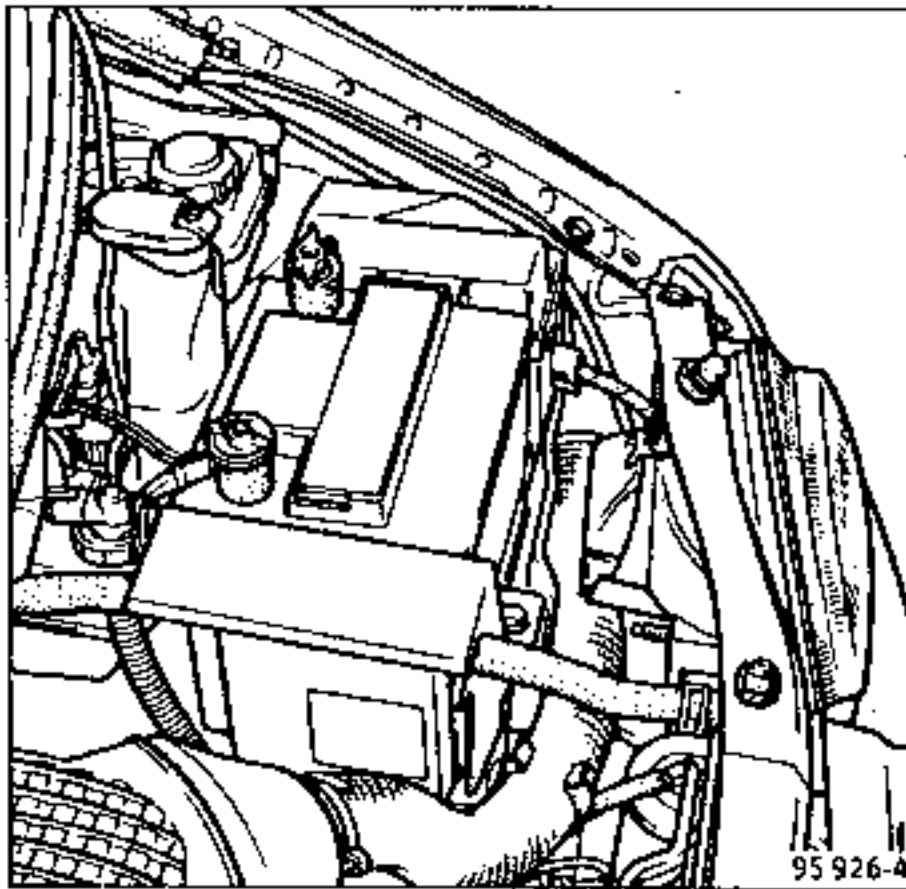


SPECIAL NOTES FOR REFITTING



Grease the terminals before refitting the connectors.

A - TESTING

Check that:

- the battery tray and cover are not cracked or broken,
- the top of the battery is clean,
- the terminals are in good condition

It is vital to ensure that :

- there is no sulphation on the terminals and collars,
- the terminals are cleaned and greased
- the collars are connected tightly on the terminals. Poor contact may cause starting or charging faults which could create sparks which could cause the battery to explode.
- the electrolyte level in the battery is correct.

Batteries with removable caps :

- remove the cover by hand or with a tool (rigid spatula),
- check that the electrolyte level in all the cells is well above the plates
- top up the level if necessary with demineralised water.

Note : certain batteries have translucent bodies which enable the electrolyte level to be checked.

Never add electrolyte or other products.

B- PRECAUTIONS

Remember that a battery :

- contains sulphuric acid which is a dangerous chemical,
- creates hydrogen and oxygen when it is charging. The combination of these two gasses is an explosive mixture.

1) DANGER = ACID

Sulphuric acid solution is a very corrosive substance, which is also poisonous. It attacks skin, clothing and concrete and corrodes most metals.

When handling the battery, follow these important precautions :

- protect your eyes with goggles,
- wear gloves and anti-acid clothing.

If you are splashed with acid rinse all affected parts with copious amounts of water. If acid is splashed into the eyes, seek medical attention.

2 - DANGER = RISK OF EXPLOSION

When a battery is charging (either in the vehicle, or outside), oxygen and hydrogen are formed. The maximum amount of gas is formed when the battery is fully charged, and the quantity of gas produced is proportional to the charging current.

Oxygen and hydrogen combine on surfaces to form a highly explosive mixture.

The slightest spark, a cigarette or a match which is still glowing is sufficient to cause an explosion. The explosion is so violent that the battery may shatter and acid fly into the air. Anyone in proximity to the battery is in danger (sharp projectiles, acid burns). Acid is dangerous to the eyes, face and hands and also damages clothing.

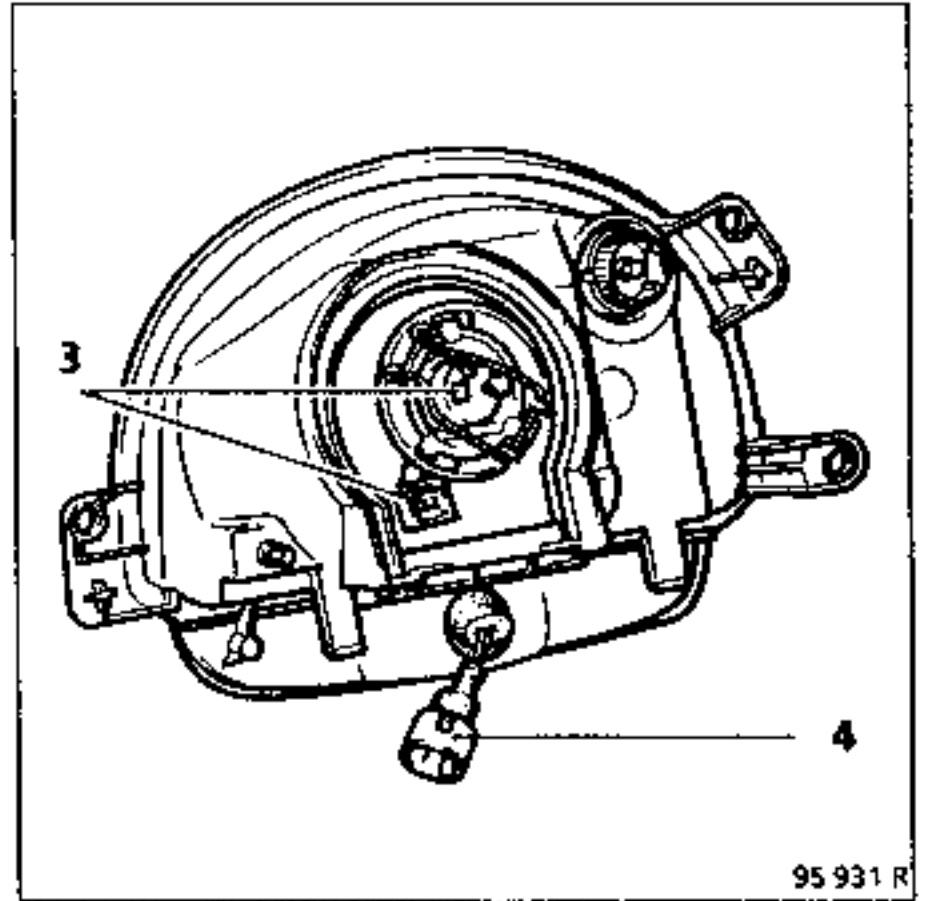
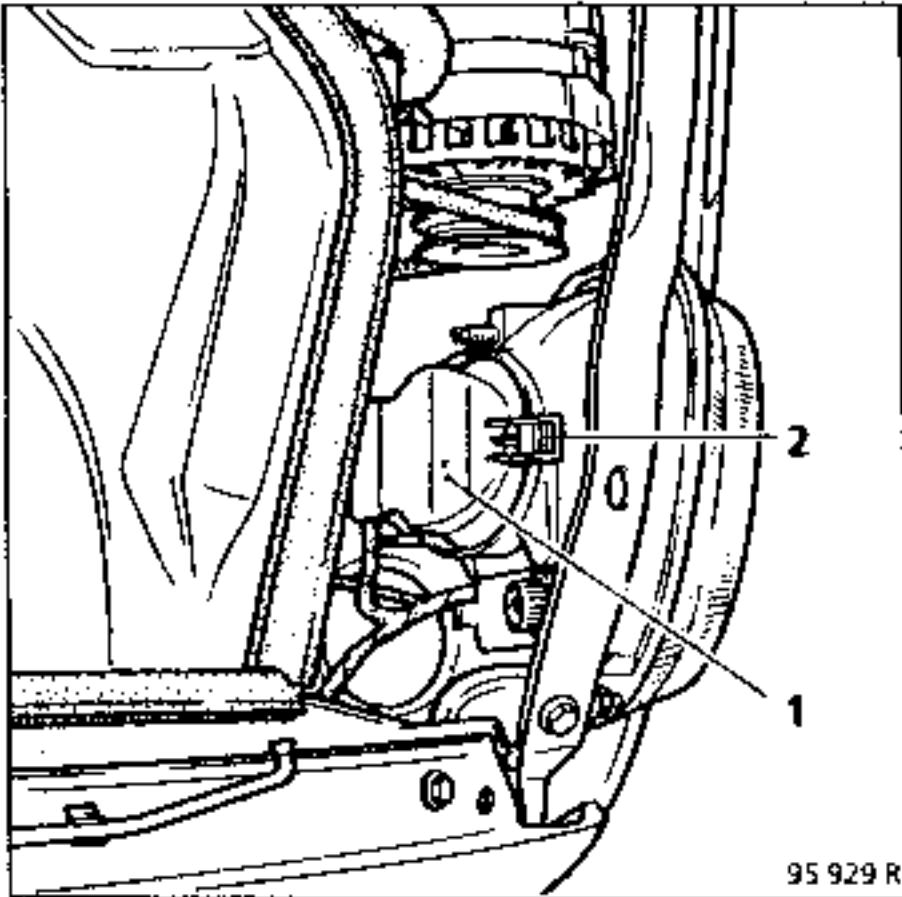
Care must be taken to avoid battery explosions - never treat a battery negligently. Avoid all risks of sparks

- Ensure all consumers are disconnected before disconnecting or reconnecting the battery.
- When charging a battery in a workshop, turn the charger off before connecting or disconnecting the battery.
- Never place a metal object on the battery which could short circuit the terminals.
- Keep naked flames, welding torches, heat guns and lighted matches away from batteries.

REMOVAL - REFITTING

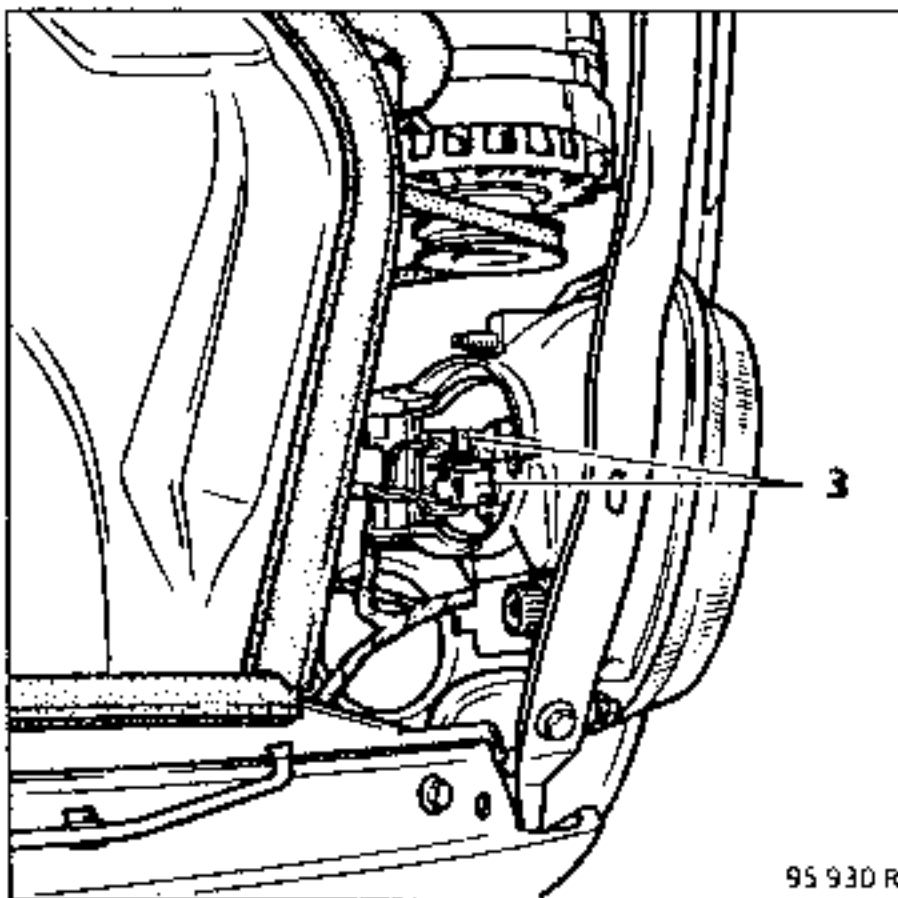
Disconnect the battery

Unclip the plastic cover (1) by pressing tab (2) and remove it.

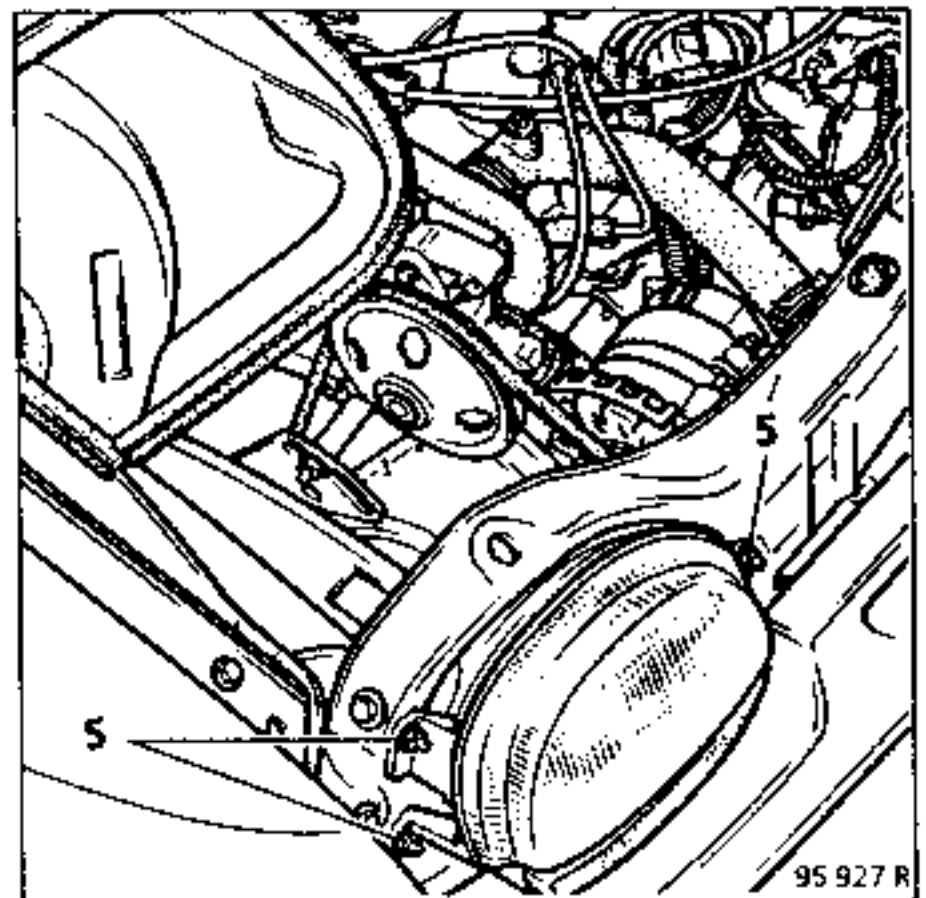


Unscrew the three lens unit mounting nuts (5).

Remove the lens unit outwards.



Disconnect the connectors on the lens unit (3) and the direction indicator light (4).



Refitting is the reverse of removal.

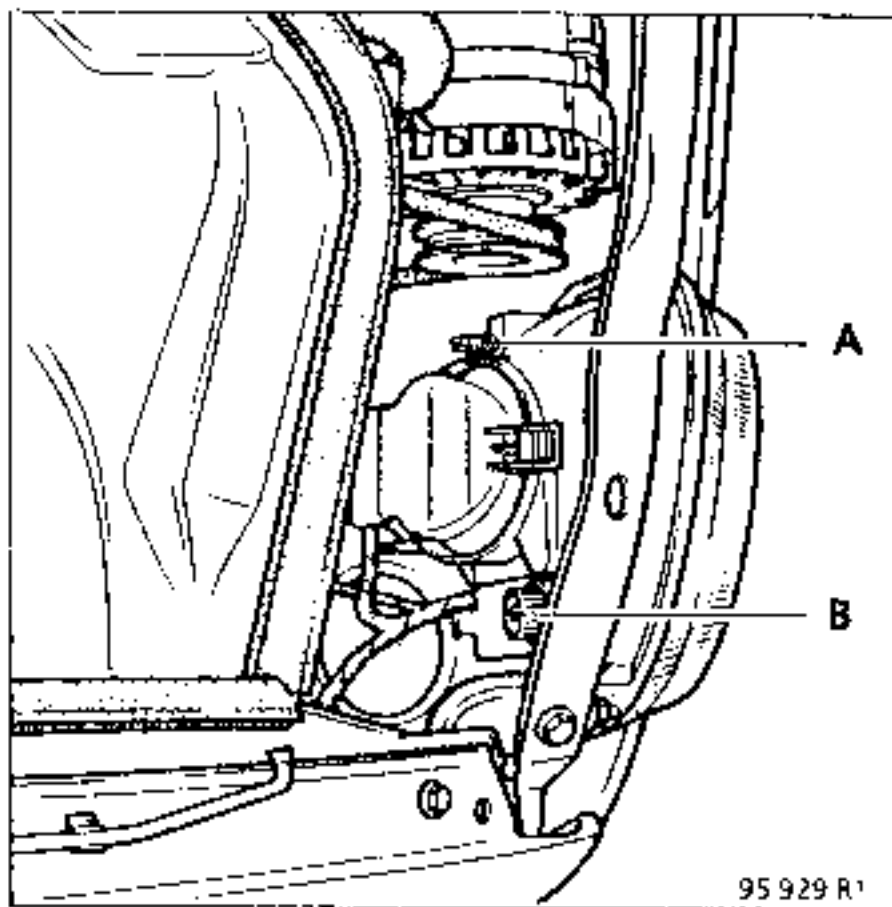
SPECIAL NOTES FOR REFITTING

After removing the lens units, the headlight beam must be adjusted.

Adjustment:

Ensure the vehicle is unladen.

Adjust direction using screw (A) and height using screw (B)

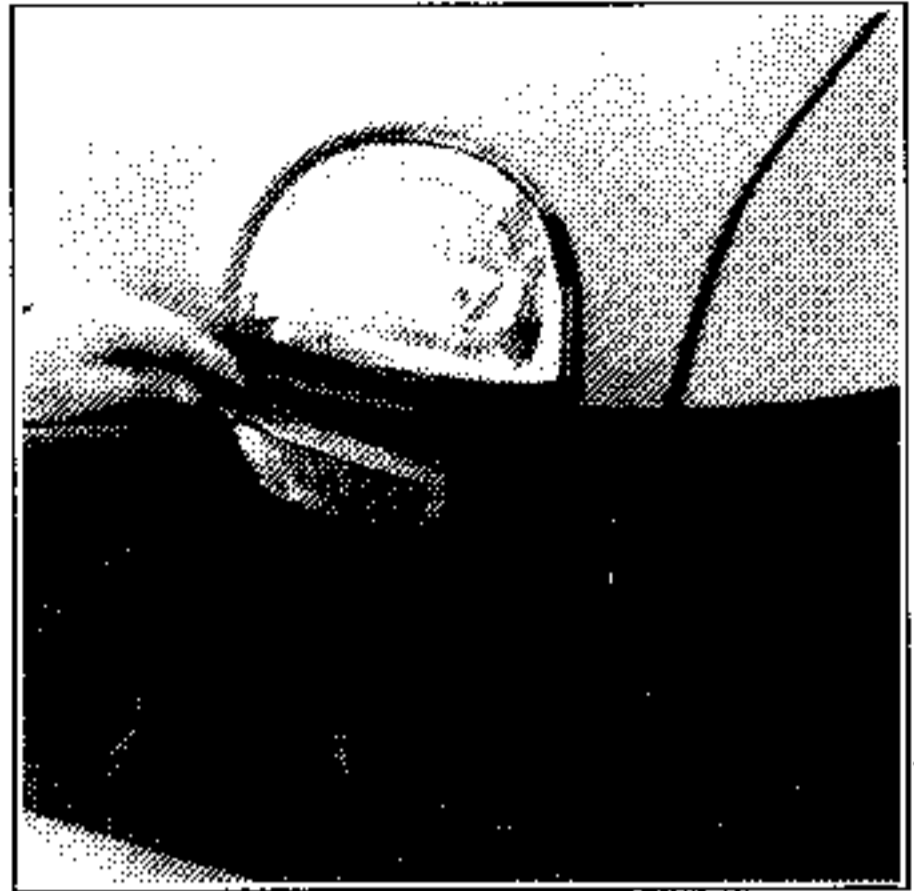


SPECIAL NOTE

Although the indicator light base is part of the same assembly as the lens unit, the cover may be removed separately

Replacing the bulb

Using a cross head screwdriver, remove the indicator light cover.
Remove the bulb from the holder

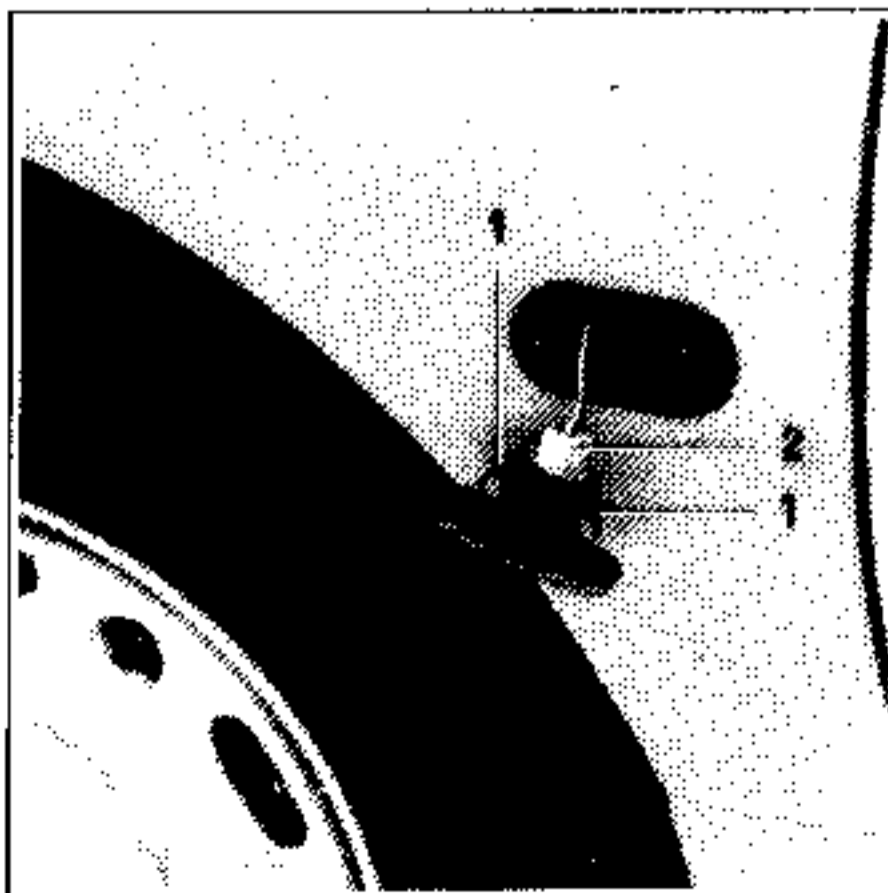


Side repeater

REMOVAL

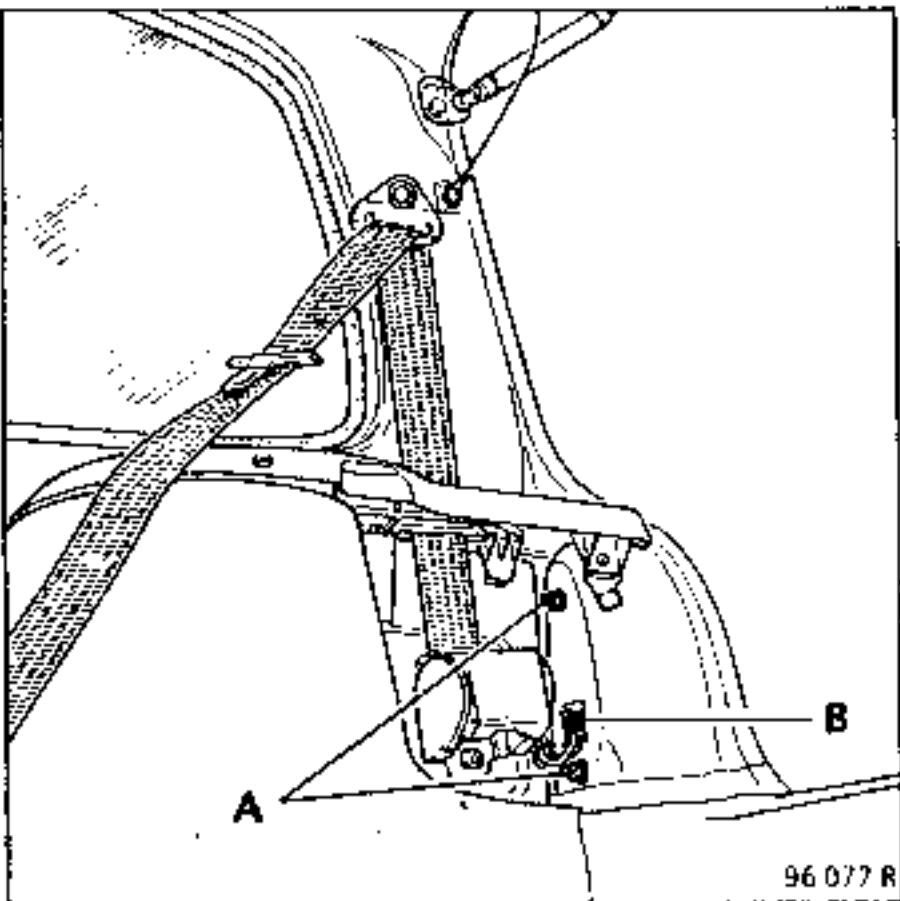
Undip the repeater using a flat blade screwdriver, to release clips (1)

To remove the bulb, turn the bulb holder by a quarter turn (2)



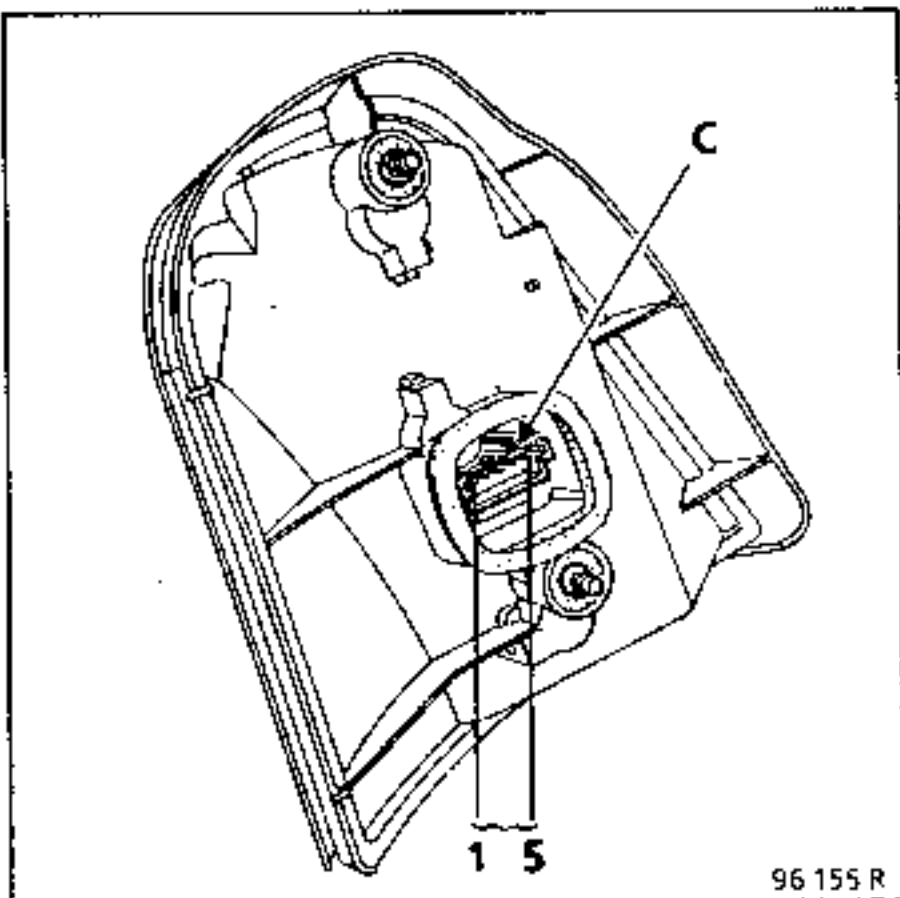
REMOVAL - REFITTING

From inside the luggage compartment, unscrew the two rear light block mounting nuts (A). Remove the rear light block from the outside. Disconnect the connector (B) by lifting tab (C).



CONNECTIONS

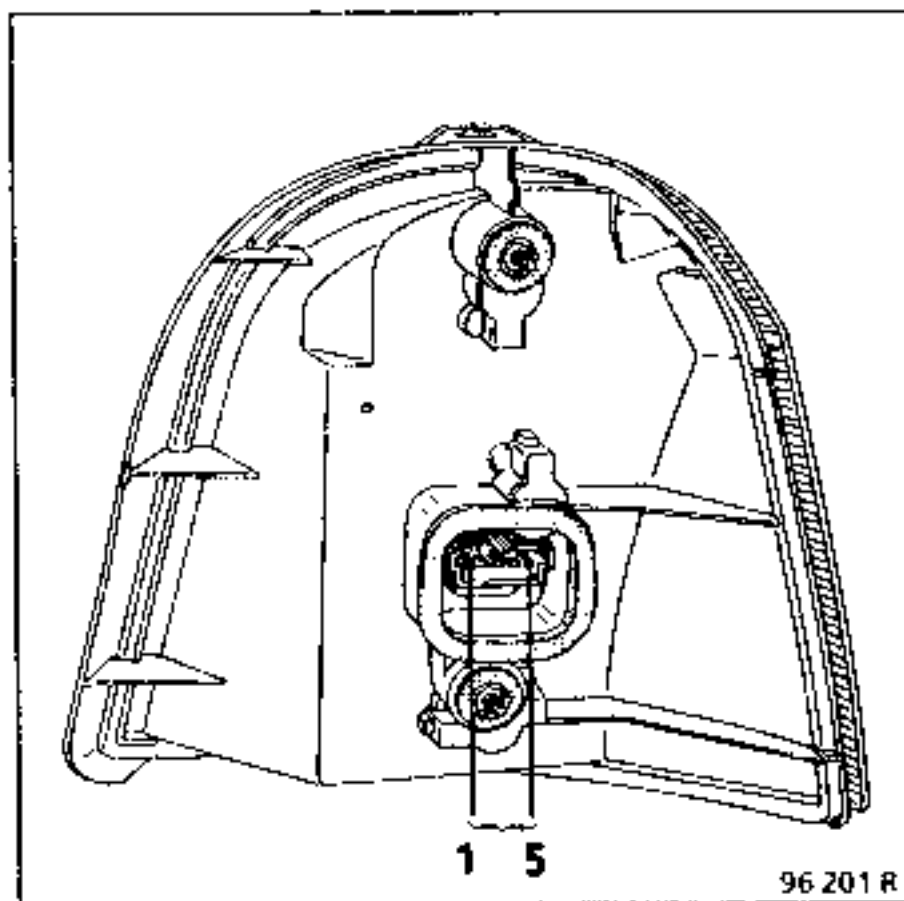
Rear right hand light



Rear right hand light connector

Track	Allocation
1	Stop light
2	Earth
3	Side light
4	Indicator
5	Reversing light

Rear left hand light



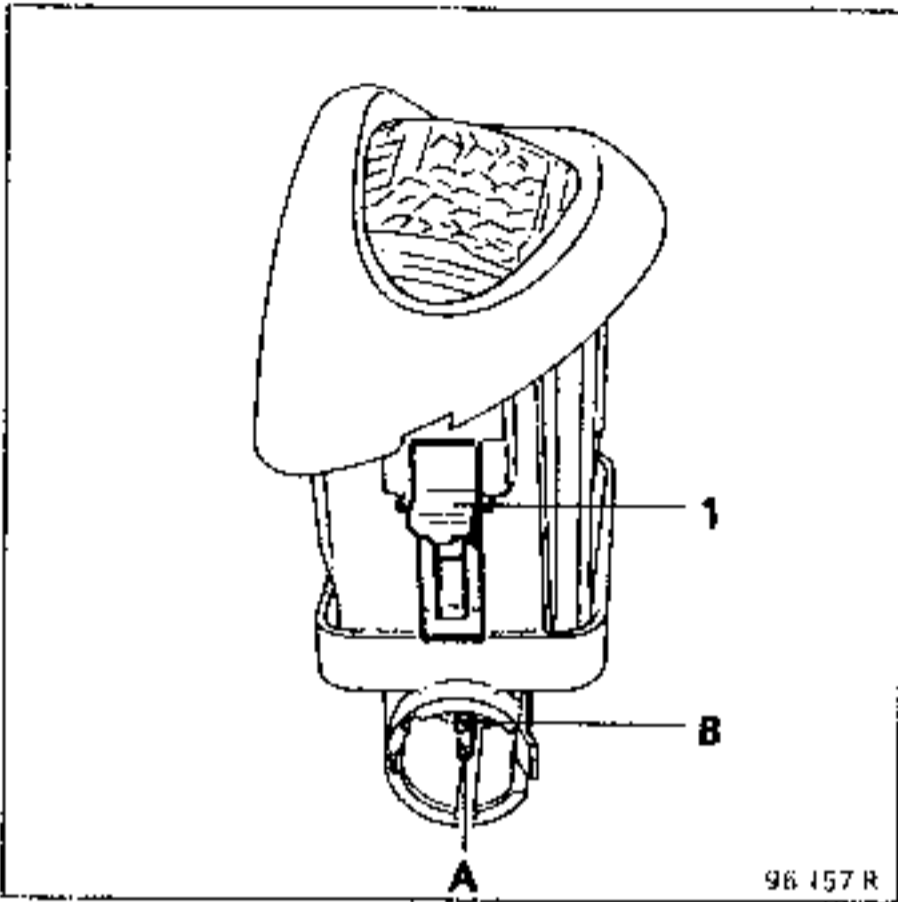
Rear left hand light connector

Track	Allocation
1	Fog light
2	Indicator
3	Stop light
4	Earth
5	Side light/number plate light

REMOVAL

Unclip the light by lifting first one side then the other to release the clips (1).

Disconnect the connector.



CONNECTIONS

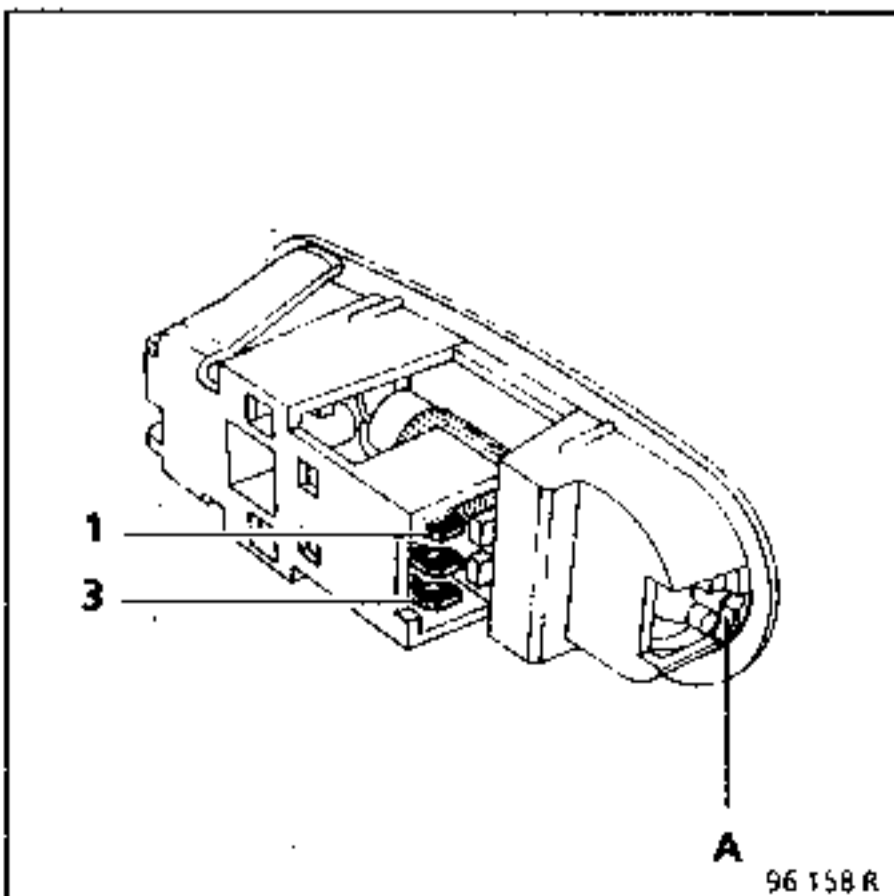
Track	Allocation
A	Earth
B	+ number plate light/ side light

Courtesy light

REMOVAL

Release clip (A) to remove the courtesy light.

Disconnect the connector.

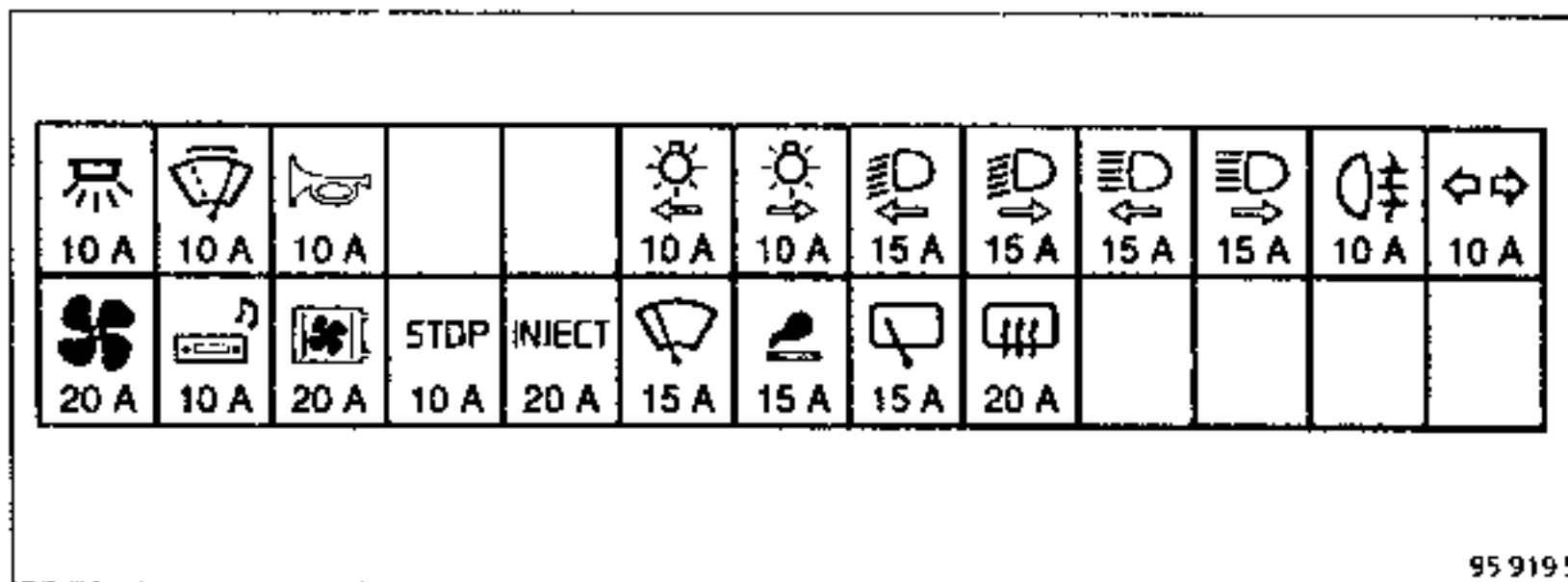


CONNECTIONS

Track	Allocation
1	Door switch info
2	+ before ignition
3	Earth

FUSE BOX (passenger compartment)

This fuse box is in the passenger compartment under the dashboard on the driver's side. To reach the fuses, open the cover in the steering column cover.

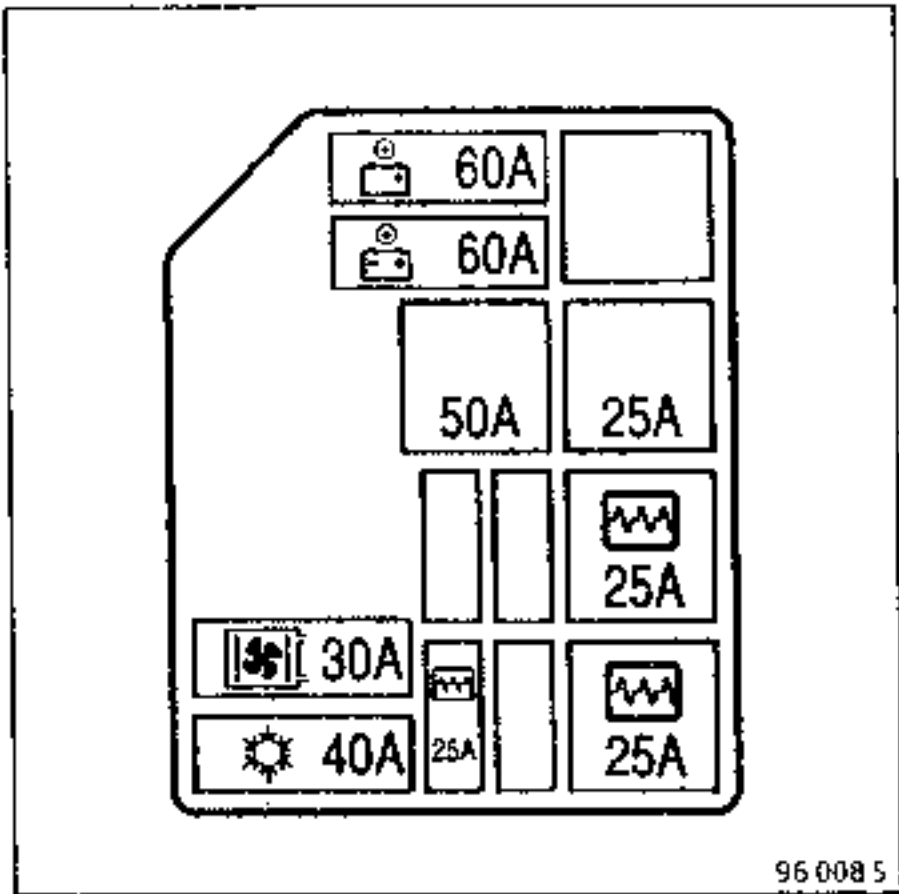


Allocation of fuses (depending on equipment level and country)

Symbol	Rating	Allocation	Symbol	Rating	Allocation
	10	Interior lighting		10	Direction indicator/hazard warning lights
	10	Front wiper park		20	Heating
	10	Horn		10	Radio
	10	LH side light/switch lighting and heating control		20	Engine cooling fan
	10	RH side light	STOP	10	Stop lights/central indicator unit
	15	LH dipped headlight	INJECT	20	Injection
	15	RH dipped headlight		15	Front screen washer - wiper
	15	LH main beam headlight		15	Cigar lighter/reversing light
	15	RH main beam headlight		15	Rear screen wiper
	10	Rear fog light		20	Rear screen de-icer

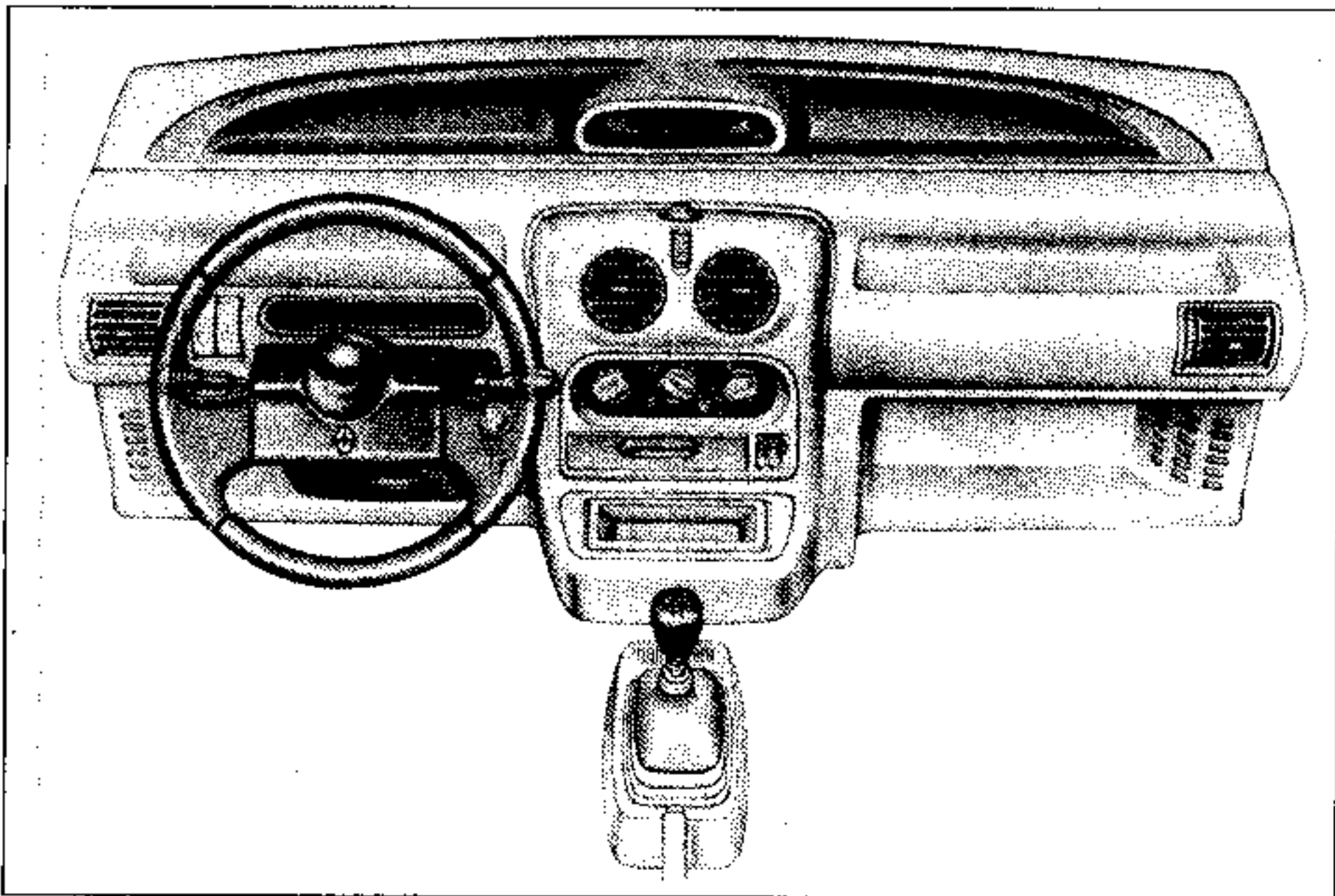
FUSE BOX (engine compartment)

This fuse box is in the engine compartment, next to the battery



Allocation of fuses (depending on equipment level and country)

Symbol	Rating	Allocation
	25	Injection (All types)
	60	General passenger compartment protection/before ignition
	60	General passenger compartment protection/after ignition
	30	Heating fan assembly
	40	Cooling fan assembly

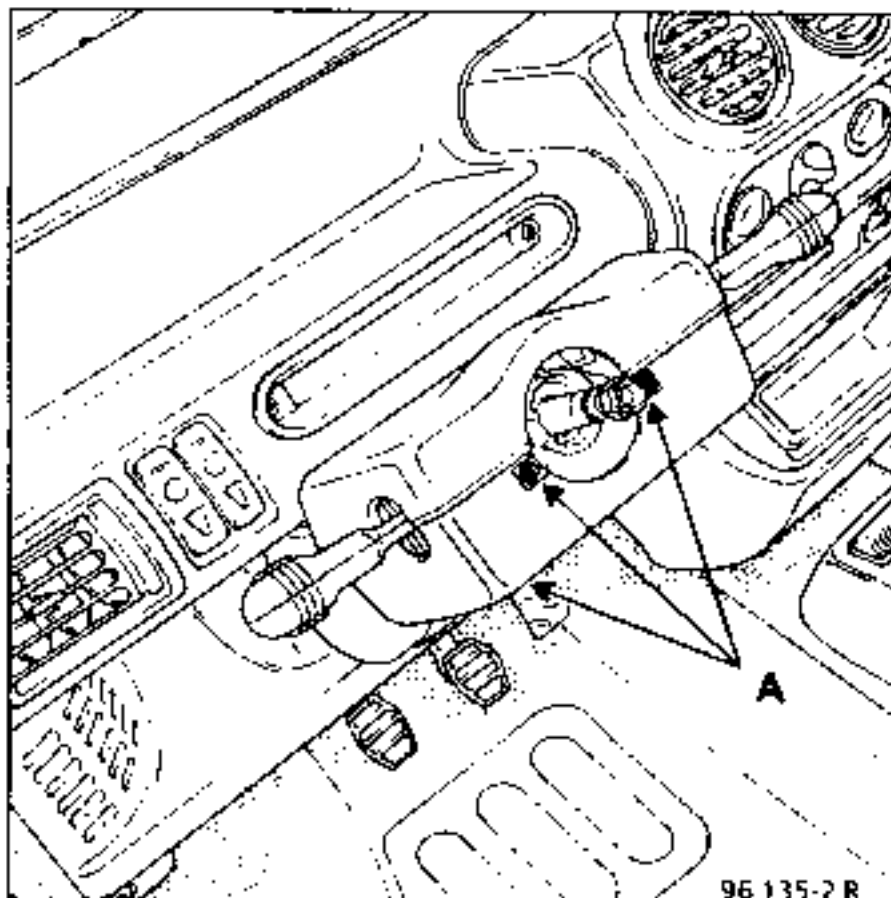


REMOVAL

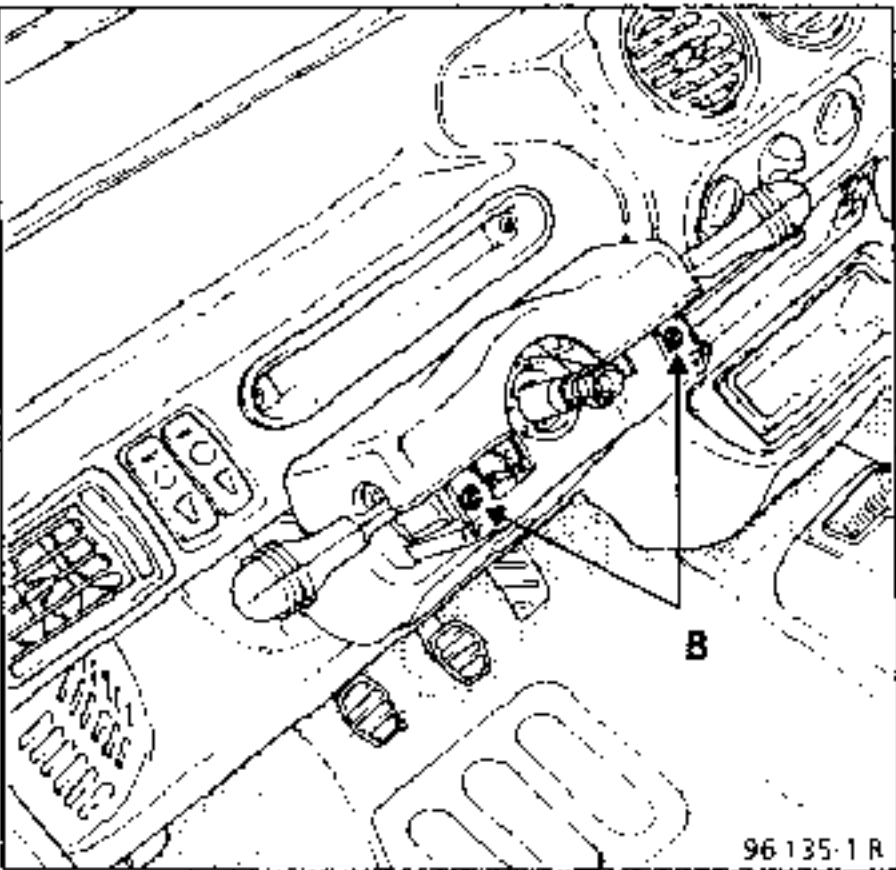
Disconnect the battery.

Remove:

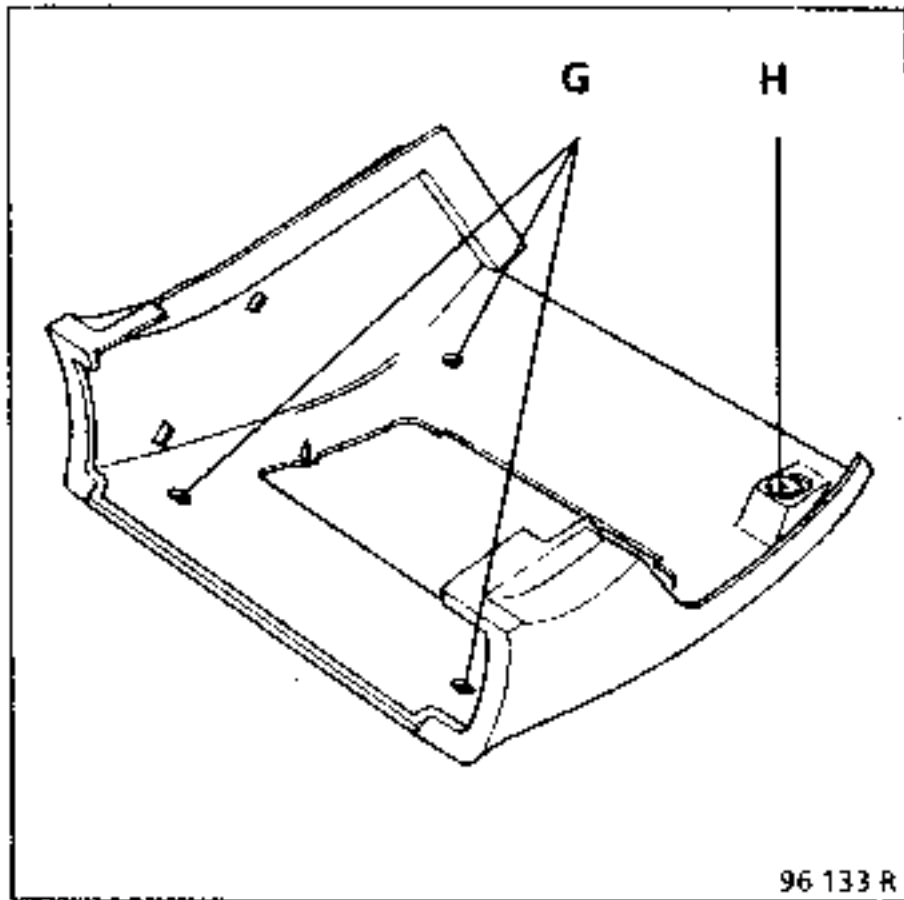
- the steering wheel having marked its position
- the lower half cowling by unscrewing bolts (A) and pulling downwards.



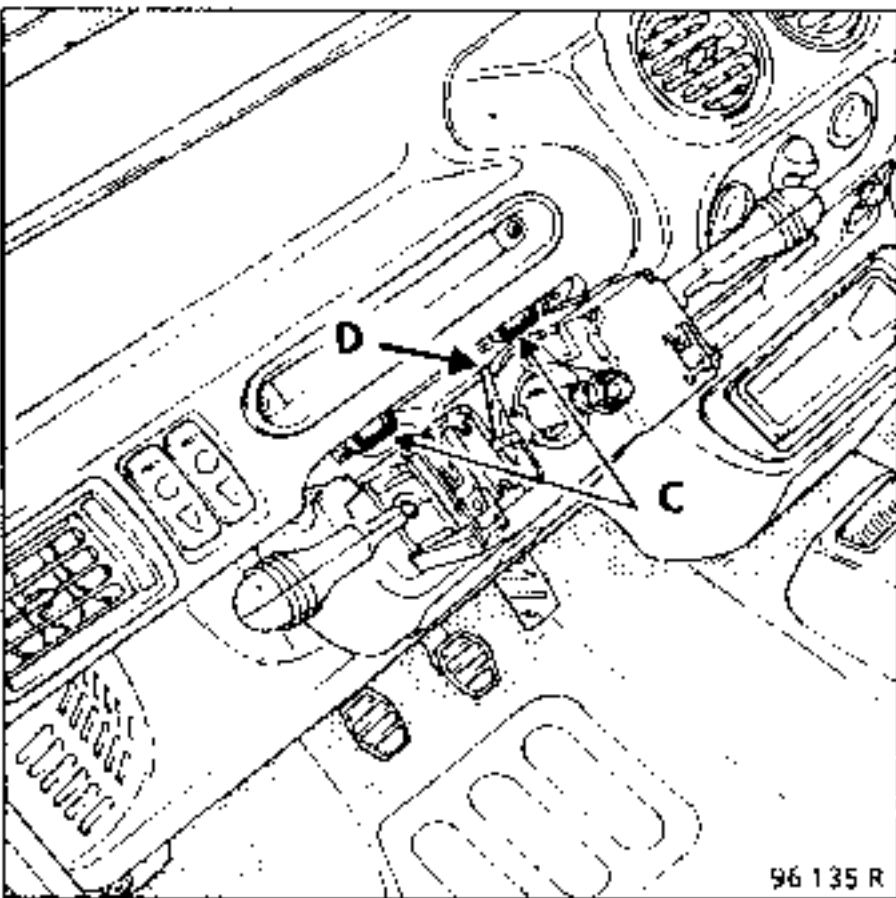
Remove the two upper half cowlings by unscrewing their mountings (B) and pulling the cowlings backwards keeping it at the same angle to allow the two lugs (C) to be released.



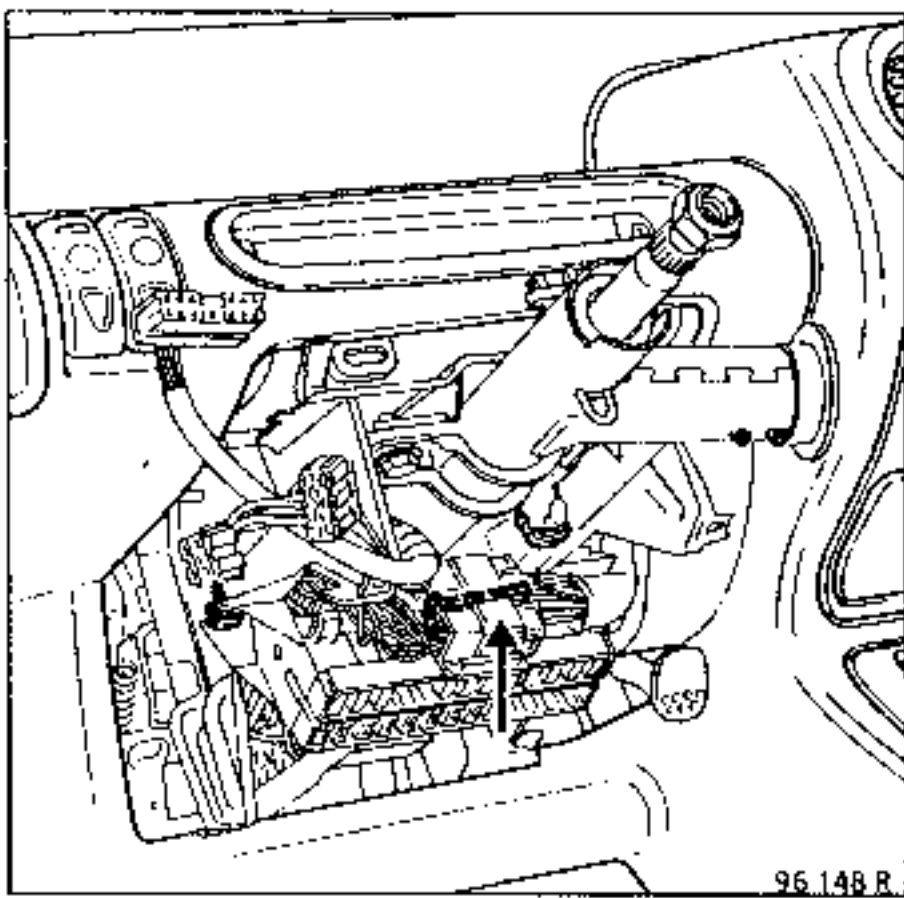
Remove the steering column cover (trim under steering wheel) by unscrewing the three bolts (G) and pulling downwards, to unclip the pin (H) on the bottom right hand side.



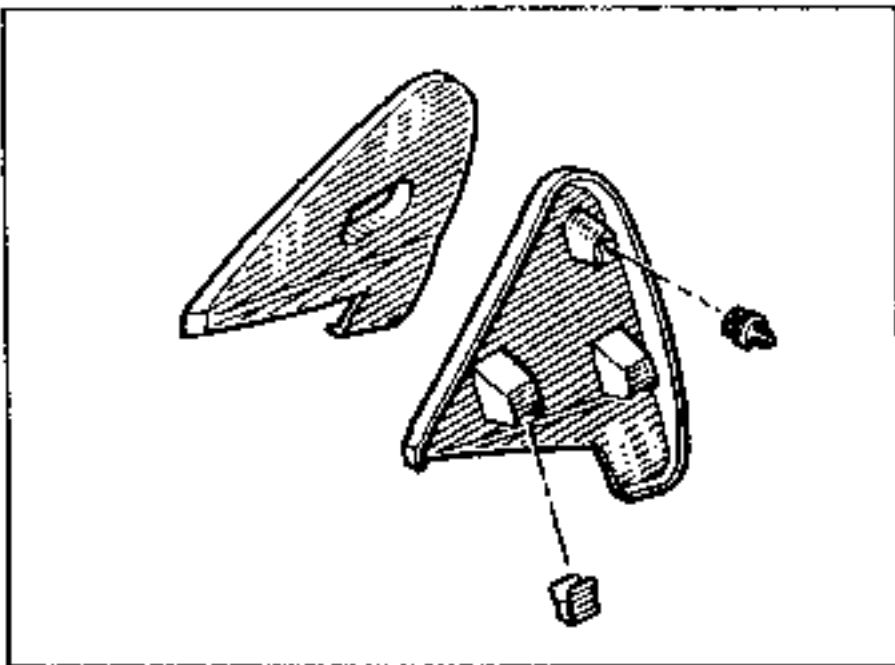
Disconnect the main wiring harness.



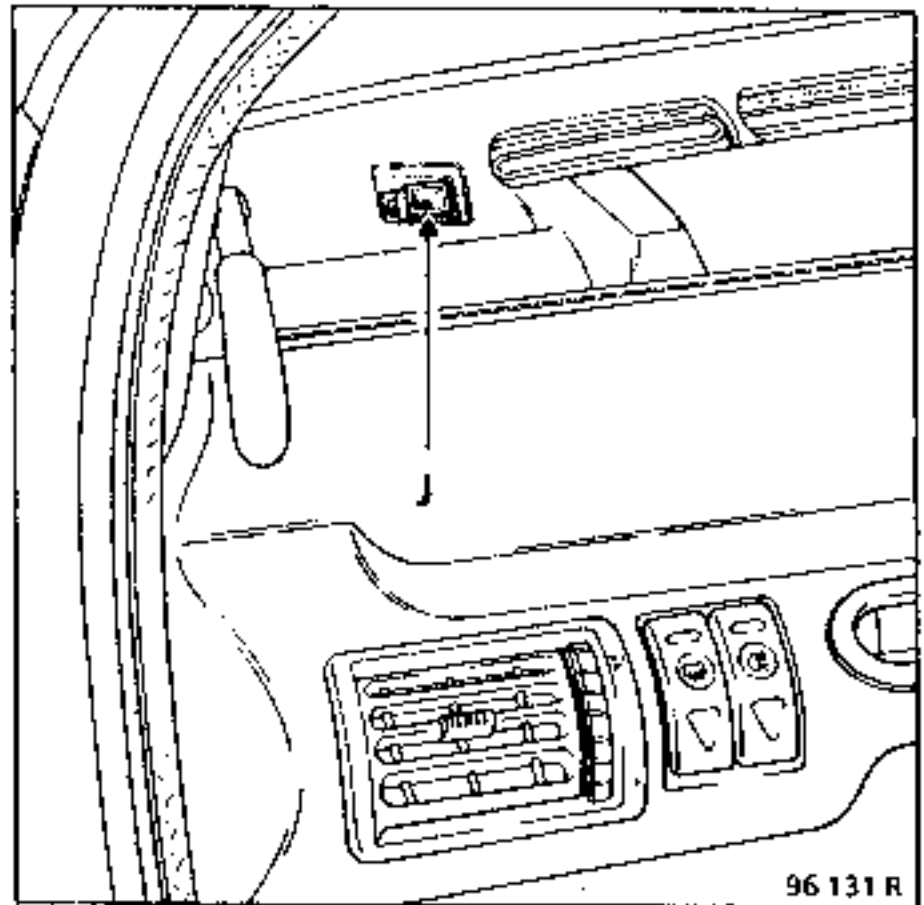
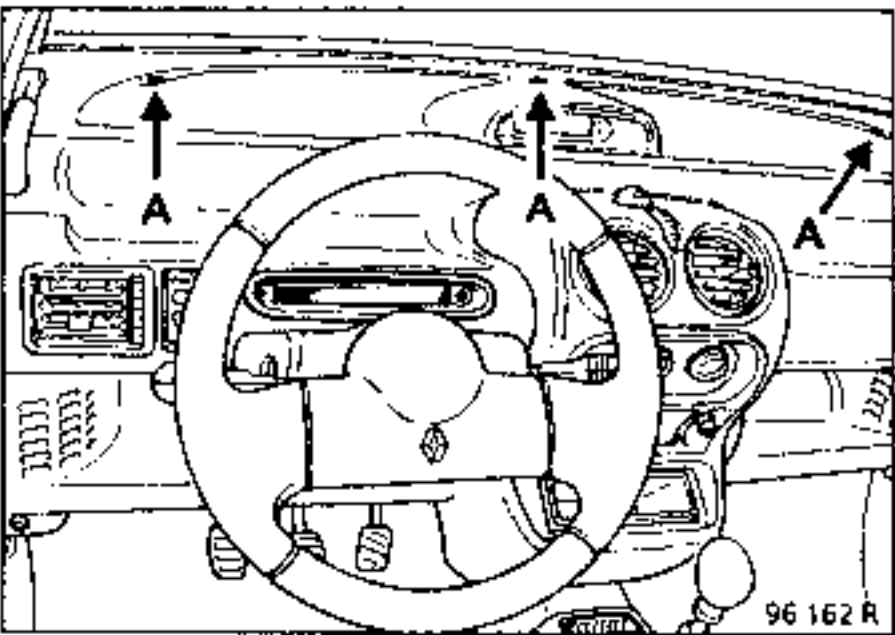
Release the switch holder assembly by loosening bolt (D).
Pull the assembly backwards slightly
Disconnect the connectors
Remove the switch holder assembly



Remove or protect the right hand rear view mirror
interior trim



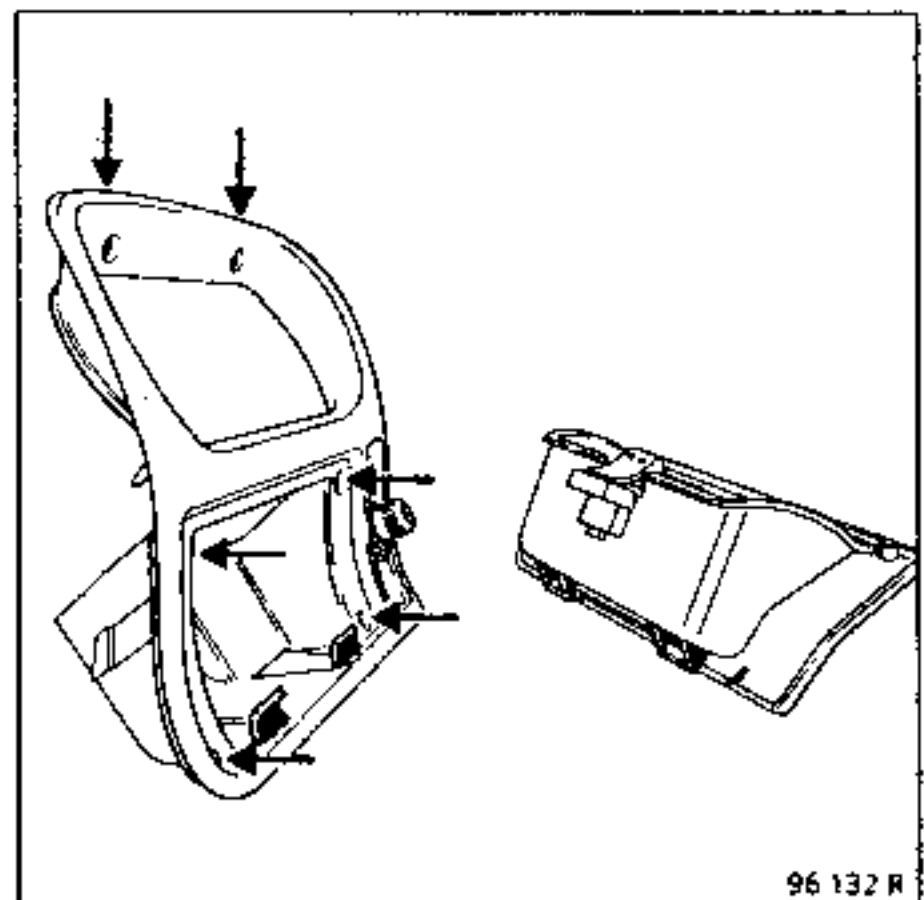
Remove the upper section of the dashboard (A)



96 131 R

Note : Clips (J) slide to allow the upper section of the dashboard to be centred.

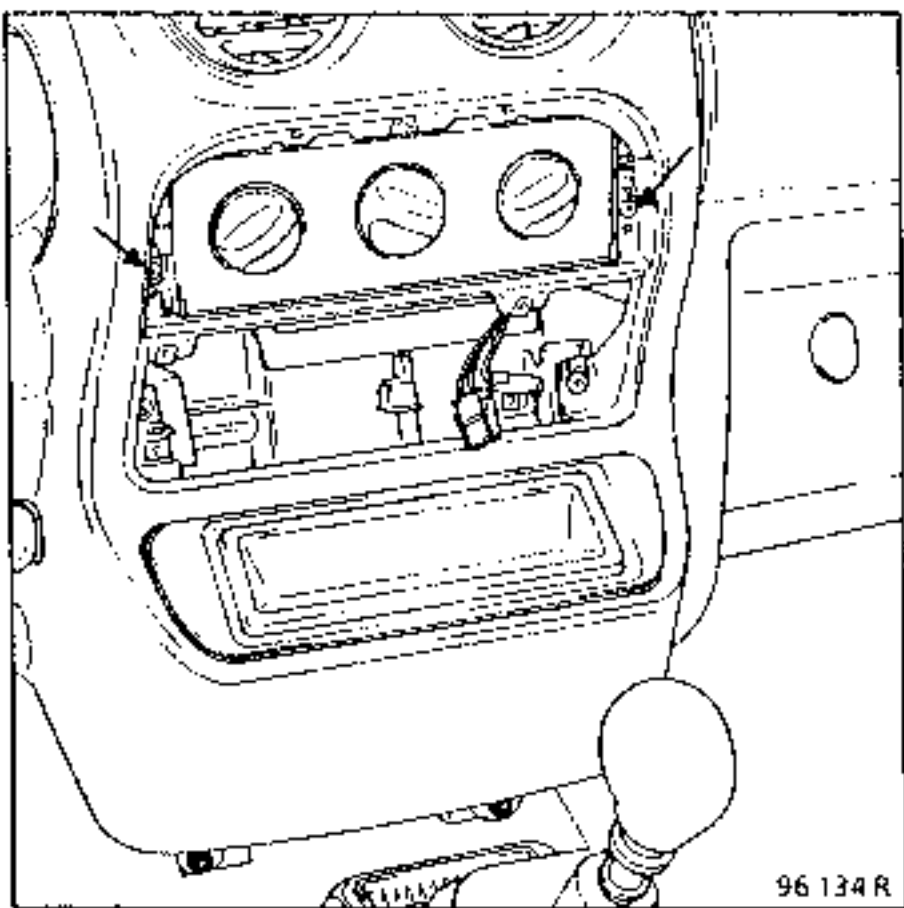
Remove the ashtray and the ashtray surround (two screws on the top and four screws behind the ashtray)



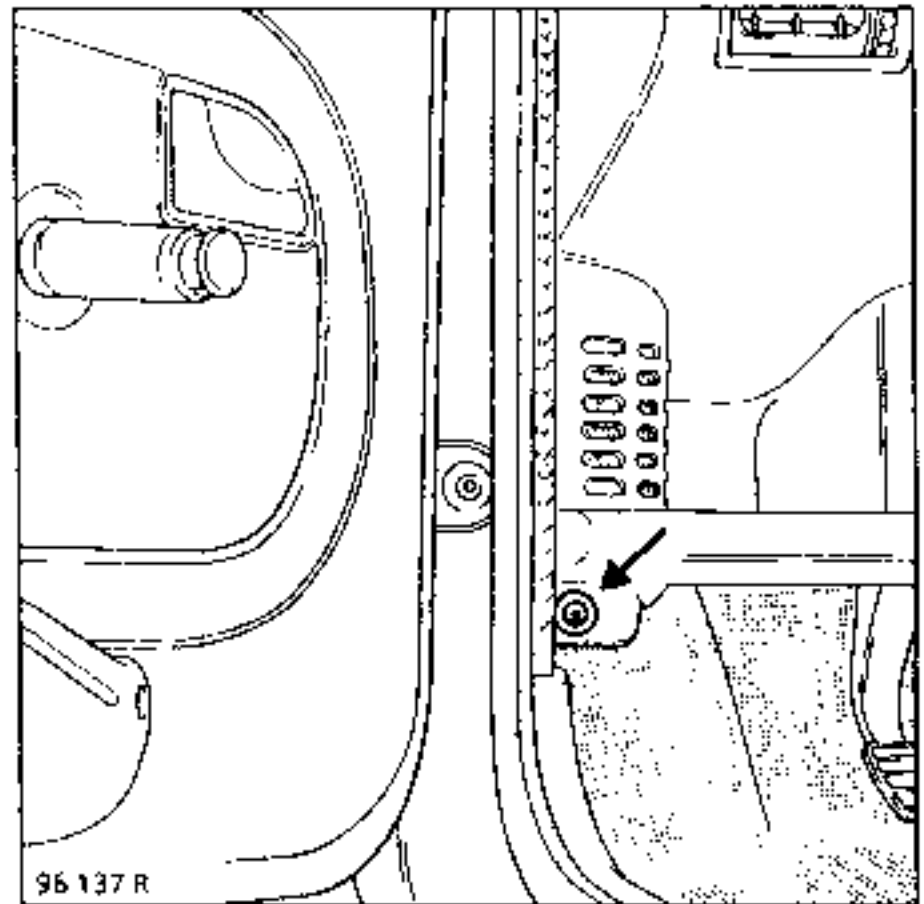
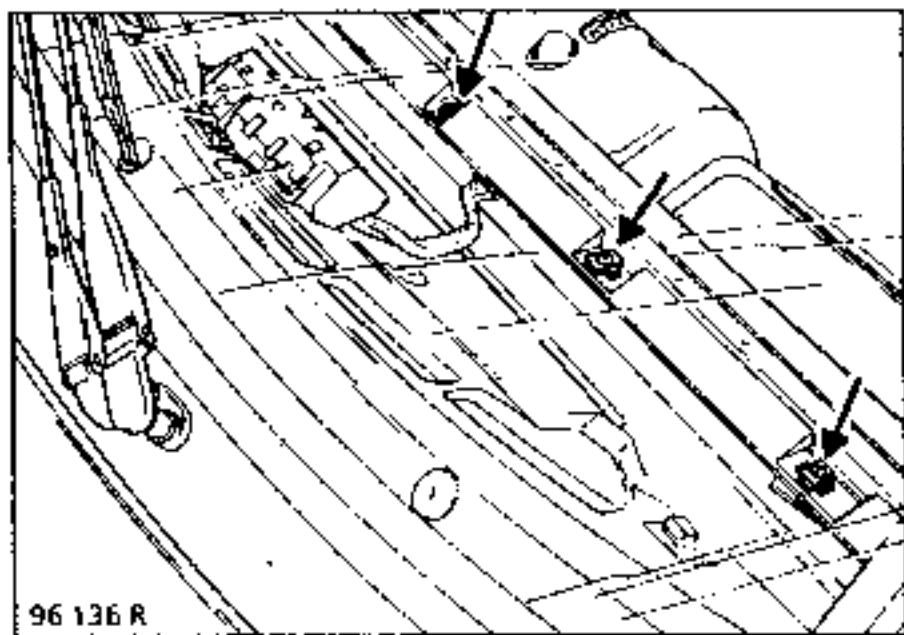
96 132 R

Disconnect the cigar lighter

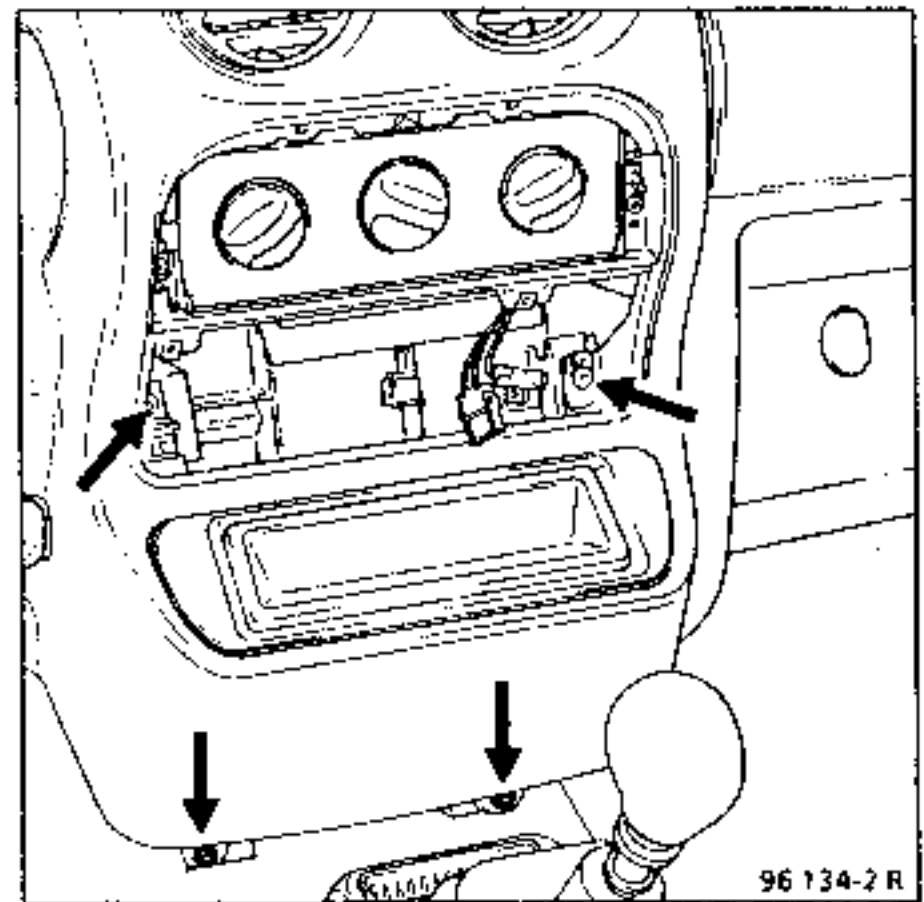
Remove the two bolts from the heating control unit



Remove the upper dashboard mountings



Remove the lower side mountings.



Remove the lower centre mountings.
Disconnect the wiring and remove the dashboard carefully.

RECOMMENDATIONS

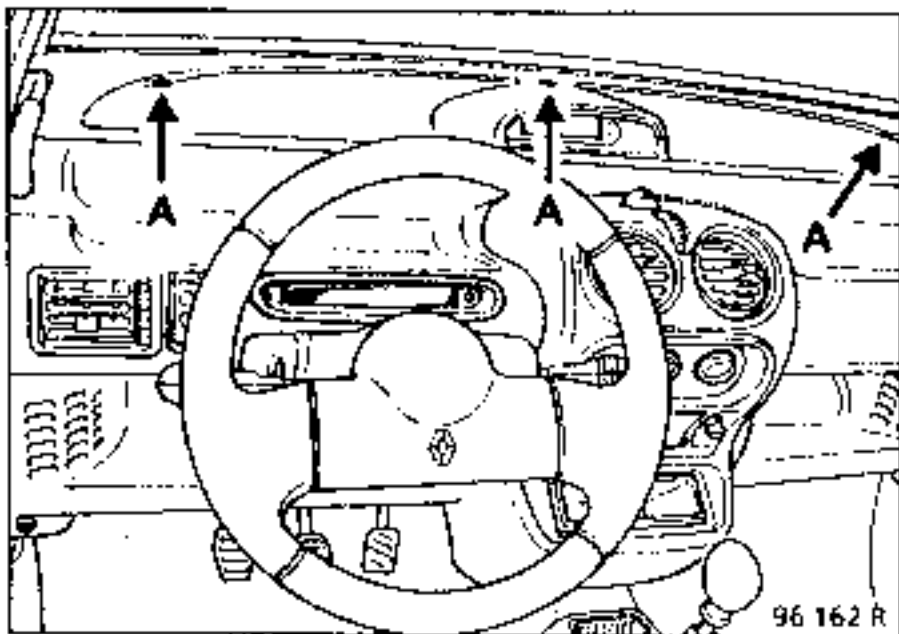
When handling the instrument panel:

- do not touch the display with the fingers.
- do not press the display.
- if the display is marked, use a disposable cotton wool pad with a little alcohol to clean the display, but do not apply any pressure
- never use solvents for cleaning.

REMOVAL

Disconnect the battery.

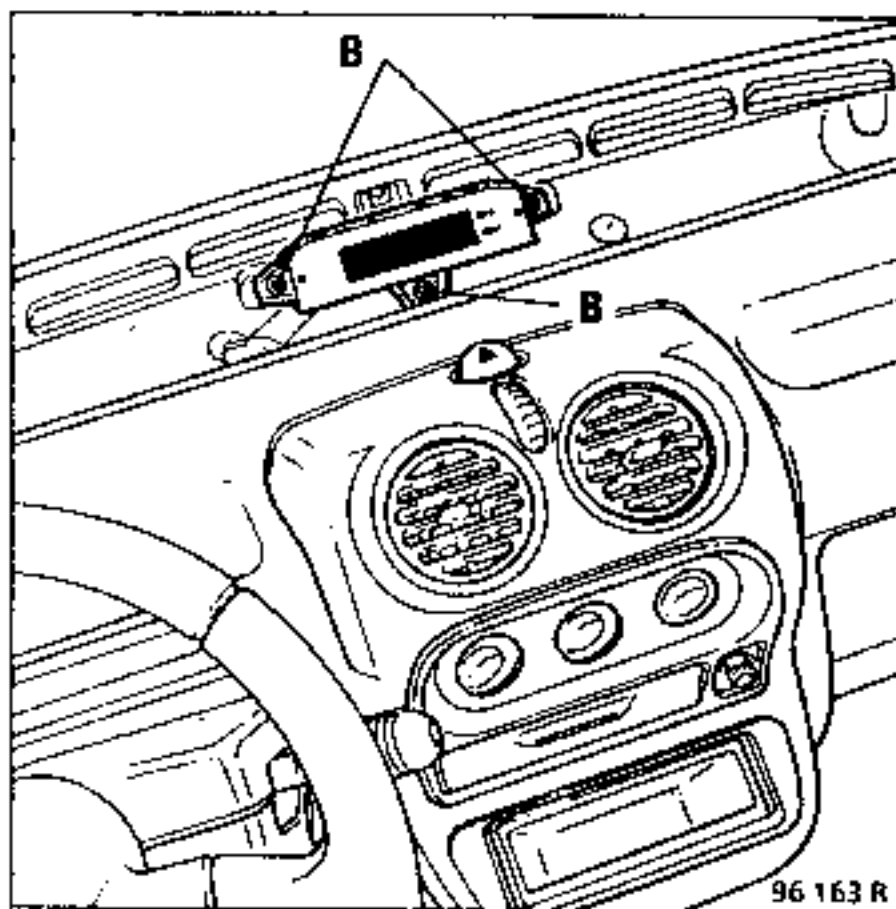
Remove the three mounting bolts (A) from the upper section of the dashboard.



Use masking tape to protect the right hand rear view mirror cover.

Remove the upper section of the dashboard by lifting the right hand side to release the left hand side from the rear view mirror control.

Remove the three mounting bolts (B) from the instrument panel.



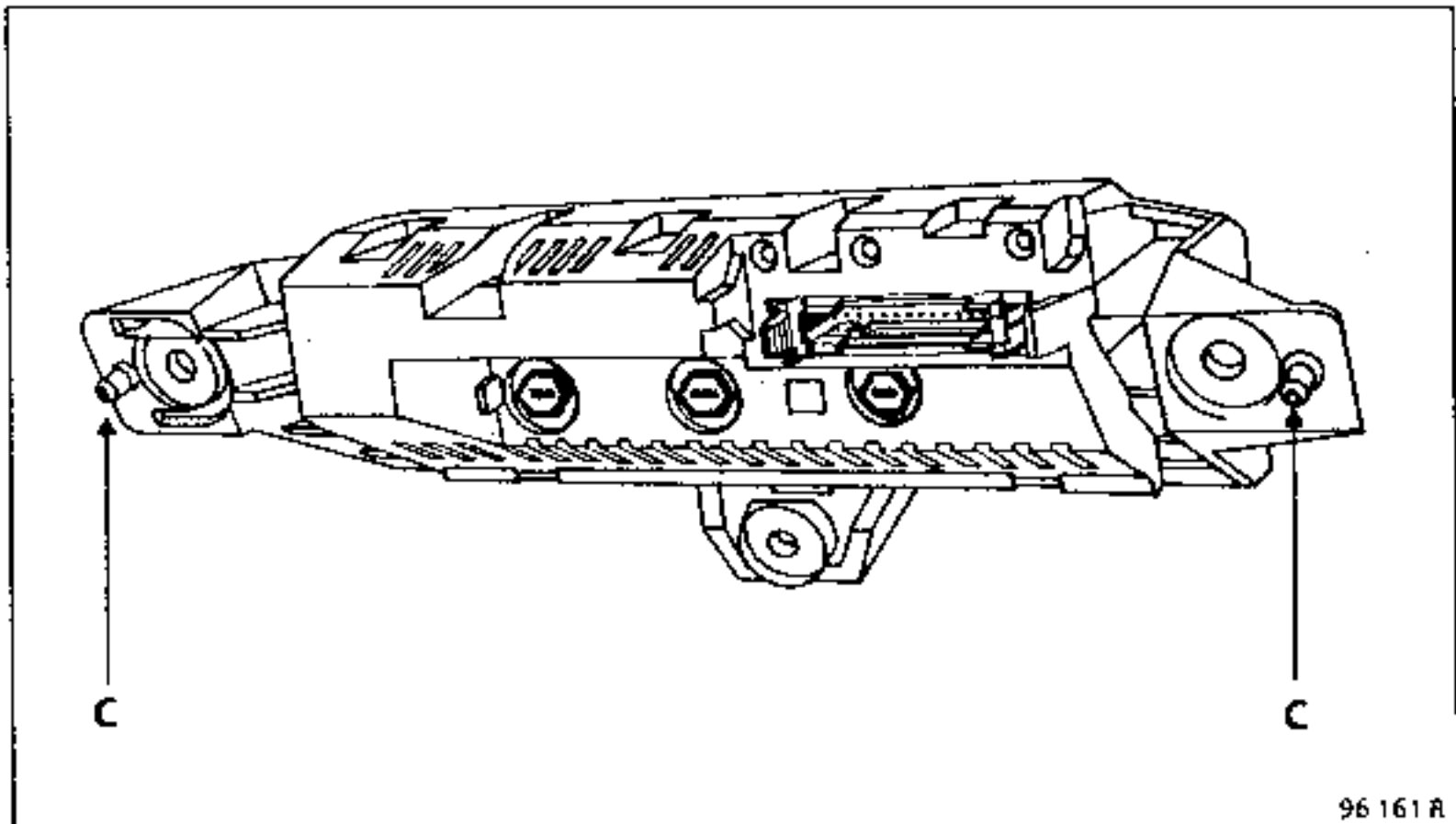
Remove the unit to enable the blue 15 track connector to be disconnected.

REFITTING (special notes)

Before reconnecting, check the connector is in good condition

Connect the connector correctly.

Replace the unit using the two centring pins (C) and ensure the foam which protects the wiring is in the correct position behind the instrument panel as well as where the wiring passes under the dashboard



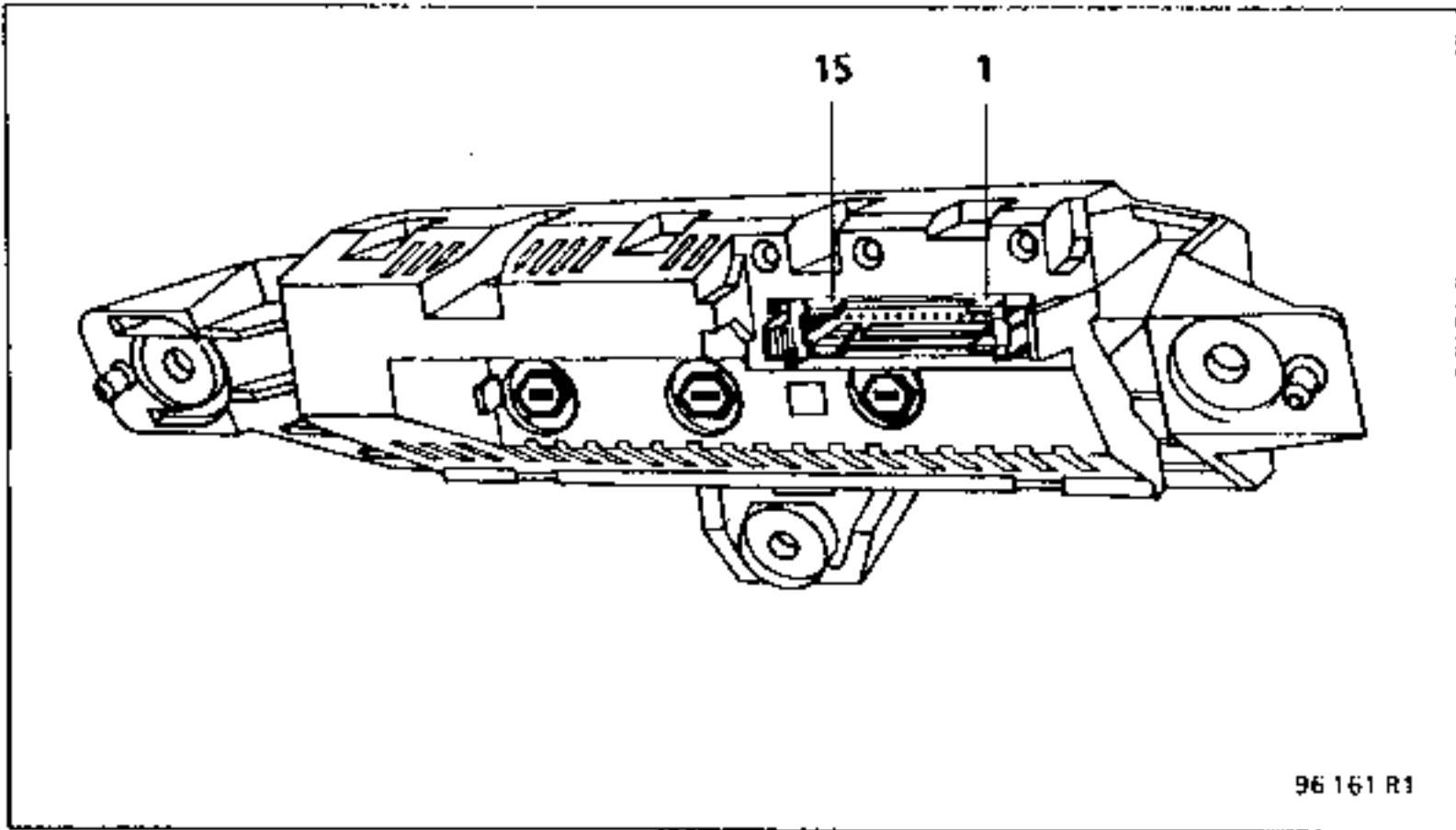
96 161 R

Reconnect the battery.

Reset the trip computer at zero.

Check the instrument panel functions.

CONNECTIONS



96 161 R1

Track	Allocation
1	+ before ignition.
2	Earth
3	Not connected
4	Instrument panel lighting.
5	Lights on reminder buzzer (driver's door)
6	+ after ignition.
7	Speed info
8	Not connected
9	Not connected
10	Fuel level info
11	Fuel gauge electronic earth
12	Info sequence control (control under steering wheel)
13	Not connected
14	Not connected
15	Not connected

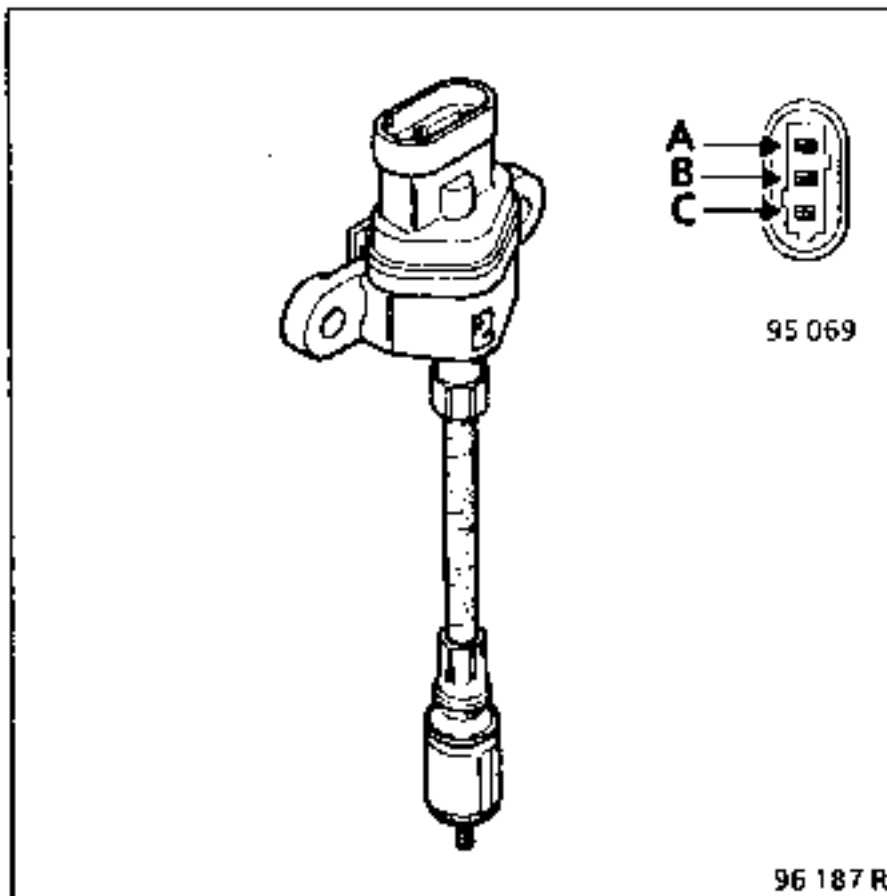
DIS-ASSEMBLY

The instrument panel cannot be dis-assembled.
Only the three illumination bulbs may be replaced.

SPEED INFORMATION

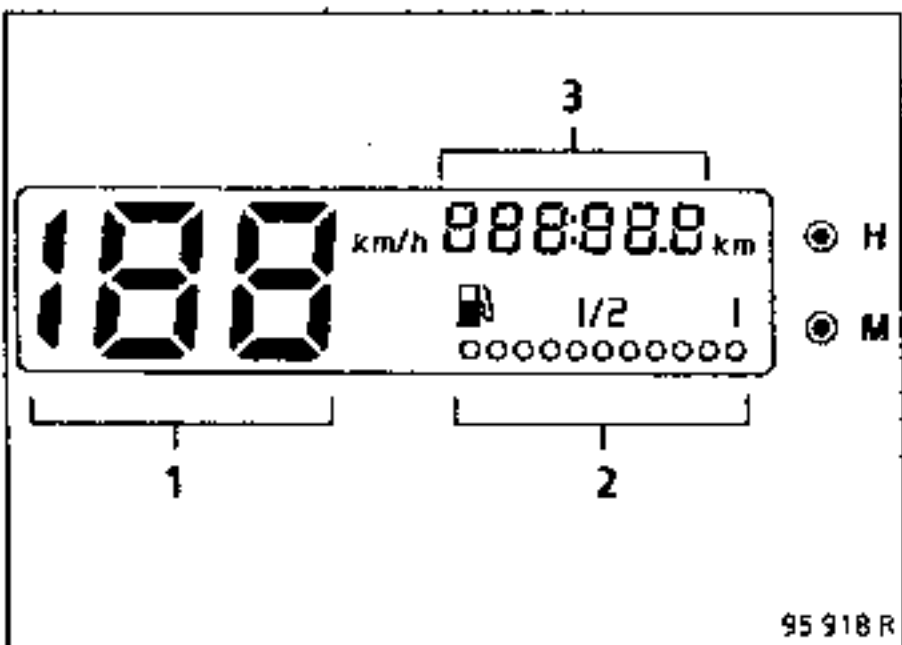
The speedometer cable is fitted with a speed sensor which counts pulses. Vehicle speed information is sent to the injection computer as well as the instrument panel which displays the vehicle speed, the total mileage and the trip mileage.

Grey 3 track connector connection.



- A + 12 V after ignition
- B Vehicle speed information
- C Earth

DESCRIPTION



- 1 Digital speed display.
- 2 Fuel level bargraph.
- 3 Multifunction display
 - Mileometer
 - Trip mileometer
 - Time display.
- 4 Multifunction sequence key.

OPERATION

This instrument panel has no tell-tales or warning lights except for the "low fuel level" warning light.

The information is given on the liquid crystal display. The display intensity reduces when the headlights are illuminated.

Vehicle speed

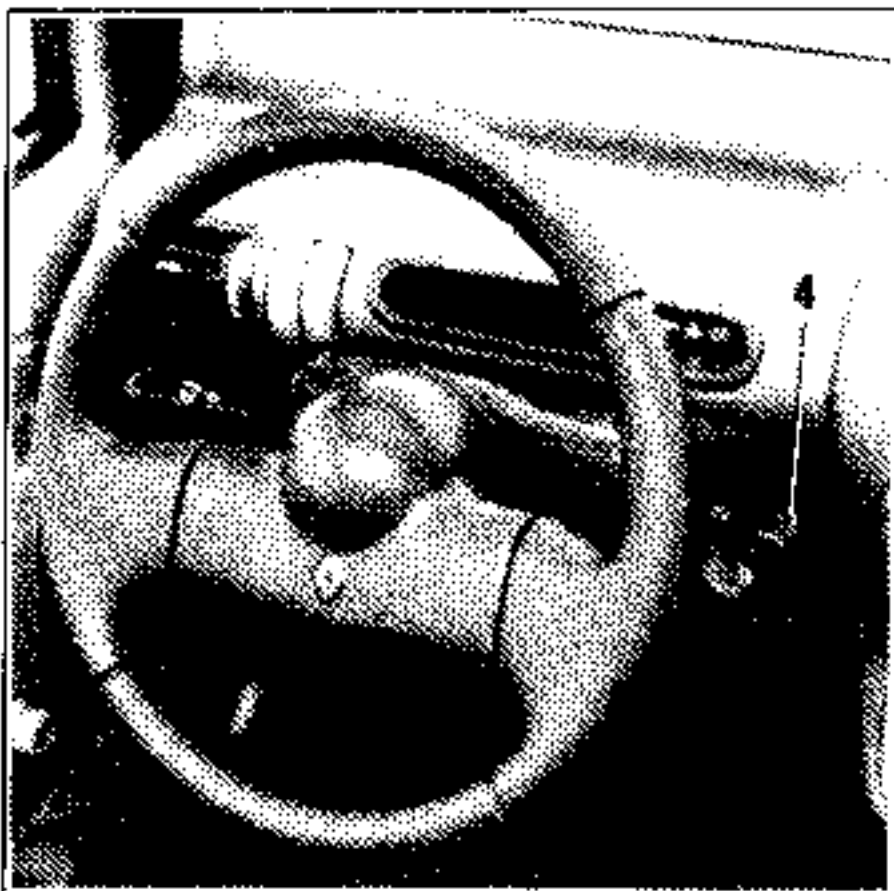
The three figure numerical speedometer, will display a maximum speed of 125 mph (199 km/h).

The speed information is taken from a sensor which is also used for both the injection system and the mileometers.

Lights on reminder buzzer.

When the driver's door is opened, a buzzer sounds to indicate the lights have been left on when the ignition is off. The reminder buzzer is part of the instrument panel.

Note : If the reminder buzzer is faulty, the instrument panel must be replaced.



OPERATION (cont)

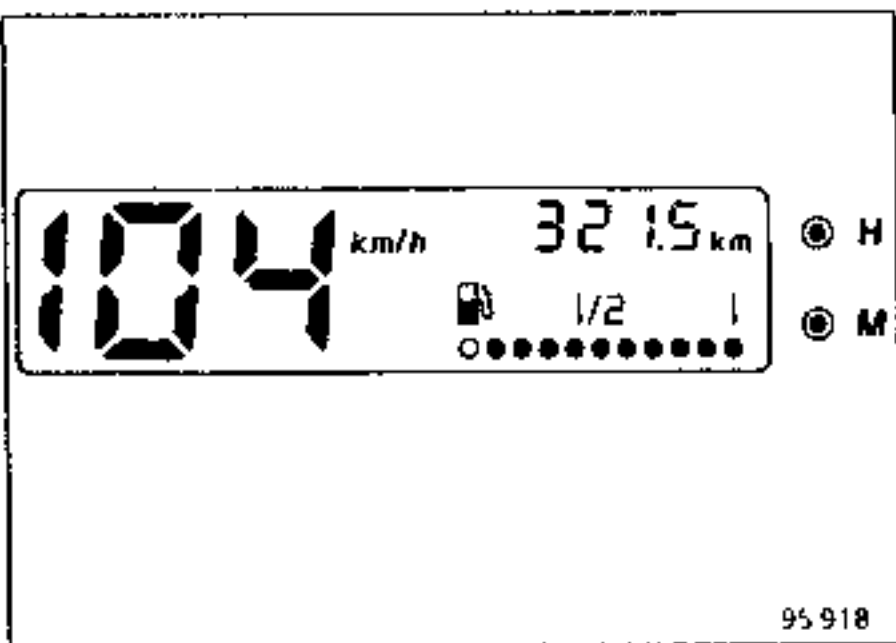
Fuel level bargraph

The amount of fuel remaining in the fuel tank is indicated by a 10 segment bargraph (green illuminated spots) with a "low fuel level" warning orange spot.

Each segment of the bargraph corresponds to approximately 3.5 litres (0.77 gallons) of fuel.

The "low fuel level" warning light illuminates on the left of the first green segment when this first green segment extinguishes.

It illuminates when between 5 and 8 litres (1.1 and 1.76 gallons) of fuel remain in normal use.



Note : To ensure the information shown on the display is correct after filling with fuel, wait for approximately 15 seconds after turning the ignition off

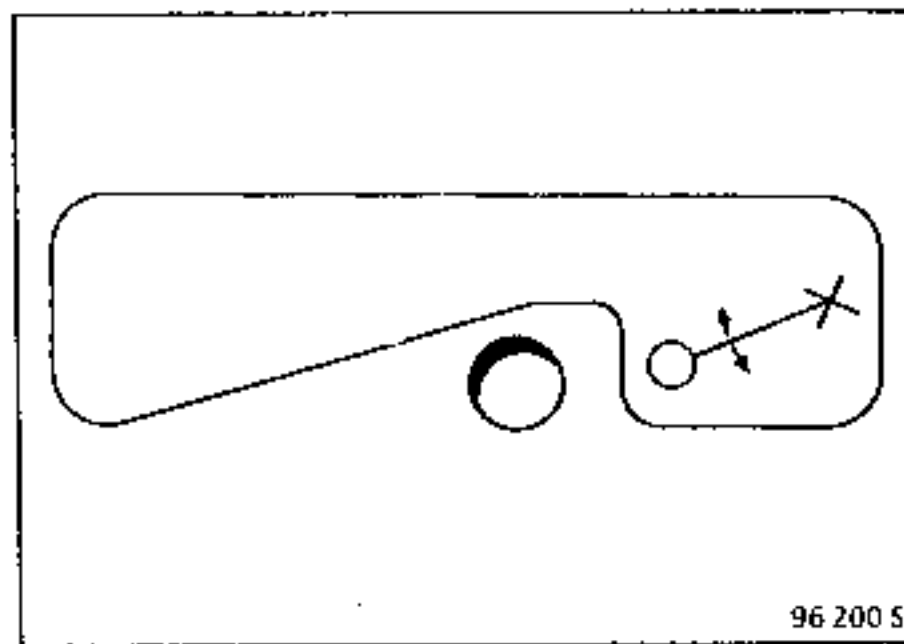
OPERATING NOTES

- **Segment extinguishing**
 - **For the nine right hand segments**
The instrument panel computer continuously compares the information from the fuel gauge with the values in its memory. A segment is extinguished when the fuel level reaches a pre-set value for that segment in the computer memory; this is the case if at least 20 km (12.5 miles) have been covered since the last segment was extinguished.

- **For this first segment**
The computer calculates a theoretical consumption figure from the speed information. The first segment is extinguished and the "low fuel level" warning light illuminated when the vehicle has consumed 3 or 4 litres (0.66 or 0.88 gallons).

Note : If there is an intermittent fault for speed info, the fuel level bargraph may remain locked with a certain number of segments illuminated. If, when the ignition is switched on, there is less than 6 litres (1.32) of fuel in the tank, the warning light will illuminate.

- A segment will never re-illuminate, except when fuel has been filled with the ignition turned off.
- **"Low fuel level" warning light**
 - **Normal operation**
The fuel tank shape may cause variations in the warning light threshold, which may be noted by the customer when the tank is filled.



The fuel is only pumped out from the right hand section of the tank, so two cases may occur :

- The fuel in the left hand section is transferred to the right hand section during driving. The warning light illuminates, the customer fills the tank with fuel as normal (35 litres, 7.7 gallons)
- The fuel in the left hand section remains there. The warning light illuminates, the customer fills the tank with fuel and finds it takes less fuel than before. The low fuel warning was given too early

OPERATION (cont)**- Fault detection**

If speed information disappears for 10 minutes, the 20 km threshold for extinguishing a segment is exceeded. The "low fuel level" warning light illuminates when the second segment extinguishes or as soon as the fault is noted, if the second segment was already extinguished. If speed information re-appears, the fault is erased.

Note : this phenomenon may occur with the ignition on when the vehicle is stationary for more than 10 minutes (speed info display fixed at 0 km/h).

If the warning light illuminates and flashes, a fault has occurred in the speed sensor which lasted for more than 100 seconds (short circuit or open circuit). If the sensor operates normally for 100 seconds, the fault is erased and the warning light extinguishes.

• Partial filling with fuel

Filling the tank only part way causes an incorrect display, because of the tank shape.

The right hand section is filled first before fuel overflows into the left hand section.

When the ignition is switched off the computer remembers the number of segments illuminated and the level indicated by the gauge.

When the ignition is switched on again, the computer compares the value from the gauge with the value in its memory. If the difference is less than 4 litres, the number of segments illuminated remains unchanged. If the difference is greater than 4 litres, the computer decides that fuel has been added.

If insufficient fuel has been added to reach the overflow line the segments illuminate in such a way that the display is as representative as possible despite the shape of the fuel tank.

Note : In some cases the calculation strategy may not allow the addition of a small amount of fuel to be displayed (the number of segments illuminated remains the same) or a segment is extinguished after turning the ignition on again (whether or not fuel has been added).

In such cases, the number of illuminated segments remains the same until, when the vehicle is moving, the actual fuel level in the tank is recorded by the display.

OPERATION (Cont)

Multifunction display

The multifunction display sequence is a loop showing three functions

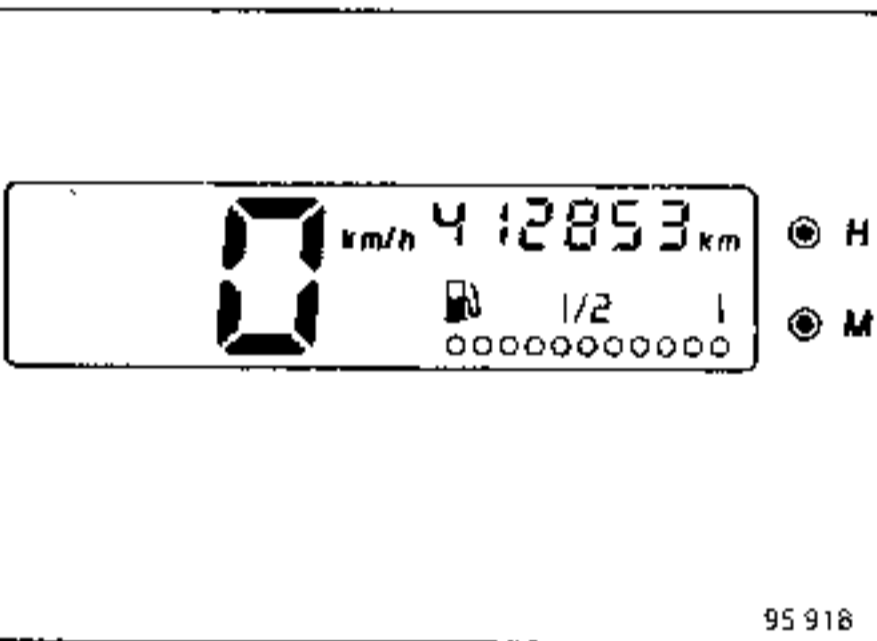
The required display is selected by repeated pressure on the key at the end of the windscreen wiper stalk.

The display shown when the ignition is turned on is always the main mileometer display.

The displays are shown in the order below

• **Main mileometer**

When + after ignition feed is available, the main mileometer shows the number of kilometers covered by the vehicle since it was put on the road ; unless the instrument panel has been replaced.



The recorder has a capacity of 299 999 kms (from 0 km to 299 999 kms)

If this capacity is exceeded, the display returns to 000 000 km.

Storing mileage

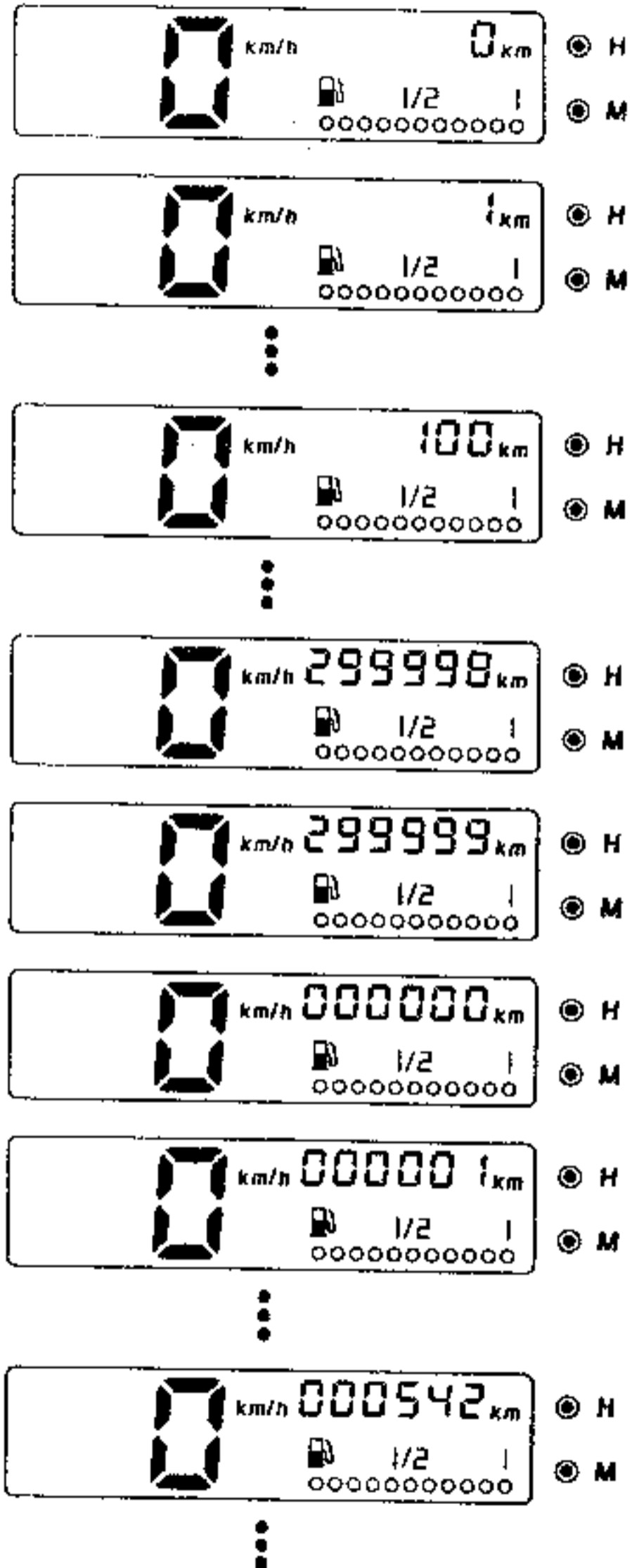
The mileage value is stored in a memory which is updated every two kilometers when power is available, and when no external power input is available the last figures memorised before the ignition was turned off are retained.

If the battery feed is cut the programme looks for the last recorded figure and retains that value.

It is therefore possible that the mileometer may lose two kilometers in relation to the actual mileage each time the battery is disconnected.

Display sequence

Example :





Note : the values 100 and 000 542 are shown as an example

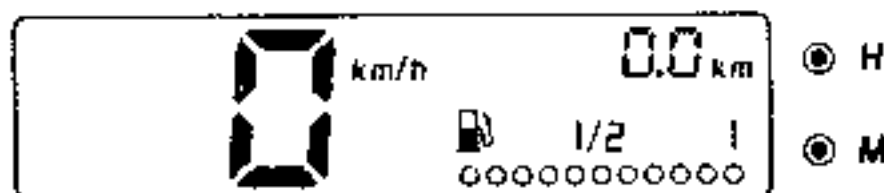
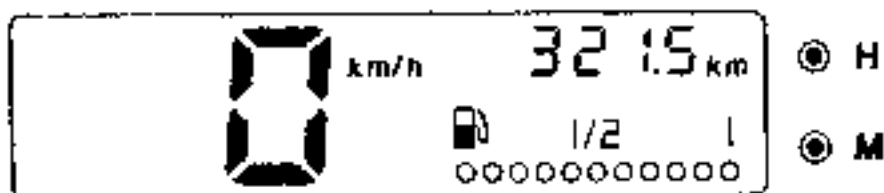
• Trip mileometer

This function calculates and displays the number of miles covered by the vehicle since the trip mileometer was last reset

The trip mileometer is reset automatically when the display capacity of 999,9 km is exceeded.

The recorder may be reset at any time by pressing the sequence key  on the end of the windscreen wiper stalk.

Whatever the active function on the multifunction display may be, keep key  depressed for more than 3 seconds. If the trip mileometer is not displayed, it will appear after one second, flash, then reset to 0.0 km after flashing five times in a period of two seconds



Attention : After the battery has been disconnected, the trip mileometer information is not correct. It is reset automatically when the feed is cut.

Note : If there is a speed sensor fault, the mileometer displays will both be wrong (main and trip).

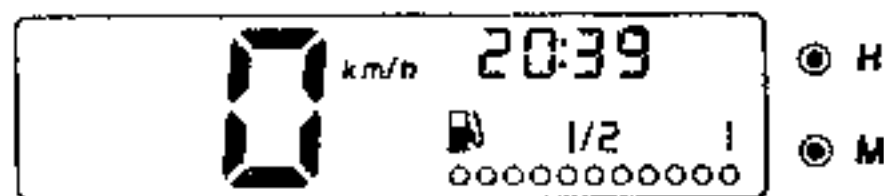
• Time display

This function displays the time in the 24 hour clock mode.

The clock may be reset using the keys **H** and **M** on the right of the display module

H: adjusts the hours

M: adjusts the minutes



When the battery is disconnected, the clock is reset to zero.

FAULT FINDING

Customer complaints

- Speed info and mileometer do not work Chart 1
- Fuel level gauge does not work Chart 2
- Lights on reminder buzzer does not work Chart 3
- Instrument panel selection does not work (mileometer - trip recorder - clock) Chart 4
- Instrument panel does not work Chart 5

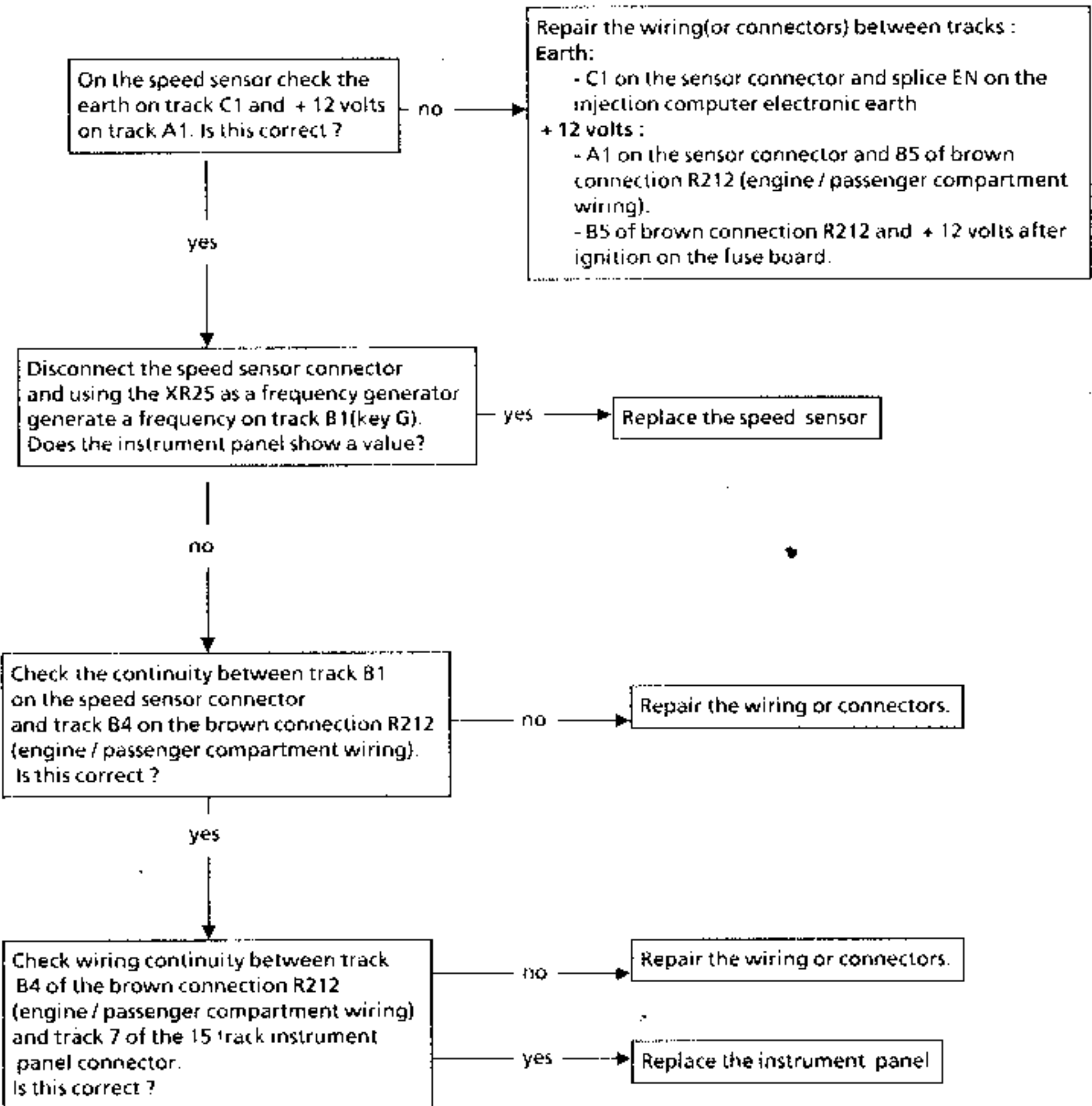
Precautions :

When checking continuity using a multimeter, avoid using a testing pin which is of a size liable to damage the clips and produce bad connections on the 15 track instrument panel connector.

FAULT FINDING

Chart 1

SPEED INFO AND MILEOMETER DO NOT WORK

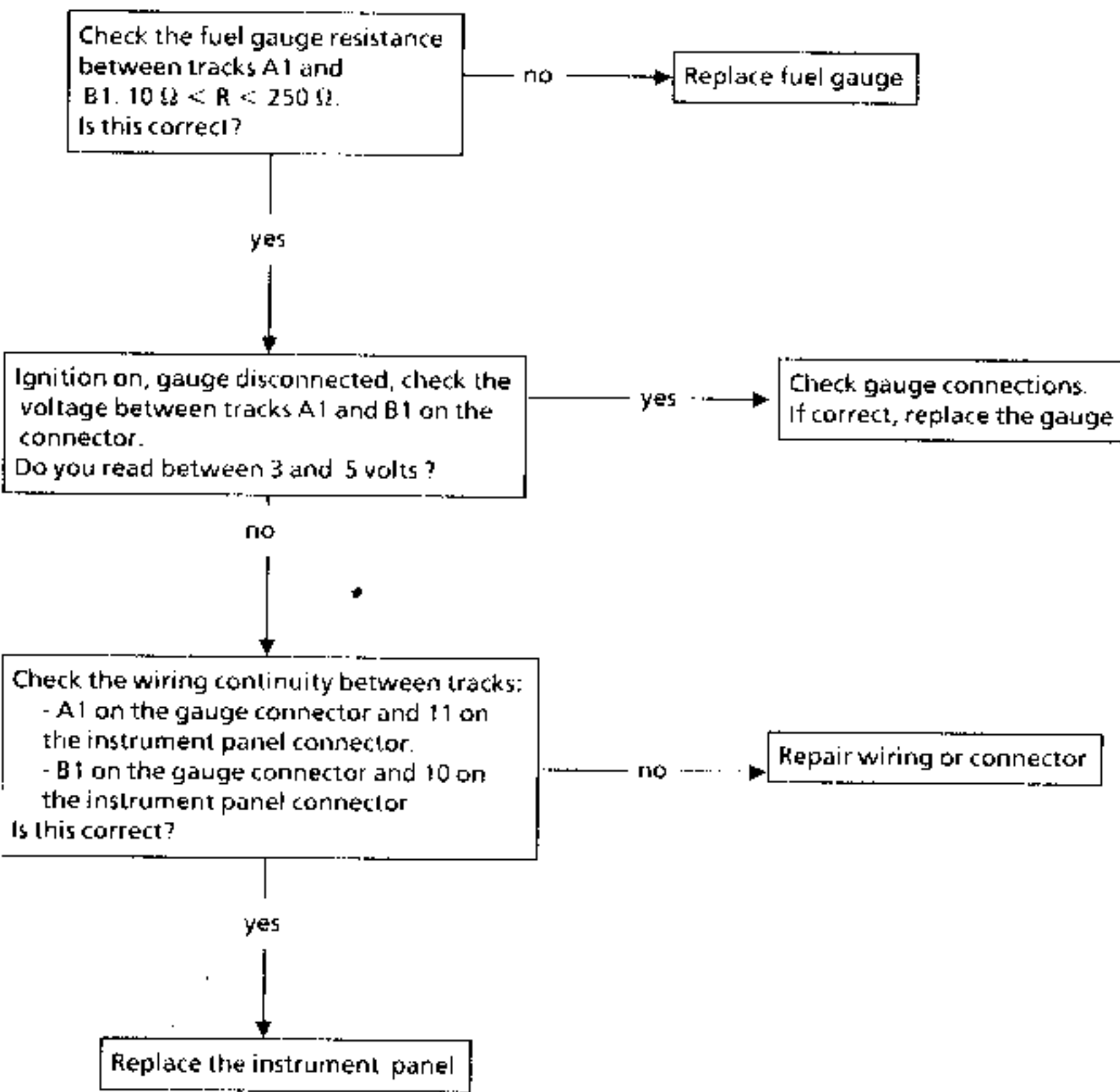


FAULT FINDING

Chart 2

FUEL LEVEL GAUGE DOES NOT WORK

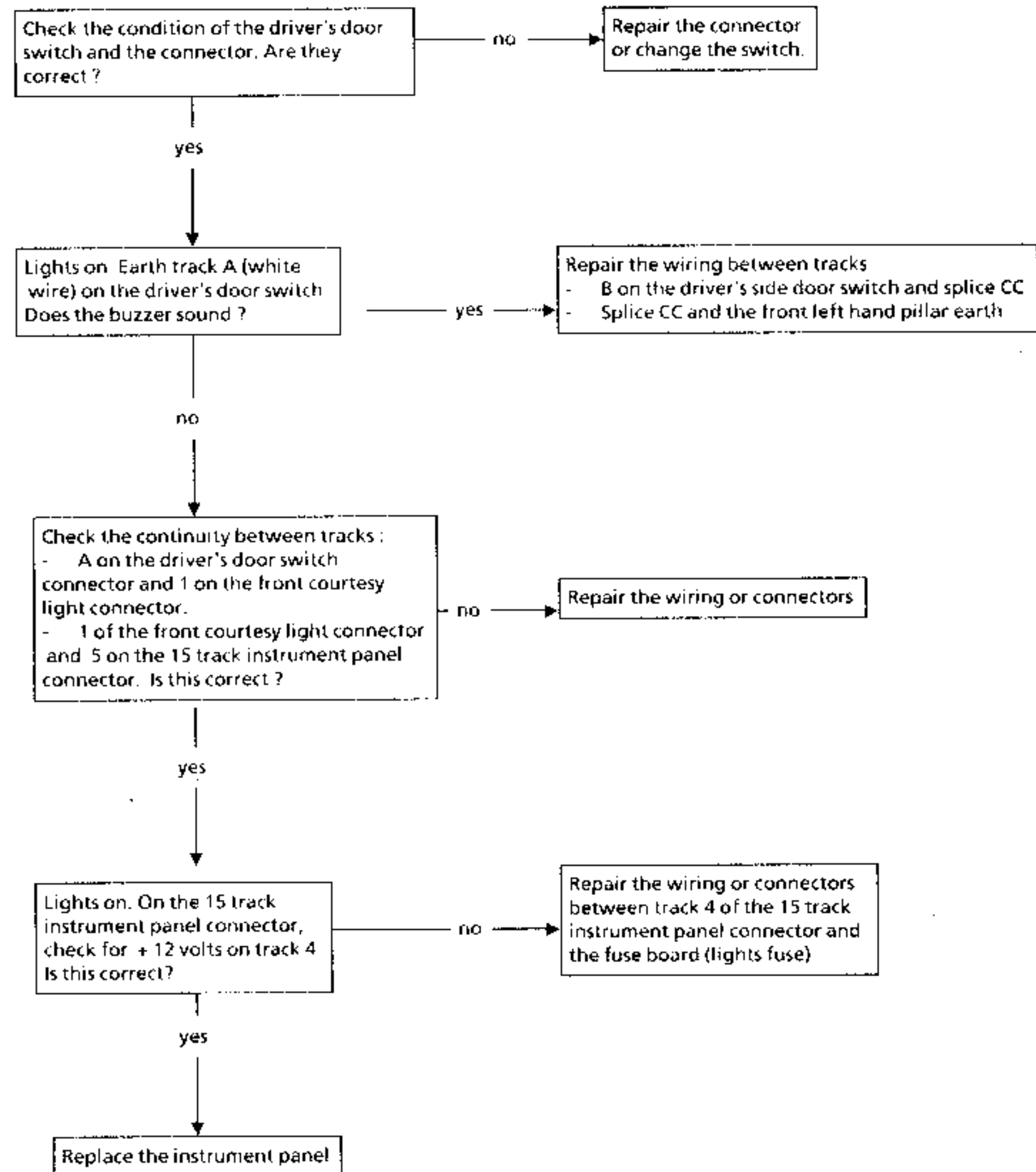
(first segment illuminated and warning light flashing)



FAULT FINDING

Chart 3

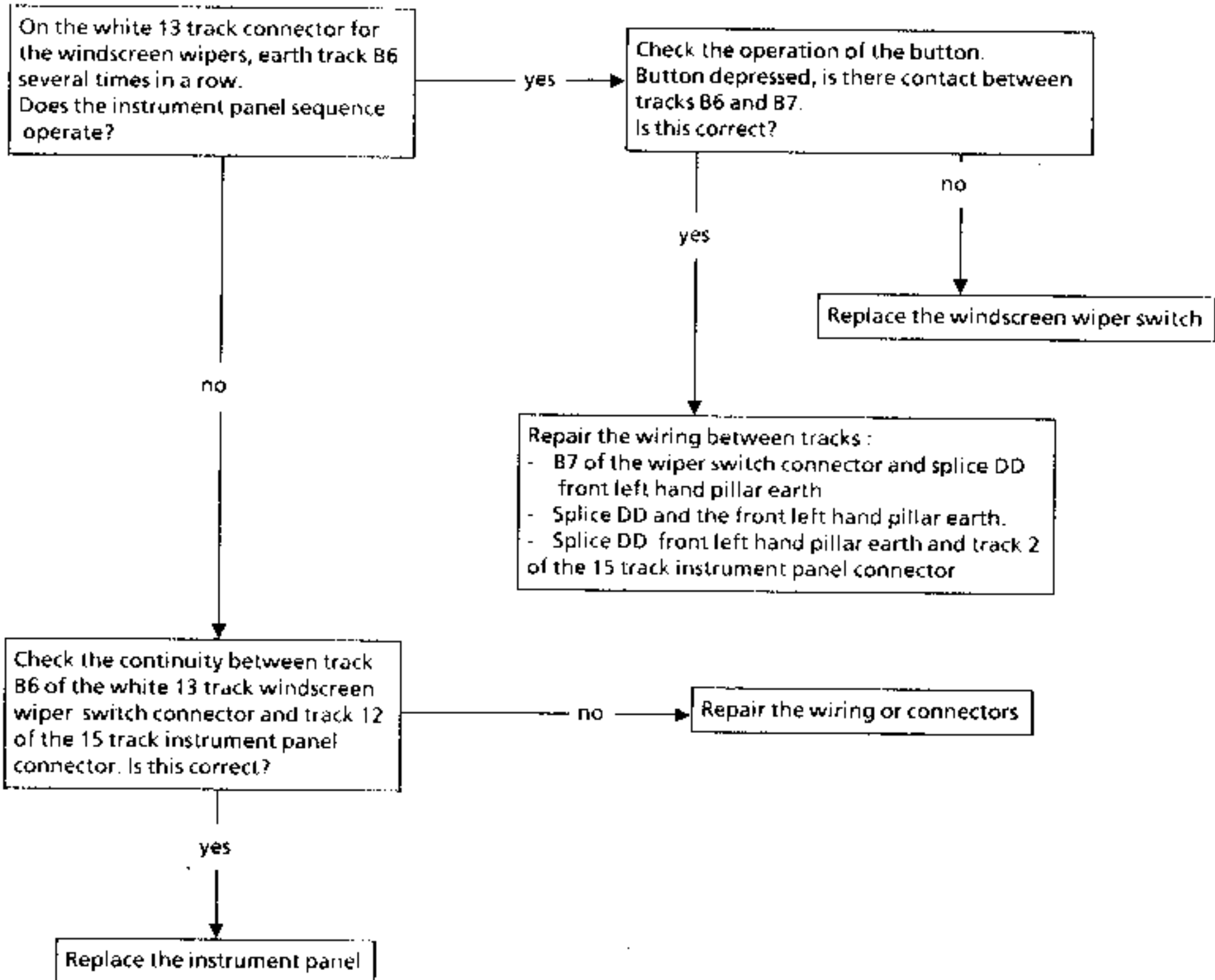
LIGHTS ON REMINDER BUZZER DOES NOT WORK
(Integral to instrument panel)



FAULT FINDING

Chart 4

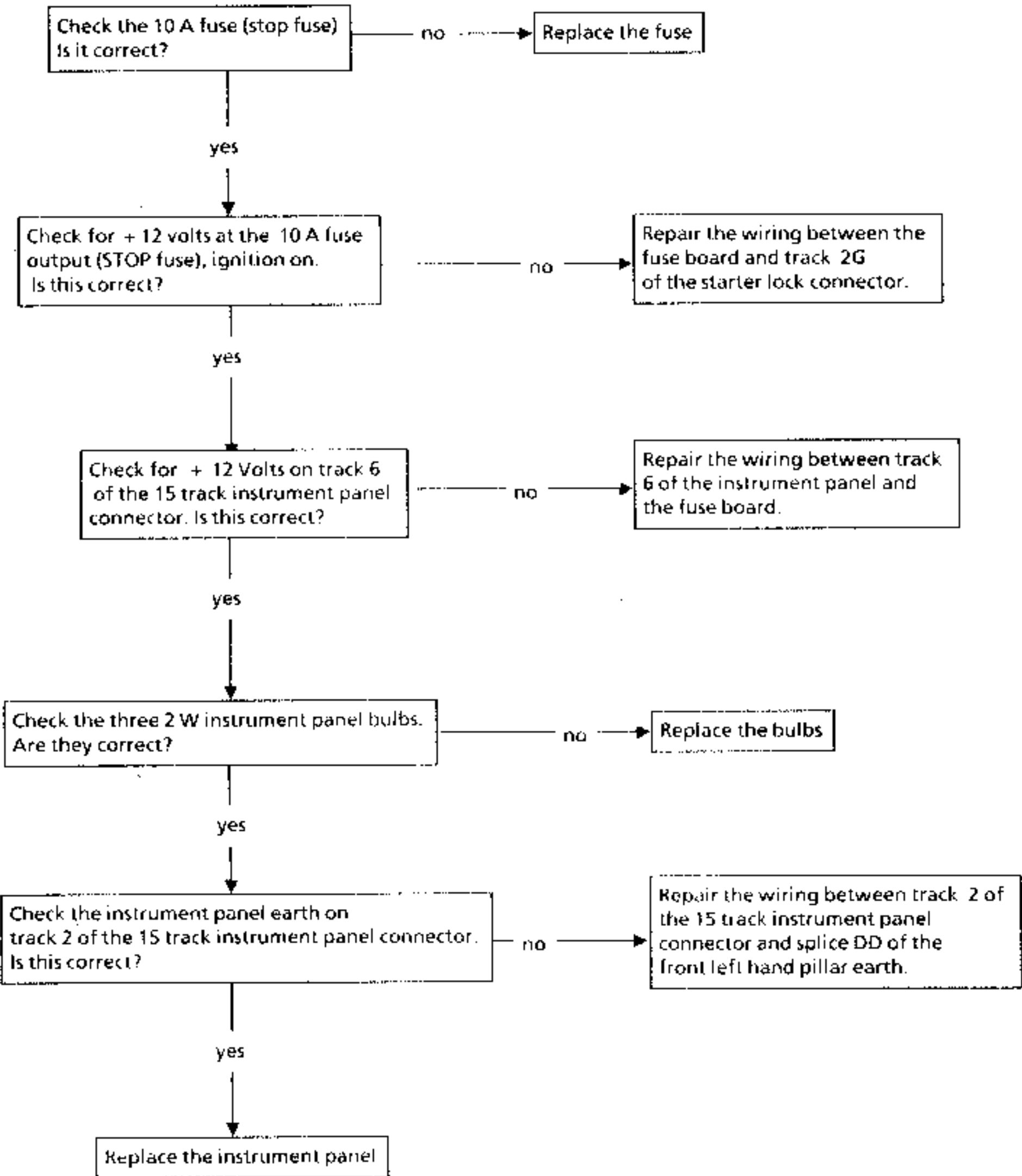
INSTRUMENT PANEL SELECTION DOES NOT WORK
(mileometer - trip recorder - clock)



FAULT FINDING

Chart 5

INSTRUMENT PANEL DOES NOT WORK



RECOMMENDATIONS

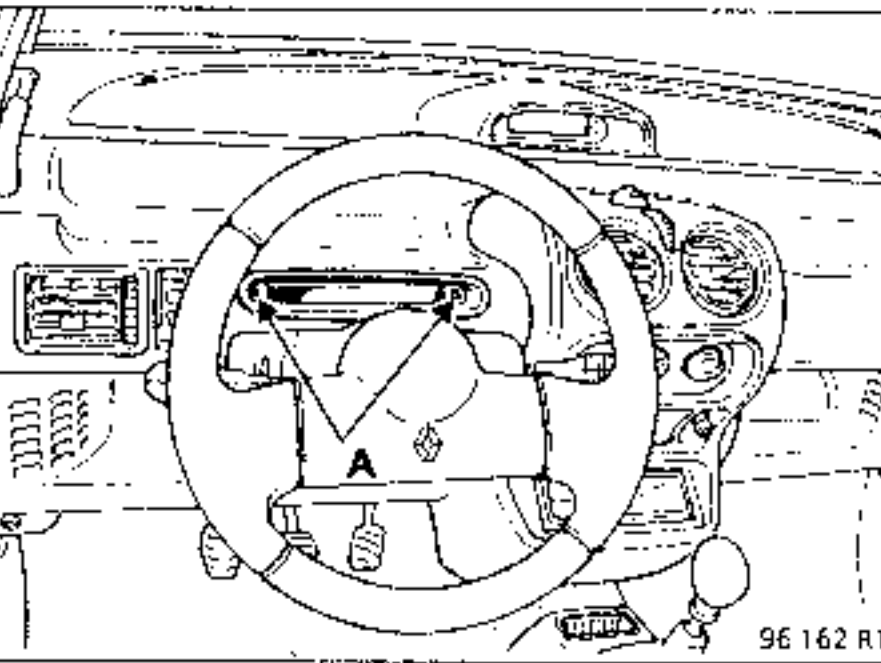
- When handling the warning light bar
- do not touch the display with the fingers.
 - do not press the display
 - if the display is marked, use a disposable cotton wool pad with a little alcohol to clean the display, but do not apply any pressure
 - never use solvents for cleaning.

When testing with a multimeter, avoid using a testing pin of a size which may damage the clips and produce a bad connection in the 15 track instrument panel connector.

REMOVAL

Disconnect the battery
Remove the two mounting bolts (A) for the warning lights bar located behind the steering wheel on the dashboard

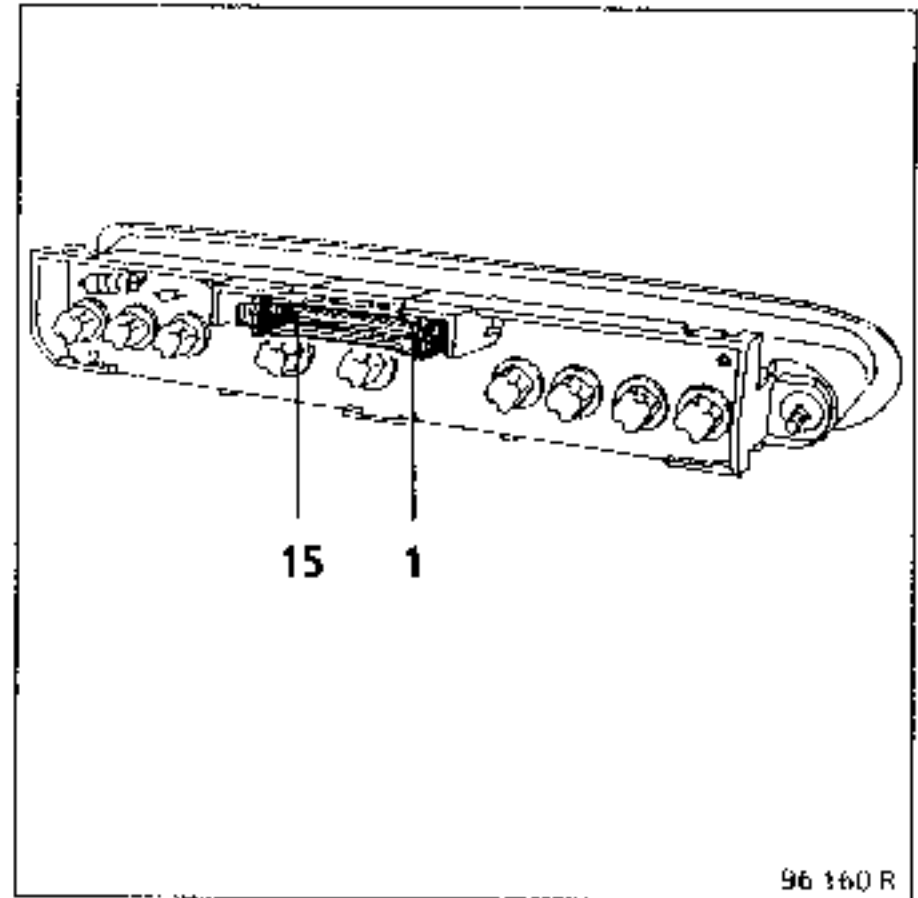
Release the bar from the dashboard to enable the red 15 track instrument panel connector to be disconnected.



REFITTING

- Before reconnecting, check the condition of the connector.
Ensure the connector is correctly clipped back into position.
Check the warning lights operate correctly.

CONNECTIONS



Track	Allocation
1	Side lights tell-tale
2	Rear screen de-mister tell-tale
3	Not connected
4	+ after ignition
5	Rear fog light tell-tale
6	Main beam tell-tale
7	Electronic earth
8	Not connected
9	Direction indicator tell-tale
10	Battery charging warning light
11	Coolant temperature warning light
12	Oil pressure warning light
13	Not connected
14	Brake warning light (nivocode)
15	Not connected

DESCRIPTION



Side lights tell-tale



Main beam tell-tale



Rear fog light tell-tale



Rear screen de-mister tell-tale



Left and right hand direction indicator lights tell tale



Handbrake on and brake circuit fault warning light

This warning light is tested with the ignition on and should extinguish when the engine is running. If the light remains illuminated when the engine is running the braking circuit is faulty (nivocode, pressure drop in braking circuit) or the handbrake is still on.



Oil pressure warning light.

This warning light should illuminate when the ignition is on, and should extinguish when the engine is running. If it remains illuminated when the engine is running, there is a pressure drop in the oil circuit.



Coolant temperature warning light

This warning light should illuminate when the ignition is on, and should extinguish when the engine is running. If it illuminates, the engine coolant temperature is too high.



Battery charging circuit fault warning light

This warning light should illuminate when the ignition is on, and should extinguish when the engine is running. If it illuminates, there is a fault in the battery charging circuit.

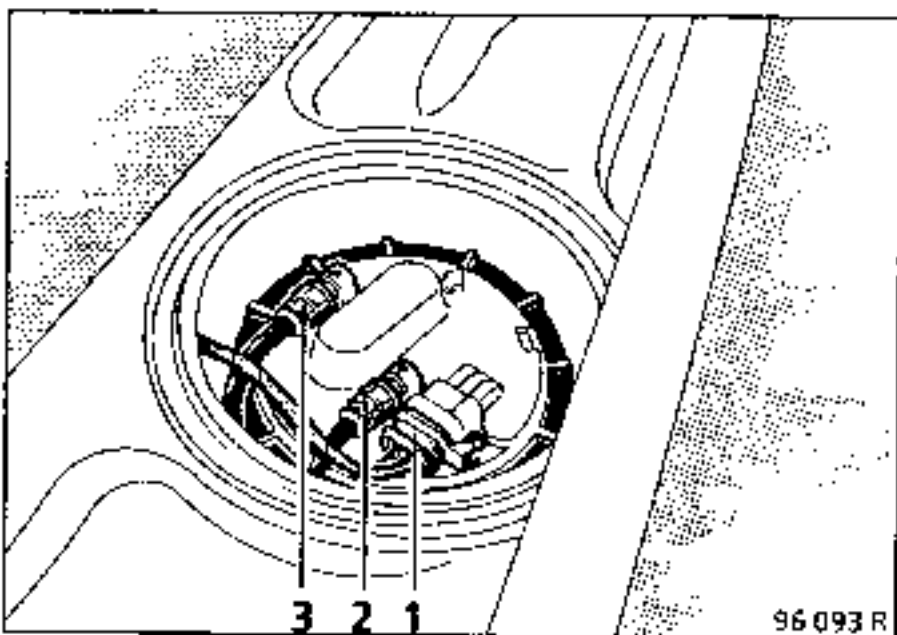
IMPORTANT

The following precautions must be observed when working on the fuel gauge :

- do not smoke
- keep all naked flames or heat sources away from the working area.

REMOVING THE PUMP - GAUGE ASSEMBLY

The pump - gauge assembly may be removed through the opening under the rear bench seat.



Disconnect the battery. Fold the rear bench seat down against the front seats.

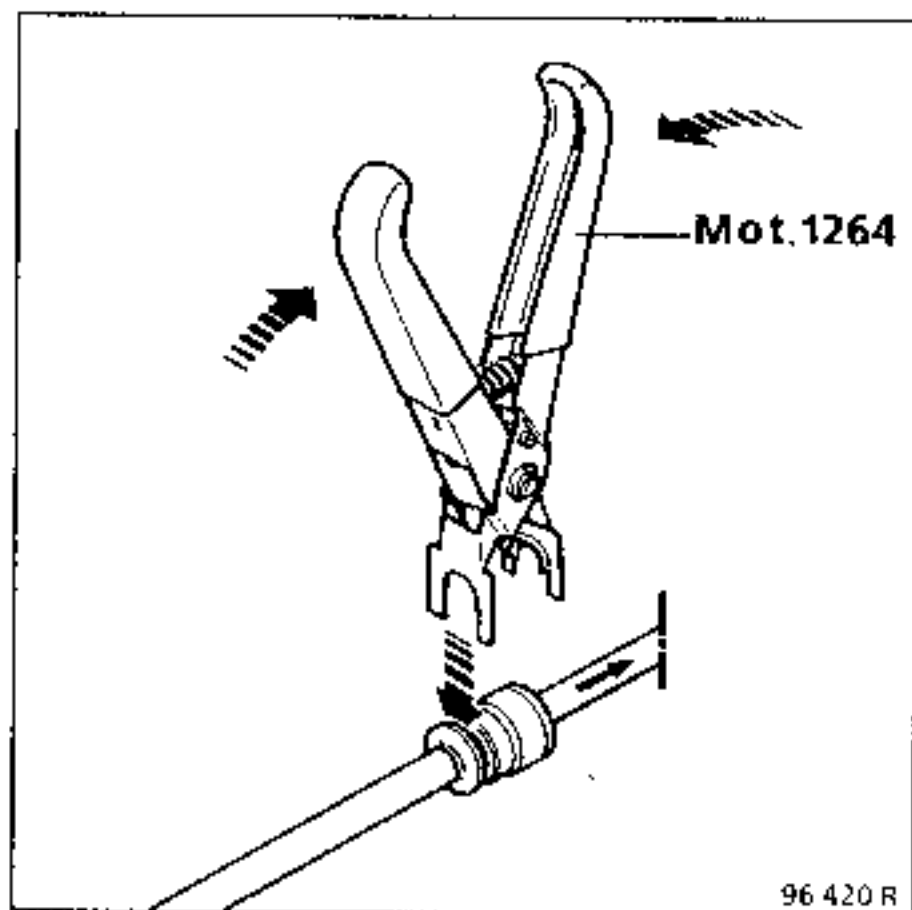
Lift the carpet after unclipping it

Remove the plastic fuel gauge cover.

Disconnect the electrical connector (1)

Disconnect the supply pipe (2) and the return pipe (3) using tool Mot. 1265.

ATTENTION : When the pipes are removed, residual pressure may cause fuel to be emitted. Ensure the surrounding area is protected.



Remove the connector and pipes on the gauge side.

Remove the mounting nut for the pump - gauge assembly using tool **Mot. 1265**

Remove the pump - gauge assembly.

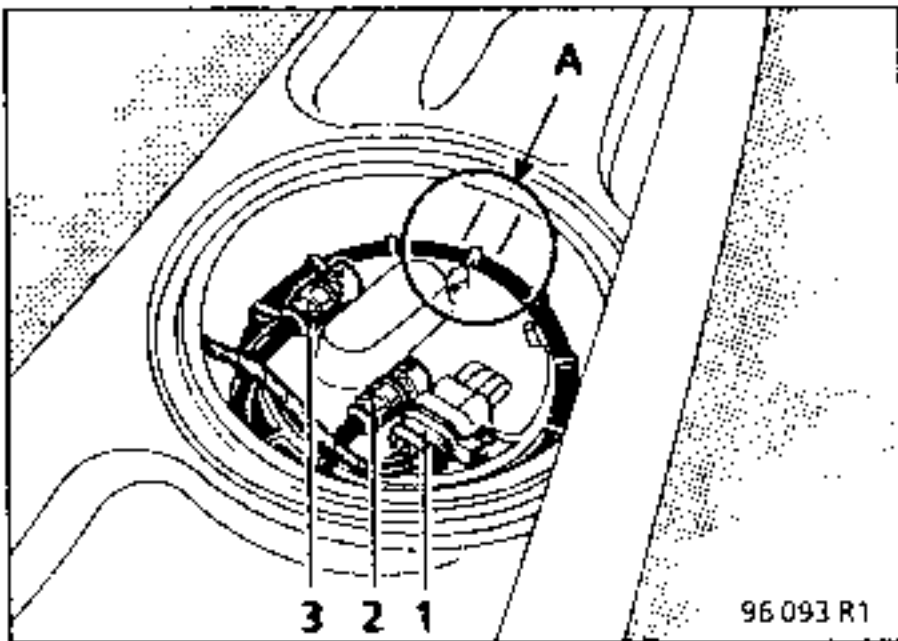
REFITTING THE PUMP - GAUGE ASSEMBLY

Special notes

Check the seal has not been damaged and replace it if necessary.

Replace the seal on the fuel tank before refitting the assembly.

Refit the pump - gauge assembly into the fuel tank aligning it so the arrow (A) is between the two marks on the fuel tank.

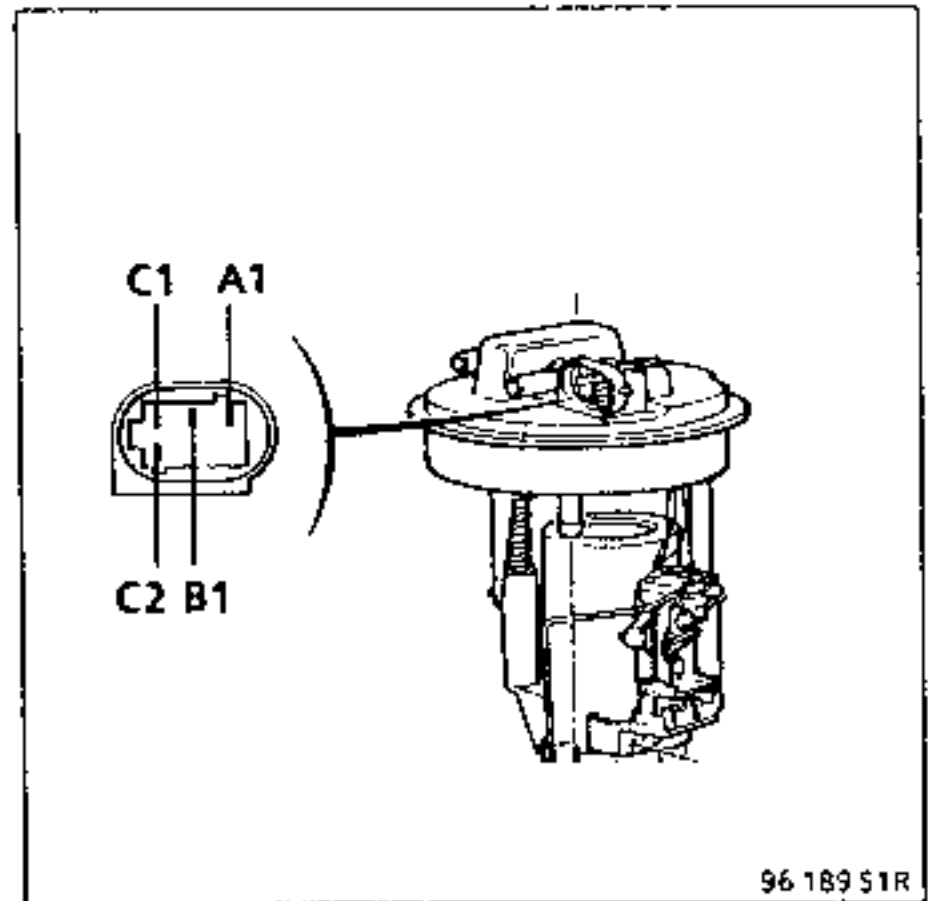


Torque tighten the mounting nut for the pump - gauge assembly to **6 daN.m** using tool **Mot. 1264** while holding the gauge, to avoid it turning in relation to the reference marks..

Reconnect the battery

Reset the trip recorder at zero.

CONNECTIONS



Track	Allocation
A1	Earth
B1	Information to instrument panel
C1	+ pump
C2	- pump

Testing

(variation of -5Ω per litre or -22,5Ω / gallon)

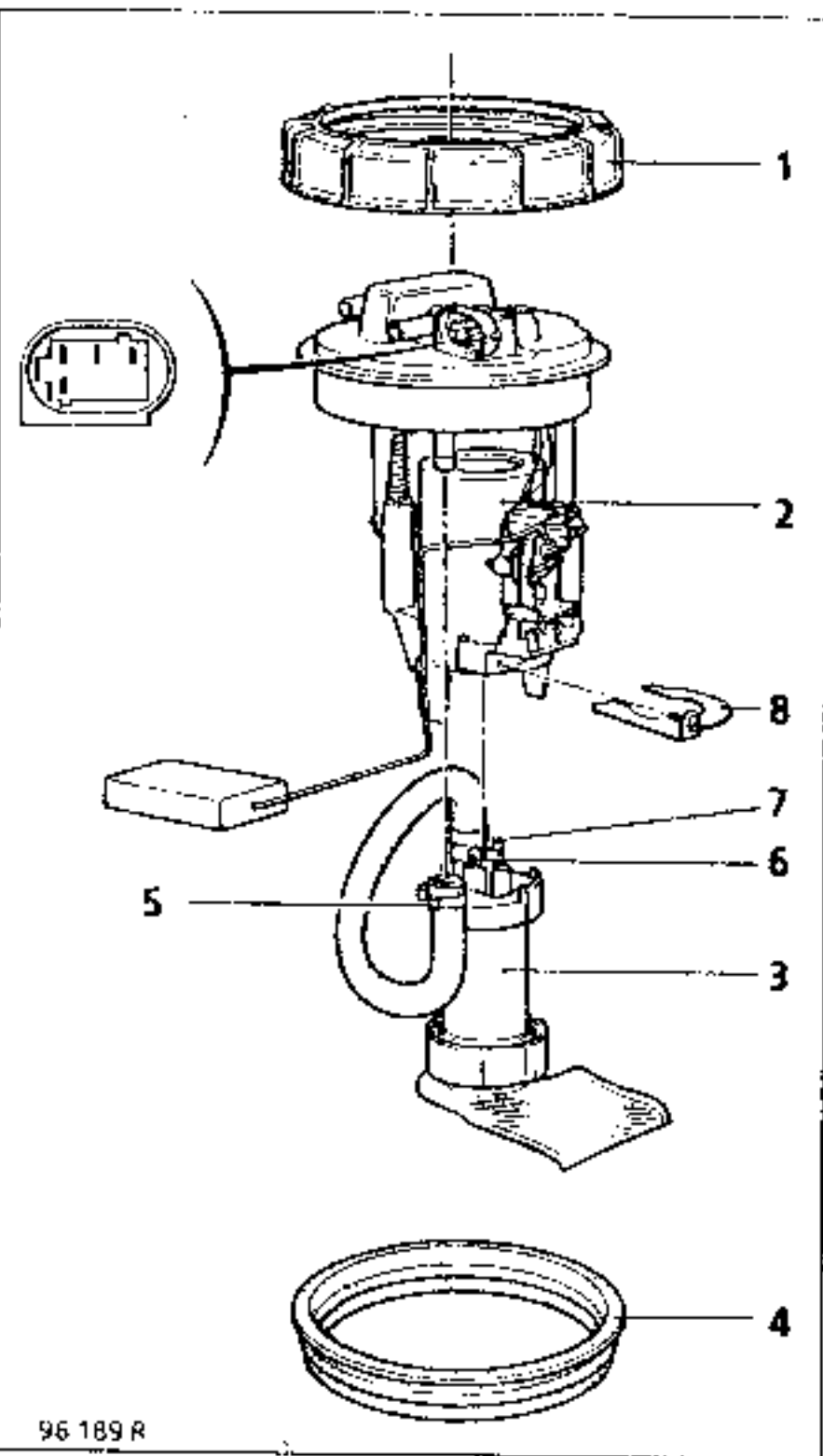
Display	Value between terminals A1 and B1 (in Ω)
4/4	22 ± 10
3/4	82 ± 10
1/2	127 ± 10
1/4	181 ± 10
Min gauge value	222 ± 10

Note :

These values are given for information only. Ensure the resistance varies by moving the float.

If the gauge is not operating correctly, it may be replaced by itself

REMOVAL - REFITTING OF THE GAUGE



- 1 Mounting nut
- 2 Fuel gauge
- 3 Fuel pump
- 4 Seal

Remove the pump - gauge assembly as described previously.
Undo collar (5) and remove the fuel pipe
Disconnect feed wires (6) and (7) from the pump
Remove the mounting bracket (8)
Separate the pump from the gauge.

When refitting

Check the condition of the seal (4), and replace if necessary
Ensure the pump feed wires are correctly connected (polarity)
Replace the collar (5) and ensure it is correctly tightened
Reconnect the battery.
Reset the trip counter to zero.

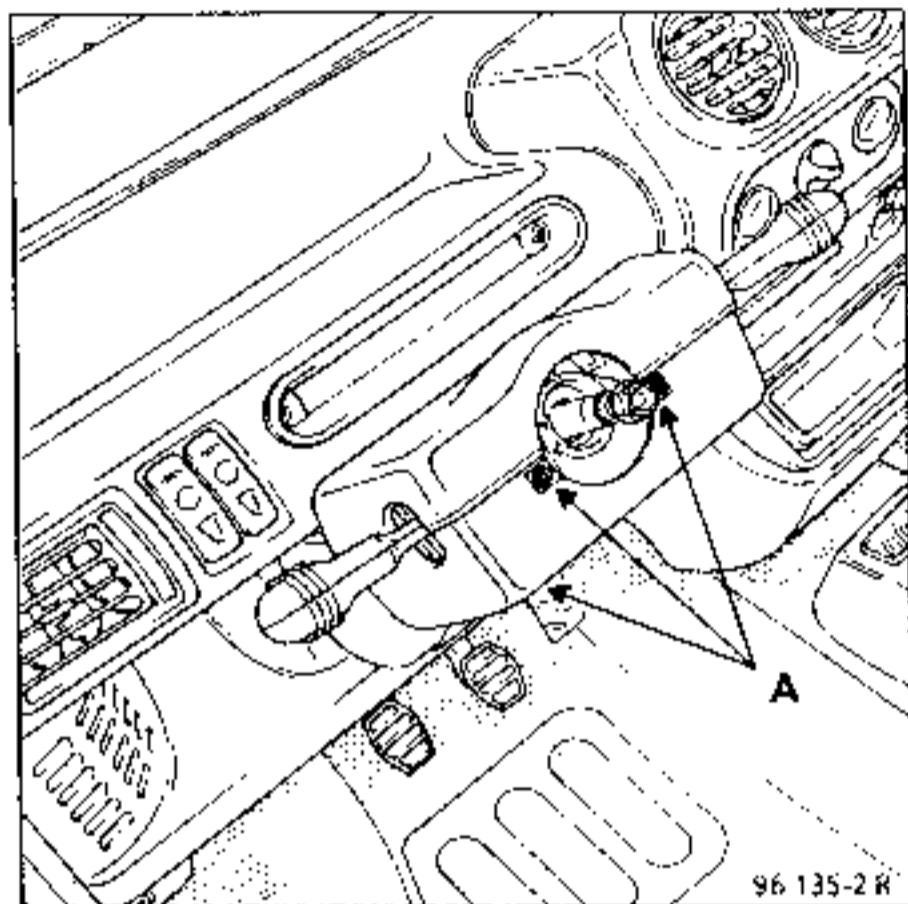
96 189 R

REMOVAL - REFITTING

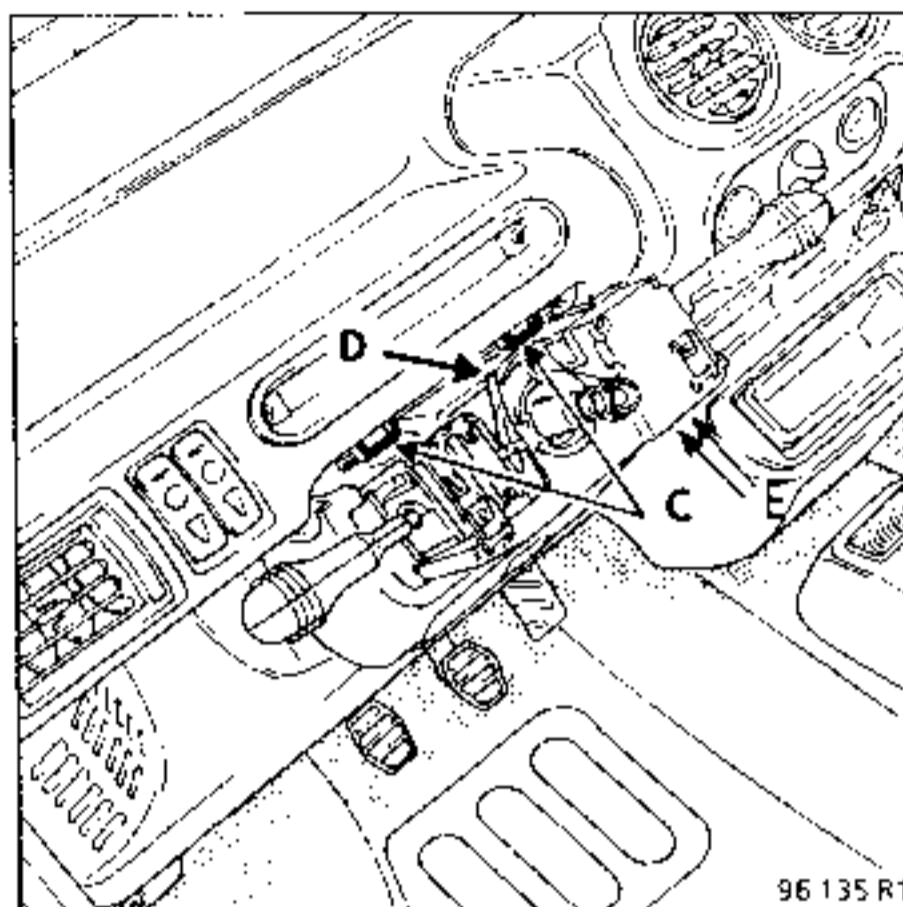
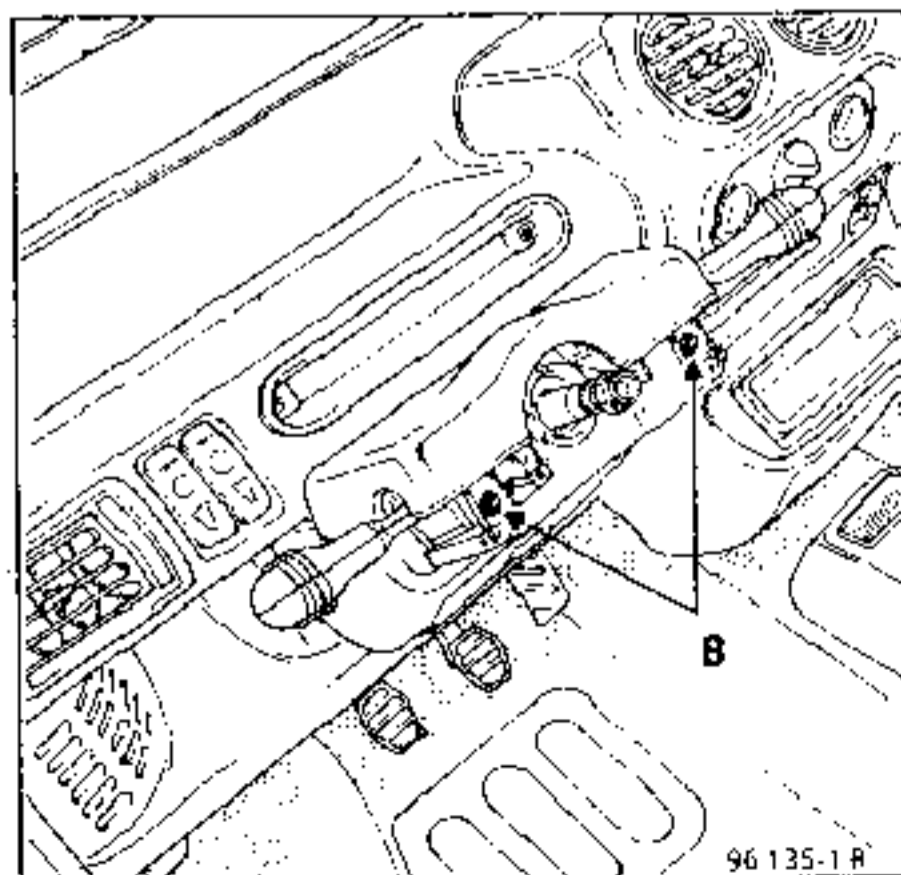
Disconnect the battery

Remove:

- the steering wheel, having centred the wheels
- the lower half cowling by unscrewing the three bolts (A) and pulling it downwards.

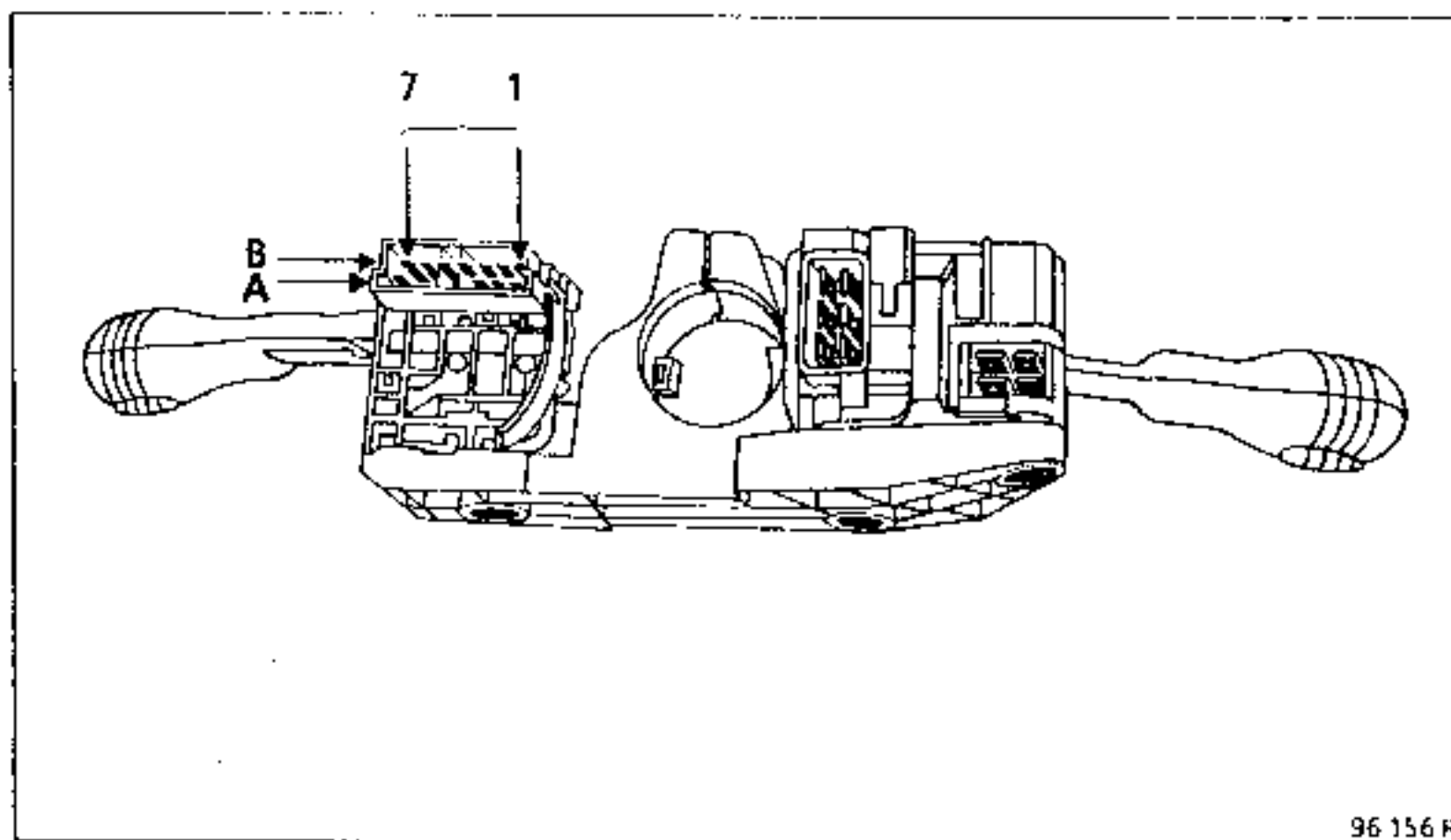


- the upper half cowling by unscrewing the two mountings (B) and pulling backwards at the same angle to unclip fixings (C).



- Release the switch holder by unscrewing bolt (D).
- Pull the assembly back slowly
- Disconnect the windscreen wiper switch connector
- Remove the two bolts (F) which mount the switch on the support.

CONNECTIONS



Front / rear screen wiper switch

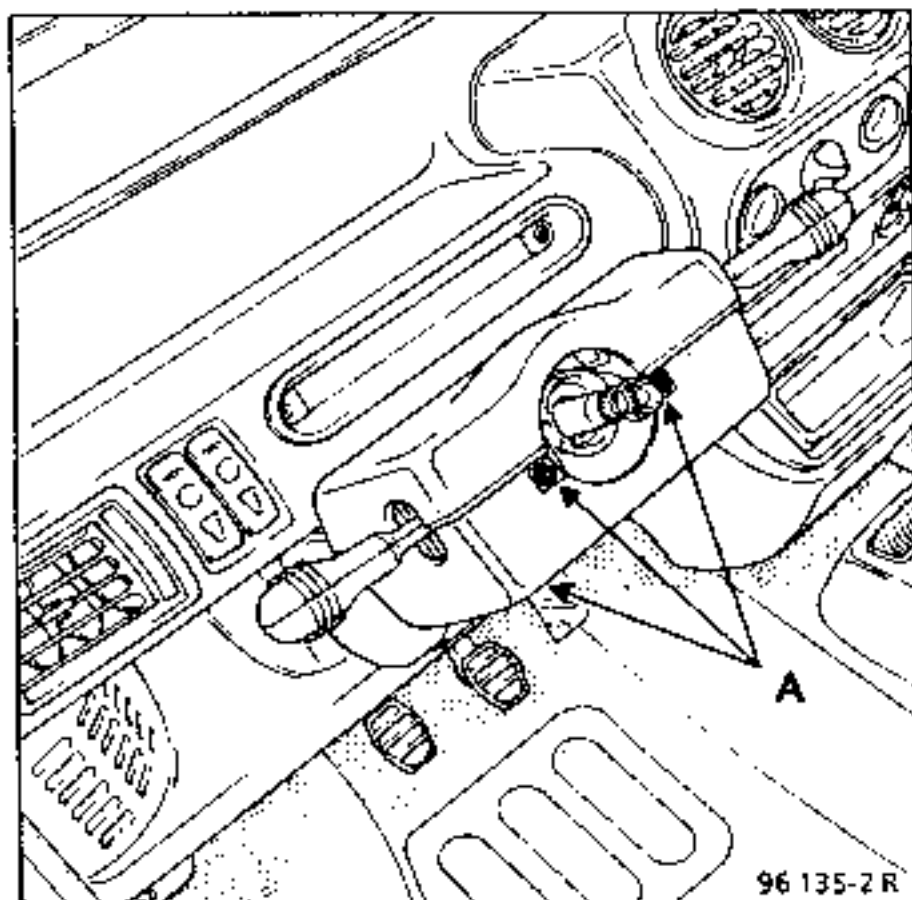
Track	Allocation
A1	+ after ignition
A2	Front wiper fast speed
A3	front wiper slow speed
A4	Not used
A5	Not used
A6	Not used
A7	Front wiper park
B1	+ Rear screen wiper
B2	Rear washer pump
B3	Earth
B4	Front washer pump
B5	+ after ignition
B6	instrument panel sequence display
B7	Electronic earth

REMOVAL - REFITTING

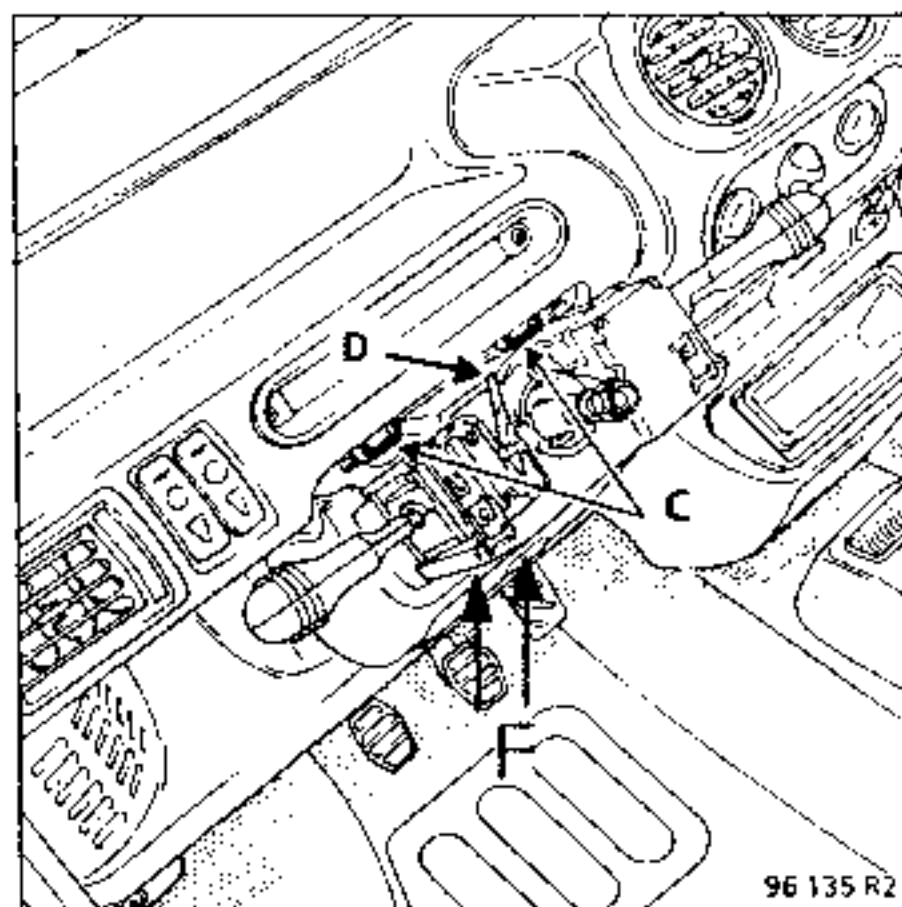
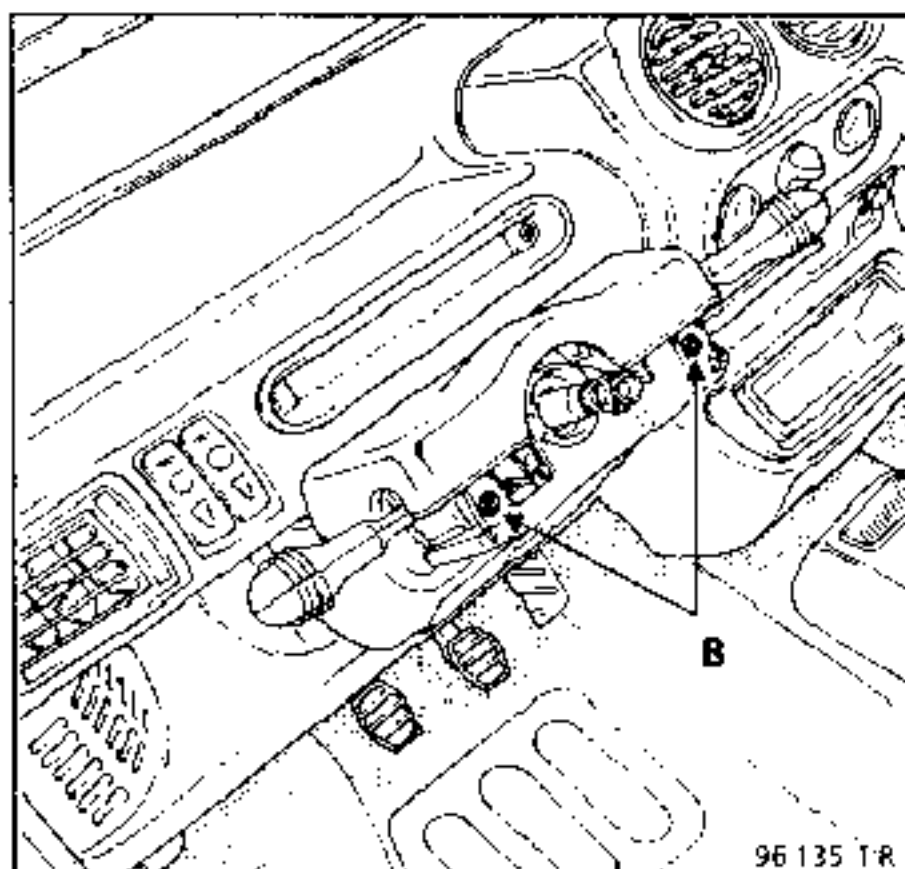
Disconnect the battery

Remove:

- the steering wheel, having centred the wheels
- the lower half cowling by unscrewing the three bolts (A) and pulling it downwards.

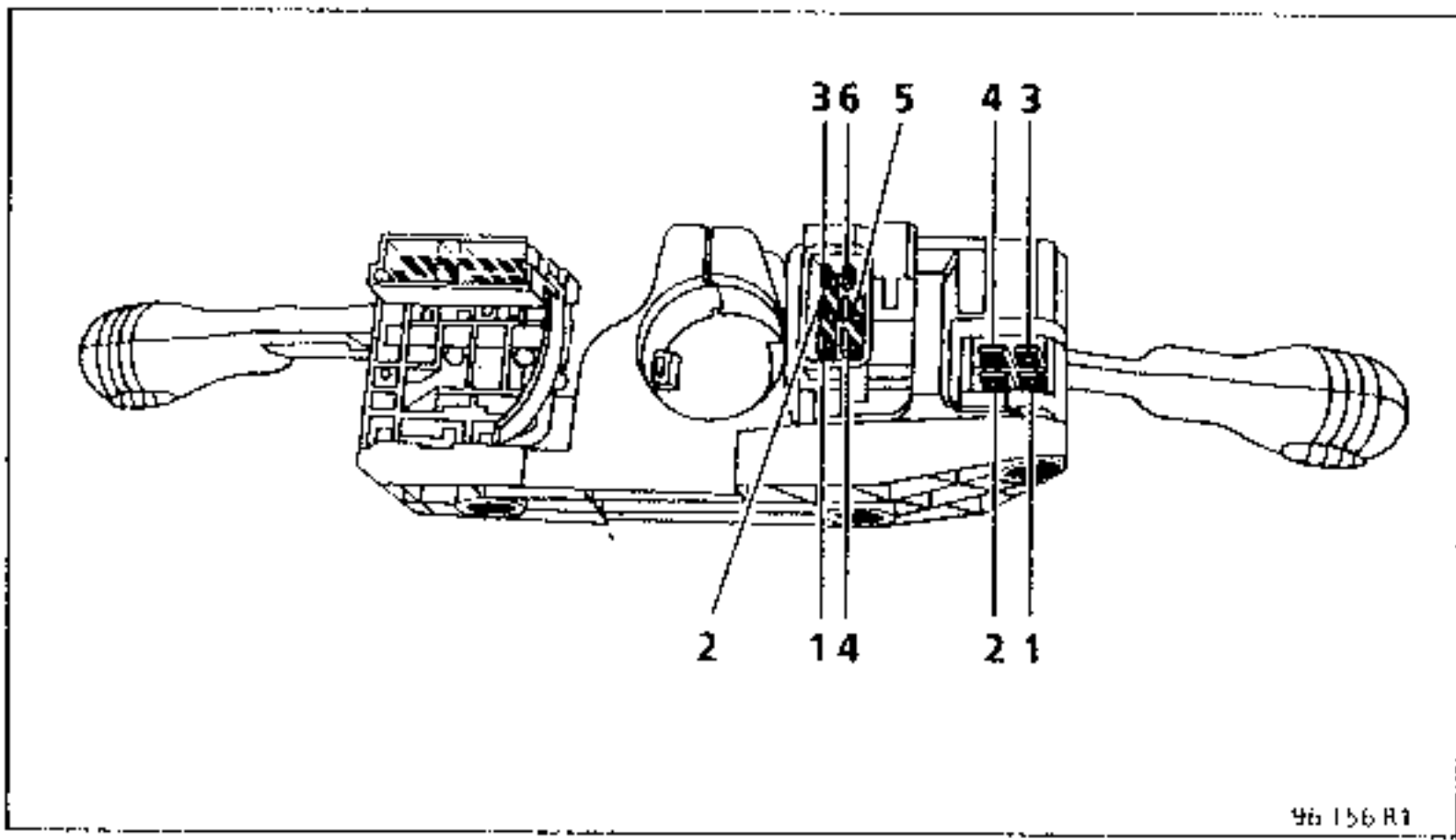


- the upper half cowling by unscrewing the two mountings (B) and pulling backwards at the same angle to unclip fixings (C).



Release the switch holder by unscrewing bolt (D).
Pull the assembly back slowly.
Disconnect the lights switch connector.
Remove the two bolts (E) which mount the switch on the support

CONNECTIONS



96 156 R1

lights switch

6 TRACK CONNECTOR

Track	Allocation
1	Lights on reminder buzzer
2	Rear fog light
3	+ before ignition
4	Right hand indicators
5	Indicator unit
6	Left hand indicators

4 TRACK CONNECTOR

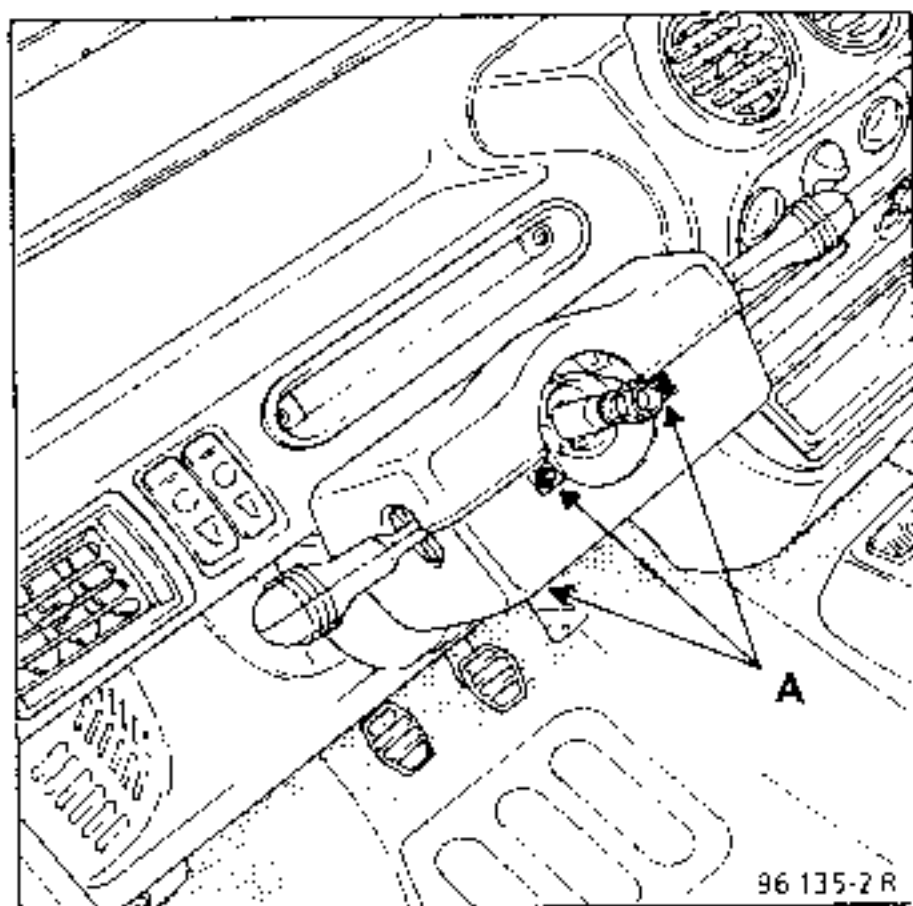
Track	Allocation
1	Main beam headlights
2	Dipped beam headlights
3	+ before ignition
4	Side lights

REMOVAL - REFITTING

Disconnect the battery

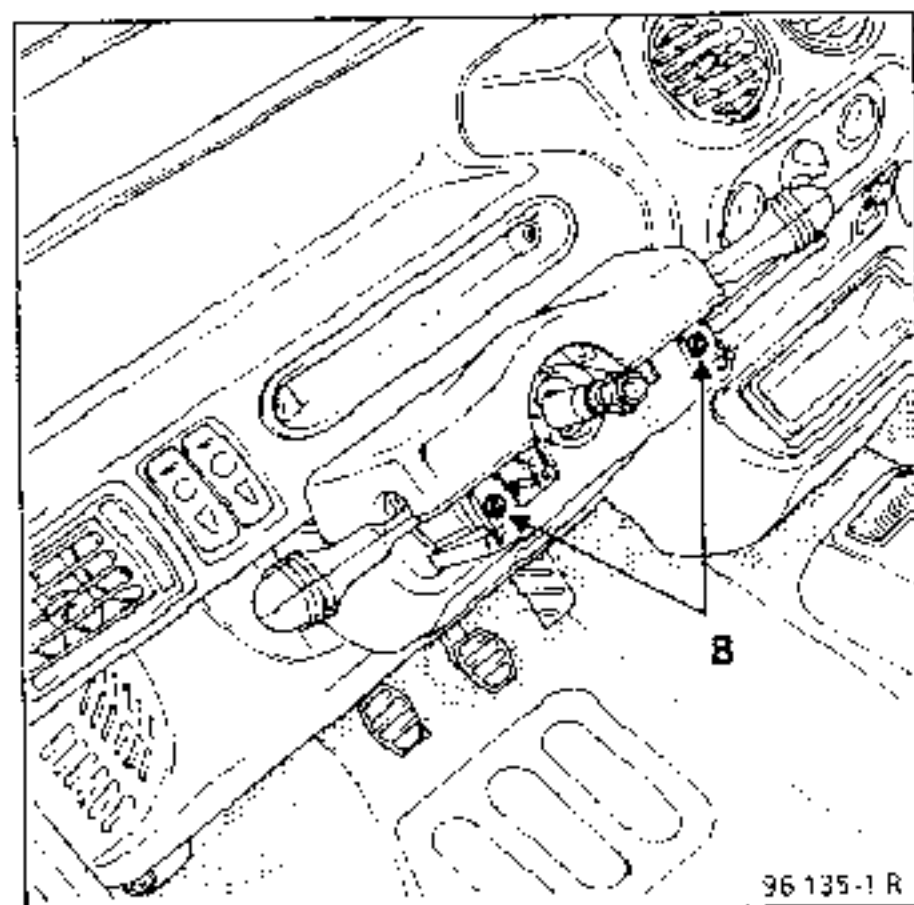
Remove:

- the steering wheel, having centred the wheels
- the lower half cowling by unscrewing the three bolts (A) and pulling it downwards.



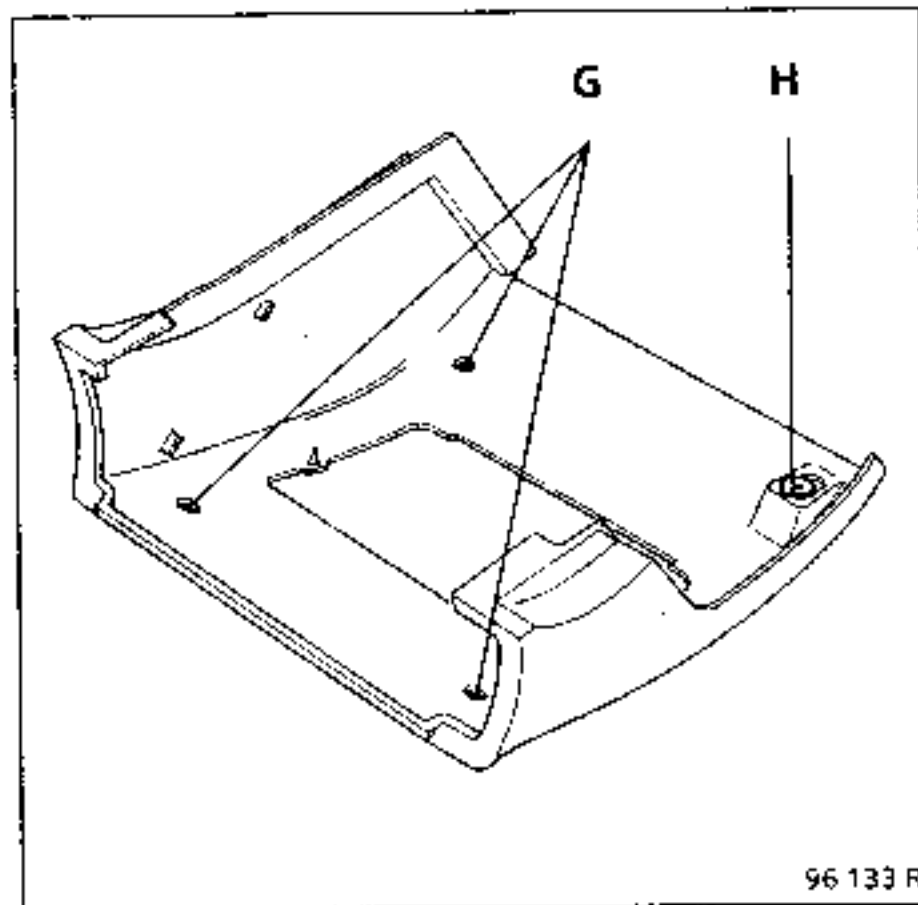
96 135-2 R

the upper half cowling by unscrewing the two mountings (B) and pulling backwards at the same angle to unclip fixings (C)



96 135-1 R

- the trim under the steering wheel by unscrewing the three bolts (G) and pulling down to unclip pin (H) on the bottom right hand side

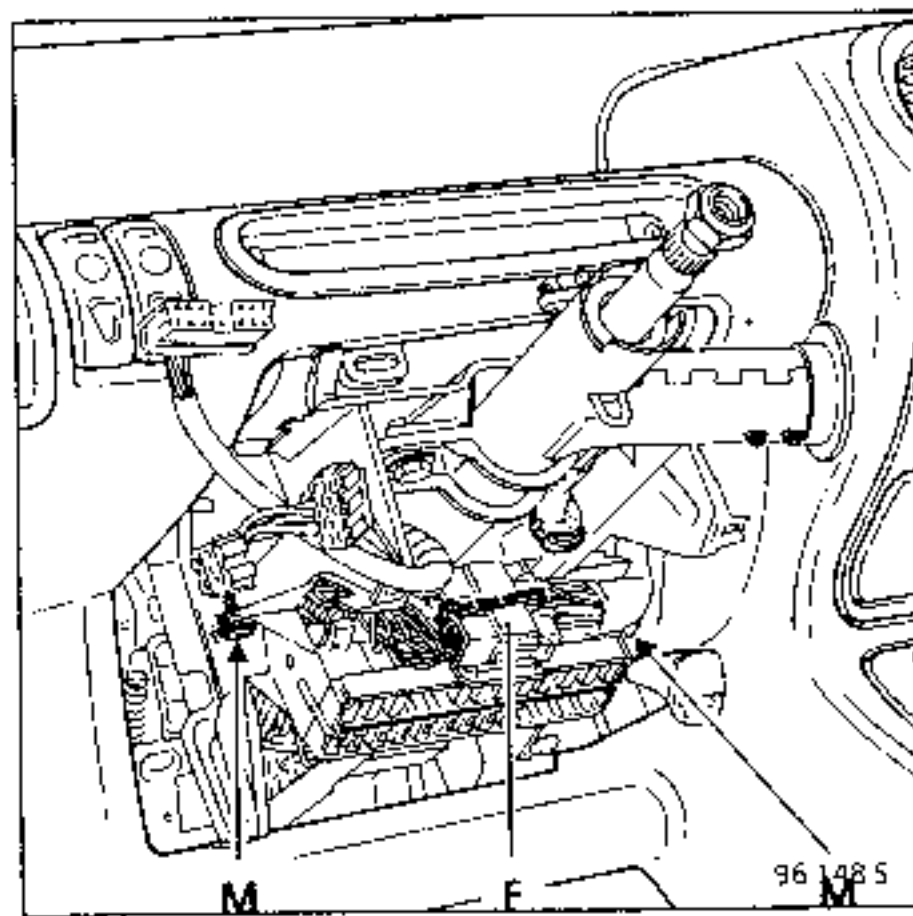


96 133 R

Disconnect the two ignition switch connectors located on the relay board behind the fuse board.

Remove the wiring (wires and connectors) towards the front, having opened the retaining clip under the ignition switch

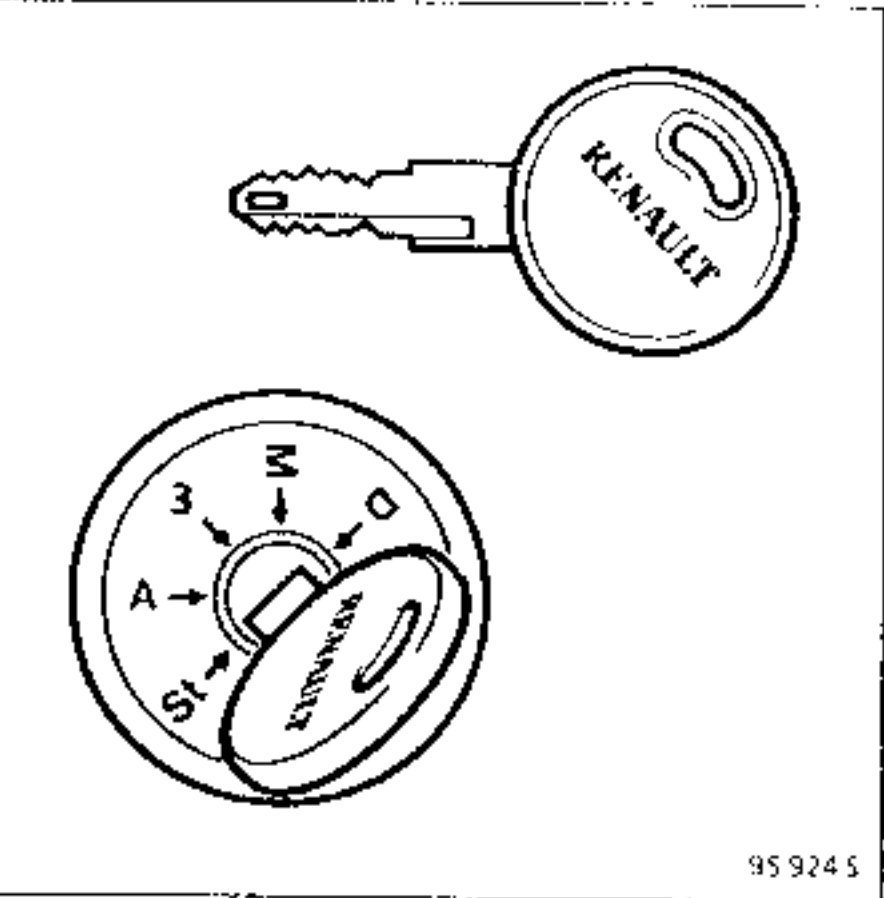
Remove the ignition switch mounting bolt.



96 148 S

REMOVAL - REFITTING (cont)

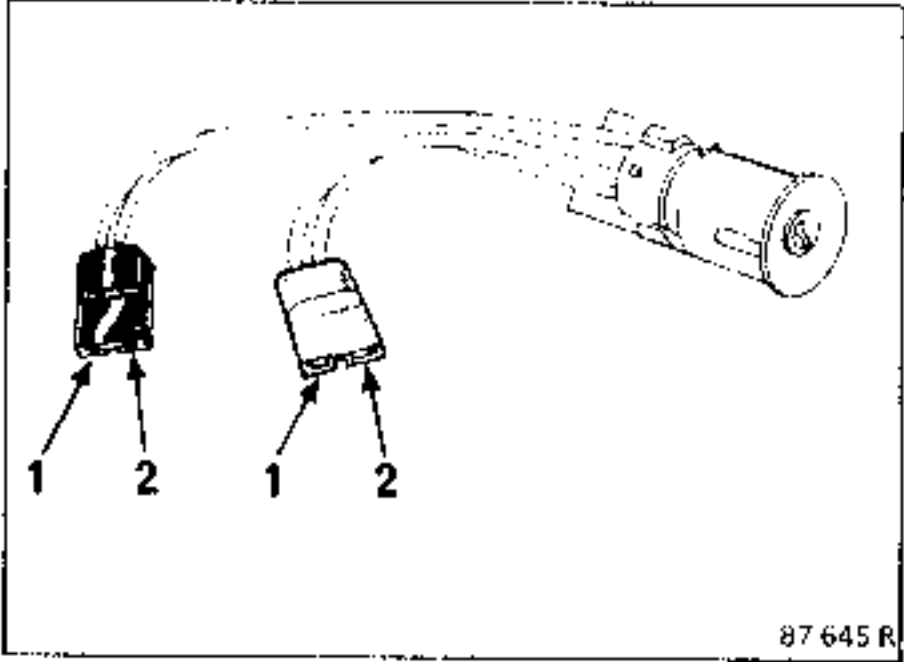
Put the key in position (3)



Press the retaining lugs and remove the ignition switch.

When refitting, ensure the wiring is correctly refitted.

CONNECTIONS



Black connector

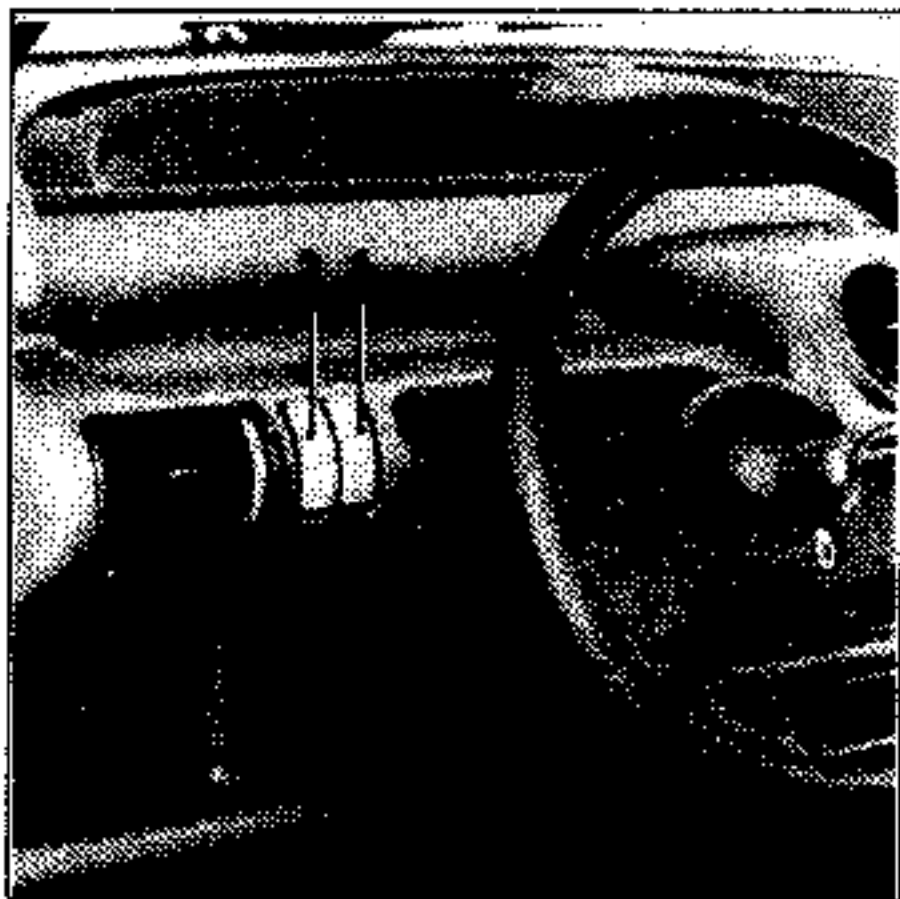
Track	Allocation
1	+ before ignition
2	Starter

Grey connector

Track	Allocation
1	Accessories
2	+ after ignition

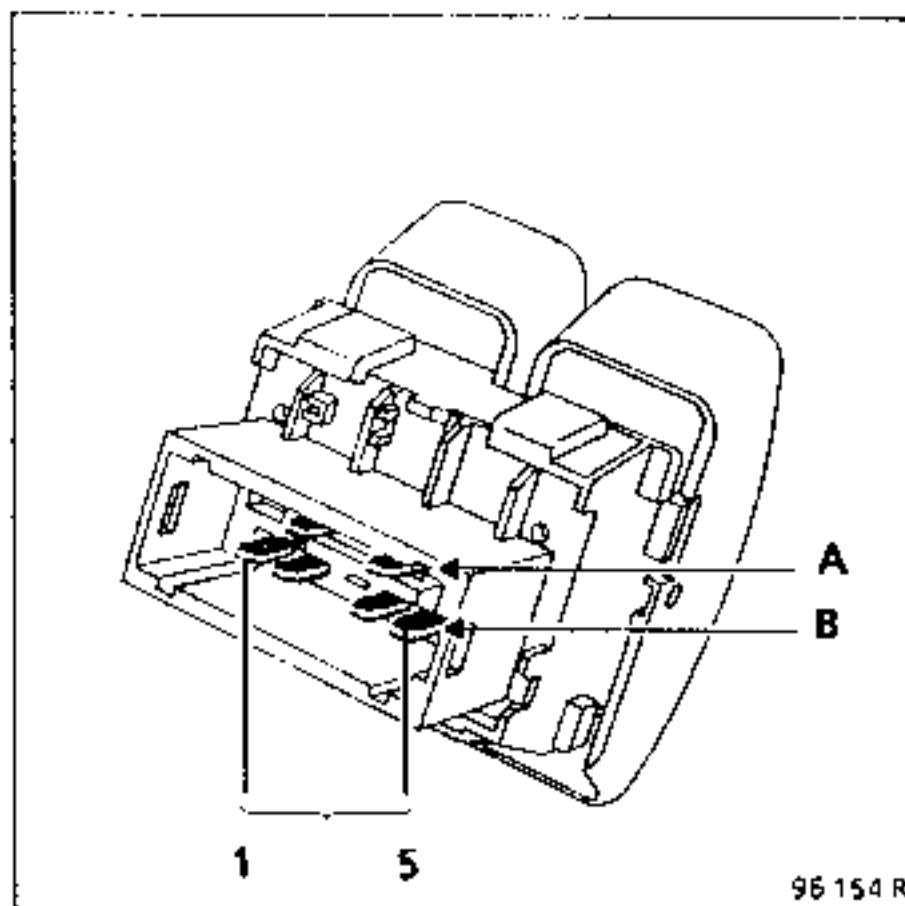
REAR FOG LIGHT / REAR SCREEN DE-ICER

The rear fog light switch (1) and the rear screen de-mister control (2) are mounted on the same base although they may be operated separately.



There is therefore only one connector.

CONNECTIONS

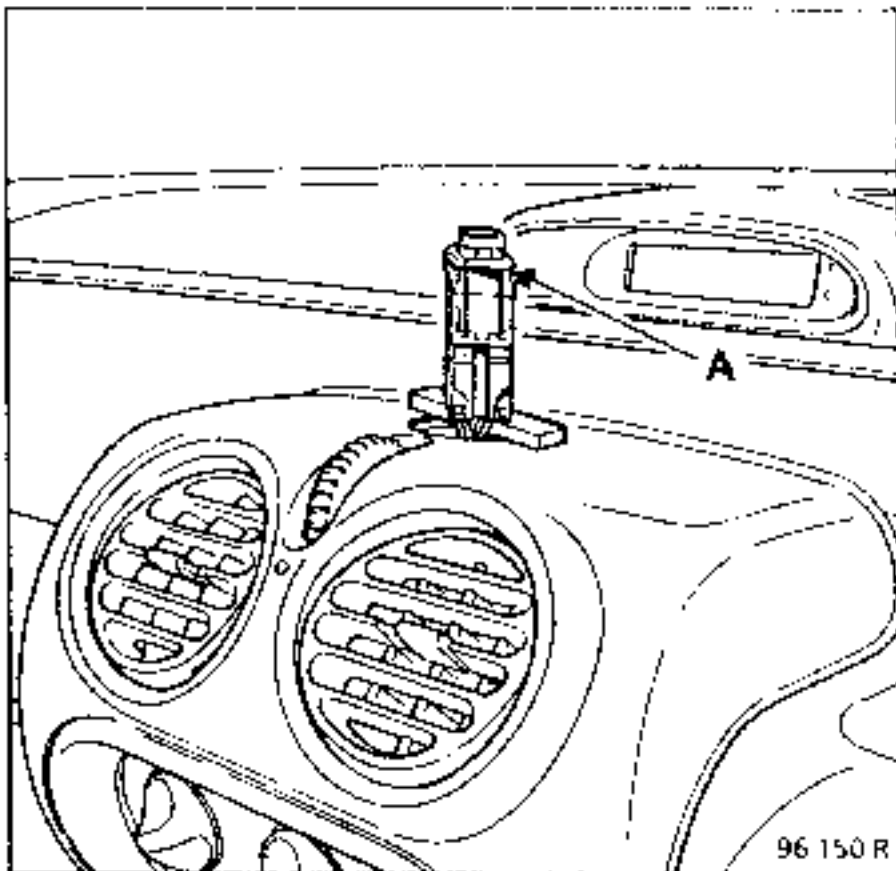


Track	Allocation
A2	Rear fog light tell-tale
A4	Rear screen de-icer tell-tale
B1	Not connected
B2	Rear fog light
B4	Rear screen de-icer relay
B5	+ after ignition

HAZARD WARNING LIGHTS

Removing the switch

Slide a flat bladed screwdriver under the rubber edge (A) of the hazard warning lights switch in order to lift the assembly.

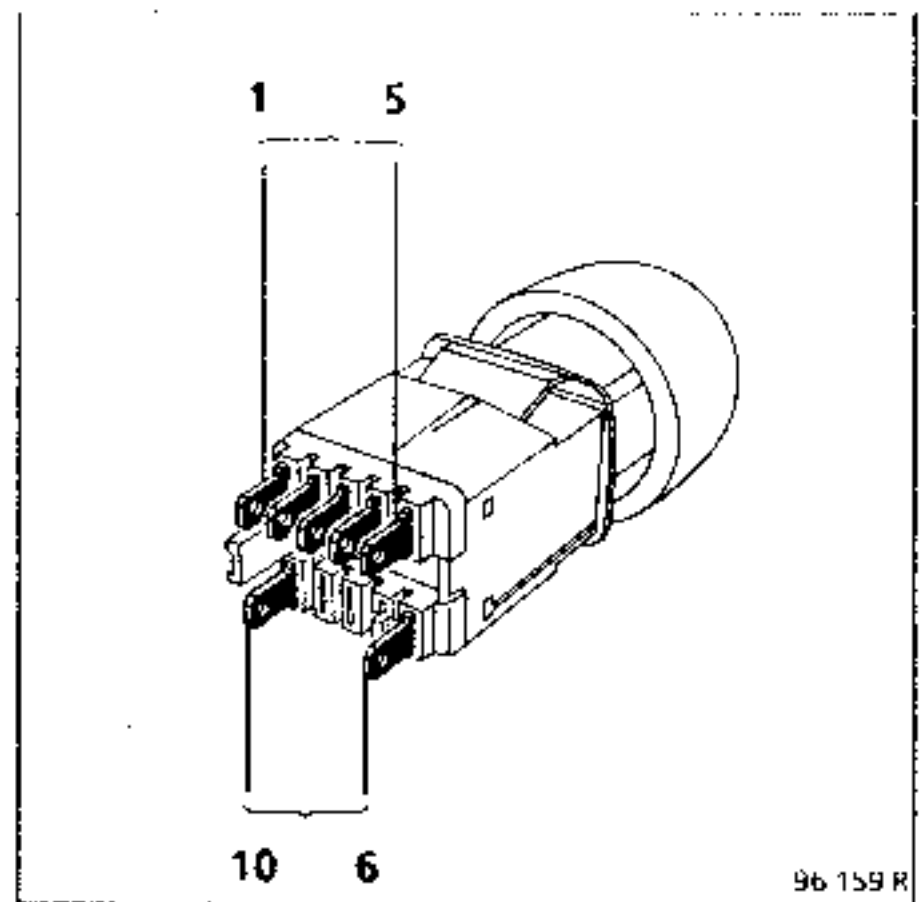


Release the switch and connector assembly from its position.

To stop the assembly falling behind the dashboard during this operation, position a small block of non-conducting material as shown in the diagram.

Disconnect the connector.

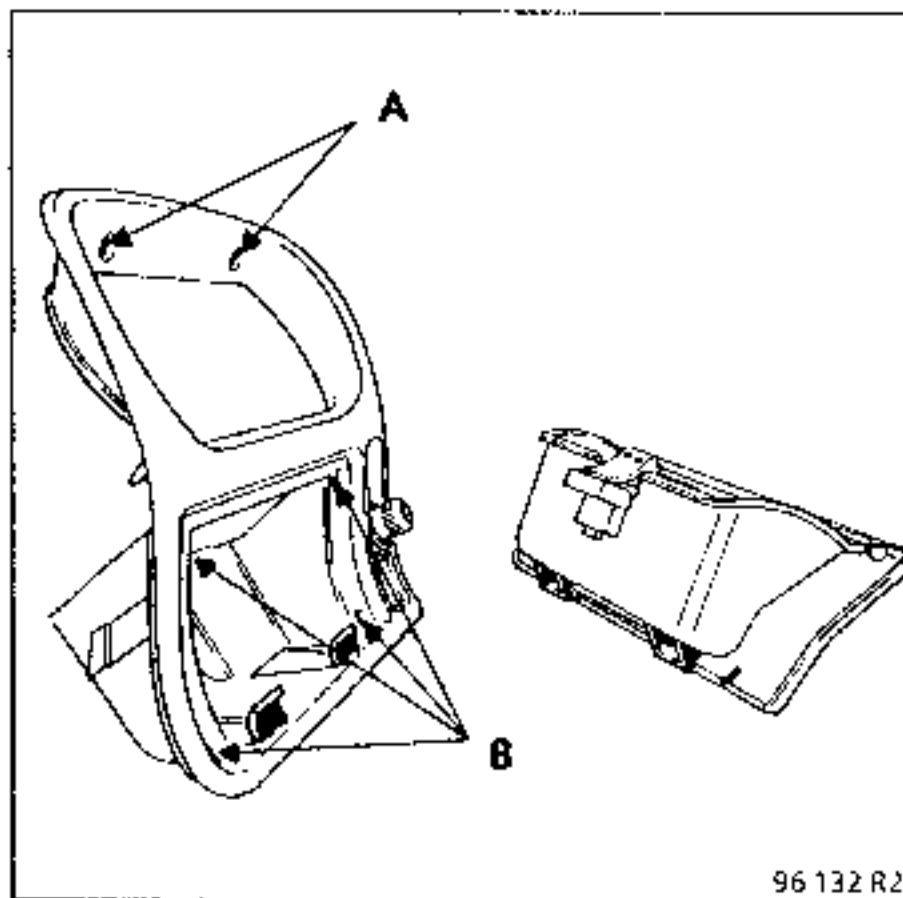
CONNECTIONS



Track	Allocation
1	RH indicators
2	LH indicators
3	Earth
4	+ before ignition
5	+ after ignition
6	+ indicators fuse
7	Not connected
8	Not connected
9	Not connected
10	Indicators unit

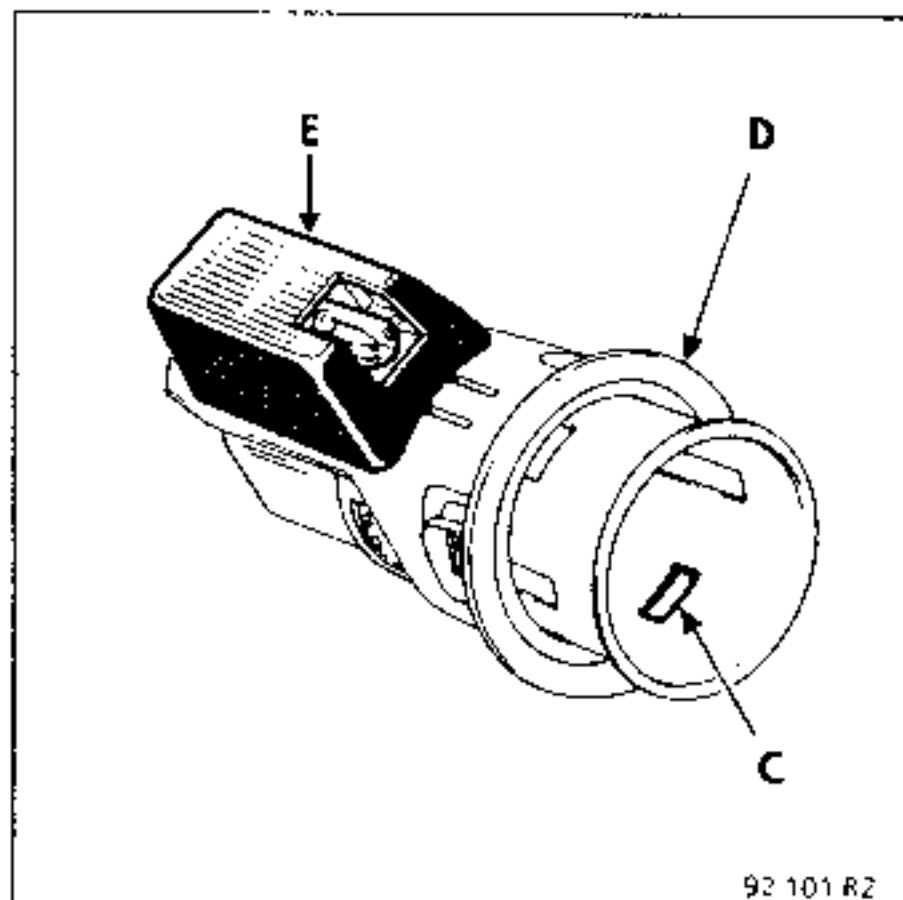
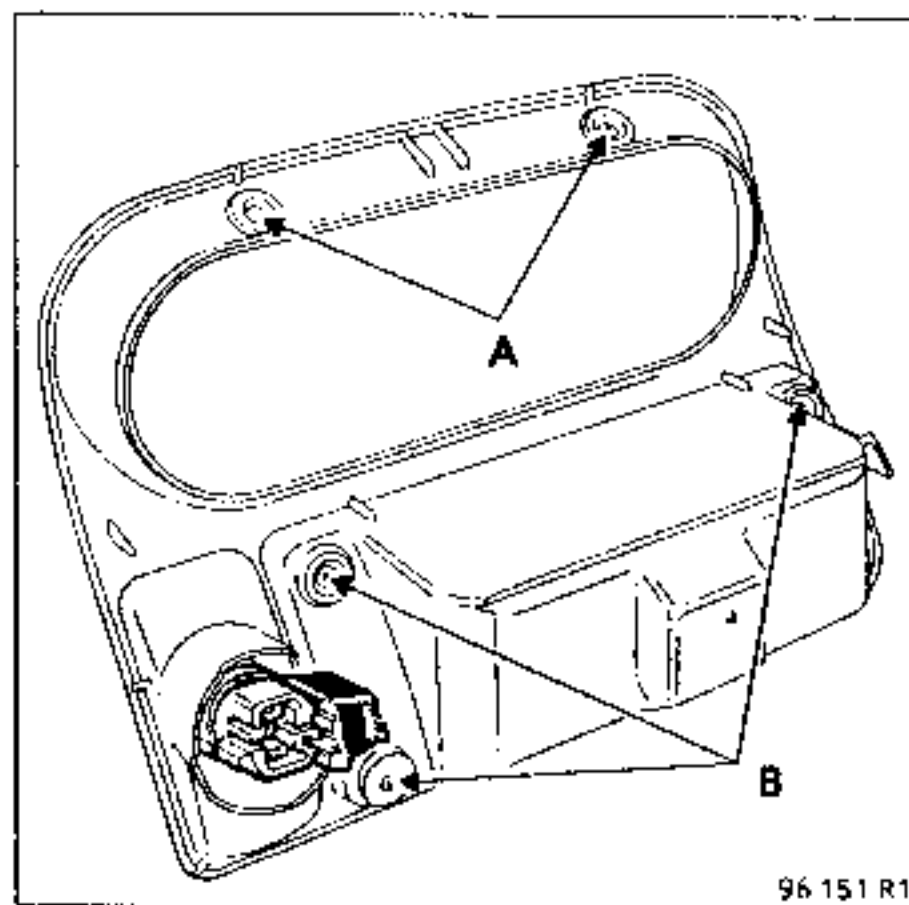
REMOVAL

Disconnect the battery.
Remove the ashtray by pressing on the central tab.
Release the plastic ashtray mounting cover, having removed :
- the two countersunk upper bolts (A)
- the four bolts (B) from the ashtray surround



Disconnect the cigar lighter connector
Remove the plastic ashtray mounting cover
Remove the cigar lighter

To remove the fixed metal section, push the back of the unit and unclip the two clips (C).



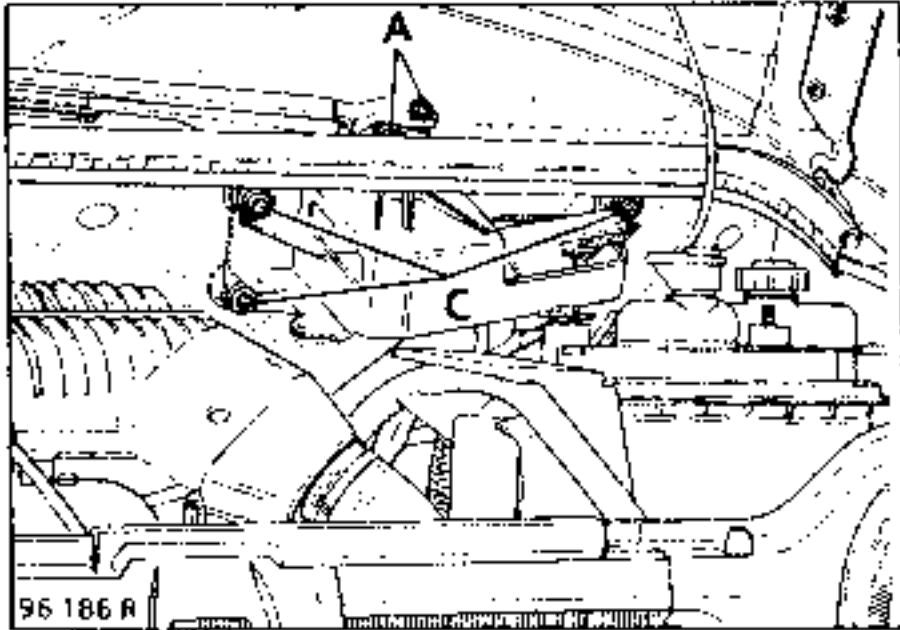
To remove the coloured plastic section (D), unclip the bulb cover (E). Remove the plastic section by pushing it backwards from the front.

REMOVAL

Disconnect the battery.

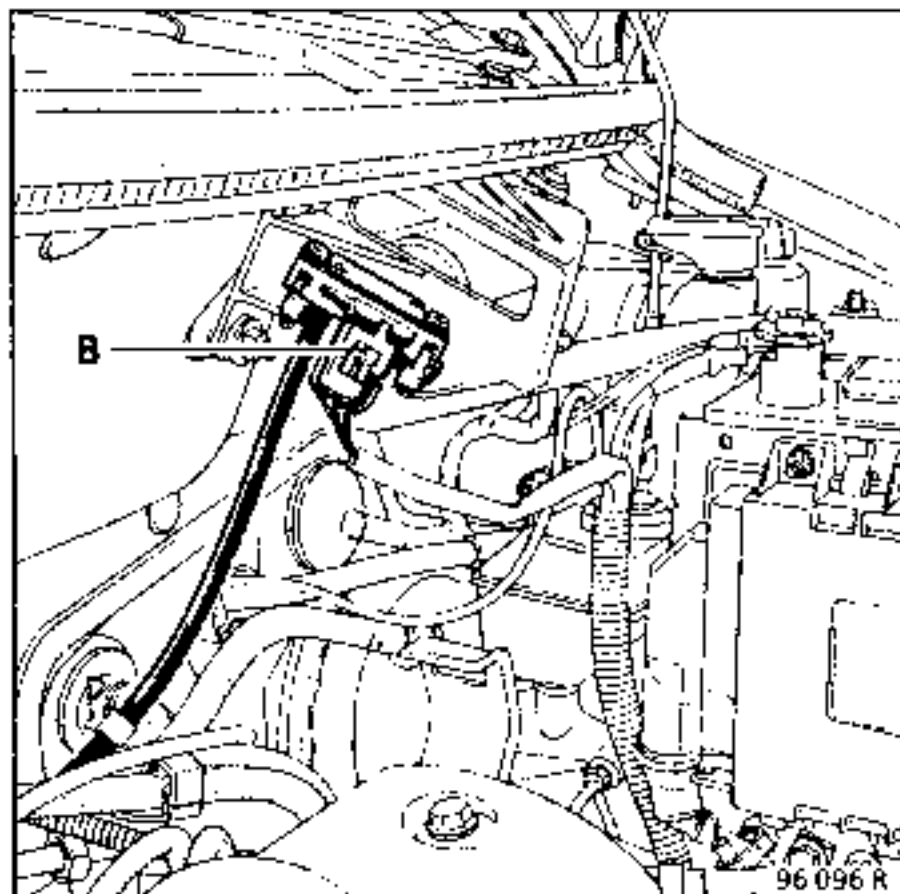
Bonnet shut, mark the position of the wiper arm holder.

Remove the wiper arm having undone the two nuts (A), which hold the pivots.



Bonnet open, unclip the absolute pressure sensor (B) and remove it from the front windscreen wiper motor mounting.

Remove the three mountings (C) for the motor mounting (1 bolt and 2 nuts)



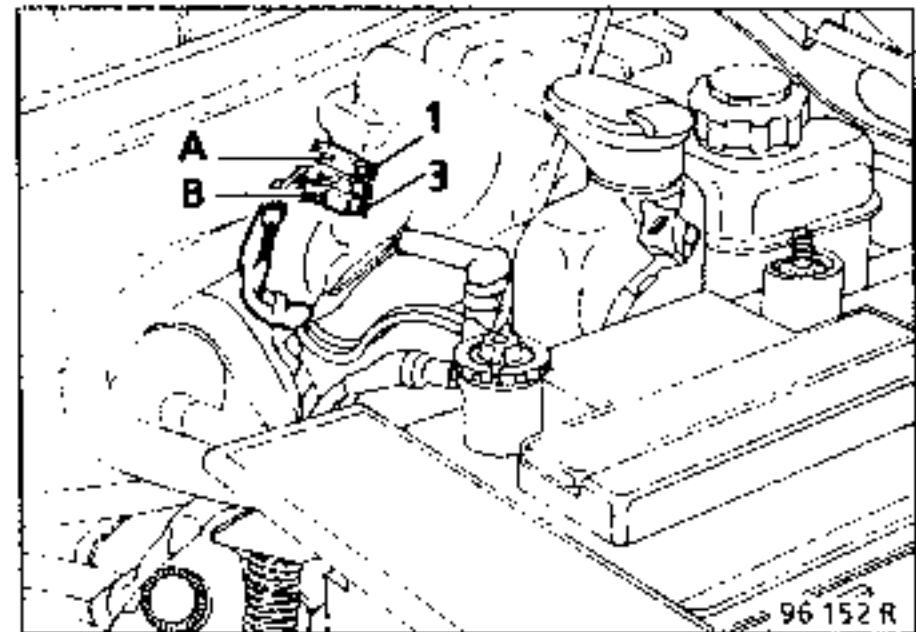
Release the motor so the connector may be disconnected.

Remove the front windscreen wiper motor.

REFITTING

When refitting ensure the motor is at the park position before refitting the wiper arm.

Use the reference mark made when the arm was removed to refit it correctly.

CONNECTIONS

Track	Allocation
A1	Fast speed
A3	Earth
B1	Slow speed
B2	+ Park
B3	Park

REMOVAL

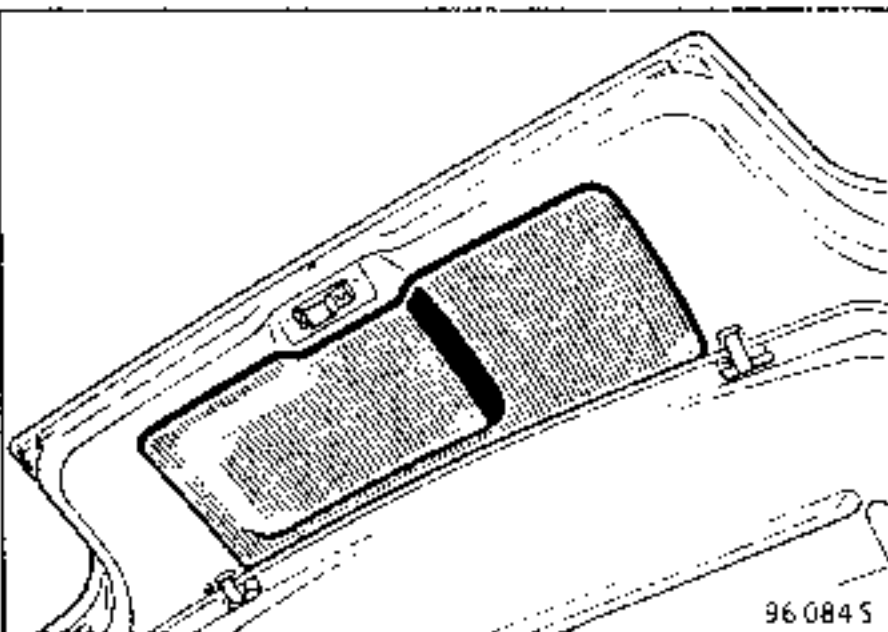
Disconnect the battery

Tailgate shut :

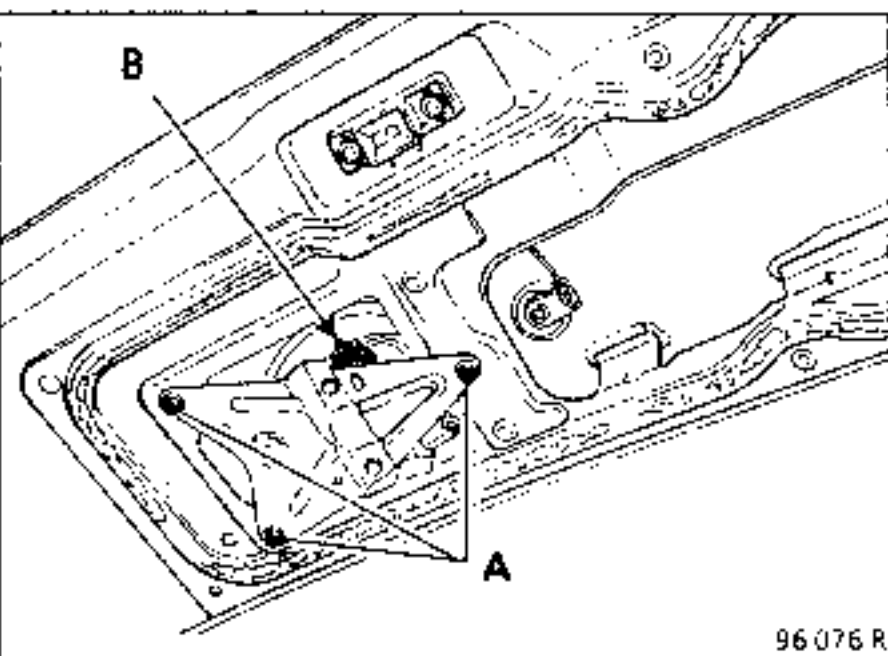
- disconnect the rear screen washer pipe
- unscrew the pivot mounting nut and remove the wiper arm

Tailgate open :

- remove the tailgate interior trim (clips + seal)



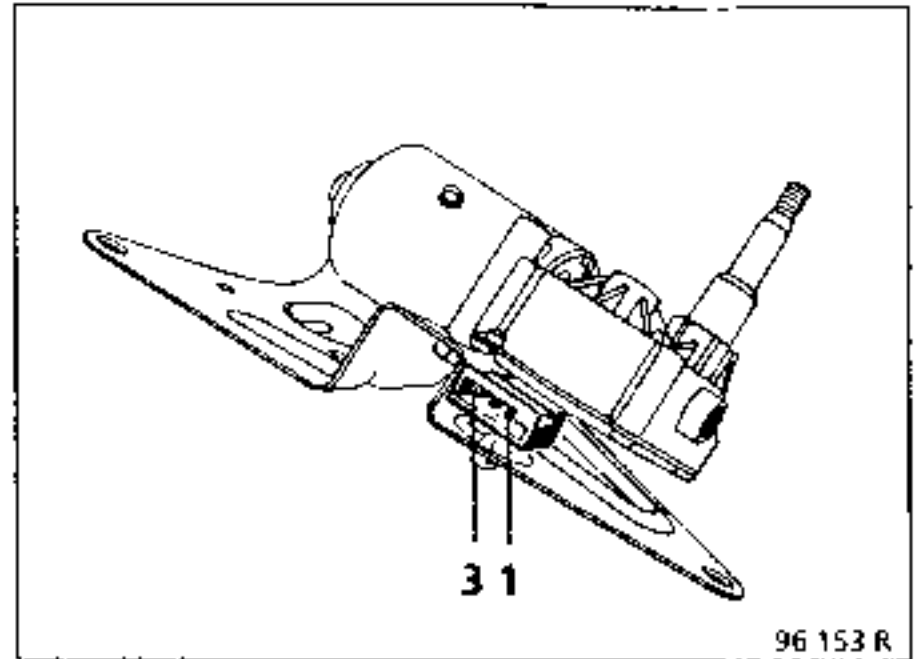
- remove the three mounting bolts (A) from the rear wiper motor
- release the motor to disconnect the connector (B).
- remove the rear wiper motor.



REFITTING

When refitting, ensure the motor is in the park position before refitting the wiper arm.

CONNECTIONS



Track	Allocation
1	+ rear wiper
2	Earth
3	+ Park

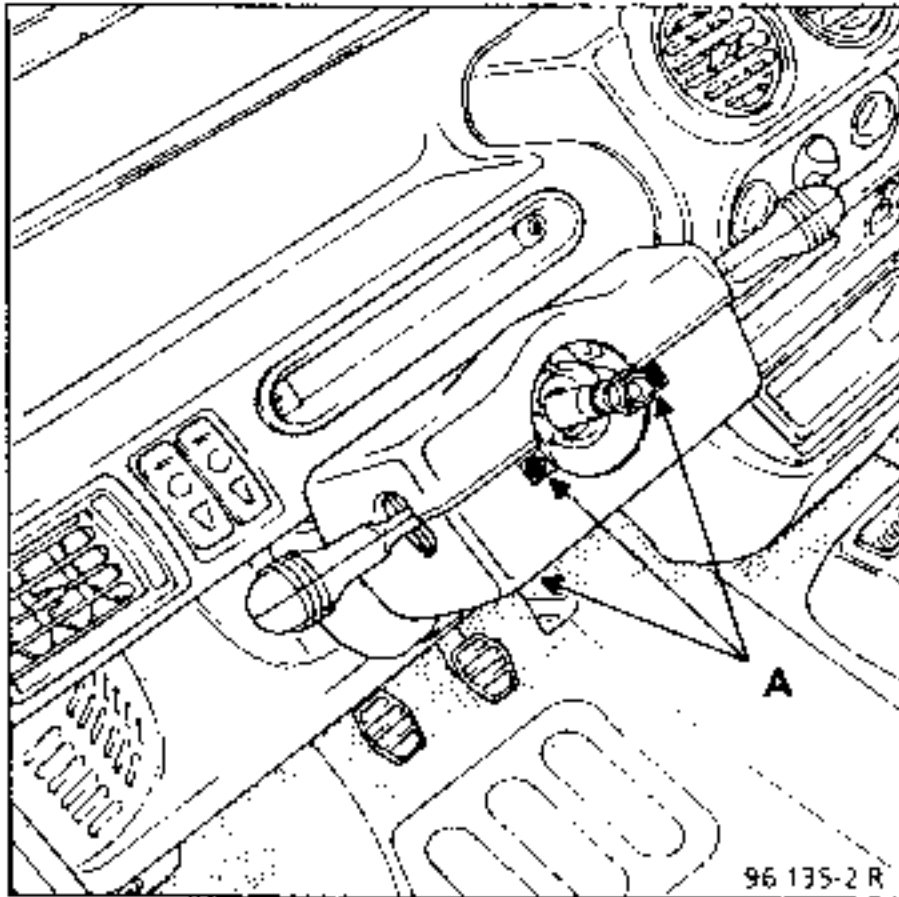
In the passenger compartment

Relay plate position

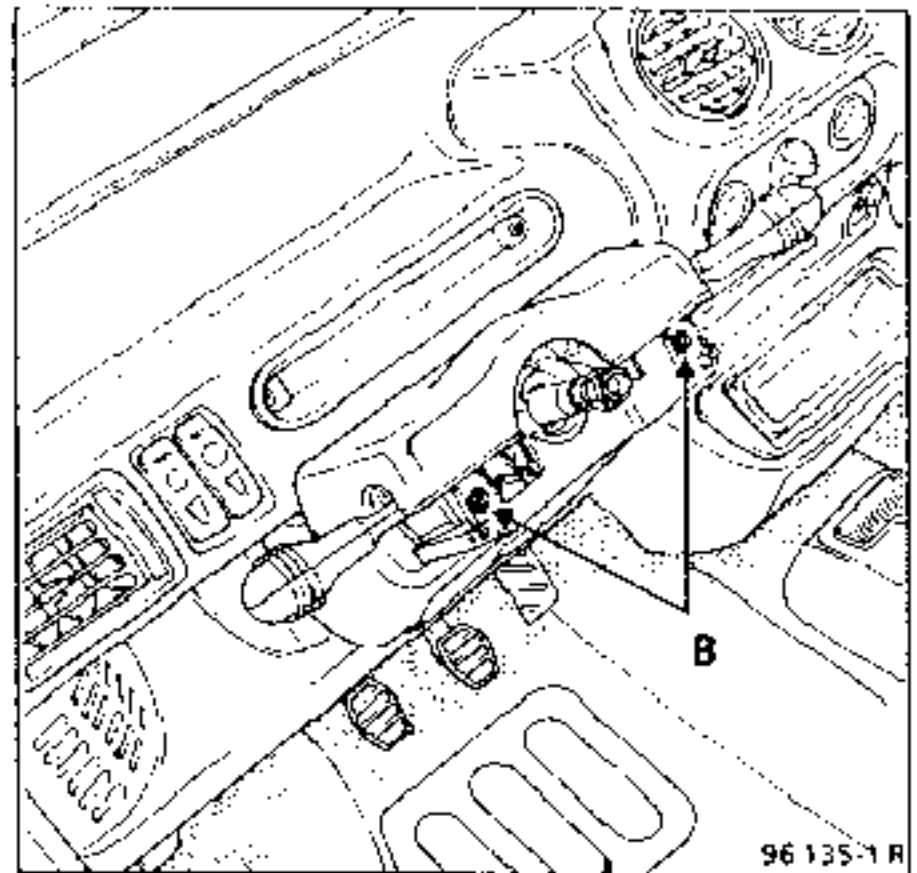
The relays are located behind the fuse board under the steering column.

To reach them, remove :

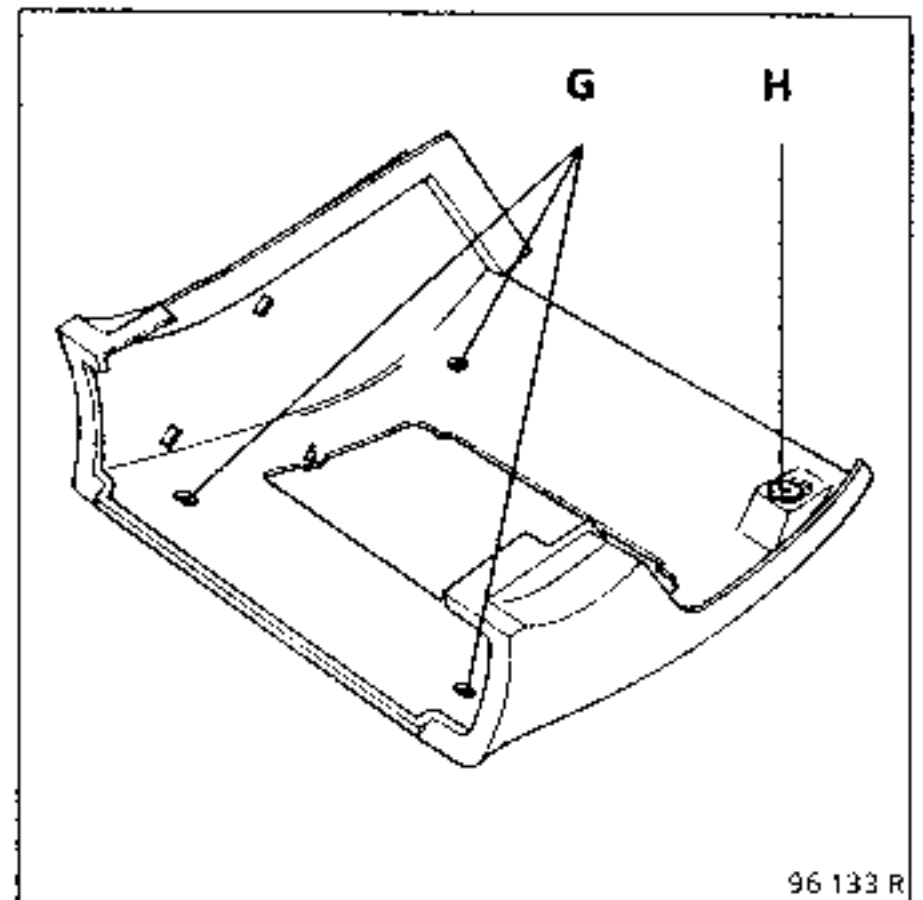
- the steering wheel, having centred the wheels
- the lower half cowling by unscrewing the three bolts (A) and pulling it downwards



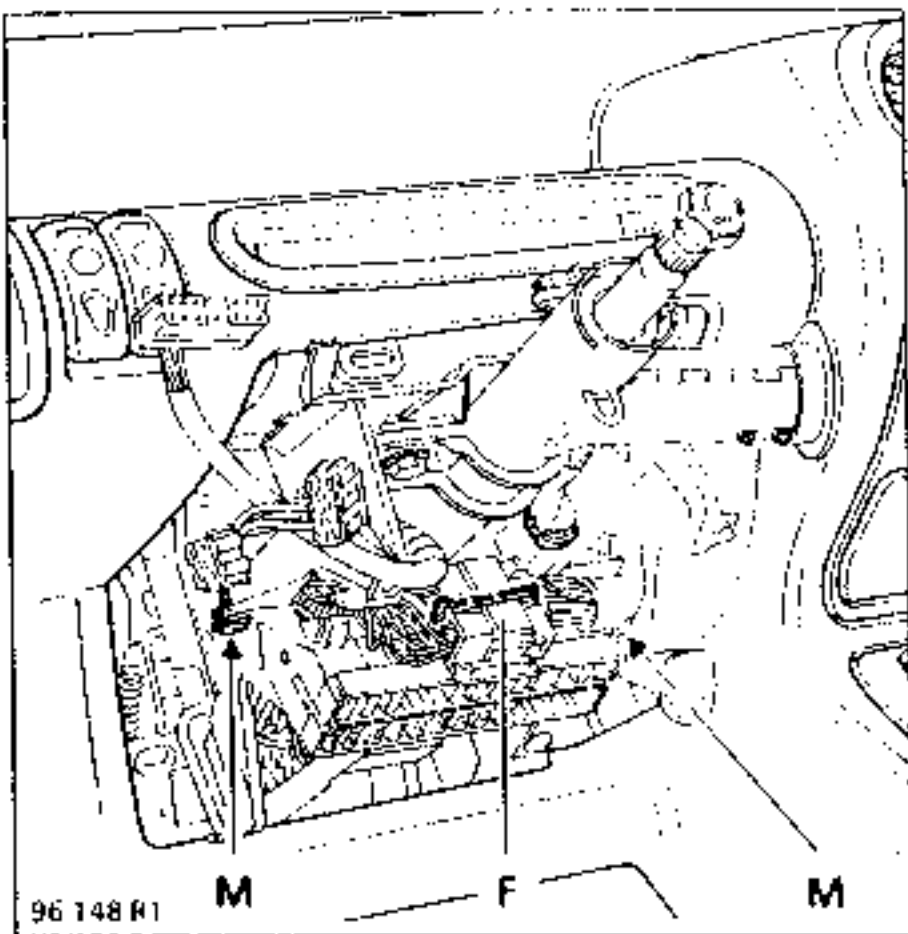
- the upper half cowling by unscrewing the two mountings (B) and pulling backwards at the same angle to unclip the two fixings in the dashboard (under the warning lights bar).



- the steering column cover by removing the three bolts (G) and pulling it downwards to release clip (H).

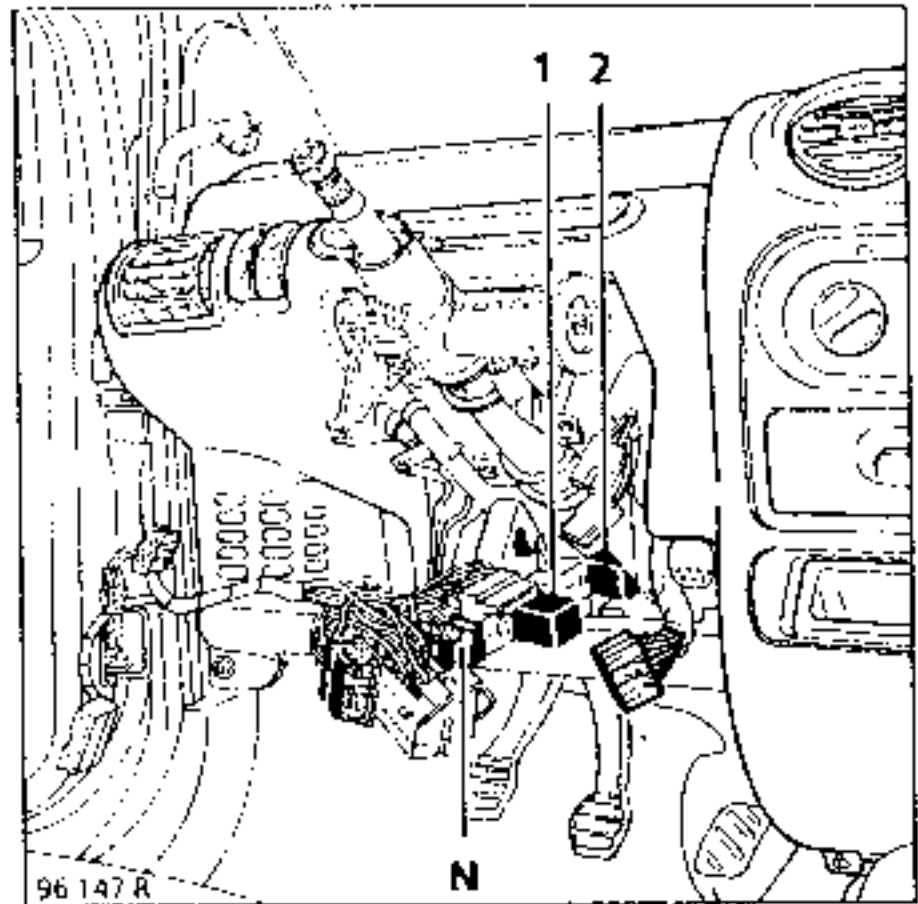


Disconnect the connector (F) having removed the pin.



Then remove the fuse board, :

- remove the two bolts(M)
- pull the unit released towards you (at the same angle) and then push it to the right to release it from the steering column.



The relay plate is attached to the back of the fuse board by a sliding clip (N).

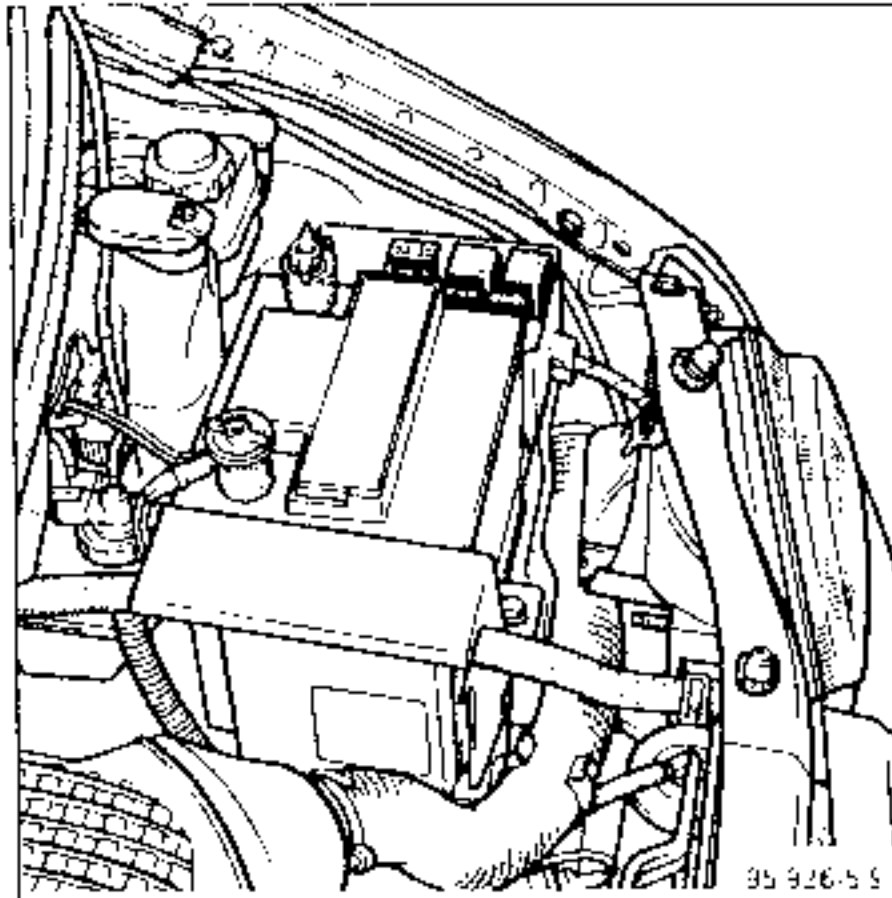
Allocation

- 1 Indicator unit
- 2 Rear screen de-icer relay

In the engine compartment

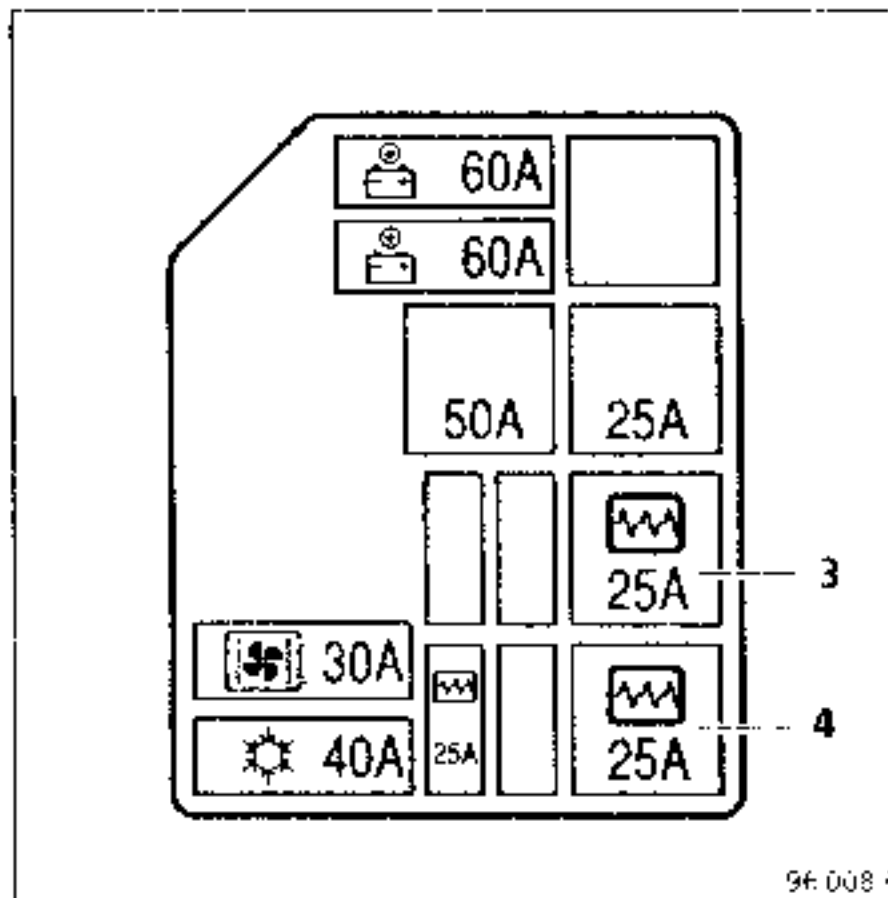
Position

The relays are located in the connecting unit next to the battery.



Allocation

- 3 Fuel pump relay
- 4 Injection relay



The rear screen de-icer is a network applied to the inner surface of the screen, and may be accidentally cut, making part of the circuit inoperative.

The exact position of the break in the circuit can be determined with a voltmeter.

Such breaks may be repaired using rear screen de-icer varnish sold under part n° 77 01 421 135 (2 g pack).

DETERMINING THE EXACT POSITION OF A BREAK IN THE CIRCUIT WITH A VOLTMETER

Switch the ignition on.

Switch the rear screen de-icer on.

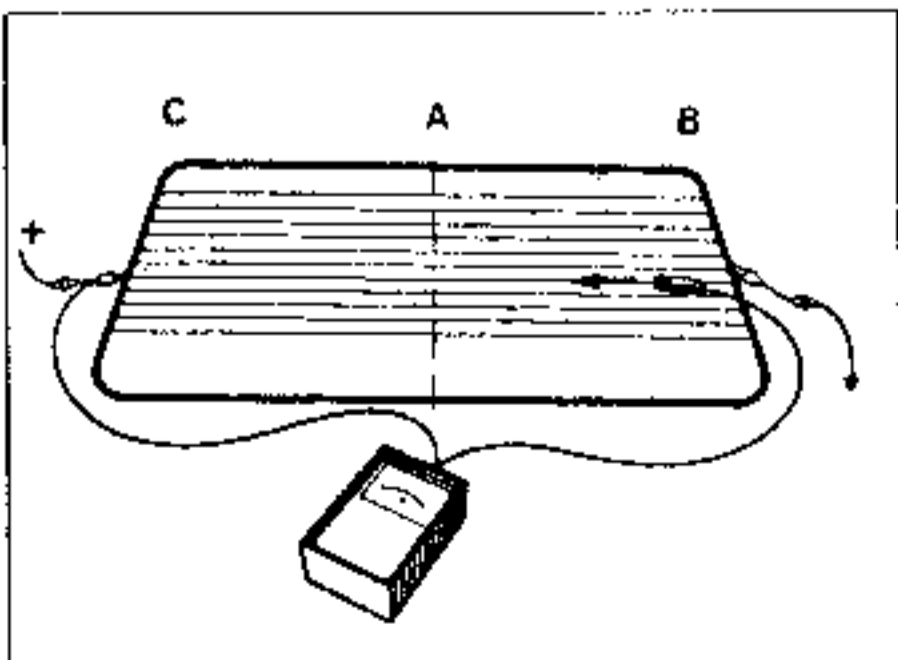
DETECTING BETWEEN LINES B AND A

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

Put the - voltmeter wire on a filament on the side of the screen - terminal (line B), you should rear battery voltage approximately.

Move the - wire towards line A (arrow) : the voltage drops progressively.

If the voltage drops sharply, the circuit is broken at that point (repeat this operation for each filament).



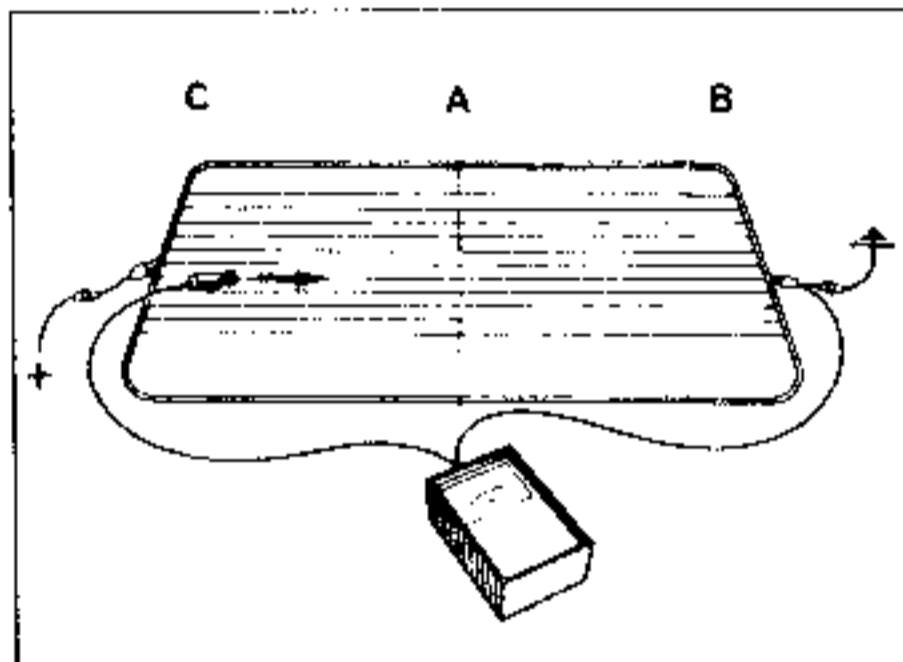
DETECTING BETWEEN LINES C AND A

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

Put the + voltmeter wire on a filament on the side of the screen + terminal (line C), you should rear battery voltage approximately.

Move the + wire towards line A (arrow) : the voltage drops progressively.

If the voltage drops sharply, the circuit is broken at that point (repeat this operation for each filament).



REPAIRING THE FILAMENT

Clean the area to remove all traces of grease or dust, using alcohol or a screen cleaner. Wipe with a clean dry cloth

To ensure a straight line is produced, mask either side of the filament using masking tape.

Before applying the varnish, shake the bottle to avoid silver deposits at the bottom of the bottle.

REPAIR

Using a small paintbrush, repair the filament, ensuring sufficient varnish is applied. If successive layers are applied, allow each layer to dry completely. Do not apply more than three layers.

If the filament is now raised, use a knife or razor blade to flatten it, after allowing several hours for the product to harden completely.

The masking tape should only be removed after allowing the varnish to dry for a minimum of one hour. The tape should be removed at right angles to the filament, as shown by the diagram. The varnish should be applied at a room temperature of 20°C and is dry after three hours. In cooler temperatures, the drying period is slightly longer.

