



FLEXIGLASS FITTING MANUAL - SECTION 3.1F

FLEXIWORK GENERAL WIRING INSTRUCTIONS - ISSB3

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

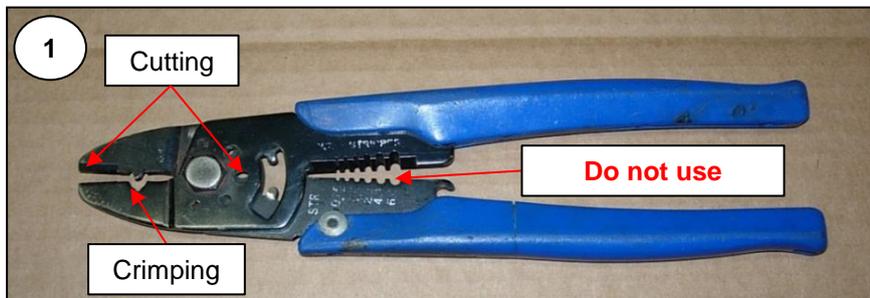
SAFETY EQUIPMENT
• Hearing protection as required
• Eye protection as required

TOOLS REQUIRED
• Pneumatic screwdriver
• No 2 Phillips head bit
• Pneumatic drill 10mm cap
• 3mm drill bit
• 6mm drill bit
• Wire stripper / cutter
• Flameless heat gun
• Toledo cable strippers
• Wurth Cable strippers

MATERIALS & PARTS REQUIRED		
Part No.	Description	Qty.
SOL10	1.5 - 2.5 solder terminals	19
SOL20	2.5 - 4.5 solder terminals	2
SOL30	4.5 - 7 solder terminals	2
RST10	Load balance resistor (optional)	2 to 4
RFL10	Reflector-rear W/Ezy	2
RFL20	Reflector clear Narva 70x20mm	2

ELECTRICAL WIRE STRIPPING SAFETY PROCEDURE

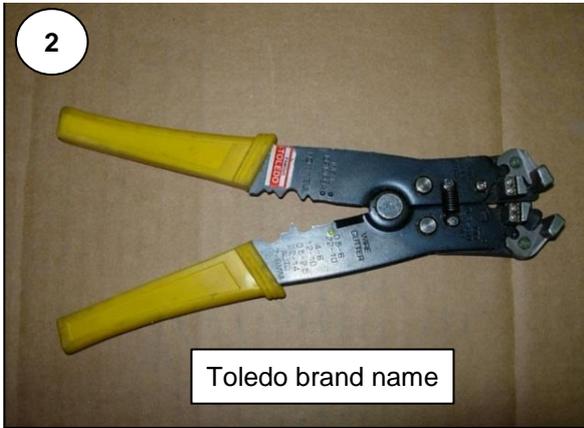
It is Flexiglass policy that the use of combination electrical cutting/crimping and stripping pliers be restricted to cutting and crimping use only.



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

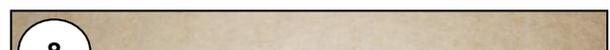
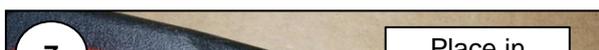
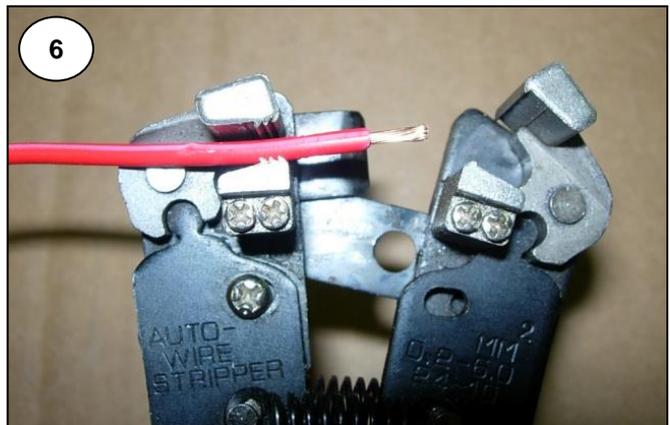
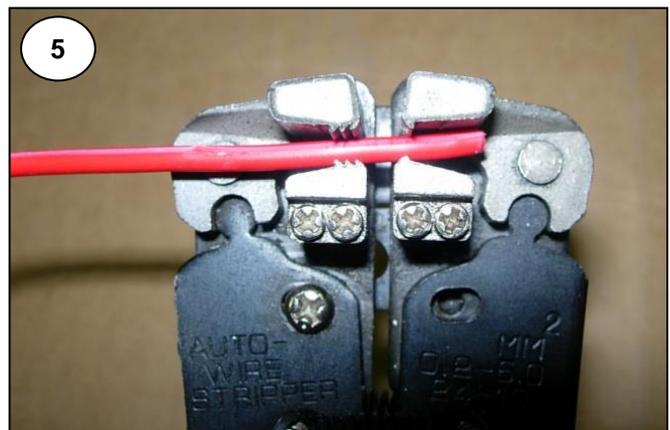
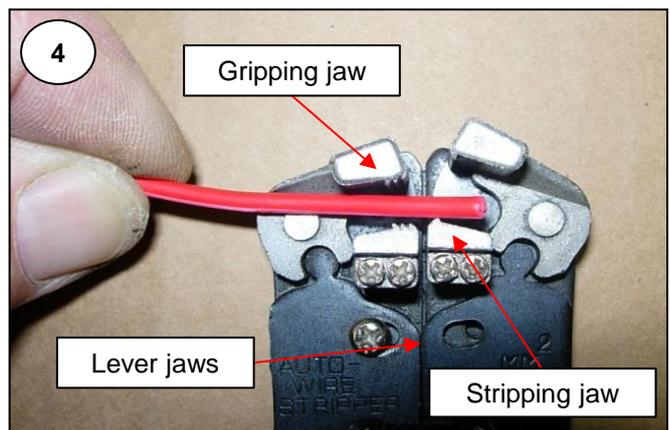
- 1 Squeeze handles sufficiently to bring the lever jaws together. Lay cable between stripping jaws as shown in **ILL 4**.

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 independently of the pliers cutting and stripping the end of the wire until with a sharp click both sets of jaws will automatically disengage.

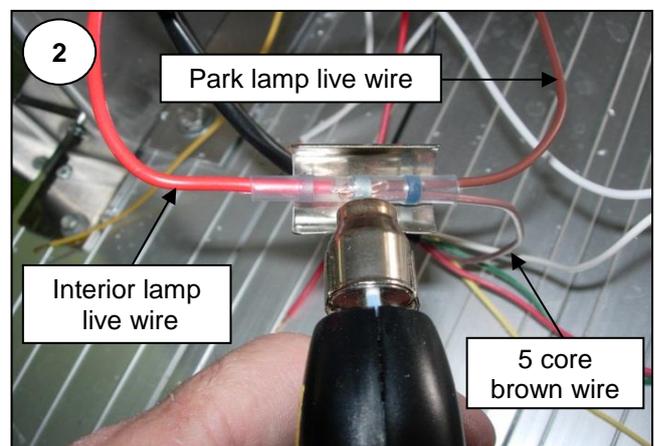
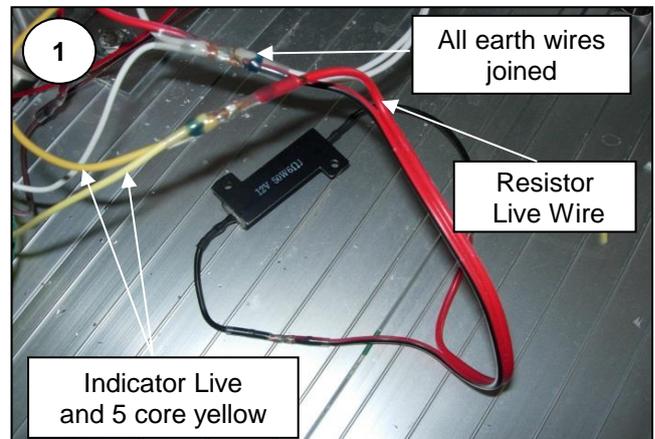




- 4 The Wurth pliers are simpler in operation. After placing the cable in the "V" of the bottom jaw, **ILL 7**, squeeze the handles together. The squeezing action brings the jaws together and forces the bottom jaw forward both cutting and pulling the sheath from the cable. See **ILL 8 & 9**.

GENERAL INSTRUCTIONS

- 1 Remove O.E.M. tail lamps from vehicle and cut the connectors from the ends of the harness to both sides.
- 2 Pull all wires out through the grommets in the deck rear.
- 3 Cut lengths of **WIRE05** to the length required to join the vehicle harness to the canopy wires.
- 4 Ascertain whether the vehicle will require balance resistors and on which circuits.
Note: Wiring method will be as in the photographs but carried out under the deck not on top.
- 5 Group all earth lines on each side and join them onto the earth line of the **WIRE05**. See **Photo 1**.
- 6 Connect each of the live wires to the matching colour in the **WIRE05**. See **Photo 2**. Use the green cable in the 5 (or 7) core for the black reverse lamp wire.
Note: Remember to attach the resistors (if required) across the necessary circuits during these two operations. See **Photo 1**.
- 7 If resistors have been connected attach them to a convenient section of the deck underside, remember it must be a metal part as it has to conduct heat away from the resistor.
Note: Riveting through the floor is not recommended as the stub ends of the rivets will create a catch point that may cause injury or damage.
- 8 Join the **WIRE05** to the matching wires of the vehicle harness.



- 9 Attach the O.E.M. license plate bracket and lamp(s) to the underside of the **CAP260**.
- 10 Check that all lights operate correctly and that no warning/fault indicators show up on the dashboard.

11 If a fault warning occurs and there is no obvious reason, it may indicate that a resistor needs to be fitted across the circuit.
If uncertain call an Auto Electrician.

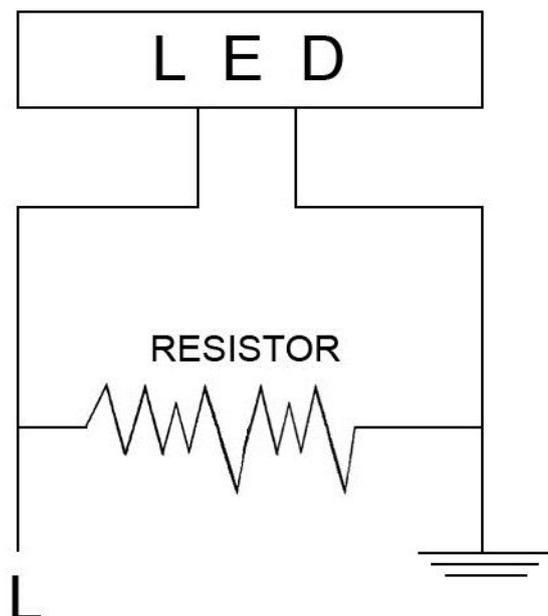
12 Once all circuits function correctly, beneath the rear of the tray, cover the **WIRE05** with the **TUB140** and attach to the planks by drilling holes in the flanges and using cable ties where necessary. See **Photo 3**.



Note: Many vehicles now have on board central monitoring systems fitted. If the dash board has digital read outs, multi function displays and cruise control it is almost certain to be in this category. In this event replacing the incandescent O.E.M. tail lamps with the FlexiWork L.E.D. units will cause fault warnings to be displayed and probably the cruise control to cease function.

The fitting of balance resistors is then indicated. Only one resistor is required per circuit. i.e. one each for right and left indicators, one for the brake circuit and possibly one on the reverse light. Although the reverse lamp does not necessarily cause a fault warning, it may in some cases - the FG Falcon for instance - half light up as soon as the ignition is turned on and run constantly.

The method of connection is to fit one of the resistor lines to the live and one to the earth of the L.E.D lamp wires in each circuit, see diagram on right.



Note: On use of Narva Shrink / Solder Connectors:

The connectors come in three sizes, the largest will be required for the multiple wire earth line hook up. The midsize where three wires link (live with resistor), the smallest on single cable links. The side with the blue ring is slightly larger than the grey. Use it on the ends of the figure 8 twin wire.

The heat gun should be used with the reflector and a side to side action to apply the heat. First shrinking the plastic sleeve then concentrating on the solder until it melts into the wire.

- 13 Once all lights have been checked and are functioning correctly, degrease two areas of the canopy shell below the tail lamps and attach the **RFL10** reflectors in place by removing the protective film from their back and pressing them firmly into place as shown in **Photo 4**.

- 14 At the front corners of the canopy, degrease two flat areas facing forwards as shown in **Photo 5** and attach the two **RFL20** clear reflectors in the same manner as the rear units.

