



**WORLD'S BEST
ALLOY BULLBARS**

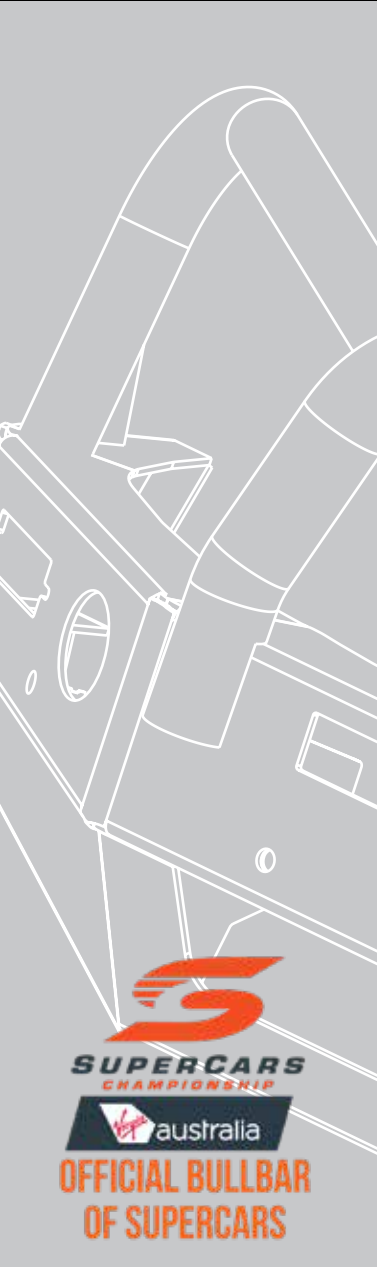
**Strongest Built
Australian Made
Lifetime Warranty**

PN: NBM34SY



Fitting Guide & Owners Manual Mitsubishi Outlander MY18.5-10/17 ON

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



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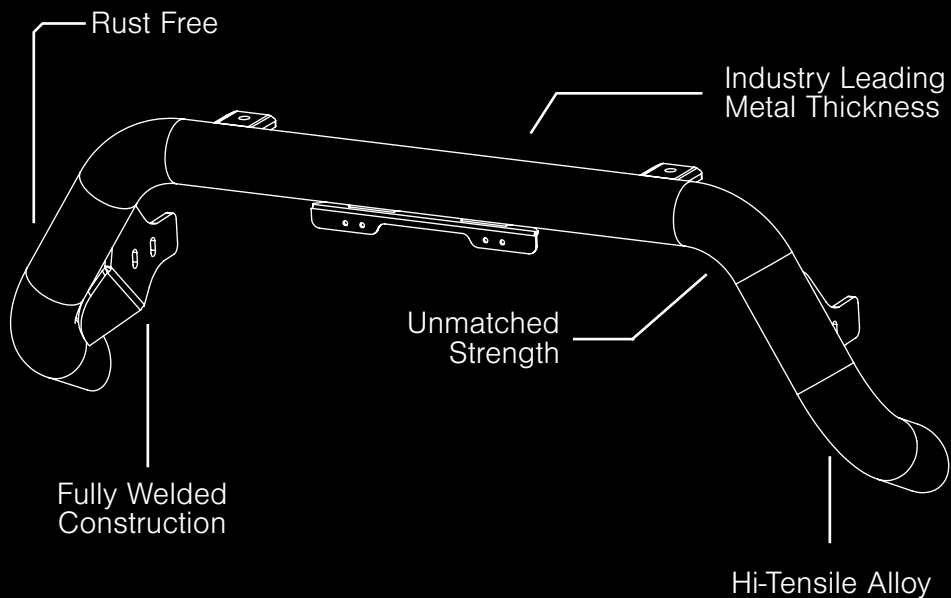
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The Features of ECB



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.**

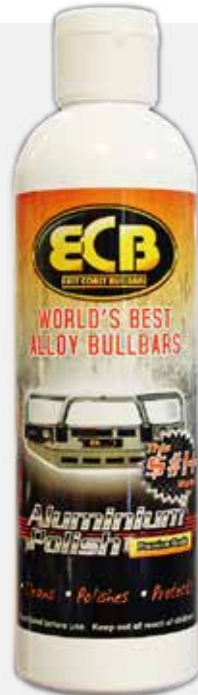
Powdercoated Products

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 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.



NBM34SY

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

- Remove trim from top of radiator support, (12) twelve plastic push pull clips.



Stage 3

- From outer edge of grill, remove (2) two plastic push pull clips, pull firmly on grill to release three clips.
- Remove grill.

MITSUBISHI OUTLANDER

Stage 4

- Remove(1) one 10 mm head bolt from wheel arch flare per side.
- Remove flare.
- Remove (2) two black push pull clips from wheel arch (per side) and one push pull clip from rear wing to guard per side .
- From top of bumper between headlights remove (5) five plastic push pull clips and (3) three 10mm head bolts. From underside of bumper remove (6) six push pull clips and (6) six hex clips. Remove from front of bumper lower grille, (2) two 10mm head bolts.



Stage 5

- Unplug fog light /sensor and camera harness from drivers side of bumper reinforcement.
- Unclip headlight washer hose from bumper.
- Carefully pull out on rear of wing to unclip bumper from guard and then forward from headlight to remove.



Stage 6

- Using 18mm drill ,enlarge front hole in outer section of crash can for tube spacer.
NOTE :Tube spacers are different sizes, right hand side is 64mm and left hand side is 72mm.
- **NOTE : Blow filings clear and treat all exposed metal with a rust inhibitor.**
- Remove lower air dams



PRODUCT

Stage 7

- On passenger's side of bumper support disconnect temperature sensor from mount and using a chisel or similar tool, remove mount from bumper support
- **NOTE : Blow filings clear and treat all exposed metal with a rust inhibitor.**



Stage 8

- Remove (2) two 12mm head bolts from lower intercooler mount (per side) and (1) one 12mm head bolt from upper intercooler mount (per side). Allow intercooler to hang.



Stage 9

- From lower intercooler mounts remove rubber locator plug . Fit locator rubber into ECB steel mounting brackets supplied.



VEHICLE MODEL

Stage 10

- Disconnect transmission cooler hoses
- Remove cooler from bumper support, (3) three 12 mm head bolts, two at base one at top.
- Remove cover at bonnet release bracket, two push pull clips. Remove (2) two 12mm head bolts from rear of sonar mount back of bumper support and (1) one 12 mm nut top of sonar support bracket .Carefully remove sonar . Retain nut and bolts.



Stage 11

- Remove bumper support rail , (4) four 12mm head bolts each side .
- Retain bolts for refittment.

Stage 12

- Refit sonar to support mount, moving across to drivers side by 4 holes. Drill 8mm hole through support rail, refit sonar to bumper support using original bolt.
- Note: Blow filings clear and treat all exposed metal with a rust inhibitor.
- Use M8 x 45 bolt , flat washers, spring washer and nut in hole drilled in rail. Do not tighten.



VEHICLE MODEL

Stage 13

- Refit bumper support.
- Install top steel bracket to sonar and attach top bracket to bonnet release bracket using (2) two M10 x 40 bolts, flat washers, spring washers and nuts.
- Using original nut remount top of cooler to bracket



Stage 14

- Extend wiring harness to sonar by 200 mm using single core wire and joiners (supplied). Reconnect sonar.



Stage 15

- Remove bottom mounting brackets from transmission cooler and install transmission cooler to steel bracket (supplied).
- Mount transmission cooler to bumper support using (1) one M8 x 45 bolts , flat washers, spring washers and nuts .
- Reconnect hosing to intercooler using hosing (supplied) and zip tie together gently.



VEHICLE MODEL

Stage 16

- Trim bonnet release cover to suit mount placement and refit.

Stage 17

- Remove centre sensors from bumper and extend wiring by 150 mm using single core wire and joiners (supplied).
- CAUTION: Using too long an amount of wire will cause these sensors to stop working. Try to keep the amount of wire used to a minimum.



Stage 18

- As installing ECB steel mounting brackets in side of crash can and bumper support, ensure lower intercooler mount sits into mounting rubber correctly. Use (2) two M8x 30 bolts, flat washers and spring washes (supplied) for lower radiator support . Flatten down tab on top of intercooler mount and fit using (1) one M8x 30 bolt, flat washer, rubber mounts and spring washer for rear of bumper support. Make sure intercooler is captured between top and bottom mounts and is fully rubber mounted.



VEHICLE MODEL

Stage 19

- Install (1) one M8 x 100 bolt, spacer tube, flat washers, spring washer and nut (supplied) for crash can . Ensure steel brackets are parallel and vertical.
- **Tighten all bolts**



Stage 20

- Refit temperature sensor onto black bumper locator



Stage 21

- Using steel mounting brackets as a guide mark and cut lower grill in bumper



VEHICLE MODEL

Stage 22

- Fit bumper onto vehicle in reverse of stages 3 and 5 ,do not fit under body guard at this time



Stage 23

- Fit parking sensors to protection bar secure with zip ties (supplied).



Stage 24

- Fit protection bar to outside of ECB steel mounting brackets using (4) four M10x 35 bolts,washers,spring washersand nuts (supplied). Align protection bar to vehicle and tighten all bolts.
- Refit under body guard.

VEHICLE MODEL

Stage 25

- Connect sensors.
- Test sensors to ensure correct operation.
- Test drive vehicle to ensure correct operation of driver aids.



Final Checks & Fitting 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. **Insure 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.

Fitting Kit

1 - Pair ECB steel mounting brackets

1 - top steel bracket

1 - oil cooler bracket (bent mount)

1 - 10Nb spacer tube, 64mm long

1 - 10Nb spacer tube, 72mm long

4 - M10 x 1.25 x 35mm bolts

8 - M10 flat washers

4 - M10 spring washers

4 - M10 x 1.25 nuts

2 - M8 x 1.25 x 100mm bolts

3 - M8 x 1.25 x 45mm bolt

6 - M8 x 1.25 x 30mm bolts

16 - M8 flat washers

11 - M8 Spring washers

6 - M8 x 1.25 nuts

6 - 150mm length 3mm single core wire

4 - 200mm length 3mm single core wire

20 - solder joiners

6 - 150mm Zip ties

1 - 300mm length transmission cooler hose

1 - 340mm length transmission cooler hose

Finished Product



Warranty Registration

Contact Details

Name: _____

Address: _____

Product: _____

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.

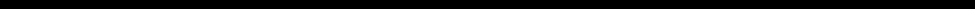
Or Register Online

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



Please post to PO Box 112, Margate QLD 4019

Notes



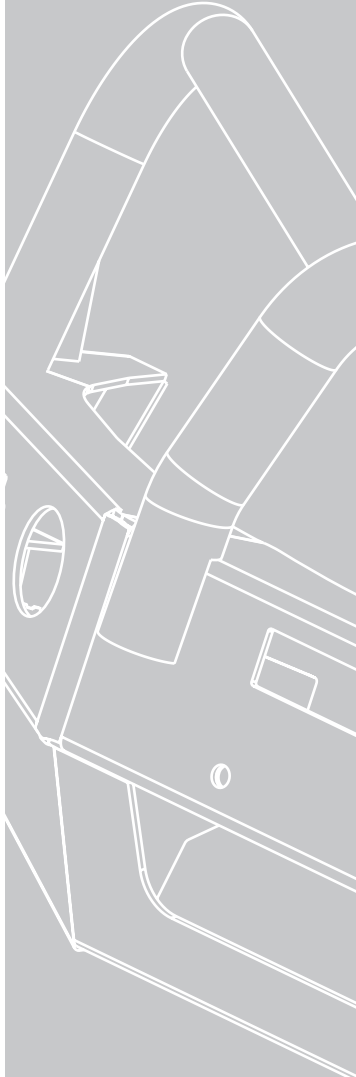
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_____ Full Name

_____ Date

REPLACES: 08.03.18

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www.ecb.com.au

Strongest Built Australian Made Lifetime Warranty

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