



FLEXIGLASS FITTING MANUAL - SECTION 1.6C

NISSAN D40 NAVARA

FLEXISPORT & WORKSMART CANOPY FIT - ISSA5

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

MATERIALS & PARTS REQUIRED		
ANG100	Angle 1.6M	1
RIVET220	Rivet 5MM Steel 6-12	8

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

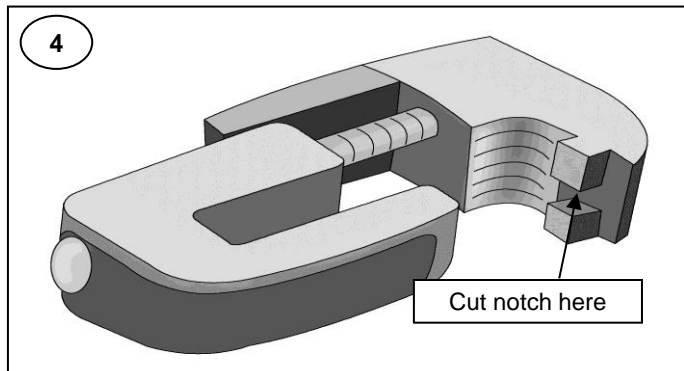
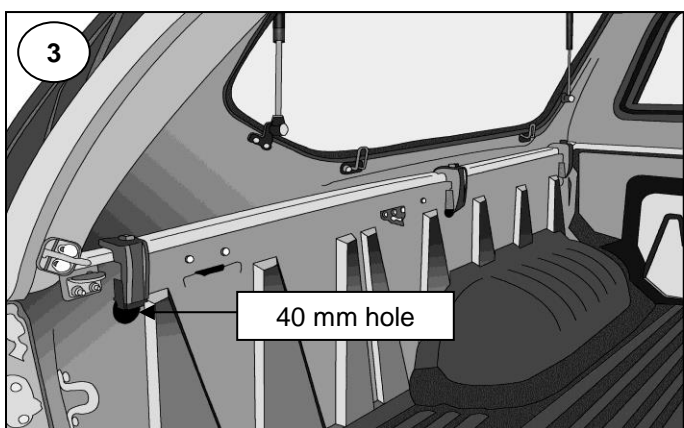
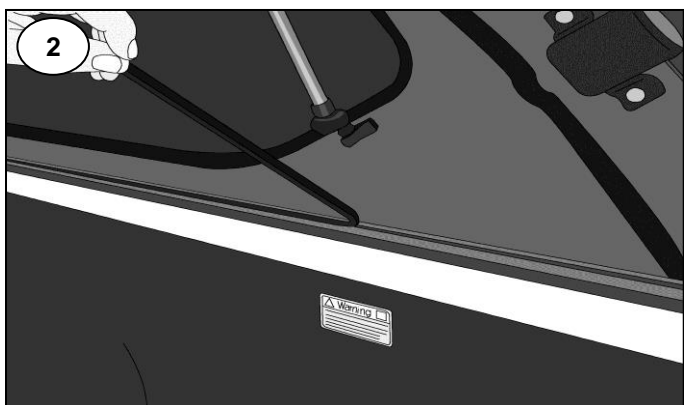
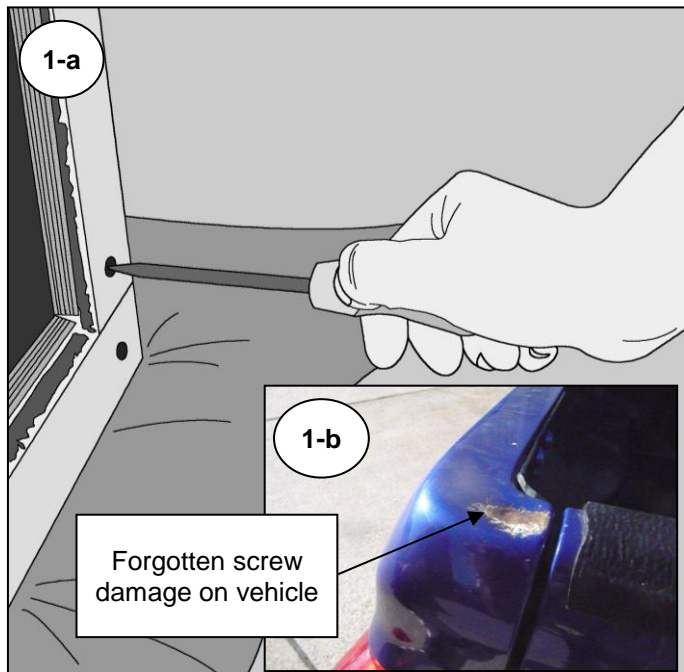
LIST of D40 FLEXISPORT CANOPY COLOURS AVAILABLE

CANFSD4DAB	Canopy FS Nav D40 Altitude Blu	
CANFSD4DAW	Canopy FS Nav D40 Artic White	STX ONLY 326
CANFSD4DBO	Canopy FS Nav D40 Blue Opal	Colour Code B24
CANFSD4DBR	Canopy FS Nav D40 Burning Red	
CANFSD4DBS	Canopy FS Nav D40 DC Brill Silv	Brilliant Silver K23
CANFSD4DBV	Canopy FS Nav D40 DC Blue Vel.	Blue Velvet BW9
CANFSD4DCB	Canopy FS Nav D40 DC CosmicBlk	Colour Code G42
CANFSD4DDS	Canopy FS Nav D40 DC DesertSnd	Colour Code K32
CANFSD4DDSR	Canopy FS Nav D40 Deep Sapphir	
CANFSD4DFR	Canopy FS Nav D40 Flame Red	
CANFSD4DLS	Canopy FS Nav D40 DC L/Silver	Lighting Silver K10
CANFSD4DMB	Canopy FS Nav D40 DC Black	Midnight Black GNO
CANFSD4DPW	Canopy FS Nav D40 Polar White	ST, RX, - QM1
CANFSD4DR	Canopy FS Nav D40 DC Red	Colour Code A31
CANFSD4DSG	Canopy FS Nav D40 DC StormGrey	Colour Code K26
CANFSD4DSL	Canopy FS Nav D40 DC SlateGrey	Colour Code K21
CANFSD4DTU	Canopy FS Nav D40 Tuscan	
CANFSD4DW	Canopy FS Nav D40 DC White	USE CANFSD4DPW I/L
CANFSD4SP	Canopy FS Nav D40 ExCabPainted	Extra Cab
CANFNAVPR	Canopy FS Nav D40 DC Primed	

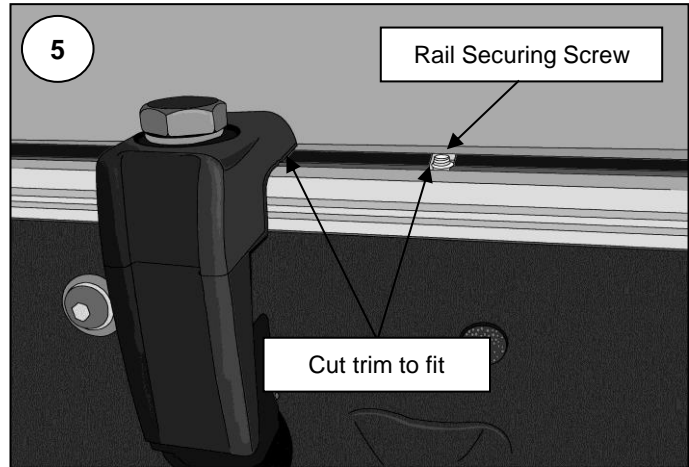
Note: If vehicle has no cab rack fitted, proceed to Step 4

FIT INSTRUCTIONS

- 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**.
Any forgotten screw leads to damage on the vehicle. Make sure that all screws are removed. **ILL 1-b**.
- 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 so that 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**.

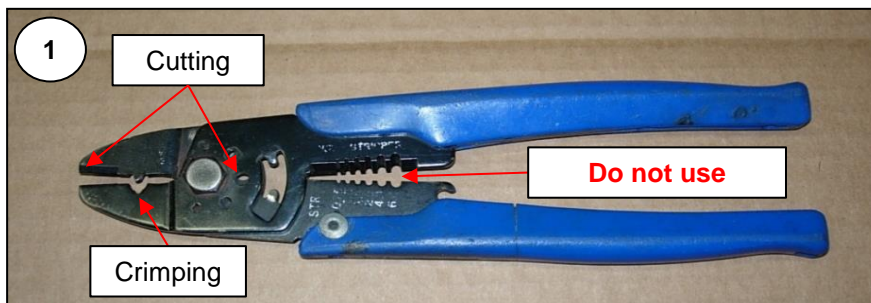


- 12 Use a 17mm socket and a torque wrench to pull down each clamp to 10NM.
Note: Be careful not to over tighten the bolts as the captive nut can be pulled from it's housing if tightened over much.
- 13 Carefully replace the plastic trim to the bottom rail channel. Cutting it either side of each clamp 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

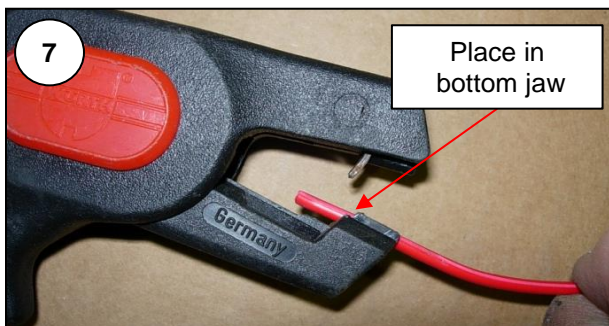
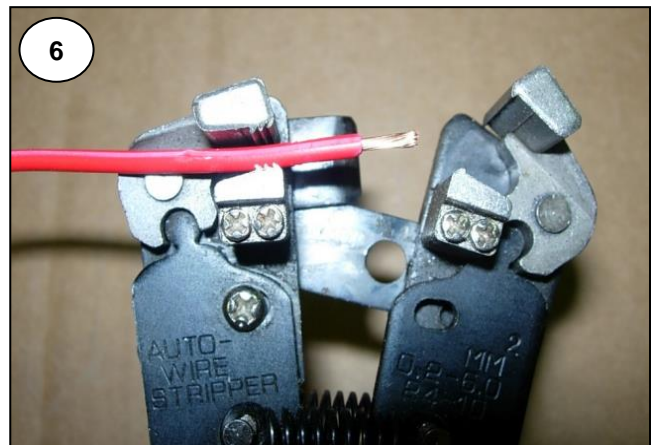
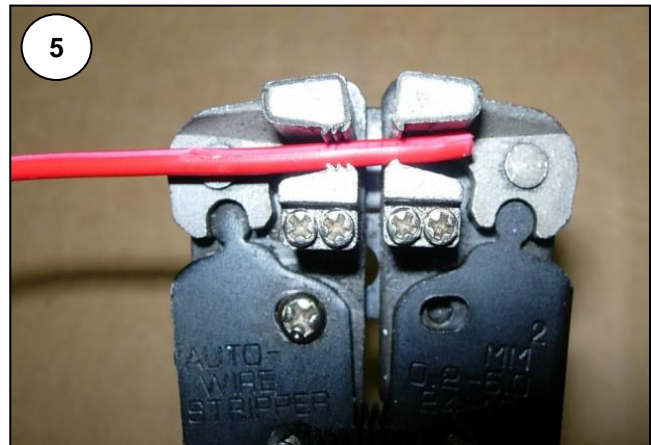
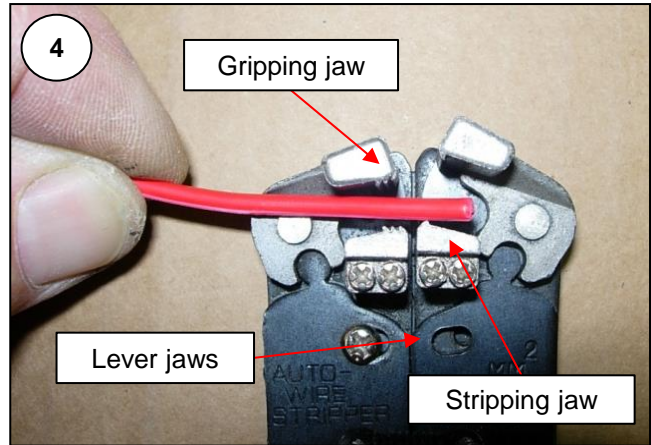
- 1 Squeeze handles sufficiently to bring the lever jaws together. Lay cable between stripping jaws as shown in **ILL 4**.

Note:

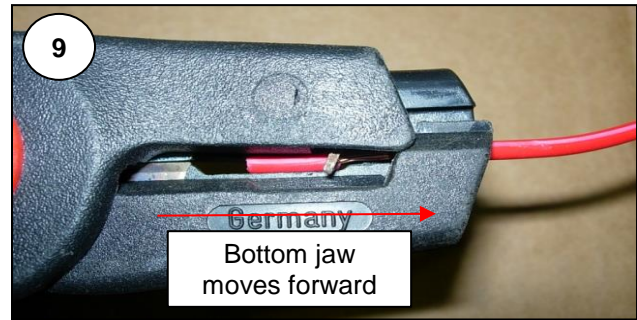
There should be no necessity to strip more than 10mm of sheathing from the cable end for any of the connectors used by Flexiglass. If for any reason a longer stripped end is required, do it in repeated 10mm bites, the pieces can then be slid off the end using the fingers.

- 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.



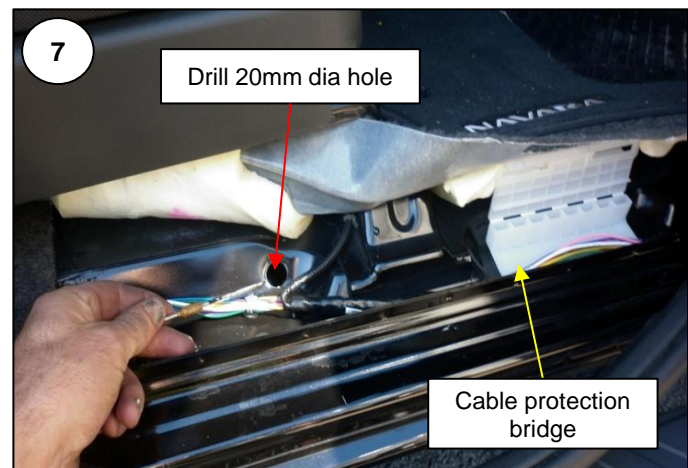
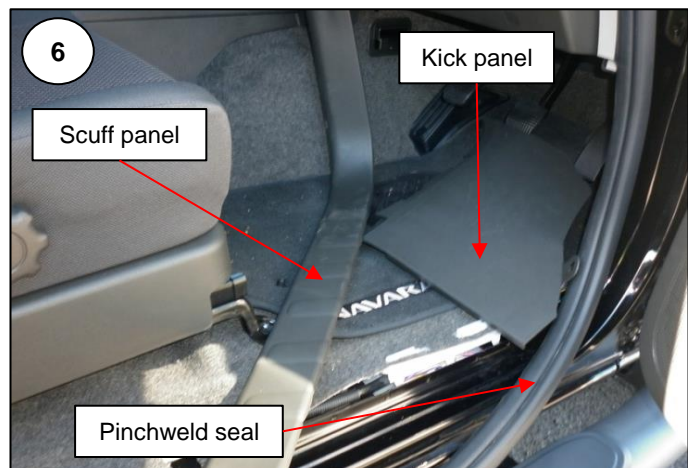
- 4 The Wurth pliers are simpler in operation. After placing the cable in the "V" of the bottom **ILL 7**, squeeze the handles together. The squeezing action brings the jaws together and forces the bottom jaw forward both cutting and pulling the sheath from the cable. See **ILL 8 & 9**.



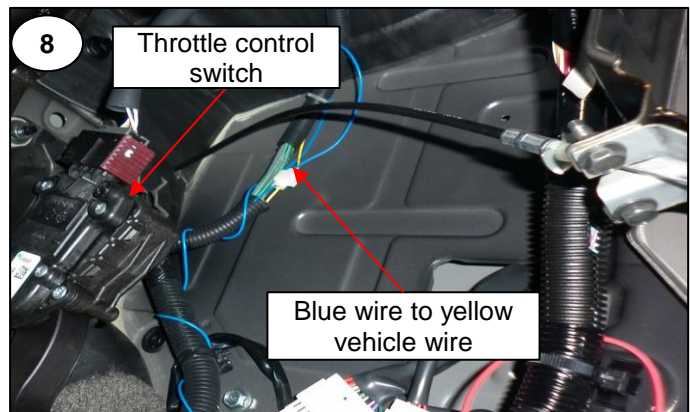
NOTE: Two options for making electrical connections are available. The preferred method is soldered joints, operators must be trained and familiar with ----- Soldering Iron S.O.P ISS ---. Found in the S.O.P. section of the Secure Members page of the Flexiglass web site. The alternative (illustrated)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

WIRING THE CANOPY

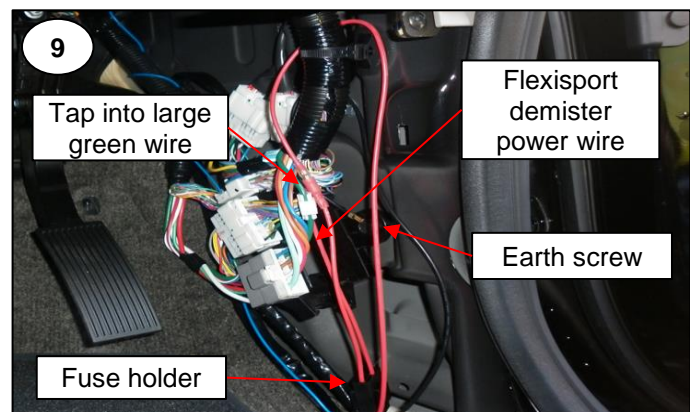
- 14 Carefully pry off the driver side scuff panel and kick panel. See **ILL 6**.
- 15 Pull the pinchweld seal from the bottom lip of the door sill, peel it off up the sides until it can be laid over onto the roof to keep it out of the way.
- 16 Lift up the carpet along side the drivers seat and footwell. See **ILL 7**.
- 17 Use a 20mm hole saw to cut a hole through the floor as shown in **ILL 7**. Be sure to keep the cables away from the saw to prevent damage.
- 18 Unclip the protection bridge at the front of the door opening to gain access to the wiring harness, the top can be used to prop the carpet up out of the way.
- 19 From inside the vehicle pass the Flexisport the harness through the hole until the branching point of the individual wires sits approximately at the front corner of the opening.



- 20 Run the blue Flexisport wire forward and up the side of the foot well, looping it around the vehicle wires as shown in **ILL 8**.
- 21 Carefully cut away a section of the conduit until it is possible to tap into the yellow wire next to the throttle control switch.
NOTE: Some vehicles may have an ORANGE wire instead of yellow (6/10/2016)



- 22 Cut two wires on the Flexisport fuse holder approximately 120mm long and attach a female bullet connector to the end of one of them. Remove the fuse and keep safe until ready to check wiring function.
- 23 Tap the bare end of the fuse wiring into the large green wire between the end of the conduit and the multiconnector. See **ILL 9**.
- 24 Using a 10mm socket or spanner, remove the earthing screw indicated in **ILL 9** and attach the black earth wire from the Flexisport harness.
- 25 Tie the demister relay and associated wiring to convenient vehicle wiring behind the kick panel.



NOTE:

Before connecting the relay and central locking wiring it is important to know where the vehicle was manufactured because the colour coding is different depending on it's origin. There are three different origins that can be ascertained from the VIN code on the manufacturers plate in the engine bay

- 26 Run the green, grey and yellow Flexisport wires back to the protection bridge (**ILL 10**) and connect them as follows:

VIN No JNI

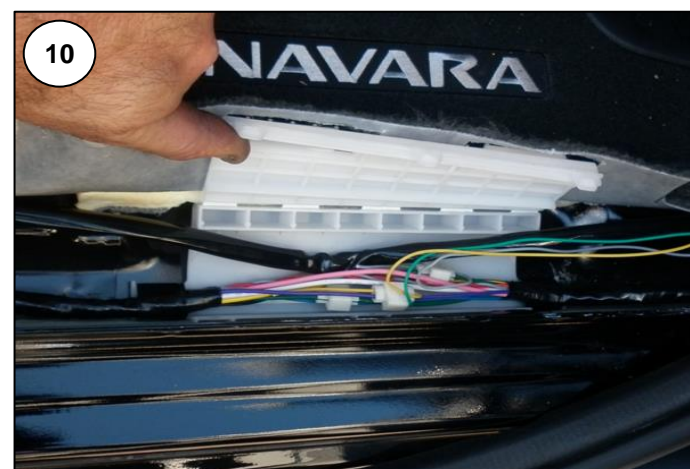
- Flexisport yellow to purple.
- Flexisport grey to green/blue.
- Flexisport green to large green.

VIN No VSK

- Flexisport yellow to Green/purple with silver bands.
- Flexisport grey to green/white with silver bands.
- Flexisport green to large black.

VIN No MNT

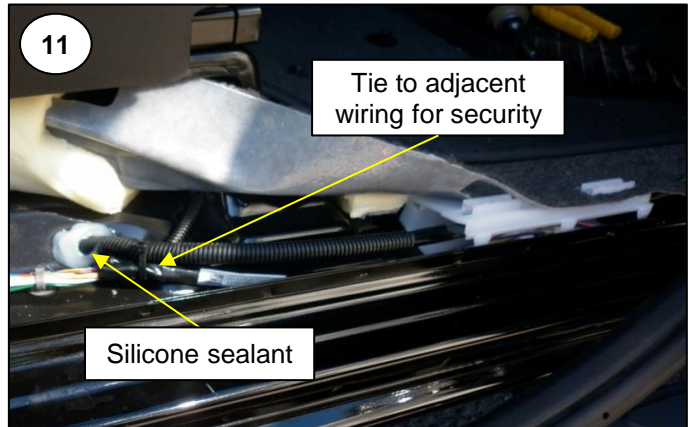
- Flexisport yellow to purple with silver bands.
- Flexisport grey to white with silver bands.
- Flexisport green to large green or large black.



27 Cover the Flexisport wiring harness with convoluted conduit as shown in **ILL 11**, passing it through the floor hole before tying it and the enclosed harness to adjoining vehicle wiring.

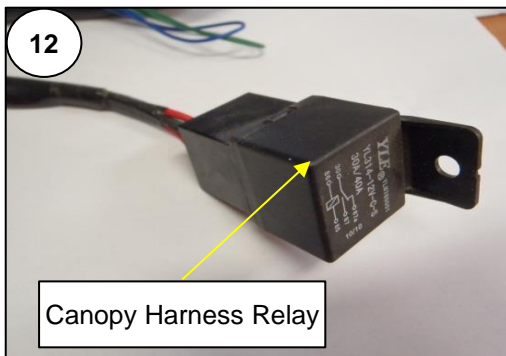
28 Fill gaps around where the conduit passes through the floor hole with silicone sealant and cover with a patch of polythene film to prevent the carpet getting stuck to it.

29 Underneath the vehicle, run the harness rearward along the chassis, keeping it to the inside of the rail and tying it to convenient brackets or cables to prevent movement. Do not tie to brake lines or allow it to get close to the exhaust system.



30 Connect the front and rear canopy harnesses together using the connectors provided, replace the fuse in the power line fuse holder (removed at stage 22) and check the wiring for correct function. If all is correct wrap the connectors with insulating tape to prevent water ingress.

31 The canopy harness relay is not a waterproof relay. We recommend to keep the relay behind the the kick panel **ILL 12**. Never place the relay out of the car **ILL 13**.



32 Coil the excess length of harnesses into a tidy bundle under the rear of the cab and tie it together, secure the bundle in a convenient protected area out of sight.

33 Tidy all wiring at the door sill and behind the kick panel. Tie with cable ties where necessary and clip the protection bridge back in place, replace the carpet, kick panel and scuff panel.

34 Replace the pinchweld seal on the lip around the the door opening.

35 Detail the canopy ready for inspection and delivery to the client.