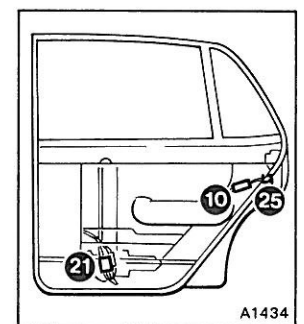
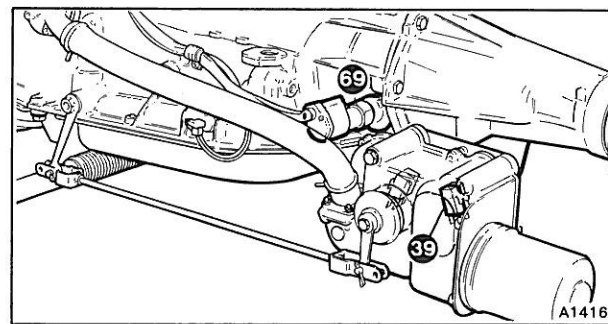
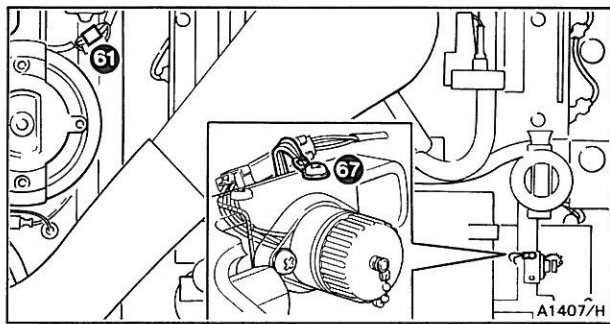
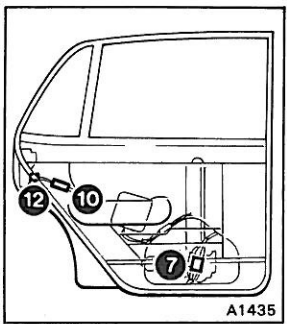
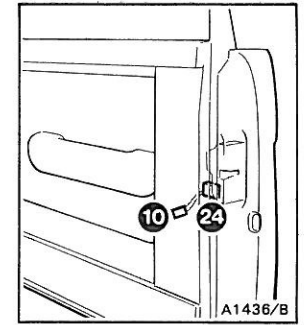
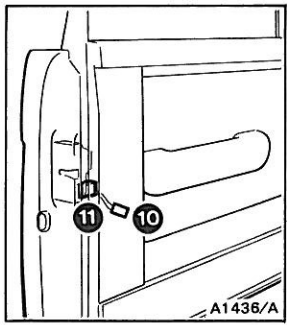
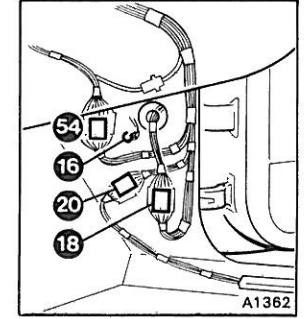
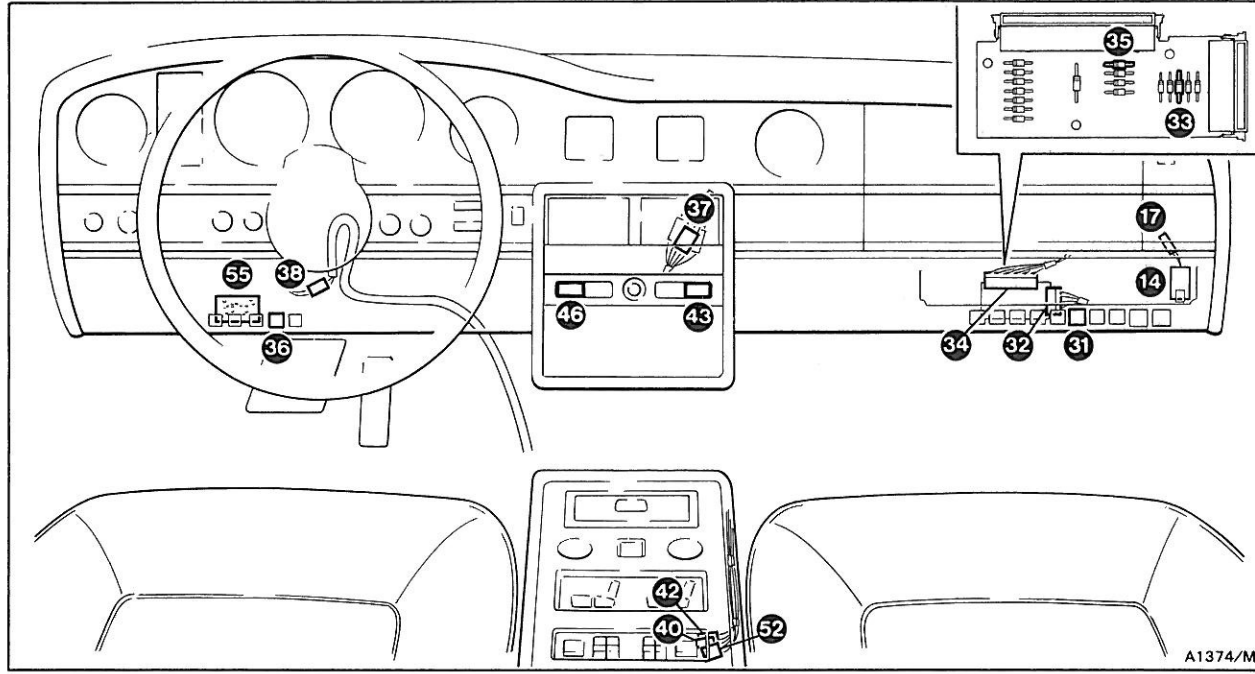
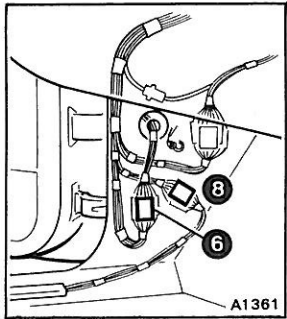




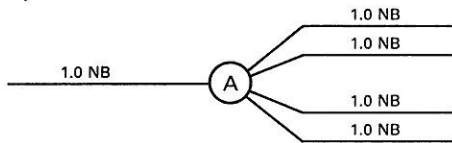
Passive restraint – seat belts

Contents	Specific application	Pages							
		Rolls-Royce			Bentley	Mulsanne	Mulsanne S	Turbo R	Continental
		Silver Spirit	Silver Spur	Corniche / Corniche II	Eight				
Passive restraint – seat belts									
Component location		6-2	—	—	6-2	—	6-2	—	—
Wiring diagram		6-3	—	—	6-3	—	6-3	—	—
Test procedure		6-5	—	—	6-5	—	6-5	—	—
Operational check procedure	Refer to Workshop Manual TSD 4700 Chapter S								

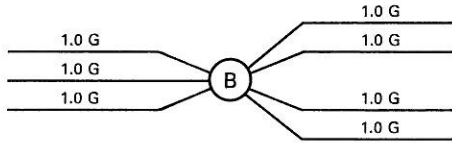


Key to 6-3

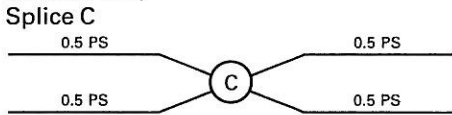
- 1 Fuseboard F2, fuse A6, 20 Amp
- 2 Fuseboard F2, fuse A4, 20 Amp
- 3 Fuseboard F1, fuse B4, 10 Amp
- 4 Splice A



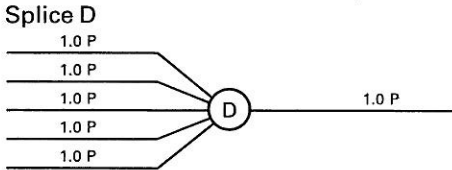
5 Splice B



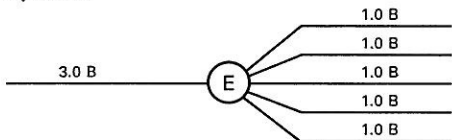
- 6 Left-hand front door plug and socket 12-way
- 7 Left-hand rear door plug and socket 9-way
- 8 Left-hand 'A' post main to body loom plug and socket 9-way
- 9 Splice C



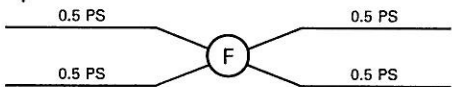
- 10 Interior lamps switch (door) plug and socket
- 11 Left-hand front door interior lamps switch
- 12 Left-hand rear door interior lamps switch
- 13 Splice D



- 14 Interior lamps delay electronic control unit
- 15 Splice E

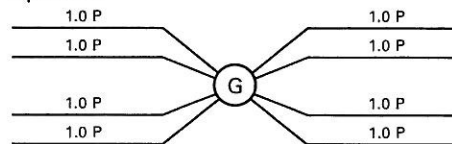


- 16 Right-hand 'A' post earth point
- 17 Interior lamps delay electronic control unit plug and socket
- 18 Right-hand front door plug and socket 12-way
- 19 Splice F

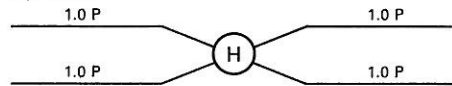


- 20 Right-hand 'A' post main to body loom plug and socket 12-way
- 21 Right-hand rear door plug and socket 9-way

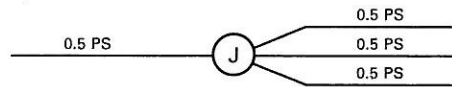
22 Splice G



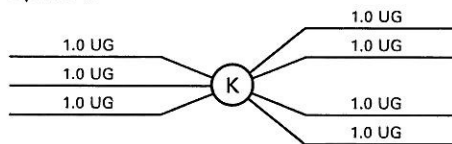
23 Splice H



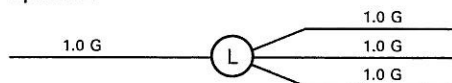
- 24 Right-hand front door interior lamps switch
- 25 Right-hand rear door interior lamps switch
- 26 Splice J



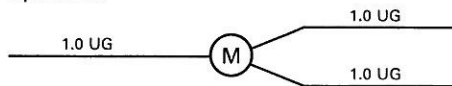
- 27 Fuseboard F1, fuse B5, 10 Amp
- 28 Fuseboard F1, fuse B2, 10 Amp
- 29 Fuseboard F2, fuse A5, 20 Amp
- 30 Splice K



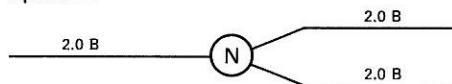
- 31 Fuel filler door relay
- 32 Diode board plug 10-way
- 33 Diode (diode board)
- 34 Diode board plug 18-way
- 35 Diode (diode board)
- 36 Driver's door open relay
- 37 Centre console plug and socket 12-way
- 38 Gearchange actuator plug and socket 6-way
- 39 Gearchange actuator micro-switch
- 40 Centre stowage compartment plug and socket 3-way
- 41 Splice L



- 42 Centre stowage compartment plug and socket 12-way
- 43 Passenger's seat belts warning lamp
- 44 Splice M

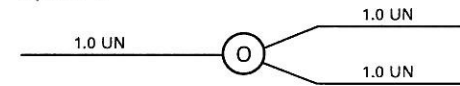


45 Splice N

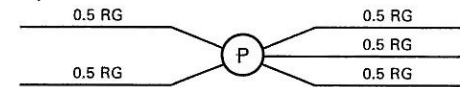


- 46 Driver's seat belts warning lamp

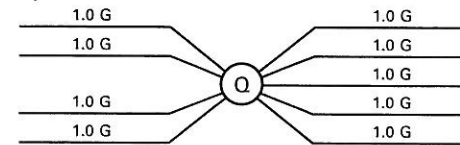
- 47 Driver's seat belts electronic control unit plug and socket 9-way
- 48 Driver's seat belts electronic control unit plug and socket 7-way
- 49 Driver's seat belts electronic control unit to lap belt buckle switch plug and socket
- 50 Driver's seat belts electronic control unit
- 51 Splice O



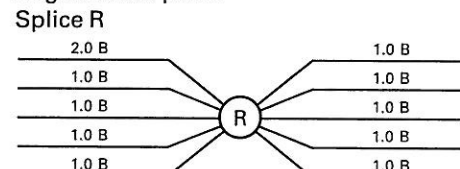
- 52 Centre stowage compartment plug and socket 7-way
- 53 Splice P



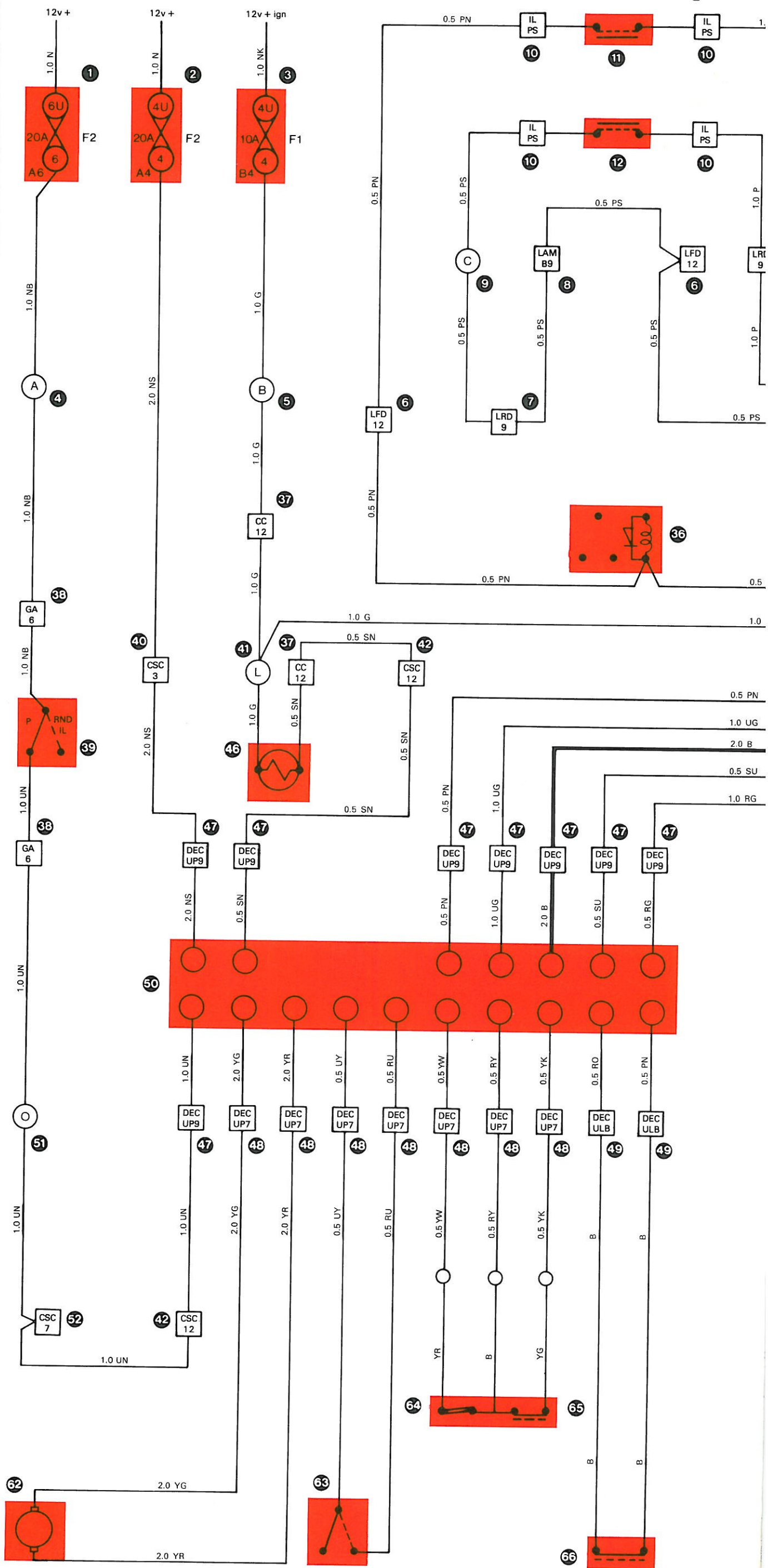
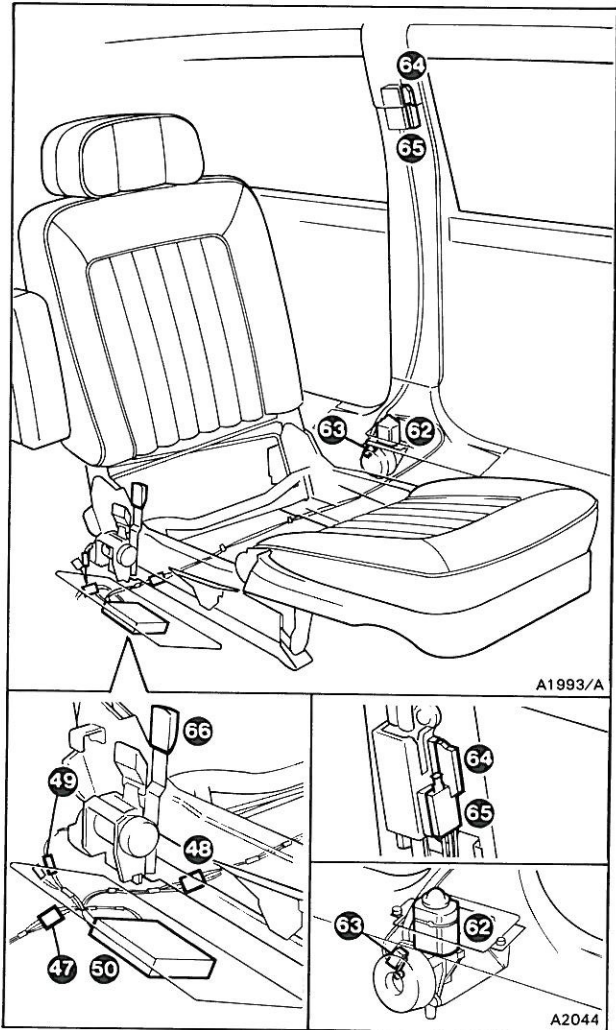
- 54 Right-hand main to valance loom plug and socket 12-way
- 55 Seat belts audible warning unit
- 56 Passenger's seat belts electronic control unit plug and socket 9-way
- 57 Passenger's seat belts electronic control unit plug and socket 7-way
- 58 Passenger's seat belts electronic control unit to lap belt buckle switch plug and socket
- 59 Passenger's seat belts electronic control unit
- 60 Splice Q

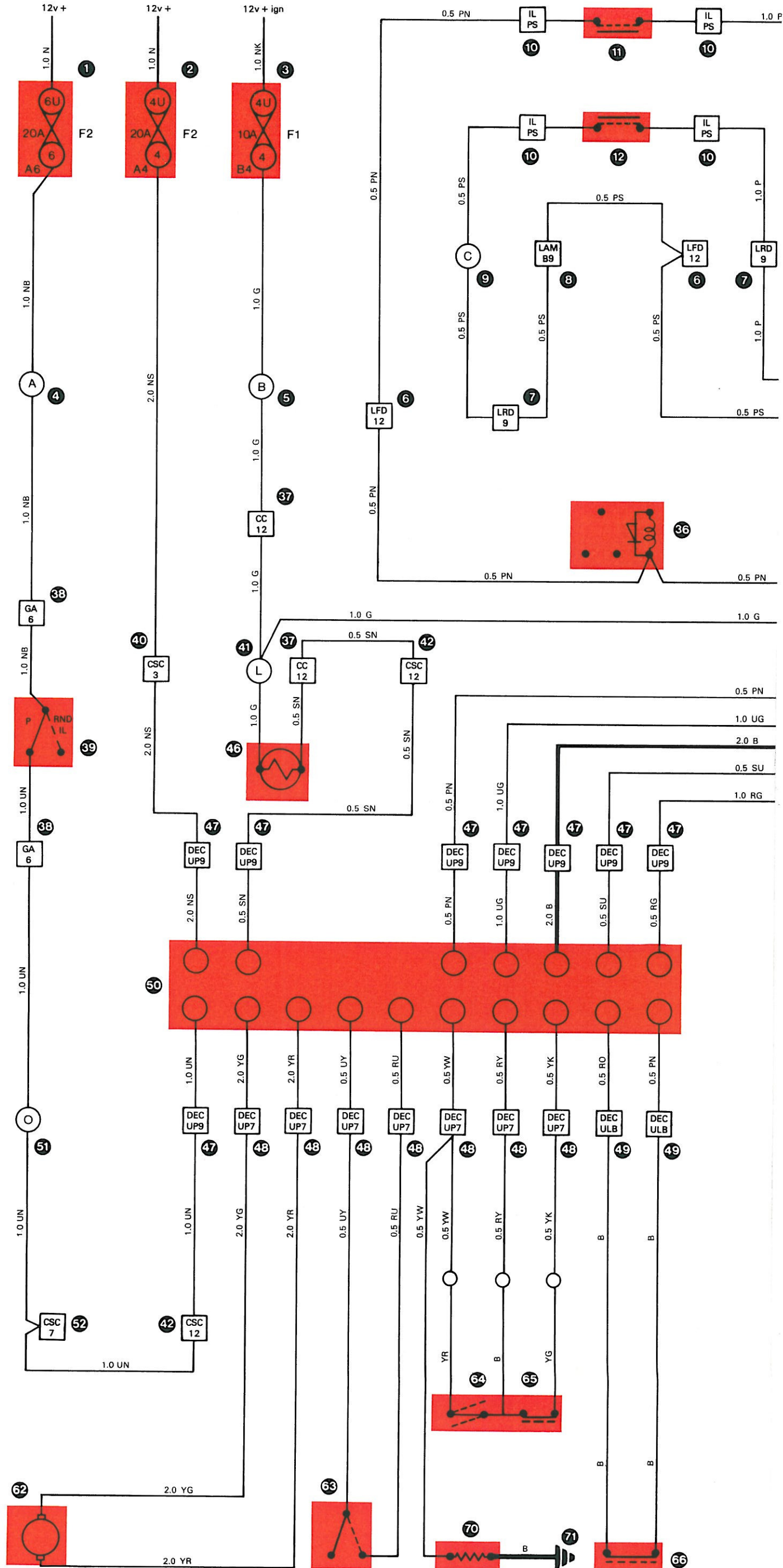
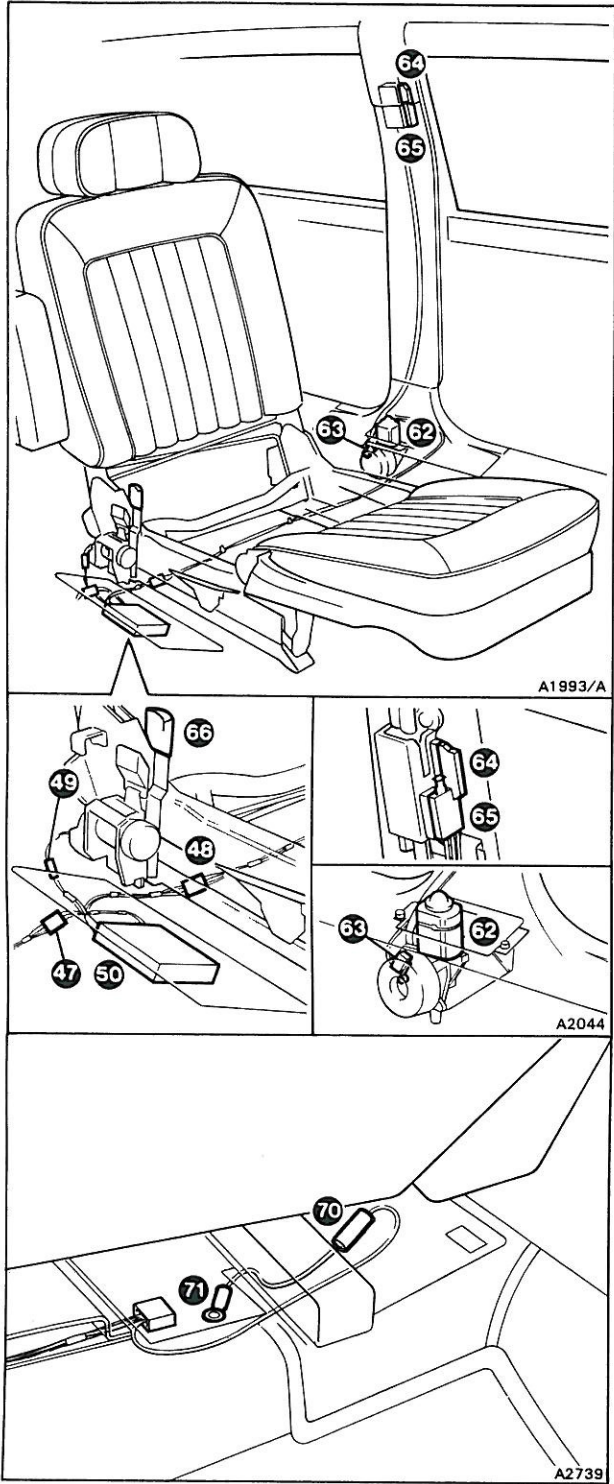


- 61 Right-hand valance to engine loom plug and socket 9-way
- 62 Diagonal seat belt drive motor
- 63 Diagonal seat belt 'A' post limit switch
- 64 Diagonal seat belt emergency buckle proximity switch
- 65 Diagonal seat belt 'BC' post limit switch
- 66 Lap belt buckle switch
- 67 Engine earth point
- 68 Splice R



- 69 Speed signal generator
- 70 Resistor
- 71 Resistor earth point





Passive restraint – seat belts

Introduction

In order to meet federal safety requirements, automatic diagonal seat belts and manually operated retractable lap belts are provided for the driver and front seat passenger.

Operation of the automatic front seat belts

The automatic diagonal belts operate as follows.

Note that contact with an automatic belt during its travel should be avoided.

Ensure that the parking brake is applied and that the gear range selector lever is in the park position. When the ignition key is turned to the RUN or START position the passenger's diagonal belt will immediately travel to its anchorage point on the centre door pillar and lock into position. The driver's diagonal belt will move to its anchorage point only when a gear range position other than park is selected. It should be noted that immediately the ignition key is turned to either the RUN or START position the seat belt warning panels, situated in the centre console, will flash for approximately six seconds.

Whenever a lap belt is released a chime will sound for approximately six seconds. The appropriate seat belt warning panel will also flash for the same duration.

Release of the automatic diagonal belts is as follows.

The passenger's diagonal belt will travel to its unfastened position whenever the car becomes stationary and the passenger's door is opened, irrespective of the position of the gear range selector lever.

The driver's diagonal belt will travel to its unfastened position when the gear range selector lever is moved to the park position and the driver's door is opened. **Do not** select the park position until the car is stationary.

In an emergency, a diagonal belt can be released from its travel mechanism by pressing the red button in the retaining clasp allowing the belt to return to its stowage position. Releasing a belt in this manner will cause the chime to sound for approximately six seconds and the appropriate seat belt warning panel to flash for approximately sixty seconds.

If the travel of an automatic diagonal belt is interrupted the belt will stall and the appropriate seat belt warning panel will illuminate constantly. To reset the system carry out the operations described under the heading Reset procedure.

Reset procedure

In the unlikely event of a diagonal belt stalling during its travel, carry out the following procedure.

Ensure that the car is stationary. Then, move the gear range selector lever to the park position and apply the parking brake.

Turn the ignition key to the LOCK position; then back to the RUN position.

The belt should then resume its normal operation.

If after several attempts to reset the system the belt fails to operate then a fault must be suspected.

In the event of a failure, two emergency seat belt tongues are supplied; one for the driver's belt, the other for the passenger's. These provide a **temporary** conventional active restraint system (see Emergency seat belt tongues – Fitting and removal procedure).

Emergency seat belt tongues – Fitting and removal procedure (see fig. 6-1)

Two emergency seat belt tongues are located on the inside of the fuse compartment door. The tongue for the driver's seat belt is marked 'LH top'; the passenger's is marked 'RH top'. In the unlikely event of a failure the appropriate tongue should be inserted into the anchorage point and the diagonal seat belt attached. This will provide a **temporary** conventional active restraint system.

1. To fit an emergency seat belt tongue proceed as follows.

Unclip the appropriate tongue from the fuse compartment door.

Position the tongue as shown in inset A and insert it through the brush seal. Then, slide the tongue downwards into the anchorage point until it 'clicks' into position. When correctly fitted the tongue will be locked into the anchorage point. Remove the plastic protective cover from the emergency tongue.

2. Release the diagonal belt from its travel mechanism by pressing the red button in the retaining clasp. Fasten the belt retaining clasp onto the emergency tongue ensuring that the belt webbing is not twisted.

3. Attach the plastic protective cover to the exposed diagonal seat belt tongue. Care must always be taken

when entering or leaving the car to avoid contact with this tongue.

4. To remove an emergency seat belt tongue proceed as follows.

Release the diagonal belt from the emergency tongue.

Using a small screwdriver, or a similar tool, move the securing lever in the direction of the arrow (see inset B). Then, lift the tongue clear of the anchorage point and remove.

Parking the car on a steep gradient

When the car is parked on a steep gradient, the diagonal seat belt may not fully return to its unfastened position. This will cause the appropriate seat belt warning panel to illuminate constantly. In this event, the belt should be manually released by pressing the red button in the retaining clasp allowing the belt to carefully return to its stowage position. The system must then immediately be reset to ensure that the travel mechanism resumes its normal operation.

To reset the system proceed as follows ensuring that the diagonal belt is released from its travel mechanism.

Ensure that the car is stationary and that the parking brake is applied. Then, move the gear range selector lever to the park position.

Turn the ignition key to the LOCK position; then back to the RUN position.

The travel mechanism should then resume its normal operation.

When next driving the car the diagonal belt must be fastened to its travel mechanism manually.

Fasten seat belt warning chime and illuminated warning panels

To remind occupants to fasten their lap belts the chime will sound for approximately six seconds, immediately the ignition key is turned to the RUN or START position. The warning panels situated in the centre console will also flash for the same duration.

If it becomes necessary to release an automatic belt from its travel mechanism, by pressing the red button in the retaining clasp, the chime will sound for approximately six seconds. The appropriate seat belt warning panel will also flash for approximately sixty seconds.

If the travel of an automatic diagonal belt is interrupted the belt will stall and the appropriate seat belt warning panel will illuminate constantly. To reset the system, refer to the information under the heading Reset procedure.

Test and fault finding procedures

If a fault is reported in the operation of a passive restraint seat belt system the system must be checked using passive restraint seat belt test box RH 12024.

The following points must also be noted.

1. The speed control system test box RH 9883 can be utilized as described under the heading Speed signal input.
2. Throughout the test procedures it will be necessary to check voltage and cable continuity. When doing so a multi-meter must be connected in accordance with the manufacturer's instructions.
3. During a check procedure a number of lamps on the test box can be illuminated. Illumination of lamps other than those specified in the operation can be ignored.
4. Only one seat belt system at a time can be tested. As a fault becomes apparent it must be rectified before carrying out the next check procedure.
5. Ensure that all workshop safety precautions are observed throughout the test procedures.

Preliminary checks

1. Verify the operation of the speedometer.
2. With the ignition switched off and the parking brake applied, remove the starter relay (refer to Section 4).
3. Ensure fuses B2, B4, and B5 at fuseboard F1 are intact.
4. Ensure fuses A4, A5, and A6 at fuseboard F2 are intact.
5. Ensure correct operation of the driver's and front passenger's interior lamps door switches.
6. It is essential that the electrical system of the car is capable of providing 12.5 volts throughout the test procedure. To achieve this the car battery must be in a fully charged condition and connected to a **low current** type battery charger.

Connecting the passive restraint test box

1. Remove the appropriate front seat assembly and

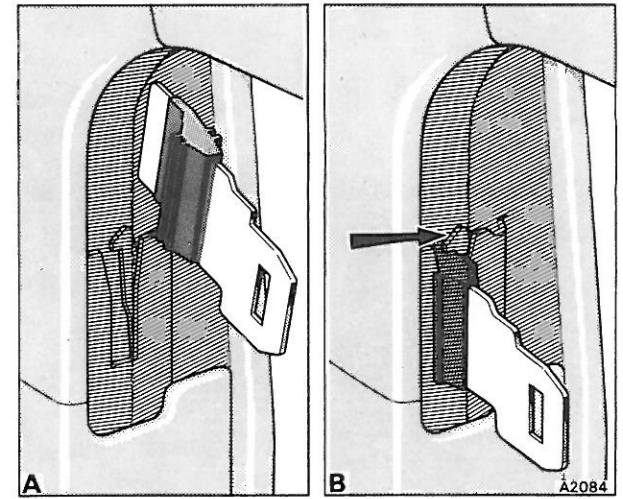


Fig. 6-1 Emergency seat belt tongues

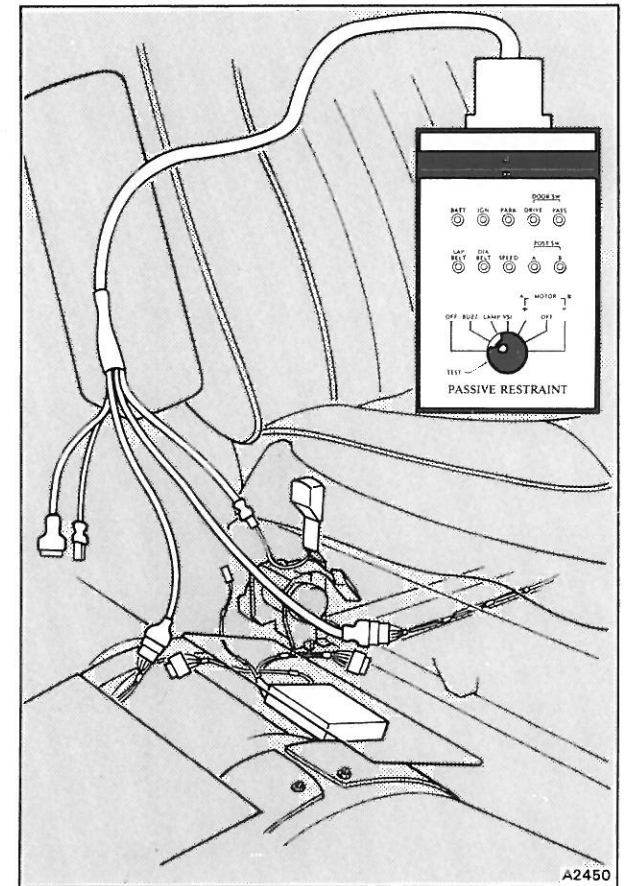


Fig. 6-2 Connecting the passive restraint test box

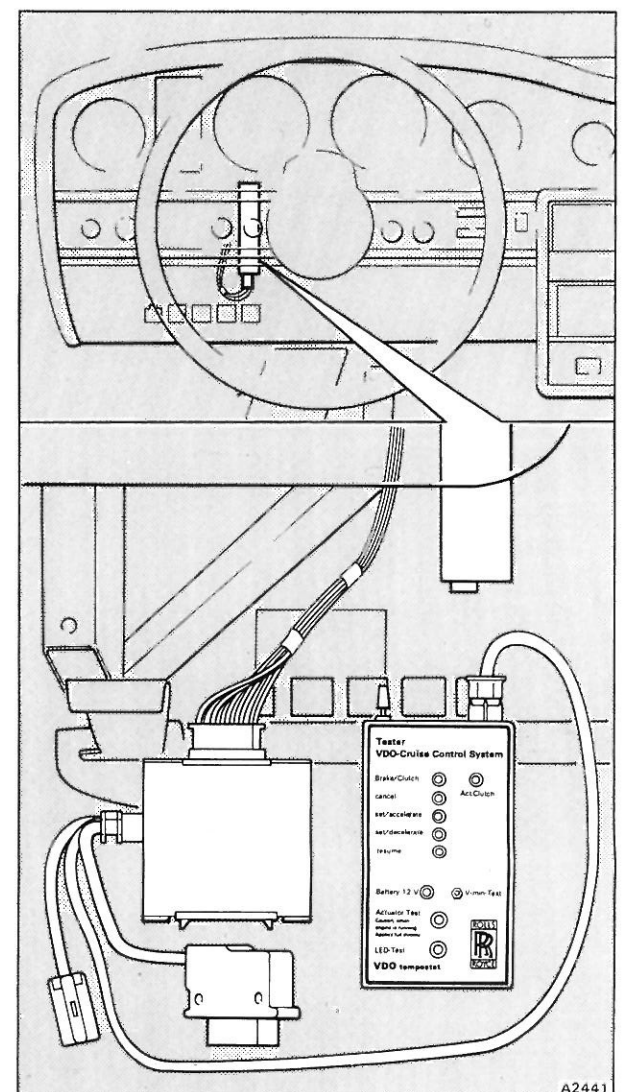


Fig. 6-3 Connecting the speed control test box

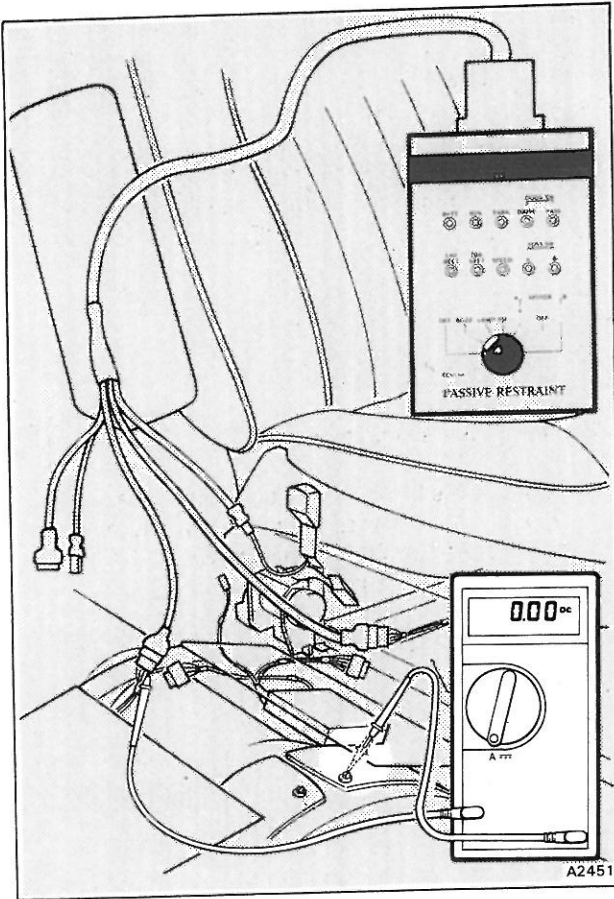


Fig. 6-4 Applying an intermittent earth

trim panel to gain access to the electronic control unit (refer to Workshop Manual TSD 4700, Chapter S).

2. Disconnect the electronic control unit plugs and sockets. Referring to figure 6-2 connect the passive restraint test box RH 12024 as follows.

Test box 7-way socket to car loom 7-way plug.

Test box 9-way socket (driver's side) or plug (passenger's side) to appropriate car loom 9-way plug or socket.

Test box 2-way plug to lap belt buckle switch 2-way socket.

The remaining test box 2-way socket is **not** connected during this test procedure.

When the test box has been connected, the seat assembly should be replaced and secured for the duration of the test.

Speed signal input

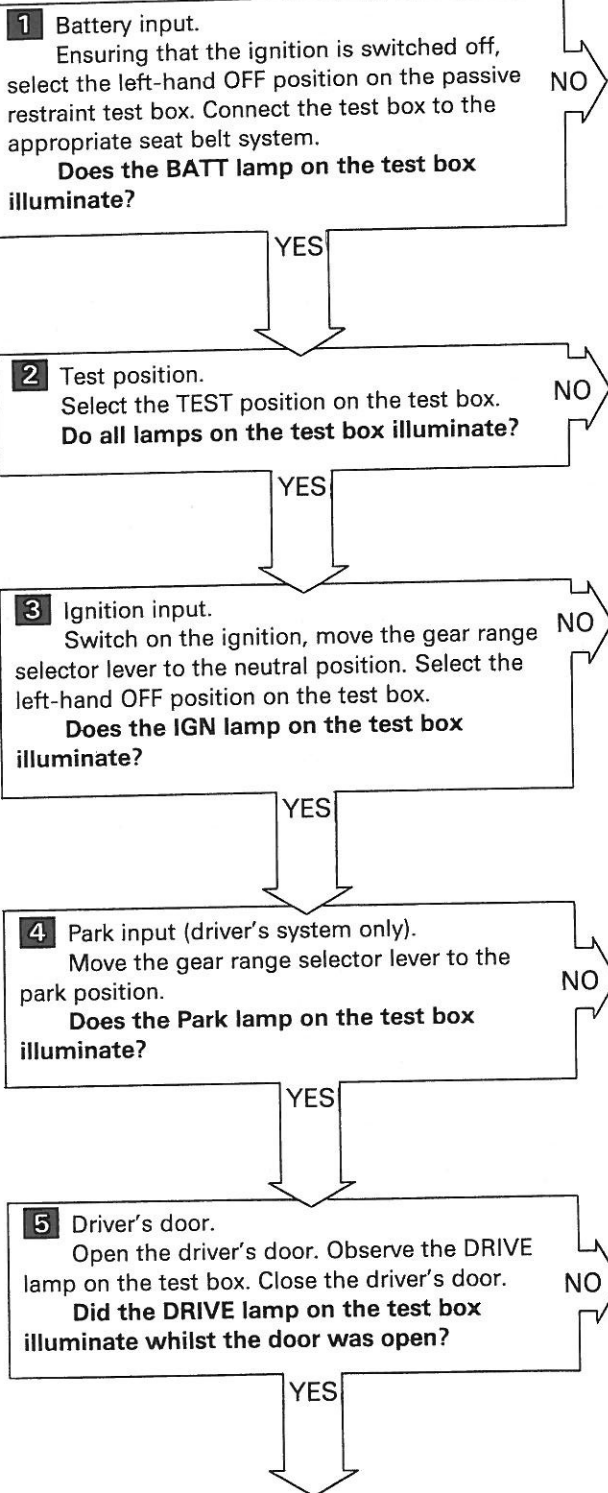
During the test and fault diagnosis procedure two methods for checking speed input are given.

Check procedure 8 utilizes the speed control test box RH 9883 and necessitates the removal of the driver's lower trim panel (refer to TSD 4700 Chapter S). The test box is connected to the speed control electronic control unit loom plug as shown in figure 6-3.

Check procedure 9 tests speed signal input using a multi-meter.

Test and fault diagnosis procedure

Check procedure



Diagnosis/rectification – Driver's system

Ensure continuity of the black cable from the test box plug and socket 9-way to the right-hand 'A' post earth point.

Ensure that there is 12v+ on the brown/slate cable at the test box plug and socket 9-way.

2

The test equipment is faulty. Replace equipment and return to 1

Ensure that there is 12v+ on the blue/green cable at the test box plug and socket 9-way.

4

The gearchange actuator micro-switch, gear range selector switch, or associated wiring is faulty. Ensure that there is 12v+ on the blue/brown cable at the test box plug and socket 9-way.

5

The driver's door interior lamps switch or associated wiring is faulty. Ensure that there is 12v+ on the purple/brown cable at the test box plug and socket 9-way when the driver's door is open.

7

Diagnosis/rectification – Passenger's system

Ensure continuity of the black cable from the test box plug and socket 9-way to the right-hand 'A' post earth point.

Ensure that there is 12v+ on the brown/blue cable at the test box plug and socket 9-way.

2

The test equipment is faulty. Replace equipment and return to 1

Ensure that there is 12v+ on the blue/green cable at the test box plug and socket 9-way.

5

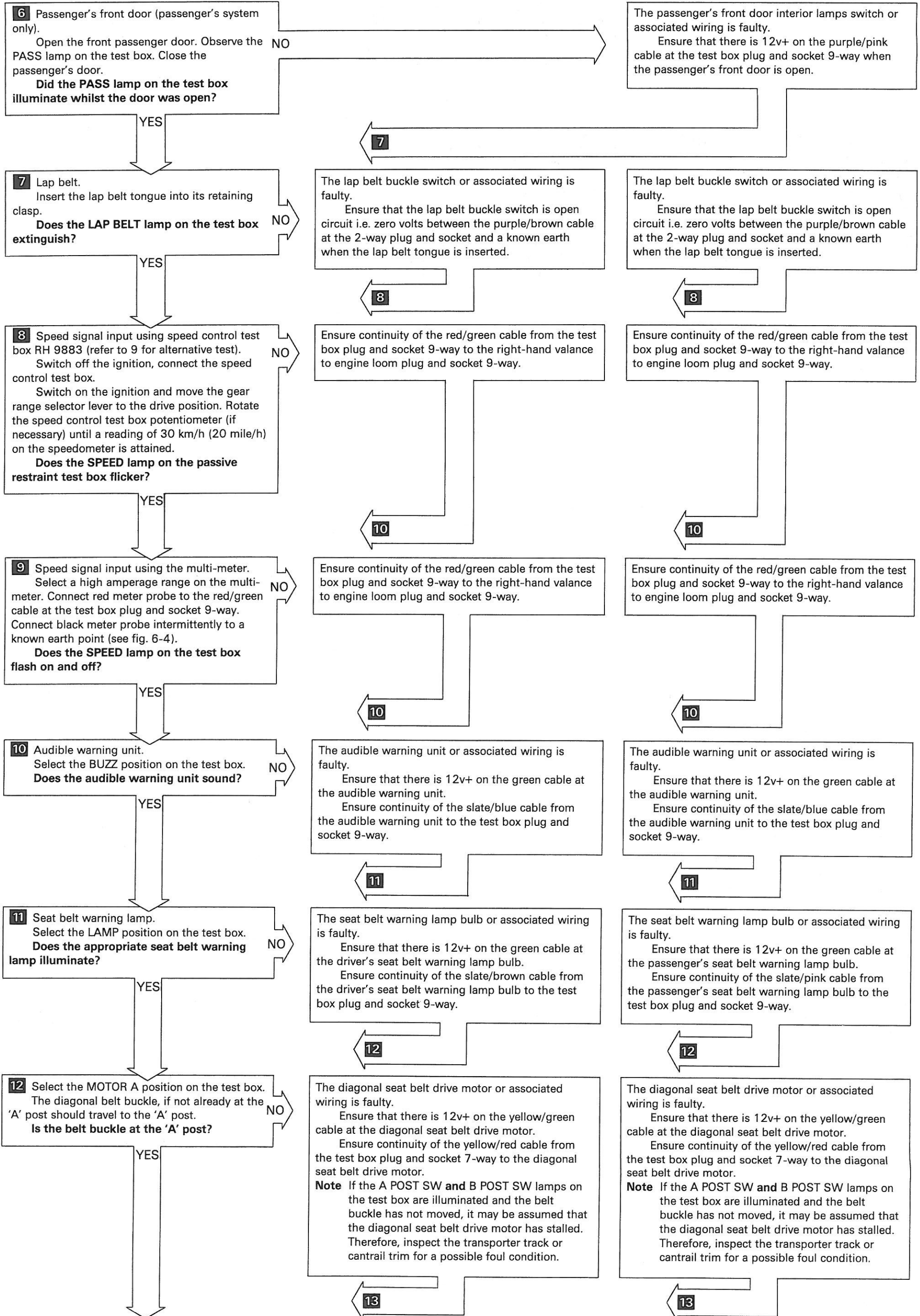
The driver's door interior lamps switch or associated wiring is faulty. Ensure that there is 12v+ on the purple/brown cable at the test box plug and socket 9-way when the driver's door is open.

6

Check procedure

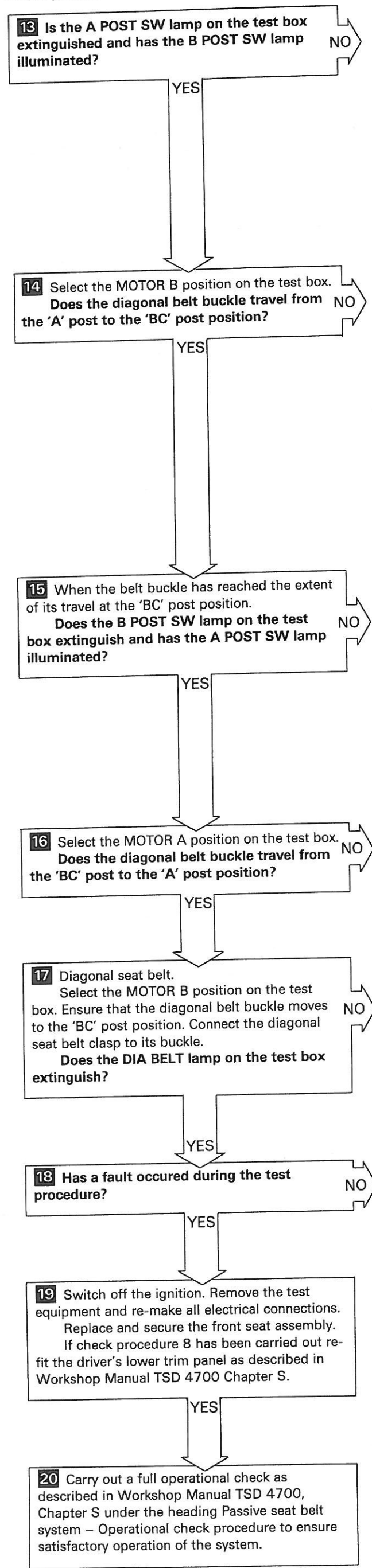
Diagnosis/rectification – Driver's system

Diagnosis/rectification – Passenger's system

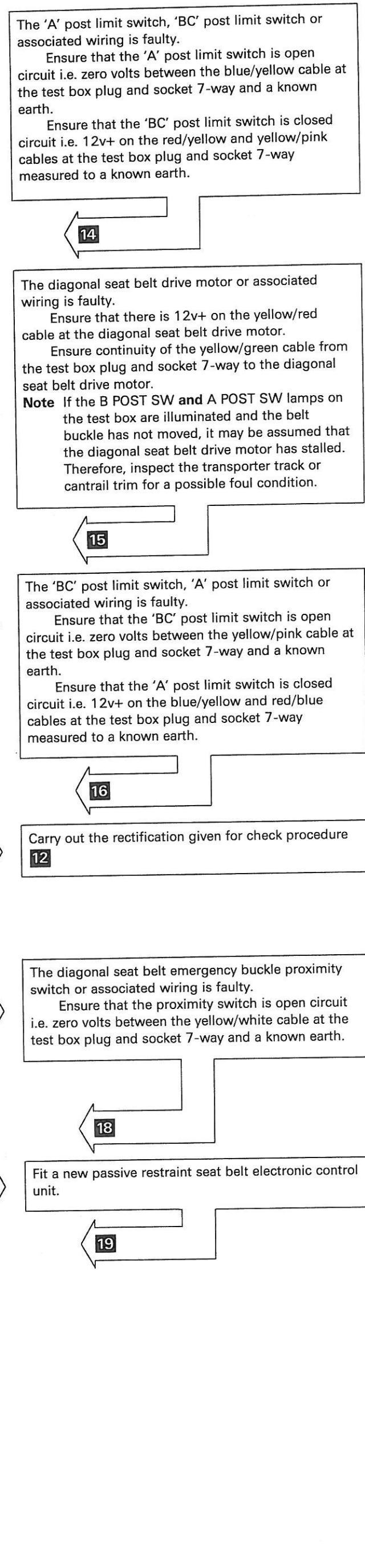




Check procedure



Diagnosis/rectification - Driver's system



Diagnosis/rectification - Passenger's system

