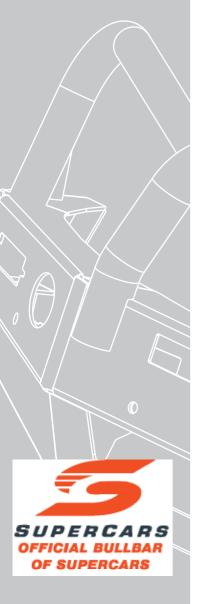


Strongest Built Australian Made Lifetime Warranty

PN:EAM115SY





Fitting Guide & Owners Manual MITSUBISHI PAJERO SPORT 11/19 on

BIG TUBE BAR WITH BUMPER LIGHTS
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 - Radiator cover

Stage 3 - Grille removal

Stage 4 - Chrome moulding removal

Stage 5 - Disconnect wiring

Stage 6 - Bumper removal

Pages 8-9

Stage 7 - Bumper removal

Stage 8 - Bumper support removal

Stage 9 - Underbelly guards

Stages10 to 11 - Bottle replacement

Stage 12 - Steel mount installation

Pages 10-11

Stage 13 - Steel mount installation (Cont'd)

Stage 14 to 15 - Camera reloaction

Stage 16 - Parking sensor relocation

Stage 17 - Indicator / Park installation

Stage 18 - Clip lock trim

Pages 12-13

Stage 19 - Light wiring

Stage 20 - Bumper light removal

Stage 21 - Bumper cut

Stage 22 - Bumper light infill installation

Stage 23 - Refit bumper

Stage 24 - Fit Protection bar

Pages 14-15

Stage 25 - Fog light installation

Stage 26 - Center underbelly fitment

Stage 27 - Side underbelly fitment

Stage 28 - Inner guard

Stage 29 - Connect, check and test

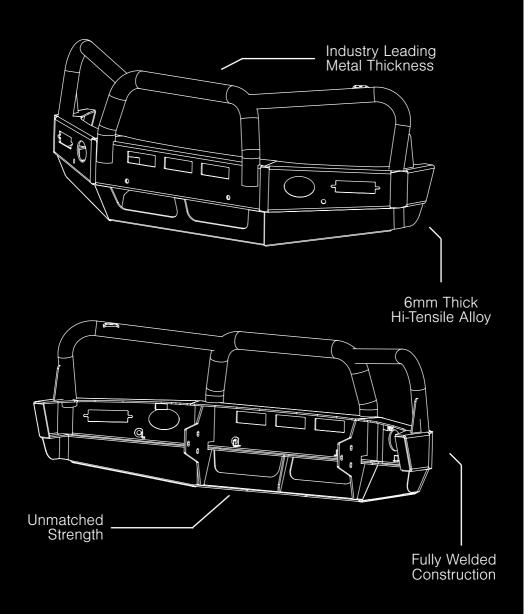
Pages 16-17

Final Checks Installation Kit

Pages 18-19

Finished Product Warranty Registration

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.



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 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.



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.
- From behind cover plates, disconnect three (3) wiring harness plugs from centre of bumper support.



- Remove one (1) push/pull 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.



Stage 7

• Remove vertical bumper stays, three (3) 10mm head bolts (per side).



Stage 8

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



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



Stage 10

- Remove three (3) push pull clips from join line on guard liner and remove front of guard liner.
- 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 1.25 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.



- 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 58mmm 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.



Stage 13

- Fit ECB steel mount gussets (supplied) onto inside
 of mount to front cross member using M10 x 1.25
 x 40mm bolts, flat washer, spring washers and
 10mm spacer bar (supplied) into captive nuts and
 M10 x 1.25 x 40mm bolt flat washer, spring washer
 and nut and washer on wire (supplied) into outside
 hole.
- Install M10 x 1.25 x 40mm 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 are for underbelly guard.



Stage 14

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



- 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.



Stage 16

- Remove parking sensor and fog light harness from bumper and place into protection bar.
- Secure harness in protection bar with zip ties (supplied).
- NOTE: Harness may need to be split for wiring to meet the parking sensors. Where required cover wiring with electrical tape.





Stage 17

 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 18

 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.







Stage 19

- Splice ECB wiring harness into wiring harness behind headlight using cable locks (supplied). Ensure harness is clear of sharp edges and moving parts.
- Install ECB quick click wiring harnesses (supplied) between disconnected harness and fog lights on vehicle, ensuring clearance from sharp edges and moving parts.

Stage 20

 Remove indicator / fog light from bumper, four (4) phillps head screws (each side).



- Using sharp scissors, carefully cut out template supplied with these instructions.
 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.
- NOTE: trim chrome trim as well as bumper to correct size



Stage 22

- Place indicator / bumper light infills (supplied) into rear of bumper.
- Use M6 x 16mm bolt, washers and nyloc nut (supplied) to secure infill to bumper.
 Tuck other end under bumper trim and over locater.



Stage 23

 Refit bumper as per reverse of steps 2 and 3.

NOTE: Chrome trim in photo has not been cut as vehicle was returned to standard after photos.



- Fit protection bar onto steel mounting brackets and fix with M12 x 1.75 x 40mm bolts, flat washers, spring washers and nuts (supplied).
- Align protection bar to front of vehicle and tighten all bolts.
- · Refit grille using original equipment.



Stage 25

- Attach ECB bumper 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.
- Install bumper light surrounds (supplied) to fog light openings. Large side of surround to inside of opening on lights.



Stage 26

- Fit center under body guard using four (4)
 M6 x 20mm bolts flat washers and nyloc nuts in
 front holes and two (2) M10 x 40mm x 1.25mm
 bolts, spring washers and flat washers (supplied) in rear holes.
- Refit metal under body guard with original equipment.



- Join side under belly guards with four (4) M6 x 20mm bolts, flat washers and nyloc nuts (supplied).
- Fit side under body guards using two (2) M6 x 20mm bolts, flat washers and nyloc nuts (supplied) in front holes.
- Use one (1) M6 x 30mm bolt, flat washers and nyloc nut (supplied) in rear wing of channel.
- Use one (1) M6 x 30mm bolt, flat washers and nyloc nut (supplied) in lower hole in steel mount.
- · Ensure all bolts are in place before tightening.



Stage 28

 Refit inner guard liner with original equipment and trim inner guard to fit neatly on under body guard and fix with three (3) self drilling 8-18 x 25mm screws (supplied).



- Connect indicator / DRL / park lights, bumper lights, camera, sonar and parking sensors.
 Check for correct operation.
- · Test drive vehicle to ensure parking sensors and driver aids are working correctly.

Final Checks

Ensure Number Plate is Clearly Visable

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

- Do not attach VFPS to the vehicle using anchorages not intended for this purpose (e.g. engine mounting bolts).
- 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 - LH steel mounting bracket	2 - M10 x 1.25 nuts & washer on 300mm wire
1 - RH steel mounting bracket	2 - M8 x 55mm bolts
1 - Pair steel support brackets	1 - M8 x 30mm bolt
1 - 10mm spacer bar steel	1 - M8 x 16mm bolt
1 - Centre under body guard	3 - M8 flat washers
1 - Pair Bottom side underbody guard	3 - M8 spring washers
1 - Pair Front side underbody guard	4 - M6 x 30mm bolts
2 - Fog light infills 3mm alloy	2 - M6 x 25mm bolts
4 - 3mm plastic sensor spacers	14 - M6 x 20mm bolts
1 - Water bottle	1 - M6 x 16mm bolts
1 - Alloy water bottle support mount 3mm alloy	48 - M6 flat washers
1 - 25mm x 10mm x 6mm steel spacer washer	2 - M6 spring washers
1 - Camera mount (EAM163_V3A)	2 - M6 nuts
2 - 10NB x 58mm spacer tube	25 - M6 nyloc nuts
1 - 10NB x 15mm spacer tube	2 - M5 x 20mm bolts
6 - M12 x 1.75 x 40mm bolts	4 - M5 washers
12 - M12 flat washer	2 - M5 nyloc nuts
6 - M12 spring washer	6 - 8-18 x 25mm self drilling screws
6 - M12 x 1.75 nuts	1 - ECB Indicator / DRL / Park Light kit
2 - M10 x 1.5 x 100mm bolts	8 - Cable locks
1 - M10 x 1.5 x 50mm bolt	16 - 150mm Zip ties
13 - M10 x 1.25 x 40mm bolts	1 - Fog light quick click harness (IC10D40S1004ECBH)
28 - M10 flat washers	2 - Fog light surrounds
16 - M10 spring washers	2 - ECB Fog light kit
5 - M10 x 1.25 nuts	1 - 2500mm length 6mm clip lock
3 - M10 x 1.5 nuts	2 - 600mm length 3mm clip lock trim

Finished Product





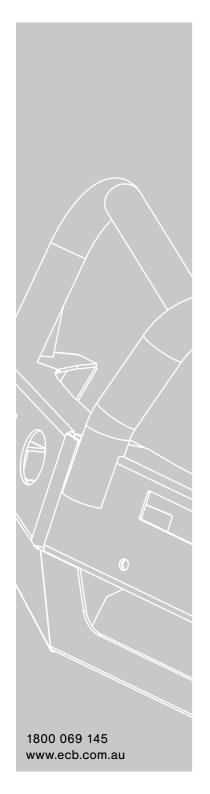


Warranty Registration

Name	e:
Address:	
Prod	uct:
Emai	l:
Phon	e:
You can	Order Number: find this on the silver label ECB product.
5	nitting this registration you automatically subscribe to ECB's mail outs. 'ubscribe at any time.
For onlin	Jister Online ne registration please go online to www.ecb.com.au/warranty-registration ave any questions please contact our national office on 1800 069 145 of the com.au.

PO Box 122 Margate QLD 4019

REPLACES: N/A REVISED: 11.03.20



Strongest Built Australian Made Lifetime Warranty

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