



FLEXIGLASS FITTING MANUAL - SECTION 1.6D

NISSAN NAVARA D22-3 FLEXISPORT CANOPY FIT - ISSA3

Note: Familiarise yourself with the instructions before you start to ensure you are clear on all aspects of the fit

SAFETY EQUIPMENT
● Hearing protection as required
● Eye protection as required

TOOLS REQUIRED
● Plywood or cardboard sheet
● Pneumatic or hand hacksaw
● Grinder, sander or file
● Metal priming paint
● Paint brush
● Silicone sealant & applicator
● Pneumatic or electric drill
● 5mm Drill bit
● Rivet gun with 5mm capacity
● 6mm Allen key
● Pneumatic or hand driver
● 14mm Socket
● Cable cutter, stripper, crimp tool
● Lock tight
● Knife or scissors
● Snake for guiding cables
● IPA Wipes or similar cleaning product
● Toledo cable strippers
● Würth Cable strippers

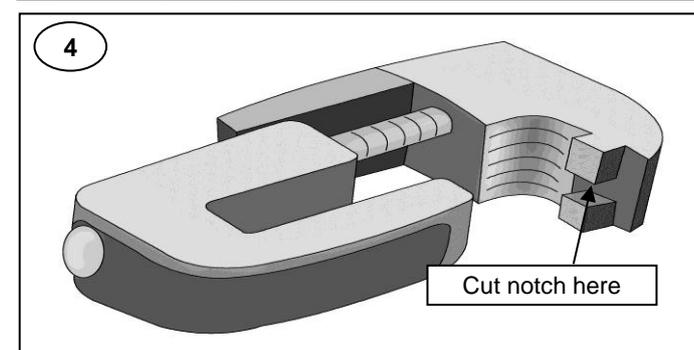
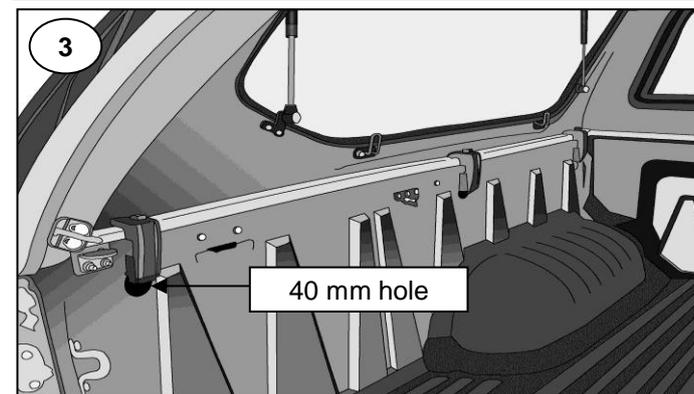
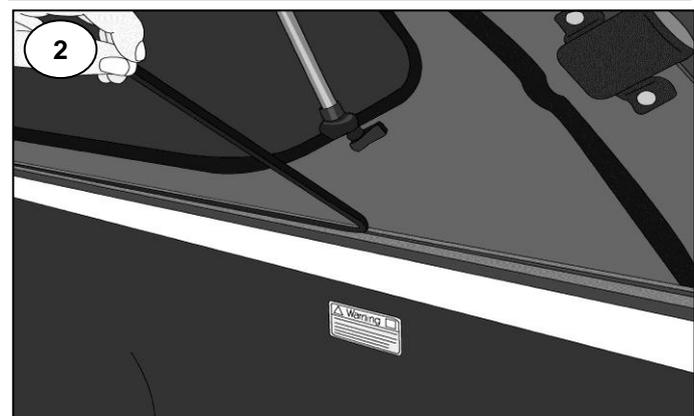
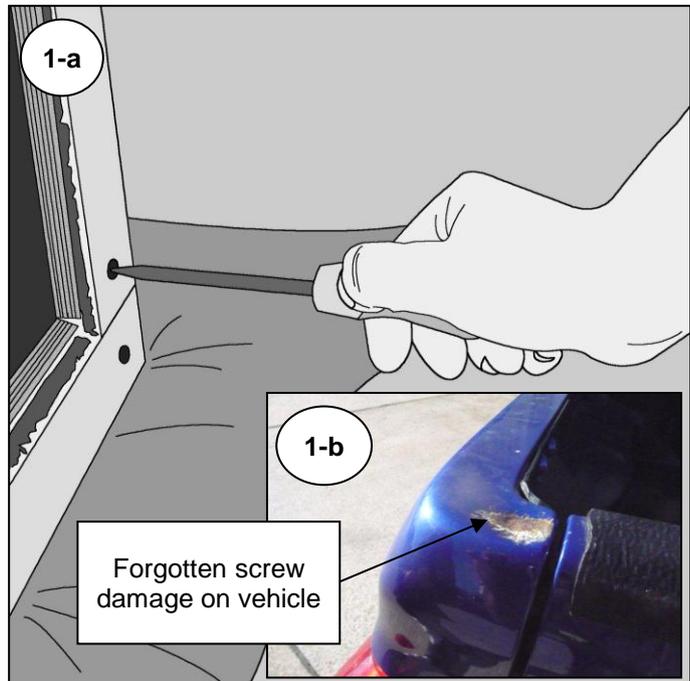
MATERIALS & PARTS REQUIRED		(FIT KIT 215)
Part No.	Description	Qty.
ANG100	Angle 1.6M	1
RIVET220	Rivet 5MM Steel 6-12	8

LIST OF D22 FLEXISPORT CANOPY COLOURS AVAILABLE

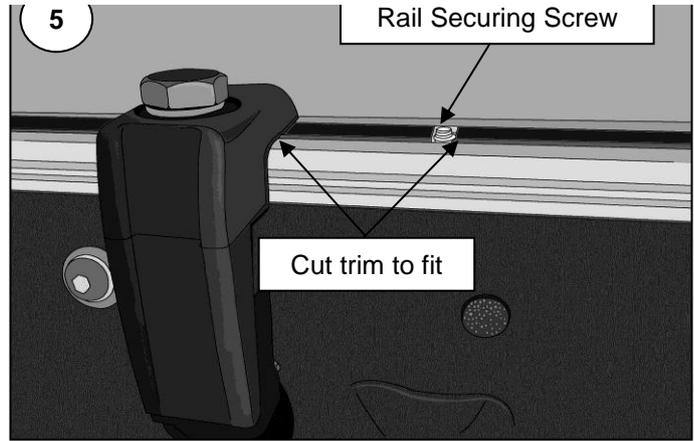
CANFSD2DBK	Canopy FS Nav D22 S3 DC Black	
CANFSD2DBP	Canopy FS Nav D22 S3 DC BluPrl	Blue Pearl BW6
CANFSD2DP	Canopy FS Nav D22 S3 DC Platin	Platinum KYO
CANFSD2DPR	Canopy FS Nav D22 S4 DC Primed	
CANFSD2DPW	Canopy FS Nav D22 S3 DC White	Polar White BQM1
CANFSD2DS3PR	Canopy FS Nav D22 S3 DC Primed	
CANFSD2DWH	Canopy FS Nav D22 S4 DC White	Colour Code QM1

Note: If vehicle has no cab rack fitted, proceed to Step 4

- 1 Place a piece of thin plywood or heavy duty cardboard sheet between the cab and the tub to protect paint and glass whilst cutting the cab rack off.
- 2 Sand cut areas of front panel flat and paint bare metal with metal priming paint.
- 3 Remove protective sheet from the vehicle.
- 4 Trim to length a piece of **ANG100** and rivet it to the front panel in the normal manner.
- 5 Place canopy on it's front end on a soft surface and remove the base rail protector strips. See **ILL 1-a**.
- 6 Lift prepared canopy onto tub and position for best fit.
- 7 Remove the plastic trim from each canopy base side rail and retain for future use. See **ILL 2**.
- 8 If an over lip liner is fitted holes will need to be cut in the liner to allow the fitment of the six clamps. If an underlip liner is fitted ascertain how stiff the plastic is. If it is too stiff to allow the clamp to be pushed up between it and the metal lip, proceed as follows.
- 9 Position the clamps so as to miss any ribs on the liner and if possible missing the canopy alloy rail securing screws. The front and rear clamps should be approximately 150mm from their respective rail ends.
Note: If the securing screws cannot be avoided cut a notch in the clamp locating ridge of the top jaw of the clamp to bridge them. See **ILL 4**.
- 10 Use a 40mm hole saw to cut a hole in the liner the top is level with the bottom edge of the coaming lip. Repeat for all six holes.
- 11 Fit a clamp at each hole position. See **ILL 3**.
- 12 Use a 17mm spanner or socket to pull down each clamp.
Note: Be careful not to over tighten the bolts as the captive nut can be pulled from it's housing if tightened over much.
- 13 Carefully replace the plastic trim to the

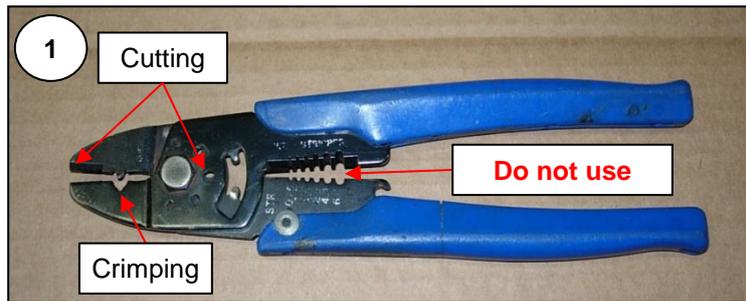


bottom rail channel. Cutting it either side of each clamp and each rail bolt. See ILL 5.



ELECTRICAL WIRE STRIPPING SAFETY PROCEDURE

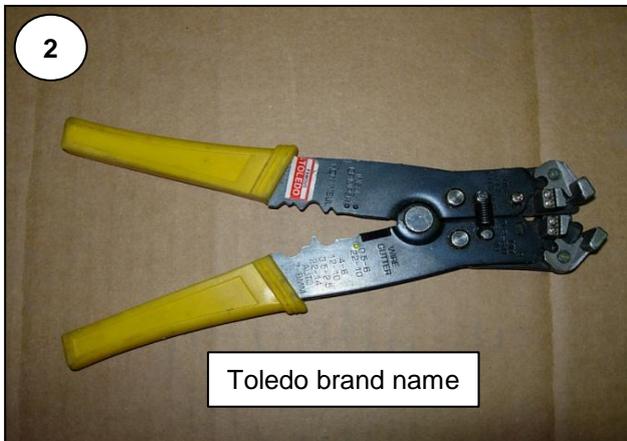
It is Flexiglass policy that the use of combination electrical cutting/crimping and stripping pliers be restricted to cutting and crimping use only.



It is a documented fact that the use of these pliers can cause personal injury due to the fact that they are reliant upon holding the cable in one hand while pulling with the pliers with the opposite hand. Any attachments to the gripped end can be pulled into and through the palm of the gripping hand causing injury.

The single hand action strippers are to be used at all times for stripping cable ends ready for joining or connecting.

Two types of cable strippers are recommended, one operates with the pliers at 90° to the cable (2) the other operates in-line with the cable (3).



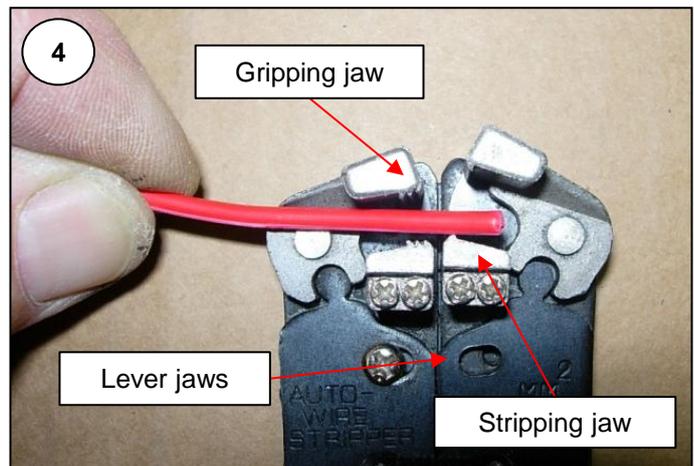
The tool in ILL 2 is a generally stronger and harder wearing item but the other is very useful for getting to cables in restricted space, it is therefore recommended that both types be available.

OPERATING INSTRUCTIONS

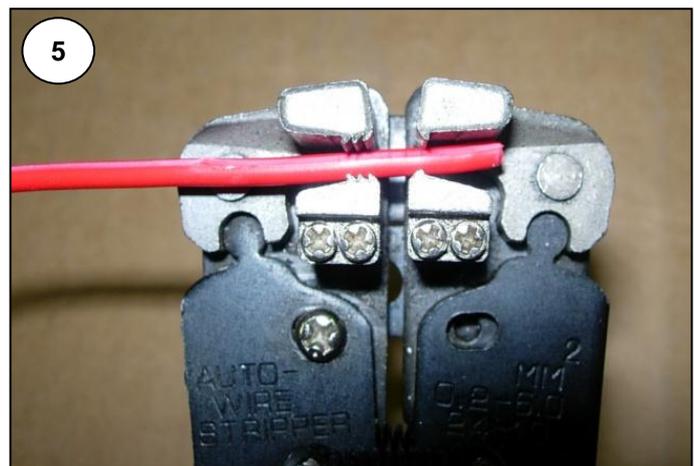
- 1 Squeeze handles sufficiently to bring the lever jaws together. Lay cable between stripping jaws as shown in ILL 4.

Note:

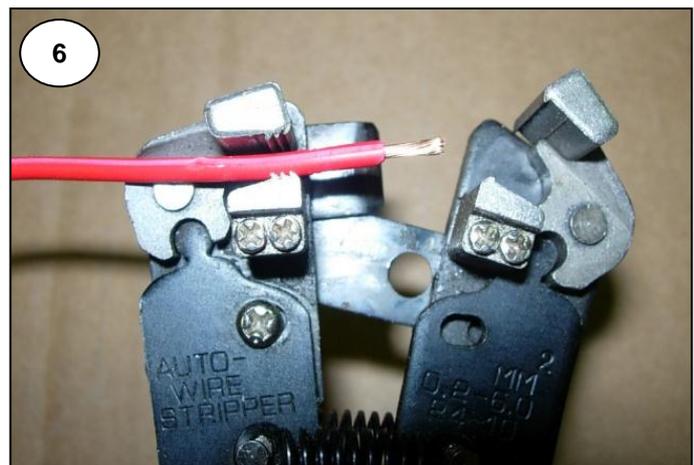
There should be no necessity to strip more than 10mm of sheathing from the cable end for any of the connectors used by Flexiglass. If for any reason a longer stripped end is required, do it in repeated 10mm bites, the pieces can then be slid off the end using the fingers.



- 2 Continue squeezing the handles together to engage the gripping and stripping jaws.



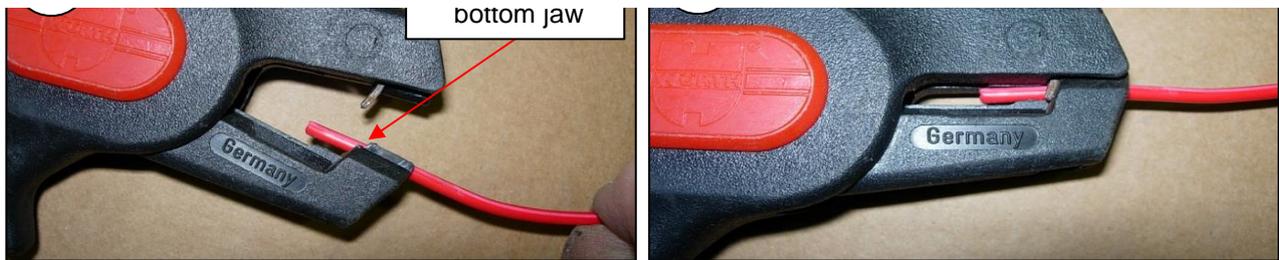
- 3 Increase the pressure slightly as you continue to squeeze. The stripping jaws will then move independantly of the pliers cutting and stripping the end of the wire until with a sharp click both sets of jaws will automatically disengage.



Place in bottom jaw



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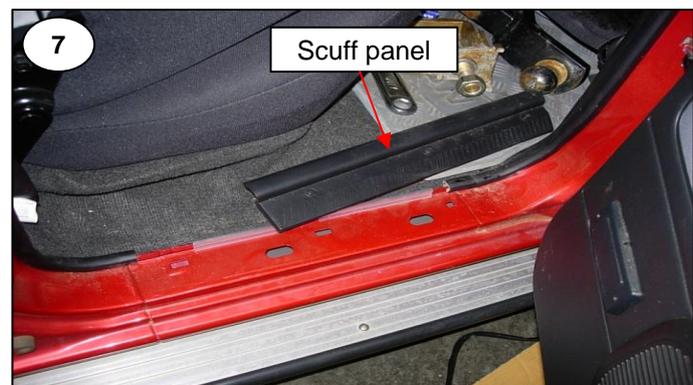
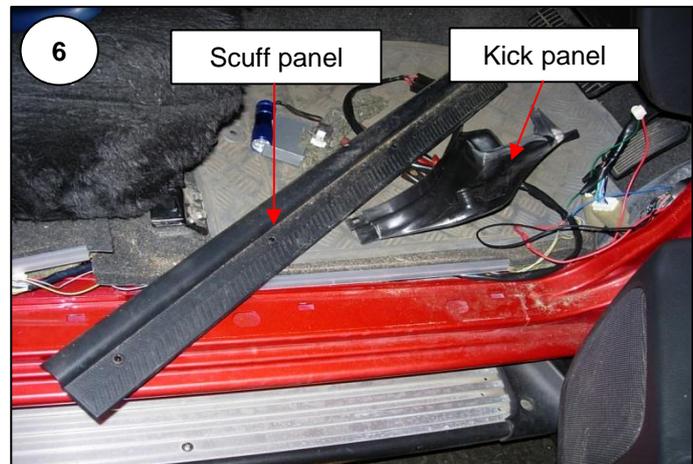
- 4 The Wurth pliers are simpler in operation. After placing the cable in the "V" of the bottom ILL 7, squeeze the handles together. The squeezing action brings the jaws together and forces the bottom jaw forward both cutting and pulling the sheath from the cable. See ILL 8 & 9.



NOTE: Two options for making electrical connections are available. The preferred method is soldered joints, operators must be trained and familiar with ----- Soldering Iron S.O.P ISS ---. Found in the S.O.P. section of the Secure Members page of the Flexiglass web site. The alternative (illustrated) is using Scotchlock connectors.

WIRING INSTRUCTIONS

- 14 From the front driver side door opening, remove the scuff & kick panels, see ILL 6 and from the driver side reardoor opening the scuff panel. See ILL 7.

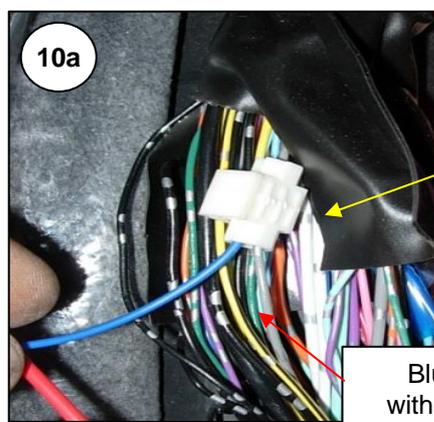
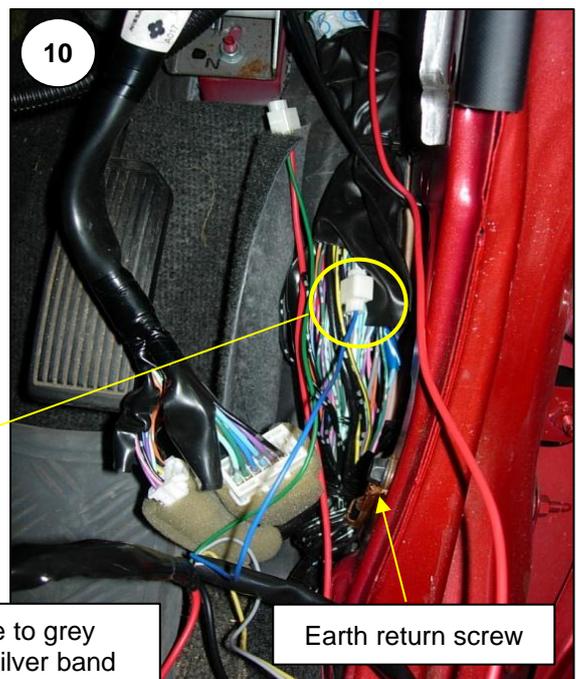
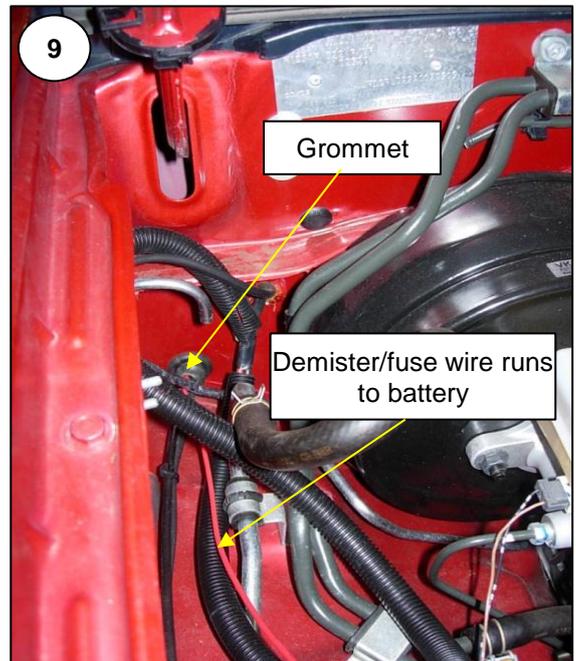
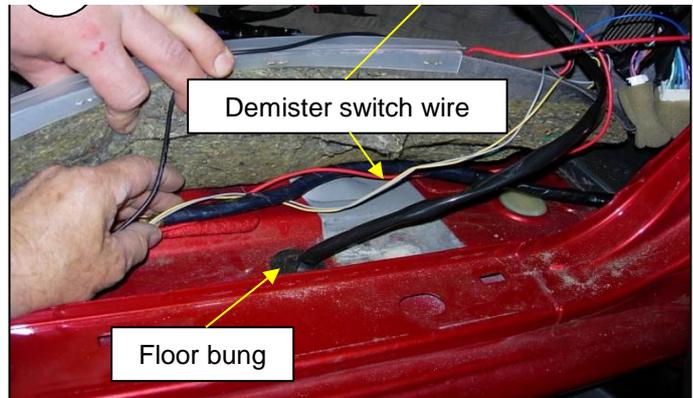


- 15 Locate the rubber bung in the vehicle floor at the side of the seat, see ILL 8, and



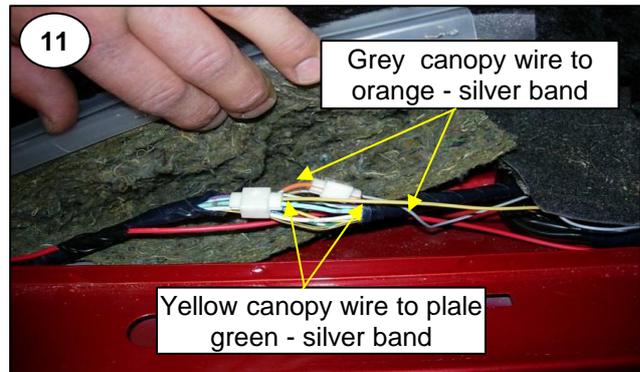
remove it.

- 16 Make two straight cuts through the center of the bung to form a cross, then work the three rectangular connectors on the end of the Flexisport harness through the bung (one at a time).
- 17 Pull the harness through the bung leaving the exposed wire junction positioned by the front corner of the door opening. Replace the bung in its hole in the floor.
- 18 Remove the fuse from it's holder and, working from the engine bay, push the long leg of the fuse wire through the grommet. See ILL 9.
- 19 Connect the short leg of the wires coming from the fuse to the live terminal of the battery using the round eye terminal on the end of the wire. Tie or tape the demister/fuse wire to adjoining cables or fixtures, with the fuse plainly visible, to prevent them chafing.
- 20 From the drivers foot well, pull the long leg of the fuse wires down to meet the thick red wire of the Flexisport harness and connect using the attached bullet connectors.
- 21 Remove the earth return screw indicated in ILL 10 and attach the black wire with the terminal eye at the end under it, replace the screw and tighten fully.
- 22 Locate the grey wire with a silver band in the large bundle of wires coming down the footwell kick panel area. Tap the blue Flexisport brake light wire into it. See ILL 10 & 10a.



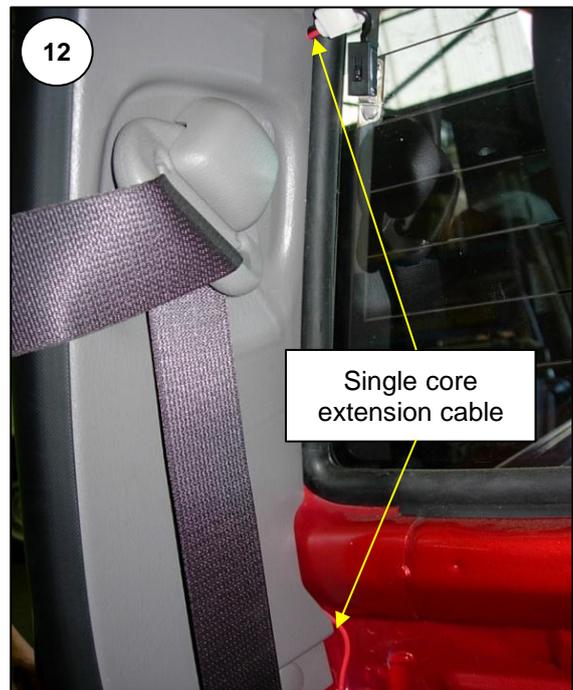
- 23 Bring the grey and yellow Flexisport wires back along the floor beside the seat.

- 24 Remove some of the conduit from the vehicle harness. See **ILL 11**.
- 25 Locate the thick orange wire with a silver band and tap into it with the grey (unlock) Flexisport wire.
- 26 Locate the thick pale green wire with a silver band and tap into it with the yellow Flexisport (lock) wire.
- 27 Cut a length of single core cable long enough to reach from the rear windscreen to the drivers footwell.
- 28 Feed the cable through the exit hole for the demister wire until it can be caught at the bottom of the rear door frame trim panel. See **ILL 12**.
- 29 Pull through until there is just enough to tap into the demister power wire (black).

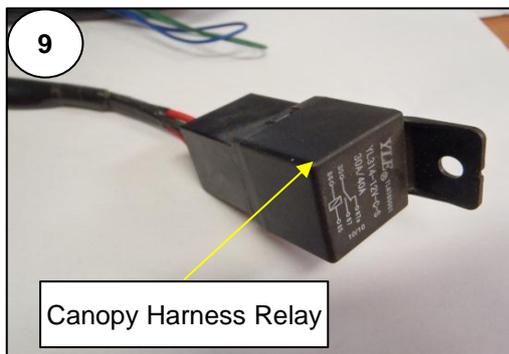


Note: If desired the cable and Scotch lock connector can be hidden behind the trim panel but this will require removal of the seat belt top anchor and the pinch weld door trim.

- 30 Run the extension cable forward along the door sills to the foot well and connect it to the green Flexisport wire. See **ILL 8**.



- 31 The canopy harness relay is not a waterproof relay. We recommend to keep the relay behind the the kick panel **ILL 9**. Never place the relay out of the car **ILL 10**.



- 32 Tidy up all wiring by running it along the vehicle harness and tying or taping it in place, seal the bung around the Flexisport harness with silicone and use a polythene wrapping film patch over it to prevent it sticking to the carpet.
- 33 Attach the Flexisport canopy harness to the front harness using the snap connectors at the ends.
- 34 Re-fit the fuse to the fuse holder of the demister power wire (from the battery), and test all circuits for function.

- 35** If all is correct tuck the demister relay and associated wiring in behind the kick panel and re-fit the panel.

- 36** Run the front harness back to the corner of the cab by tying it to the chassis, brackets or other fixtures, do not tie it to brake or fuel lines and keep well clear of the exhaust system.

- 37** Collect all excess cable together, bundle and wrap it with tape so that it can be tied up out of the way under the vehicle.

- 38** Clean and tidy vehicle ready for inspection and delivery to the client.