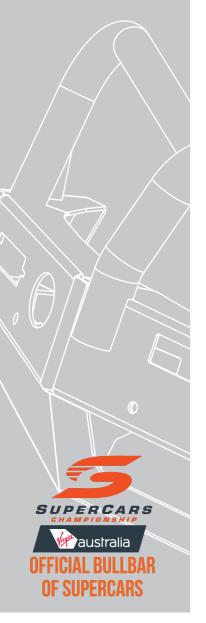


Strongest Built Australian Made Lifetime Warranty

PN: EAMB102SY





Fitting Guide & Owners Manual

Mercedes-Benz X-Class V6 Models (12/18-ON)

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

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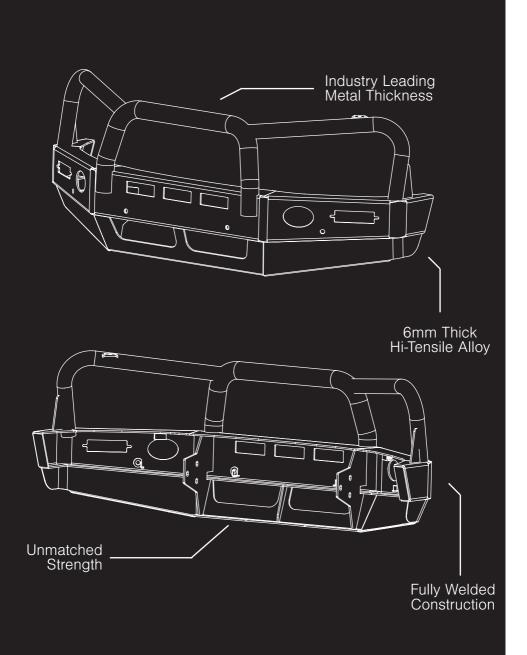
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The Features of ECB



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 Insert 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



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

 Remove thirteen (13) push pull plastic clips from top cover plate of grille.



- From front of wheel arch, remove one
 (1) T20 Torx screw (per side).
- Under front of bumper, remove two (2) 10mm head bolts from bumper lower cover to inner guard (per side).
- Pull inner guard rearward to expose rear of bumper.
- Disconnect lights, camera and FM antenna from left hand radiator support and bumper washers from right hand inner guard.



Stage 4

- Remove one (1) push pull plastic clip from top of grille to headlight.
- From bottom of grille, remove three (3) plastic push pull clips.



Stage 5

- Remove one (1) 10mm head bolts from bumper guard join.
- Remove six (6) 10mm head bolts from centre lower bumper cover. Remove cover.
- Remove four (4) 10 mm head bolts from bumper to underbelly splash guard.



Stage 6

- Carefully pull sides of bumper away from guard and forward on vehicle.
- · Remove bumper from vehicle.

CAUTION: Pull bumper away carefully to ensure clips are not damaged and all electrics are disconnected.

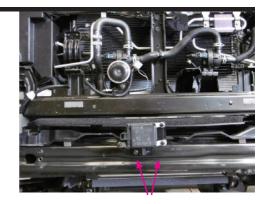


Stage 7

Disconnect and remove sonar unit, two
 (2) 10mm head bolts, from vehicle.

Caution needs to be taken when handling this unit. DO NOT scratch or drop the sonar unit.

Remove air dams from top of bumper support.



Stage 8

- Remove bumper support from vehicle, four (4) 17mm head bolts.
- From under left hand side of vehicle, remove tow hook from chassis rail, two
 (2) 17mm head bolts.



- On Passenger side install ECB steel mounting bracket (supplied) into position with steel spacer on left hand chassis rails using two (2) M12 x 1.25 x 40mm bolts, spring washers and flat washers (supplied) for front holes and two (2) M12 x 1.25 x 55mm bolts, spring washers and flat washers.
- On Drivers side install ECB steel mounting bracket (supplied) into position with steel spacer using two (2) M12 x 1.25 x 40mm bolts, spring washers and flat washers (supplied) for front holes and two (2) M12 x 1.25 x 55mm bolts, spring washers, flat washers and M12 nuts and washers on wire (supplied) for lower holes.



Stage 10

- Install winch into ECB winch frame using instructions provided by winch manufacturer.
- Fit fairlead roller to front of ECB winch frame using bolts supplied with winch.
- Install winch control box to ECB control box mount. Fit ECB control box mount to right hand front of ECB winch frame using two (2) M8 x 30 bolts, flat washers, spring washers and nuts (supplied).



Stage 11

- Between ECB steel mounts, install ECB winch frame using eight (8) M10 x 40 bolts, flat washers, spring washers and nuts (supplied)
- Wire winch to vehicle and test for correct operation.



Note: Photo has front of winch frame removed to show bolts in chassis mount

- Align mounts central to vehicle body and using measurements of inside of ECB protection bar to outside of ECB steel mounting brackets.
- · Tighten all bolts.

Stage 13

- From rear left hand side of bumper, remove FM Antenna two (2) 10mm head bolts. Antenna is fitted at a later stage.
- On inner edges of bumper wings, remove one (1) 10mm head bolt.
- Gently separate upper and lower sections of bumper



Stage 14

- Find template in this instruction. Check template for correct sizing.
- Cut template from instruction with sharp scissors and join using clear tape.
- Mask area on bumper to be cut. Place template in position to mark cut area.
- · Check markings for correct.
- Trim bumper using jigsaw or similar on waste side of cut line.
- Install 3mm clip lock trim (supplied) to cut edges.





Stage 15

- Disconnect and remove headlights from vehicle, four (4) 10mm head bolts per side.
 Unclip from top rear attachment point by gently levering up with a screwdriver.
- Splice ECB wiring harness into wiring harness using cable locks (supplied). Ensure harness is clear of sharp edges and moving parts.
- · Refit headlights to vehicle using original bolts.
- Extend sonar wirng harness using 300mm single core wire and solder joiners (supplied).



Vehicle Connector	
Pin Number	Use
3	DRL
4	Parking light
7	Indicator
Attach to body	Earth

NOTE: This wiring information is correct at the time of printing and on the vehicle in the development process. Please check your vehicle using a multimeter to ensure correct for your vehicle.

Stage 16

 On left hand side of radiator support, hold FM antenna bracket (supplied) against top intrusion beam. Using bracket as a guide, mark and drill holes to 6mm.

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

- Fit two (2) M6 x 20mm bolt, spring washer, flat washer and nut (supplied).
- · Tighten all bolts.



Stage 17

- Trim base of antenna to fit onto mounted antenna base, as per picture.
- Using 6mm drill, hold antenna up to antenna bracket, drill two securing holes through plastic and steel bracket.
- Install antenna to mounted bracket using (2) two M6 x 20 bolts, flat washers and nyloc nuts.
- · Re-connect antenna.

- Refit top half of bumper back to vehicle using original bolts and clips as per reverse of steps 1 to 6.
- Attach headlight washer water tube and sonar wiring to lower section of bumper using zip ties (supplied).
- Note: Shown with winch and winch mounting bracket installed



Stage 19

- Remove parking sensors and parking sensor wiring from plastic bumper.
- · Feed wiring into rear of ECB protection bar.
- Fit plastic spacer washer to front sensor section of parking sensor. Install parking sensor into ECB parking sensor housing in protection bar.
- Attach zip tie (supplied) to rear of ECB parking sensor housing. DO NOT overtighten zip tie as it will cause the parking sensor to malfunction.



Stage 20

- · Remove camera from rear of plastic bumper.
- Install camera into camera mount using M5 x 12 bolts nyloc nuts. (On left hand side fit
 M6 washer between mount and plastic housing for a spacer). Carefully place camera
 into hole in skirt. Install two M6 x 20mm bolts, flat washers and nyloc nuts (supplied).
 Align camera straight and central. Tighten all bolts.
- Connect camera and parking sensors to harness.
- Fit ECB Fog light harness to original equipment harness.

- 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.
- To prepare sonar sensor for fitment, attach three (3) M6 x 50mm bolts, flat washers and nuts (supplied to plexiglass peice with white plastic cover (supplied) removed. Fit another nut and washer (supplied) to the bolts and attach sonar unit the washer. Carefully install Sonar sensor to centre skirt with flat washers and nyloc nuts (supplied).



Stage 22

- Attach 2400mm 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.
- Attach 700mm length 6mm clip lock trim (supplied) to roller fairlead cut out in skirt.



Stage 23

- Install ECB Protection Bar to outside of steel mounts using six (6) M12 x 1.25 x 40mm bolts, flat washers, spring washers and nuts (supplied).
- · Aligin Protection Bar to vehicle.
- Tighten all bolts.



Stage 24

- · Connect all electronics, cameras and sensors.
- · Test all sensors and cameras for correct operation.
- To align camera, place a line at 300mm from Protection bar, parallel to protection bar.
 Start vehicle and place into "D" to bring up red line on dash display. Align camera red line to 300mm line on ground. NOTE: The red line needs to match the line on the ground as well as possible for the cameras scale to be valid to the parking sensors.

CAUTION: BEFORE WORKING ON FRONT OF VEHICLE, ENSURE VEHICLE IS IN PARK WITH THE HANDBRAKE ON. WHEN PLACING VEHICLE IN "D - DRIVE" FOR CHECKING, ALWAYS PLACE BACK IN PARK BEFORE LEAVING DRIVERS SEAT.

Stage 25

- Remove two (2) 10mm head bolts from front of rear centre plastic underbelly guard.
 Allow to hang.
- Fit centre underbelly guard to top lower flange of ECB protection bar skirt using three (3) M6 x 20mm bolts, flat washers and nyloc nuts.
- Reinstall rear centre underbody guard under ECB centre underbelly guard using four (4) M6 x 30mm bolts, flat washers and large 5/16" washers (supplied)
- · Tighten all bolts.



Stage 26

- Fit side underbelly guards to top of channel lower leg using three (3) M6 x 20mm bolts, flat washers and nyloc nuts (supplied). Nuts can be accessed through fog light openings.
- · Tighten all bolts.
- Using side underbelly guard as a guide, dirll two (2) 6mm holes in plastic liner. Install two (2) M6 x 20 bolts, flat washers and nyloc nuts.
- Trim inner guards to suit underbelly guards.
 Tuck sides behind Protection Bar



- Attach ECB fog lights to protection bar.
 Place M6 x 20mm 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.
- · Fit fog light surrounds (supplied).
- Connect fog light to harness. Test fog lights 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.
- No accessory or fitment should project forward of the VFPS forward profile.
- 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

Installation Kit

1 - Pair ECB steel mounting brackets	2 - M8 nuts
2 - Chassis mount spacer plate	3 - M6 x 50mm bolts
1 - ECB winch mount	4 - M6 x 30mm bolts
1 - ECB Control box mount	21 - M6 x 20mm bolts
1 - Aerial bracket (FM antenna)	49 - M6 flat washers
1 - Camera mount	6 - M6 spring washers
1 - Centre underbelly guard	22 - M6 nyloc nuts
1 - Pair side underbelly guards	8 - M6 nuts
4 - M12 x 1.25 x 55mm bolts	2 - M5 x 12 bolts
10 - M12 x 1.25 x 40mm bolts	2 - M5 nyloc nuts
20 - M12 flat washers	1 - ECB indicator / park light / DRK kit
14 - M12 spring washers	6 - Cable locks
6 - M12 x 1.25 nuts	2 - Crimp ring terminals (KTBRS8D
2 - M12 x 1.25 nut and washer on 300mm wire	1 - Fog light kit
8 - M10 x 1.5 x 40mm bolts	1 - Quick Click Kit (IC104D40S100ECBH)
3 - M10 x 1.5 x 30mm bolts	4 - Fog light surrounds
22 - M10 flat washers	1 - Perspex sonar cover
8 - M10 spring washers	4 - Sensor mount spacer
8 - M10 x 1.5 nuts	1 - 2400mm length 6mm clip lock trim
3 - M10 x 1.5 nyloc nuts	1 - 700mm length 6mm clip lock trim
2 - M8 x 1.25 x 30mm bolts	2 - 300mm lengths 3mm clip lock trim
4 - M8 flat washers	25 - 150mm zip ties
4 - 5/16" large flat washers	4 - 300mm lengths 0.5mm single core wire
2 - M8 spring washers	8 - Solder joiners
	<u> </u>

Finished Product







Warranty Registration

Contact Details		
Name:		
Address:		
Product: EAMB102SY		
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.		
Please post to PO Box 122, Margate QLD 4019		

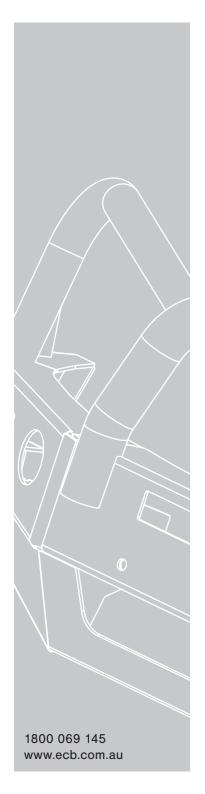
For online registration please go online to www.ecb.com.au/TBC. If you have any questions please contact our national office on 1800 069 145 or www.ecb.com.

Or Register Online

au.



REPLACES: 25.03.19 REVISED: 27.09.22



Strongest Built Australian Made Lifetime Warranty

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