

# **FLEXIGLASS FITTING MANUAL - SECTION 3.11A**

**MAHINDRA SC TRAY FIT - ISSA3** 

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
- Toledo cable strippers
- Pneumatic driver
- Rivet gun with 5mm tip
- Loctite 243.
- Wurth Cable strippers

These instructions will be suitable for the Flexiglass Deluxe Tray with the substitution of 4 of PAN500 mudgard panels in place of 2 each PAN440 & 450.

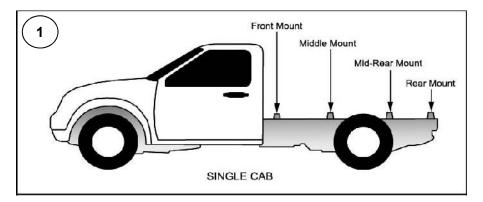
TRFITMAHL Tray Fit Mahindra LWB - Kit BOM				
Type	No.	Description	Quantity per	Unit of Measure Code
Item	BLK200C	Block For Cross Bars 40MM Coat	4	EACH
Item	BLTHHZP1290	Bolt & Nut Hex ZP 12X90mm	4	EACH
Item	NUT12C	Nut Channel M12	8	EACH
Item	NUT6N	Nut Nyloc M6	22	EACH
Item	NUT8N	Nut Nyloc M8	16	EACH
Item	RIVET 200	Rivet 6-6 Steel	1	EACH
Item	SCRHHSS620	Screw Set Hex Head S/S 6x20mm	21	EACH
Item	SCRHHSS825	Screw Set Hex Head S/S 8x25mm	16	EACH
Item	SPACER40	Mounting Cross Bar Spacer	6	EACH
	SPACER50	Mounting Block Spacer 10MM	8	EACH
	WSH220	Washer 5/16 X 3/4 Flat	16	EACH
	WSH240	Washer 1/2X 1 1/8 ZP Flat	8	EACH
	WSH300	Washer Spring Z/P 12x2.5x2.5mm	8	EACH
	BAR310FC	Bar Universal Cross Mount Coat	4	EACH
	SPACER30	Mounting Spacer 50 X 50 X 3	10	EACH
	BLTHHZP1250	Bolt & Nut Hex ZP 12x50mm	4	EACH
	FUELSTAY10	Fuel Neck Stay	1	EACH
Item	SCRHHSS625	Screw Set Hex Head S/S 6x25mm	1	EACH
	WSH180	Washer Brt Z/P 1/4x5/8x18G	4	EACH
Item	TRSTDFITKIT	Tray STD Fitting Kit	1	EACH

## **FIT INSTRUCTIONS**

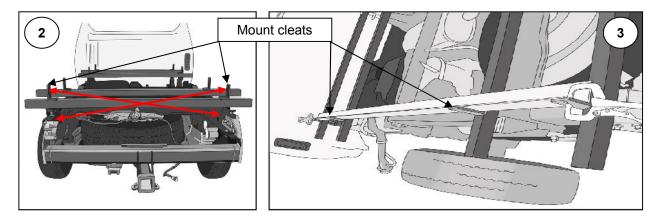
- 1 Refer to ILL 1 showing single cab mounting positions. Locate these positions on the vehicle.

  Note: All mount points on the vehicle must be used when fitting a Flexiglass Tray.
- 2 Refer to mount diagrams on **Page 2** which illustrates standard part useage for mounts on Mahindra and Flexiglass Tray.
- 3 Remove the filler transit stay from the mid-rear mount area.
- 4 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 2.

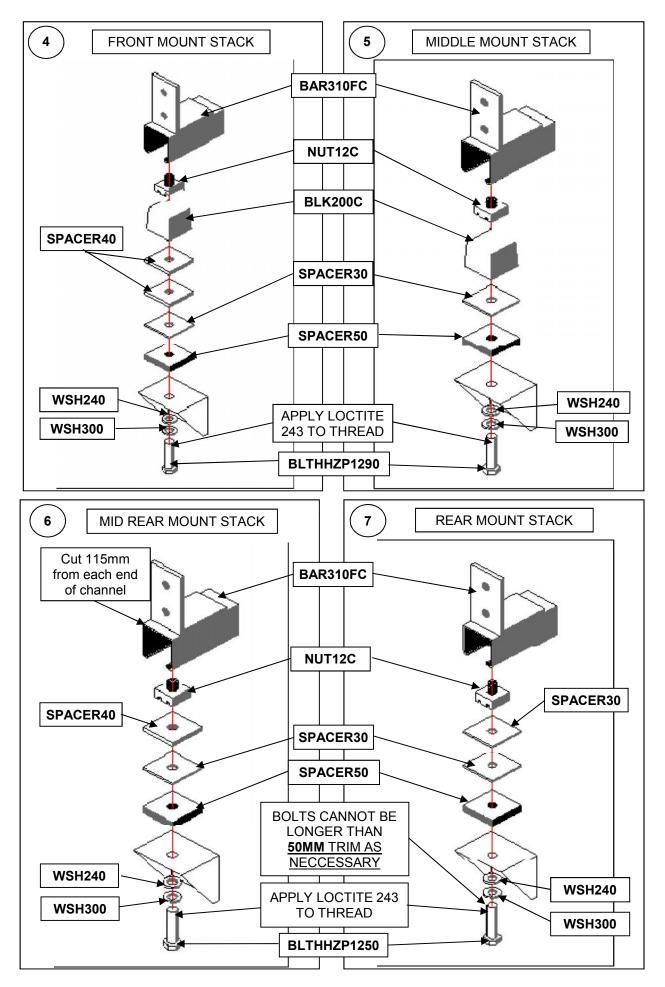
**Note:** The front mount will share bolt holes with the handbrake spreader pully bar. Chock the vehicle and relax the handbrake before loosening the two M10 bolts that secure the cross bar. This will allow the **BLTHHZP1290** bolts to be pushed though the holes more easily.

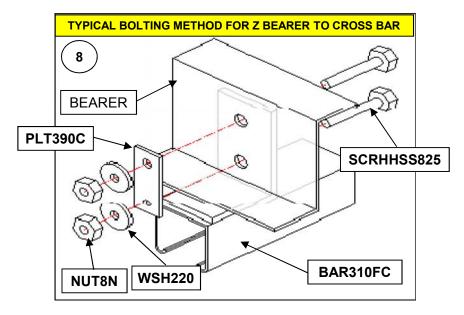


- With all parts in place and the bolts still loose check the <u>front and rear mounts</u> are central over the chassis by measuring from the inside of one mount cleat to the inside of the <u>opposite</u> chassis rail. Repeat this for the other mount cleat and rail, sliding the mounting cross bar "to and fro" until the measurements are equal. See **ILL 2**.
- 6 Tighten the four bolts securing the mount bars to the chassis mounts front and rear.
- 7 Place a length of **ALUM10** or similar between the vertical faces on one side of the front and rear mounting cross bar cleats and clamp it to them. See **ILL 3**.
- 8 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:** I his ensures that all four bars are now central and in line with each other.
- **9** Tighten the four bolts securing the middle and mid-rear mounting cross bars.



- 10 Place the Flexiglass Tray in place on the mounts.
  - **Note:** There must not be more than 700mm overhang of the tray bearers from the rear **mounting position**.
- 11 The front section (Z Bearer) of the tray needs to be a least 25mm back from the cab to allow for chassis twist.



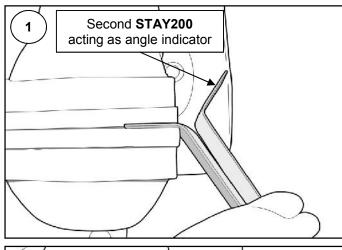


- 12 Once tray is lined up drill 21/64" Holes into the bearers using the mounting cross bar as a guide. See ILL 8.
- 13 Secure tray to the bearers as shown in the diagrams above.

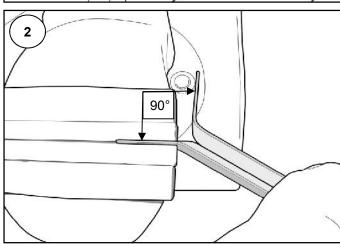
### **STAY MODIFICATION**

About 1/3 of tray fits will require a shorter mudguard stay than the **STAY200**, supplied, to accommodate fuel fillers etc. In those cases two of the **STAY200**'s will require modifying in the following manner.

Clamp the bottom end (large diameter hole) of the STAY200 in a vice.
See ILL 1.



2 Use a second stay as a guide to staighten the bottom end, use the guide stay to achieve about 90° between the two ends. See ILL 2.



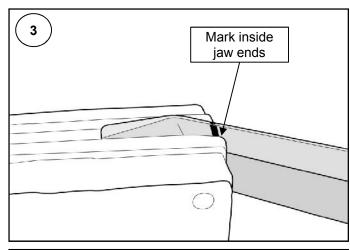
3 Measure from the inside of the bottom bend. About 255 - 260mm towards the top and make a mark.

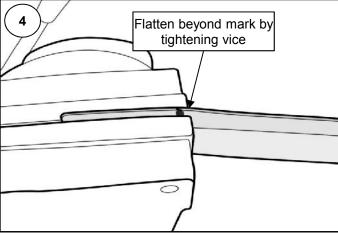
Clamp the top end into the vice with the mark inside the end of the jaw.
See ILL 3.

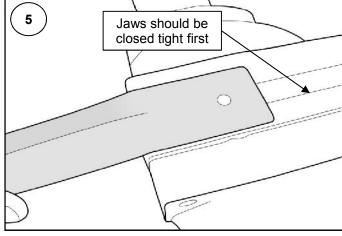
5 Press end flat by tightening vice jaws. See ILL 4.

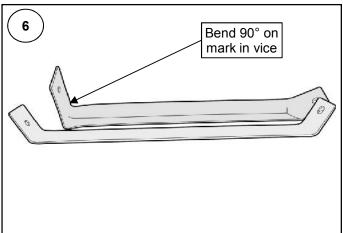
6 Lightly hammer the last bit of distortion out on the tightened jaws of the vice. See ILL 5.

7 Clamp in the vice and bend the flattened end 90° at the mark to make the shape shown in ILL 6.

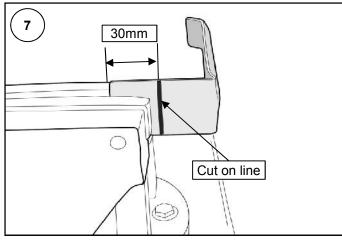




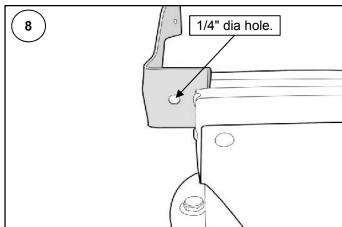


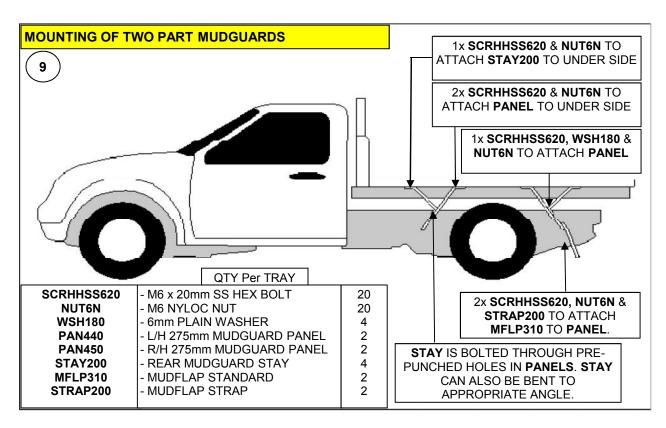


8 Shorten the newly bent end by about 30mm. See **ILL 7**.



- 9 Drill a 1/4" hole in the middle of the new end. See ILL 8.
- **10** Remove sharp edges and corners with a file.





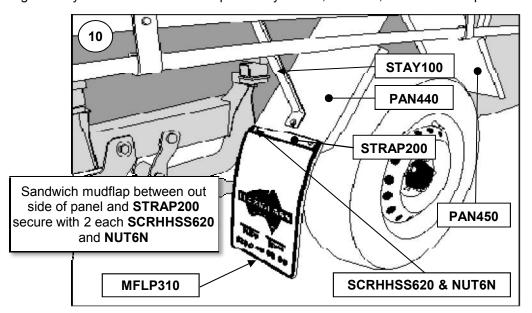
14 The stays are mounted to the mudguards in pre-drilled holes using 1 of SCRHHSS620, WSH180 & NUT6N.

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

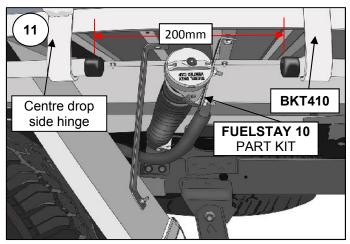
- **16** Attach the other end of the stay to the underside of the tray using same method but with only one fixing.
- 17 Attach both MFLP310 mud flaps to the mudguards using 4 of SCRHHSS620 & NUT6N as well as 2 of STRAP200 as shown in the diagram below.

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



- **18** See **ILL 11**. Cut a section of rope rail out about 200mm long behind the centre hinge.
- 19 Fit a BKT410 over the rope rail and fasten to the side coaming with SCRHHSS625 & NUT6N drill and rivet from behind with a RIVET200.
- 20 Fit the KIT10 to the filler neck as shown, do not fully tighten. Move the neck and bracket until the bracket hole is positioned over a plank rib while ensuring the hose does not kink.

Note: The flat bar in KIT10 is not required.



- 21 Use the bracket hole as a guide to drill a 1/4" hole through the rib flange and attach it with a SCRHHSS620 & NUT6N fully tighten all nuts and bolts on the bracket and clamp.
- 22 As tail lights and licence plate fixtures are permanently provided on the chassis, detail and clean the tray for delivery to the client.