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#### EAM111SY

REPLACES: 16.01.18 REVISED: 20.11.20

#### FITTING INSTRUCTIONS MITSUBISHI PAJERO SPORTS 01/16 ON BIG TUBE PROTECTION BAR VEHICLE FRONTAL PROTECTION SYSTEM (VFPS) FOR AIR BAG & ADR COMPLIANT VEHICLES

Check installation hardware before commencing.

- 1. Open bonnet.
- 2. Remove steel under bodyguard. Completely remove two 12mm head bolts at front, loosen only two 12mm head bolts at rear and remove from vehicle.
- 3. Remove twelve plastic screw clips from grille cover panel and remove plastic panel. See figure 1.
- 4. Remove one black plastic push pull clip from top of grille beside headlight per side and undo camera plug. Pulling gently forward on lower grille to release clips from bumper and remove grille from vehicle. **See figure 2**
- 5. Remove three 10mm head bolts from top of bumper between headlights. Remove four 10mm head screws from front wheel arch, and two push/pull clip from underside of bumper.
- 6. Gently lever out the fog light surrounds by unclipping from behind the bumper while pulling on the front. Remove one 10mm head bolt holding the bumper onto the metal stay under each surround. **See figure 3.**
- 7. Unplug the parking sensor and fog light looms from next to the radar system. Unplug the headlight washer system at the T piece (which will drain water) and gently pull the bumper wings outwards and forwards to remove the bumper.
- 8. Remove vertical bumper stay, two 10mm head nuts (per side). See figure 4.
- 9. Remove air dams from each side
- 10. Remove five 14mm head bolts from front cross member and remove bumper reinforcement.
- 11. Drill 25mm hole through passenger side chassis as shown in **figure 5. Blow filings clear and treat all exposed metal with a rust inhibitor.** Fit 3/8 x 2 bolt, spring washer and flat washer (supplied) through the drilled hole and out the existing hole. Slide 30mm spacer tube (supplied) onto the bolt.
- Place 3/8 x 4 inch bolt, flat washer and 58mm tube spacer (supplied) into chassis rail per side as shown in figure 6.
- 13. Fit ECB steel mounting brackets over cross member to outside of chassis rail using bolts supplied. One M10 x 1.25 x 40 bolt, spring washers and flat washer (supplied) in front hole of chassis rail into captive nut. One M10 flat washer, spring washer and 3/8 nut (supplied) in rear hole. Flat washer spring washers and nut (supplied) onto 3/8 x 4 inch bolt in rail.



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- 14. Fit ECB steel mounting gusset onto inside of steel mounting bracket to front cross member using one M10 x 1.25 x 40 bolts, flat washer, spring washers (supplied) (per side) into captive nuts and one M10 x 40 bolt flat washer, spring washer and nut and washer on wire (supplied)(per side) into inside hole. Two 10mm x 30 round spacers between mounting gusset and bumper support(supplied) per side.
- 15. Use four M10 x 1.25 x 40 bolt, flat washer, spring washer and nuts (supplied) to secure the mount to the gusset piece. Once all bolts are fitted align mount to front of vehicle and **tighten all bolts. See figure 7.**
- 16. Trim air dam to not interfere with the mounts.
- 17. Refit the air dam into position using original equipment.
- 18. Disconnect indicator and parking lights on vehicle. Install ECB quick click wiring harnesses (supplied) between disconnected harness and indicator / park lights on vehicle. Run wiring out from under lights ensuring clearance from sharp edges and moving parts.
- 19. Remove wiring loom for sensors and fog lights from bumper. Install Quick click harness to connector and ensuring clearance from sharp edges and moving parts **See figure 8.**
- 20. Check template for correct sizing and carefully cut out. Using ECB bumper cut template (supplied), mark out bumper for cutting. Use masking tape to avoid damaging paint work when cutting bumper. Attach 3mm clip lock trim (supplied) to trimmed edge. See figure 9.
- 21. Fit parking sensor clips into the bullbar and clip in parking sensors.
- 22. Remove camera from rear of grille badge. Install camera into centre opening of Protection bar. Using camera mounts as a guide, Drill two holes 6mm through protection bar. Install two 3/16 PK screws, flat washers and nyloc nuts. Tighten all bolts.
- 23. Run wiring loom along the bullbar allowing enough slack in the centre to attach to the vehicle plugs when the bar is fitted.
- 24. Attach ECB fog light bracket only to protection bar. Place M6 x 20 bolts, spring washers (supplied) through light mount from inside and attach nut to top. Slide assembly into light mount in Protection bar and centralize light to hole. **TIGHTEN FIRM ONLY.**
- 25. Refit bumper to vehicle using original equipment in the reverse of step 5. Re fit the headlight washer system.
- 26. Trim slots into the lower grille to fit the mounts through and refit to vehicle.
- 27. Fit ECB LED indicator / park lights into protection bar as per instructions supplied with the LED indicator kit. See figure 10.
- 28. Attach 6mm clip lock trim (supplied) to top of ECB protection bar. **NOTE**: Trim off lower edge on an angle so trim will sit flush with end of protection bar. **See figures11, 12 and 13.**
- 29. Fit ECB protection bar to outside of steel mounting brackets using three M12 x 40 bolts, flat washers, spring washers and nuts (supplied) per side. Align protection bar to front of vehicle and **tighten all bolts**. See figures 14 and 15.
- 30. Plug in the wiring looms from steps 4 and 7.



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- 31. Connect and check indicator / park lights, fog lights, parking sensors and sonar box for correct operation.
- 32. Refit upper grille in the reverse steps of 4.
- 33. Fit ECB side under bodyguard using three M6 x 30 bolts flat washers and nyloc nuts (supplied) per side. Do not tighten bolts until all bolts are fitted.
- 34. Fit ECB centre under bodyguard using four M6 x 20 phillips head bolt flat washers and nyloc nuts (supplied) across the front and two M6 x 30mm flat washers and nyloc nuts (supplied) on the sides. **Do not tighten bolts until all bolts are fitted.**
- 35. Refit plastic guard liner and mark and trim of excess liner, secure to under bodyguard with self tapers supplied. When trimming liner remove humps at lower edge so liner fits flush. **CAUTION:** Ensure placement of screws (supplied) on passengers side is away from washer bottle. Screws placed too high could create a rubbing issue on the bottle. **See figure 16**
- 36. Refit steel under bodyguard using original equipment in the reverse step of 1.

#### ENSURE NUMBER PLATE IS CLEARLY VISABLE

**Note:** When fitting/refitting the licence plate to the vehicle, ensure there is no obstruction to licence plate vision in accordance with local authorities. If required relocate licence plate to an alternate location.

#### **Further VFPS Notes:**

- a) Do not attach VFPS to the vehicle using anchorages not intended for this purpose (e.g. engine mounting bolts).
- b) Do not use this product for any vehicle make or model, other than those specified by the VFPS manufacturer.
- c) Do not remove the plaque or label from the VFPS.
- d) Do not modify the structure of the VFPS in any way.
- e) No accessory or fitment should project forward of the VFPS forward profile.
- f) ENSURE THESE INSTRUCTIONS ARE LEFT WITH VEHICLE OWNER AND/OR OPERATOR.

#### **IMPORTANT INFORMATION**

Periodically check bolts and nuts for correct tightness, especially if travelling on rough roads



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#### FITTING KIT

1 – Left mounting bracket	8 – M6 x 30mm bolts	
1 – Right mounting bracket	24 – M6 flat washers	
1 – Pair side under bodyguards	2 – M6 spring washers	
1 – Centre under bodyguard	10 – M6 nyloc nuts	
1 – Pair Steel mount gussets	2 - M6 nuts	
4 – M10 x 30 steel round spacer washers	$2 - 3/16 \text{ x} \frac{3}{4} \text{ stainless PK screw}$	
2 - 10 NB tube spacer 58 mm long	4 - 3/16 stainless flat washers	
2 - 10 NB tube spacer 30 mm long	2-3/16 nyloc nuts	
6 – M12 x 1.75 x 40mm bolts	4 – 8 gauge 18-25 button head self-tapping screws	
12 – M12 flat washers	1 – ECB LED Indicator / Park light kit	
6 – M12 spring washers	1 – Quick Click Kit (IC16MIPAHIPDH)	
6 – M12 x 1.75 nuts	2 – Fog light surrounds	
$2-3/8 \times 4$ inch bolts	1 – Pair fog lights	
$2 - 3/8 \ge 2$ inch bolts	1 – Quick Click kit (IC10D40S1004ECBH)	
4 - 3/8 nuts	1-2500 length 6mm clip lock trim	
12 – M10 x 1.25 x 40mm bolts	2-600 length 6mm clip lock trim	
24 – M10 flat washers	2-400 length 3mm clip lock trim	
16 – M10 spring washers	2 - 300mm length of 3 core wire	
6 – M10 x 1.25 nuts	12 – Solder joiners	
2 - M10 nut and washer on 300mm wire	2 – 200mm lengths 10mm split loom tubing	
6 – M6 x 20mm bolts		



Figure 1

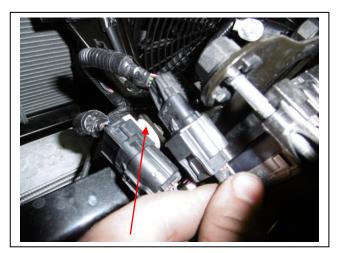


Figure 2



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Figure 3



Figure 4



Figure 5



Figure 6



Figure 8



Figure 7



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Figure 9.

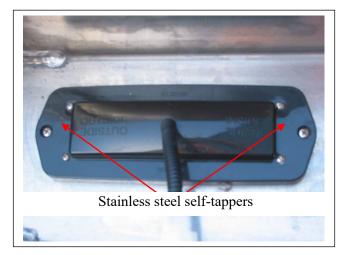
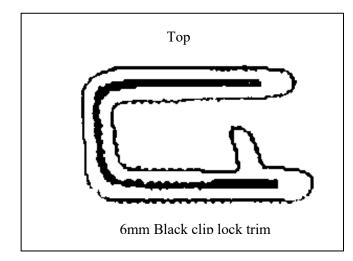


Figure 10.





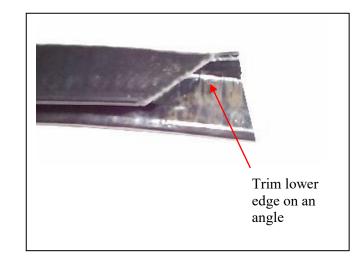


Figure 12.

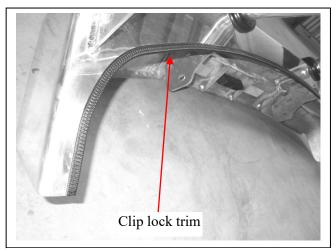


Figure 13.



Figure 14



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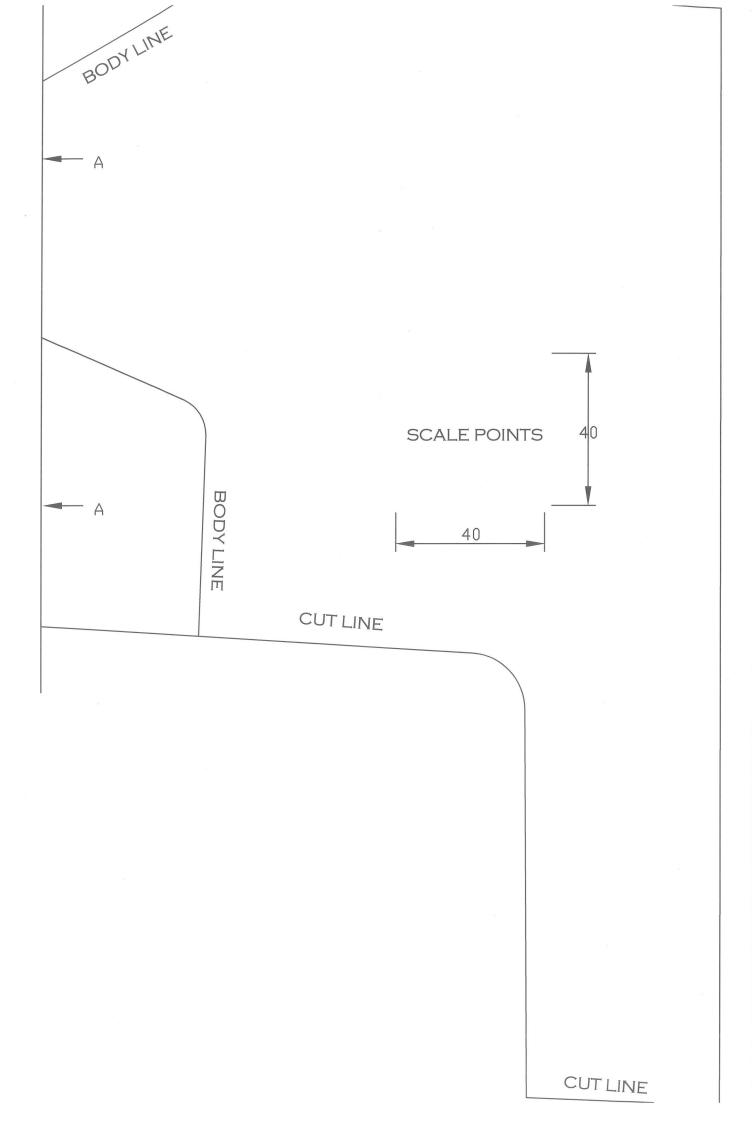
Figure 15



Figure 16: liner trimmed to fit guard

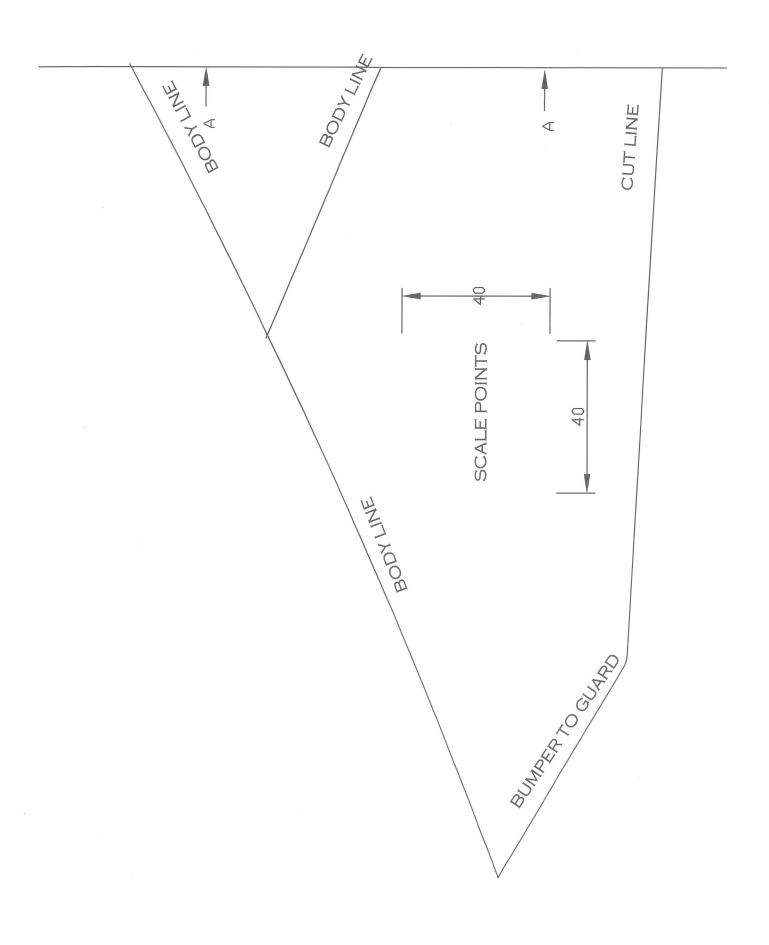


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# We value your comments

Dear Fitter,

ECB would like to know how you went with the installation of this product. We value your comment and may need to contact you to clarify some details so please complete your contact details clearly.

We would appreciate if you could complete as many of the following details as possible.

Your Name:	Your contact No.		
Product Part No.	Product Invoice No.	Product Invoice No.	
Product Description:	Make, model, and year of vehicle:		
Product Work Order No.	Company your from/	Company product purchased from:	
Date of Fitment://	Yes	No	
Was the fitting hardware supplied complete?			
If no what was not supplied			
Did the installation go well?	Yes	No	
Please provide comments			

Please draw diagrams if you need to.

Post to Reply Paid 122 PO Box 122 Margate QLD 4019 Fax to (07) 3283 1168



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# DESPATCH CHECKLIST EAM111SY

Work Order #	See other side of
Finish:	this page for
Transport:	photos of all
Due Date:	mounts

- OC.....1 Set of Steel mounting brackets.
- OC.....1 Pair Steel gussets
- OC.....1 Pair Under body guards
- OC.....1 Centre under body guard
- BK.....1 Bolt Kit.
- BK.....1 LED ECB indicator / park light kit.
- BK.....1 Quick Click Kit (IC16MIPAHIPDH)
- BK.....1 Fog light kit
- BK.....2 Fog light surrounds
- BK.....1 ECB Quick click wiring harness (IC10D40S1004ECBH Reverse Polarity)
- BK....1 2500 mm length 6mm clip lock trim
- BK....2-600 mm lengths 6 mm clip lock trim
- BK....2-400 mm lengths 3mm clip lock trim
- OC.....2 ECB Overriders Fitted to Bar
- OC.....4 6mm Air Vents Fitted to Bar





**Is this product "the best it can be" Yes** If **NO** fix before continuing

All parts <u>checked</u> and <u>completed</u> by:

 Date//
 Date//
 Date//

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