

Strongest Built Australian Made Lifetime Warranty

PN: EAT165SY





Fitting Guide & Owners Manual

Toyota Prado Kakadu & VX 10/17-ON

Big Tube Bar with Bumper Lights
VEHICLE FRONTAL PROTECTION SYSTEM (VFPS)
FOR AIR BAG & ADR COMPLIANT VEHICLES

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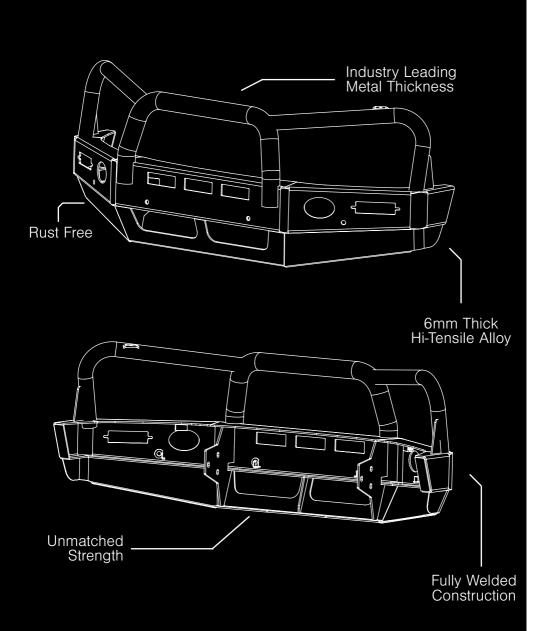
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The Features of ECB



ECB's Benefits

Built to Perform - Not to a Price

ECB are proud to claim that their channels are not jigsaw puzzles that are bolted together, or even multiple sections welded together. Where any welding is required, it is done to the highest standards by qualified welders, not machines.

Anti-Corrosive Nature of Alloy

The composition of ECB's alloy has a very high resistance to corrosion. Rust not only looks unappealing but greatly reduces the strength of the metal. Rust can and will weaken the structural integrity of a steel bullbar effectively rendering it useless over time.

Australian Made

Established in 1971, we utilise decades of experience designing, engineering and building products in Australia to suit Australian conditions. We can ensure the best quality controls and help support the local economy and employ over 90 proud Australians.

Weight Saving Benefits

An ECB alloy bullbar is typically half the weight of a steel bullbar. Unnecessary suspension upgrades are not required. The reduced weight also contributes to increased fuel economy and less wear and tear on tyres, suspension and braking components.

Welds That Work

ECB uses only the strongest welds and welding techniques to ensure every product is as structurally sound as possible. MIG (Metal Inert Gas) welding techniques are employed ensuring the welds are as thick as the thickest section of alloy's being joined together.

Lifetime Warranty

ECB provide a lifetime warranty and consumer guarantee on all of our manufactured products. This guarantee highlights the confidence in our ability and provides complete peace of mind for your purchase for the lifetime you own your vehicle.

Product Care

Polished Products

Being a premium mirror polished finish, regular maintenance will be required to keep that iconic ECB shine. We recommend using our own brand of Aluminium Polish. This formula has been tried and tested and in our opinion is the world's best standard.

Directions: Apply a small quantity of Aluminium Polish to a clean soft cloth and rub the metal surface. The longer the rubbing the brighter the surface becomes. Wipe off Aluminium Polish with clean soft cloth. Also suitable for motorised buffing machines. **Note: There are more specific details on the polish bottle. Please read before use.**

Powdercoated Products

Our powdercoated finishes are very low maintenance. Infact there is actually very little you will ever need to do for this product. Just clean it as you would your car and it will stay looking good as new.

ECB Aluminium Polish

When you're looking for that showroom finish look for your polished automotive products, you can depend on the no compromise quality of East Coast Bullbars Aluminium Polish. This specifically designed product is the best polish available and we guarantee that this \$#!+ works. With over 40 years of manufacturing polished alloy products we have trialled a large range of different polishes on the market and believe without a doubt that nothing beats the finish quality of East Coast Bullbars Aluminium Polish

East Coast Bullbars Aluminium Polish is excellent for use by hand and is ideal for polished bullbars, nudge bar and stainless steel products. This polish will clean, polish and protect your product from the elements whilst bringing your products back to that showroom finish look.



Caution: DO NOT turn vehicle on when electrical parts are disconnected on this vehicle, it will show up a malfunction on the dash. This vehicle will then need the codes to be reset on the internal computer to remove the malfunction from the dash.

Stage 1

- Road test vehicle to check all active safety equipment is operational.
- · Lift bonnet
- · Disconnect battery.
- Ensure these instructions are left with the vehicle owner and/or operator.



Stage 2

 Remove plastic between radiator and grille. Thirteen (13) plastic push pull clips.



Stage 3

· Unplug grille sonar unit.



Stage 4

 Slide small flat screwdriver between headlight chrome trim and headlight. Gently pry chrome trim away from headlight and remove.



- Disconnect camera from wiring under badge. Unclip wiring from support.
- Remove four (4) 10mm head screws from top of grille, unclip upper and lower sections and pull forward to remove.
- From rear of grille, remove camera two (2) phillips head screws. Retain for fitment in protection bar.



Stage 6

- From top of bumper between headlights, remove four (4) push pull plastic clips.
- In front of wheel arch, remove two (2) 10mm head screws (per side).
- Across bottom of bumper, remove six (6) 10mm head bolts and two push pull plastic clips.
- Pull side inner guards rearward and from inside, disconnect fog lights, sensors and headlight washers (if fitted).



Stage 7

- Pull side of bumper out from vehicle to unclip guard section and forward to unclip from headlight.
- · Remove bumper from vehicle.
- From rear of bumper, remove wiring harness, parking sensors and parking sensor clips.



Stage 8

Remove left and right air scoops. One
 (1) push pull clip per side.



Stage 9

 Remove center plastic bash plate, five (5) 10mm head bolts and one (1) push pull clip.



Stage 10

 Remove the top plastic trim from the bumper support.



Stage 11

 Remove alloy bumper support, three (3) 14mm head nuts per side



Stage 12

- Drill two (2) lower crash can holes out to 10mm. Enlarge holes in top to 18mm to allow for tube spacer to be fitted.
- Blow all metal filings clear and treat all exposed metal with a rust inhibitor.



Stage 13

- Fit ECB steel mounts to chassis rail with welded washers to chassis side. Install M8 x 1.25 x 40mm bolt, spring washer and flat washer (supplied) to hole between body mount and chassis front.
- Install M12 x 1.25 x 40mm bolt, spring washer and flat washer (supplied) to lower hole and M10 x 1.25 x 40mm bolt and washer on wire, flat washer, spring washer and nut (supplied) to rear hole.



- In front of chassis join, install two (2) angle mounts (supplied) per side and fix with 3/8 x 5 bolts, flat washers, spacer tubes, spring washers and nuts (supplied). Fit four (4) M10 x 1.25 x 40mm bolts, flat washers, spring washers and nuts (supplied).
- Align mounts to vehicle and tighten all bolts.



Stage 15

- Unclip guard top plastic trim to allow access to headlight bolt, two (2) plastic clips
- Remove radiator air dam to allow access to headlight bolt. One (1) plastic push pull clip and two (2) clips into radiator support.





- Disconnect headlight from power connector.
- Remove headlight, four (4) 10mm head screws.





Stage 17

- Find lower cover and wiring grommet on rear of headlight.
- Remove lower cover, spins anti clockwise (retain for refit)
- Remove rubber grommet from rear of light for easy access.



Stage 18

- Carefully disconnect connector on board inside light.
- Pull connector back to rubber grommet side of openings



- · Strip sheath on wiring to reveal wiring.
- Carefully strip sheath on yellow wire about ½ way along to allow solder connection.



Stage 20

- Create small hole in rubber grommet and feed in black wire from harness.
- Solder black wire to yellow wire in harness. Tape join to protect.



Stage 21

- · Tape sheath back to wiring.
- Place harness back in position and reconnect to board in headlight.



- · Reseal headlight
- Place neutral cure silicon around wire through plug to ensure headlight seal.

Stage 23

- · Refit headlight to vehicle.
- · Install electrical plug to bottom of headlight
- · Strip back sheathing from connector.
- Select wires from connector:
- Pin 4, grey on car/ DRL/ Brown on ECB harness
- Pin 11, (Purple (LH), Green (RH)) on car/ indicator/ green on ECB Harness
- Pin 12, White/black on car/ Earth/ White on ECB harness
- Strip small section of wire and solder correct wire as per above connections. Joining further down the cable will give better results.



Note: Wires will not show on test light. Some functions of the light are worked on power changing in the wire rather than on/ off.

> Toyota Prado 11/17 on Wiring information

12 13 14 0 0 0 24

Stage 24

 Check scale on the cut templates included with this instruction. Using sharp scissors or similar, cut templates out and join with clear tape where required.

- Check area behind bumper is free from hoses and wiring.
- Tape bumper using paper tape so bumper is not damaged when cutting.
- Using paper template, mark out bumper ready to be cut. Double check mark out before cutting.
- Cut bumper to shape using a jigsaw or similar
- Install 3mm clip lock trim (supplied) to outside of cut area.
- Refit bumper to vehicle as per reverse of steps 1 to 7



Stage 26

 Connect ECB Quick Click bumper light wiring harness (supplied) into original wiring harness.

Stage 27

 Refit bumper to vehicle as per reverse of steps 2 to 7

Stage 28

- Fit ECB LED indicator / park lights into protection bar as per instructions supplied with the LED indicator kit. NOTE: Ensure light is up correct direction.
- Clean rear of ECB channel parking sensor holes using isoprophyl alcohol or similar.
- Attach parking sensor mounts to rear of protection bar using Loctite gel adhesive (supplied).
- Attach wiring harness into rear of protection bar and zip ties (supplied) to lower leg of channel.



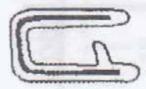
- Attach ECB bumper lights to protection bar.
 Use M6 x 20 bolts and washers (supplied) with M6 nuts (supplied). TIGHTEN FIRM ONLY
- Install bumper light surrounds (supplied) with large side of surround to inside of opening.
- Install camera into center hole in channel.
 Center camera to hole and secure to channel using (2) two 8g x 12 phillips self drilling screws.



Stage 30

 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.







Stage 31

- Install ECB protection bar to ECB steel mounts using six (6) M12 x 1.25 x 40mm bolts, flat washers, spring washers and nuts (supplied). FINGER TIGHTEN ONLY.
- · Align ECB protection bar with vehicle.
- · Tighten all bolts
- Connect all electrics and check for correct operation.



NOTE: A small amount may need to be removed from the center of the plastic bumper cut to allow the camera wiring to not be pulled tight. Tight wiring will result in damaged electrical items or wiring on the vehicle due to the amount of movement between the chassis rails and vehicle body.

- Remove lower M12 bolt from steel mounting bracket.
- Install ECB outer underbelly guards to top
 of end skirt and underside of channel wing
 using three (3) M6 x 20 bolts, flat washers
 and nyloc nuts (supplied) per side.
- Refit M12 bolt to steel mounting bracket through underbelly guard.
- · Tighten all bolts



Stage 33

- · Remove vents from center skirt.
- Install center underbelly guard using four (4) M6 x 20 bolts, flat washers and nyloc nuts (supplied) across front and two (2) M6 x 20 bolts, spring washers and flat washers (supplied) for rear into original equipment stone guard.
- TIGHTEN ALL BOLTS

Fitting Kit

2 - M8 spring washers
2 - M8 flat washers
14 - M6 x 20mm bolts
22 - M6 flat washers
2 - M6 spring washers
12 - M6 nyloc nuts
2 - 8g x 12 self-drilling button head screws
1 - Indicator / DRL / Park light kit
1 – Bumper light kit
2 - Bumper light surrounds
1 - Quick click harness (IC10D40S1004ECBH)
2 - 600mm lengths 3mm clip lock trim
1 - 2900mm length 6mm clip lock trim
10 - 300mm zip ties
2 - 3g bottles Loctite gel adhesive

Final Checks

Ensure Number Plate is Clearly Visible

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

- 1. Do not attach VFPS to the vehicle using anchorages not intended for this purpose (e.g. engine mounting bolts).
- 2. Do not use this product for any vehicle make or model, other than those specified by the VFPS manufacturer.
- 3. Do not remove the plaque or label from the VFPS.
- 4. Do not modify the structure of the VFPS in any way.
- 5. No accessory or fitment should project forward of the VFPS forward profile.
- 6. Ensure these instructions are left with the vehicle owner and/or operator.

Important Information

Periodically check bolts and nuts for correct tightness, especially if traveling on rough roads.

Finished Product







Warranty Registration

Contact Details
Name:
Address:
Product: EAT165SY
Email:
Phone:
Work Order Number: You Can find this on the silver label of your ECB product.
By submitting this registration you automatically subscribe to ECB's mail outs. You can unsubscribe at any time.

Or Register Online

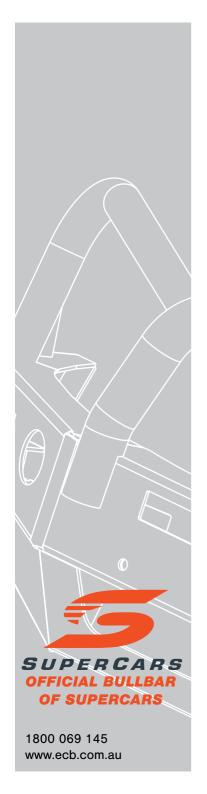
For online registration please go online to www.ecb.com.au/warranty-registration. If you have any questions please contact our national office on 1800 069 145 or www.ecb.com.au.



Please post to PO Box 122, Margate QLD 4019

Notes Full Name Date

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