

Tel: 07 3897 5700 Fax: 07 3283 1168 ecb@ecb.com.au_www.ecb.com.au 29 Snook St Clontarf QLD 4019 Australia

Po Box 122 Margate QLD 4019 Australia

EAT161SY

REPLACES: 00.00.00 REVISED: 07.01.14

FITTING INSTRUCTIONS

TOYOTA PRADO 10-13on ARC[™] PROTECTION BAR WITH FOG LIGHTS AND PARKING SENSORS 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. Disconnect camera and pre- crash sensor (if fitted) on rear of grille.
- 4. 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 1and 2.**
- 5. Remove two 10mm head bolts (per side) from inner guards and pull rearward to clear bumper side.
- 6. Disconnect driving lights/ parking sensors on passenger's side of vehicle under headlight 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 one plastic push pull clip.
- 9. Remove Alloy cross member. Three 14mm head nuts (per side)
- 10. Using a jigsaw or sharp knife, trim plastic air dams to allow fitment of mounts. See figure 3.
- 11. 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.
- 12. Fit ECB Steel mounting brackets (supplied) to chassis rail using M8 x 40 bolt, spring washer and flat washer (supplied), M12 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 two steel angle mounts (one top and one bottom of crash can, chassis spacers inserted into crash can assembly on fitment) (supplied). 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 to ECB steel mounting brackets.
- 13. Align mounts to vehicle and **tighten all bolts.** Trim wire from rear bolt and clamp to side of hole to avoid vibration.



Tel: 07 3897 5700 Fax: 07 3283 1168 ecb@ecb.com.au www.ecb.com.au

- 14. 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.
- 15. Check area behind cut is free from hoses and wiring.
- 16. 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 6 and 7. 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.
- 17. Refit top section back to vehicle using original bolts as per reverse of step 7.
- 18. Splice ECB wiring harness into wiring harness behind headlight using cable locks (supplied). Ensure harness is clear of sharp edges and moving parts.
- 19. Fit parking sensors into ECB protection bar. Attach wiring to lower leg of channel using zip ties (supplied). See figure 8 and 9. Connect ECB Quick Click fog light wiring harness (supplied) into original wiring harness.
- 20. Remove headlight washer tubing from bumper (if fitted). Install headlight washer tubing onto underside of bumper support panel between headlights using zip ties supplied. See figure 10.
- 21. 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 11.
- 22. 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.** Connect to fog light harness.
- 23. 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 13, 14 and 15.**
- 24. 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.**
- 25. Align ECB protection bar to vehicle. See figure 16 and 17. TIGHTEN ALL BOLTS.
- 26. Connect and check indicator / park lights and fog lights and parking sensors.
- 27. Connect and check original equipment camera..
- 28. 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 18.** 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.**
- 29. Fit centre under body guard to top of protection bar skirt using four M6 x 20 bolts, flat washers and nyloc nuts (supplied). ECB under body guard bolts to original steel bash plate using original bolts to outside. **TIGHTEN ALL BOLTS.**

ENSURE NUMBER PLATE IS CLEARLY VISABLE



Tel: 07 3897 5700 Fax: 07 3283 1168 ecb@ecb.com.au www.ecb.com.au

Po Box 122 Margate QLD 4019 Australia

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

<u>FII IING KII</u>	
1 – Pair steel mounting brackets	2 – M8 flat washers
4 – Steel angle brackets	$4 - 3/8 \ge 5$ bolts
4 – 81mm long 10 Nb Steel spacer tubes	4 - 3/8 nuts
1 – Pair side under body skirts	2 - M6 nuts
1 – Centre under body skirt	18 – M6 x 20 bolts
$8 - M12 \times 1.25 \times 40$ bolts(2 bolts to be left out for packaging	32 – M6 flat washers
14 – M12 flat washers(4 washers to be left out for packaging)	2 – M6 spring washers
8 – M12 spring washers	16 – M6 nyloc nuts
$6 - M12 \times 1.25$ nuts (2 nuts to be left out for packaging)	1 – ECB LED Indicator / Park light kit
8 – M10 x 1.25 x 40 bolts	6 – cable locks
$2 - M10 \times 1.25 \times 40$ bolt and washer on 300mm wire	1 – Pair ECB fog lights (35 watt)
26 – M10 flat washers	1 – Quick Click Fog Harness
	(IC10D40S1004ECBH)
14 – M10 spring washers	4 – Fog light surrounds
10 – M10 x 1.25 nuts	1 – 2600mm length 6mm clip lock trim
2 – M8 x 1.25 x 40 bolts	2 – 500mm length 3mm clip lock trim
2 – M8 spring washers	15 – 150mm zip ties



Figure 1: Grille outer lower bumper clip

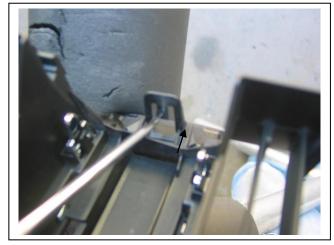


Figure 2: Grille inner lower bumper clip



Tel: 07 3897 5700 Fax: 07 3283 1168 ecb@ecb.com.au_www.ecb.com.au 29 Snook St Clontarf QLD 4019 Australia



Figure 3: Trim point on drivers side air dam.

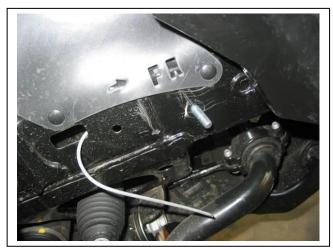


Figure 5: Rear bolt on wire fitted before mount is assembled for photo

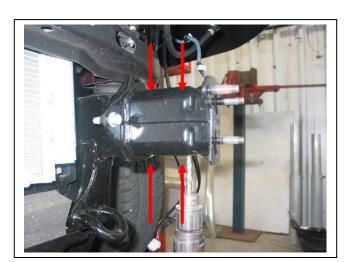


Figure 4: Drill holes to 10mm (3/8). Drill or die grind top to 18mm.



Figure 6: Cut line across front of vehicle.



Figure 7: Cut line across front of vehicle.



Figure 8: Parking sensor mounted into protection bar with secured wiring.



Tel: 07 3897 5700 Fax: 07 3283 1168 ecb@ecb.com.au_www.ecb.com.au 29 Snook St Clontarf QLD 4019 Australia



Figure 9: Parking sensor mounted into protection bar. NOTE wiring direction secured to mount.

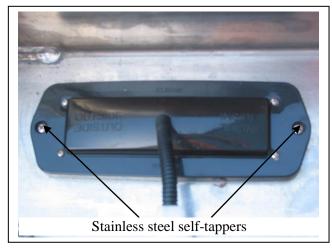


Figure 11

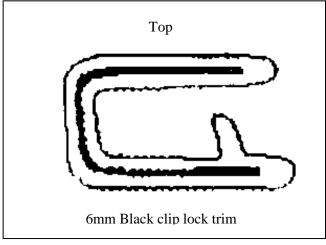
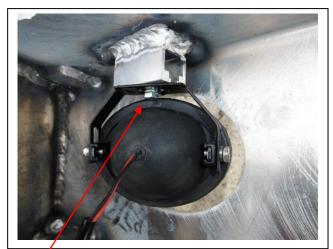


Figure 13

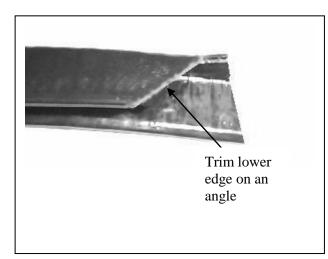


Figure 10: Attachment of water tubing under bumper support. Caution: watch for sharp edges.



M6 bolt









Tel: 07 3897 5700 Fax: 07 3283 1168 ecb@ecb.com.au_www.ecb.com.au 29 Snook St Clontarf QLD 4019 Australia

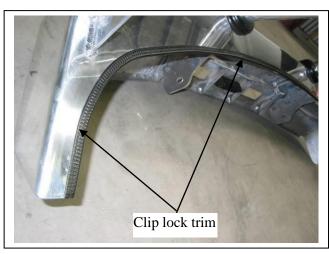


Figure 15



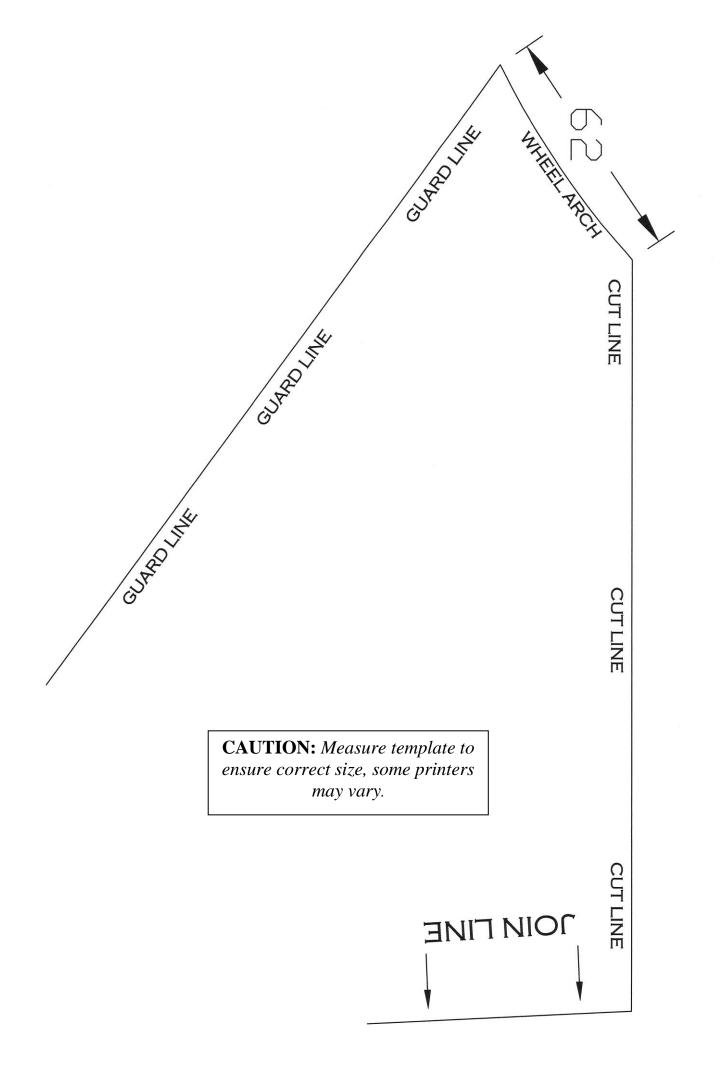
Figure 16: Front view



Figure 17: Side view

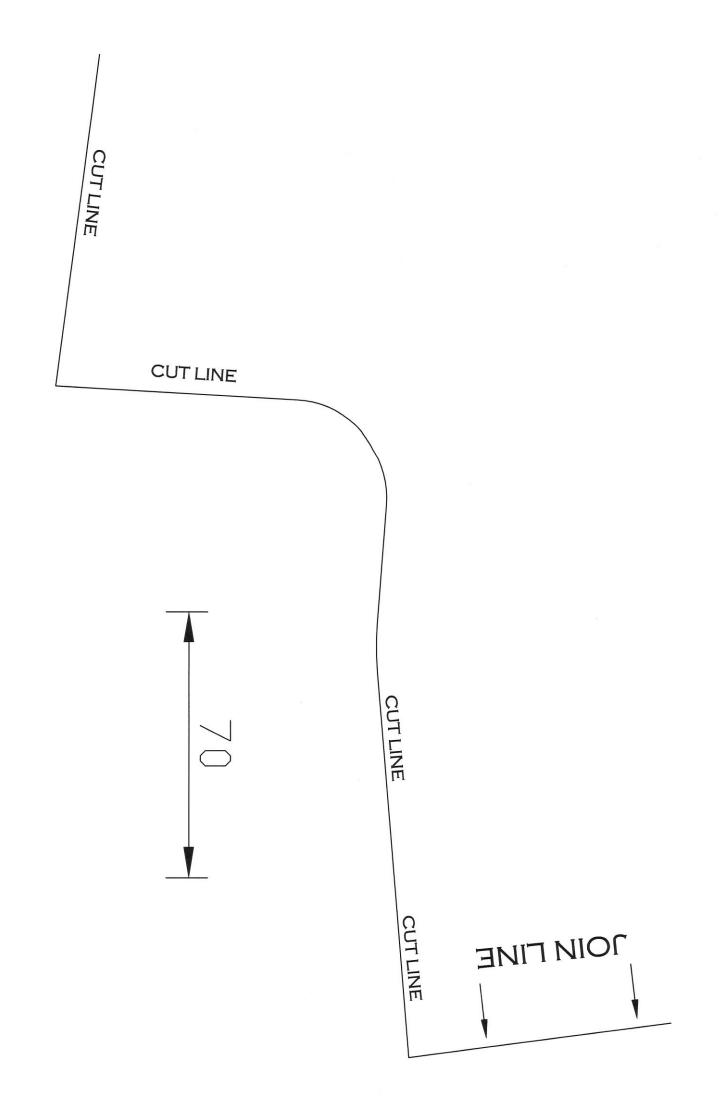


Figure 18: Passengers side under body guard





Tel: 07 3897 5700 Fax: 07 3283 1168 ecb@ecb.com.au_www.ecb.com.au 29 Snook St Clontarf QLD 4019 Australia





Tel: 07 3897 5700 Fax: 07 3283 1168 ecb@ecb.com.au_www.ecb.com.au 29 Snook St Clontarf QLD 4019 Australia



Tel: 07 3897 5700 Fax: 07 3283 1168 ecb@ecb.com.au www.ecb.com.au

Po Box 122 Margate QLD 4019 Australia

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



Tel: 07 3897 5700 Fax: 07 3283 1168 ecb@ecb.com.au_www.ecb.com.au 29 Snook St Clontarf QLD 4019 Australia



Tel: 07 3897 5700 Fax: 07 3283 1168 ecb@ecb.com.au_www.ecb.com.au 29 Snook St Clontarf QLD 4019 Australia

Po Box 122 Margate QLD 4019 Australia

DESPATCH CHECKLIST EAT161SY

Work Order #	
Finish:	
Transport:	
Due Date:	

- **OC**....1 Pair steel mounting brackets.
- **OC....**4 Steel angle brackets
- **BK....**1 Bolt Kit.
- **BK....**1 ECB LED indicator / park light kit.
- BK.....1 Fog light kit (35 watt)

BK.....1 - Quick Click Fog Harnesses (IC10D40S1004E) mounts

- **BK....**4 Fog light surrounds
- **BK**.....1 2600mm length 6mm clip lock
- **BK**.....2 500mm length 3mm clip lock
- **OC....**1 Centre under body guard (powder coated black ripple)
- **OC**....1 Pair side under body guards (powder coated black ripple)
- OC.....2 ECB Overriders Fitted to bar
- OC.....4 6mm air vents Fitted to bar



Is this product "the best it can be" Yes

Wrapper's initials / Checker initials

See other side of

this page for

photos of all

If **NO** fix before continuing

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

Nut and bolts:	Date//
Order control:	Date//
Final wrap check:	Date//



Tel: 07 3897 5700 Fax: 07 3283 1168 ecb@ecb.com.au www.ecb.com.au 29 Snook St Clontarf QLD 4019 Australia

