



**WORLD'S BEST
ALLOY BULLBARS**

**Lighter
Stronger
Better!**

**Strongest Built
Australian Made
Lifetime Warranty**

PN: NBT139SY



Fitting Guide & Owners Manual

Toyota Rav 4 05/2019 on Edge

76mm NUDGE BAR
VEHICLE FRONTAL PROTECTION SYSTEM (VFPS)
FOR AIR BAG & ADR COMPLIANT VEHICLES

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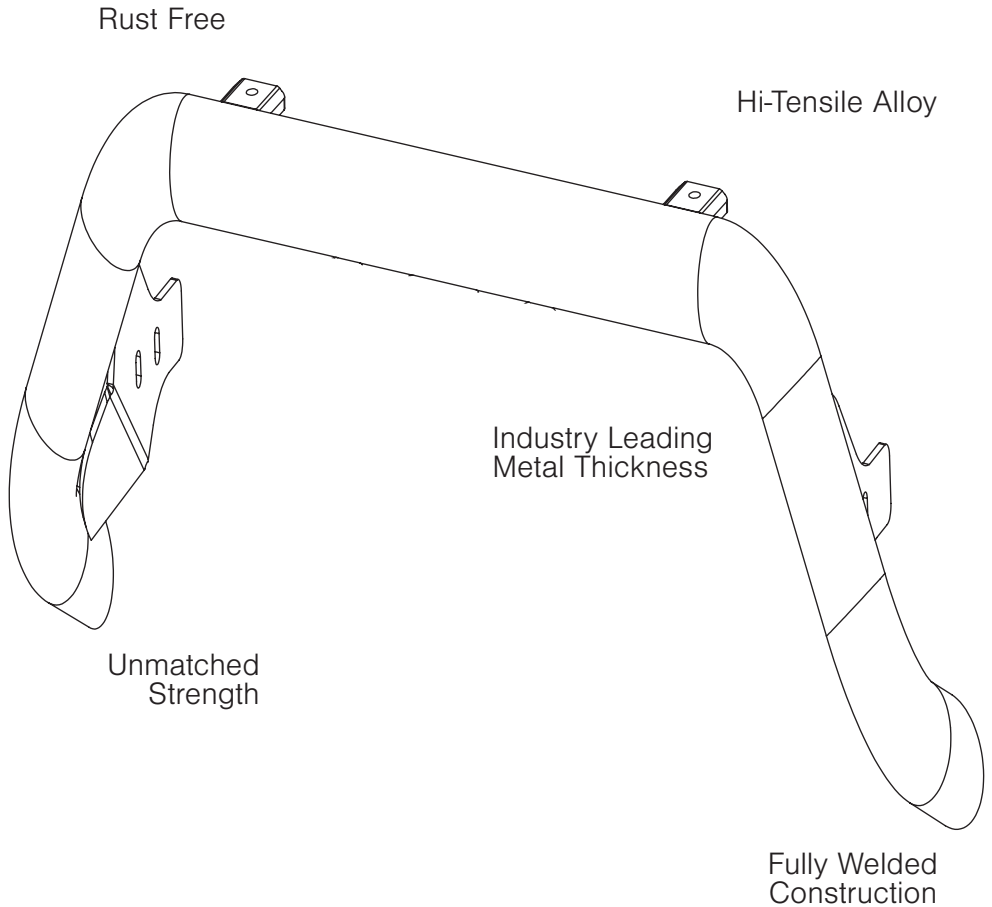
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The Features of ECB



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 over 46 years 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.

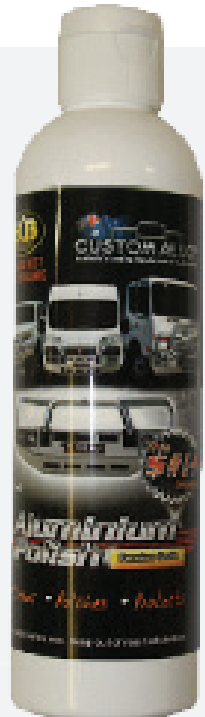
Powdercoated Products

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 trialed 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.

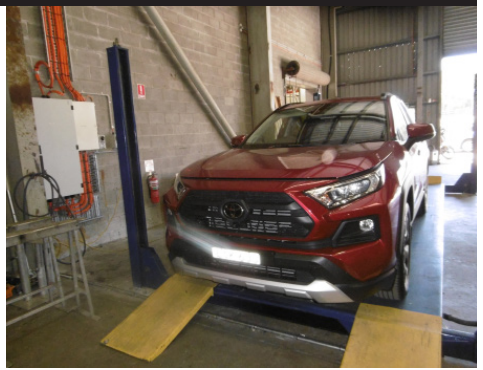
East Coast Bullbars Aluminium Polish is excellent for use by hand and is ideal for polished bullbars, nudge bar and stainless steel products. This polish will clean, polish and protect your product from the elements whilst bringing your products back to that showroom finish look.



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Stage 1

- Test drive vehicle to ensure all driver assists are correctly working and to gauge effectiveness. Park on a flat level surface.
- Apply parking brake and lift bonnet.
- Unwrap ECB Protection bar and disconnect mounts. Discard bolts.
- Ensure these instructions are left with the vehicle owner and/or operator.



Stage 2

- On top of bumper remove four (4) 10mm head bolts ,four (4) push pull clips. Remove plastic trim
- From underside of vehicle remove eight (8) 10mm head bolts.
- On inner gaurds remove one(1) 10mm head bolt, two (2) push pull clips per side.Carefully unclip wheel arch mould .
- carefully pull out on rear wing to unclip from gaurd .
- Disconnect wiring from bumper. Passanger side.



Stage 3

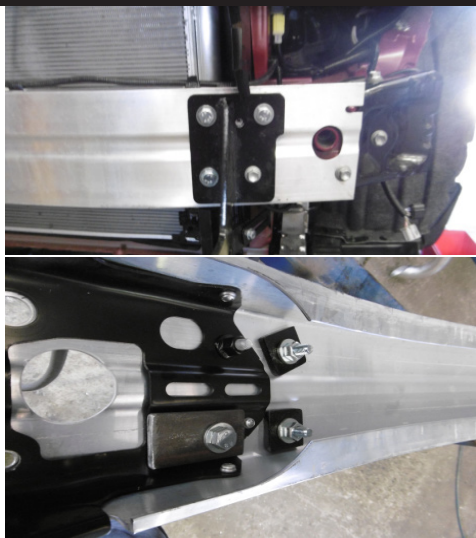
- Remove polystyrene infill from bumper reinforcement.
- Disconnect wiring from bumper reinforcement.
- Remove bumper reinforcement by removing three (3) 14mm head bolts per side.



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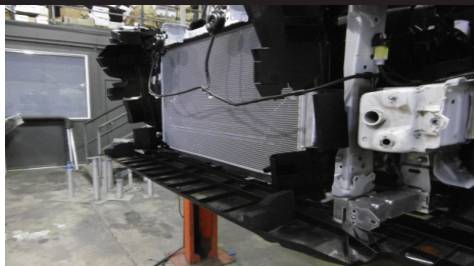
Stage 4

- Working on one side at a time install steel mounting bracket (supplied) onto bumper support with original bolt in outer lower hole.
- Using mounting bracket as a guide drill inner holes to 10mm. Attach mount with two (2) M10 x 1.5 x 35mm bolts, flat washer, 40 x 40mm washer plate (supplied) to rear of bumper support and flat washer, spring washer and nut (per side) (supplied).
- Install one (1) M10 x 1.5 x 35mm bolt, flat washer and 40 x 70mm washer plate (supplied) in top outer hole from rear and secure with flat washer, spring washer and nut (per side) (supplied).



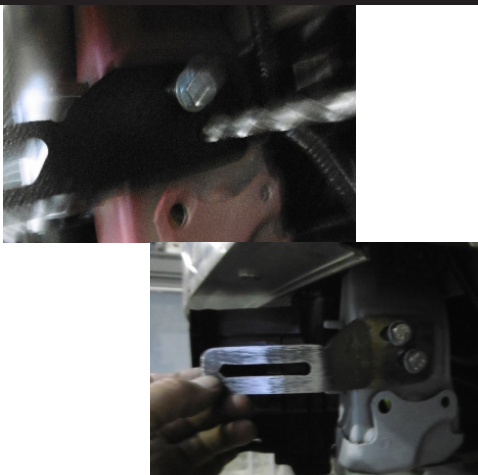
Stage 5

- Remove lower air dam for access to rear bolt in steel mount when installing protection bar.
- Remove side air dam beside radiators.



Stage 6

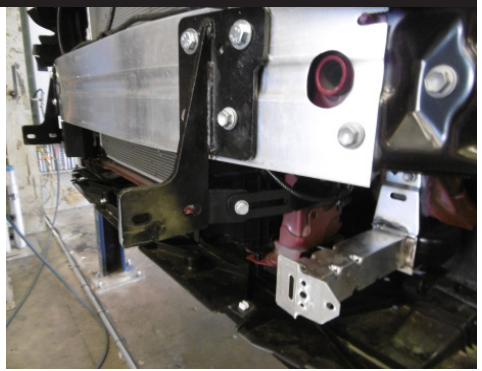
- Fit steel stabilizer mount (supplied) onto radiator support using one (1) M8 x 1.25 x 30mm bolt, flat washer and nyloc nut (per side) (supplied). **Finger tight only.**
- Using mount as a guide, drill lower hole to 8mm
- **Blow filings clear and treat all exposed metal with a rust inhibitor.**
- Install one (1) M8 x 1.25 x 30mm bolt, flat washer and nyloc nut (per side) (supplied). **Finger tighten only**



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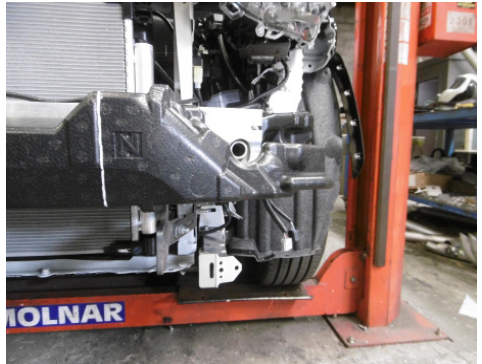
Stage 7

- Refit side air dams.
- Refit bumper reinforcement using original equipment.
- Fix stabilizer mount to the outside of steel mount with one (1) M8 x 1.25 x 30mm bolt, flat washer and nyloc nut (per side) (supplied).
- **TIGHTEN ALL BOLTS.**



Stage 8

- Mark and trim polystyrene to fit over steel mounting brackets.
- Zip tie onto reinforcement



Stage 9

- Remove the two (2) centre parking sensors from plastic bumper.
- Relocate parking sensors into rear of plastic sensor housings in protection bar.
- Using Quick click harness (supplied), feed harness through sensor holes in bumper cover and connect to original equipment wiring harness.

NOTE: holes in bumper may need to be enlarged to allow harness to feed through.

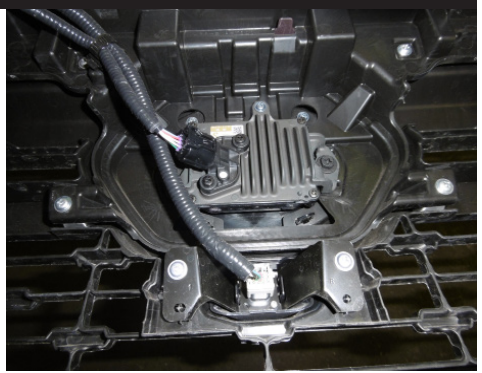


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Stage 10

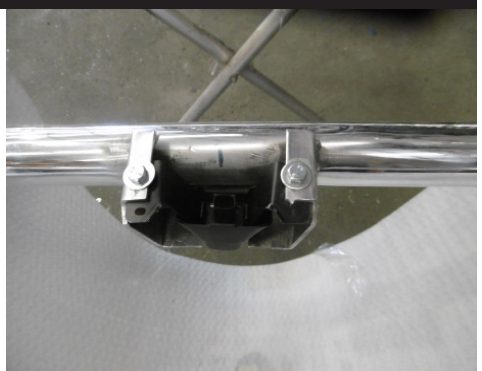
- Remove camera from bumper, two (2) PK screws.
- Extend camera wiring harness 200mm using wire and solder joiners (supplied).
- Place exposed wiring into 250 mm convoluted tubing (supplied) for protection.

NOTE: Overheating of connectors will cause the plastic sheathe to melt, while under heating will not melt the solder enough to create a strong connection. Hold joint still until solder is solid for a good join.



Stage 11

- Place camera into camera housing on protection bar.
- Secure with two (2) M6 bolts, flat washers and nyloc nuts.



Stage 12

- Using measurement from steel mounting bracket, mark and trim lower grill for mounting to go through.
- Ensure trim is as neat as possible as this will not be covered.
- Note: Alloy goes to inside of mounting bracket



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Stage 13

- Refit bumper onto vehicle using original equipment as per reverse of stage 2.



Stage 14

- Fit protection bar onto steel mounting brackets using four (4) M10 x 1.5 x 40mm bolt, flat washer, spring washer and nut (supplied).
- Align and **tighten all bolts.**



NOTE: Old product show. Parking sensor mounts have changed.

Stage 15

- Connect sensors and camera check for correct operation.
- Refit lower air dam and under body guard.
- Test drive vehicle to ensure all driver assists are working as per before fitment



Final Checks & Installation Kit

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.

Installation Kit

1 - Pair steel mounting brackets	6 - M8 x 1.25 nyloc nuts
1 - Pair steel stabilizer brackets	2 - M6 x 20mm bolts
4 - 40 x 40 x 6mm steel flat washer	4 - M6 flat washers
2- 40 x 70 x 6mm steel flat washer	2 - M6 nyloc nuts
4 - M10 x 1.5 x 40mm bolts	1 - Quick click kit (IC19TOR4SP1H)
6 - M10 x 1.5 x 35mm bolts	1 - 200mm length five core wire
20 - M10 flat washers	10 - solder joiners
10 - M10 spring washers	1 - 250mm length 10mm convoluted tubing
10 - M10 x 1.5 nuts	4 - 300mm zip ties
6 - M8 x 1.25 x 30mm bolts	4 - 200mm zip ties
12 - M8 flat washers	

Finished Product



Warranty Registration

Contact Details

Name: _____

Address: _____

Product: **NBT139SY**

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.

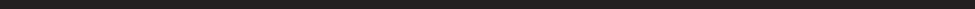
Or Register Online

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.



PN: NBT139SY
Please post to: PO Box 122,
Margate QLD 4019

Notes



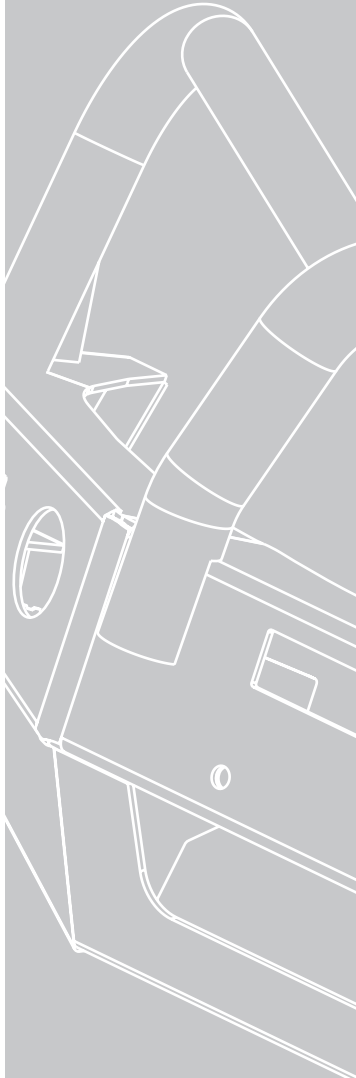
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 Full Name

 Date

REPLACES: 13.07.20

REVISED: 23.11.22



1800 069 145
www.ecb.com.au

Strongest Built Australian Made Lifetime Warranty

29 Snook St, Clontarf QLD 4019
PO Box 122, Margate QLD 4019