



**Strongest Built
Australian Made
Lifetime Warranty**

PN: NBT137SY



Fitting Guide & Owners Manual

Toyota Rav 4 5/2019 on

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

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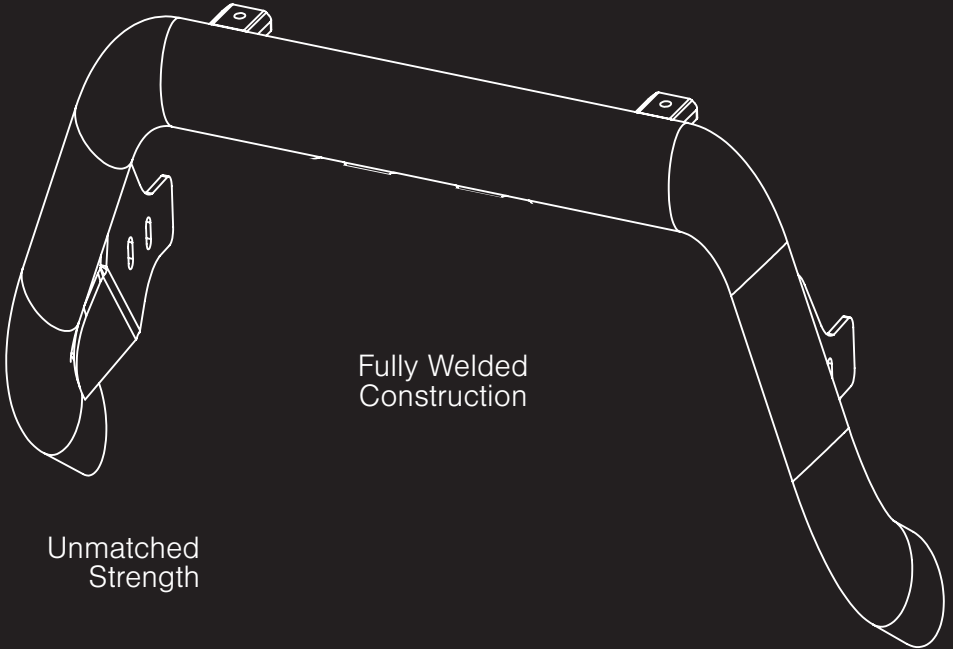
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Notes

The Features of ECB

Hi-Tensile Alloy

Rust Free



Fully Welded
Construction

Unmatched
Strength

Industry Leading
Metal Thickness

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 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.



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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.



Stage 2

- On top of bumper remove four (4) 10mm head bolts, five (5) push pull clips. Remove plastic trim.
- From underside of vehicle remove six (6) 10mm head bolts.
- On inner guards remove one (1) phillips head screw, two (2) push pull clips (per side). Carefully unclip wheel arch mould from inside while pulling outwards.
- Remove one (1) clip in rear wing per side. Pull out on rear wing to unclip from guard and unplug wiring on passenger side.
- Remove bumper.



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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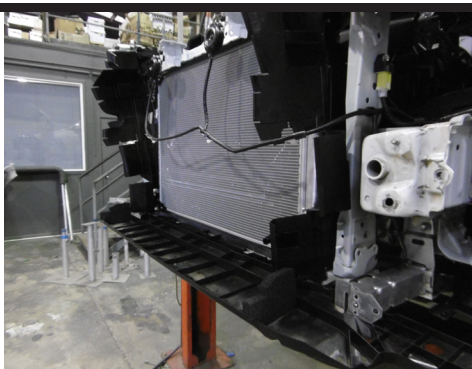
Stage 4

- 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 (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 (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

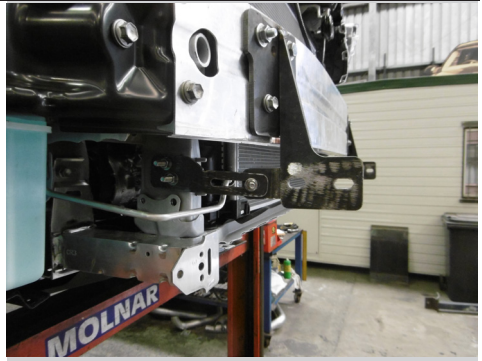
- Fit steel stabilizer mount (supplied) onto radiator support using one (1) M8 x 1.25 x 30mm bolt, flat washer and nyloc nut (per side) (supplied).
Finger tight only.
- Using mount as a guide, drill lower hole to 8mm.
- **Blow filings clear and treat all exposed metal with a rust inhibitor.**
- Install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



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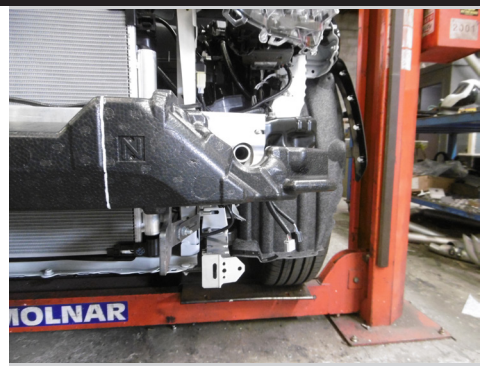
Stage 7

- 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.**



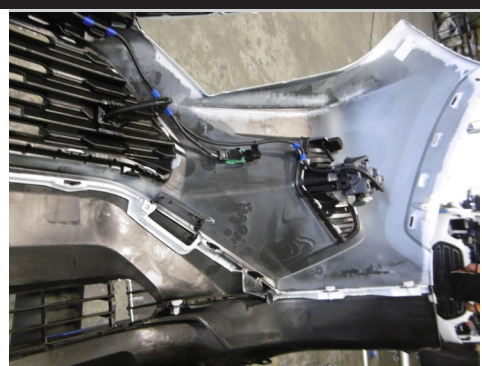
Stage 8

- 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 to rear of plastic 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.

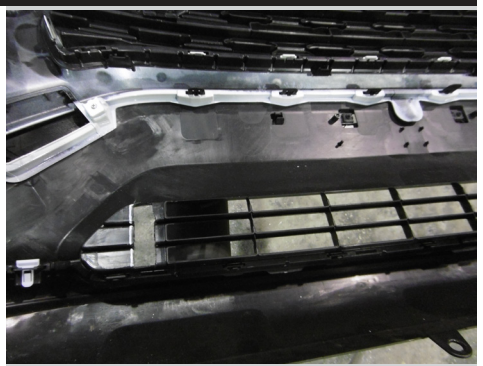


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Stage 10

- 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 outside of mounting bracket.



Stage 11

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



Stage 12

- 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.**



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Stage 13

- Connect sensors and 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	10 - M10 x 1.5 nuts
1 - Pair steel stabilizer mounts	6 - M8 x 1.25 x 30mm bolts
4 - 40 x 40 x 6mm steel flat washer	12 - M8 flat washer
2 - 40 x 70 x 6mm steel flat washer	6 - M8 x 1.25 nyloc nuts
4 - M10 x 1.5 x 40mm bolts	4 - 300mm zip ties
6 - M10 x 1.5 x 35mm bolts	1 - Quick click Kit (IC19TOR4SP1H)
20 - M10 flat washers	4 - 200mm zip ties
10 - M10 spring washers	

Finished Product



Warranty Registration

Contact Details

Name: _____

Address: _____

Product: **NBT137SY** _____

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.

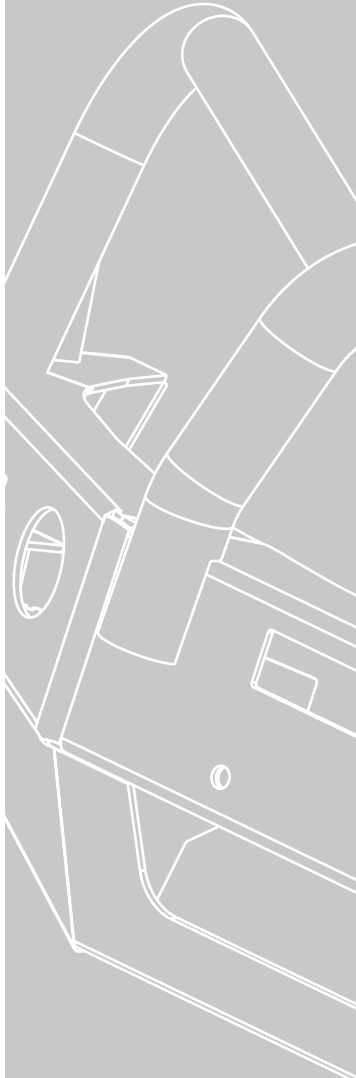
Or Register Online

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



PN: NBT137SY
Please post to PO Box 122,
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REPLACES: N/A
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