



**Lighter
Stronger
Better!**

**Strongest Built
Australian Made
Lifetime Warranty**

EAM163SY



Fitting Guide & Owners Manual

**Mitsubishi Triton
MR MY19 11/19on**

Big Tube Bar with Bumper Lights
VEHICLE FRONTAL PROTECTION SYSTEM (VFPS)
FOR AIR BAG & ADR COMPLIANT VEHICLES



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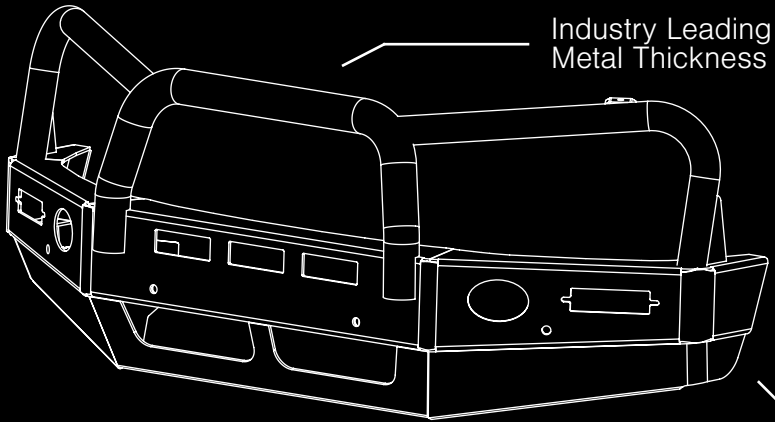
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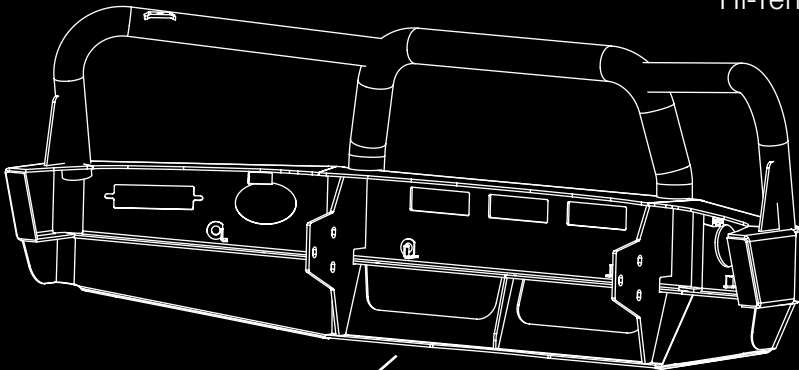
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The Features of ECB



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.

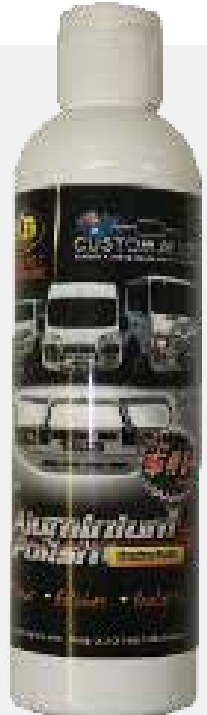
Powdercoated Products

Our powdercoated finishes are very low maintenance. 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. 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 and/or operator.



Note: Vehicle shown has original equipment Nudge Bar installed. Instruction does not include removal of Original Equipment nudge bar.

Stage 2

- Remove eleven (11) plastic screw clips from top of radiator cover.
- Remove radiator cover.



Stage 3

- Remove one (1) plastic screw clip beside headlight (per side). Gently pull forward on lower grille to release clips from bumper and remove grille.



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Stage 4

- Remove outer chrome infill's (if fitted) or coloured infill from bumper. Gently pull on corner to release clips once removed.
- From under infill, remove one (1) 10mm head bolt.
- Remove number plate cover one (1) Phillips head screw and unclip sides from lower grille. Do not replace.



Stage 5

- In top grille opening, remove three (3) 10mm head bolts.
- Disconnect three (3) wiring harness from centre of bumper support.
- Disconnect harness from grille support, release one (1) 12mm head bolt from bonnet support latch bracket. Pull harness underneath bonnet latch support and replace bolt.



Stage 6

- Remove one (1) plastic screw clip from top inner guard and three (3) 10mm head bolts from under outer bumper.
- Remove two (2) push pull clips from underside front of inner guard (per side).
- Gently pull bumper sides away from vehicle to release from clips and remove bumper.



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Stage 7

- Remove vertical bumper stay, three (3) 10mm head bolts (per side).



Stage 8

- Remove six (6) 14mm head bolts from front cross member and remove bumper reinforcement.



Stage 9

- Remove under belly guard, four (4) 12mm head bolts.
- Retain for refittment.



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Stage 10

- From inner guard, remove three (3) push pull clips from top. Passenger side only. Remove inner guard.
- Disconnect harness to water bottle, disconnect hose and drain. Remove filler tube from top of bottle.
- Remove three (3) 12mm head bolts.
- Remove bottle.



Stage 11

- Carefully remove motor and all rubber seals from the original washer bottle. Place all parts into washer bottle (supplied) using fittings from original bottle.
- On inner side of bottle, place support bracket (supplied) on bottle using M8 x 16mm bolt, spring washer and flat washer (supplied).
- Fit bottle to vehicle in original position using two (2) M8 x 55mm bolts, spring washers and flat washers (supplied)
- For inner bracket to body, use M8 x 1.25 x 30mm bolt, flat washer, spring washer and 25mm x 6mm spacer (supplied). **Tighten all bolts.**



Stage 12

- Attach ECB steel mounting brackets (supplied) over crossmember to outside of chassis rail. Attach to chassis rail using M10 x 1.25 x 40mm bolt, flat washer and spring washer (supplied) for front hole into captive nut.
- For centre hole use M10 x 1.5 x 100mm bolt, flat washers, spring washer and nut (supplied) and 10NB x 58mm tube spacer.
- On drivers side in rear hole use M10 x 1.25 x 40mm bolt, flat washers, spring washer and nut (supplied).
- On passenger side, use M10 x 1.5 x 50mm bolt, flat washer, spring washer and nut with 10NB x 15mm tube spacer (supplied) between mount and chassis rail into lower hole, just above the tow hook.



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Stage 13

- Fit ECB steel mount gussets onto inside of mount to front cross member using M10 x 1.25 x 40 bolts, flat washer, spring washers and 10mm spacer bar (supplied) into captive nuts and M10 x 1.25 x 40 bolt flat washer, spring washer and nut and washer on wire (supplied) into outside hole.
- Install M10 x 1.25 x 40 bolt, flat washer, spring washer and nuts (supplied) to bar **mounting bracket**.
- When all bolts are fitted, align mount central to front of vehicle and tighten all bolts. Two centre holes for underbelly guard



Stage 14

- Remove camera and harness from bumper, two (2) Phillips head screws. Retain for fitment into protection bar.



Stage 15

- Secure camera to mounting bracket (supplied) using two (2) M5 x 20mm bolts, flat washer and nyloc nuts (supplied).
- Secure into protection bar using two (2) M6 x 25mm bolts, flat washer and nyloc nuts (supplied).
- Align camera ensuring it is centered in hole and **TIGHTEN ALL BOLTS**.



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Stage 16

- Remove parking sensor and fog light harness from bumper and place into protection bar.
- Center sensor wiring will need to be released from convoluted tubing to extend to the sensor.
- Secure harness in protection bar with zip ties (supplied). Where required cover wiring with electrical tape.



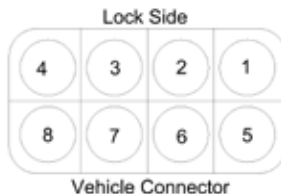
Stage 17

- Fit parking sensors to housing in protection bar using two (2) plastic spacers to front of parking sensor, one (1) 3mm and one 2mm clear spacer.
- Secure sensor in housing with zip tie (supplied).
- Do not over tighten as this may result in sensors working incorrectly.



Stage 18

- Splice ECB wiring harness into wiring harness behind headlight using cable locks (supplied). Ensure harness is clear of sharp edges and moving parts.



Pin 1 for high spec vehicle Separate harness for low spec vehicle	DRL
2	EARTH
3	PARK
A	INDICATOR (separate 2 pin harness)

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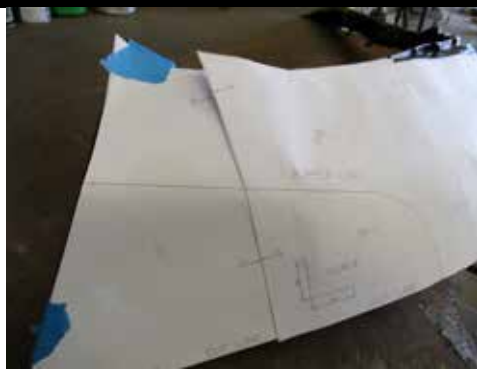
Stage 19

- Remove indicator / fog light from bumper, four philips head screws.
- Retain two screws, to secure light infills into bumper.
- Remove fog light support mount.



Stage 20

- From this instruction, using sharp scissors, carefully cut out template. As printers vary, check measure template to ensure correct sizing.
- Using template provided, mask area to be cut to avoid damage.
- Mark and cut bumper using jigsaw, hack saw or similar. CAUTION: Double check all marked lines before trimming.
- Use 3mm clip lock (supplied) on trimmed edges.



Stage 21

There are two (2) indicator infills in the kit, one for the twin light and one for the one piece light version.

- Place correct Indicator / fog light infills (supplied) for your model into bumper.
- Use philips head screws from headlight and M6 x16mm bolt, washers and nyloc nut (supplied) to secure infill to bumper.



Twin light vehicle



One piece light vehicle

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Stage 22

- Refit bumper and grille as per reverse of steps 2 and 3.
- Refit passenger side inner guard .



Stage 23

- Fit ECB LED indicator / park lights into protection bar as per instructions supplied with the LED indicator kit.
NOTE: Ensure park light is to top.



Stage 24

- Attach the long length 6mm clip lock trim (supplied) to top of ECB protection bar.
NOTE: Trim off lower edge on an angle so trim will sit flush with end of protection bar.



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Stage 25

- Fit protection bar to vehicle using M12 x 1.75 x 40mm bolts, flat washers, spring washers and M12 nuts (supplied).
- Align protection bar and tighten all bolts.
- Reconnect parking sensors and camera.



Stage 26

- Join side under belly guards with four (4) M6 x 20mm bolts, flat washers and nyloc nuts (supplied).
- Fit under body guards secure with M6 x 25mm bolts, flat washers and nyloc nuts (supplied).
- Align and **tighten all bolts.**
- Refit original equipment under belly guard.



Stage 27

- Fit centre under belly guard to top of Protection Bar skirt using two (2) M10 x 1.25 x 40mm bolts, flat washers and M10 spring washers (supplied) for rear hole and four (4) M6 x 25mm bolts, flat washers and nyloc nuts (supplied for front holes).



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Stage 28

- Neatly trim inner guards to suit underbelly guards. Secure with self tapping screws (supplied).



Stage 29

- Attach ECB bumper lights to protection bar. Place M6 x 20 bolts, spring washers (supplied) through light mount from inside and attach nut to top. Slide assembly into light mount in Protection bar and centralize light to hole. TIGHTEN FIRM ONLY.
- Install fog light surrounds (supplied) to fog light openings with large side of surround to inside of opening.



Stage 30

- Test all lights, camera and parking sensors for correct operation.
- Test drive vehicle to ensure all driver assists are working as per manufacturers specifications.

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	3 - M10 x 1.5 nuts
1 - Pair steel support brackets	2 - M10 x 1.25 nuts and washer 300mm wire
1 - 10mm steel spacer bar	2 - M8 x 1.25 x 55mm bolts
1 - Centre underbody guard	1 - M8 x 1.25 x 16mm bolt
1 - Pair bottom side underbody guards	3 - M8 flat washers
1 - Pair front side underbody gaurds	3 - M8 spring washers
1 - Pair One Piece light infills 3mm alloy	12 - M6 x 25mm bolts
1 - Pair Two Piece light infills 3mm alloy	12 - M6 x 20mm bolts
1 - Camera mount 3mm alloy	2 - M6 x 16mm bolts
1 - Water bottle	48 - M6 flat washers
1 - Alloy water bottle support mount 3mm alloy	2 - M6 spring washers
1 - 25mm x 10mm x 6mm steel spacer washer	2 - M6 nuts
2 - 10NB x 58mm spacer tube	24 - M6 nyloc nuts
1 - 10NB x 15mm spacer tube	2 - M5 x 20mm bolts
4 - 3mm plastic sensor spacers	4 - M5 flat washers
4 - 2mm plastic sensor spacers	2 - M5 nyloc nuts
6 - M12 x 1.75 x 40mm bolts	4 - 8g 18-25 self-drilling screws
12 - M12 flat washers	1 - ECB Indicator / DRL / Park light kit
6 - M12 spring washers	8 - Cable Locks
6 - M12 x 1.75 nuts	1 - ECB Bumper light kit
2 - M10 x 1.5 x 100mm bolts	1 - Bumper light quick click harness (IC10D40S1004ECBH)
1 - M10 x 1.5 x 50mm bolts	2 - Bumper light surrounds
13 - M10 x 1.25 x 40mm bolts	1 - 2500mm length 6mm clip lock
28 - M10 flat washers	2 - 350mm lgenths 6mm clip lock
16 - M10 spring washers	16 - Zip ties
5 - M10 x 1.25 nuts	

Finished Product



Warranty Registration

Contact Details

Name: _____

Address: _____

Product: **EAM163SY** _____

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.

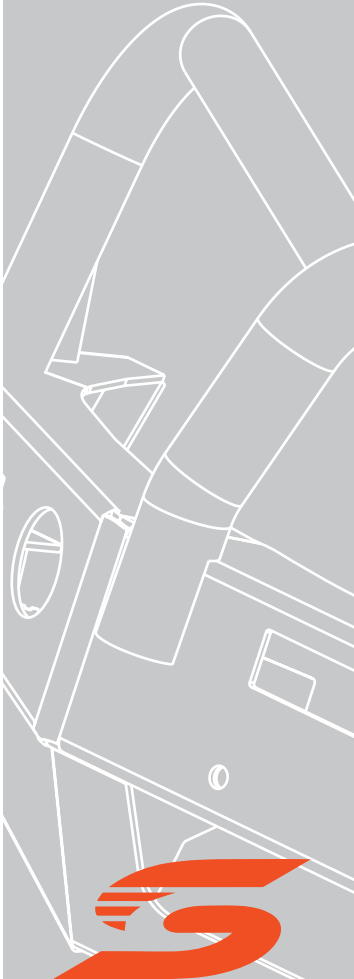
Or Post to

PO Box 122, Margate, QLD, 4019



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