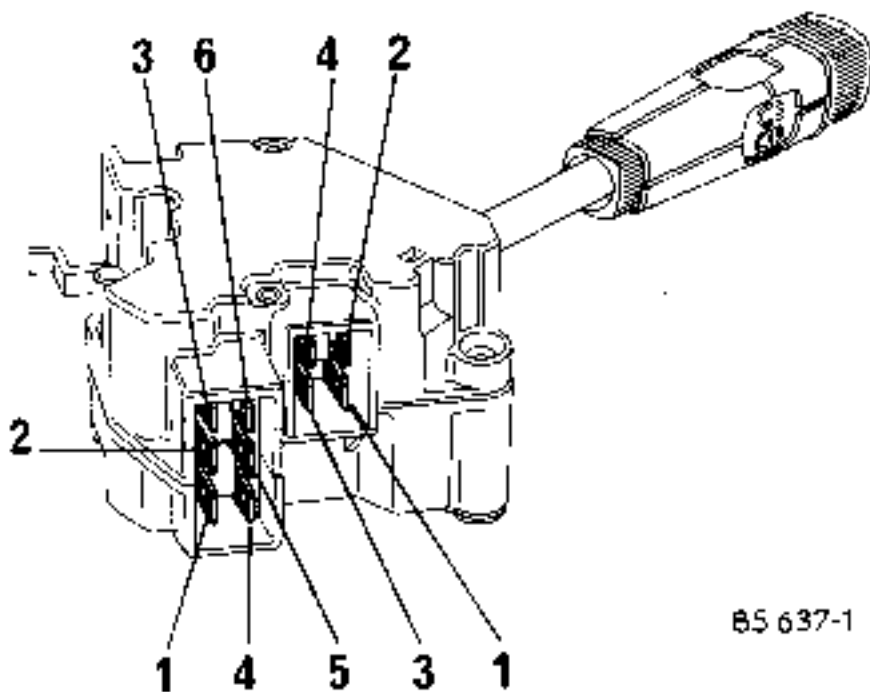
Disconnect the connectors.

Remove the two screws from the switch to be removed.

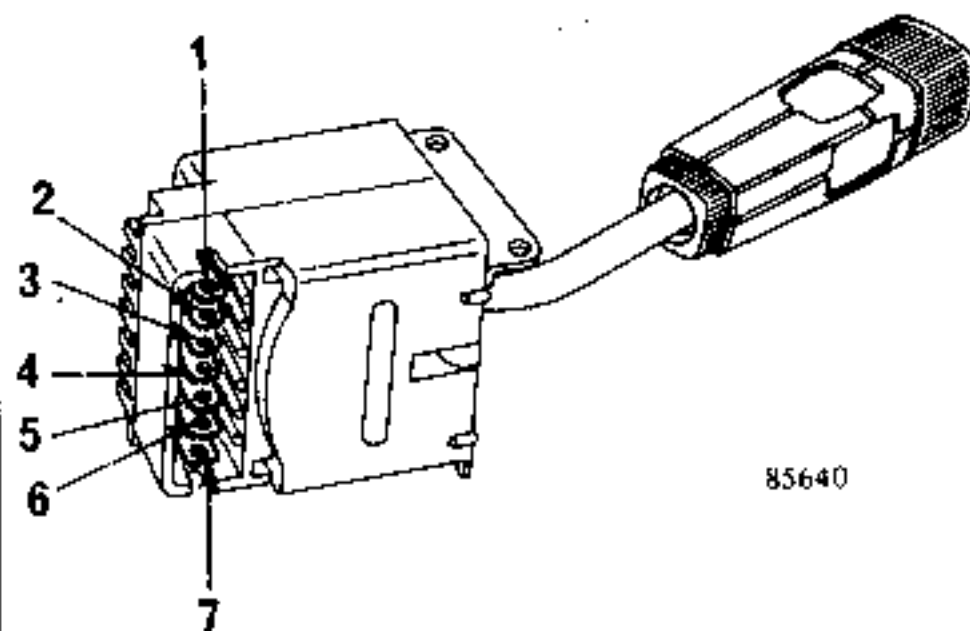


85668

Connections



85 637-1



85640

Lighting connector

- 1 Main beam headlights
- 2 Dipped beam headlights
- 3 Permanent + feed
- 4 Side and rear lights

Direction indicator - horn connector

- 1 Horn
- 2 Rear foglight outlet
- 3 + before ignition
- 4 Righthand direction indicator
- 5 Flasher unit
- 6 Lefthand direction indicator

Windscreen wiper connector

- 1 Timer relay +
- 2 Shunted with 5
- 3 Timer +
- 4 Normal speed
- 5 Windscreen wiper assembly +
- 6 Fast speed
- 7 Timer input

REMOVAL

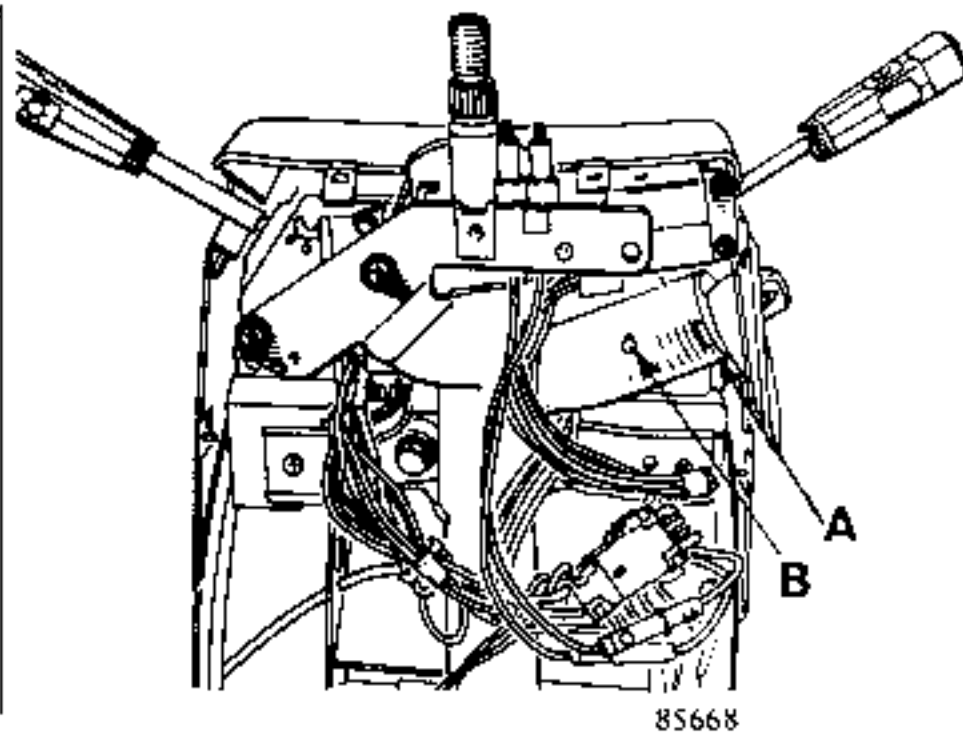
Disconnect the battery.

Remove the two half-casings from around the steering wheel.

Disconnect the switch connector.

Turn the key to the "garage" position and remove the key.

Unscrew mounting screw (A), press on retaining notch (B) using an instrument with a small point and press behind the switch to remove it.

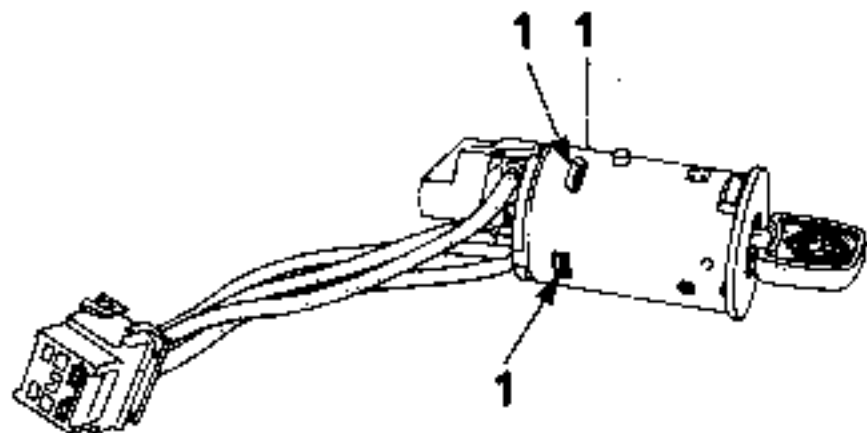
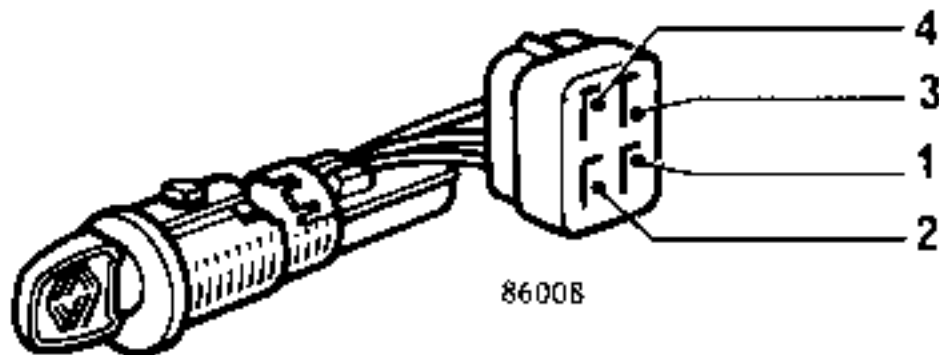


Replacing the internal switch

Remove the switch and turn the key to the "STOP" position.

Remove the key and take out the locking bolt.

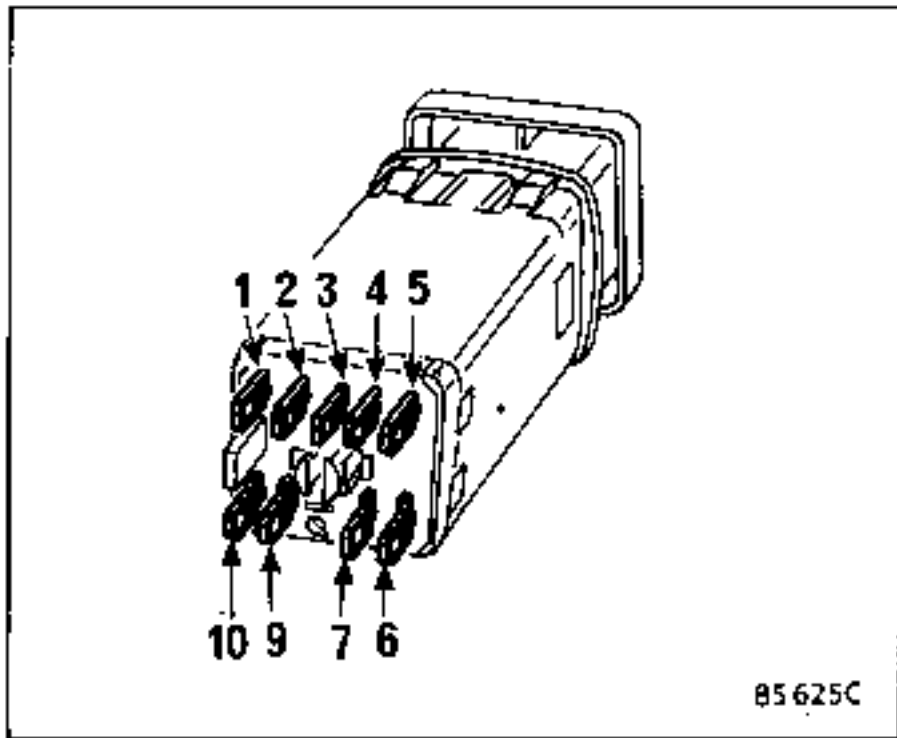
Remove the mounting screws from the rear lug.



- 1 - Accessories
- 2 - + after ignition
- 3 - + before ignition
- 4 - Starter

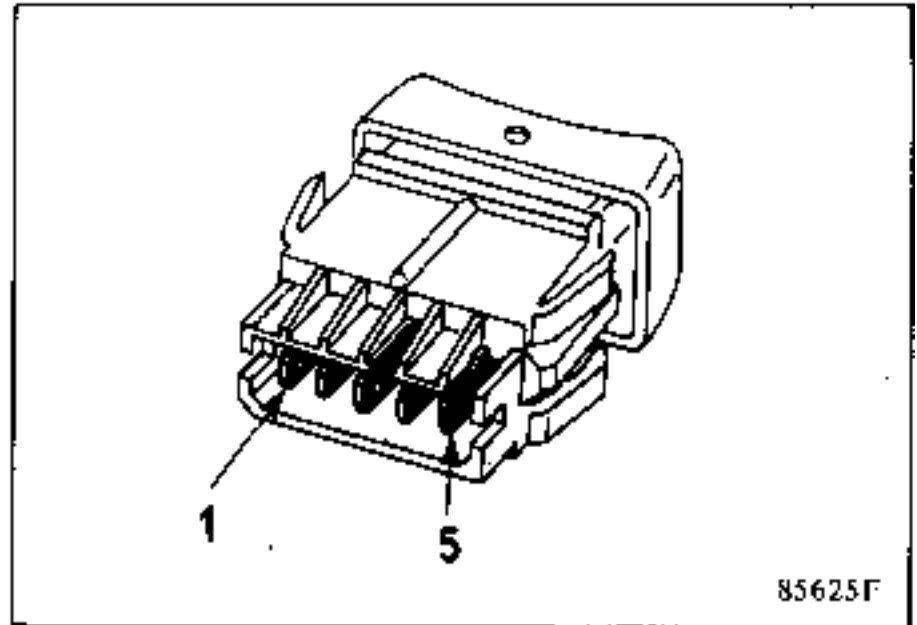
Press on the three notches (1) to remove the switch (SEIMA).

"HAZARD" WARNING LIGHTS



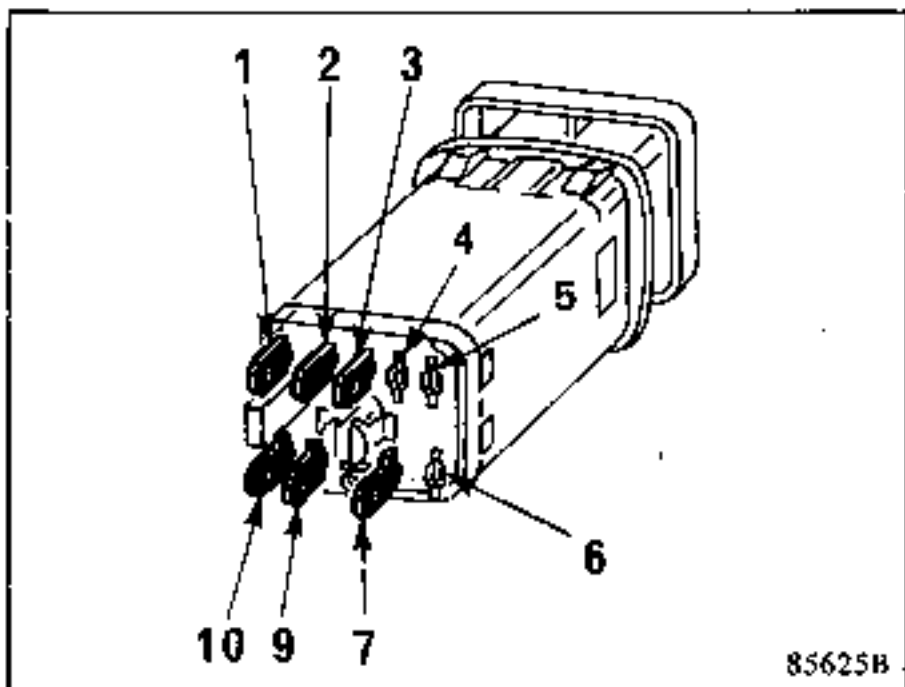
- 1 Righthand direction indicator
- 2 Lefthand direction indicator
- 3 Lighting
- 4 + before ignition
- 5 + after ingiiton
- 6 Flasher unit + (fuse)
- 7 Earth
- 9 Direction indicator switch control
- 10 Warning light

FRONT FOGLIGHTS



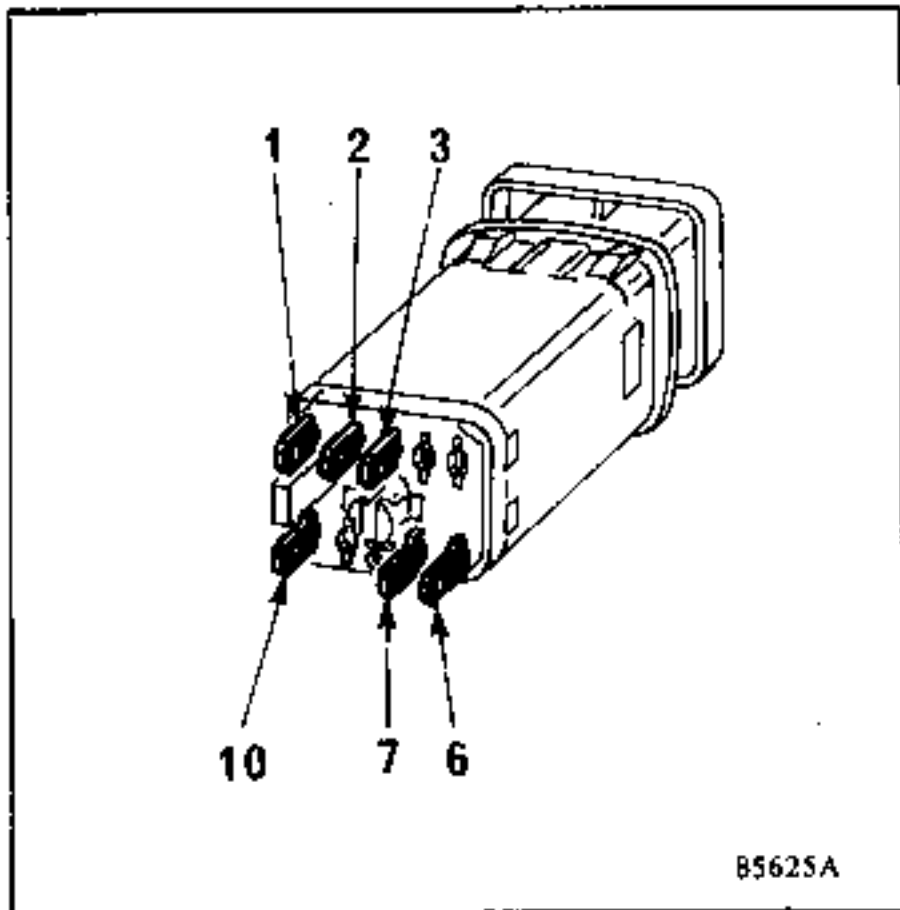
- 1 Rear foglight feed+
- 2 Feed +
- 3 Relay feed
- 4 Lighting
- 5 Earth

REAR FOGLIGHT



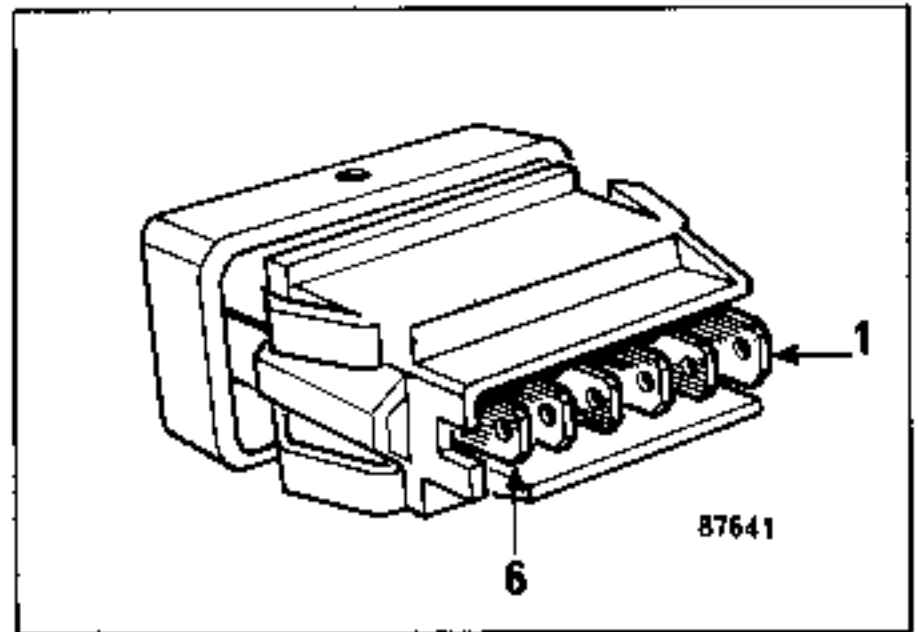
- 1 Feed +
- 2 Rear foglight warning light
- 3 Earth
- 4 Not used
- 5 Not used
- 6 Not used
- 7 Bulb feed
- 9 Not used
- 10 Front foglight option connection

HEATED REAR SCREEN SWITCH



- 1 - + after ignition
- 2 - Relay control
- 3 - Earth
- 6 - Not used
- 7 - Lighting +
- 10 - Warning light

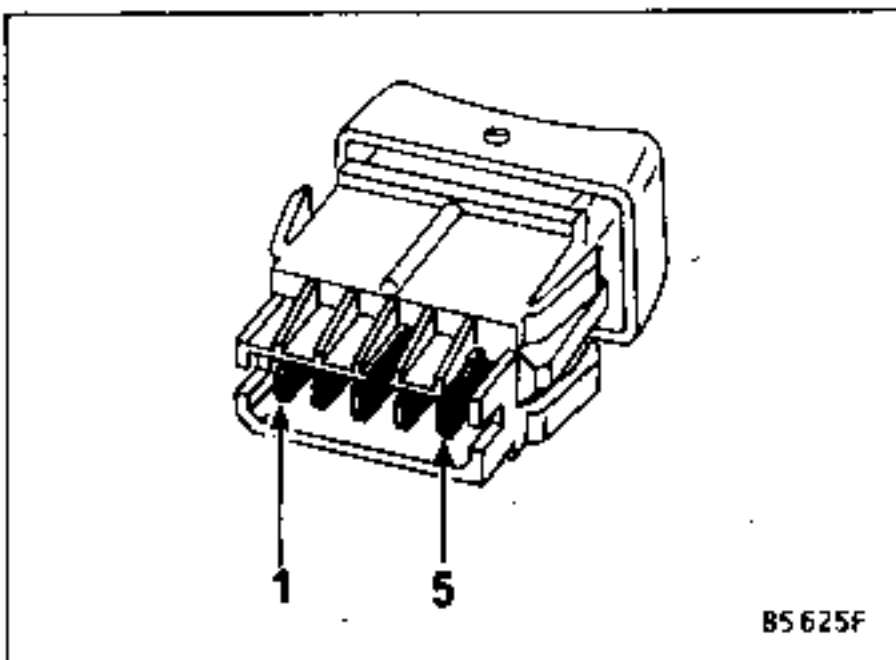
SWITCH ON PASSENGER'S SIDE



Connector

- 1 Lighting
- 2 Motor
- 3 Driver's side switch
- 4 Earth
- 5 Driver's side switch
- 6 Motor

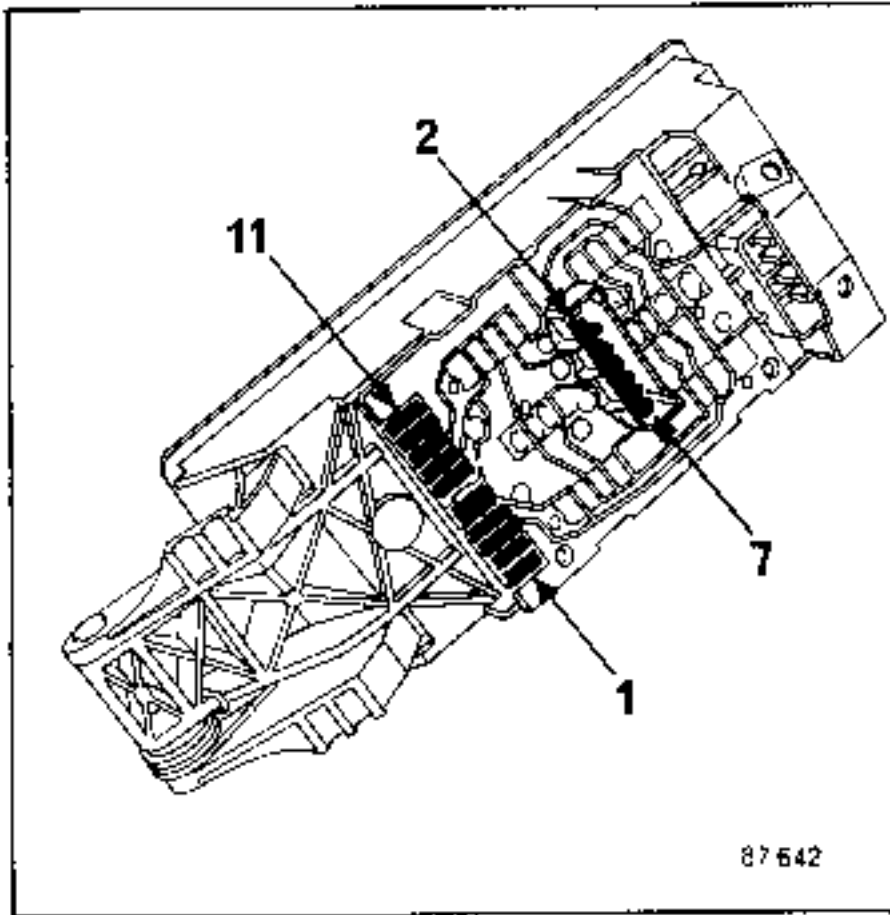
SWITCH ON DRIVER'S SIDE



Connector

- 1 Motor
- 2 + after ignition
- 3 Earth
- 4 Lighting
- 5 Motor

ARMREST PLATE CONNECTION



11-way connector

- 1 Normal descent for window on driver's side
- 2 To rear switch on driver's side
- 3 Normal ascent for window on driver's side
- 4 To rear switch on driver's side
- 5 Window down by one-pressure switch on driver's side
- 6 Safety notch
- 7 Lighting
- 8 To rear switch on passenger side
- 9 To rear switch on passenger side
- 10 To switch on passenger side
- 11 Window up by one-pressure switch on driver's side

7-way connector

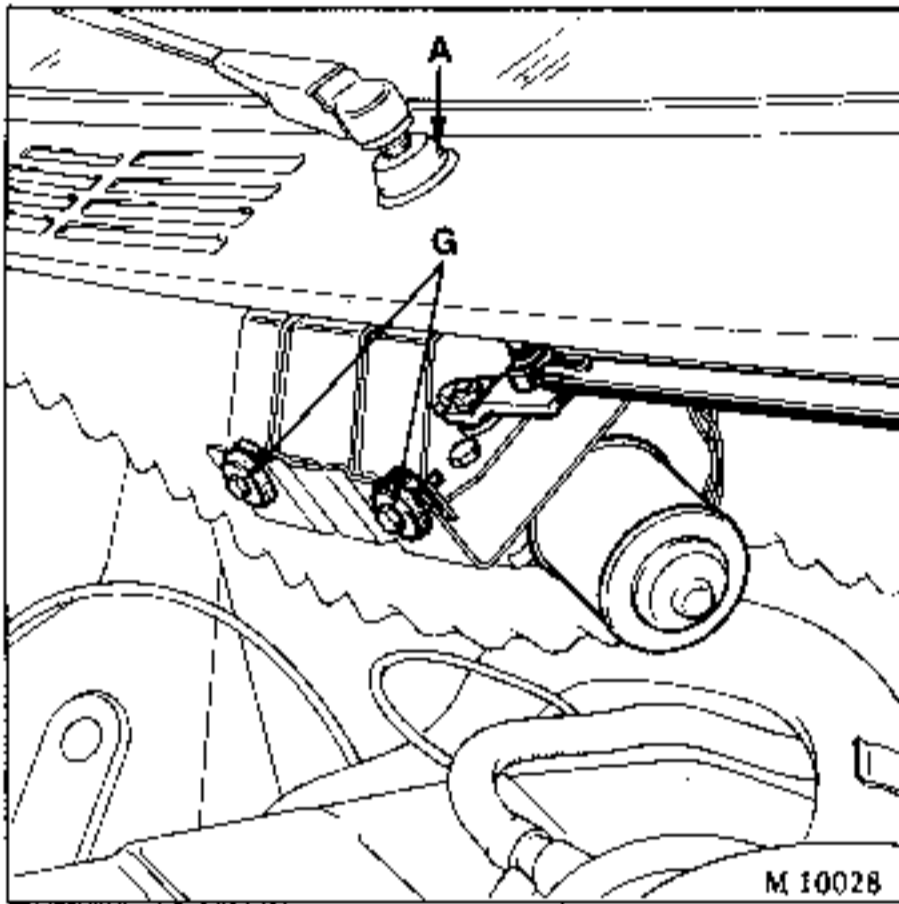
- 1 Not used
- 2 + after ignition on passenger side
- 3 Earth
- 4 Earth
- 5 Earth after blocking switch
- 6 + after ignition of driver's side
- 7 To switch on passenger side

REMOVAL

Disconnect the battery.

Remove:

- the mounting nuts (A) from the windscreen wiper spindles;
- the electric junction block;
- the two screws (G).



Remove the windscreen wiper assembly.

**REFITTING
SPECIAL POINT**

Ensure that links (H and I) are correctly aligned and the motor is in the "park" position.

REMOVING-REFITTING THE MOTOR

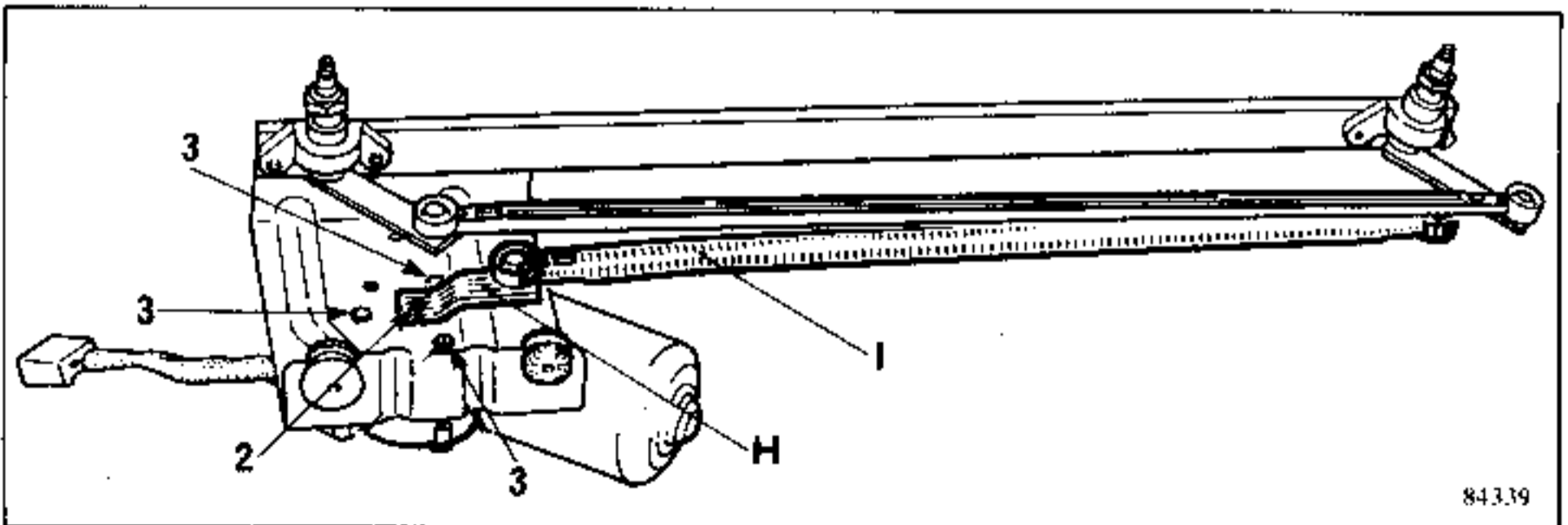
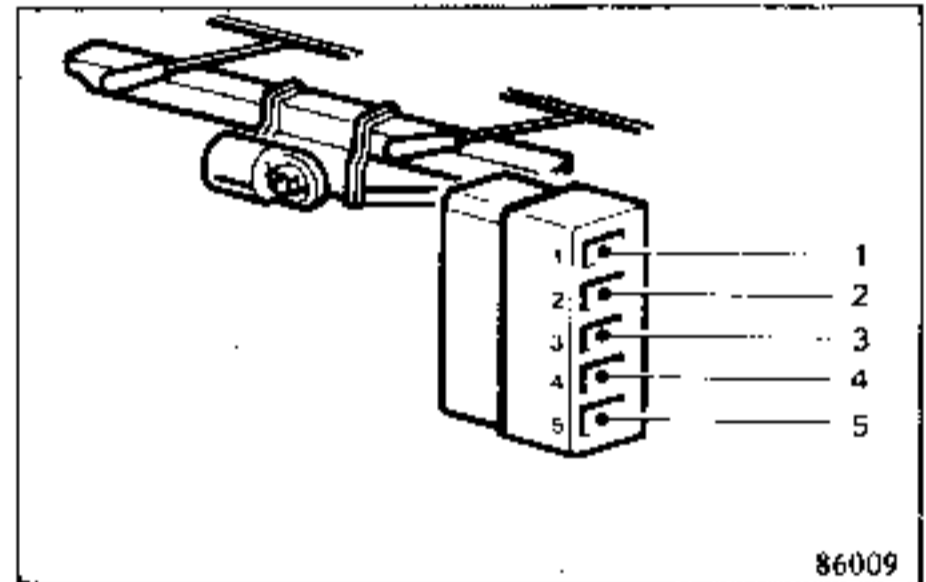
Unscrew mounting nut (2) from the drive link.

Unscrew the three screws (3).

SPECIAL POINT CONCERNING REFITTING.

Put the motor in the "park" position.

After mounting the motor on its plate, tighten link (H) so that it is aligned with link (I).



OPERATION

Switch terminals	Normal speed	Positions of switch				Functions of corresponding wires
		Fast speed	Timer	"Park"	Windscreen washer	
1					●	Windscreen washer
2			●			+ after ignition
3			●	●		timer +/"park"
4	●		●	●		Normal speed
5	●	●			●	+ before ignition
6		●				Fast speed
7						Timer input

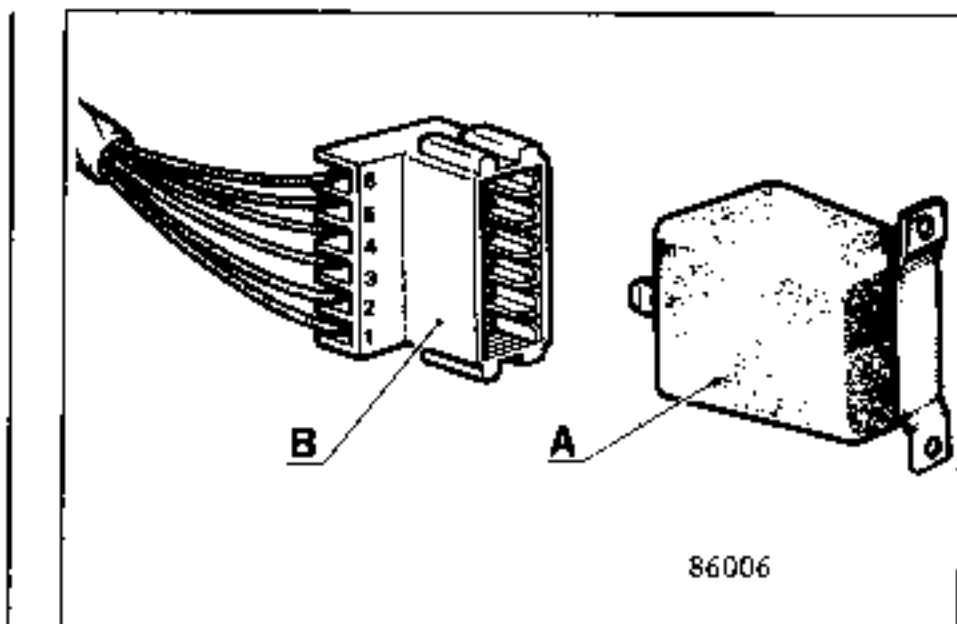
Examples: on Normal speed: terminals 4 and 5 are connected (+ before ignition and normal speed motor wire);
on timer: terminals 3 and 4 are connected as are terminals 2 and 7 with an intermediate resistor.

System with fixed timer (fault-finding)

TIMER JUNCTION BLOCK CONNECTION

- A Timer
- B Timer junction block

- 1 Timer earth
- 2 Windscreen washer pump and switch
- 3 Timed operation
- 4 Motor "park"
- 5 + before ignition
- 6 Normal speed via timer



CHECKING METHOD

a) Preliminary checks

Check that the windscreen washer pump and both speeds of the windscreen-wiper motor are operating via the switch.

Normal speed and fast speed operating	Windscreen washer operating	Continue test
Normal speed and/or fast speed not operating	Windscreen washer operating	Check motor and its connection
Normal speed and fast speed operating	Windscreen washer not operating	Check windscreen washer pump and its connection
Normal speed and fast speed not operating	Windscreen washer pump not operating	Change the fuse. If fuse not burnt out: change the switch.

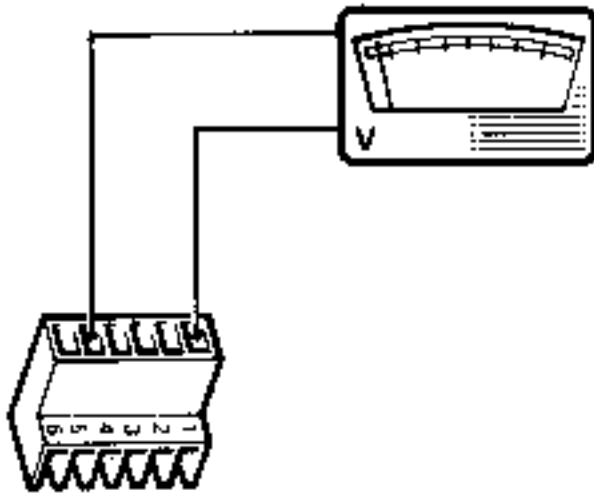
b) Checking the timer

Remove the accessories plate without disconnecting it and disconnect the timer:

- Switch on the ignition.
- Place the switch in the timed operation position.

Perform the following operations in the order given.

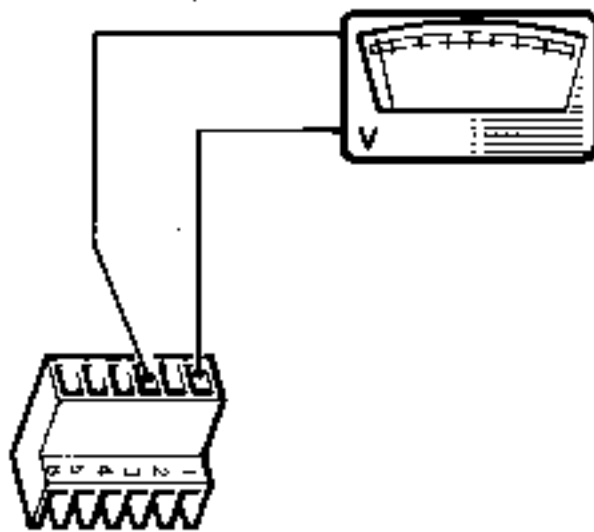
1°) Check the timer feed



If the voltage equals battery voltage: continue the test, proceed to 2nd stage.

If the voltage is zero: check the fuse and earth (lead going from terminal 1) of the timer on the earth junction plate.

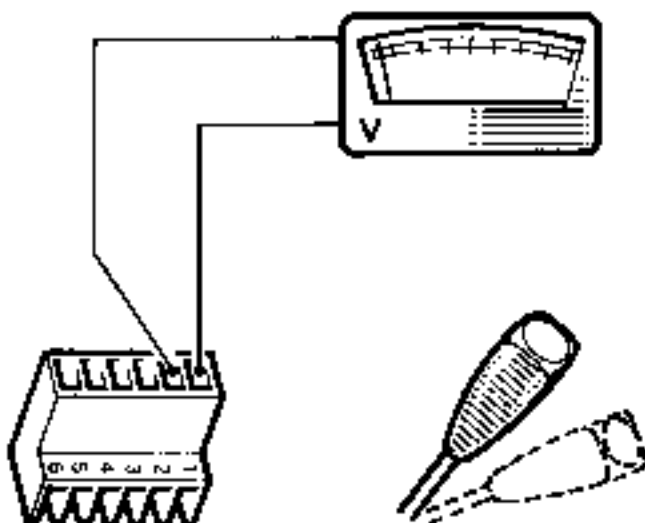
2°) Check the switch resistance



If the voltage is of the order of 1 volt: continued the test and proceed to 3rd stage.

If the voltage is zero: change the switch.

3°) Check the operation of the windscreen washer



If the voltage is zero and the windscreen washer pump does not operate: change the switch.

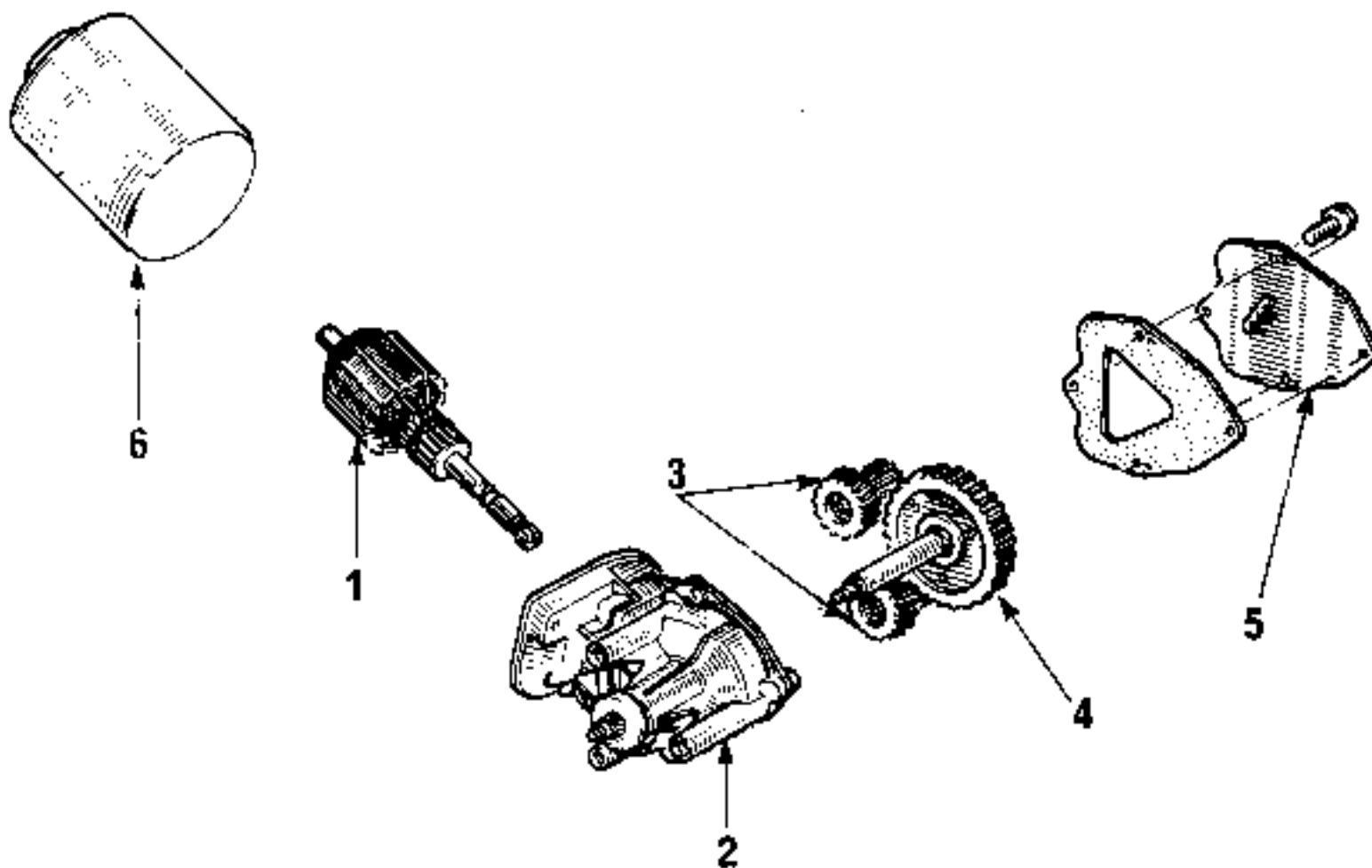
If the voltage is equal to battery voltage and the windscreen washer pump operates: change the switch.

"M.F.D." SEV-MARCHAL MOTOR

Special points concerning refitting
of the gear train

A Fit the components in the
following order:

- (1) (2) (3) (4) (5) and (6).



B - Refitting the gear train

1 Position the armature with a 1.8 mm shim (7); ensure that the threads (8) are correct.

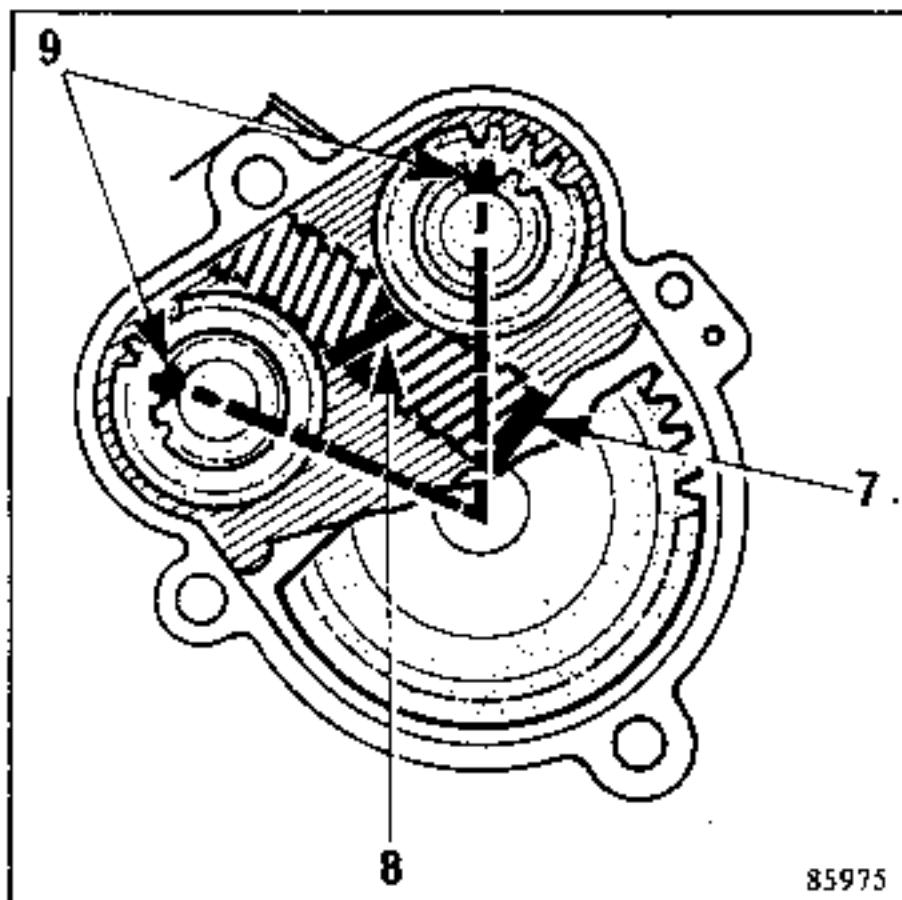
2 Place the coloured pinion so that its mark is positioned on the centreline of the pinion and the wheel (9).

3 Place the other pinion so that its mark is positioned on the centreline of the pinion and wheel (9).

4 Remove the shim.

5 Fit the wheel without moving the armature as the teeth on the pinion are engaged with the wheel.

6 The armature should not come right up against the wheel.



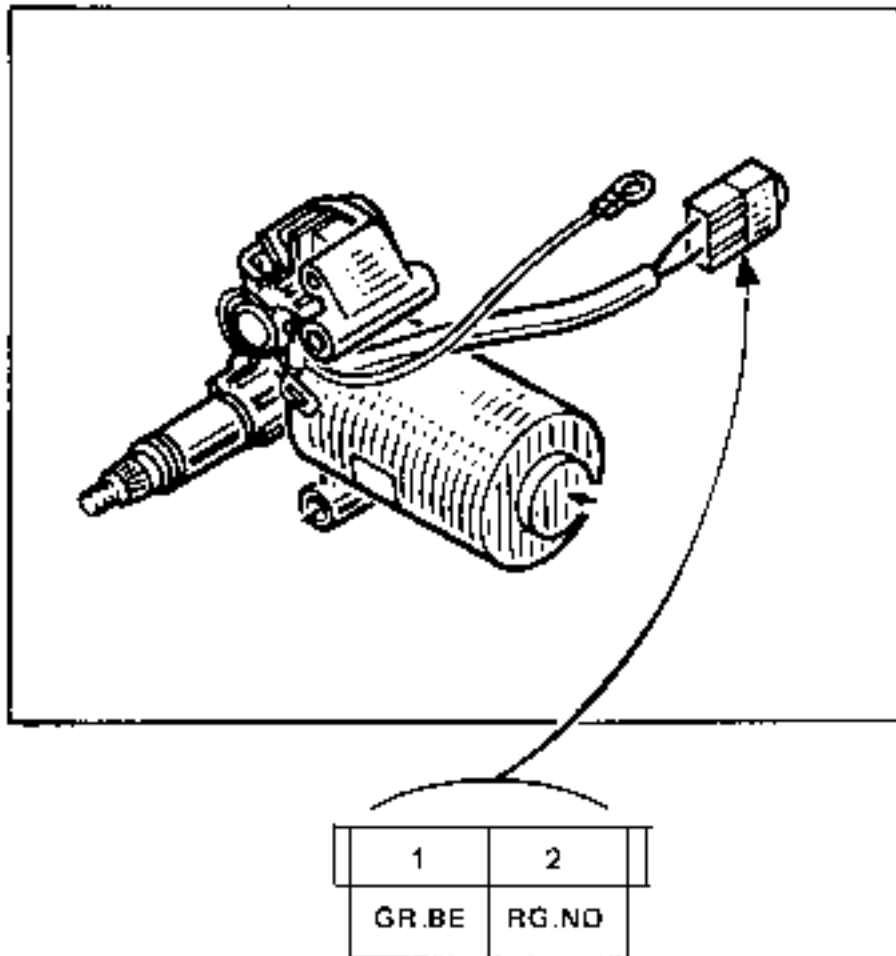
REMOVAL

Disconnect the battery.

Remove:

- the mounting nut from the screen wiper spindle;
- the blade-carrier arm.

1. Rear screen wiper motor feed
2. Rear screen wiper "park"



- As from 1987 model year, vehicles without a rear screen wiper will be delivered with the necessary pre-equipment. A screen wiper can therefore be fitted by ordering a kit from the Matra parts department.

FITTING A RADIO

A radio location is provided in the dashboard console, in place of the lower glove compartments which have a standardised cut-out of 182 x 53 mm.

All vehicles are equipped with a roof aerial and a blue cable which is totally screened.

Up to the 86 model, the radio and speaker feed cables were different depending on whether or not the vehicle had a factory-fitted rear screen wiper.

As from the 86 model, the pre-equipment is integral (front and rear speaker looms).

The front door panels have locations for the main speakers and Tweeter speakers with their protective grilles.

IDENTIFYING THE RADIO HARNESS ACCORDING TO MODEL

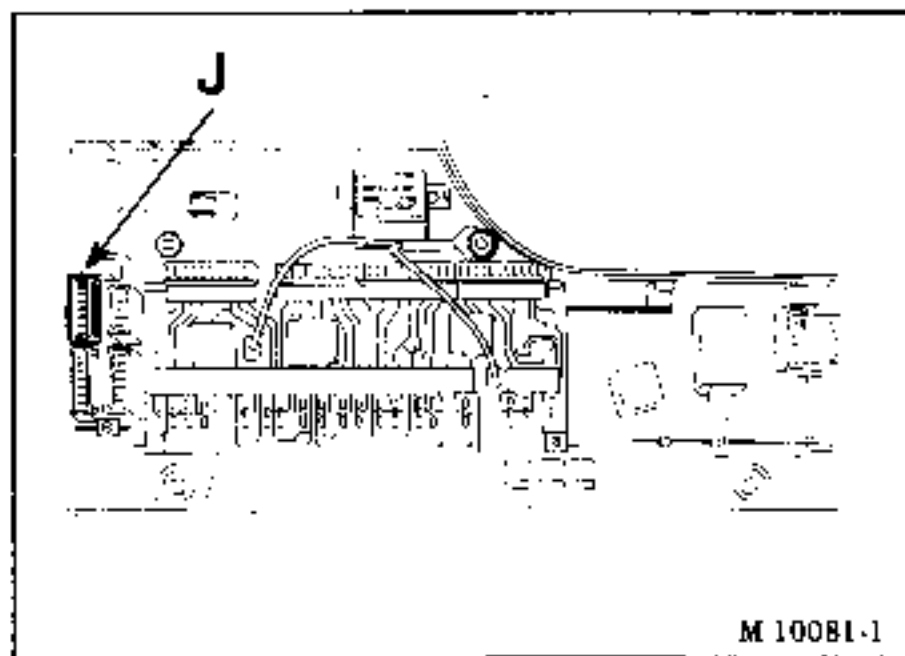
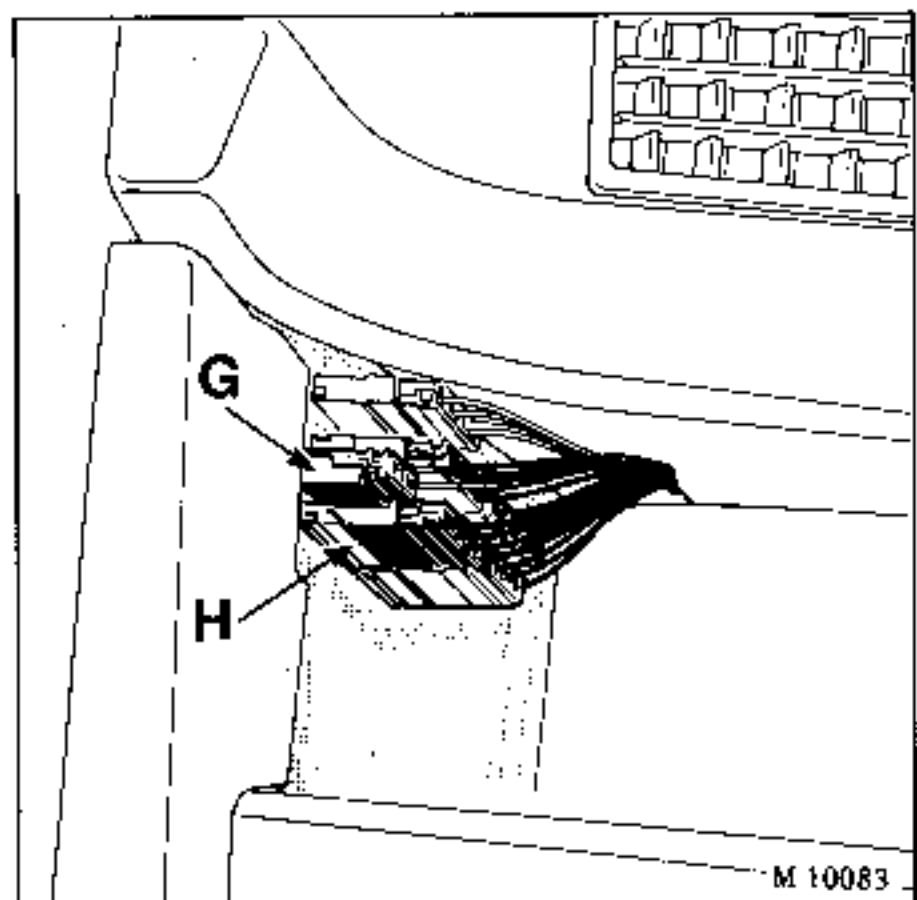
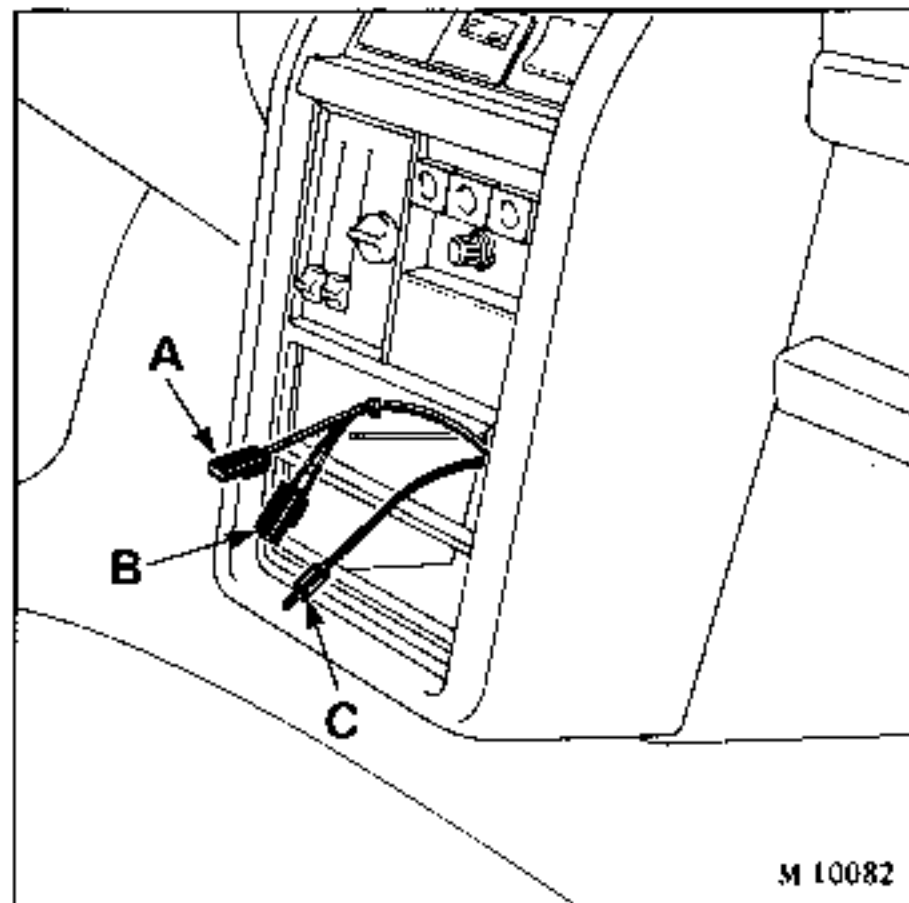
- Front speaker harness going:

- a) from terminals (3) and (4) of connector (H) above the lefthand glove compartment shelf (mauve-red and brown-red leads) into the lefthand door;
- b) from terminals (1) and (2) of connector (J) (mauve-green and brown-green leads) in the front lefthand corner of the accessories plate support into the righthand door.

1985 models

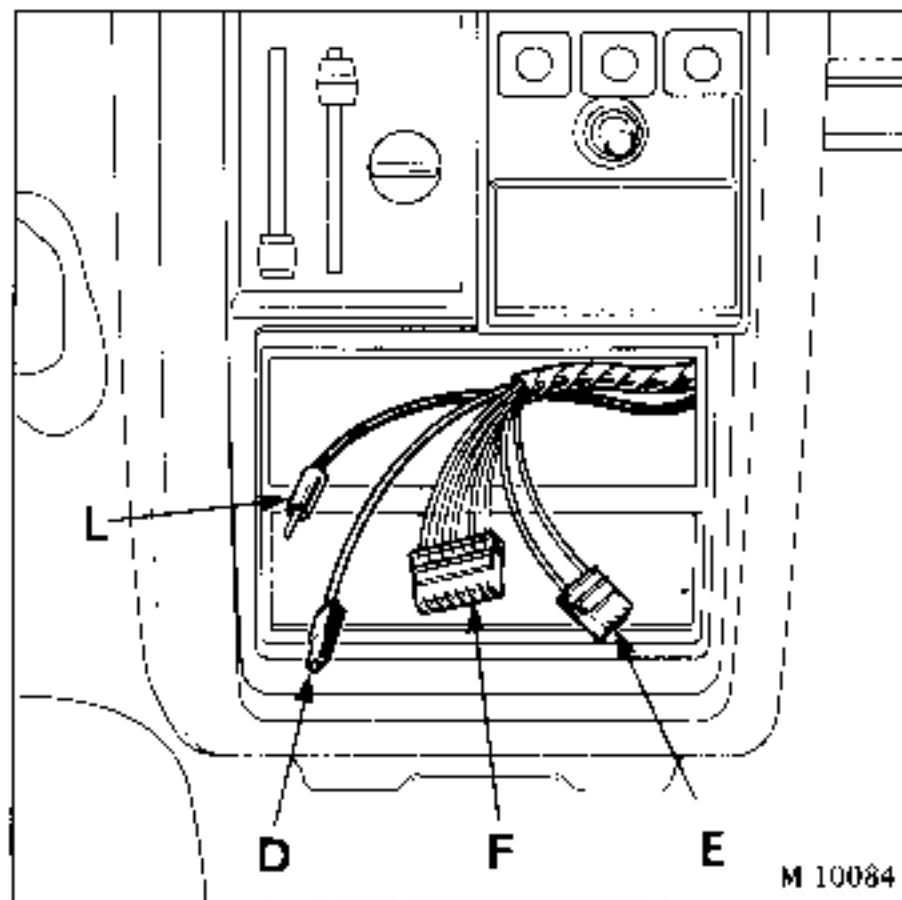
I - Vehicle without rear screen wiper option (2000 GTS)

- Mauve feed (A)
 - Black earth (B)
 - Aerial cable (C)
- } in console



II - Vehicle with rear screen wiper option (2000 GTS with option or 2000 TSE)

- Aerial cable (L).
- Earth (D) black lead.
- Grey connector (E) with radio feed on terminal (1) (mauve lead) and rear righthand speaker earth at (3), brown lead with blue mark.
- Black connector (F) with 7 terminals supplied as follows:

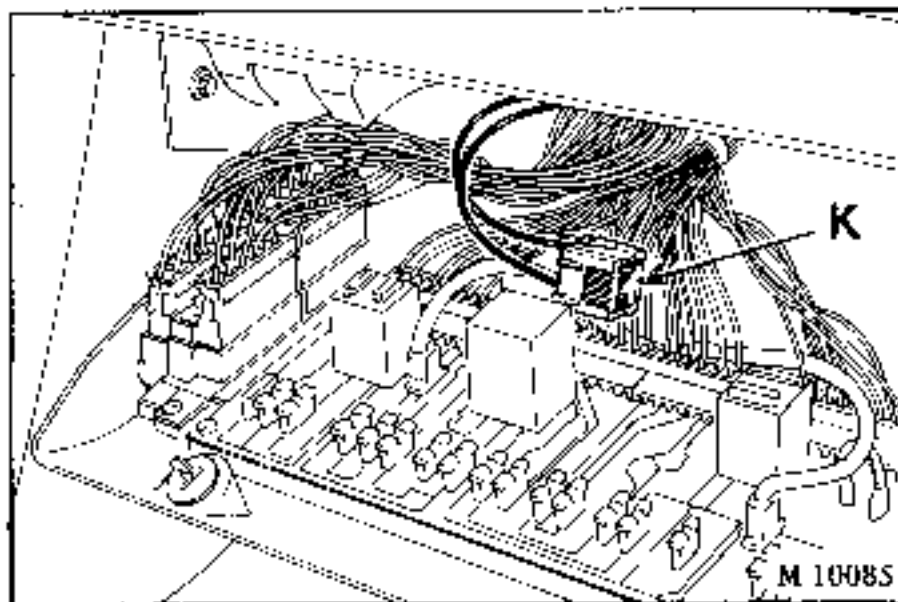
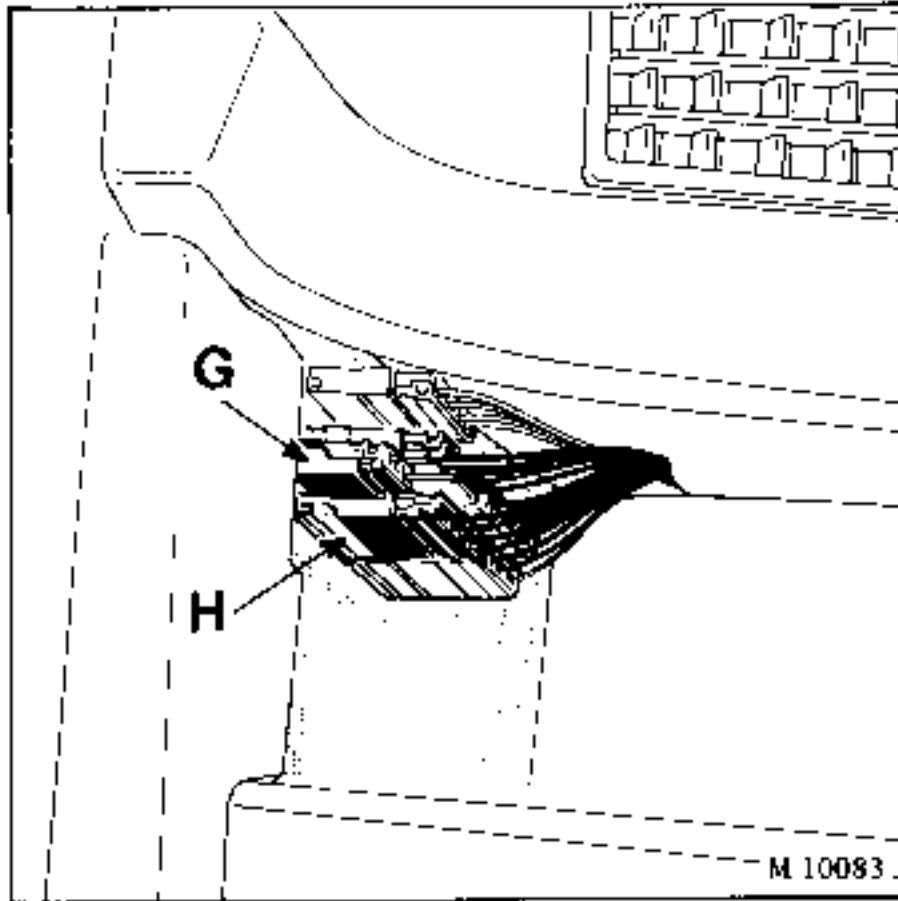


1 Rear righthand speaker +	mauve wire	(blue mark)
2 Front righthand speaker -	brown wire	(green mark)
3 Front righthand speaker +	mauve wire	(green mark)
4 Rear lefthand speaker -	brown wire	(white mark)
5 Rear lefthand speaker +	mauve wire	(white mark)
6 Front lefthand speaker -	brown wire	(red mark)
7 Front lefthand speaker +	mauve wire	(red mark)

Wires (6) and (7) of the black connector go into the lefthand door, passing through orange connector (H) and wires (2) and (3) go into the righthand door passing through connector (J).

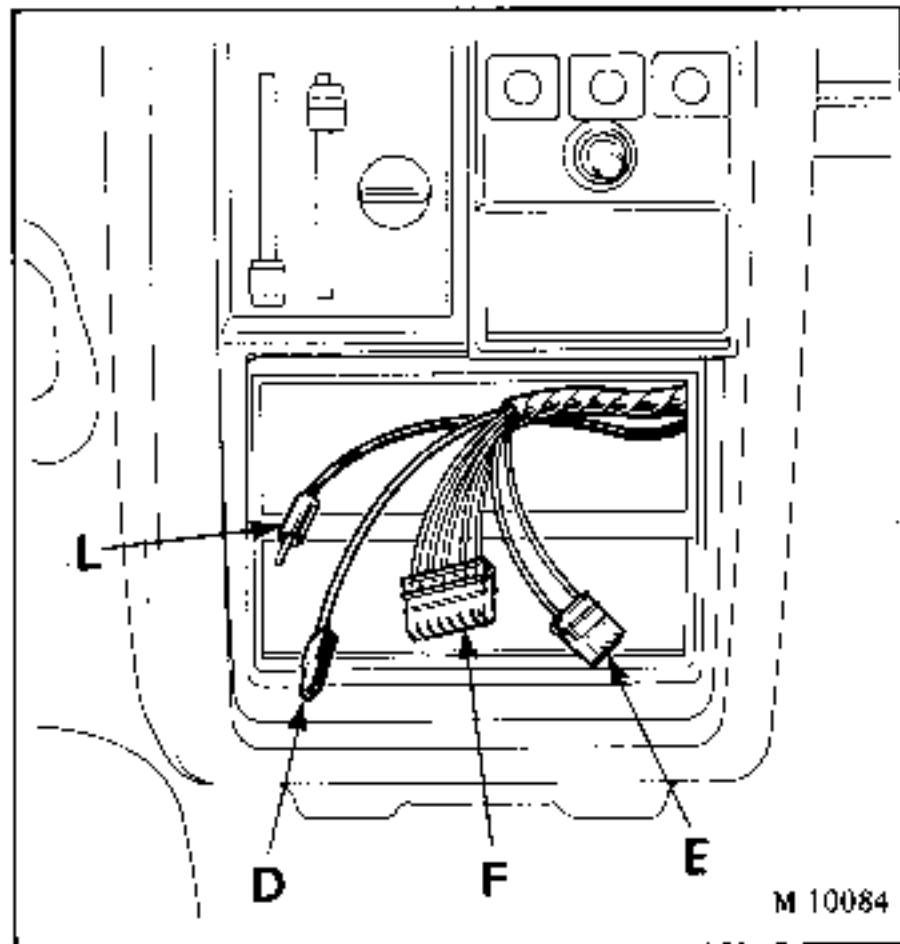
Leads (4) and (5) (rear lefthand speaker) stop at connector (G).

Wire (3) of grey connector (E) and wire (1) of black connector (F) (rear righthand speaker) stop at connector (K) in the accessories plate.



Model up to end of December 1987

CONNECTION (+, - and speaker)



D - Earth (black lead)

E - Grey connector (3 terminals)

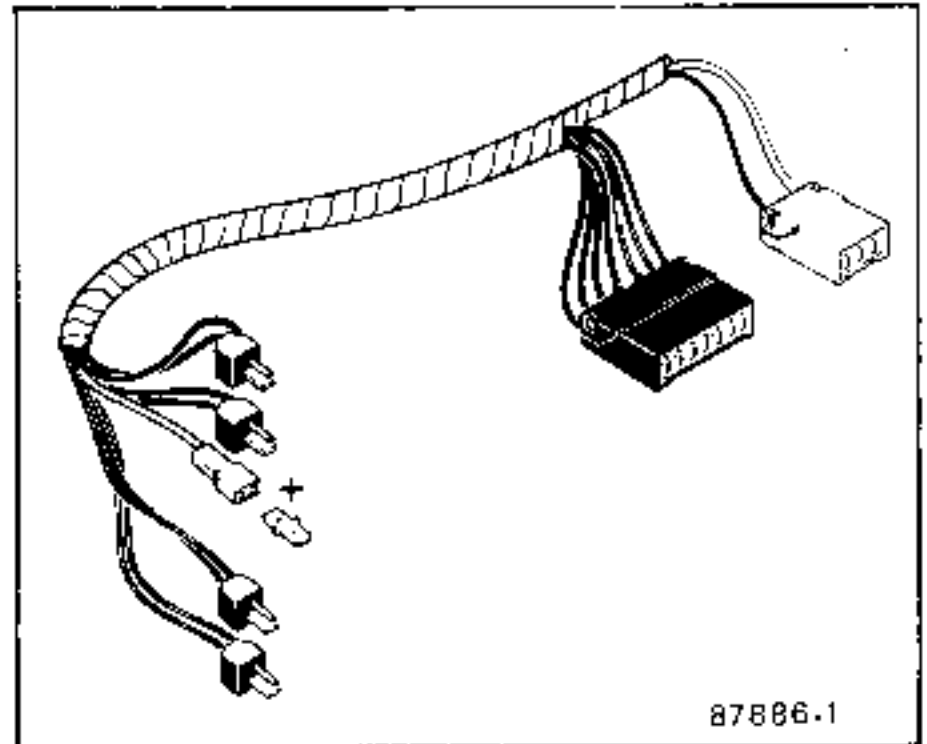
- (1) Radio feed (+ after ignition) - mauve wire
- (3) Rear righthand speaker earth - brown wire - blue mark

F - Black connector (7 terminals)

- (1) Rear righthand speaker + mauve wire (blue mark)
- (2) Front righthand speaker - brown wire (green mark)
- (3) Front righthand speaker + mauve wire (green mark)
- (4) Rear lefthand speaker - brown wire (white mark)
- (5) Rear lefthand speaker + mauve wire (white mark)
- (6) Front lefthand speaker - brown wire (red mark)
- (7) Front lefthand speaker + mauve wire (red mark)

A simplified radio harness part no. 77 01 407 026 must be used.

- It supplies power to the radio (yellow and blue lead) and to the front and rear speakers, if fitted.
- Connect the harness in the same way as the previous harness. The radio will be earthed via the large black wire on the console.



Permanent feed

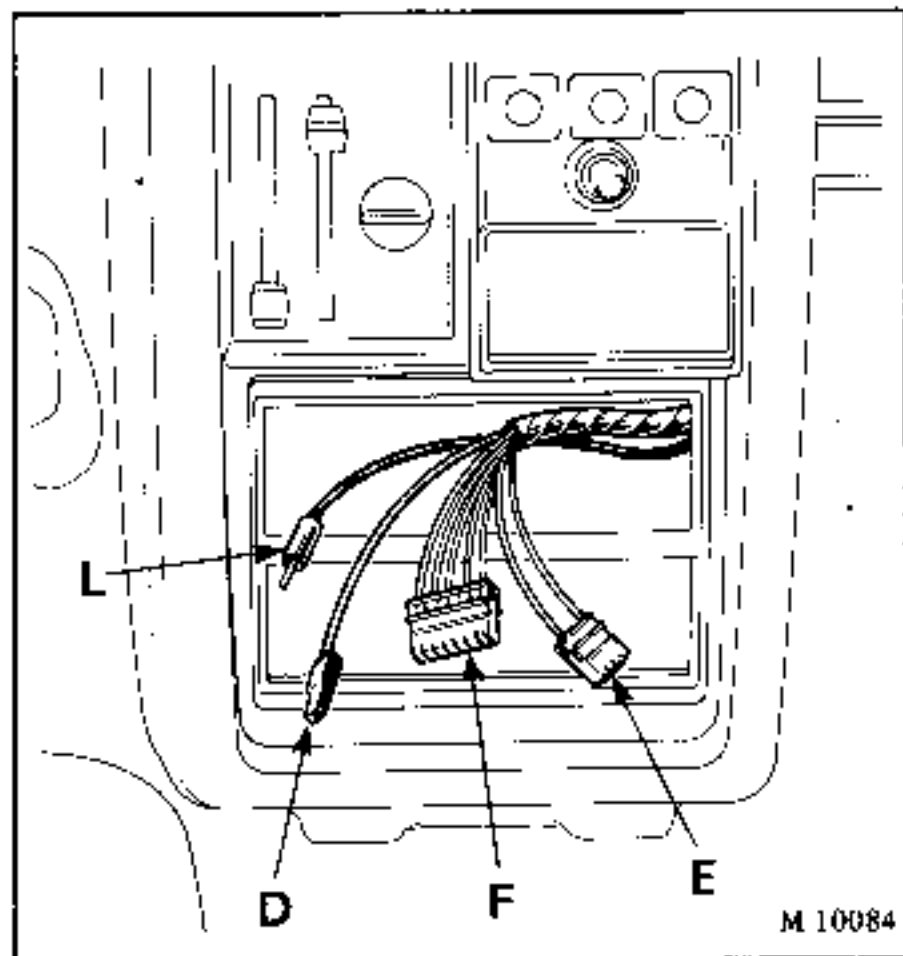
For memory-type radio

Take a permanent + supply using a suitable rapid connector, on a red lead with a suitable cross-section or run a lead from the red lead terminal on the accessories plate.

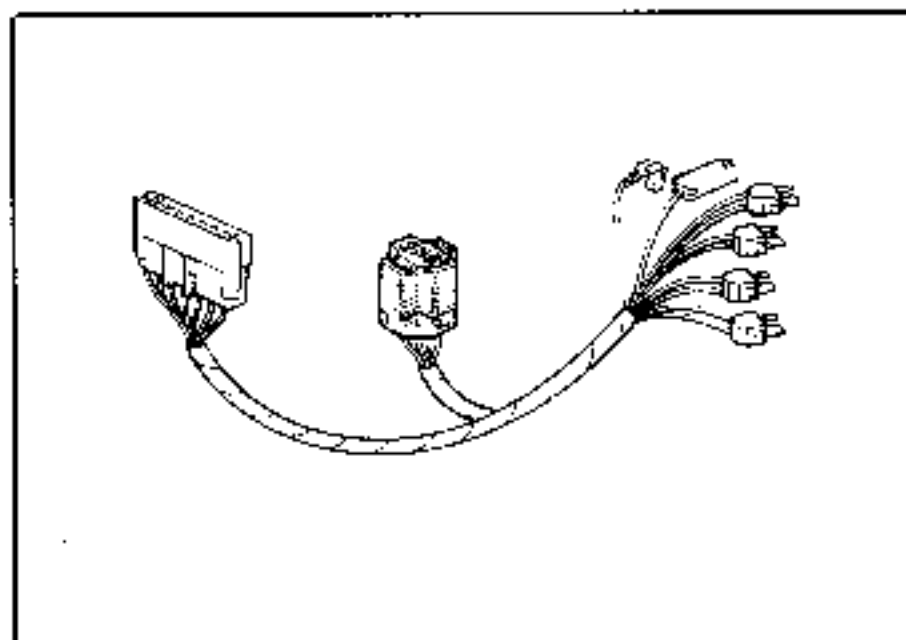
In both cases, the radio feed must be protected by a fuse.

As from January 1988

4 x 20 watt radio connection



Note: When fitting this harness to vehicles with the injection system, fit a radio filter, part no. 60 25 004 892 which is to be connected to wires 4G and 4B (yellow) at the junction socket end on the console loom. Connect the two wires to each other on other vehicles.

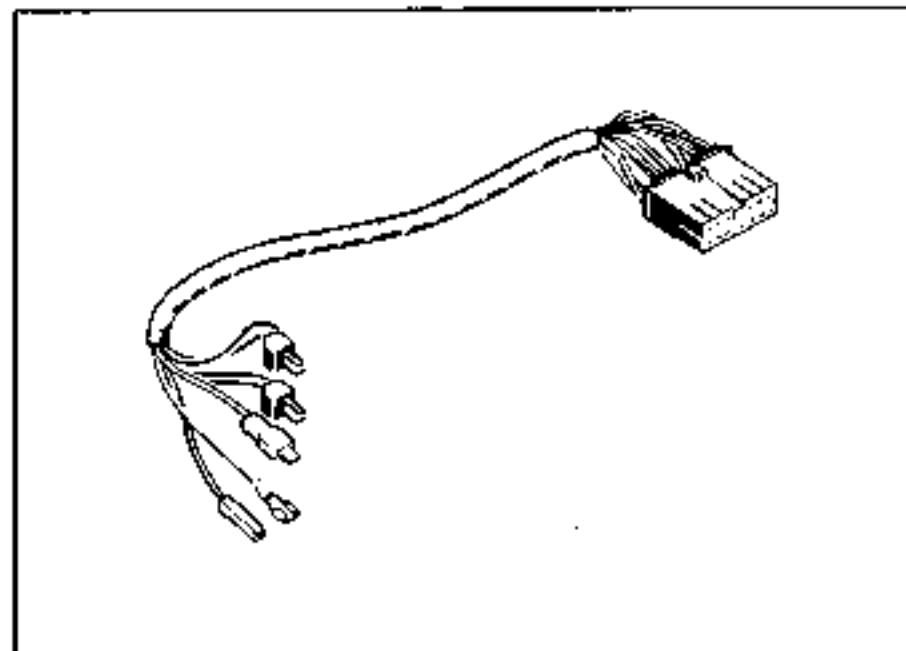


Connection on 4 x 6 watt radio

Identical to the 4 x 20 watt radio, the set being connected using loom part no. 60 25 006 444.

In both cases, after connecting the loom, clip it on the holding clip mounted on the rear bracket of the set.

For all other types of radio it is connected to the console harness using harness part no. 77 01 419 040.



Pos.	Mark	COLOURS		
		1	2	
5A	4B	VI		Radio accessory +
5A	4F	VI		Clock accessory +
3B	7	RG	BA	Radio permanent +
5B	110D	NO		Radio earth
5B	110K	NO		Cigar lighter earth
2B	150	BA	RG	FR LH speaker +
2A	151	BA		FR LH speaker -
6A	153	VI	RG	FR RH speaker +
6B	154	VI		FR RH speaker -
1B	156	BA		RR LH speaker +
1A	157	BA	JN	RR LH speaker -
7A	159	VI	VE	RR RH speaker +
7B	160	VI	JN	RR RH speaker -

B	BA/VE	BA/RG	RG/BA		NO NO	VI	VI/JN
A	BA/JN	BA			VI VI	VI/RG	VI/VE
	1	2	3		5	6	7

The radio is connected using harness part no. 60 25 06 443.

For 4 x 20 watt radios

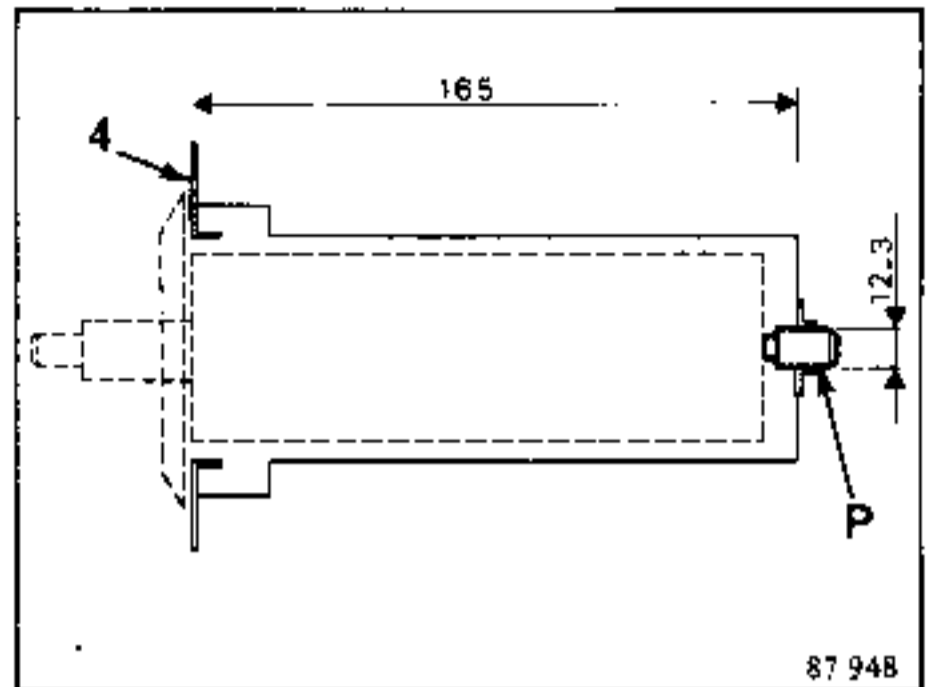
- Remove the two glove compartments. These compartments are held in their housings by clips at each corner. Very great care must be taken when taking them out so as not to damage the separating bar on the console.
- Remove the holding panel at the base of the compartments (4 "parker" screws behind them).
- Free or unfasten the loom.
- In place of the panel previously fitted, fit mounting bracket part no. 60 25 000 489 with an aperture for holding the rear section of the radio at (P).

For 4 x 6 watt radios

- Fit mounting bracket part no. 60 25 005 615 which holds the radio and remaining glove compartment.
- This mounting bracket must be fitted for all other radio types.
- Screw the dowel (P) supplied or a 12.3 mm diameter rubber dowel, with or without a spacer, so that the dowel is 165 mm away from bearing surface (4).

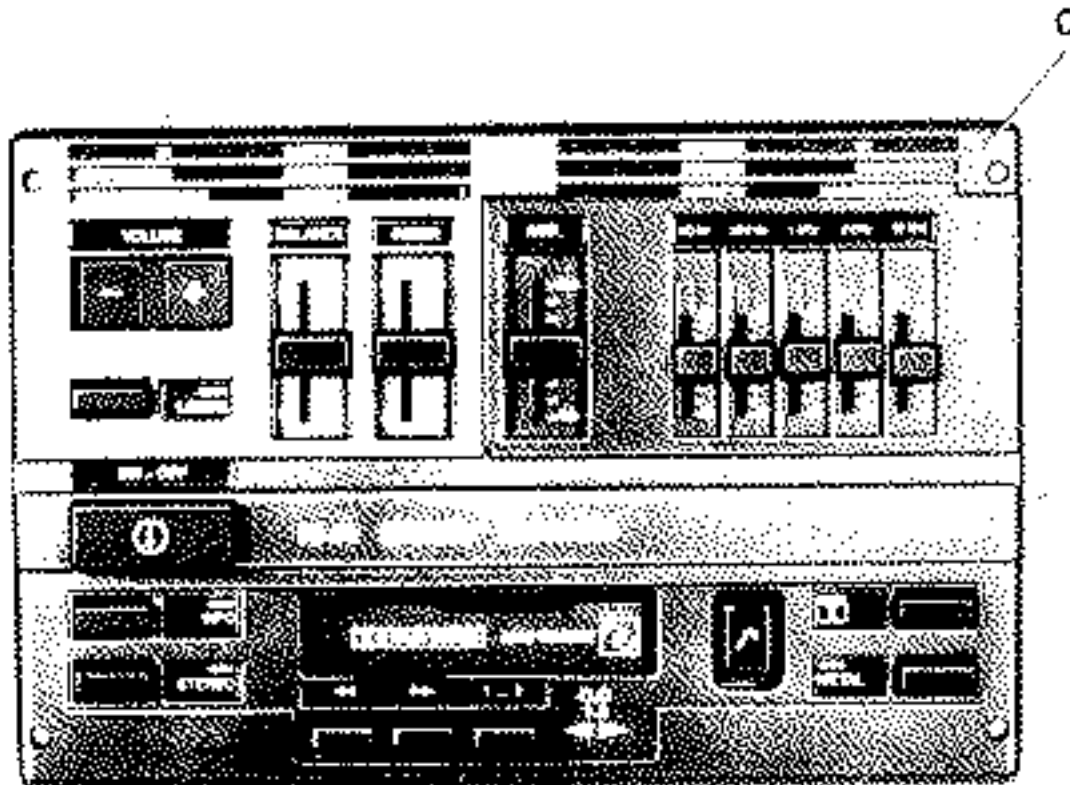
NOTE:

- It is essential to ensure that radio fuse no. 13 on the accessories plate is a 10 amp fuse.
- When fitting the radio, push the assembly of the two heater sheathings to the inner lefthand side of the console so that they are not deformed as this would make it difficult to use the controls.



- Connect the aerial cable, feed cable, earth cable and speaker cables to the radio.
- Put the radio in place and push mounting springs (S) (if fitted) under the edge of the console to hold it in place.

4 x 20 watt RADIO



CONTROL UNIT (A)

- (1) Two-function SELECTIONS rocker switch:
 - displays time
 - displays radio information (frequency ...).
- (2) Two-function ACCORD (tuning) rocker switch:
 - sets time on clock
 - frequency tuning.
- (3) "Time programming" mode tell-tale light
- (4) VOLUME + - rocker switch
- (5) MEMO key
(stops access to programming)
- (6) PROG key
(starts access to programming)
- (7) "Programming" mode tell-tale light
- (8) Digital display:
 - time
 - radio data (frequency)
- (9) Six pre-selection tumble wheel (p1 to p6) in each range:
 - Long wave - Medium wave - MCC - Short wave (FM).
- (10) R.A./CL key (Automatic search/temporary switching off of station) with three functions:
 - Automatic search of stations in Long wave, medium wave and FM.
 - Temporary suppression of a station in MCC mode.
 - Stopping of programming in MCC mode.
- (11) GAMMES (WAVEBAND) key
 - Changes the wave band each time key is pressed.

In this case the MCC mode is considered as an FM wave band.

THE REMOTE CONTROL (SATELLITE) UNIT B

- (32) VOLUME + - switch
[function identical to (4) and (31)]
- (33) RA/CL key
functions identical to (10)
- (34) GAMMES (WAVEBAND) key
functions identical to (11)
- (35) Tumble wheel with functions identical to (9).

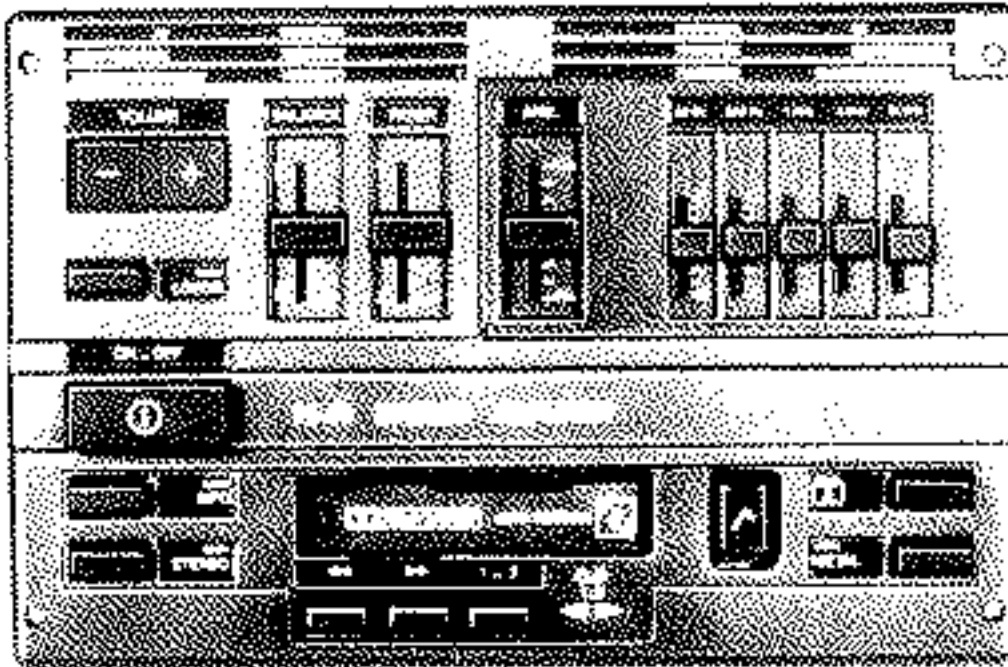
THE RADIO (C)

- (14) BALANCE linear control
(righthand/lefthand)
- (15) FADER linear control (front/rear)
- (16) AMBIANCE linear control* (spatial effect)
- (17) Linear tone controls
- (18) DOLBY*NR key with tell-tale light showing function is operating
(* registered trade mark of Dolby Inc. Laboratories.
- (19) METAL key with tell-tale light showing function is operating
- (20) Cassette ejection key
- (21) Light display showing direction of play
- (22) Key for changing direction of play
- (23) Fast forward and rewind key
- (24) Cassette compartment
- (25) STEREO key
- (26) Tell-tale light showing STEREO operation
- (27) SDK (INFO) key (for certain countries) enables stations broadcasting road traffic information to be identified
- (28) Light tell-tale showing SDK (INFO) key operating
- (29) ON/OFF key for radio, cassette and remote control unit (except for clock and external temperature functions)
- (30) EQUALIZER key with tell-tale light showing it is operating
 - the bass sound level is strengthened
 - the bass and treble notes are further amplified.
- (31) VOLUME + - key (identical function to (4) and (32)).

REMOVAL

RADIO (C)

Unhook the clips using the special pliers (or four metal rods).



Control unit (A)

Remove the unit using two screwdrivers.

Remote control (satellite) unit (B)

See paragraph concerning controls on steering wheel.

Front speakers

- 180 mm diameter:

Free the embellisher by turning it 1/8 of a turn in an anti-clockwise direction.
Remove the four cross-head screws.

- 70 mm diameter:

Free the speaker embellisher using a flat screwdriver: two lugs diametrically opposite the vertical.

Rear speakers

Free the speakers by pulling the embellisher downwards (flat section).
Remove the four cross-head screws.

REFITTING

Proceed in the reverse order to removal.

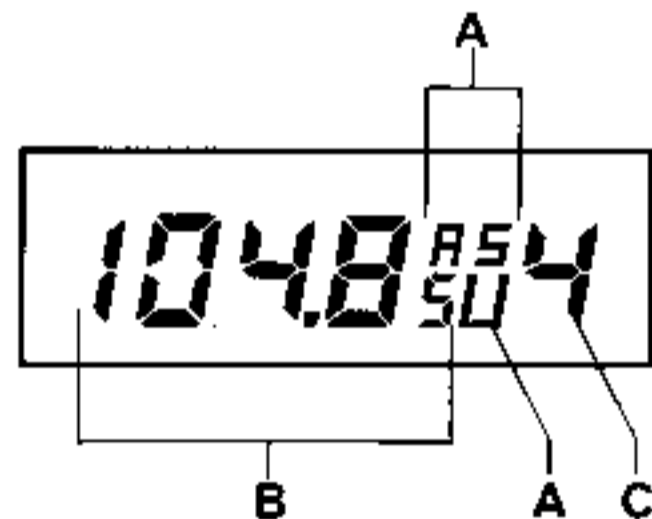
THE RADIO

- (1) Radio function display
- (2) Key for preselecting and storing stations (P1 to P7) and code validation.
- (3) FM - Long wave - Medium wave and Autostore (AS) wave band selector and start of AS search.
- (4) Frequency search and code number keys:
key 4a : run-through in upward direction
key 4b : run-through in downward direction
- (5) ON/OFF, volume
- (6) Front/rear balance
- (7) Right/left hand balance
- (8) Tweeter continuous control
- (9) Bass note accentuation key
- (10) Mono/stereo change-over and stereo reception key
- (11) Cassette compartment
- (12) Key for changing direction of run-through and cassette ejection
- (13) Fast rewind key
- (14) Run-through direction indicators
- (15) Fast forward key
- (16) INFO switch and INFO reception tell-tale (only for certain countries)

REMOTE CONTROL (SATELLITE) UNIT

- (17) Automatic frequency search - in upward direction only.
- (18) Volume - + rocker switch
- (19) Tumble wheel for 7 preselections (P1 to P7) in each wave band: FM - Long wave - Medium wave and Autostore (AS).
- (20) L.M.U.AS. key
Changes wave band each time it is pressed.
Stops the automatic frequency search.
Starts AS search.

RADIO DISPLAYS



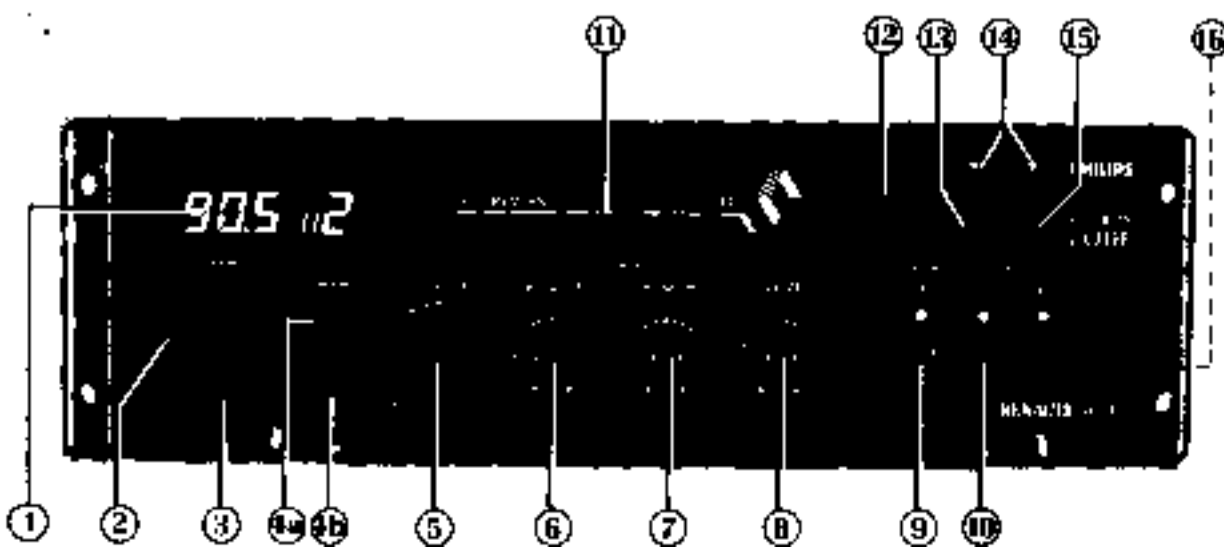
As soon as the set is switched on the following is displayed for one second:

COD 0 : the apparatus is not coded

or

COD 1 : the apparatus is coded

After one second the radio displays appear for as long as the radio is switched on.



Legend:

- A :** Wave band selected
Long wave - Medium wave - FM - AS
- B :** Frequency to which radio is tuned
- C :** Preselection (P1 to P7)

Important

When the electrical supply has been cut off (battery disconnected, feed wire cut, etc.):

if your radio is in the coded mode, the input code must be entered so that the radio can be used again (see the procedure under "using the radio in the coded and non-coded modes").

However, the information stored in the radio's memory will remain there.

For safety reasons, when driving please only use the satellite control unit for altering the radio.

Using the radio in the coded and non-coded modes

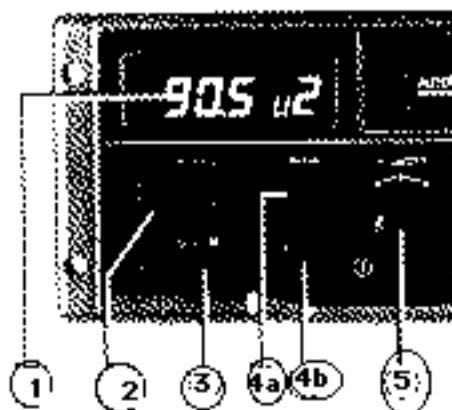
USING THE RADIO IN THE CODED AND NON-CODED MODES

As a means of deterrent your radio is delivered to you in "coded" mode. This system enables you to "lock" electronically the operation of the apparatus each time the main feed supply is cut off (battery disconnected, fuse blown, etc.).

The apparatus will stay silent and to make it operational a confidential code (four figure number) **must be entered**. The code is given to you by the supplying Renault Dealer. He has a secure record of this code. **Keep a safe note of the code**. If you should ever lose it, contact the supplying Renault Dealer.

This security device can be rendered inoperative by decoding your apparatus and it can then be used like a conventional radio cassette player.

In all cases display (1) informs you which operating mode the system is in when it is switched on. Three different data may be displayed:



COD 0 : the apparatus is decoded and can be used like a conventional system (duration of display: 1 second).

COD 1 : the apparatus is coded and is, therefore, locked if the general power supply is cut off (duration of display: 1 second).

COD : the power supply has been cut off and the set was in the coded mode. It stays silent and is requesting that the code be entered (operation described below).

Procedure for entering the code (after the power supply has been cut off)

Press key 5 and the information COD will appear on the display.

A - Press key 2 to select the first figure to be entered.

B - Alter the figures using keys 4a and 4b.

C - Press key 2 to validate the figure and this operation will automatically select the second figure.

Repeat operations A-B-C until the fourth and final figure has been validated, which will be indicated by a bleep to show that the code has been accepted.

Note: If an error is made while the code is being entered (for example, validation of the first figure and second or third figure incorrect), the procedure can be cancelled by switching the set off then on again using button 5.

Important:

If the code entered is incorrect, an error "bleep" will be emitted and the message COD will appear on the display.

You may then re-enter the code following the method described above but to do so you must leave the set switched on and wait one minute before recommencing the operation.

If this new attempt is unsuccessful, you can re-start the operation still keeping the set switched on but the amount of time will increase successively from 2, 4, 8, 16 to 32 minutes.

Passing from one operating mode to another (coded to non-coded mode or vice versa)

You can at any time change the set's operating mode. All you have to do is enter the input code as follows:

- radio off press key 4a then, keeping the key depressed, press key 5 until the word COD appears on display 1. Then enter the code according to operations A-B-C described above.

I - LOCATION

1985 models

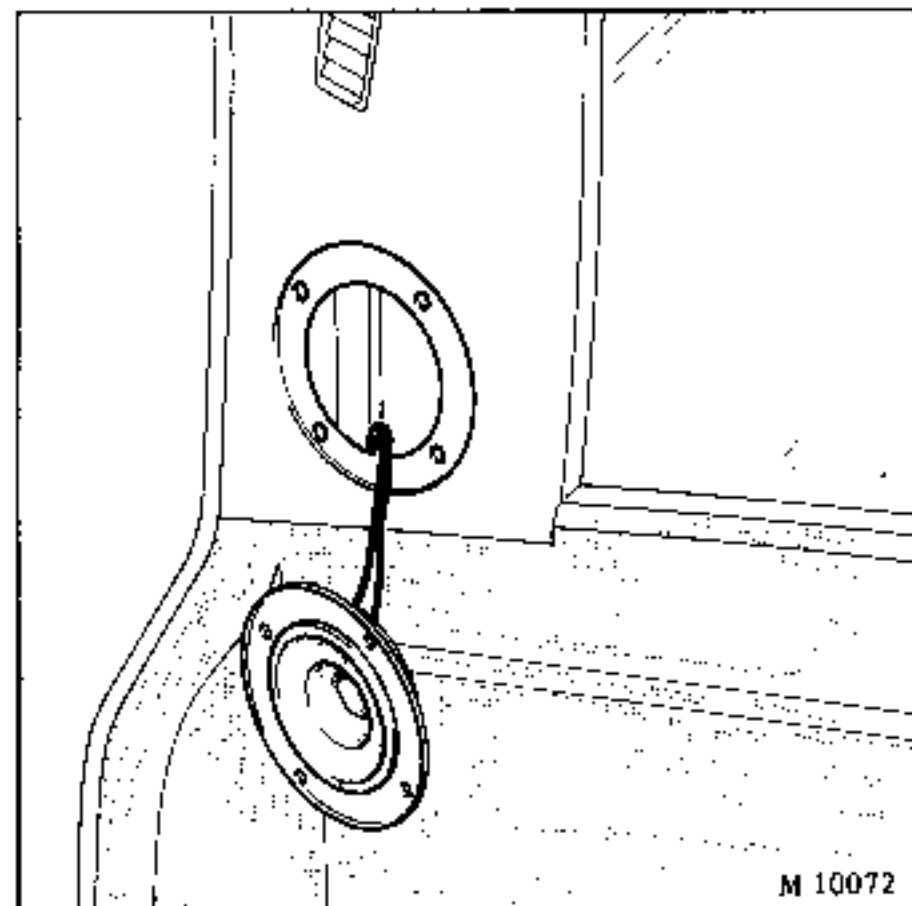
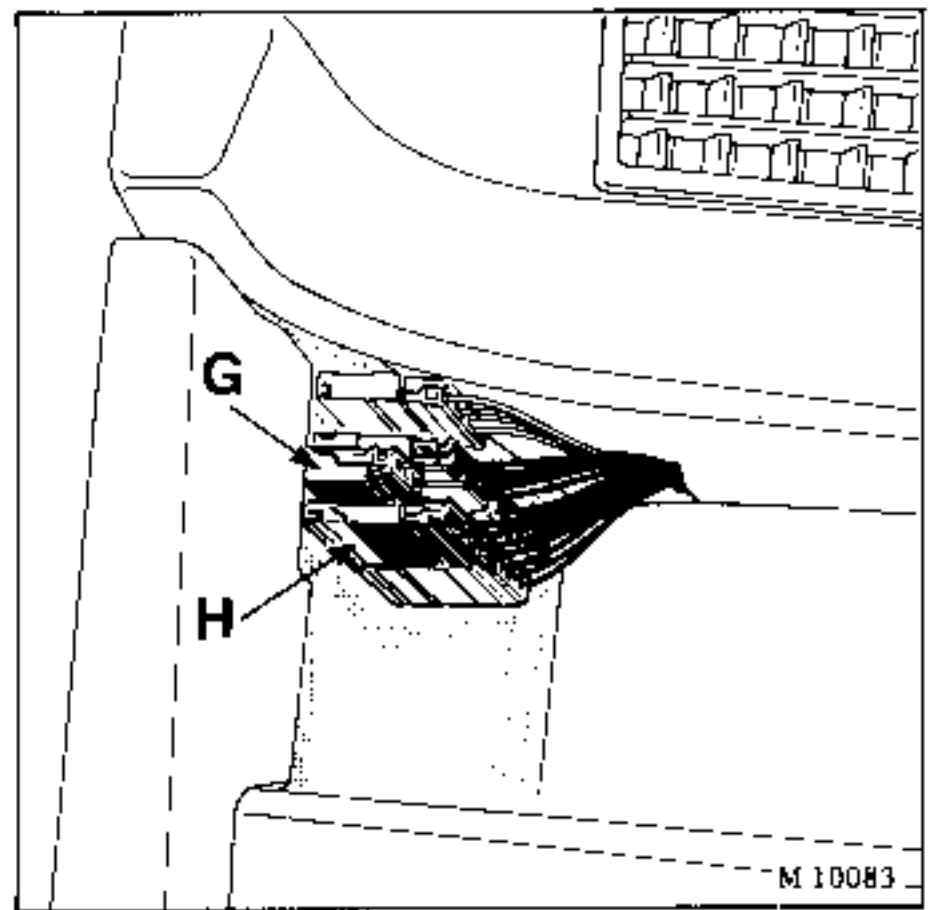
Front doors

2000 TSE: The door panels are provided with two grilles for fitting a speaker part no. 77 00 750 602 and a tweeter speaker part no. 77 00 750 604.

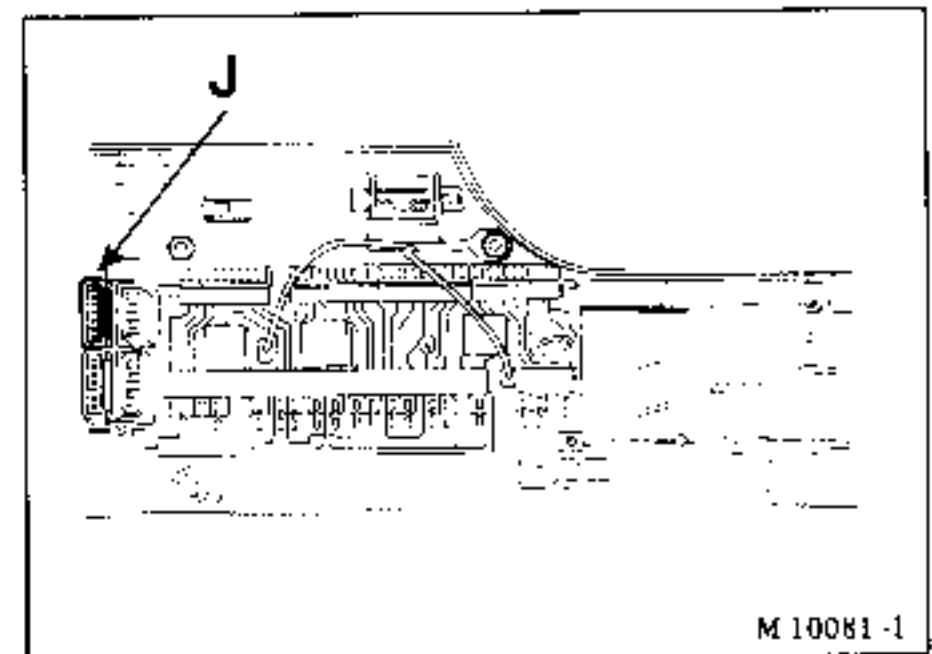
2000 GTS: The door panels have locations for fitting a speaker and tweeter speaker after the trim has been cut out.

Rear quarter panels

A location is provided in the rear quarter panels.



This location can be found by feeling the trim. To fit a speaker the trim must be cut out following the location provided in the lining.



II - SPEAKER CONNECTIONS

A - Vehicle without rear screen wiper front speakers

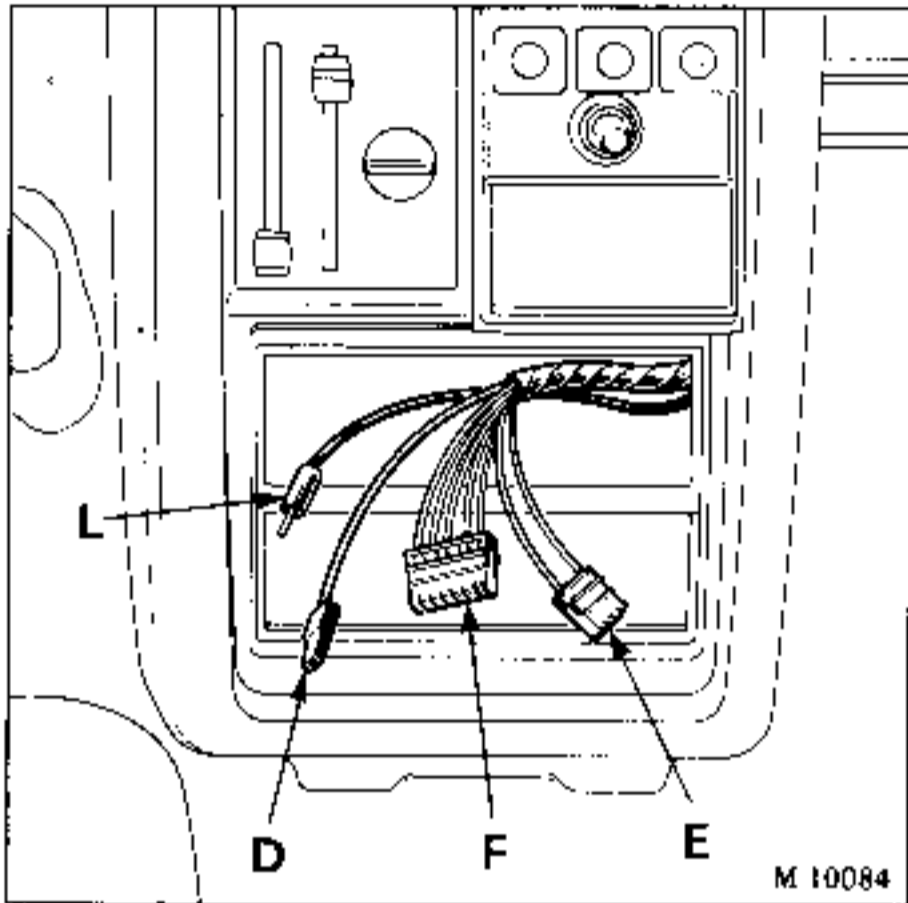
The equipment for this model requires a speaker loom to be made up for connecting the radio set to the orange connector (H), on the front lefthand pillar, terminals (3) and (4), and to the black connector (J) on the accessories plate, terminals (1) and (2).

Rear speakers

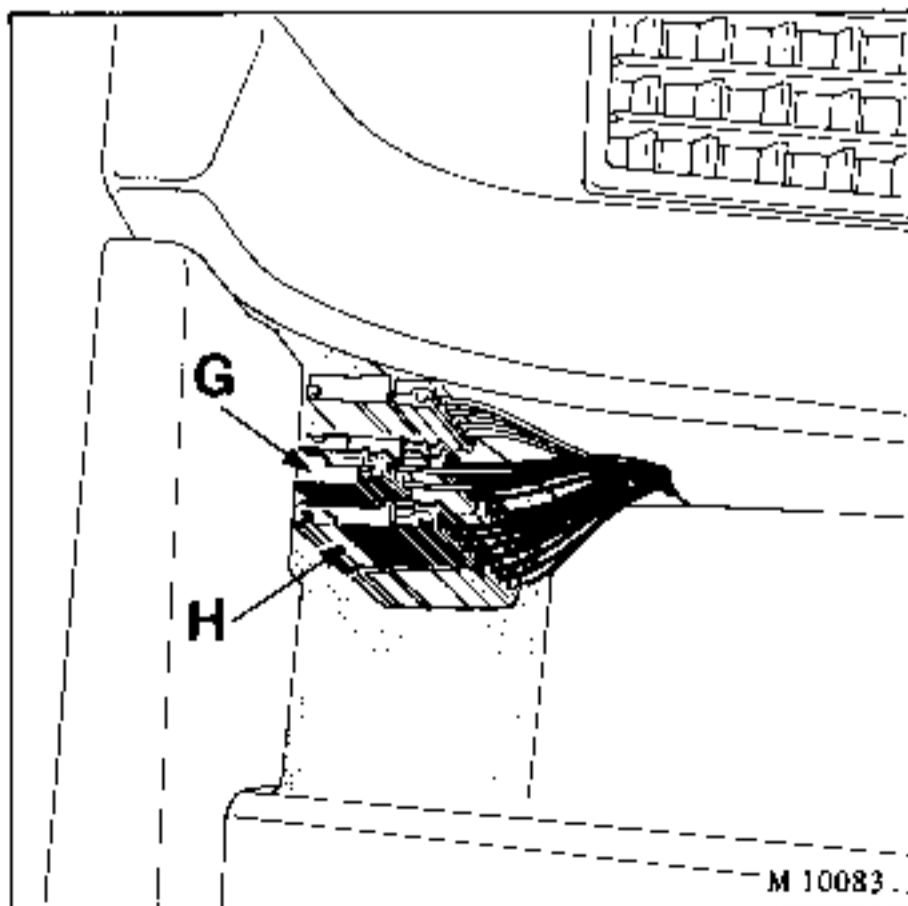
To connect the rear speakers, a loom connecting the radio set to the speakers must be made up.

B - Vehicle with rear screen wiper

The speaker assembly is fed via black connector (F) from (1) to (7) and via grey connector (E) terminal (3).



Reception at the rear speakers requires two harnesses to be fitted (one on each side) part number 60 25 000 805.

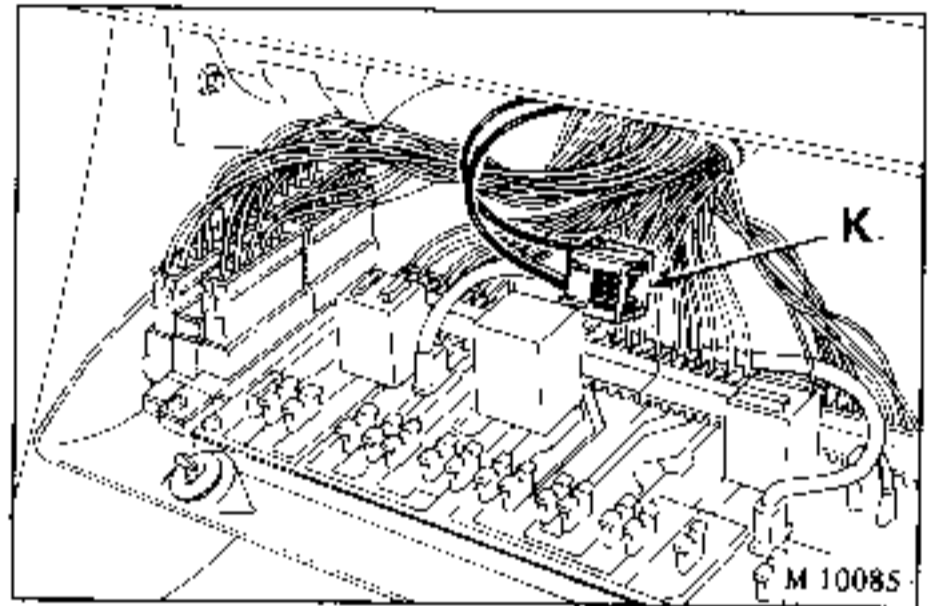


a) Rear lefthand side:

The harness is connected to connector (G) on the front lefthand pillar. Route this harness under the floor panel trim and up under the trim of the rear wheel arch as far as the blanking cover under the cut-out section for the speaker. Pass the harness over this blanking cover and bring the harness to the speaker. The passage for the wires through the blanking cover must be sealed.

b) Rear righthand side:

The harness is connected to connector (K) under the accessories plate.



The routing and fitting of the harness is the same as for the lefthand side.

As from 1986 models

FITTING SPEAKERS TO THE FRONT DOOR PANELS

The front door panels have grille mounting units to which the 165 mm diameter speakers, sold individually in the Parts Departments under part number 77 00 750 602, are fitted using the screws used to hold the blanking cardboard.

The grille is removed by turning it anti-clockwise.

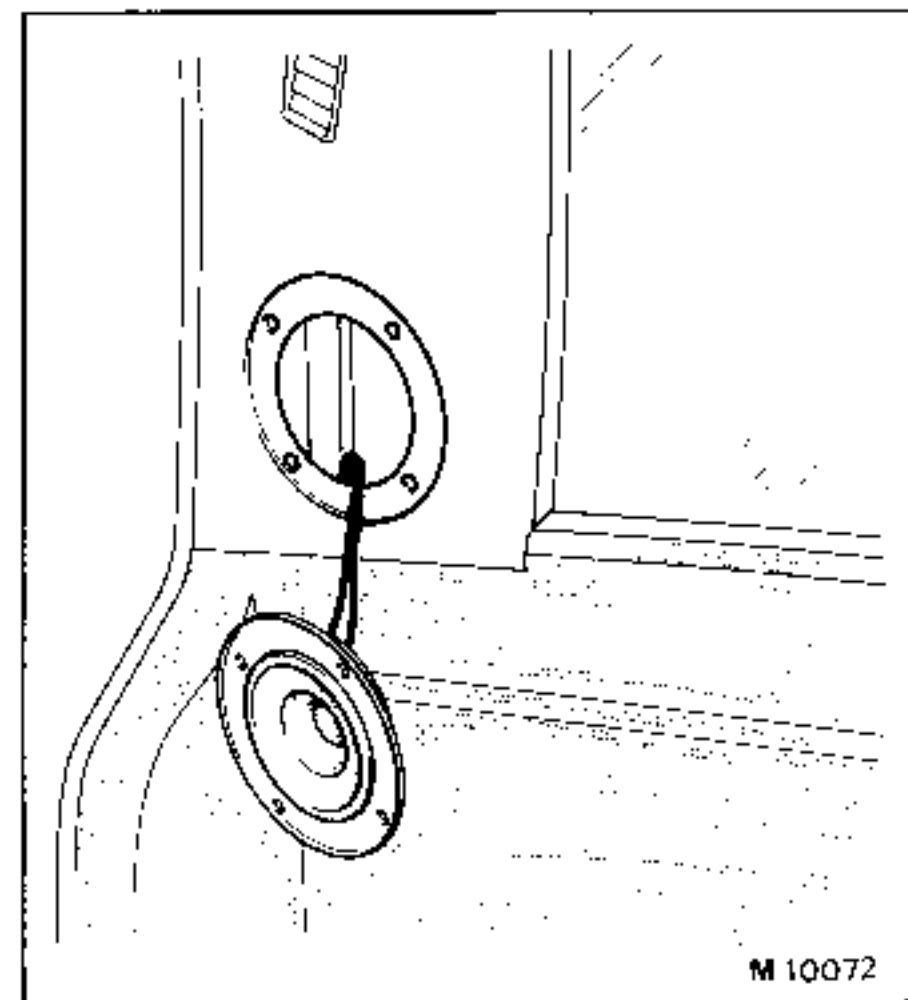
Additional speakers (Tweeters), sold individually under part number 77 00 750 604, are clipped into the grille, after it has been removed and the grille is in turn clipped into the door panel.

REAR SPEAKERS

A location is provided for them in the rear quarter panels.

- plastic insert 77 03 081 024 (8)
- washer 79 03 056 005 (8)
- screws 77 03 016 020 (8)
- dished section 60 25 001 601 (2)
- speaker 77 00 750 603 (2)
- grille: sand 77 00 754 299 (2)
- or ash 77 00 754 298 (2)

The speaker feed can be reached after the trim has been cut out.



This location can be found by feeling the trim. To fit a speaker the trim must be cut out following the location provided in the lining. The following parts are required:

INTERFERENCE SUPPRESSION

All the vehicles are equipped in production with interference suppressing capacitors in the alternator and the incorporated regulator.

Vehicles with hi-fi systems also have the following:

- 1 earth braiding (part no. 77 00 646 863) between the engine block and the sidemember, on the righthand side.
- 1 earth braiding (part no. 60 25 003 032) between the cooling fan lower mounting and the sidemember on the righthand side.
- 1 earth braiding (part no. 60 25 003 033) connecting the radio set to the console, lefthand trim lower mounting lug.
- 1 250 μ F capacitor (part no. 77 00 676 948) between the coil feed and the earth.
- 1 250 μ F capacitor (part no. 77 00 676 948) between the horn relay feed (TSE) and the earth.

The capacitors are connected as follows: the lead with a terminal to the + terminal and the mounting lug connected to earth.

It may be necessary to make these provisions when fitting radios other than the stereo system.

POSSIBLE ADDITIONAL INTERFERENCE SUPPRESSION

Start the operation by checking the aerial cable and its earthing

If any particular difficulties are experienced, consult technical note 1276 concerning interference emitted by radiation (shield screening).

REMOVABLE RADIO SET (ANTI-THEFT)

A removable unit may be mounted in the radio location if its maximum dimensions are:

- width 182 mm
- height 53 mm
- depth 165 mm

or by enlarging the cut-away section, provided its dimensions do not exceed:

- width 188 mm
- height 60 mm
- depth 200 mm (by cutting the plastic tab at the bottom of the rear housing (2)).

The edges of the radio mounting should not exceed the following dimensions:

- width 188 mm
- height 64 mm

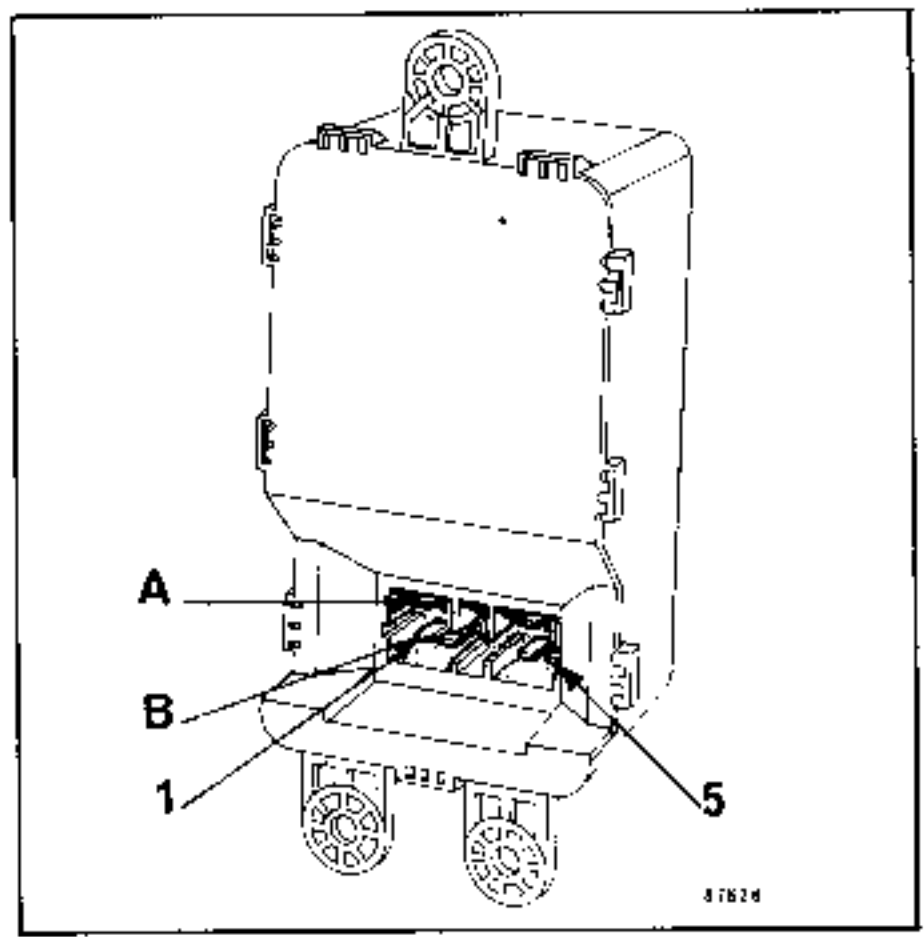
otherwise it must be reduced to these dimensions.

It is preferable to stick the central bar of the radio housing in place.

**ELECTRIC WINDOW CONTROLLED BY SINGLE
PRESSURE ON SWITCH**

Connector

- A1 Motor
- A2 Earth
- A4 Motor
- A5 + after ignition
- B1 Window up by pressing once
- B2 Window down by pressing once
- B4 Window up - normal speed
- B5 Window down - normal speed



Accessories plate

REMOVAL

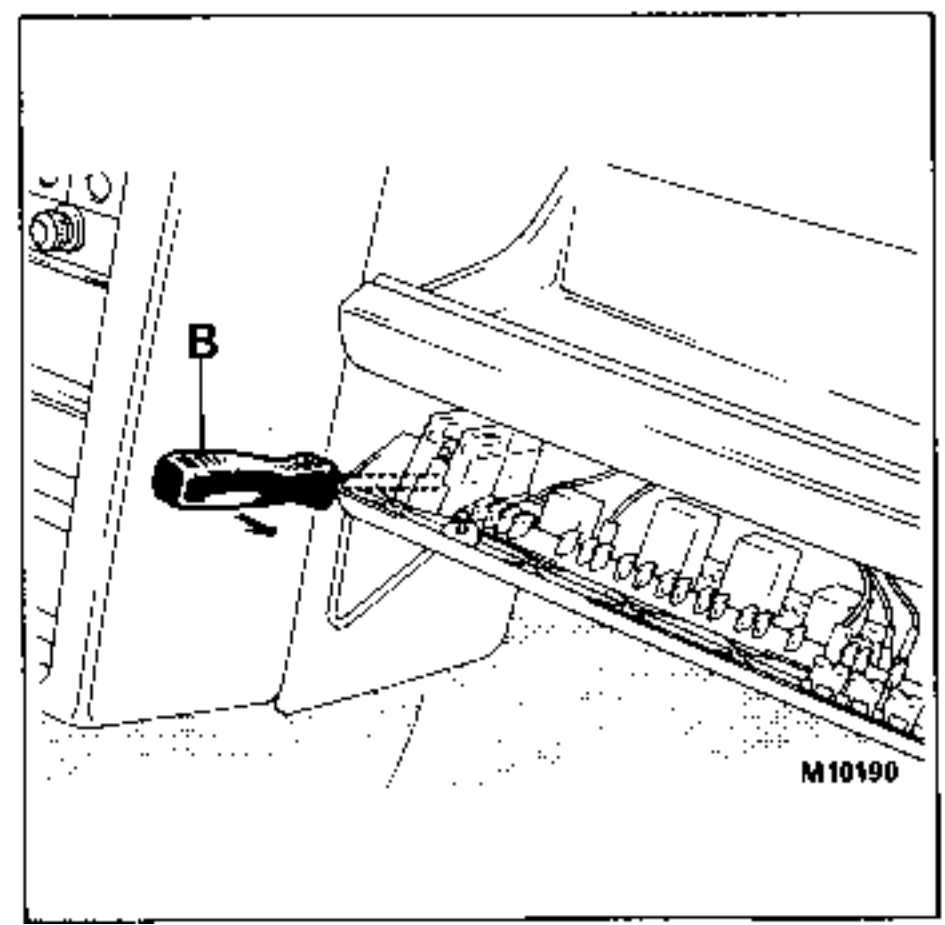
- Disconnect the battery.
- Turn the clips $\frac{1}{4}$ of a turn.
- Move the spindle using screwdriver B.

Remove the plate assembly:

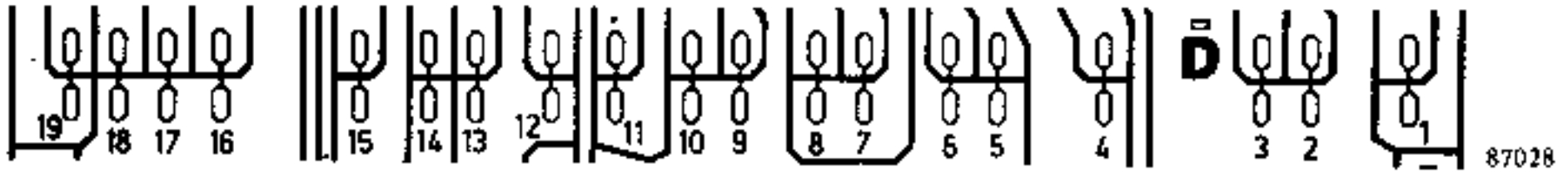
- 85 model: NT 8003
- 86 model: NT 8015
- 87 model: NT 8031.

REFITTING

Proceed in the reverse order to removal.



M10190



Fuse	Rating	Application	Fuse	Rating	Application
1	7,5 A	Rear foglight	11	10 A	Flasher unit
2	7,5 A	Windscreen and rear screen wiper "park"	12	15 A	Heater cooling fan
3	15 A	Cigar lighter/Clock/Lighting	13	3 A	Radio
4	20 A	Heated rear screen			
5	7,5 A	Windscreen wash/wipe/Rear screen wiper	15	15 A	Door locking
6	7,5 A	Reversing light/Windscreen wiper timer	16	25 A	Air conditioning/Sunroof
7	5 A	Righthand side & rear lights/Rheostat lighting	17	25 A	Lefthand window
8	5 A	Lefthand side & rear lights/Dashboard identifications	18	25 A	Righthand window/Electric rear view mirrors
9	3 A	Instrument panel feed	19	15 A	Front foglights
10	15 A	Stoplights			

Spare fuses

- 10 A = 2
- 25 A = 1
- 15 A = 1
- 7,5A = 1

For the radio option the 3 amp fuse no. 13 must be replaced by a 10 amp fuse.

COMPONENTS

- A - Dipped beam headlights shunt
- B - Heated rear screen relay
- C - Front window relay

- D - Accessories plate feed
- F - Flasher unit
- H - Not used

The heating grid consists of a screen-printed resistor applied to the inside face of the glass. If this is accidentally damaged it will render the part of the circuit concerned ineffective.

The exact point of the break can be detected with a voltmeter.

Such damage can be repaired using heated rear screen repair varnish supplied under part no. 77 01 400 794 (10 gr pack).

Determining the exact point of the break using a voltmeter

Switch on the ignition.
Switch on the heated rear screen.

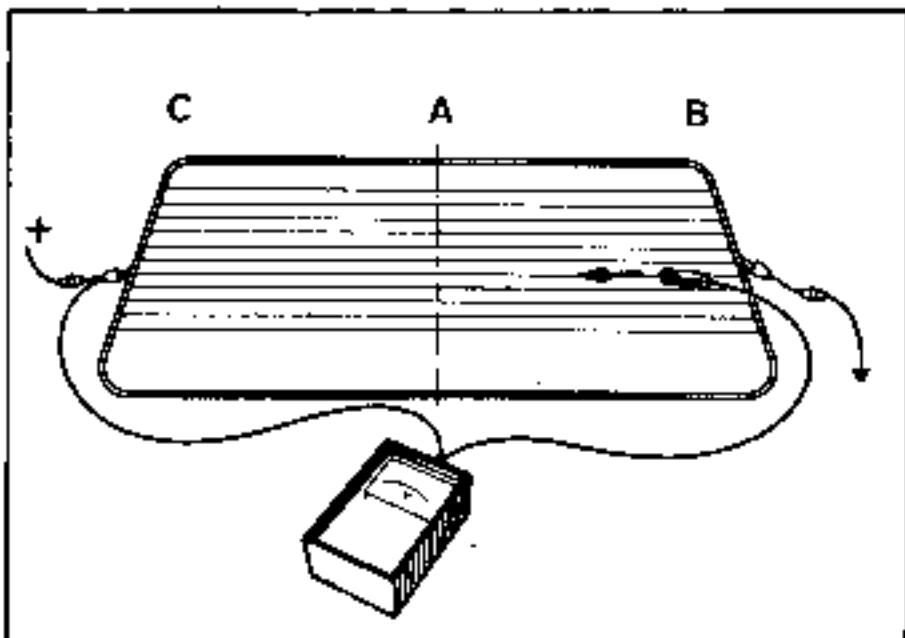
Detecting between lines B and A

Connect the + wire of the voltmeter to the screen + feed wire.

Apply the - wire of the voltmeter to one of the resistor filaments on the negative side of the screen (line B). The voltage noted should be approximately battery voltage.

Move the - wire towards line A (see arrow): the voltage should gradually drop.

If the voltage drops suddenly the filament is broken at that point (carry out the same operation on each filament).



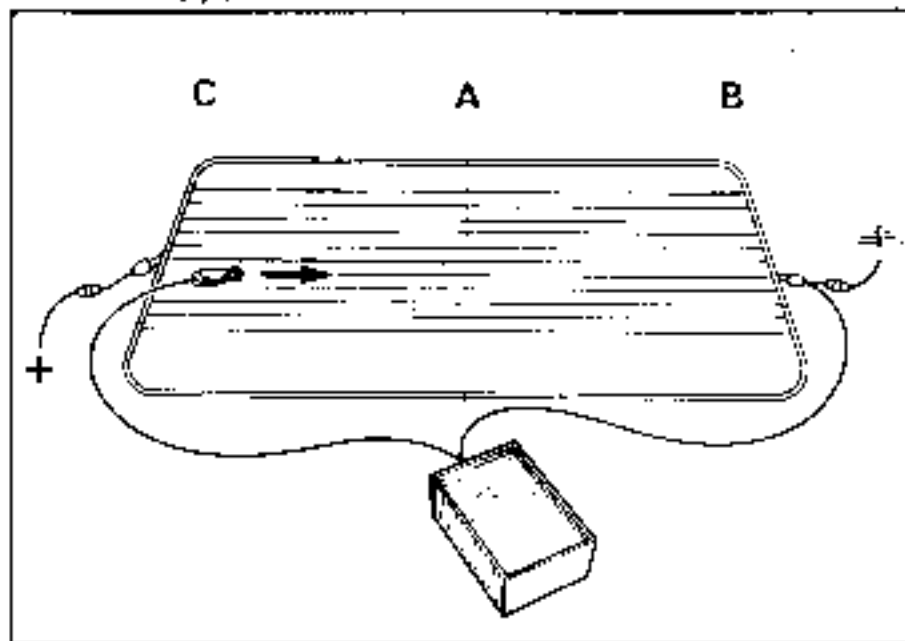
Detecting between lines C and A

Connect the voltmeter - wire to the - terminal on the screen.

Apply the voltmeter + to one of the filaments on the + terminal side of the screen (line C). The voltage noted should be approximately battery voltage.

Move the + wire towards line A (see arrow). The voltage should gradually drop.

If the voltage drops suddenly the filament is broken at that point (carry out the same operation on each filament).



REPAIRING A FILAMENT

Clean the area to be repaired to remove all dirt or grease, preferably using alcohol or a window cleaning compound. Dry the area with a clean, dry cloth.

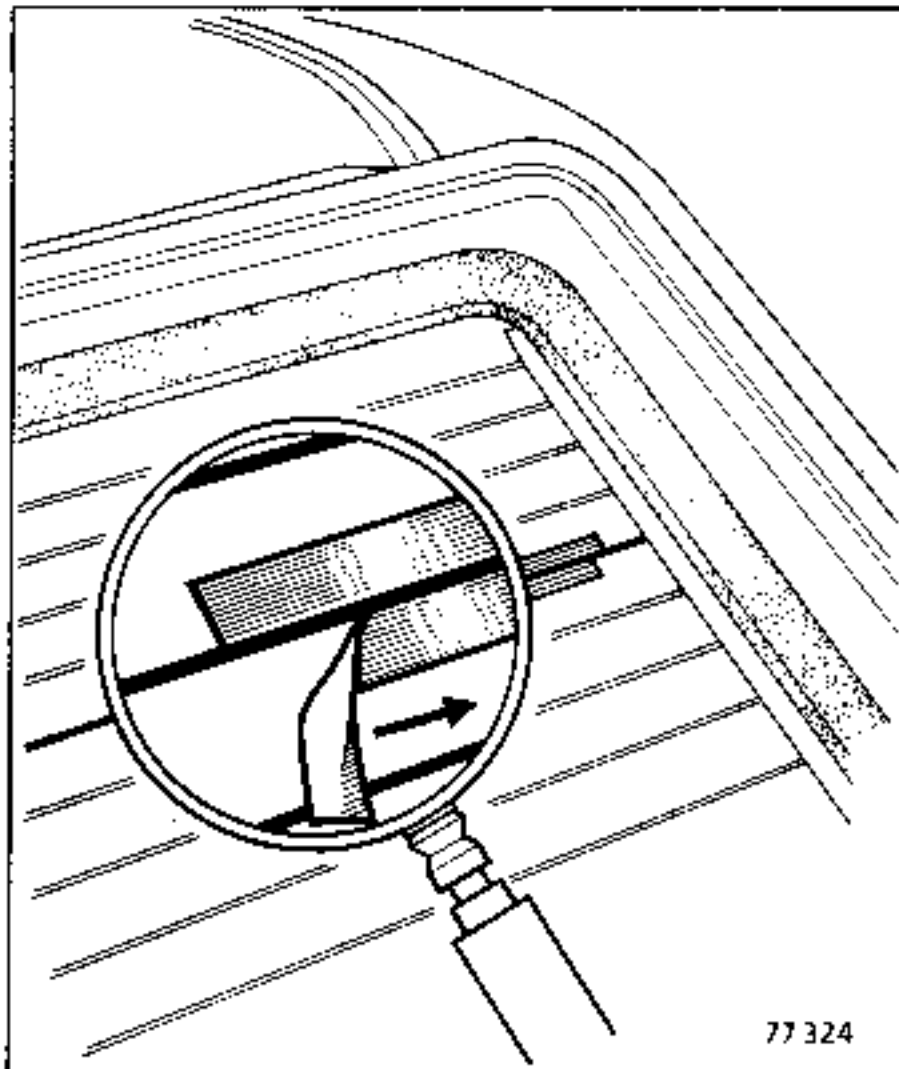
To obtain a neat repair, apply adhesive tape, of the sellotape type, to either side of the area to be repaired, leaving the filament line bare.

Before applying the varnish, shake the flask to avoid leaving the silver particles as a deposit in the bottom of the flask.

Repair the filament with a small paintbrush, ensuring that the coat is thick enough. If more than one coat is required, leave time for each coat to dry before applying the next one. Do not apply more than three coats.

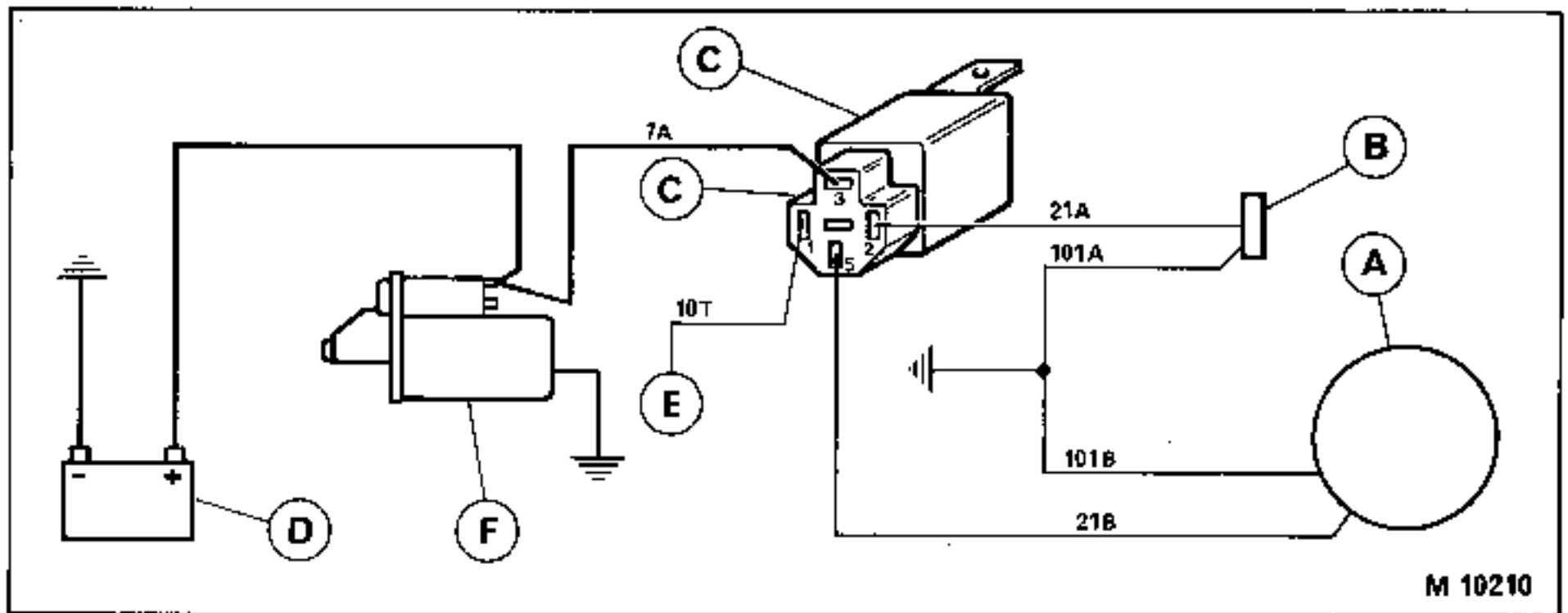
If a rough edge is left, it can be trimmed off with the point of a knife or razor blade, but only after several hours when the product has dried thoroughly.

The adhesive tape applied as a guide is not to be removed until approximately one hour after application. It is to be pulled off square with the resistor element in the direction shown by the arrow. When applied at an ambient temperature of 20°C the varnish will be fully dry within three hours. At lower temperatures the drying time will be a little longer.



The DIESEL FUEL FILTER has a heater, the temperature of which is electrically regulated.

Diagram



M 10210

- | | | | |
|---|--------------------|---|------------------|
| A | Heater ring | D | Battery |
| B | Temperature sensor | E | + after ignition |
| C | Control relay | F | Starter |

OPERATION

As soon as it is in the operating position (ignition "on"), relay (C) controls the electrical feed of heater ring (A). The temperature is regulated from +8°C by sensor B which controls relay (C).

CHECKING

Heater ring (A) does not have to be removed to check the heater.

Check that the resistance $R \approx 0.8$ ohms using an ohmmeter.

REMOVAL

Replacing the ring

Disconnect the connector from the resistor.

Remove the diesel fuel filter (strap wrench).

Remove the screws (8mm male hexagon head screws) securing the ring.

REFITTING

Proceed in the reverse order to removal.

OPERATING PRINCIPLE

The remote control unit consists of two components:

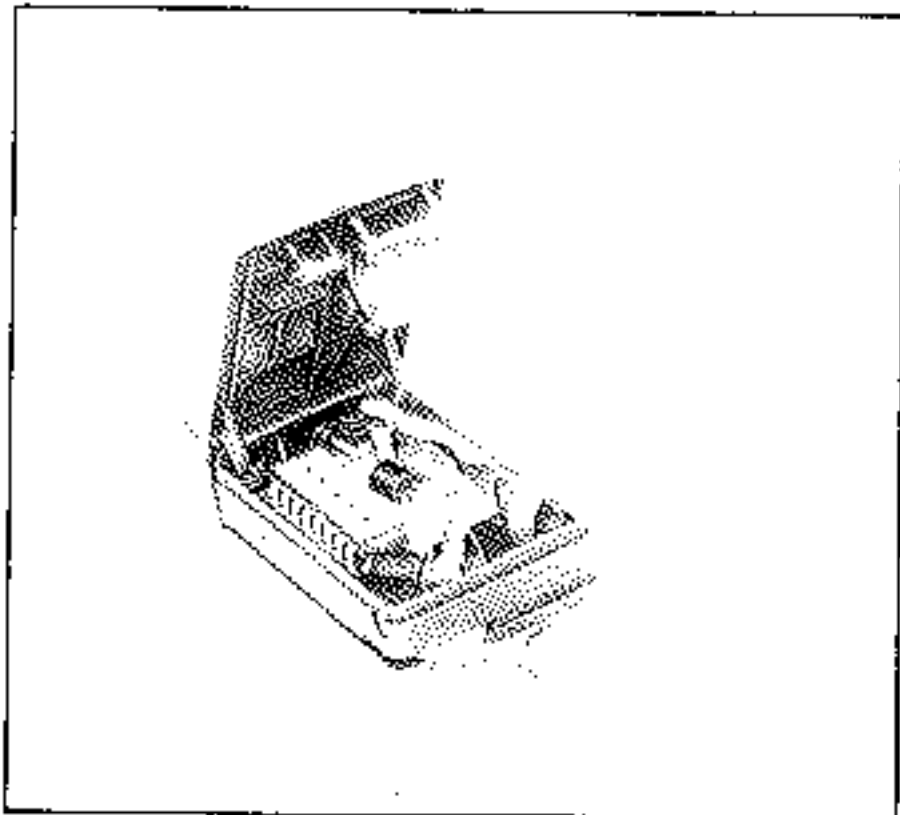
- a transmitter in the form of a key-ring;
- a receiver located on the front crossmember of the roof and connected to the electrical circuit of electromagnetic locks where it duplicates the conventional locking system.

The transmitter emits a series of infra-red pulses (forming a code). Receiver (5) receives this code, compares it with a pre-set code and, if they are identical, controls alternately a relay acting on the locking system and a relay acting on the unlocking system.

- Duration of coded signal = 0.3 seconds
- Duration of relay operation = 0.6 seconds
- Duration of security locking before a new coded signal is emitted \approx 1 second.

FAULT-FINDING

The transmitter-receiver system cannot be repaired.

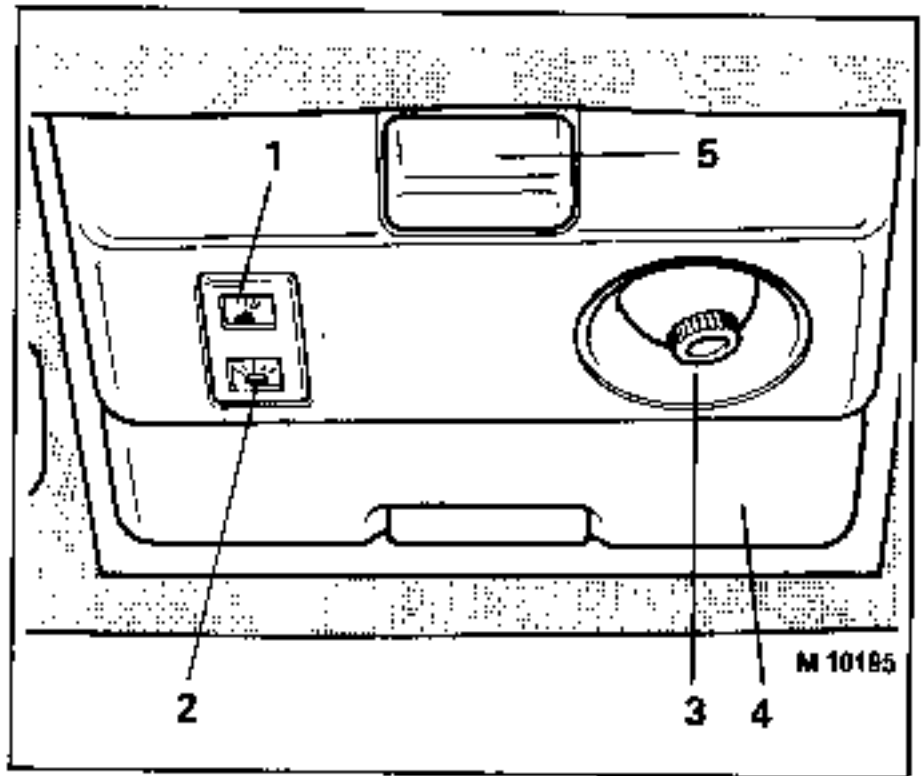


The transmitter is fed by three LR54 batteries. The code number is stamped on the transmitter cover. To order the transmitter alone use the part number plus the code number.

When the transmitter tell-tale no longer lights up, check the batteries or the battery contacts.

Receiver:

- the code number is stamped on the lower face of the receiver;
- the receiver can be reached by removing the mounting plate.



1. Map-reading light switch (centre interior light)
2. Interior light switch
3. Map-reading light
4. Centre vizoir
5. Infra-red receiver

HARNESS ROUTING

