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> REPLACES: 06.10.16 REVISED: 09.01.19

EAM112SY

FITTING INSTRUCTIONS MITSUBISHI PAJERO SPORTS 01/16 ON WINCH 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 body guard. 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 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 through the drilled hole and out the existing hole. Slide 30mm spacer tube onto the bolt.
- 12. 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 winch mounting bracket onto front of cross member using four M10 x 1.25 x 40 bolts, spring washers, flat washers (supplied) and 10mm spacer plate with the 3 mm spacer facing up (supplied). **Finger tighten only**
- 14. 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, 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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- 15. Use four M10 x 1.25 x 40 bolt, flat washer, spring washer and nuts (supplied) to secure the mount to the winch frame piece. Align mount to front of vehicle **and tighten all bolts. See figure 7.**
- 16. Fit fairlead and winch as per manufactures instructions.
- 17. Fit control box onto ECB steel control box mount and fit mount to winch cradle using bolts supplied. Two M10 x 1.25 x 30 bolts, flat washers, spring washers and nuts (supplied).
- 18. Trim air dam to not interfere with the mounts.
- 19. Refit the air dam into position using original equipment.
- 20. Splice ECB wiring harness into wiring harness behind headlight using cable locks (supplied). Ensure harness is clear of sharp edges and moving parts.
- 21. Remove wiring loom for sensors and fog lights from bumper. Extend outer sensor wires as shown in **figure 8.** Use 3 core wire and solder joiners (supplied). Cover wiring with split loom (supplied).
- 22. 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 (supplied) to trimmed edge. **See figures 9.**
- 23. Fit parking sensor clips into the bullbar and clip in parking sensors.
- 24. 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.
- 25. Run wiring loom along the bullbar allowing enough slack in the centre to attach to the vehicle plugs when the bar is fitted.
- 26. Refit bumper to vehicle using original equipment in the reverse of step 5.
- 27. Trim the lower grille to fit the mounts and winch and refit to vehicle.
- 28. Fit ECB LED indicator / park lights into protection bar as per instructions supplied with the LED indicator kit. **See figure 10.**
- 29. 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 figures 11, 12 and 13.**
- 30. 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.**
- 31. Fit ECB protection bar to outside of steel mount using bolts supplied. 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.
- 32. Plug in the wiring looms from steps 4 and 7.



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- 33. Connect and check indicator / park lights, fog lights and parking sensors for correct operation.
- 34. Refit upper grille in the reverse steps of 4.
- 35. Fit ECB side under body guards using three M6 x 30 bolts flat washers and nyloc nuts (supplied) per side. **Do not tighten bolts until all bolts are fitted.**
- 36. Refit plastic guard liner and mark and trim of excess liner, secure to under body guard 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 for washer bottle. Screws placed too high could create a rubbing issue on the bottle. **See figure 16**
- 37. Refit steel under body guard 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

FITTING KIT

1 – Left mounting bracket	2 – M6 x 20 bolts	
1 – Right mounting bracket	10 – M6 x 30mm bolts	
1 – Pair Steel mount gussets	22 – M6 flat washers	
1 – Winch mounting bracket	2 – M6 spring washers	
1 – Control box mount	10 – M6 nyloc nuts	
1 – Winch frame spacer plate	2 – M6 nuts	
1 – Pair Under body guards	2 – 3/16 x 3/4 stainless PK screws	
2 – 10 NB tube spacer 30 mm long	4 – 3/16 Stainless flat washers	
2 – 10 NB tube spacer 58 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	
10 – 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	1 – Fog light kit	
$2-3/8 \times 4$ inch bolts	4 – Fog light surrounds	
$2-3/8 \times 2$ inch bolts	1 – Quick Click kit (IC16MIPASPFLECBH)	
4 - 3/8 nuts	1 – 2500mm length 6mm clip lock trim	
12 – M10 x 1.25 x 40mm bolts	2 – 400mm lengths 3mm clip lock trim	
2 – M10 x 1.25 x 30mm bolts	1 – 600mm length 6mm clip lock trim	
24 – M10 flat washers	2 – 300mm lengths 3 core wire	
16 – M10 spring washers	12 – Solder joins	
6 – M10 x 1.25 nuts	2 – 200mm length 10mm split loom tubing	
2 – M10 nut and washer on 300mm wire		



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Figure 1

Figure 2

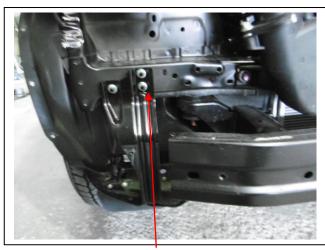


Figure 3



Figure 4



Figure 5

Figure 6:



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Figure 7

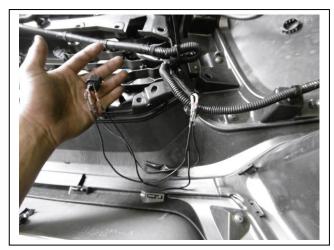


Figure 8.



Figure 9.

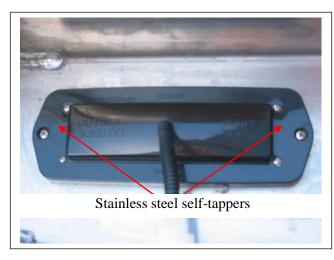


Figure 10.

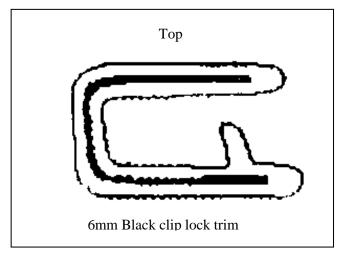


Figure 11.



Figure 12.

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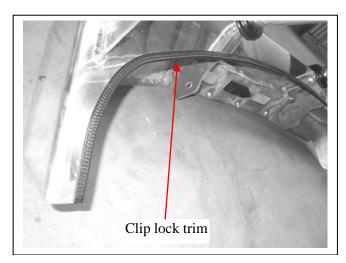


Figure 13.



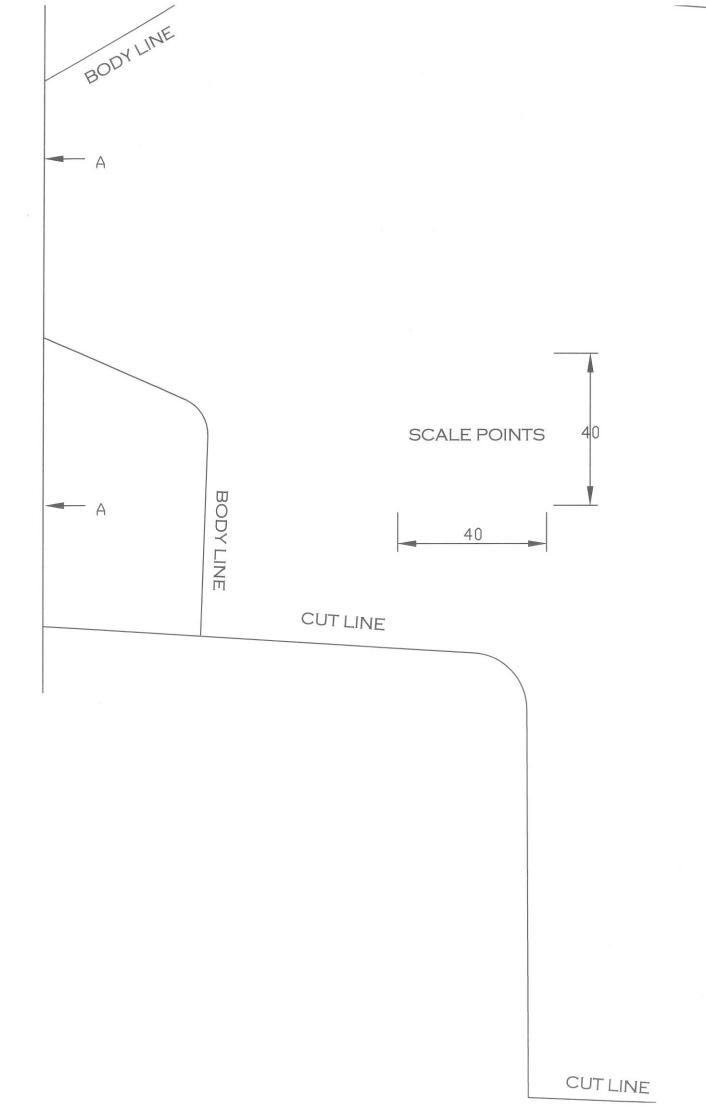
Figure 14



Figure 15



Figure 16: liner trimmed to fit guard





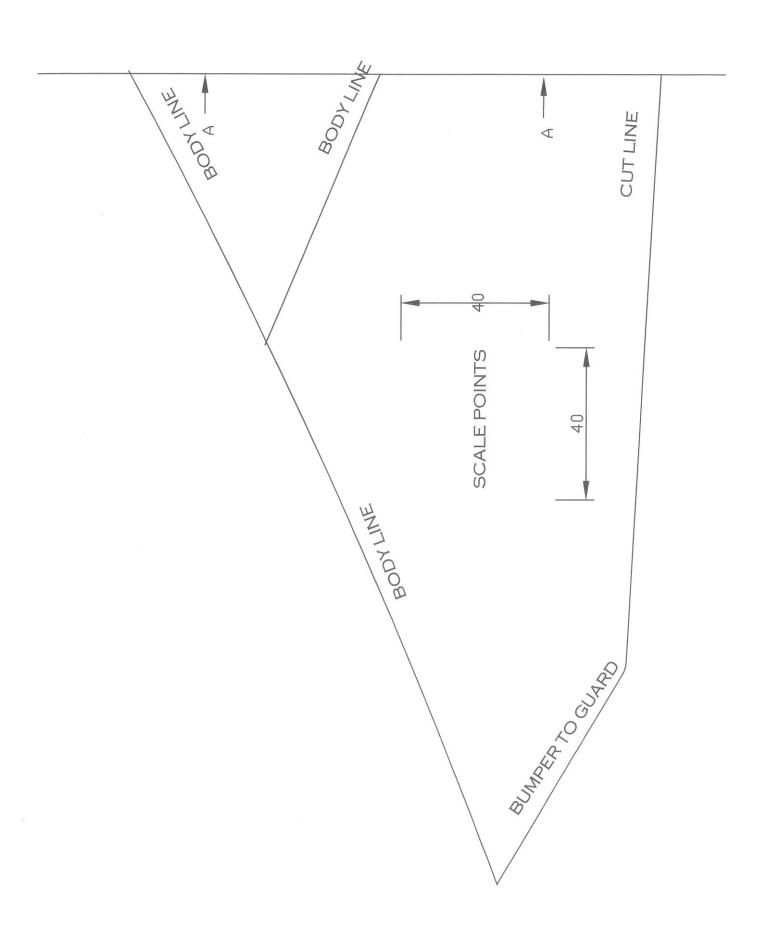
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We value your comments

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 Invoice No. Make, model, and year of vehicle: Company your from/Company product purchased from:	
Product Part No.		
Product Description:		
Product Work Order No.		
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		

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DESPATCH CHECKLIST EAM112SY

Work Order #		See other side of
Finish:		this page for
Transport:		photos of all
Due Date:		mounts
OC1 – Left mounting	bracket.	
OC1 – Right mounting	g bracket.	
OC1 – Winch Mount		
OC1 – Winch Control	mount	
OC1 – Winch Mount S	Spacer	
OC1 – Pair outer unde	r body guards	
BK1 - Bolt Kit.		
BK1 – LED ECB indic	cator / park light kit. (ICLE	ED105ECB)
BK1 – Quick click har	ness kit (IC16MIPAHIPDI	H)
BK1 – ECB fog light k	kit	
BK1 – Quick click kit	(IC16MIPASPFLECBH)	
BK1 - 2500 mm length	h 6mm clip lock trim	
BK2 - 600 mm length	s 6 mm clip lock trim	
BK2 - 400 mm length	•	
OC2 – ECB Overrider		
OC4 – 6mm Air Vents	- Fitted to Bar	/
		Wrapper's initials / Checker initials
	oduct "the best it can before continuing ed by:	be" Yes
1	_ ,	
Nut and bolts:		Date//
Order control:		Date//
Final wrap check:		Date//



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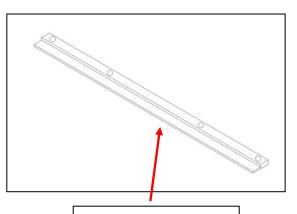
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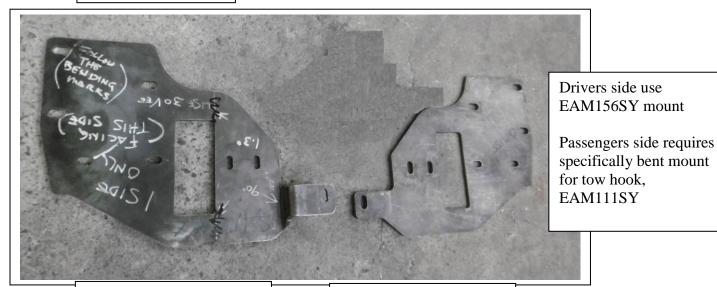


Control box mount same as EAM158SY

Winch cradle same as EAM158SY

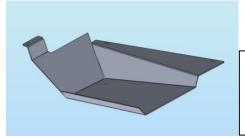


10mm + 4mm flat top winch spacer plate



Drivers side – welded plate underneath in photo

Passengers side - welded plate underneath in photo



1 pair (opposite folds) of underbelly guards

Wrapper's initials / Checker initials



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