



**Safer
Lighter
Stronger**

PN: NBT34SY



Fitting Guide & Owners Manual

**TOYOTA KLUGER
03/2021on**

76mm NUDGE BAR

VEHICLE FRONTAL PROTECTION SYSTEM (VFPS)
FOR AIR BAG & ADR COMPLIANT VEHICLES



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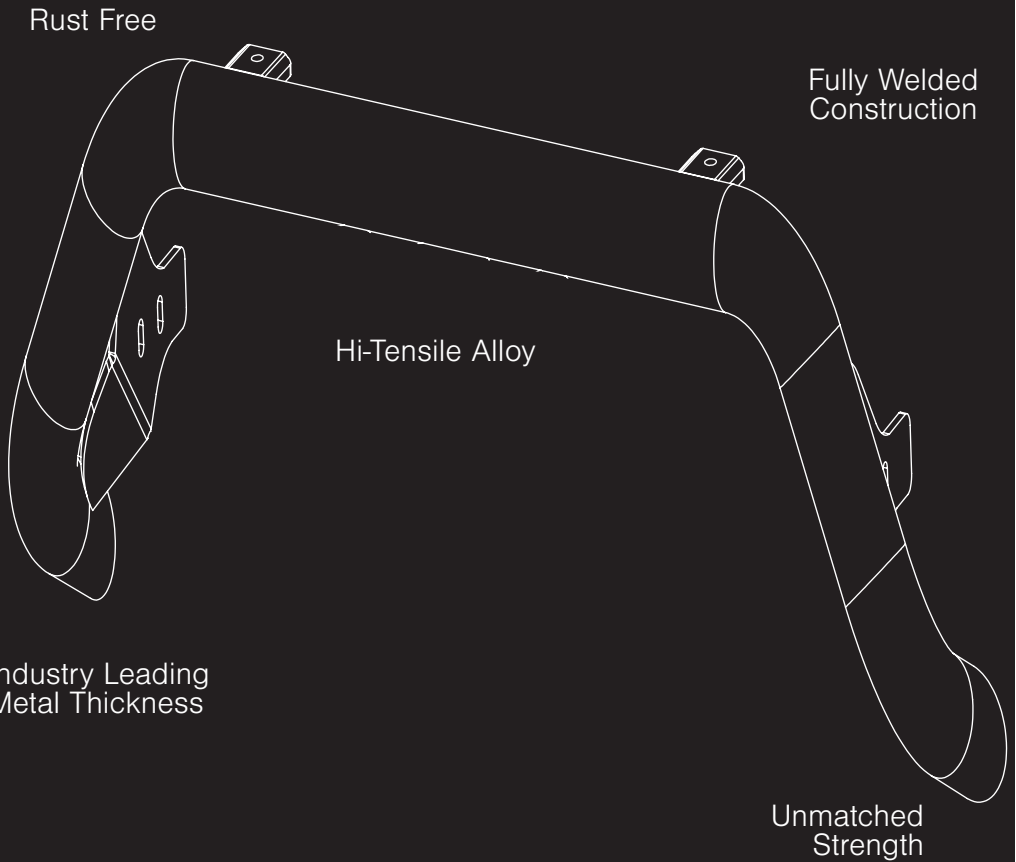
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The Features of ECB



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 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. In fact 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. Within our decades 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/operator.



Stage 2

- Remove nine (9) push/pull clips from radiator plastic cover and remove.



Stage 3

- Remove four (4) 10mm head bolts from top and centre mounts. Grille and bumper will be removed in one piece.



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Stage 4

- Under front of bumper at front ends of inner guards, remove three (3) 10mm head screws (per side).



Stage 5

- From underside of front edge of plastic splash guard/bumper join, remove ten (10) 10mm head screws.



Stage 6

- On centre splash guard, remove three (3) 10mm head bolts and two (2) push pull clips. Remove centre splash guard.



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Stage 7

- From rear of flare, remove one (1) 10mm head bolt and two (2) plastic push pull clips.



Stage 8

- Pull inner guards rearward away from front of bumper and wheel arch to allow access to rear of flare.
- Disconnect bumper sensor and camera wiring loom from behind bumper on drivers side. Unclip wiring from rear of fog light assembly (per/side).



Stage 9

- Unclip flare to second clip past guard/ bumper join.
- Lower clips are accessed from rear of bumper whilst top two clips are push only style clips which need to be carefully levered out.



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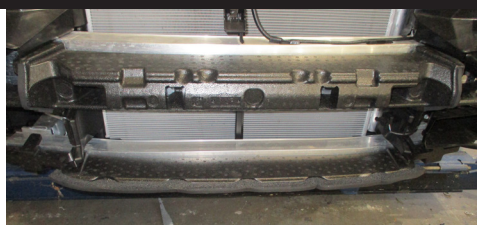
Stage 10

- Gently unclip bumper from retaining clips where bolts are removed from inner guard and pull guard sides outwards to release from guard, carefully remove bumper from vehicle.



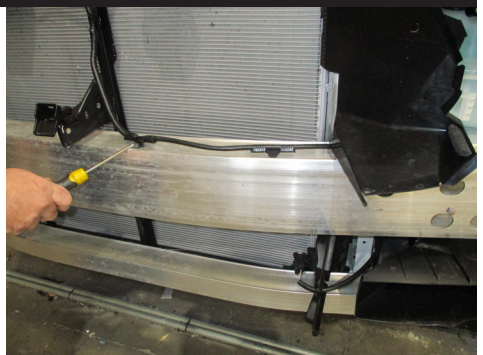
Stage 11

- Remove top and bottom polystyrene infills from bumper supports.
- From passenger side of vehicle, remove transmission cooler shroud, three (3) 10mm head bolts. Retain for re fitment.



Stage 12

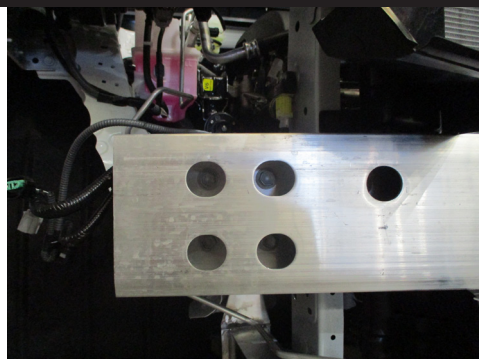
- On top of alloy bumper support remove wiring and allow to hang. This will be refitted later.



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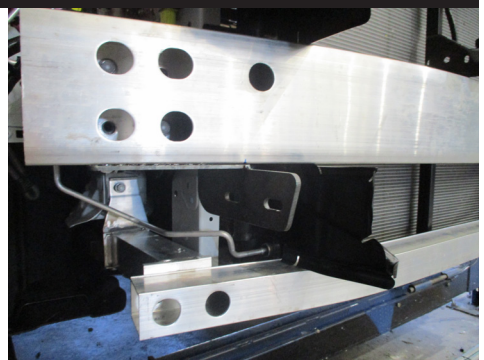
Stage 13

- Remove top alloy bumper support, eight (8) 14mm head nuts, accessible from holes in front of support.



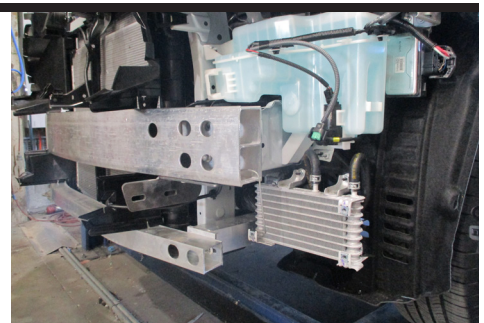
Stage 14

- Install ECB steel mounting brackets onto the end of chassis rail.
- Refit alloy bumper support using original equipment bolts. Finger tight only at this stage.



Stage 15

- Using measurement from alloy protection bar, centralize and set steel mounts to fit outside alloy mounts.
- Align and tighten all bolts.



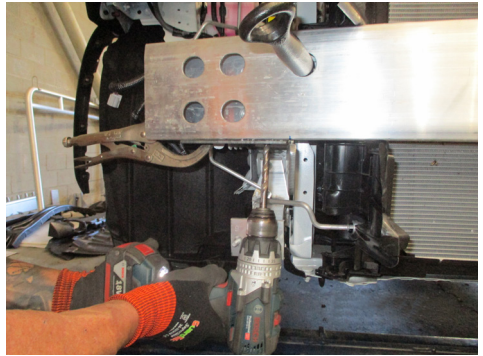
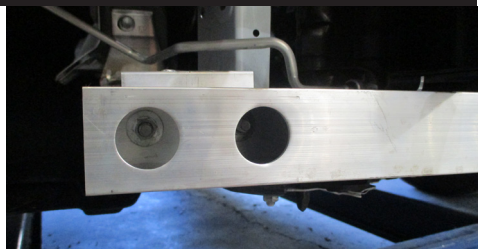
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Stage 16

- Remove lower alloy support by removing two (2) 12mm head nuts (per/side).
- Using steel mount as a guide, drill a 10mm hole into under side of top alloy support (per/side).

Blow filings clear and treat all exposed metal with a rust inhibitor

- Insert 40 x 40 x 4mm steel spacer washer (supplied) between alloy and steel mount. Attach with M10 x 1.5 x 35mm bolt, spring washer, flat washer and nut and washer on wire (per/side) (supplied).
- Refit alloy support using original equipment.



Stage 17

- Using steel mount as a guide mark, cut air duct on transmission cooler for steel mounting bracket to fit.



Stage 18

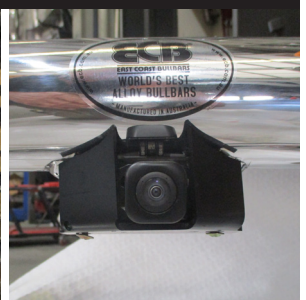
- Refit wiring to top of alloy support.
- Refit polystyrene infill to top support only.
- DO NOT FIT LOWER POLYSTYRENE AT THIS STAGE.



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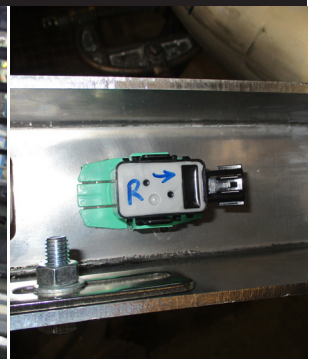
Stage 19

- Remove camera from behind grille and relocate into protection bar using two (2) 8g x 12mm self drilling screws (supplied).
- Extend camera wiring with solder joiners and 160mm wire extensions (supplied).



Stage 20

- Remove center bumper sensors and bumper sensor clips from bumper and relocate to protection bar using VHB tape (not supplied) or gel glue (supplied).
- Extend sensor wiring with solder joiners and 320mm wire extensions supplied. NOTE: use minimum wire to reach the sensors only. Too much wire can cause sensors to fail.



CAUTION: Care must be used to not glue the sensor to the mounting bracket. This will cause sensor failure.

- Where sensors are not fitted, install black plugs (supplied) into holes in cross bar.

Stage 21

- Using steel mount measurement as a guide, mark and trim lower grille for alloy mount to fit.



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Stage 22

- Refit bumper as per reverse steps of 2 to 10.



Stage 23

If installing optional light bar into protection bar.

- Remove infill from nudge bar two (2) M8 x 30mm allen head bolts, flat washers, spring washers and nuts. Access from bottom.
- Attach light bar using the M8 x 30mm allen head bolts, flat washers, spring washers and nuts. Access from bottom.
- Wire light as per manufacturers instructions if fitting.
- Discard infill.



Stage 24

- Fit protection bar onto steel mount using M10 x 1.5 x 40mm bolts, flat washers, spring washers and nuts (supplied).
- Align protection bar and tighten all bolts.
- Connect camera and attach cover plate using two (2) 8g/18 x 12mm self drilling screws (supplied) .

NOTE: Access to steel mounting bracket is from underside of vehicle.



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Stage 25

- Refit lower polystyrene and under body guard using original bolts and clips.
- Connect all electrical equipment and check for correct operation.

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.

Installation Kit

1 - Pair steel mounting brackets	2 - M8 x 30 Allen head bolt
1 - Light blanking plate	4 - M8 Flat washers
1 - Camera cover	2 - M8 Nyloc nuts
2 - Spacer washers 40 x 40 x 4 13mm hole	4 - 8g/18 x 12mm Self drilling screws
4 - M10 x 1.5 x 40mm Bolts	12 - 320 mm Length single extension wires
2 - M10 x 1.5 x 35mm Bolts	4 - 160 mm Length single extension wires
10 - M10 Flat washer	32 - Solder joiners
6 - M10 Spring washer	1 - Tube gel glue
4 - M10 x 1.5 Nuts	2 - 19mm Black blanking plugs (17mm hole size)
2 - M10 x 1.5 Nut and washer on 300mm wire	

Finished Product



Warranty Registration

Contact Details

Name: _____

Address: _____

Product: **NBT34SY** _____

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.

Register Online

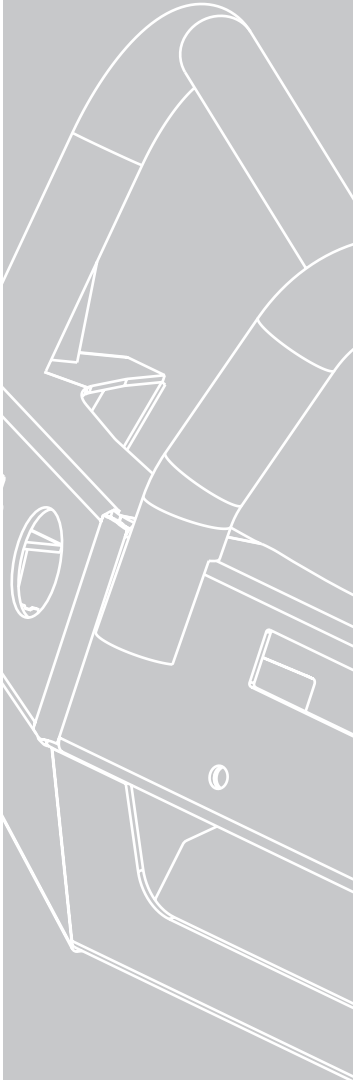
For Online registration please go Online to www.ecb.com.au/warranty-registration If
you have any questions please contact our national office on 1800 069 145 or www.ecb.com.au.



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