



WORLD'S BEST
ALLOY BULLBARS

East Coast Bullbars (ECB Pty Ltd)

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BT56SY

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FITTING INSTRUCTIONS

TOYOTA RAV 4 10/08 on BIG TUBE™ PROTECTION BAR VEHICLE FRONTAL PROTECTION SYSTEM (VFPS) FOR AIR BAG & ADR COMPLIANT VEHICLES

Check installation hardware before commencing.

Special Equipment: Instant (style) adhesive

Die grinder or Dremel with metal grinding bit.

Drill and 10mm drill bit

NOTE: If vehicle does not have OE bumper lights additional time will be required to wire auxiliary bumper lights supplied into vehicles low beam circuit.

1. Lift bonnet.
2. Remove plastic grille to radiator trim, nine plastic centre push clips. Remove two PK head screw (bonnet rubbers), centre push pull bonnet rubber and four push pull clips from top of grille assembly. **See figure 1.**
3. Remove eight 10mm head screws and two plastic push pull clips from underside front of bumper, under body guard join.
4. Remove two 10mm head bolts (one per side) from join between under body guard and inner guards. Remove enough plastic centre pull clips from under body guard to allow to hang. **See figure 2.**
5. Remove half turn screw clip from front of inner guard. Unclip inner guard from plastic bumper and pull toward wheel to allow access to rear of plastic bumper to guard join. Remove one (per side) 10mm head screw from rear corner of bumper to guard join. Gently pull plastic bumper away from side of vehicle to unclip from guard fixings. Remove bumper. **CAUTION:** Bumper will come fully away from vehicle. Care must be taken to avoid damage to plastic bumper.
6. Remove centre foam infill, inner wiring clip for horn and air temperature sensor from front of bumper support.
7. Enlarge 2 holes in centre of bumper support to allow access for nuts on wire. **See figure 3. Blow all fillings clear and treat all exposed metal with a rust inhibitor.**
8. Attach ECB Steel mounting bracket (supplied) to front of bumper support using two M24 bolts, spring washers and flat washers (supplied) to tow hook attachment points. **Finger tighten only.** Using three 3/8 x 1 1/4 bolts, spring washers, flat washers and 3/8 nuts on wire (per side) (supplied) attach steel mounting bracket to front of bumper support. Two lower bolts are accessed from end of bumper support, top bolt accessed through hole previously enlarged in centre of bumper support. Centre steel mounting bracket to vehicle. **Tighten all bolts. See figure 4.** Trim wire from nuts 20mm outside of bumper support bracket. Fold wire and tightly crimp to bumper support using pliers to avoid possible rattling when vibrated.
9. Using ECB steel mounting bracket as a guide, drill 10mm hole through top of bumper support bracket. **Blow all fillings clear and treat all exposed metal with a rust inhibitor.** Fit 3/8 x 1 1/4 bolt, spring washer, flat washer and 3/8 nut on wire (supplied) into hole. **Tighten all bolts.** Trim wire from nuts to fit inside of bumper support bracket.
10. Remove white installation clip from rear of air temperature sensor. Install 150mm cable tie (supplied) through inner hole of air temperature mount on ECB steel mounting bracket. Feed cable tie through rear of Air temperature sensor, through centre hole of mount and cable tie end. Pull up firmly. Using second cable tie in



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outer hole, capture wiring associated with air sensor and horns to keep clear of radiators. **See figure 5.** Refit centre foam infill to vehicle. Adhesive may be required to hold in place until bumper refitted.

11. Splice ECB indicator/ park wiring into original wiring harness using cable lock (supplied). Route wiring under head light to front bumper via most direct route.
12. If original equipment fog lights fitted, splice ECB fog light wiring to original harness using cable locks (supplied). Should original equipment fog lights not be fitted to your vehicle, use aftermarket wiring harness (supplied) to wire fog lights into vehicle low beam circuit.
13. Remove middle and lower grilles from plastic bumper. Reattach bumper as per reverse of steps 2 to 6. Do not refit under body guard at this time.
14. Fit ECB steel lower mounts (bend in mount to inside) to top of ECB steel mounting bracket lower legs using four 3/8 x 1 1/4 bolts, flat washers, spring washers, and nuts (supplied). Use front holes in mount for 4 cylinder models and rear holes for 6 cylinder models. **See figure 6.** Place bolt head to top by pushing plastic bumper rearward. **Note:** Bolt heads must be to top to avoid unnecessary wear to plastic bumper.
15. Remove number plate mounting position from front of bumper (two 10mm head screws)
16. 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 7.**
17. 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 8. Do not install fog light at this time.**
18. 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 9, 10 and 11.**
19. Attach ECB protection bar to outside of steel mounting brackets using three 3/8 x 1 1/2 bolts, flat washers, spring washers and nuts (supplied). Place nuts to outside of mounts for ease of tightening. This protection bar is a tight fit to improve visual appearance on vehicle. Protection bar can be leaned rearward at top (taking care not to damage vehicle) for fitment of bolts. **Finger tighten only.**
20. Align protection bar with vehicle. **See figures 12 and 13.** Upper bolts are tightened through fog light hole using an impact wrench and extension bars for front bolt and air ratchet and extension bars for rear bolt. Remove outer air vents from skirt to access lower bolt using an air ratchet. **Tighten all bolts.** Refit vents, ECB to bottom. Trim outer edge of vent to suit mount.
21. Connect indicator / park light wiring and install connected fog light into attached fog light bracket. Install fog light trims with large side of trim to inside of fog light hole. Check for correct operation of indicator / park lights and fog lights.
22. Working on one side at a time, remove four 17mm head bolts from front of chassis. **See figure 14.**
23. Attach steel tow brackets (supplied) to where bolts were removed. Use original 100mm long bolts for rear holes. Use M12 x 35 socket head bolts with 20mm OD spring washers (supplied) for front holes. **TIGHTEN ALL BOLTS FULLY.**
24. Repeat for other side.
25. Trim 160mm long x 8mm wide from plastic under guard and refit to vehicle. **See figures 16 and 17.**



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Warning: When towing or snatching this vehicle, it is recommended that both tow points are used with a joiner rope or strap between them as use of only one point may damage vehicle.

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 – ECB steel mounting bracket	4 – M12 spring washers 20mm OD
1 – Pair ECB steel lower mount brackets	2 – M6 x 20 bolts
2 – ECB steel tow brackets	2 – M6 spring washers
2 – M24 x 2 x 40 bolts	2 – M6 flat washers
2 – M24 spring washers	2 – M6 nuts
2 – M24 flat washers	1 – ECB LED Indicator / Park light kit
12 – 3/8 x 1 ¼ bolts	1 – Pair ECB fog lights
6 – 3/8 x 1 ½ bolts	2 – ECB fog light trims
28 – 3/8 flat washers	10 – Cable locks
18 – 3/8 spring washers	1 – ASLWIRING (required for vehicles without OE bumper lights).
10 – 3/8 nuts	1 – 2200mm length clip lock trim
8 – 3/8 nuts and washers on 500mm wire	2 – 150mm cable ties
4 – M12 x 35 socket head screws	



Figure 1: Positioning of bonnet rubber clip and screws



Figure 2: Position of bolts from inner guard to under body guard



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M24 bolt



Figure 3: Enlarge centre holes to enable access for 3/8 nuts on wire



Figure 4: ECB steel mounting bracket fitted to vehicle.

Cable tie

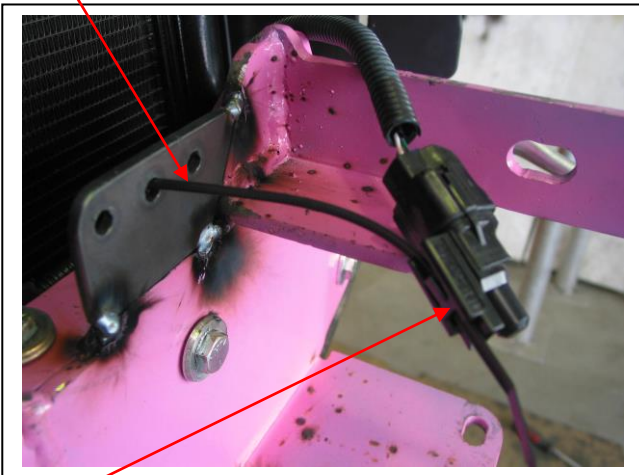


Figure 5



Figure 6: Drivers side shown

Air temperature
sensor mount

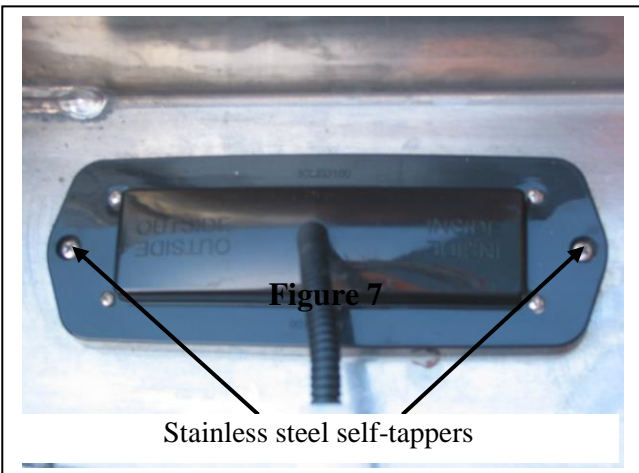
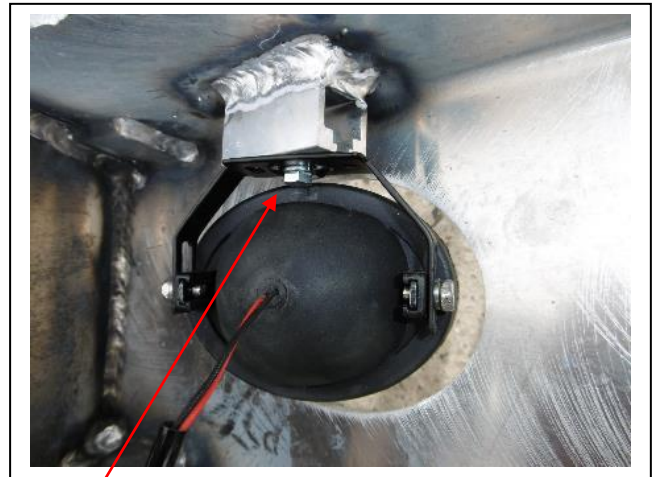


Figure 7

Stainless steel self-tappers

Figure 7



M6 bolt

Figure 8



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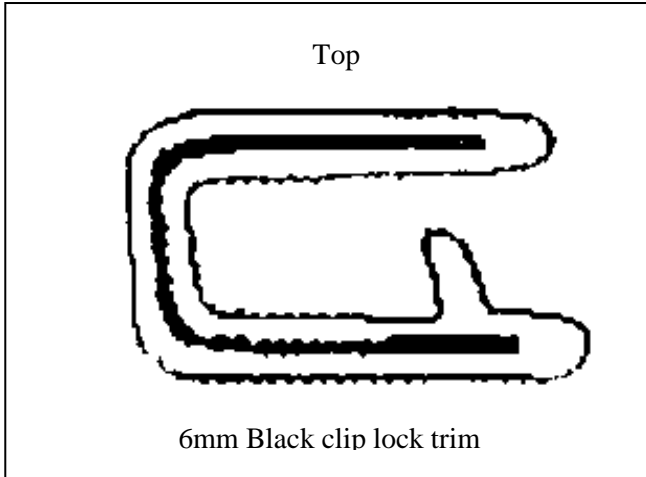


Figure 9

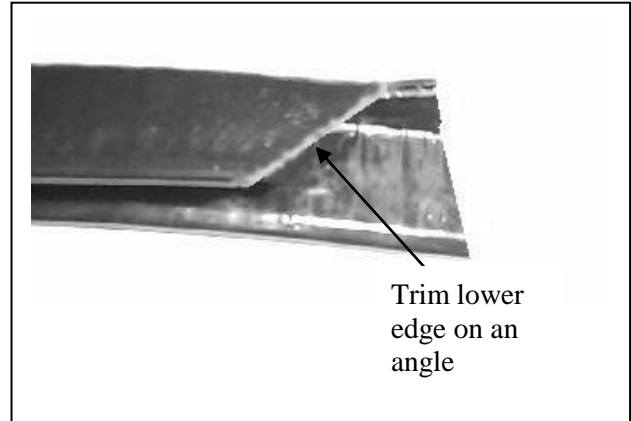


Figure 10

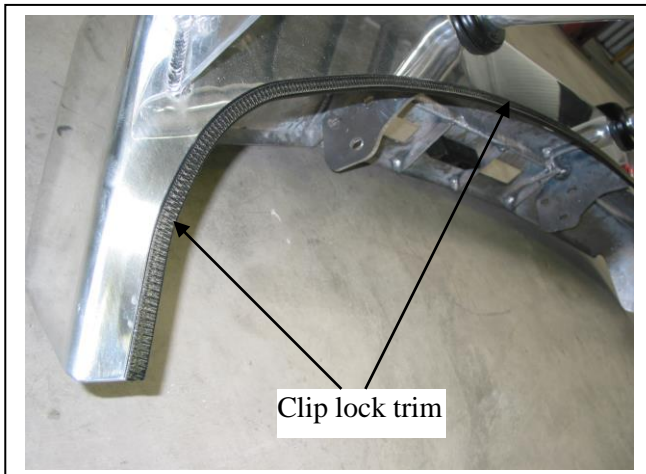


Figure 11



Figure 12: Front view

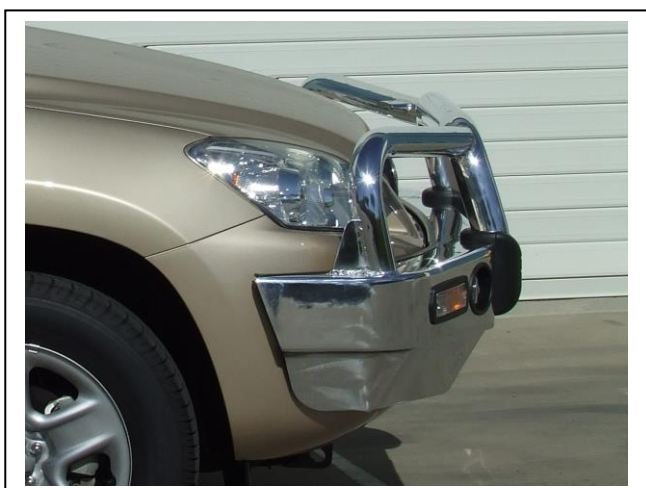


Figure 13: Side view

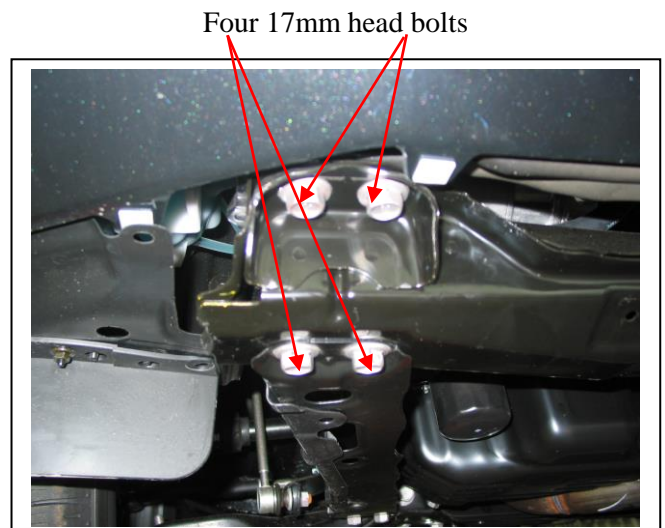


Figure 14 – Driver's side shown



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Trim here each side



Figure 15: Passenger side shown



Figure 16



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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? 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
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Fax to
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DESPATCH CHECKLIST BT56SY

Work Order #	
Finish:	
Transport:	
Due Date:	

- 1 – Steel mounting bracket.
- 1 – Pair steel lower mount brackets.
- 2 – Tow hook brackets
- 1 – Bolt Kit.
- 1 – ECB LED Indicator / Park light kit.
- 1 – Pair ECB fog lights
- 2 – Fog light trims
- 1 – ASLWIRING KIT
- 1 – 2200mm length 6mm clip lock
- 2 – ECB Overrides – **Fitted to Bar**
- 3 – 6mm air vents - **Fitted with ECB to bottom**

**See other side of
this page for
photos of all
mounts**



Is this product “the best it can be” Yes _____/_____

Wrapper’s initials / Checker initials

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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