

## Strongest Built Australian Made Lifetime Warranty

PN:BR58SY

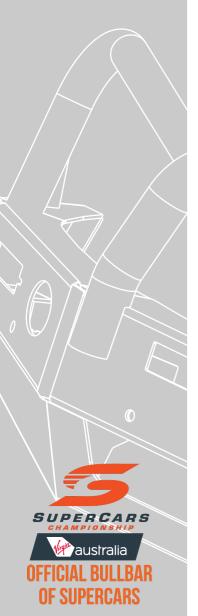


# Fitting Guide & Owners Manual

LANDROVER DISCOVERY SERIES 5

12/17on

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 Preparation Stages 2 to 6 - Bumper Removal

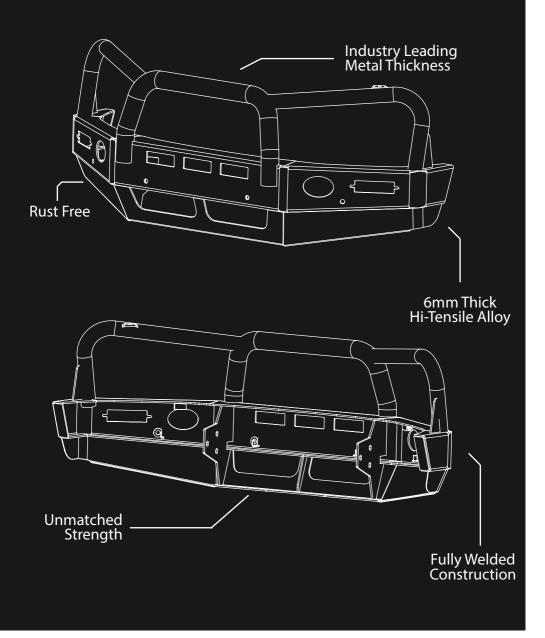
Pages 8-9 Stage 7 - Air scoop removal Stage 8 - Sonar unit removal Stage 9 to10 - Protection Bar mount installation Stage 11 - Air scoop refitment Stage 12 - Bumper trim

Pages 10-11 Stage 13 - Sensor relocation Stage 14 - Bumper refitment Stage 15 to 16- Sonar unit installation Stage 17 - Camera installation Stage 18 - Protection bar installation and testing

Pages 12-13 Final Checks & Fitting Kit Finished Product

Pages 14-15 Warranty Registration Notes

# The Features of ECB



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# 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.



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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 / operator.

NOTE: This vehicle has had a mid life sonar unit update. Two sonar unit mounts have been included in this kit. Correct installation is required for system to operate at its optimum



#### Stage 2

• Remove four (4) phillips head screws from top of grille between headlights.



- Gently pull bottom of centre grill and remove.
- Remove headlight washer covers, gently pull cover forward and spread apart clips on sides.
- Remove four (4) 8mm head bolts from top of bumper.





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#### Stage 4

- Remove two (2) phillips head screws, one from bottom of inner wheel arch and one inner top of arch. Gently pull cover strip from bumper.
- Remove one (1) phillips head screw top of bumper under headlight.

Caution: Plastic is easily broken if stressed.

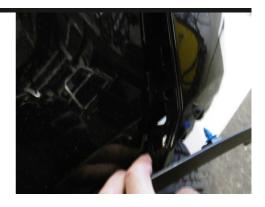


#### Stage 5

- From under bumper outer bumper remove two (2) phillips head screws each side and four (4) T27 torx screws.
- Undo four (4) plastic screws to remove underbody trim and remove.
- Remove two (2) T27 torx screws from above cover.



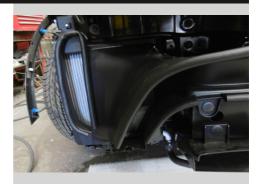
- Gently pull inner guard away from vehicle. Remove one (1) phillips head screw from inside bumper guard join each side.
- Disconnect wiring for sensors and fog lights passenger side and headlight wahers on drivers side.



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#### Stage 7

- Gently remove bumper from vehicle.
- Remove air scoop to intercooler and brakes by pulling out push pull plugs.



#### Strage 8

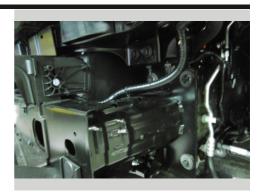
Delphi Systems Sonar Unit (See photo)

- Remove sonar from bumper, three (3) 10mm head bolts. Disconnect wiring.
- Extend wiring by removing push pull plugs, so wiring runs along passenger side steel mount.
- Remove sonar from mounting bracket, by gently pulling each corner away from mount.

#### Bosch Sonar unit

- Remove sonar from bumper, three (3) 10mm head bolts. Disconnect wiring.
- Extend wiring by removing push pull plugs, so wiring runs along passenger side steel mount.
- Remove sonar from mounting bracket, four 8mm head bolts. Retain bolts for refitment. Note width of unit at top to ensure refit same direction. Unit on plastic backing is narrow on one side.

- Remove two (2) 13mm head bolts from outside off bumper support and chassis rail each side .
- Remove one (1) 10mm head bolt from bottom rear of intercooler shroud and a10mm nut top rear of shroud.





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#### Stage 10

- Fit steel mounting brackets (supplied) to vehicle using two (2) M10 x 1.5 x 40mm bolts, spring washer and flat washer, one (1) M10 x 1.5 x 150mm bolt, flat washer, sping washer and nut (supplied). Using inside of alloy mounts on protection bar, set outside measurement of steel mounting brackets.
- Using front of steel mount as a guide, drill 10mm hole through bumper support. Blow filings clear and treat all exposed metal with a rust inhibitor. Attach using two (2) M10 x 1.25 x 30mm bolts, Flat washers, spring washers and nuts. (supplied)



#### Stage 11

- Tighten all bolts.
- Refit all vents using original push pull plugs.



- Find bumper cut template with this instruction. Check scale on templte to ensure correct sizing as printers amy vary.
- Tape bumper at place of bumper cut with paper masking tape to avoid damage from cutting process.
- Using template mark bumper. Check bumper marking against steel mounting brackets position to ensure correct.
- Cut bumper to correct sizing.



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#### Stage 13

- Remove parking senors from bumper and place into protection bar .
- Unclip wiring harness for sensors in bumper so can be extended into protection bar. For wiring for outer left sensor, lift housing for air vent and feed wiring under between vent and bumper. Feed other wiring through mount cut out in bumper.



Note: Air vent may need to be trimmed to remove possibility of rubbing through the wiring.

#### Stage 14

• Refit bumper back to vehicle in reverse steps 2 to 7

#### Stage 15

Delphi Systems Sonar Unit

• Fit sonar and perspex cover to mounting bracket provided using three (3) M6 x 50mm bolts, M6 nuts, flat washers and M6 nyloc nuts (supplied). Refer to photo for nut and bolt placement.

#### Bosch Sonar unit

 Fit sonar unit to mounting bracket using original equipment bolts. install perspex cover to front of mounting bracket using three M6 x 20mm bolts, flat washers and nyloc nuts. Note: Direction of fit must be the same as originally on vehicle. One side of unit is narrower than the other.



#### Stage 16

- Mount bracket and sonar to inside of drivers side of protection bar using two (2) M6 x 25mm bolts, flat washers and nyloc nuts (supplied).
- Mount second sonar mount and perspex cover to opposite side of protection bar.

Delphi Systems Sonar Unit



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#### Stage 17

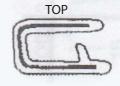
- Remove camera from bumper by gently levering keeper off body.
- install two (2) M6 x 16mm bolts, flat washers and nyloc nuts into camera mount.
  Fit cmarea into camera mount and install rear section. Mount is a squeeze fit on camera.
- Install camera in mount into the bar mount section. Gently tighten bolts.
- install camera mount to rear of protection bar lower leg using two (2) M6 x 20mm bolts, flat washer and nyloc nuts.





#### Stage 18

- Install protection bar to vehicle using M12 x 1.75 x 40mm bolts, flat washers spring washers and nuts (supplied).
  Finger tighten only.
- Align protection bar with vehicle and tighten all bolts, refer to photos on page 13.
- Secure wiring harness for parking senors and sonar with zip ties provided.





Cut underside at ends to give length at top



- Install protection bar to vehicle using M12 x 1.75 x 40mm bolts, flat washers, spring washers and nuts (supplied).Finger tighten only.
- Align protection bar with vehicle and tighten all bolts, refer to photos on page 13.
- Secure wiring harness for parking senors and sonar with zip ties provided.
- Road test vehicle to ensure all safety equipment is working as per previously completed test.



# Final Checks & Fitting Kit

### 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**

- 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.

#### Fitting Kit

5		
1 - Pair ECB steel mounting brackets	16 - M10 flat washers	
2 - Steel Delphi sonar brackets	10 - M10 spring washers	
1 - Steel Bosch sonar bracket	6 - M10 x 1.5 nuts	
2 - Perspex sonar covers	6 - M6 x 50mm bolts	
1 - 3 piece camera mount	4 - M6 x 25mm bolts	
6 - M12 x 1.75 x 40mm bolts	5 - M6 x 20mm bolts	
12 - M12 flat washers	2 - M6 x 16mm bolts	
6 - M12 spring washers	40 - M6 washers	
6 - M12 x 1.75 nuts	8 - M6 nuts	
2 - M10 x 1.5 x 150mm bolts	17 - M6 nyloc nuts	
4 - M10 x 1.5 x 40mm bolts	1 - 2390mm length 6mm cliplock trim	

# **Finished Product**





# Warranty Registration

Contact Details
Name:
Address:
Product: BR58SY
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
Or Register Online For online registration please go online to www.ecb.com.au/TBC. If you have any

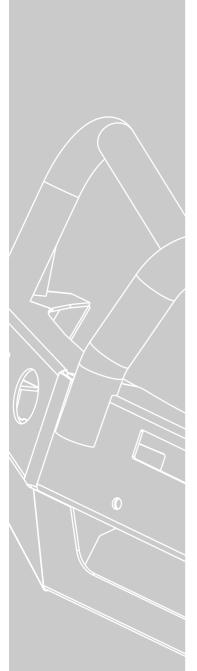
For online registration please go online to www.ecb.com.au/TBC. If you have any questions please contact our national office on 1800 069 145 or www.ecb.com.au.

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Full Name

Date

REPLACES: 20.07.18 REVISED: 11.06.19



1800 069 145 www.ecb.com.au

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