



**Safer
Lighter
Stronger**

PN:BM233SY



Fitting Guide & Owners Manual

**MITSUBISHI OUTLANDER
08-2021on**

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

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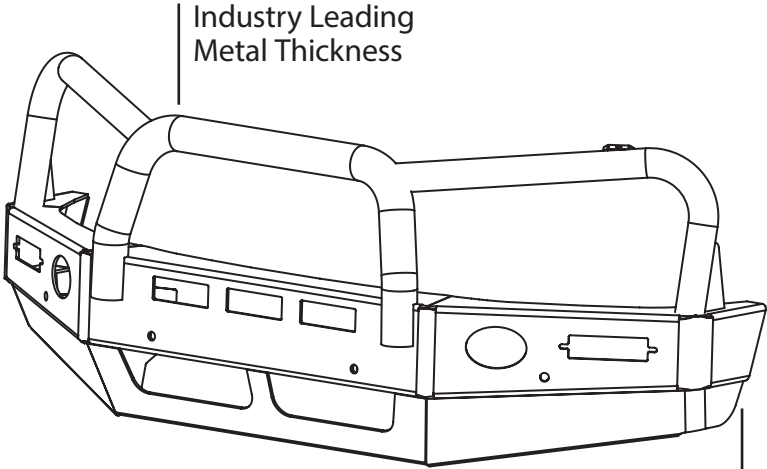
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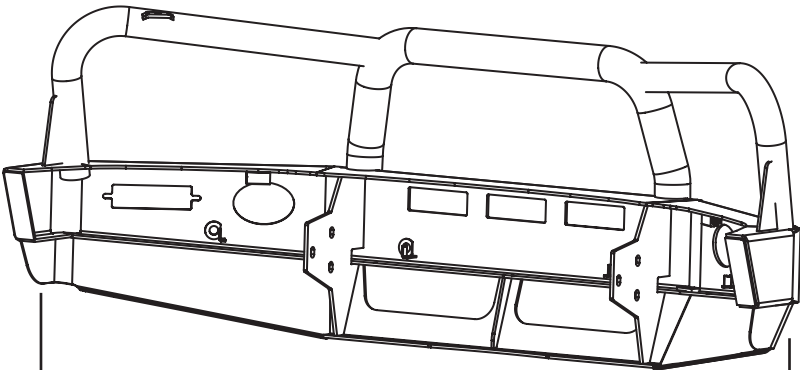
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The Features of ECB



Industry Leading
Metal Thickness

6mm Thick
Hi-Tensile Alloy



Unmatched
Strength

Fully Welded
Construction

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 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.
- Ensure these instructions are left with the vehicle owner and/or operator.



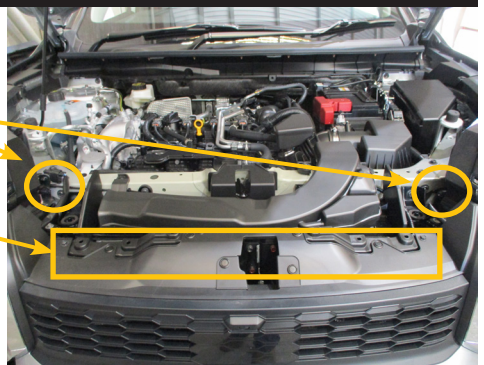
Stage 2

- From top of radiator cover remove ten (10) push pull clips and cover.



Stage 3

- Disconnect parking sensor/ fog light wiring loom, left and right side between radiator and headlights.
- Remove four (4) push pull clips across top of bumper and two (2) 10mm head bolts.



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Stage 4

- Carefully pull flare away from vehicle, disconnecting push clips.
- Do not over flex flare as it can produce visible stress lines in the flare.



Stage 5

- Remove 10mm head bolt and two (2) push pull clips from inner wheel arch (per side).



Stage 6

- From front underside of bumper remove ten (10) push pull clips.



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Stage 7

- Remove one (1) 10mm head bolt, located under flare (per side).
- From front lower grille remove one (1) 10mm head bolt (per side).



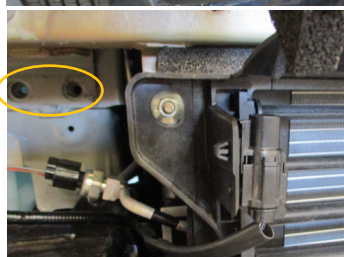
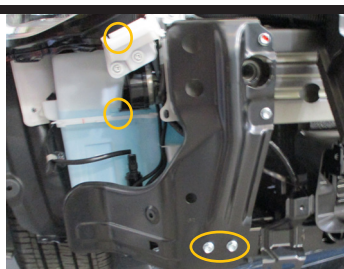
Stage 8

- Carefully pull away bumper from side of vehicle disconnecting guard clips.
- Remove bumper.



Stage 9

- Remove foam support from the bumper support, one (1) Phillips screw.
- Remove outside reinforcement brackets by releasing four (4) 12mm head bolts (per side).
- From underside of bumper support at chassis connection point, remove two (2) 12mm head bolts.



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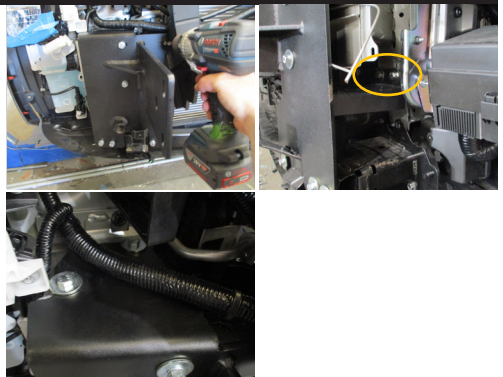
Stage 10

- Disconnect wiring from air vent louvre system.
- Remove one (1) push pull clip and one (1) 10mm head nut from air vent louvre system (per side).
- Using a sharp knife or similar, trim rubber surround on air vent louvre system to allow ECB steel mount to fit.
- Refit air vent louvre system with original equipment bolt and plugs.



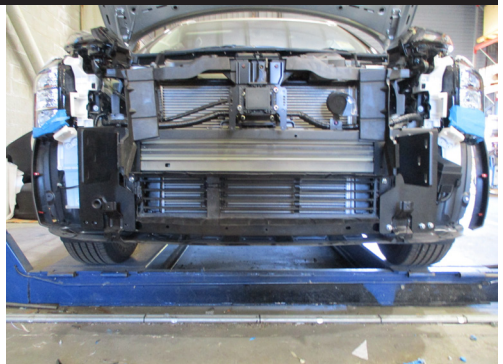
Stage 11

- Fit ECB steel mount to front of bumper support using four (4) M8 x 1.25 x 30mm bolts, spring washers and flat washers (per side) into holes where outside reinforcement brackets removed.
- At chassis rail to bumper support join, fit two (2) M10 x 1.25 x 40 bolts, spring washers and flat washers.
- Fit (2) M8 x 1.25 x 120mm bolts, flat washers and nyloc nuts through top of steel mount (per side)
- **Finger tighten only.**



Stage 12

- Measure width of inside of alloy Protection Bar.
- Align outside of steel mounts to Protection Bar measurement.
- Centralise mounts to vehicle.
- Tighten all bolts.
- Place two (2) M10 nuts on rear of M10 bolts through chassis rail (per side) and tighten firmly only. These act as locking nuts.



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Stage 13

- Using ECB steel mount as a guide, drill three (3) inner holes through bumper support to 8.5mm (per side).

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

- Install three (3) M8 x 1.25 x 30mm bolts, spring washers, flat washer and nut and washer on 300mm wire (per side).



Stage 14

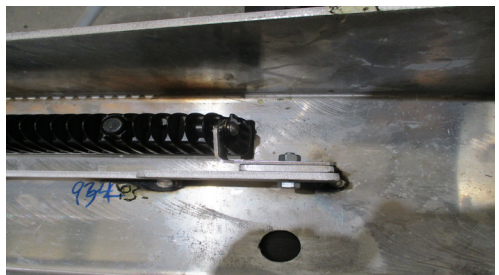
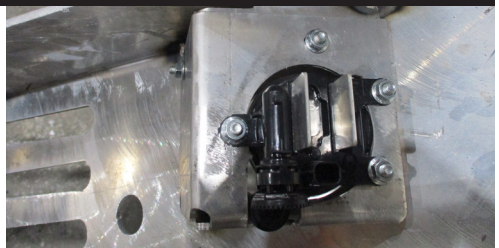
- From rear of bumper, disconnect and remove all four (4) parking sensors and housings.
- Place sensors into ECB parking sensor housing in same direction as previously in bumper.



Stage 15

- Disconnect and remove fog lights from bumper, three (3) phillips head screws.
- Secure fog light into ECB alloy fog light bracket using three (3) M6 x 16mm bolt, washers and flange nuts.
- If fitting Accessory LED light bar, remove alloy blanking plate from bar.
- We recommend fitting 22 inch Narva light bar. Install as per instruction with accessory light.

NOTE: Two (2) alloy spacer plates are required for correct fitment (supplied with accessory kit).

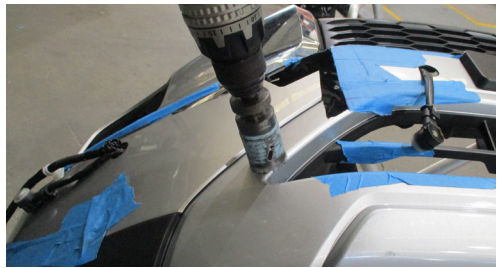
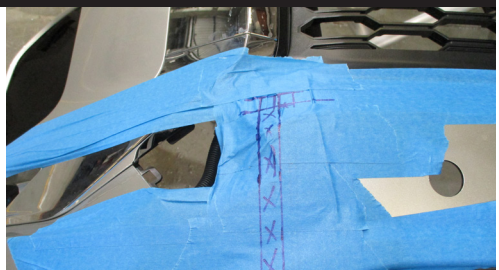


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Stage 16

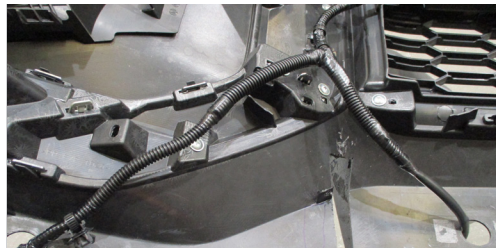
- Using paper masking tape, mask area to be cut to avoid damage.
- As printers vary, check measure template to ensure correct sizing.
- From this instruction, using sharp scissors, carefully cut out template.
- Mark and cut bumper using jigsaw, hack saw or similar.
- Use 38mm hole saw to drill tow hook hole (driver side only).

CAUTION: Double check all marked lines before trimming.



Stage 17

- From rear side of bumper release wiring clips to allow extra length for sensor and fog light wiring to come through front of bumper.
- Split wiring harness for extra length on sensor wires and cover with convoluted tubing (passenger side only).



Stage 18

- Place sensor and fog light wires through front of bumper before refitting bumper.
- Refit bumper in reverse of steps 2 to 8.



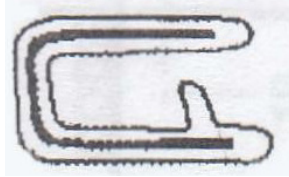
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Stage 19

- Attach 6mm clip lock trim (supplied) to top of ECB Protection Bar and lower skirt holes .

NOTE: Trim off lower edge on an angle so trim will sit flush with end of Protection Bar.

- Install 3mm clip lock trim (supplied) into tow hook holes.



Stage 20

- Fit ECB Protection Bar to steel mounts using M12 x 1.75 x 40mm bolts, flat washers, spring washers and nuts.

Finger tighten only.

- Align Protection Bar with vehicle. check towhook to ensure fitment is not obscured.

Tighten all bolts.

- Reconnect sensors and fog lights.



Stage 21

- Check and test all wiring connections.
- Test safety features are working correctly.
- Place supplied tow hook into vehicle for owner.

NOTE: A zip tie can be placed through the rectangular openings of the parking sensor housing to ensure parking sensor does not detach during rough operation of vehicle if required.

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 of ECB steel mounts	4 - M8 nyloc nuts
1 - ECB tow hook (leave in vehicle)	6 - M8 nut and washer on 300mm wire
6 - M12 x 1.75 x 40mm bolts	6 - M6 x 16mm bolts
12 - M12 flat washers	6 - M6 flat washers
6 - M12 spring washers	6 - M6 flange nuts
6 - M12 x 1.75 nuts	4 - ECB sensors housings (pre installed)
4 - M10 x 1.25 x 40 bolts	2 - Fog light brackets (alloy)
4 - M10 flat washers	1 - Infill bracket (alloy)
4 - M10 spring washers	1 - 2400mm length 6mm clip lock
4 - M10 x 1.25 nuts	2 - 550mm length 6mm clip lock
14 - M8 x 1.25 x 30mm bolts	2 - 250mm length 3mm clip lock
4 - M8 x 1.25 x 120 bolts	2 - 120mm length 10mm convoluted tube
22 - 5/16 x 1/14 flat washers	4 - 150mm zip ties

Finished Product



Warranty Registration

Contact Details

Name: _____

Address: _____

Product: **BM233SY**

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
ecb.com.au

Or Post To:

PO Box 122, Margate, QLD 4019



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Please post to: PO Box 122,
Margate QLD 4019

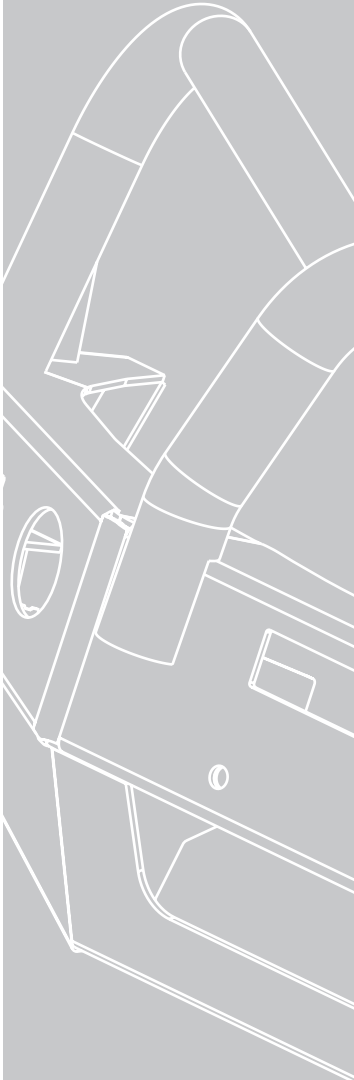
Notes

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Full Name

Date _____

REPLACES: N/A
REVISED: 16.06.22



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ecb.com.au

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