

 $\bigcirc$ 

## Safer Lighter Stronger

PN:B3MI0037SY



## Fitting Guide & Owners Manual MITSUBISHI ROSA BUS 10-20 on

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

## Index

#### Pages 3-5

ECB's Benefits Product Care

#### Pages 6-7

Stage 1 - Vehicle Testing and Preparation
Stage 2 - Remove grille
Stage 3 - Splice wiring
Stage 4 - Remove mesh
Stage 5 - P/S chassis preparation
Stage 6 - D/S chassis preparation

### Pages 8-9

Stage 7 - P/S Steel mount Stage 8 - D/S Steel mount Stage 9 - Chassis spacer Stage 10 - Install indicator/ Park lights Stage 11 - Install fog light Stage 12 - Attach clip lock

## Pages 10-11

Stage 13 - Install Protection Bar Stage 14 - Connect, check and test. Final Checks & Fitting Kit

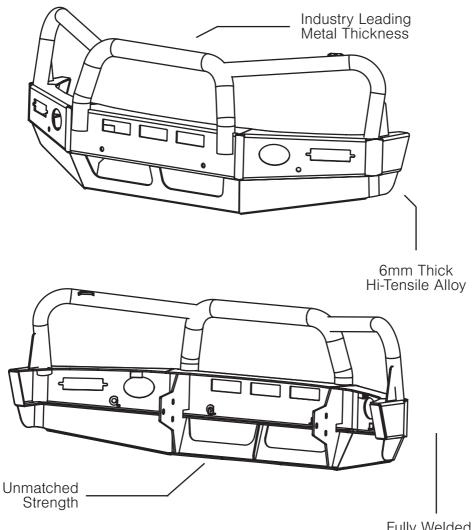
## Pages 12-13

Finished Product Warranty Registration

## Pages 14-15

Notes

## **The Features of ECB**



Fully Welded Construction

## **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 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.



# **B3MI0037SY**

#### 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 front of vehicle remove one (1) phillips screw from centre of grille. Gently pull grille away from vehicle to release clips. Remove grille.
- On outside of vehicle remove one (1) screw located under cover trim (per side)
- Gently pull to release clips and remove outside bumper trims.



#### Stage 3

- Splice ECB wiring harness into wiring harness behind headlight using cable locks (supplied). Route harness behind headlight and out through side of lower grille opening. Ensure harness is clear of sharp edges and moving parts.
- · Refit plastic trims and grille to vehicle.



# MITSUBISHI ROSA 10/20-

#### Stage 4

• On driver side of vehicle remove lower mesh in bumper, four (4) phillips screws.



#### Stage 5

- On passenger side of vehicle remove tow hook, two (2) 22mm head bolts.
- Remove two (2) 14mm head bolts from passenger side chassis rail top side.



#### Stage 6

 Remove four (4) 14mm head bolts from Drivers side chassis rail, two (2) from the top outside and two (2) from the bottom side of the rail.



# **B3MI0037SY**

#### Stage 7

- Before fitting ECB steel mount use masking tape to tape around bumper to avoid damage to vehicle.
- Fit ECB steel mount by sliding through front of bumper.



#### Stage 8

- Fit ECB steel mount to drivers side using two (2) M10 x 1.5 x 40mm bolts, Spring washers, flat washers and nut and washer on 300m wire (top holes only).
- Install lower chassis mounting bracket to underside of chassis rail using two (2) M10 x 1.5 x 30mm bolts, spring washers, flat washers and nuts on wire for holes into chassis.
- Fit lower M14 x 1.5 x 40 bolts, flat washers, and Nyloc nuts
- · Using a spirit level align mounts vertical and tighten all bolts.

#### Stage 9

- On passenger side of vehicle fit two (2) M10 x 1.5 x 40mm bolts, spring washer, flat washer and nut and washer on 300mm wire into top holes (finger tight only)
- Use two (2) M14 x 1.5 x 40mm bolts spring washers flat washers and nuts for bottom holes. Fit 2mm alloy spacer plate between steel mount and tow hook location.
- Using a spirit level align mounts vertical and tighten all bolts.





# MITSUBISHI ROSA 10/20-

#### Stage 10

 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.



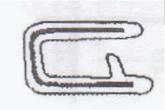
#### Stage 11

- Attach ECB fog 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 and winch openings. Large side of surround to inside of opening on lights and to rounded side of winch openings.



#### Stage 12

 Attach 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.







# **B3MI0037SY**

#### Stage 13

- Before fitting ECB protection bar make sure mounts are level.
- Fit ECB protection bar to veichle using three (3) M12 x 1.75 x 40mm bolts, flat washers and nyloc nuts (per side)
- Two 3mm alloy spacers are supplied for sideways adjustment if required.
- · Align and tighten all bolts.



#### Stage 13

- Connect, check and test.
- Test drive vehicle to ensure all safety features work as per manufacturers specifications.

# **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**

2 - Steel mounting brackets	4 - M10 x 1.5 x 40mm bolts	
1 - Steel support bracket	6 - M10 flat washers	
1 - 3mm Alloy spacer plate	6 - M10 spring washers	
2 - 3mm Alloy channel mount spacers	6 - M10 x 1.5 nut and washer on 300mm wire	
4 - M14 x 1.5 x 40 bolts	2 - M6 x 20 bolts	
8 - M14 flat washers	2 - M6 x 20 spring washers	
4 - M14 nyloc nuts	2 - M6 nuts	
6 - M12 x 1.75 x 40mm bolts	1 - Pair of indicators	
12 - M12 flat washer	1 - Pair of fog lights	
6 - M12 x 1.75 nuts	8 - cable locks	
2 - M10 x 1.5 x 30mm bolts	1 - 2150mm length 6mm clip lock	

## **Finished Product**







# **Warranty Registration**

### **Contact Details**

Name:		
Address:		
Product:	B3MI0037SY	
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

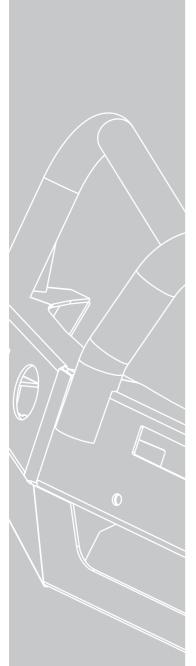
PN: B3MI0037SY Please post to: PO Box 122, Margate QLD 4019

## Notes

Full Name

Date

#### REPLACES: N/A REVISED: 13.09.22



#### 1800 069 145 www.ecb.com.au

# Safer Lighter Stronger

29 Snook St, Clontarf QLD 4019 PO Box 122, Margate QLD 4019