

# FLEXIGLASS FITTING MANUAL - SECTION 1.10A ISUZU D-MAX FLEXISPORT & WORKSMART CANOPY FIT - ISSA2

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

SAFETY EQUIPMENT
<ul> <li>Hearing protection as required</li> </ul>
<ul> <li>Eye protection as required</li> </ul>

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

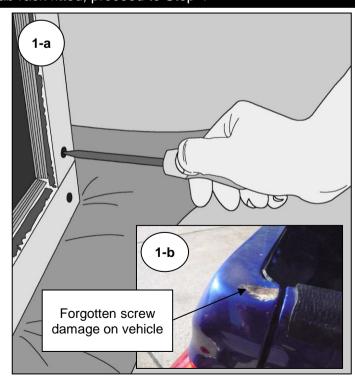
<b>MATERIALS</b>	MATERIALS & PARTS REQUIRED (FI		
Part No.	Description	Qty.	

# LIST OF ISUZU D-MAX FLEXISPORT CANOPY COLOURS AVAILABLE

CANFSISUB	Canopy FS Isuzu Dmax DC Blue
CANFSISUBK	Canopy FS Isuzu Dmax DC Black
CANFSISUNG	Canopy FS Isuzu DMax DC N Grey
CANFSISUW	Canopy FS Isuzu DMax DC White

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

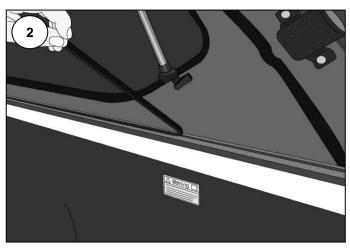
- Place a piece of thin plywood or heavy duty cardboard sheet between the cab and the tub to protect paint and glass whilst cutting the cab rack off.
- 2 Sand cut areas of front panel flat and paint bare metal with metal priming paint.
- 3 Remove protective sheet from the vehicle.
- 4 Trim to length 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.

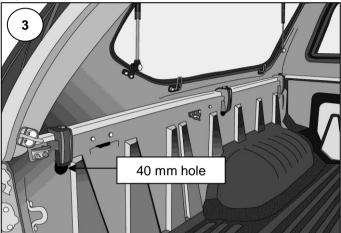


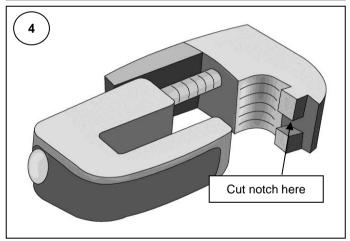
- 6 Lift prepared canopy onto tub and position for best fit.
- 7 Remove the plastic trim from each canopy base side rail and retain for future use. See ILL 2.
- 8 If an over lip liner is fitted holes will need to be cut in the liner to allow the fitment of the six clamps. If an underlip liner is fitted 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 spanner or socket to pull down each clamp.

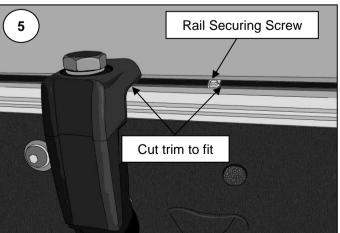
**Note:** Be careful not to over tighten the bolts as the captive nut can be pulled from it's housing if tightened over much.

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.



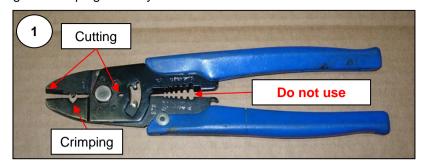






## **ELECTRICAL WIRE STRIPPING SAFETY PROCEDURE**

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).





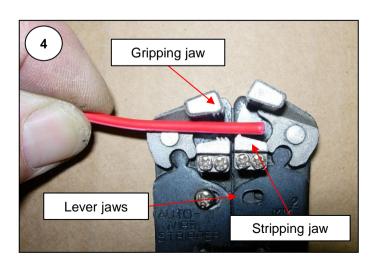
The tool in **ILL 2** is a generaly stronger and harder wearing item but the other is very useful for getting to cables in restricted space, it is therefore recommended that both types be available.

#### **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.

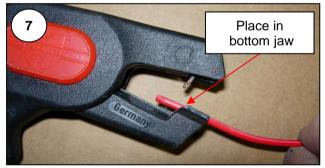


2 Continue squeezing the handles together to engage the gripping and stripping jaws.



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







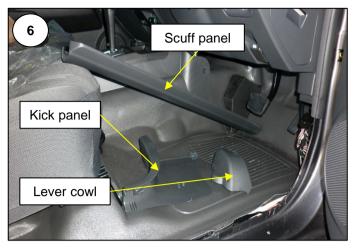
The Wurth pliers are simpler in operation. After placing the cable in the "V" of the bottom ILL 7, squeeze the handles together. The squeezing action brings the jaws together and forces the bottom jaw forward both cutting and pulling the sheath from the cable. See ILL 8 & 9.

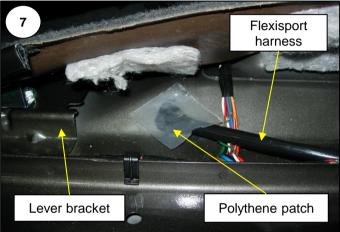


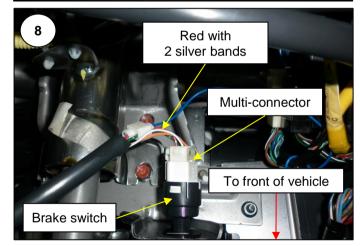
#### **WIRING PROCEDURE**

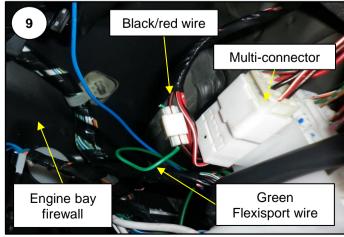
14 Carefully remove, in order, the scuff panel, kick panel and filler cover lever cowl from the driver side door opening and foot well. See ILL 6.

- Approximately 50-75mm in front of the filler cap lever bracket drill a 20mm hole through the floor with a hole saw, see ILL 7, and thread the snap connectors on the end of the front Flexisport cable harness through, one at a time.
- Pass the encased harness through the hole until the junction point of the relay and the separate wires is level with the front door pillar.
- 17 Locate the brake lamp switch at the rear of the pedal mount bracket and unplug the white multi-connector. See ILL 8. Looking straight up behind the dash board.
- 18 Loop the blue harness wire up the kick panel area and arround some cable bundles to stop it dropping down, then tap it in to the red wire with pairs of silver bands.
- **19** Plug the connector back into the switch body.
- 20 Locate the multi-connector, see ILL 9, high up on the right hand wall of the foot well.
- 21 Run the green (demister switch) wire up through the vehicle cabling until it can be tapped into the black/red wire. See ILL 9.
- 21 A little below this locate a bundle of cables containing a thick white/black wire.
- 22 Remove the fuse from the Flexisport fuse holder then trim the short leg, with the eye tag connector, long enough to allow the fuse to be attached to a cable bunch just to the left of the bonnet catch lever.

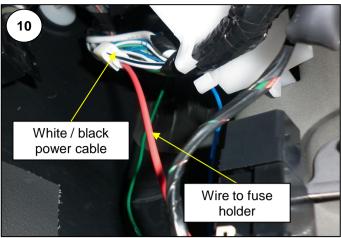


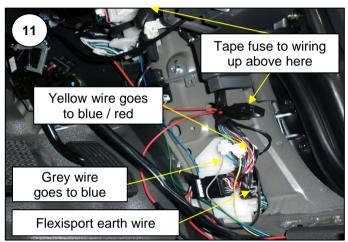




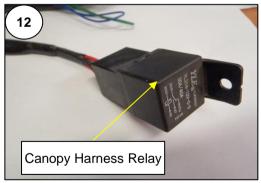


- 23 Tap the trimmed red wire onto the thick white / black wire. See ILL 10.
- 24 Tape the fuse holder to the cable bunch mentioned above and run the long wire with the female bullet connector over and down through the wiring to meet it's male counterpart.
- 25 Trim off the excess and fit another female bullet connector to the end, then connect the two wires.
- 26 Tap the grey (unlock) wire to the blue wire, see ILL 11 and the yellow (locking) wire to the blue / red one. Trim the excess wire from the connectors.
- 27 Located behind the wiring, just connected too, is an earth return. Undo the M6 screw with a 10mm spanner and attach the Flexisport earth line under it.
- 28 Run the canopy harness diagonally across between the cab rear and the tub front to meet the front Flexisport harness at the rear drivers side corner of the cab.
- 29 Plug the two harnesses together using the attached connectors and re-fit the fuse to the demist fuse holder.





30 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.





- 31 Test all circuits are functioning correctly.
- **32** Once all is working, tidy up the wiring behind the kick panel and along the door sill, tape and or tie where necessary.
- 33 Apply a liberal bead of silicone sealant arround the hole the front harness passes through in the floor and place a patch of polythene wrapping film over it to prevent the carpet getting stuck to it. See ILL 7.
- 34 Replace the carpet and trim panels.

35 Tie the Flexisport harness to the top of the chassis rails, bundle the connectors and excess wire together and tie them neatly out of the way against the chassis or to some convenient bracket or crossmember.

**36** Clean and detail the canopy ready for delivery to the client.