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29 Snook St Clontarf QLD 4019 Australia Po Box 122 Margate QLD 4019 Australia

#### EAM104SY

#### REPLACES: 06.06.12 REVISED: 15.01.18

#### FITTING INSTRUCTIONS

# NW PAJERO 11/11- BIG TUBE™ PROTECTION BAR WITH FOG LIGHTS AND HEADLIGHT WASHER OPENINGS VEHICLE FRONTAL PROTECTION SYSTEM (VFPS) FOR AIR BAG & ADR COMPLIANT VEHICLES

Check installation hardware before commencing.

**NOTE**: On drivers side of Exceed model, there is a siren box mounted to the outside of the chassis rail. The mounting bolts, although they look like rivets are actually M8 bolts with a break away section for security. To remove these bolts, drill with small drill bit and use an "easy out" to remove threaded section. Or a second method is, with small chisel, place a slit in the outer edge of the rivet section. Use the chisel or a punch to rotate the rivet section anticlockwise to undo the bolt. Remove from vehicle. **See figure 1 and 2.** 

- 1. Remove grille. Seven plastic clips along top and gently pull up to release three plastic clips under.
- 2. Remove steel protection guard from vehicle tow bracket area.
- 3. Remove front of inner guards to allow access to rear of bumper. Two plastic screw clips and one 10mm head bolt (flare to inner guard), three plastic clips (chassis rail) and two plastic clips on lower inner guard (each side).
- 4. Disconnect fog lamp wiring harness (passenger's side under grille, beside headlamp).
- 5. Disconnect headlight washer hose, (driver's side under grille, beside headlamp) by squeezing rippled edges of tube joiner. Drain into clean bucket or similar to allow re-use of fluid.
- 6. Remove bumper skin. Two plastic clips and two 10mm bolts in lower centre where steel protection guard removed, two plastic clips under number plate mounts, one 10mm head self tapper (each side) at top side bumper returns (access under flare), six plastic clips along top centre (where grille removed to access), and two 10mm head bolts under ends of bumper to lower bumper support. Gently ease flare away from vehicle until clips release, taking care not to damage flare. **See figure 3.** Carefully pull top edge of bar down to release from positioning lug (10mm head bolt retaining clip at top side bumper returns)and pull out away from guard to release plastic clips. Do not discard any clips or bolts.
- 7. Using hole-marking template, mark where rear steel mounting bracket is to be drilled on inside of chassis rail. Line up template with inside bottom of tow bracket on vehicle chassis and mark hole, **see figure 4.**
- 8. Centre punch mark and drill 10mm hole through inside edge of chassis only. Treat exposed steel. See figure 4.
- 9. **On Exceed model only:** Remove siren box from outer chassis rail on drivers side of vehicle.
- 10. Place outer chassis washer plate into position, flat on outside of chassis rail. **See figure 5.** On drivers side, align M8 holes. Lower hole should match position of hole previously drilled on other side of chassis rail. Centre punch mark and drill 10mm hole. Using a die grinder or similar, enlarge top and bottom holes only to allow fitment of chassis spacer tubes. **See figure 6. Note: Blow filings clear and treat all exposed metal with paint or a rust inhibitor.**
- 11. Install outer chassis plates and chassis spacers into pre drilled holes using 3/8 x 6 bolt, spring washer and flat washer. Note: top inner holes not yet drilled. This hole drilled in step 11.



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- 12. Drill 10mm hole entirely through chassis using front slot hole in steel mounting bracket as a guide. Drill in centre of slot hole for if any adjustment is necessary.
- 13. Insert 40 x 6 round alloy washer plate (supplied) between chassis and steel spacer welded to steel mounting bracket **See figure 7. TIGHTEN ALL STEEL MOUNTING BRACKET BOLTS/NUTS.**
- 14. Using 10mm hole in steel mounting bracket as a guide. Drill 10mm hole in lower cross member. Treat exposed metal. Use 3/8 x 1 1/4 bolt, flat washers, spring washers and nut (supplied).
- 15. Repeat for other side, ensuring mounts are aligned in same position and inner measurement of mounts matches outer measurement on protection bar.
- 16. **On Exceed model:** Refit siren box to outside of drivers chassis using M8 x 30 bolts, spring washers and flat washers. On rear hole, install 40mm alloy washer between siren box and chassis rail.
- 17. Trim outer edge of bumper grille to allow protrusion of ECB steel mounting brackets. See figure 8.
- 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 original equipment fog light from bumper cover.
- 20. Connect ECB Quick Click fog light wiring harness (supplied) into original wiring harness.
- 21. Trim lower sections from front bumper cover. **See figure 9.** Trim line is across bottom where flare meets bumper, from front corner of flare to top corner where original equipment under body guard fits.
- 22. Refit original bumper assembly and grille to vehicle as per reverse of steps 1-6. Feed wiring harnesses through fog light holes to assist in later connection.
- 23. Fit ECB LED indicator / park lights (supplied) into protection bar as per instructions supplied with the LED indicator kit. **NOTE: Ensure park light is to outside. See figure 10**
- 24. Attach ECB fog lights 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. NOTE:** Do not fit ECB light trims to protection bar at this point. **See figure 11.**
- 25. Fit 6mm clip lock trim to rear of protection bar. **NOTE:** Trim off lower edge on an angle so trim will sit flush with end of protection bar. **See figures 12, 13 and 14.**
- 26. Attach protection bar to outside of steel mounting brackets. Use six ½ x 1 ½ bolts washers spring washer and nut (supplied). **DO NOT TIGHTEN.**
- 27. ALIGN PROTECTION BAR WITH VEHICLE. See figures 15 and 16.
- 28. TIGHTEN ALL BOLTS
- 29. Connect and check operation of ECB indicator / park lights, ECB fog lights and headlamp washers. Adjust headlamp washers if required.
- 30. Aim ECB fog lamps at low beam height. **TIGHTEN IN POSITION**.

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- 31. Attach ECB fog light trims (supplied) to protection bar.
- 32. Reattach steel protection guard to vehicle.
- 33. Remove attachment clip from lower bolt in bumper (for inner guards) and attach to ECB under body guards. Attach ECB under body guards to rear edge of ECB Protection Bar using three M6 x 20 bolts, flat washers and nyloc nuts (supplied) (per side). Finger tighten only. Attach rear of under body guard and inner guards to body of vehicle where lower bar mount brackets where removed using M6 x 25 bolts, spring washers and flat washers. Holes will need to be drilled in inner guard to allow fitment. Fit flare, plastic bumper cover and inner guard to ECB under body guard on outer corner. **Tighten all bolts. See figure 17.**
- 34. Fit 6mm clip lock trim to air vent cut outs in front of protection bar. Start at top centre and feed into corners. Trim off end slightly longer than needed and force in at top to create a neat finish. **See figure 18. NOTE:** Ensure ends are cut square.
- 35. Fit 6mm clip lock trims to vents in skirt. When fitting trim on angle to suit hole and leave the trim slightly longer than required for hole, to allow a snug fit. **See figure 19.**

#### 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 – Pair Steel mounting brackets.             | 3- M8 flat washers                                |
|---|---|
| 1 – Pair Under body guards                    | 8 – M6 x 20 bolts                                 |
| 2 – Outer Chassis Plates                      | 4 – M6 x 25 bolts                                 |
| 3 – 40 x 11 x 6 round alloy washer plates.    | 16 – M6 flat washers.                             |
| 4 – 78mm long 10 NB chassis tube spacers.     | 6 – M6 spring washers.                            |
| 4 – 3/8 x 6 bolts                             | 2 – M6 nuts                                       |
| $2 - 3/8 \times 1 \frac{1}{4} \text{ bolts}$  | 6 – M6 nyloc nuts                                 |
| 12 - 3/8 flat washers.                        | 1 – ECB LED Indicator / Park light kit.           |
| 6 - 3/8 spring washers.                       | 1 – Quick Click Indi / Park kit (IC10KLUGECB100H) |
| 6 - 3/8 nuts.                                 | 1 – ECB fog light kit.                            |
| $6 - \frac{1}{2} \times 1 \frac{1}{2}$ bolts. | 1 – Quick Click fog wiring kit (IC10D40S1004ECBH) |
| $12 - \frac{1}{2}$ flat washers.              | 2 – ECB fog light trims                           |
| $6 - \frac{1}{2}$ spring washers.             | 1 – 2100mm length 6mm clip lock trim              |
| $6-\frac{1}{2}$ nuts.                         | 2 – 600mm length 6mm clip lock trim               |
| 3 – M8 x 30 bolts                             | 2 – 450mm length 6mm clip lock trim               |
| 3 – M8 spring washers                         |   |

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**Figure 1:** Using chisel to place cut in edge of security bolt.



**Figure 2:** View of security bolt when removed from vehicle.



Figure 3



Figure 4



Figure 5: Placement of outer chassis washer



Figure 6 Enlarging outer chassis hole to 17mm for chassis spacer



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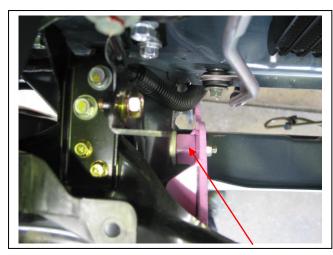


Figure 7

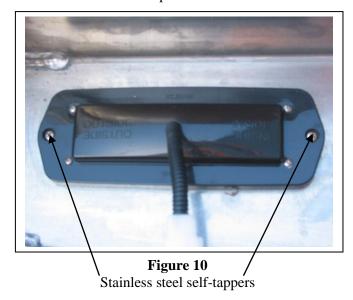
6mm alloy chassis spacer

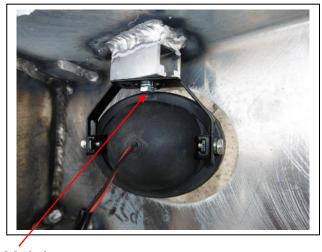


**Figure 8:** Trim grille opening to allow for mount protrusion



**Figure 9:** Cut line from flare to inner corner of plastic bumper cover.





M6 bolt Figure 11

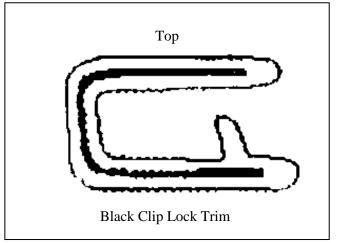


Figure 12

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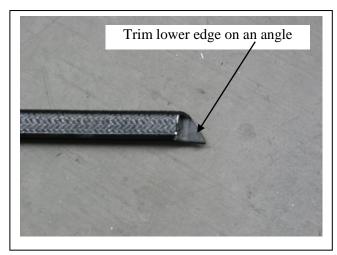


Figure 13



Figure 14



**Figure 15** – Front view shown



Figure 16 – Side view shown



**Figure 16** – Under body guard fitted.



Figure 17



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Figure 18



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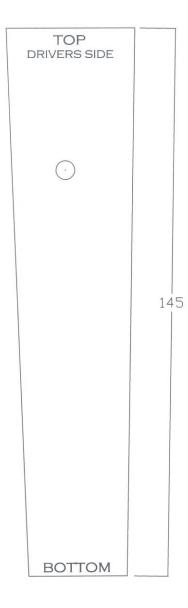
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#### HOLE MARKING TEMPLATE

Cut out and line up top with bottom of tow bracket.





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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 Description:   | Make, model, and year of vehicle:                 |  |  |  |
| Product Work Order No.   | Company your from/Company product purchased from: |  |  |  |
| Date of fitment://  Was the fitting hardware supplied complete?  If no what was not supplied | Yes No  |  |  |  |
| Did the installation go well?  Please provide comments                                       | Yes No  |  |  |  |
| Please draw diagrams if you need to.   |   |  |  |  |

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# DESPATCH CHECKLIST EAM104SY

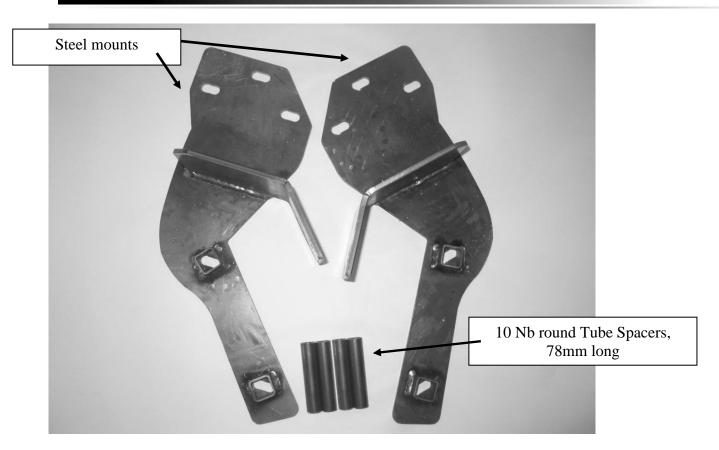
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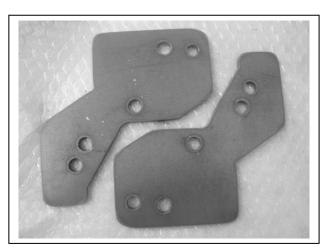
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|   | Finish:             |                                |        |  |  |  |
| Т   | ransport:           |                                |        |  |  |  |
|   | ue Date:            |                                |        |  |  |  |
| 0   | 1 – Pair steel mour | nting brackets.                |        |  |  |  |
| 0   | 1 – Pair Alloy und  | See other side                 |        |  |  |  |
| 0   | 2 – Outer chassis p | of this page for               |        |  |  |  |
| Ο   | 1 − Bolt Kit.       | photos of all                  |        |  |  |  |
| 0   | 1 – ECB LED Indi    | cator / Park lights kit.       | mounts |  |  |  |
| Ο   | 1 – Quick Click In  | di / Park kit (IC10KLUGECB100F | I)     |  |  |  |
| Ο   |                     |                                |        |  |  |  |
| Ο   |                     |                                |        |  |  |  |
| 0   |                     |                                |        |  |  |  |
| 0   |                     |                                |        |  |  |  |
| O   |                     |                                |        |  |  |  |
| O   | 2-450mm lengths     | 6mm clip lock.                 |        |  |  |  |
| Ο   | 2 – ECB overriders  | – Fitted to bar.               |        |  |  |  |
| Is this product "the best it can be" Yes/ |                     |                                |        |  |  |  |
| NT4                                       | and halter          | $\mathcal{D}_{\alpha}$         | to / / |  |  |  |
| INUL                                      | and bolts:          | Da                             | te//   |  |  |  |
| Ord                                       | er control:         | Da                             | te//_  |  |  |  |
| Fina                                      | al wrap check:      | Da                             | te//   |  |  |  |



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Outer chassis plates