



FLEXIGLASS FITTING MANUAL - SECTION 3.3F

FLEXIGLASS TRAY

FORD RANGER (PX) EC 2011 FIT - ISSA9

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 / electric drill
- Pneumatic / electric hacksaw
- Drill bits: 21/64", 1/4" & 3/16"
- Sockets: 10, 13 & 18
- Würth Cable strippers
- Pneumatic driver
- Rivet gun with 5mm tip
- Loctite 243
- Toledo cable strippers

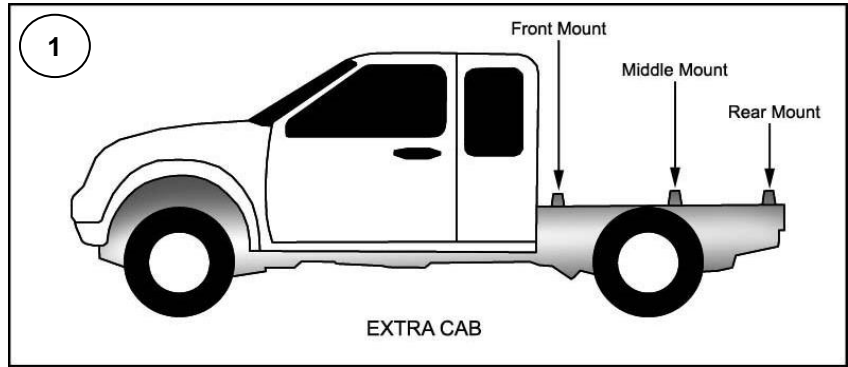
TRFITR11S Tray Fit Ranger 11 SWB - Kit BOM

Type	No.	Description	Quantity per	Unit of Measure Code
Item	BLK200C	Block For Cross Bars 40MM Coat	6	EACH
Item	BLTHHZP1290	Bolt & Nut Hex ZP 12X90mm	6	EACH
Item	NUT12C	Nut Channel M12	6	EACH
Item	NUT6N	Nut Nyloc M6	28	EACH
Item	NUT8N	Nut Nyloc M8	12	EACH
Item	PLT390C	Fish Plate forTrayBearers Coat	4	EACH
Item	RIVET200	Rivet 6-6 Steel	2	EACH
Item	SCRHHSS620	Screw Set Hex Head S/S 6x20mm	28	EACH
Item	SCRHHSS825	Screw Set Hex Head S/S 8x25mm	12	EACH
Item	SPACER30	Mounting Spacer 50 X 50 X 3	2	EACH
Item	SPACER40	Mounting Cross Bar Spacer	6	EACH
Item	SPACER50	Mounting Block Spacer 10MM	6	EACH
Item	TIE100	Tie Cable BLK 4.8x300mm	6	EACH
Item	WSH220	Washer 5/16 X 3/4 Flat	12	EACH
Item	WSH10	Washer BRT Z/P 1/2x1-7/8x14G	6	EACH
Item	WSH300	Washer Spring Z/P 12x2.5x2.5mm	6	EACH
Item	BAR310FC	Bar Universal Cross Mount Coat	3	EACH
Item	WSH240	Washer Brt Z/P 1/2x1-1/8x16G	6	EACH
Item	WSH180	Washer Brt Z/P 1/4x5/8x18G	4	EACH
Item	SCRPHSS416	Screw Phil/Head SS M4x16	4	EACH
Item	NUTSSM4	Nut Stainless Steel 4MM	4	EACH
Item	FUELSTAY10	Fuel Neck Hilux Stay	1	EACH
Item	TRSTDFITKIT	Tray STD Fitting Kit	1	KIT
Item	PAN520	PANEL LH MUDGUARD	1	EACH
Item	PAN530	PANEL RH MUDGUARD	1	EACH
Item	NUT10N	Nut Nylon Insert Lock ZP 10MM	8	EACH
Item	BLTHHZP640	Bolt & Nut Hex ZP 6X40mm	4	EACH

NOTE: PAN520 LHS & PAN530 RHS are replacement parts for 1 x PAN440 LHS & 1 x PAN450 RHS rear Mudguards which are in TRSTDFITKIT.

FIT INSTRUCTIONS

- 1 Refer to **ILL 1** showing extended cab mounting positions. Locate these positions on the vehicle.
Note: All mount points on the vehicle must be used when fitting a Flexiglass Tray.



- 2 Refer to mount diagrams on **Page 3** which illustrates standard part usage for mounts on EC Ranger PX and Flexiglass Tray.

- 3 Fit the mounts in place on the chassis, using the parts and applying lock tight to thread as shown in the diagrams on **Page 3**.

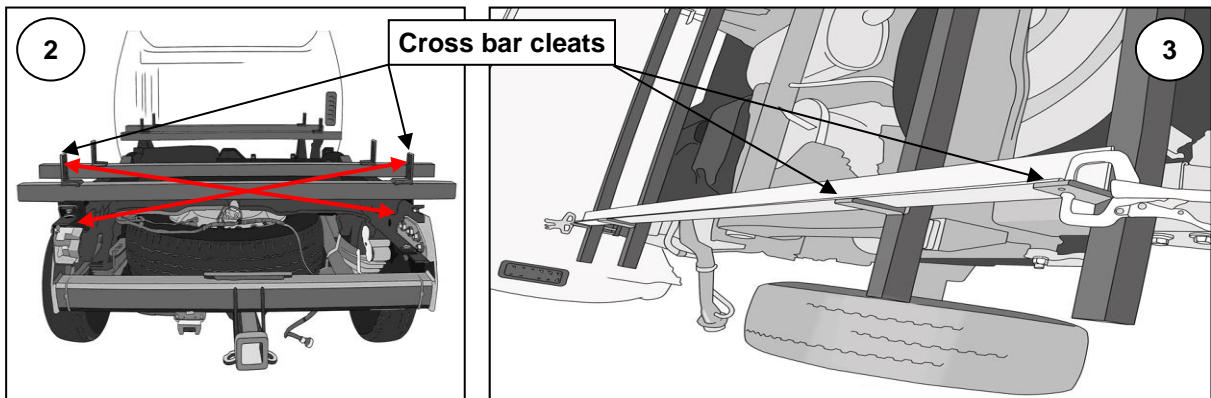
- 4 With all parts in place and the bolts still loose check the front and rear mounts are central over the chassis by measuring from the inside of one mount cleat to the inside of the opposite chassis rail. Repeat this for the other mount cleat and rail sliding the mounting cross bar "to and fro" until the measurements are equal. See **ILL 2**.

- 5 Tighten the four bolts securing the mount bars to the chassis mounts front and rear.

- 6 Place a length of **ALUM10** between the vertical faces on one side of the front and rear mounting cross bar cleats and clamp it to them. See **ILL 3**.

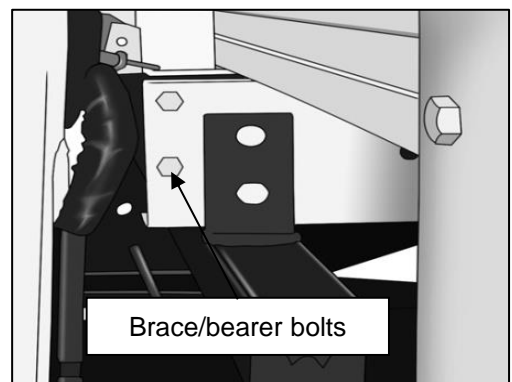
- 7 Slide the middle cross bar across until the cleats are against the same face of the angle as the front and rear cleats. **Note:** This ensures that all three bars are now central and in line with each other.

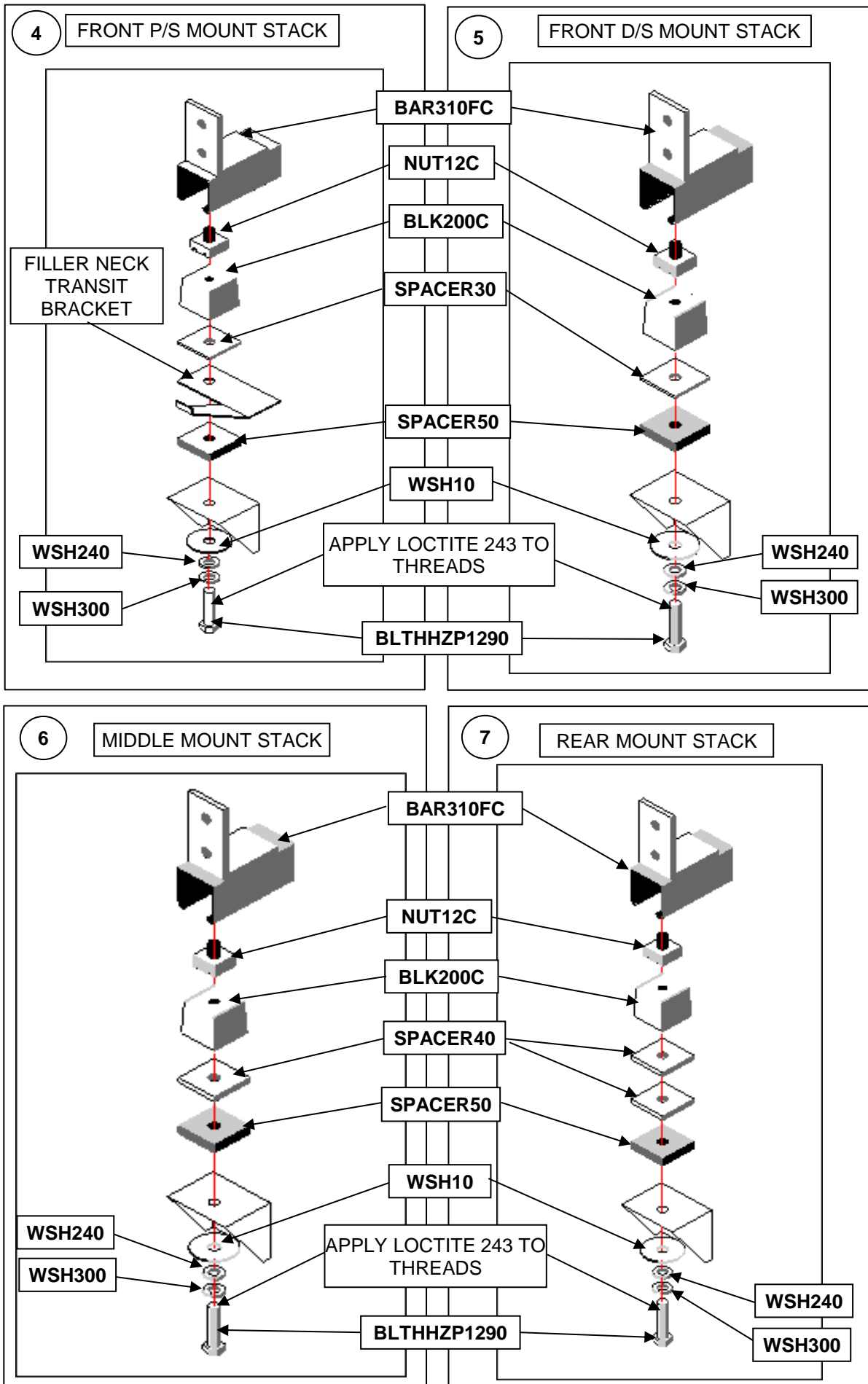
- 8 Tighten the two bolts securing the middle mounting cross bar.



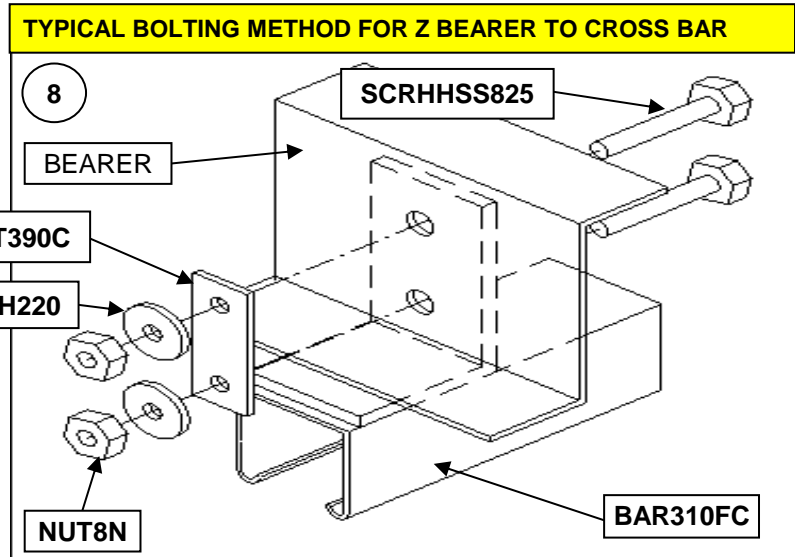
- 9 Lower the tray with the bearers between the cross bar cleats and the brace bearer bolts just in front of the front ones. There will only be about a fingers width between the tray headboard and the cab vents. Ensure the tray does not overhang more than 700mm from the last mounting point at the chassis rear.

- 10 Once the tray is lined up drill 21/64" holes into the bearers using the mounting cross bar as a guide. See **ILL 8**.
Note: It will not be possible to fit **PLT390C** fishplates at the front crossbar.





- 11 Secure tray to the bearers as shown in the diagrams adjoining.
- 12 The stays are mounted to the mudguards in pre-drilled holes using 1 of **SCRHHSS620**, **WSH180** & **NUT6N**.



QTY Per TRAY		
SCRHHSS620	- M6 x 20mm SS HEX BOLT	20
NUT6N	- M6 NYLOC NUT	20
WSH180	- 6mm FLAT WASHER	4
PAN440	- L/H 275mm MUDGUARD PANEL	1
PAN450	- R/H 275mm MUDGUARD PANEL	1
PAN520	- L/H Rear Mudguard Panel	1
PAN530	- R/H Rear Mudguard Panel	1
STAY200	- MUDGUARD STAY	4
MFLP310	- MUDFLAP STANDARD	2
STRAP200	- MUDFLAP STRAP	2

- 13 Mount the mudguards to the underside of the tray deck by lining up the pre-punched holes in the mudguard with one of the ribs running along the underside of the tray. Drill 1/4" holes and attach with 2 of **SCRHHSS620** & **NUT6N**.

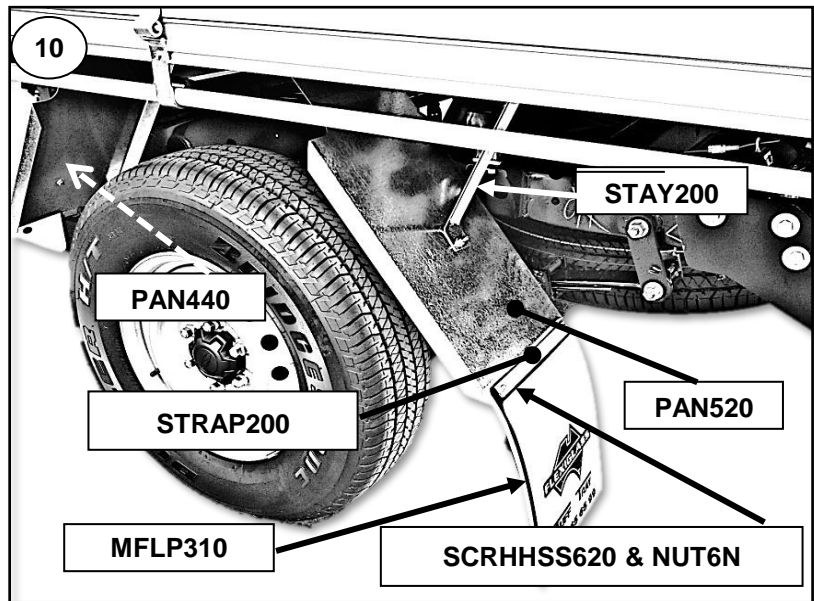
Note: The holes, pre-punched in the plank flange, position the mudguards at their widest position without reference to the vehicle track width. Legaly the guard must cover both sidewalls of the tyres which may require the guard panels to be positioned off the plank holes. Make sure the spacing between the mudguard and wheel is sufficient for both aesthetic and functional purposes. See **ILL 9**.

- 14 Attach the other end of the stay to the underside of the tray using same method but with only one fixing.

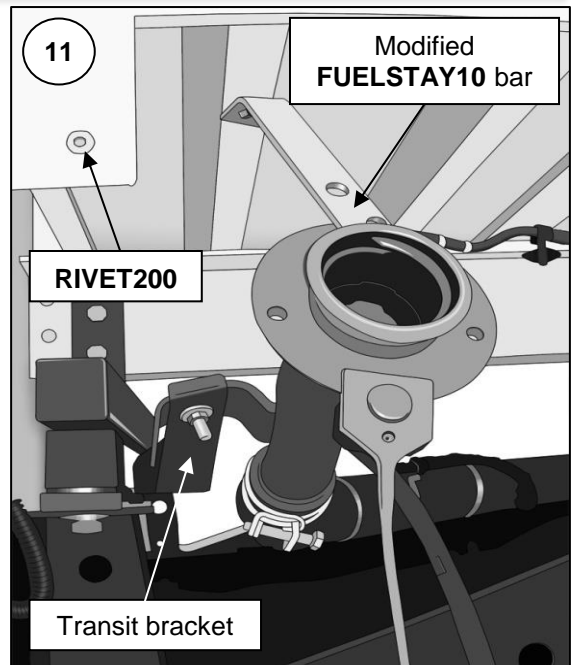
- 15 Attach both **MFLP310** mud flaps to the mudguards using 4 of **SCRHHSS620** & **NUT6N** as well as 2 of **STRAP200**. See **ILL 10**.

Note: Diagram only shows one side and requires only 2 bolts, washers, nuts and 1 strap.

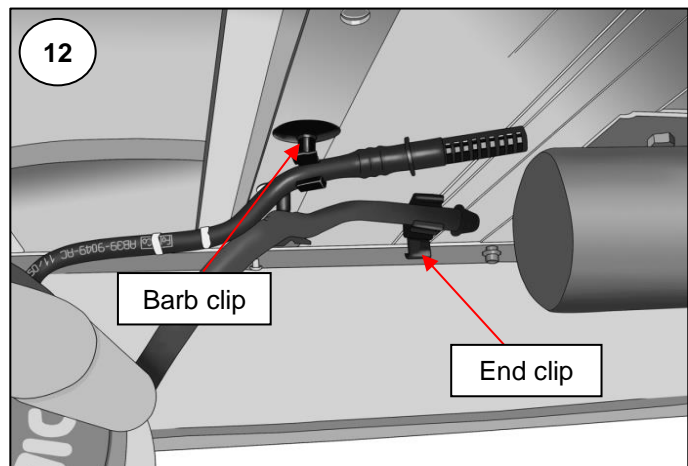
Sandwich mudflap between out side of panel and **STRAP200** secure with 2 each **SCRHHSS620** and **NUT6N**



- 17 On the passenger side of the tray, mark the rope rail about 30mm in front of the front side board hinge, cut through the rail at this point.
- 18 Drill out the rivets securing the cut piece to the headboard angle and discard. Fit new **RIVET200** to the vacant holes in the angle and fit a **CAP220** to the cut end of the rail. See **ILL 11**.
- 19 Attach the fuel filler neck to the transit bracket, re-fitted to the front mount in stage 3, using a **SCRHHSS620**, **WSH180** & **NUT6N**.
- 20 Take the bent bar from the **FUELSTAY10** kit and modify it in the following way:
From the flat end mark and drill a 1/4" hole at a distance of 45mm on the centre line, then cut 38mm off that end and file off any rough edges.

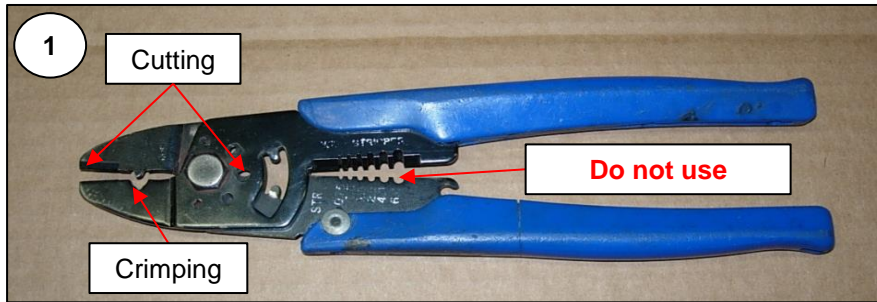


- 21 Fix the bar to the top hole on the filler flange (this requires an M5 x 20 screw). Bend the transit bracket down until the bar can be positioned on the plank flange. See **ILL 11**.
- 22 Drill through the plank flange and fix the bar with a **SCRHHSS620**, **WSH180** & **NUT6N**, tighten all screws fully.
- 23 Attach the tank vent/breathers to the planks using existing 6mm holes for the plastic barb clips and the bearer edge for the end clip. See **ILL 12**.



ELECTRICAL WIRE STRIPPING SAFETY PROCEDURE

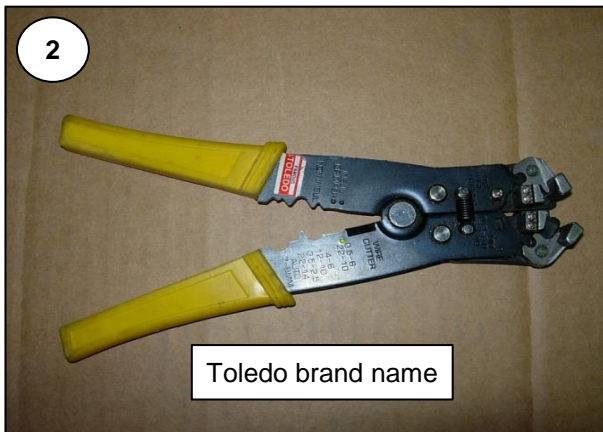
It is Flexiglass policy that the use of combination electrical cutting/crimping and stripping pliers be restricted to cutting and crimping use only.



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).



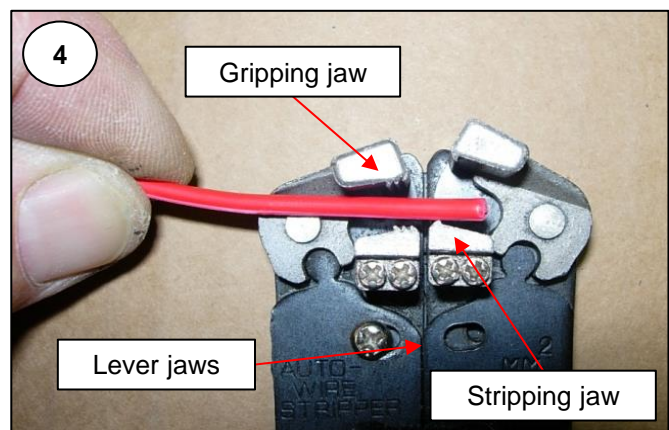
The tool in ILL 2 is a generally stronger and harder wearing item but the other is very useful for getting to cables in restricted space, it is therefore recommended that both types be available.

OPERATING INSTRUCTIONS

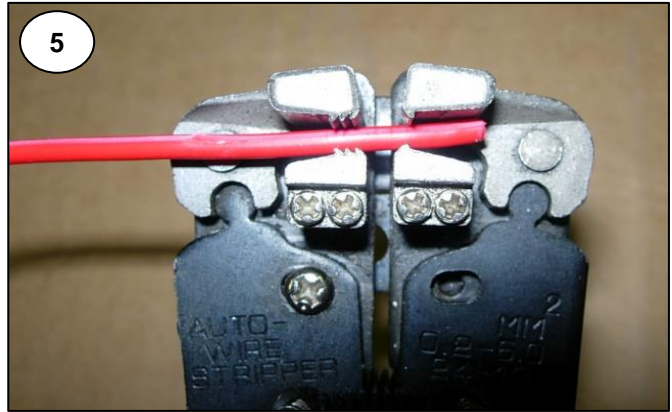
- 1 Squeeze handles sufficiently to bring the lever jaws together. Lay cable between stripping jaws as shown in ILL 4.

Note:

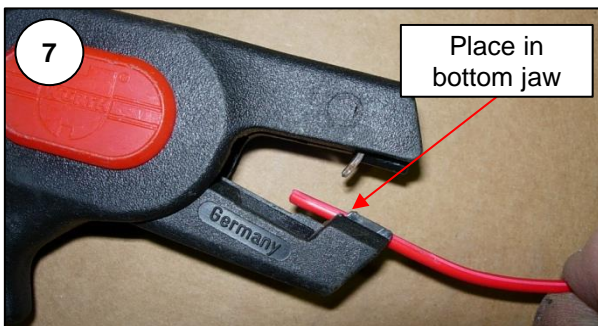
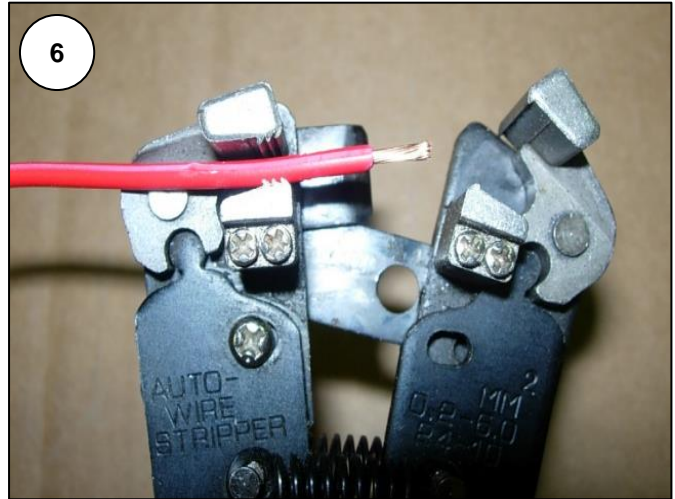
There should be no necessity to strip more than 10mm of sheathing from the cable end for any of the connectors used by Flexiglass. If for any reason a longer stripped end is required, do it in repeated 10mm bites, the pieces can then be slid off the end using the fingers.



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.

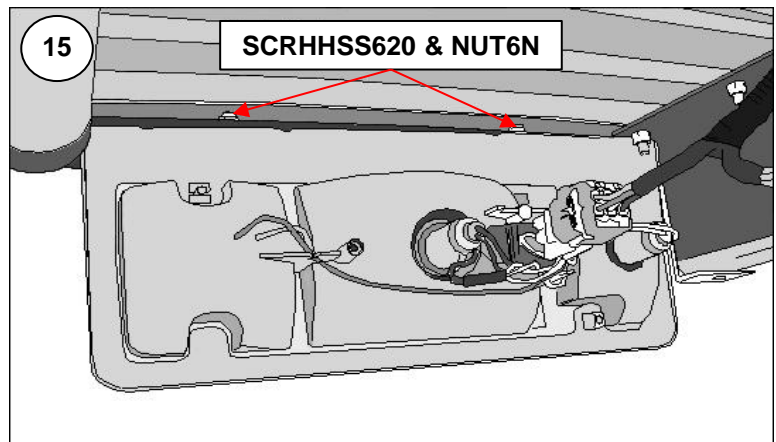
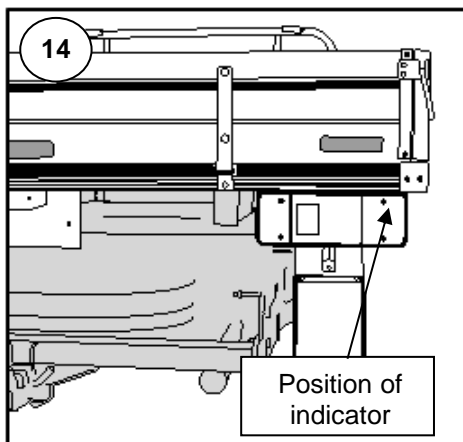
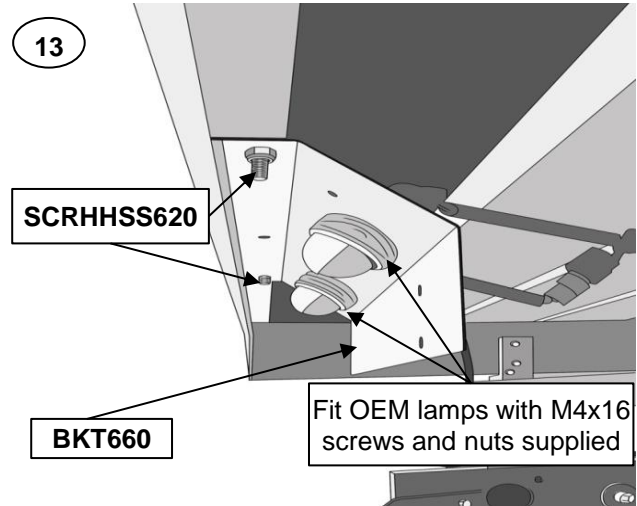


4 The Wurth pliers are simpler in operation. After placing the cable in the "V" of the bottom jaw, ILL 7, squeeze the handles together. The squeezing action brings the jaws together and forces the bottom jaw forward both cutting and pulling the sheath from the cable. See ILL 8 & 9.

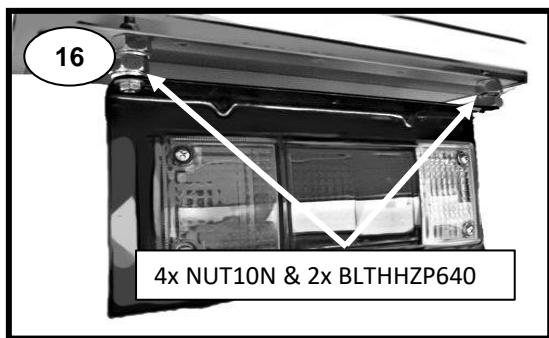


FIT INSTRUCTIONS (cont...)

- 24 Fit the vehicle licence plate lamps into the apertures provided in the **BKT660** and secure with the four **SCRPHSS416** & **NUTSSM4** provided. See **ILL 13**.
- 25 Attach **BKT660** Number plate bracket in the centre at the rear end of the tray as far to the rear as possible. Use 4 of M6x20 SS bolts and M6 Nylock nuts to fit to the underside of tray.
Important: BKT660 Number plate bracket must be fitted to the rear end of the tray to meet ADR requirements (as shown in the image).



- 26 The OEM lamps and brackets should now be attached to the underside of the tray rear, ensure that the lenses are fully exposed and the indicator lenses are to the outside. See **ILL 14 & 15**.
- 27 The OEM tail lamps and brackets should be lowered using **NUT10N & BLTHHZP640**. See **ILL 16**



- 28 All rear lamps can now be re-connected to the main harness using the original multi-pin snap connectors, check for correct operation.
- 29 Restrain loose electrical cables by tying to bearers, cross bars etc with the **TIE100** supplied.
- 30 If alterations to the wiring need to be made it is recommended that you consult an auto electrician first.
- 31 Detail and clean the tray for delivery to the client.