EAT163SY

FITTING INSTRUCTIONS

TOYOTA PRADO 10/13on ARC™ WINCH 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 1 and 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 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.
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. 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 figures 7 and 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 figures 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.

18. Refit top section back to vehicle using original bolts as per reverse of step 7.

19. Splice ECB wiring harness into wiring harness behind headlight using cable locks (supplied). Ensure harness is clear of sharp edges and moving parts.

20. Fit parking sensors into ECB protection bar. 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.

21. 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 13.**

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. See figure 14.**

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 15.** Connect fog lights.

24. 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 16, 17 and 18.** Connect to fog light harness.

25. 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.**

26. **Align ECB protection bar to vehicle. See figure 19 and 20. TIGHTEN ALL BOLTS INCLUDING WINCH BOLTS.**

27. Connect and check indicator / park lights and fog lights and parking sensors.

28. Connect and check original equipment camera.

29. 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 21. 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.

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

Figure 2: Grille inner lower bumper clip

Figure 3: Trim point on drivers side air dam.

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
Figure 7: Warn winch control box mounted.

Figure 8: Mean Mother winch control box mounted.

Figure 9: Cut line across front of vehicle.

Figure 10: Cut line across front of vehicle.

Figure 11: Parking sensor mounted into protection bar with secured wiring.

Figure 12: Parking sensor mounted into protection bar. NOTE wiring direction secured to mount.
Figure 13: Attachment of water tubing under bumper support. Caution: watch for sharp edges.

Figure 14: M6 bolt

Figure 15: Stainless steel self-tappers

Figure 16: 6mm Black clip lock trim

Figure 17: Trim lower edge on an angle

Figure 18: Clip lock trim
Figure 19: Front view

Figure 20: Side view

Figure 21: Drivers side under body guard
CAUTION: Measure template to ensure correct size, some printers may vary.
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.

<table>
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<tr>
<th>Your Name:</th>
<th>Your contact No.</th>
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<tr>
<td>Product Part No.</td>
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<tr>
<td>Product Description:</td>
<td>Make, model, and year of vehicle:</td>
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<td>Product Work Order No.</td>
<td>Company your from/Company product purchased from:</td>
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Date of Fitment: ____/____/____

Was the fitting hardware supplied complete? Yes No

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

**EAT163SY**

<table>
<thead>
<tr>
<th>Work Order #</th>
<th>See other side of this page for photos of all mounts</th>
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**OC.....1 – Pair steel mounting brackets.**
**OC.....1 – Steel winch frame**
**OC.....1 – Pair winch support brackets**
**OC.....2 – Steel angle brackets**
**BK.....1 – Warn winch control bracket (EAT160SY_A4MS)**
**BK.....1 – Mean mother control bracket (MOTHERCB_B4MS)**
**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 (IC10D40S1004ECBH)**
**BK.....4 – Fog light surrounds**
**BK.....1 – 2600mm length 6mm clip lock trim**
**BK.....1 – 500mm length 6mm clip lock trim**
**BK.....2 – 500mm length 3mm clip lock trim**
**OC.....1 – Pair side under body guards (powder coated black ripple)**
**OC.....2 – ECB Overriders – **Fitted to bar**
**OC.....2 – 6mm air vents – **Fitted to bar**

**Is this product “the best it can be” Yes**

*If NO fix before continuing*

All parts checked and completed by:

- **Nut and bolts:** ___________________________ Date __/__/__
- **Order control:** ___________________________ Date __/__/__
- **Final wrap check:** ___________________________ Date __/__/__

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