



# FLEXIGLASS FITTING MANUAL - SECTION 3.3E

## FLEXIGLASS TRAY FORD RANGER (PX) SC 2011 FIT - ISSA11

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

**NOTE:** If the vehicle is 2WD Hi-Rider or 4WD, 1 x PAN520 LHS & 1 x PAN530 RHS are required to replace 1 x PAN440 LHS & 1 x PAN450 RHS which are in TRSTDFITKIT.

### TRFITR11L Tray Fit Ranger 11 LWB - Kit BOM

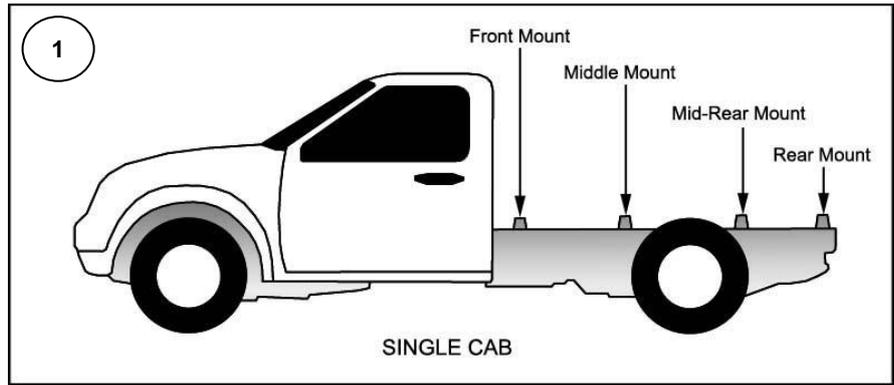
Type	No.	Description	Quantity per	Unit of Measure Code
Item	BLK200C	Block For Cross Bars 40MM Coat	8	EACH
Item	BLTHHZP1290	Bolt & Nut Hex ZP 12X90mm	6	EACH
Item	NUT12C	Nut Channel M12	8	EACH
Item	NUT6N	Nut Nyloc M6	29	EACH
Item	NUT8N	Nut Nyloc M8	16	EACH
Item	PLT390C	Fish Plate forTrayBearers Coat	8	EACH
Item	RIVET200	Rivet 6-6 Steel	1	EACH
Item	SCRHHSS620	Screw Set Hex Head S/S 6x20mm	28	EACH
Item	SCRHHSS825	Screw Set Hex Head S/S 8x25mm	16	EACH
Item	SPACER40	Mounting Cross Bar Spacer	10	EACH
Item	SPACER50	Mounting Block Spacer 10MM	7	EACH
Item	TIE100	Tie Cable BLK 4.8x300mm	6	EACH
Item	WSH220	Washer 5/16 X 3/4 Flat	16	EACH
Item	WSH10	Washer BRT Z/P 1/2x1-7/8x14G	8	EACH
Item	WSH300	Washer Spring Z/P 12x2.5x2.5mm	8	EACH
Item	BAR310FC	Bar Universal Cross Mount Coat	4	EACH
Item	BKT420	Bracket Fuel Filler	1	EACH
Item	WSH240	Washer Brt Z/P 1/2x1-1/8x16G	8	EACH
Item	WSH180	Washer Brt Z/P 1/4x5/8x18G	4	EACH
Item	SCRHHSS625	Screw Set Hex Head S/S 6x25mm	1	EACH
Item	SCRPHSS416	Screw Phil/Head SS M4x16	4	EACH
Item	NUTSSM4	Nut Stainless Steel 4MM	4	EACH
Item	TRSTDFITKIT	Tray STD Fitting Kit	1	KIT
Item	BLTHHZP12100	Bolt Only Hex ZP 12x100mm	2	EACH
Item	SPACER30	Mounting Spacer 50 X 50 X 3	1	EACH
Item	SPACER60	Spacer Packer Plastic 4.5	1	EACH
Item	NUT10N	Nut Nylon Insert Lock ZP 10MM	8	EACH
Item	BLTHHZP640	Bolt & Nut Hex ZP 6X40mm	4	EACH

### FIT INSTRUCTIONS

**Note:** When removing the fuel filler transit bracket from the chassis, leave it attached to the fuel filler neck as it will be re-used when mounting the tray.

- 1 Refer to **ILL 1** showing single 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 S/C Ford PX Ranger 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 four 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

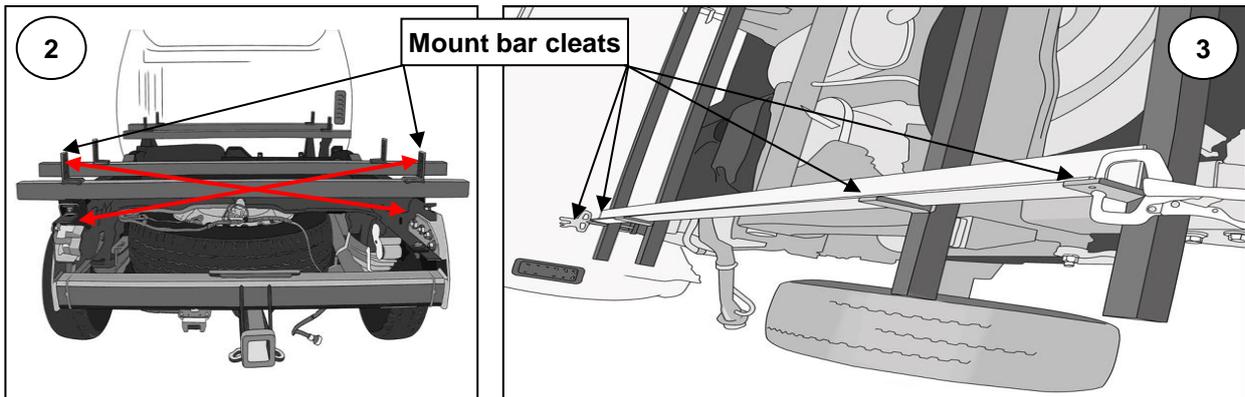
to the inside of the opposite chassis rail. Repeat this for the other mount cleat andrail, sliding the mounting cross bar "to and fro" until the measurements are equal. See **ILL 2**.

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

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

8 Tighten the four bolts securing the middle and mid-rear mounting cross bars.



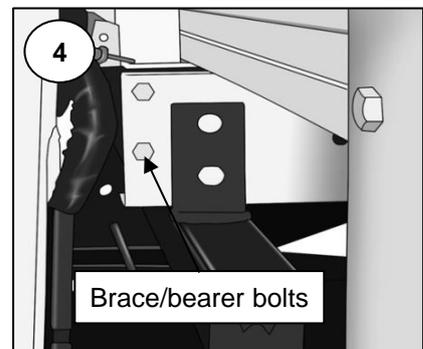
**Note:**

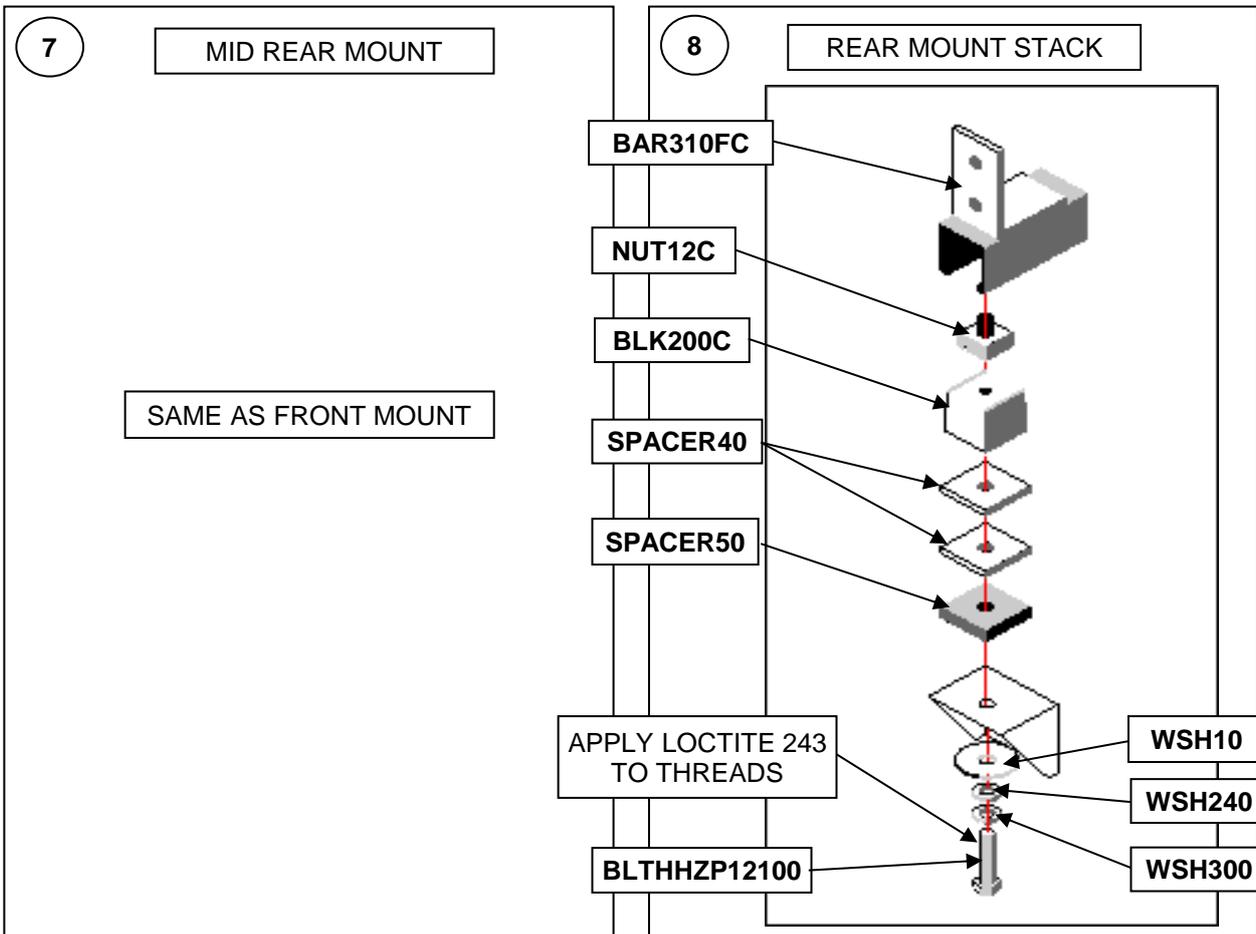
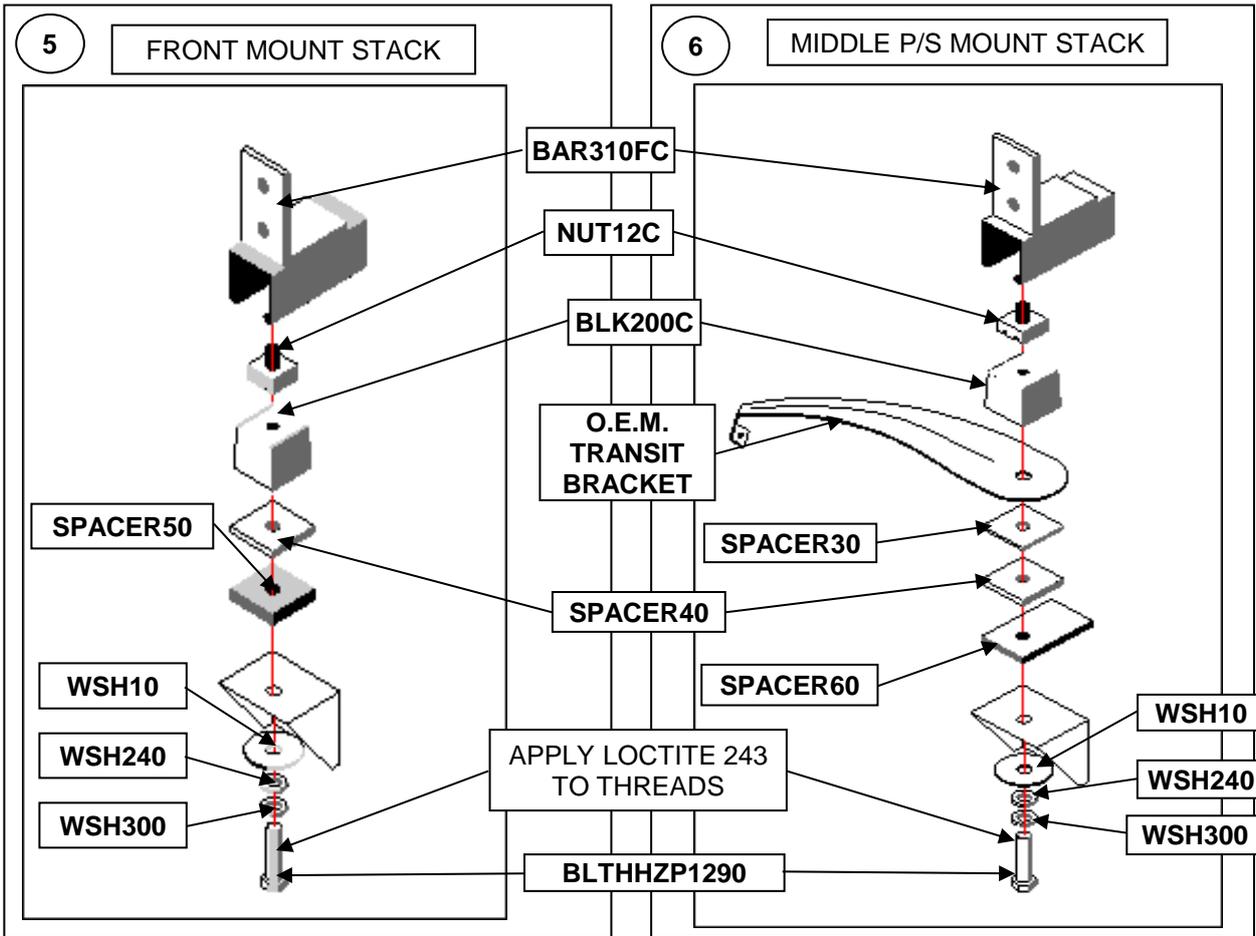
When tightening the left hand middle mount bolt, ensure that the fuel filler neck is at ninety degrees to the chassis.

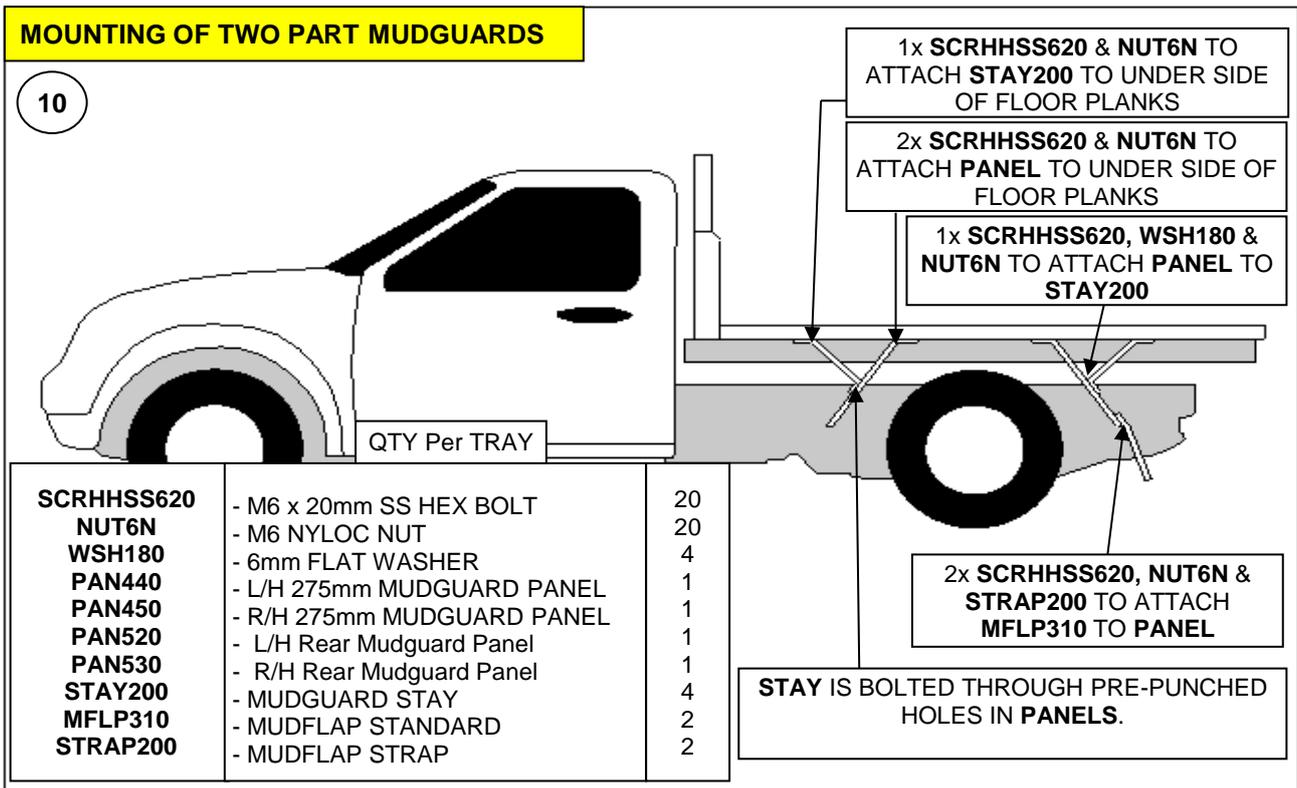
9 Lower the tray with the bearers between the cross bar cleats and the brace/bearer bolts just in front of the front ones. There will only be about a fingers width between the tray headboard and the cab vents. Ensure the tray does not overhang more than 700mm from the last mounting point at the chassis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

**Note:** It will not be possible to fit **PLT390C** fishplates at the front crossbar.





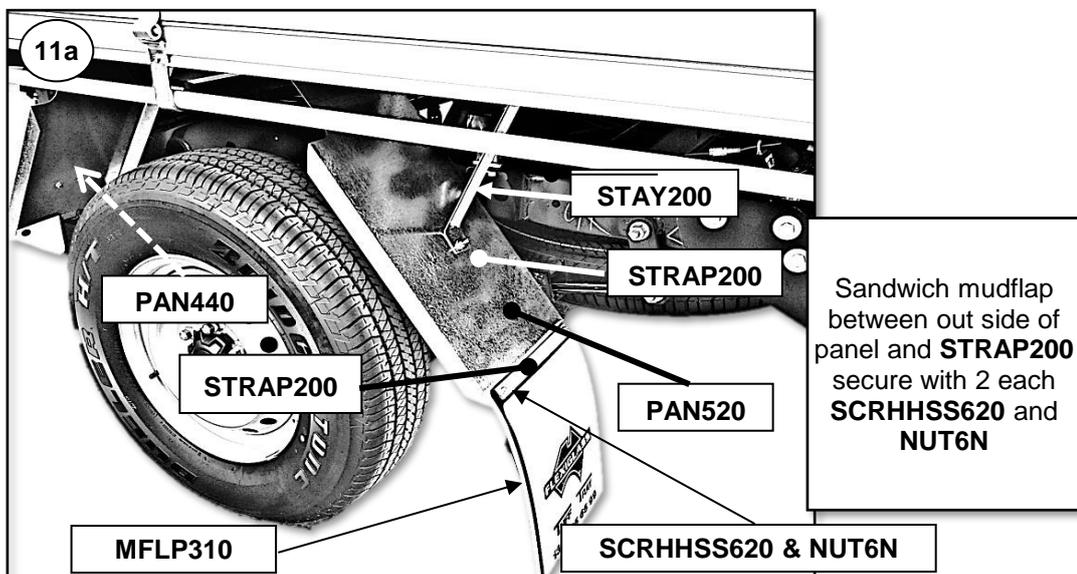


- 13 Mount the mudguards to the underside of the tray deck by lining up the pre-punched holes in the mudguard with one of the ribs running across the underside of the tray. Drill 1/4" holes and attach with 2 of **SCRHHSS620 & NUT6N**.

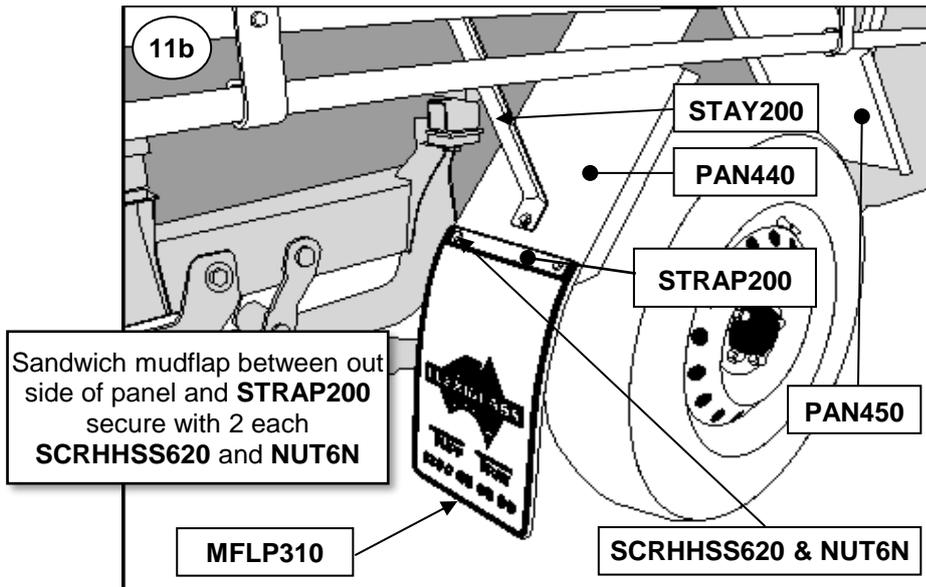
**Note:** Make sure the spacing between the mudguard and wheel is sufficient for both aesthetic and functional purposes. **See Diagram 10 above.**

- 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** as shown in **Diagram 11a** below.

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

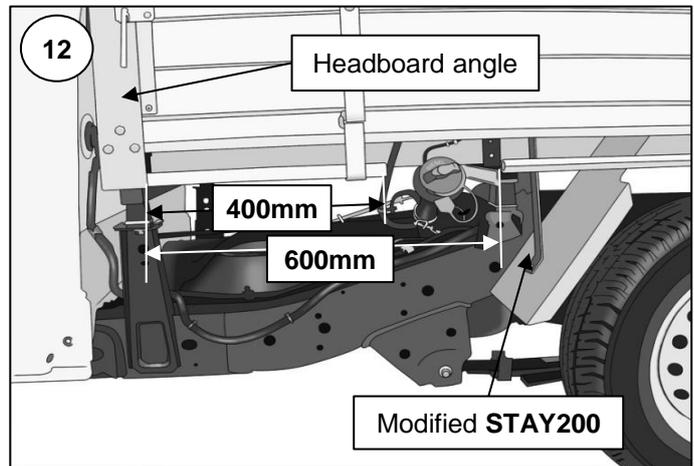


**NOTE:** Diagram 11a is shown for SC 2WD Hi-Rider (Chassis) and SC 4WD (Chassis).

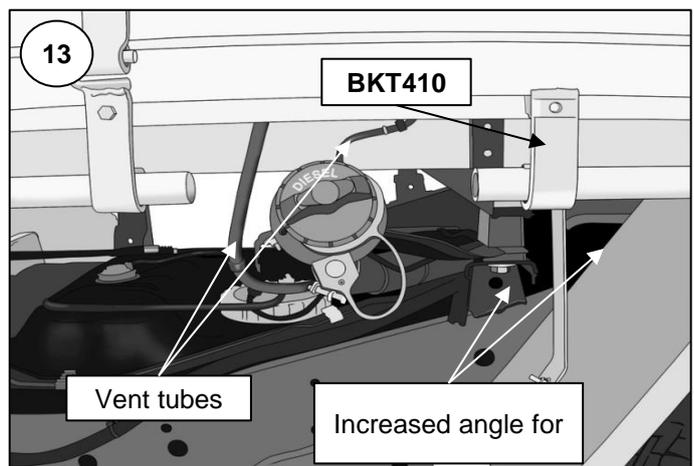


**NOTE: Diagram 11b is shown ONLY for SC 2WD (Chassis & Pick-up Well Body Removal).**

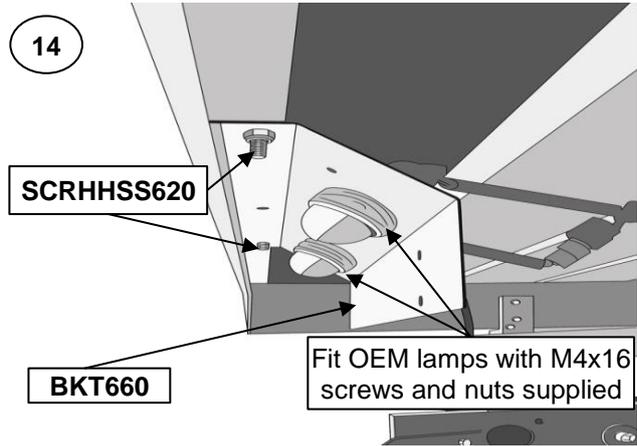
- 16 From the rear of the headboard angle measure and mark two cutting positions, 400mm and 600mm towards the rear (this will bracket the fuel filler position). Cut and remove the 200mm of rope rail between the marks. See ILL 12.
- 17 Slide a **BKT410** over the rearward section of rope rail so that it matches the other cut end. Fix with a **SCRHHSS625 & NUT6N** to the coaming and a **RIVET200** to the rail. See ILL 13.
- 18 Fit a **CAP220** to the cut ends of the rope rail.



- 19 Attach the vent hoses to the underside of the deck planks, using the clips fitted to them, wherever convenient.

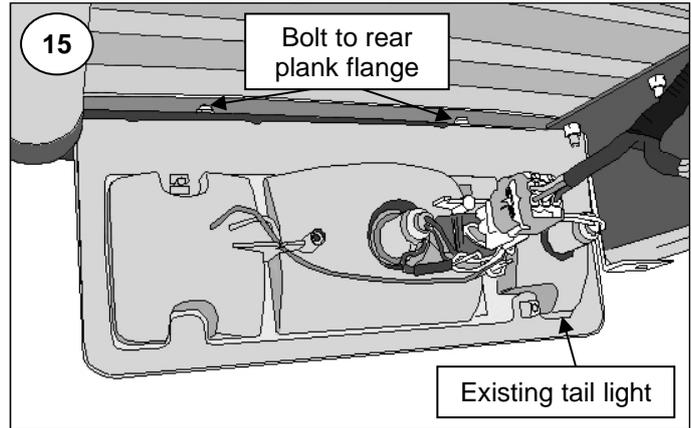


- 20 Attach **BKT660** Number plate bracket in the centre at the rear end of the tray as shown in the image to the right. Use 2 of M6x20 SS bolts and M6 Nylock nuts to fit to the underside of tray. See **ILL 14**.  
**Important:** BKT660 Number plate bracket must be fitted to the rear end of the tray to meet ADR requirements (as shown in the image).



- 21 Pass connectors and cables through the holes in the **BKT660** and fix the OEM lamps in place using the four **SCRPHSS416** & **NUTSSM4** supplied.

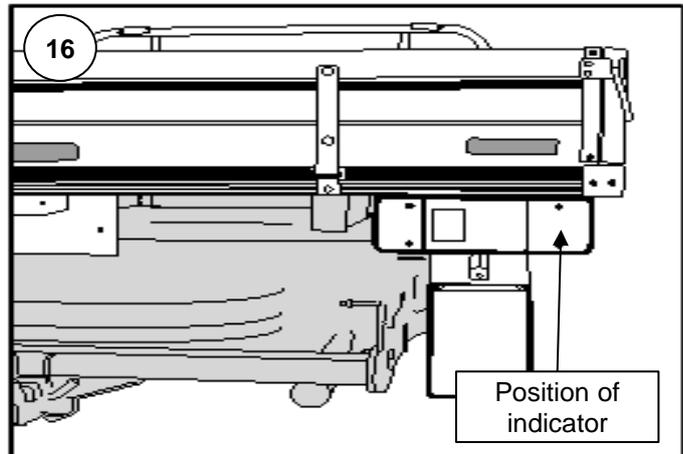
- 22 The OEM tail lamps and brackets should now be attached to the underside of the tray rear using **SCRHHSS620** and **NUT6N**. Ensure that the lenses are fully exposed and the indicator lenses are to the outside. See **ILL 15 & 16**.



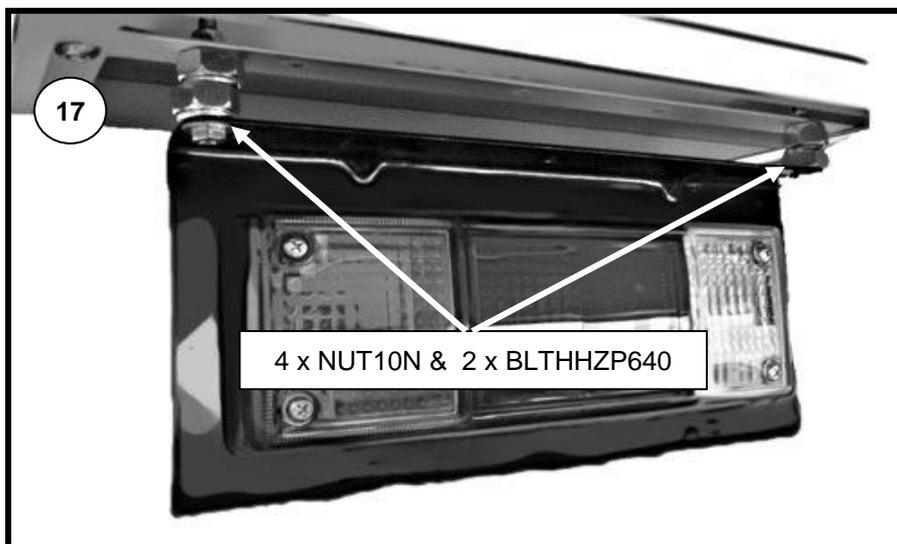
- 23 The OEM tail lamps and brackets should be lowered using **NUT10N** & **BLTHHZP640**. See **ILL 17**

- 24 All lamps can be re connected using the existing plugs and sockets, check for correct operation.

- 25 Restrain loose electrical cable by tying to bearers and cross bars with **TIE100** supplied.

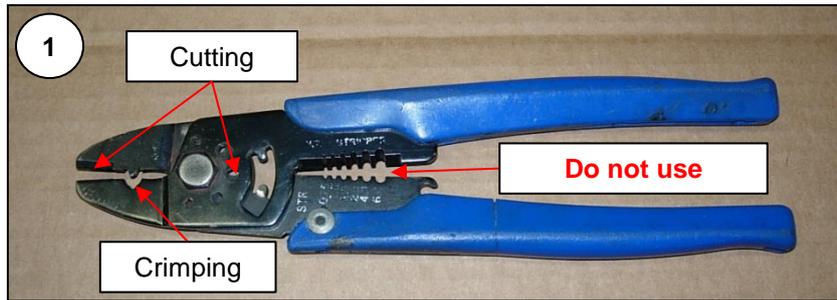


- 26 Detail and clean the tray for delivery to the client.



## ELECTRICAL WIRE STRIPPING SAFETY PROCEDURE

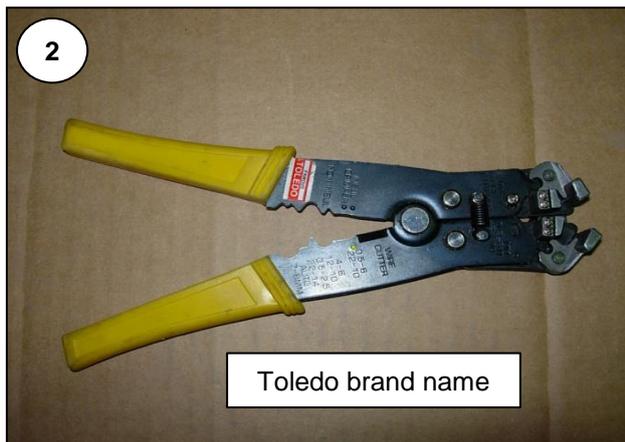
It is Flexiglass policy that the use of combination electrical cutting/crimping and stripping pliers be restricted to cutting and crimping use only.



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).



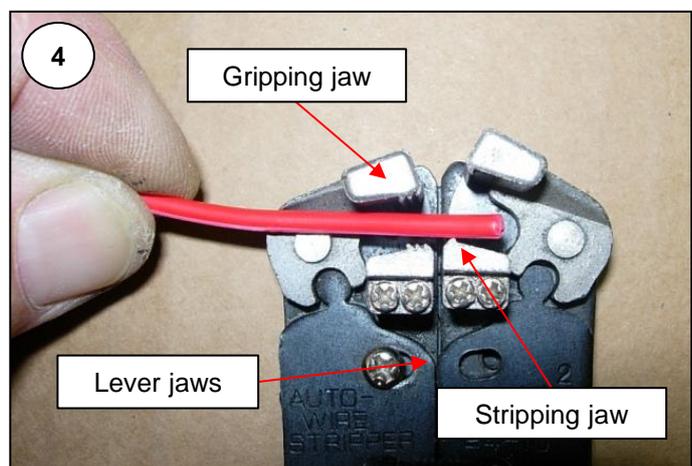
The tool in ILL 2 is a generally stronger and harder wearing item but the other is very useful for getting to cables in restricted space, it is therefore recommended that both types be available.

### OPERATING INSTRUCTIONS

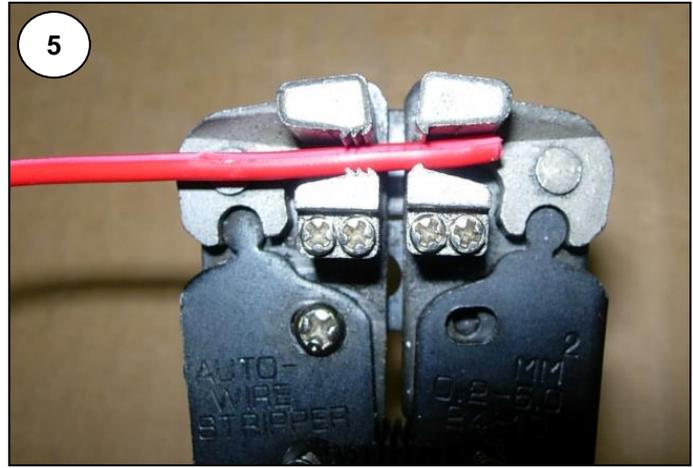
- 1 Squeeze handles sufficiently to bring the lever jaws together. Lay cable between stripping jaws as shown in ILL 4.

**Note:**

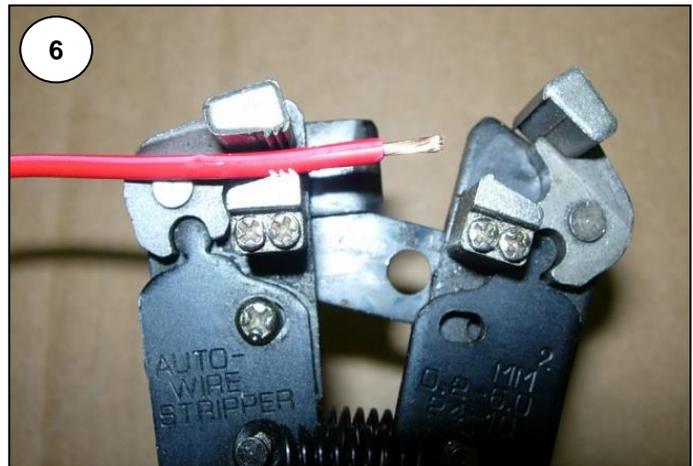
There should be no necessity to strip more than 10mm of sheathing from the cable end for any of the connectors used by Flexiglass. If for any reason a longer stripped end is required, do it in repeated 10mm bites, the pieces can then be slid off the end using the fingers.



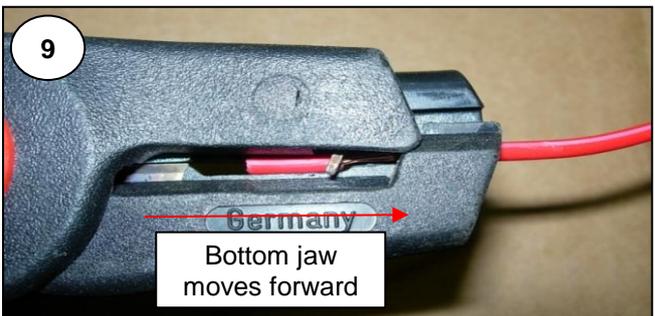
2 Continue squeezing the handles together to engage the gripping and stripping jaws.



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.

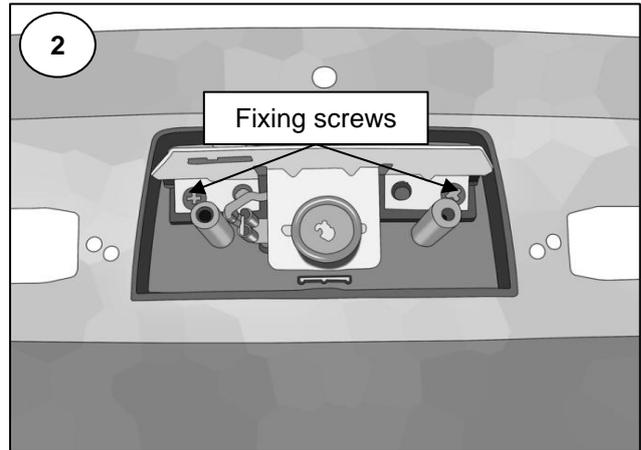
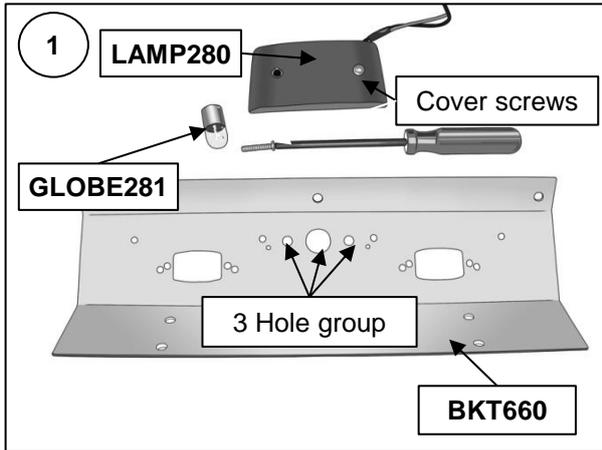


**NOTES ON USE OF KIT920 FOR WBR FITTING:**

The tail lights in the **KIT920** are compatible with the monitored wiring system of this vehicle. The vehicle tail lamps should have the wiring cut beside the lamp so that the vehicle multi-connector can be re-used for connection once the Flexiglass tail lamps have been joined using **CON110**. As the OEM transit bracket is used to mount the fuel filler. Clients requiring a Well Body Replacement fit will have to supply a transit bracket, available from Ford spare parts dept.

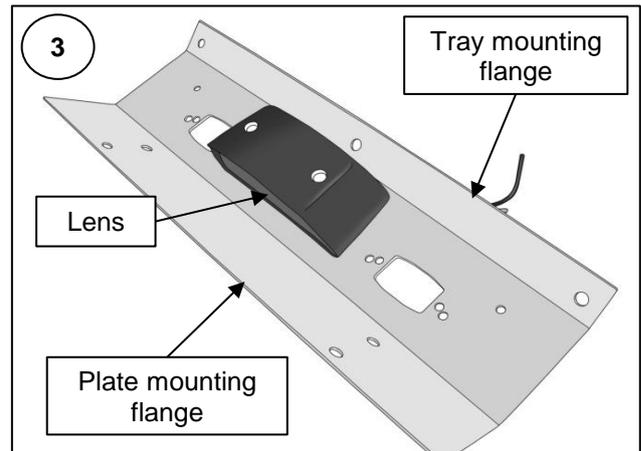
1 Assemble the **BKT660** and **LAMP280** by following the three point instruction below.

A Dismantle the two parts of the lamp cover by undoing the two Phillips head screws. See **Photo 1**.



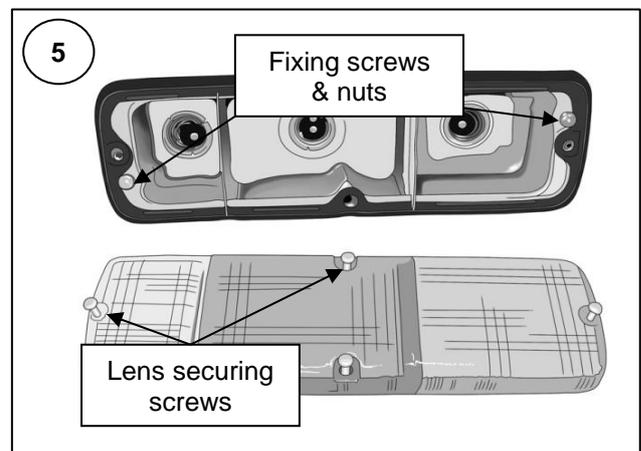
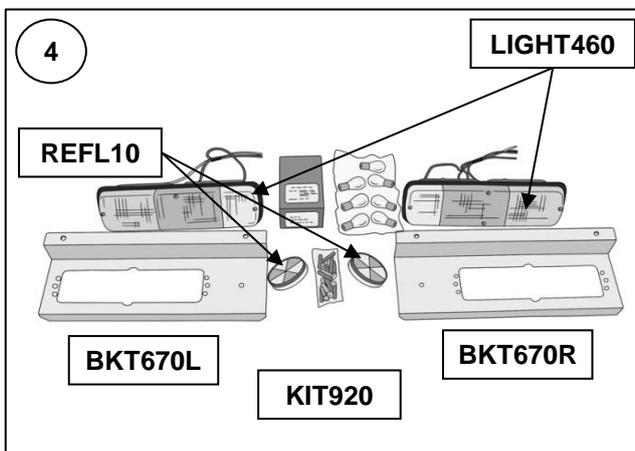
B Place the lamp base over the three hole group with the wires passing through the large central hole and fix using the two Phillips head self tapping screws provided. See **Photo 2**.

C Fit the light globe (supplied separately) into the holder then re-attach the cover and lens using the two screws removed in **Step A**.

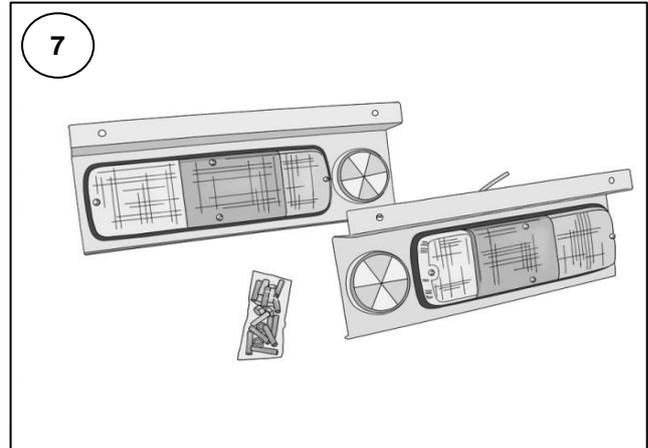
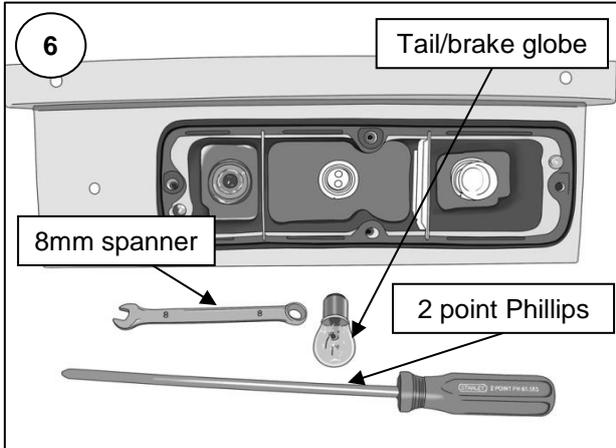


2 Assemble the tail lamp clusters by following the instructions below.

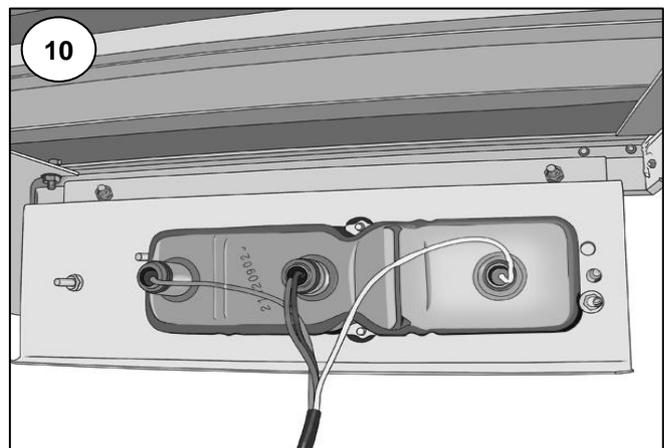
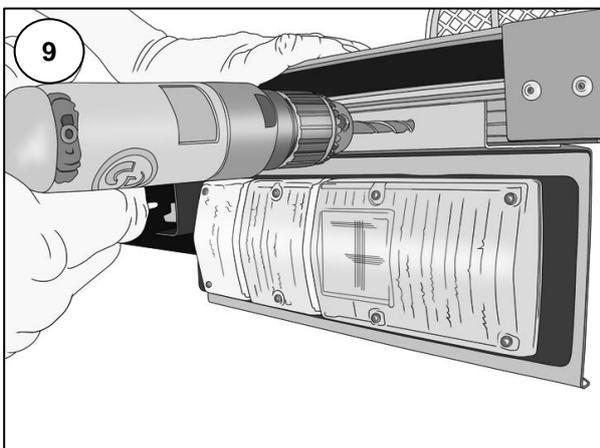
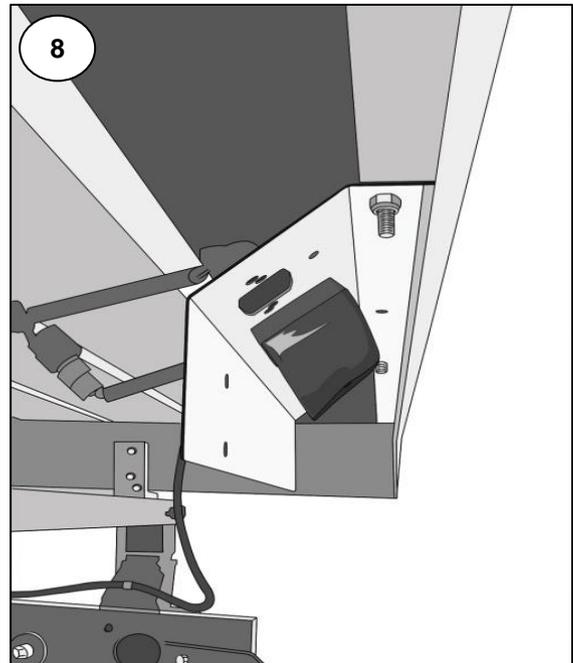
A Use a 2 point Philips screw driver to remove the four lens securing screws and remove the lens. See **Photo 5**.

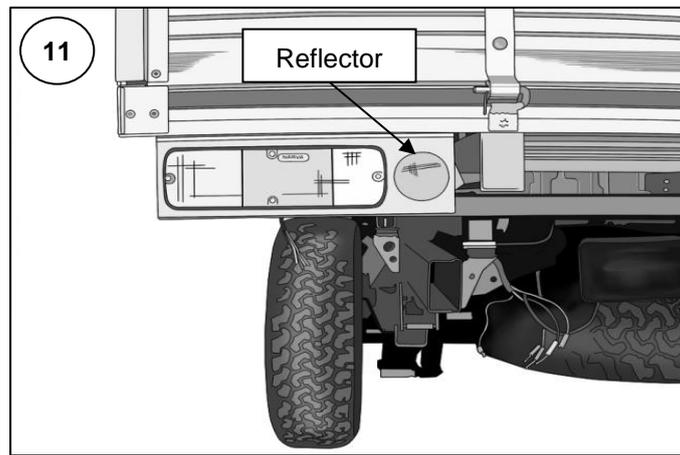


- B** Use the Philips screw driver and an 8mm spanner to remove the nut and washer from the lamp fixing screws. **See Photo's 5 & 6.**
- C** Insert the lamp body into the opening in the bracket and secure with the fixing screws nuts and washers.
- D** Fit the lamp globes into the sockets provided, the centre globe has double elements and staggered bayonet pins, do not mix it up with the other two. **See Photo 6.**



- E** Replace the lamp lens and secure with the four screws.
- F** Remove the flange nut (8mm) from the thread on the back of the **REFL10** insert the thread through the bracket, re-fit and tighten the nut to secure.
- G** Repeat for the opposite lamp assembly.
- 3** Attach the license plate bracket assembly to the underside of the rear plank as shown in **ILL 8** using two each **NUT6N** & **SCRHHSS620**.
- 4** Use the tail lamp bracket assemblies as templates to drill 1/4" holes through the rear of the rear tray plank See **ILL 9**.
- 5** Use two each **SCRHHSS620** & **NUT6N** to secure each bracket assembly as shown in **ILL 10**. Ensure that the reflector is positioned at the inboard end of the brackets. See **ILL 11**.





- 6 If the wiring, complete with multiconnectors, has been cut from the well body lights. Then the **LIGHT460**'s should be connected to it with **CON110** in the following manner.

Function	LIGHT460	PX Ranger Lights
Brake	Red	Green
Tail Lamp	Green	Red / Grey
Reverse Lamp	Blue	Red / Yellow
Indicator	Yellow	Green / Yellow
Earth	See below	Black

Attach an eye terminal to the earth line and clamp it under the **REFL10** securing nut. The tail lamps can now be re-connected to the main harness with the original multiconnectors.

- 7 If the tail lamps in the well body are not to be damaged then the multi connectors will have to be cut off and the main vehicle harness connected to the **LIGHT460**'s in the manner below with **CON110**.

Function	LIGHT460	PX Ranger Harness
Brake	Red	Purple / Brown
Tail Lamp	Green	Purple / Blue
Reverse Lamp	Blue	Green / Brown
Indicator	Yellow	Green
Earth	See above	Black / White

- 8 Connect the license plate lamp in the same manner as either of the methods given above.
- 9 Clean and detail tray as necessary for delivery to the customer.