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> REPLACES: 30.05.12 REVISED: 22.08.12

EAT120SY

FITTING INSTRUCTIONS

TOYOTA PRADO ALTITUDE 11/09on ARC™ BAR WARN XD9000 AND XP9500 WINCH COMPATIBLE 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.

Aftermarket spotlight wiring kit (if original equipment fog lights not fitted)

- 1. Lift bonnet.
- 2. Remove grille to radiator cover, 13 push pull plastic clips.
- 3. Disconnect camera and pre-crash sensor (if fitted) on rear of grille.
- 4. Remove rubbers on top of grille by gently sliding rubber from top of plastic clips, taking care not to damage rubbers. Remove two 10mm head bolts and two plastic push pull clips from centre and outer grille. Gently pull side of grille forward to unclip, lift slightly and slide forward at base to disconnect from plastic bumper. Remove fully from vehicle. **See figures 1.**
- 5. Remove three 10mm head bolts from inner guards and pull rearward to clear bumper side.
- 6. Disconnect driving lights, parking sensors on passenger's side of vehicle (if fitted) and headlight washers on driver's side of vehicle (if fitted).
- 7. 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.
- 8. Remove centre plastic bash plate, five 10mm head bolts and 1 plastic push pull clip.
- 9. Using a jigsaw or sharp knife, trim plastic air dams to allow fitment of mounts. See figure 2 and 3.
- 10. On driver side: Remove one 13mm head bolt from power steering bracket between radiator support and crush can. **See figure 4.**
- 11. Using 13mm drill, enlarge holes in top and bottom of crash cans. **See figure 5.** 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.**
- 12. Fit ECB Steel mounting bracket (supplied) between power steering support bracket (on drivers side) and 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 3/8 x 1 ½ 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 6. FINGER TIGHTEN ONLY.**



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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 3/8 x 1 ½ 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 3/8 x 1 ½ bolts, flat washers, spring washers and nuts (supplied). **See figure 7.**

- 13. Align mounts to vehicle and **TIGHTEN ALL BOLTS**. Trim wire from rear bolt and clamp to side of hole to avoid vibration.
- 14. Install winch into winch frame as per the manufacturer's instructions. Fit winch control box to ECB control box mount (supplied). Install onto inside front of winch frame. **See figure 8.** Do not tighten bolts for fairlead rollers at this time.
- 15. Remove parking sensors from plastic bumper by releasing top and bottom clips to separate front of sensor from rear. Release side clips on front section to remove from plastic bumper.
- 16. Check area behind cut is free from hoses and wiring.
- 17. 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 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.
- 18. Refit top section back to vehicle using original bolts as per reverse of step 7.
- 19. Fit parking sensors into ECB protection bar. Attach wiring to lower leg of channel using zip ties supplied. **See figure 10.**
- 20. Feed vehicle end of ECB Quick Click wiring harness (supplied) under headlight. Disconnect headlight and connect Quick Click wiring harness between headlight and vehicle wiring harness.
- 21. Connect ECB Quick Click fog light wiring harness (supplied) into original wiring harness.
- 22. Fit ECB indicator / park lights into protection bar as per instructions supplied with the LED indicator kit. **NOTE: Ensure park light is to outside.**
- 23. 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 12.** Where fog lights are not included on original equipment bar, an aftermarket light wiring kit will need to be installed.
- 24. Attach 6mm clip lock trim (supplied) to top and into winch opening of ECB protection bar. **NOTE**: Trim off lower edge on an angle so trim will sit flush with end of protection bar. **See figures 13, 14 and 15.**
- 25. Fit ECB protection bar to inside of ECB steel mounting brackets using six ½ x 1 ½ bolts, flat washers, spring washers and nuts (supplied). **FINGER TIGHTEN ONLY.**
- 26. Align ECB protection bar to vehicle. **See figure 16 and 17. TIGHTEN ALL BOLTS.** Align fairlead roller to underside of ECB protection bar. **TIGHTEN ALL BOLTS.**

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- 27. Connect and check indicator / park lights and fog lights.
- 28. Connect and check original equipment camera and parking sensors.
- 29. 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 four M6 x 20 bolts, flat washers and nyloc nuts (three to front, one to rear, through protection bar, under body guard and inner guard)(per side) (supplied). See figure 17. Trim inner guard level with bottom of under body guard and place neatly onto inside. 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.

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	20 - 3/8 nuts	
2 – Steel angle brackets	$6 - \frac{1}{2} \times 1 \frac{1}{2}$ bolts (2 bolts to be left out for packaging)	
4 – 81mm long 10Nb steel spacer tubes	$12 - \frac{1}{2}$ flat washers (4 washers to be left out for packaging)	
1 – Winch frame	6 − ½ spring washers	
1 – Pair winch frame support brackets	$6 - \frac{1}{2}$ nuts (2 nuts to be left out for packaging)	
1 – Winch control bracket	2 – M6 nuts and spring washers	
1 – Pair side under body skirts	14 – M6 x 20 bolts	
2 – M12 x 1.25 x 40 bolts	29 – M6 flat washers	
2 – M12 flat washers	12 – M6 nyloc nuts	
2 – M12 spring washers	1 – ECB LED indicator / park light kit	
2 – M8 x 1.25 x 40 bolts	1 – Quick Click Indi / Park Harnesses (IC07LC79ECB100H)	
2 – M8 spring washers	1 – Pair ECB fog lights	
2 – M8 flat washers	1 – Quick Click Fog Harnesses (IC10D40S1004LEDH)	
$2 - 3/8 \times 1 \frac{1}{2}$ bolts and washers on 300 mm wire	4 – Fog light surrounds	
$14 - 3/8 \times 1 \frac{1}{2}$ bolts	1 – 2700mm length 6mm clip lock trim	
$4 - 3/8 \times 5$ bolts	1 – 800mm length of 6mm clip lock trim	
40 - 3/8 flat washers	15 – 150mm zip ties	
20 - 3/8 spring washers		

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Figure 1: Rubber on top of grille. Take care during removal not to split rubber

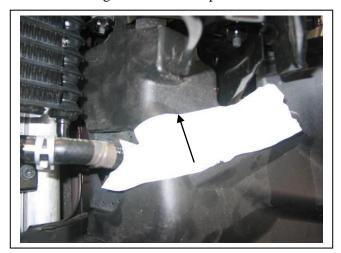


Figure 3: Trim point on passenger's side air dam.



Figure 5: Drill holes to 10mm (3/8). Drill or die grind top to 18mm.

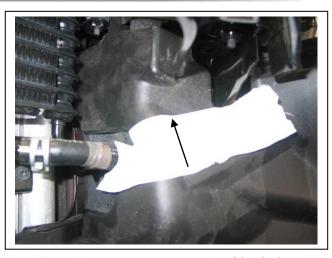


Figure 2: Trim point on driver's side air dam

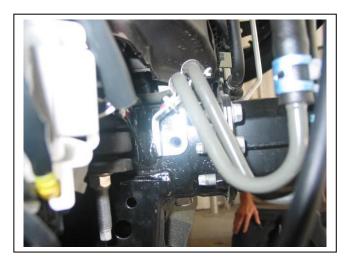


Figure 4: Side of driver's side chassis rail (bolt removed)



Figure 6: Rear bolt on wire fitted before mount is assembled for photo

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Figure 7: Winch frame fitted to chassis rails



Figure 8: Winch and control box fitted. **NOTE:** Control box mounted to rear of winch frame front steel surface.

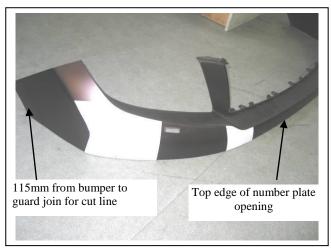


Figure 9: Position of templates on bumper



Figure 10: Parking sensor mounted into protection bar with secured wiring.

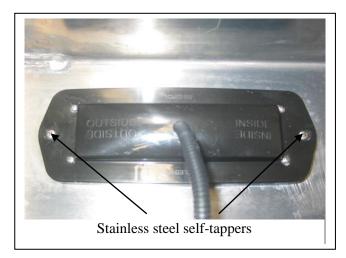
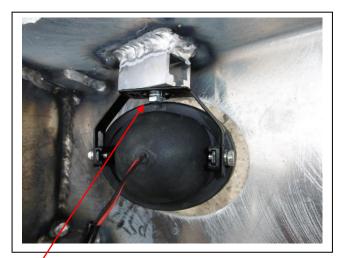


Figure 11



M6 bolt Figure 12

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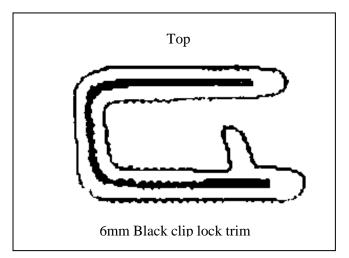


Figure 13

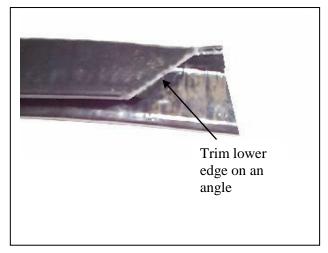


Figure 14

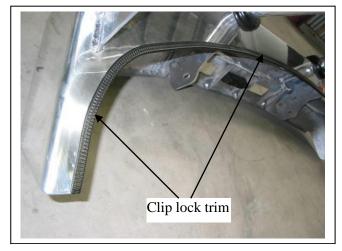


Figure 15



Figure 16: Front view

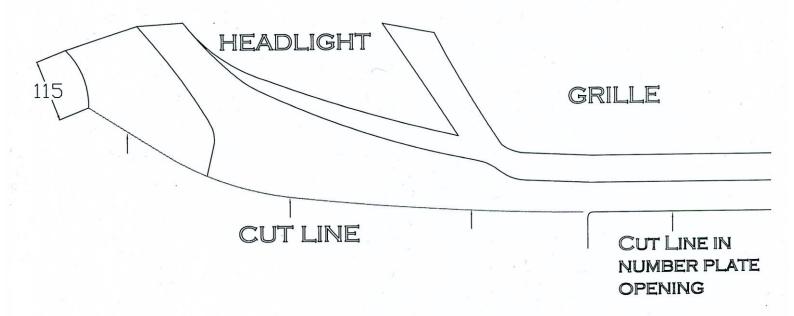


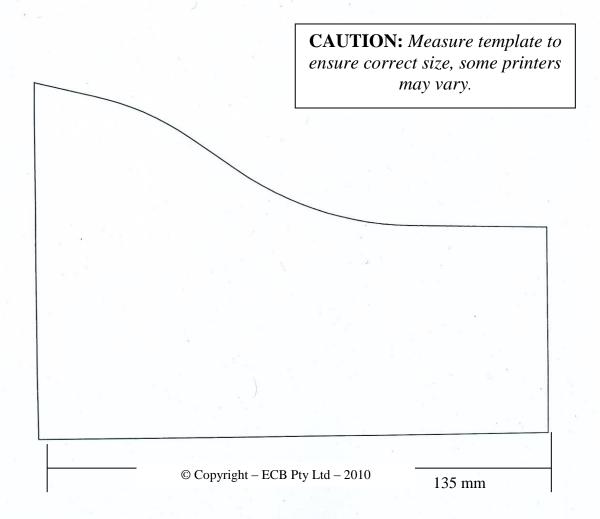
Figure 17: Front view



Figure 18: Passengers side under body guard

CUT TEMPLATES



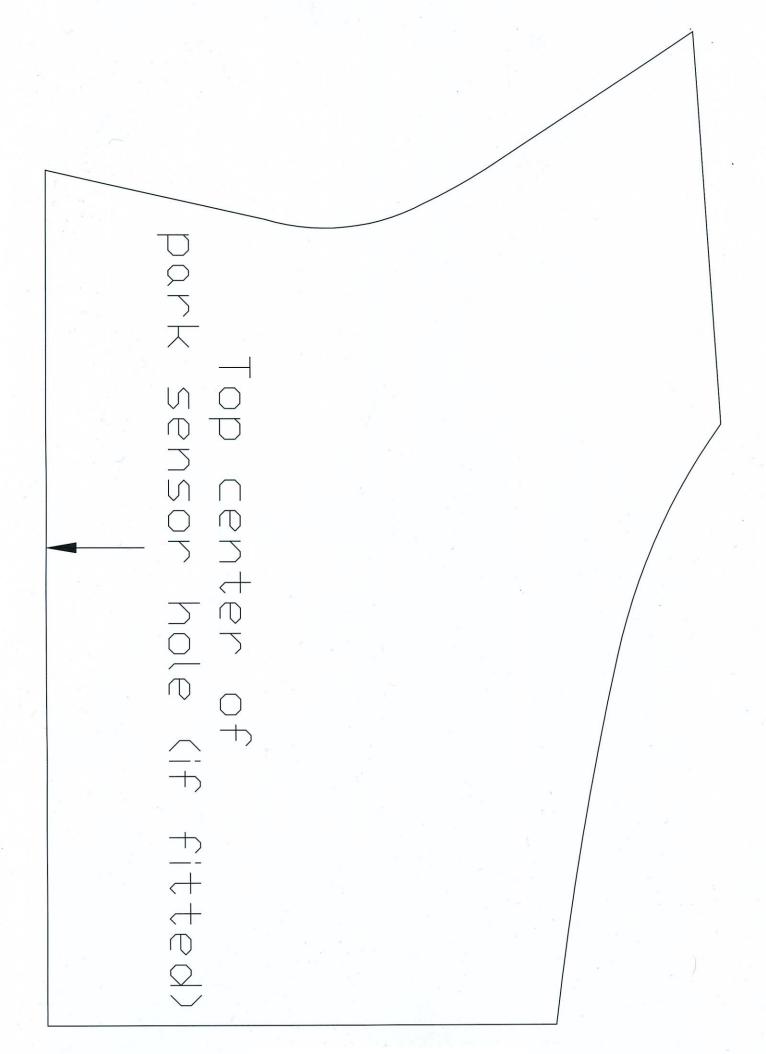




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We value your comments

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



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Australia

DESPATCH CHECKLIST EAT120SY

ICZBKCT120



.0_0.			
Work Order #			
Finish:			
Transport:			
Due Date:			
O 1 – Pair steel m	ounting brackets		
O 1 – Pair steel mounting brackets.O 2 – Steel angle brackets		See other side of	
O 1 – Winch frame		this page for	
	frame support brackets	photos of all	
O 1 – Control box	P		
O 1 – Bolt Kit.	x mounts mounts		
O 1 – ECB LED indicator / park light kit.			
O 1 – Quick Click Indi / Park Harnesses (IC07LC79ECB100H)			
O 1 – Fog light kit			
O 1 - Quick Click Fog Harnesses (IC10D40S1004LEDH)			
O 4 – Fog light surrounds			
O 1 – 2700mm length 6mm clip lock			
O 1 – 800mm length 6mm clip lock			
O 1 – Pair side under body guards (powder coated black rip)			
O 2 – ECB overriders – Fitted to bars			
O 3 – 6mm air vents – Fitted to bars			
Is this j	product "the best it can be" Yes_wrap	per's initials / Checker initials	
STOP			
II NO I	ix before continuing		
All parts <u>checked</u> and	completed by:		
Nut and bolts:		Date//	
Order control:		Date /_ /	
Final wrap check:		Date//	



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