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> REPLACES: 00.00.00 REVISED: 07.01.14

EAT162SY

FITTING INSTRUCTIONS

TOYOTA PRADO 10/13on ARC™ WINCH PROTECTION BAR WITH FOG LIGHTS VEHICLE FRONTAL PROTECTION SYSTEM (VFPS) FOR AIR BAG & ADR COMPLIANT VEHICLES

Check installation hardware before commencing. Required extra tools: Jigsaw or similar, to cut bumper.

- 1. Lift bonnet.
- 2. Remove grille to radiator cover, 13 push pull plastic clips.
- 3. Remove four 10mm head bolts and two plastic push pull clips from centre and outer grille, lift outer edge to unclip from headlight. Starting from outside edge of grille, lift up on outer clip, then push down on tab of other clips to unclip. Remove fully from vehicle. **See figures 1 and 2.**
- 4. Remove two 10mm head bolts (per side) from inner guards and pull rearward to clear bumper side.
- 5. Disconnect driving lights on passenger's side of vehicle under headlight and headlight washers on driver's side of vehicle (if fitted).
- 6. Remove bumper, one 10mm head bolt from bumper wing (per side), four 10mm head bolts from underside of plastic bumper bar, four plastic push pull clips where grille was removed. Slide fingers behind rear edge of plastic bumper to release from clip where screw was removed and gently pull side of bumper away from vehicle to remove. When released from side, pull forward to release from under headlights.
- 7. Remove centre plastic bash plate, five 10mm head bolts and one plastic push pull clip.
- 8. Remove Alloy cross member. Three 14mm head nuts (per side)
- 9. Using a jigsaw or sharp knife, trim plastic air dams to allow fitment of mounts. See figure 3.
- 10. Using 10mm drill, enlarge holes in top and bottom of crash cans. **See figure 4.** In top of crash cans, enlarge holes to 18mm to accept chassis spacers. **Blow all fillings clear and treat all exposed metal with a rust inhibitor.**
- 11. Fit ECB Steel mounting bracket (supplied) to chassis rail using M8 x 1.25 x 40 bolt, spring washer and flat washer (supplied), M12 x 1.25 x 40 bolt, spring washer and flat washer (supplied) for lower hole and M10 x 40 bolt and washer on 300mm wire, flat washer, spring washer and nut (supplied) to rear hole through rectangular hole further rearward in chassis. **See figure 5. FINGER TIGHTEN ONLY.** At front of chassis, install one steel angle mount (supplied) with chassis spacers inserted into top of chassis and winch bracket mounted to underside of chassis. Assemble using two 3/8 x 5 bolts, flat washers, spring washers and nuts (supplied) through steel angles, chassis spacers and chassis, four M10 x 40 bolts, flat washers, spring washers and nuts (supplied) from steel angles and winch mount to ECB steel mounts. Using original nuts for front of chassis rails, assemble winch support brackets onto front of chassis rails. Bolt to sides of winch frame using four M10 x 40 bolts, flat washers, spring washers and nuts (supplied). **See figure 6.**
- 12. Align mounts to vehicle and **tighten all bolts.** Trim wire from rear bolt and clamp to side of hole to avoid vibration.



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- 13. Install winch into winch frame as per the manufacturer's instructions. Two control box mounts are supplied with the ECB bolt kit, one to suit Warn winches and one to suit Mean Mother winches. Fit winch control box to ECB control box mount (supplied). Install Warn control box mount onto front of winch frame using two M10 x 30 bolts, flat washers, spring washers and nuts (if using). Mean Mother control box mount installs to top of winch frame (as per manufacturers instructions). **See figure 7 and 8.** Do not tighten bolts for fairlead rollers at this time.
- 14. Check area behind cut is free from hoses and wiring.
- 15. Mask area of plastic bumper to be cut using paper masking tape to avoid damage to painted surface. Using attached templates, mark plastic bumper ready for cut. **See figure 9 and 10.** for template placement. Cut bumper using a jigsaw or similar. **CAUTION: Straightness and quality of cut will have an impact on the finish of the final product. Please take care to ensure its correctness.** Fit 3mm clip lock trim to outer cut area of bumper.
- 16. Refit top section back to vehicle using original bolts as per reverse of step 7.
- 17. Splice ECB wiring harness into wiring harness behind headlight using cable locks (supplied). Ensure harness is clear of sharp edges and moving parts.
- 18. Attach wiring to lower leg of channel using zip ties (supplied). **See figures 11 and 12.** Connect ECB Quick Click fog light wiring harness (supplied) into original wiring harness.
- 19. Fit ECB indicator / park lights into protection bar as per instructions supplied with the LED indicator kit. **NOTE:** Ensure park light is to outside. See figure 13.
- 20. 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. See figure 14.** Connect fog lights.
- 21. 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 15, 16 and 17.** Connect to fog light harness. Insert black plugs into parking sensor holes.
- 22. Fit ECB protection bar to outside of ECB steel mounting brackets using six M12 x 40 bolts, flat washers, spring washers and nuts. **FINGER TIGHTEN ONLY.**
- 23. Align ECB protection bar to vehicle. **See figures 18 and 19. TIGHTEN ALL BOLTS INCLUDING WINCH BOLTS.**
- 24. Connect and check indicator / park lights and fog lights.
- 25. Remove M12 bolt from lower mount. Fit ECB outer alloy under body guards to external wing sections of protection bar. Place front of under body guard to top of skirt of protection bar, fit using three M6 x 20 bolts, flat washers and nyloc nuts (supplied) (per side). **See figure 20.** Push inner guard up into guard and trim inner guard level with bottom of under body guard. Using under body guard as a guide, drill holes on lower lip through inner guard with a 6mm drill. Attach using two M6 x 20 bolts, flat washers and nyloc nuts (supplied). **TIGHTEN ALL BOLTS.**

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.

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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	2 – M8 flat washers
1 – Steel winch frame	$4 - 3/8 \times 5$ bolts
1 – Pair winch frame support brackets	4 - 3/8 nuts
2 – Steel angle brackets	2-M6 nuts
1 – Steel Warn control bracket (EAT160SY_A4MS)	14 – M6 x 20 bolts
1 – Steel mother control bracket. (MOTHERCB_B4MS)	24 – M6 flat washers
4 – 81mm long 10 Nb Steel spacer tubes	2 – M6 spring washers
1 – Pair side under body skirts	12 – M6 nyloc nuts
$8 - M12 \times 1.25 \times 40 \text{ bolts}(2 \text{ bolts to be left out for})$	1 – ECB LED Indicator / Park light kit
packaging	
14 – M12 flat washers(4 washers to be left out for	6 – cable locks
packaging)	
8 – M12 spring washers	1 – Pair ECB fog lights (35 watt)
6 – M12 x 1.25 nuts (2 nuts to be left out for packaging)	1 – Quick Click Fog Harness (IC10D40S1004ECBH)
12 – M10 x 1.25 x 40 bolts	4 – Fog light surrounds
2 – M10 x 1.25 x 40 bolt and washer on 300mm wire	1 – 2600mm length 6mm clip lock trim
36 – M10 flat washers	1 – 750mm length 6mm clip lock trim
18 – M10 spring washers	2 – 500mm length 3mm clip lock trim
14 – M10 x 1.25 nuts	15 – 150mm zip ties
2 – M8 x 1.25 x 40 bolts	4 – 27mm plastic insert plugs (ICRTRI-5505)
2 – M8 spring washers	

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Figure 1: Grille outer lower bumper clip

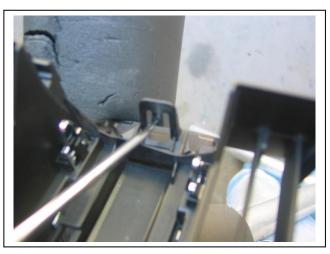


Figure 2: Grille inner lower bumper clip



Figure 3: Trim point on drivers side air dam. Trim Passengers side air dam in same area.



Figure 4: Drill holes to 10mm (3/8). Drill or die grind top to 18mm.

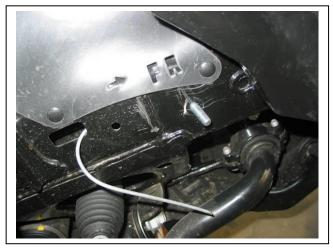


Figure 5: Rear bolt on wire fitted before mount is assembled for photo



Figure 6: ECB Winch frame with test winch fitted

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Figure 7: Warn winch control box mounted.



Figure 9: Cut line across front of vehicle.



Figure 11: Secure wiring in rear of channel. Parking sensor wiring shown.



Figure 8: Mean Mother winch control box mounted.



Figure 10: Cut line across front of vehicle.



Figure 12: Secure wiring in rear of channel. NOTE wiring direction secured to mount.



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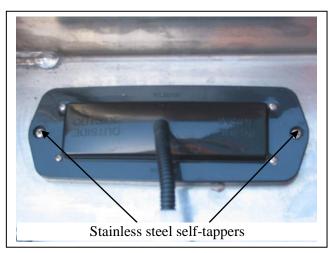
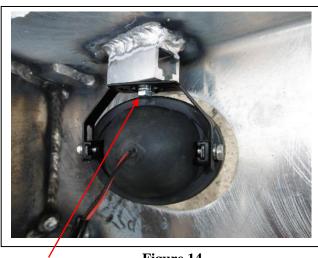


Figure 13



M6 bolt Figure 14

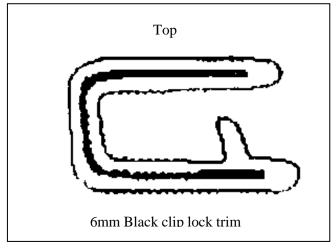


Figure 15

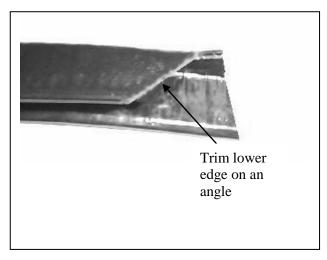


Figure 16

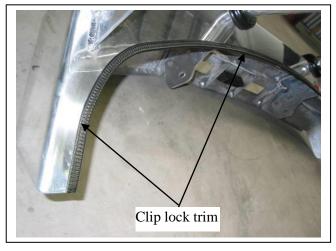


Figure 17



Figure 18: Front view

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Figure 19: Side view



Figure 20: Drivers side under body guard



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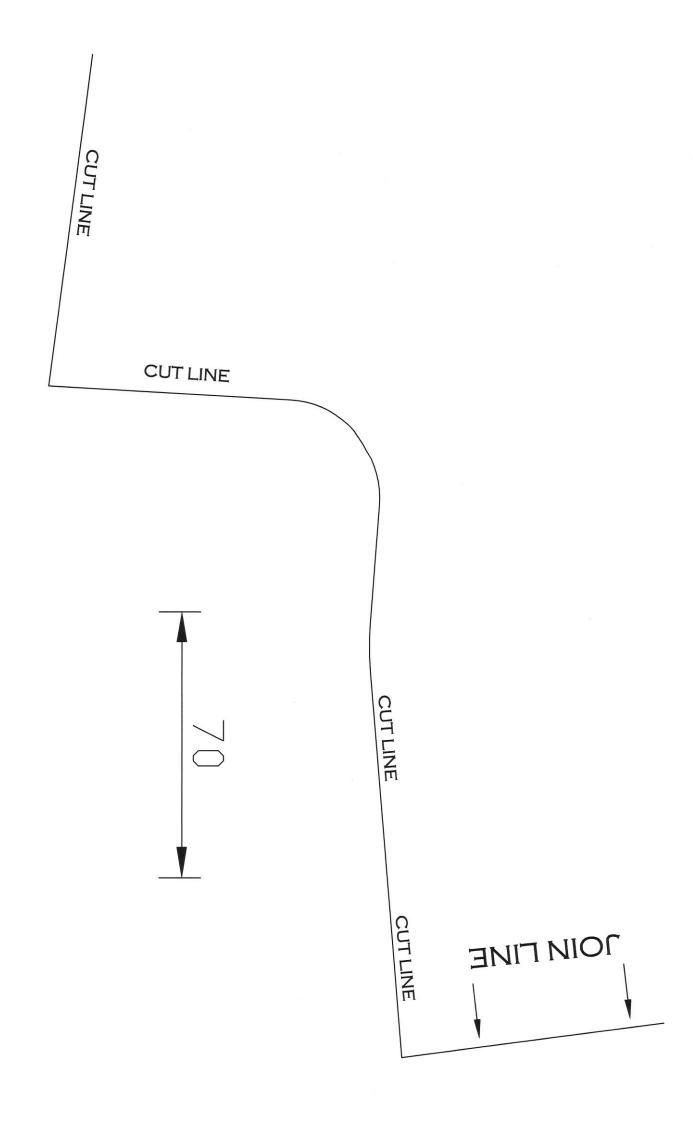
CAUTION: Measure template to ensure correct size, some printers may vary. **CUT LINE** JOIN LINE



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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: /	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 EAT162SY

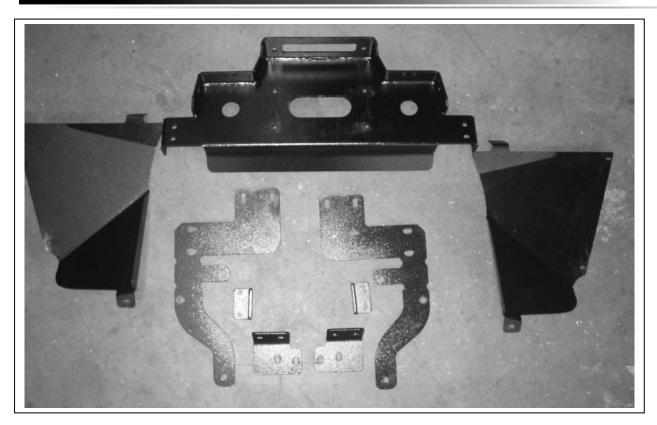
Work Order #		See other side of
Finish:		this page for
Transport:		photos of all
Due Date:		mounts
OC 1 – Pair st	eel mounting brackets.	
OC 1 – Steel v	_	
	inch support brackets	
OC 2 – Steel a		
	winch control bracket (EAT160	SY A4MS)
	mother control bracket (MOTH	_ ,
BK 1 – Bolt B	Kit.	
BK 1 – ECB 1	LED indicator / park light kit.	
BK 1 – Fog li	ght kit (35 watt)	
BK 1 - Quick	Click Fog Harnesses (IC10D403	S1004ECBH)
BK 4 – Fog li	•	
BK 1 – 2600mm length 6mm clip lock trim		
BK 1 – 500mm length 6mm clip lock trim		
	m length 3mm clip lock trim	
	ide under body guards (powder o	coated black ripple)
OC2 – ECB Overriders – Fitted to bar		
OC2 – 6mm air vents – Fitted to bar		
Is the	is product "the best it can be"	Yes
	O fix before continuing	Wrapper's initials / Checker initials
All parts <u>checked</u> and <u>c</u>	completed by:	
Nut and bolts:		Date//
Order control:		Date//
Final wrap chec	k:	Date//

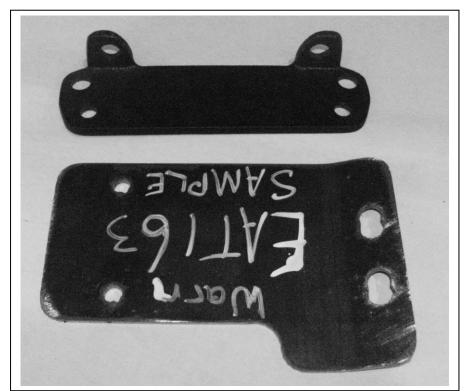


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Wrapper's initials / Checker initials