



**Lighter
Stronger
Better!**

**Strongest Built
Australian Made
Lifetime Warranty**

PN:BF174SY

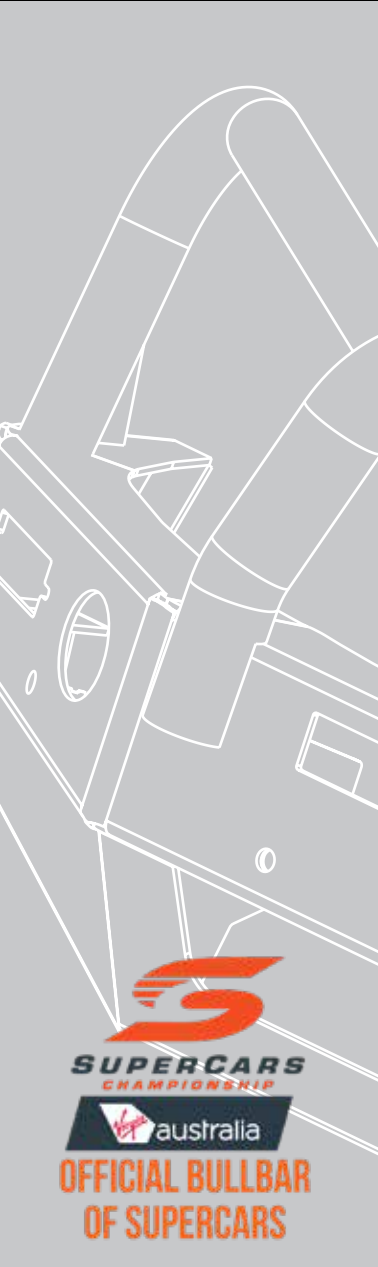


Fitting Guide & Owners Manual

FORD RAPTOR

05/2019on

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 16-17

Notes
Warranty Registration

Pages 6-7

Stage 1 - Vehicle Testing and Preparation
Stage 2 - Radiator cover
Stage 3 - Grille removal
Stage 4 to 6 - Bumper removal

Pages 18-19

Notes

Pages 8-9

Stage 7 - Bumper removal Cont'd
Stage 8 - Bumper reinforcement
Stage 9 - Underbelly guard removal
Stage 10 - Air dam trim
Stage 11 - Wiring relocation
Stage 12 - FM Antenna relocation

Pages 10-11

Stage 13 to 15 - Steel mount
Stage 16 - Steel mount stabilisers
Stage 17 - Winch installation
Stage 18 - Grille installation

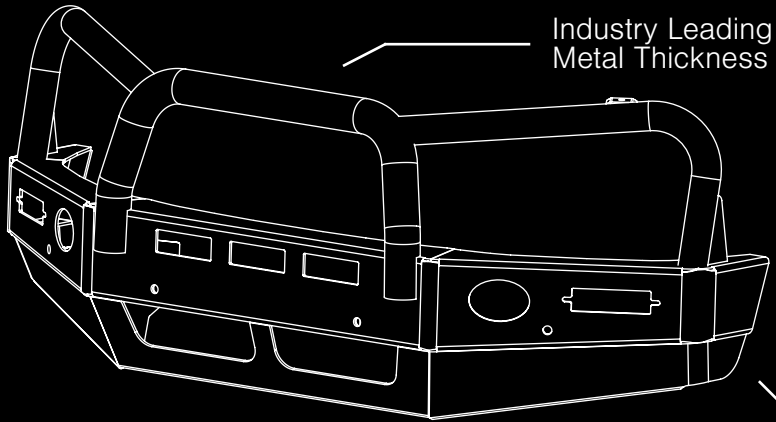
Pages 12-13

Stage 19 - Quick Click connection
Stage 20 - Light installation
Stage 21 - Clip lock Trim fitment
Stage 22 - Protection bar installation
Stage 23 - Fog light fitment
Stage 24 - Underbelly guard installation

Pages 14-15

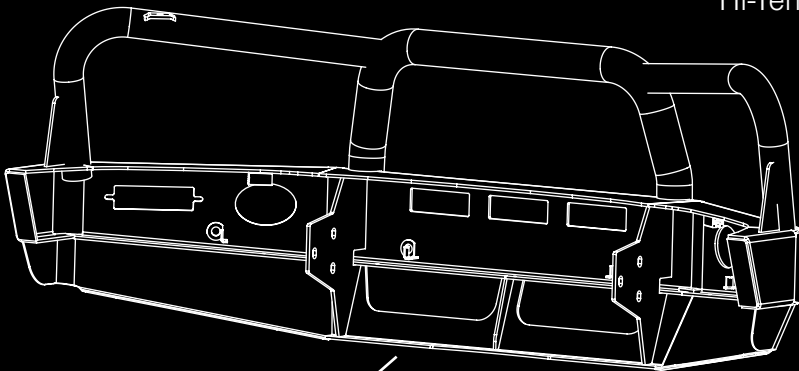
Final Checks & Fitting Kit
Finished Product

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 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.

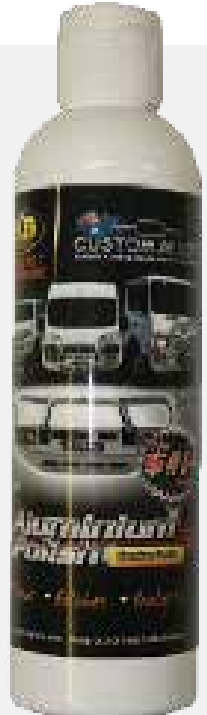
Powdercoated Products

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 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.



BF174SY

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 five (5) push/pull clips and two (2) T30 torx head screws from top radiator trim.
- Carefully lift up on front of trim to release clips from grille and remove trim.



Stage 3.

- Remove four (4) 10mm head bolts from grille and remove grille.



Ford Raptor 05/19 on

Stage 4.

- Remove four (4) T20 torx head screws from front of wheel arch liner per/side.



Stage 5.

- Remove foglight by removing three (3) T20 torx head screws per/side.
- Remove fog light surround by unclipping clips from behind and pulling from front.



Stage 6.

- Remove two (2) 10mm head bolts from under side of bumper centre trim.
- Remove bumper centre trim by carefully pulling forward.



BF174SY

Stage 7.

- Remove two (2) 13mm head bolts from behind centre bumper trim per side and one (1) 15mm head bolt from behind fog light trim.
- Remove bumper.



Stage 8.

- Unplug wiring from under side of bumper reinforcement.
- Remove one (1) plastic clip from inside of chassis rail near the coolers (per side). Remove two (2) 15mm head bolts from end of chassis rail (per side) and remove bumper reinforcement and air shoot.



Stage 9.

- Remove four (4) 15mm head bolts from under body guard and remove.



Ford Raptor 05/19 on

Stage 10.

- Remove two (2) 8mm head bolts from air dams (per side) and remove air dams.
- Mark and trim the smallest amount possible from air dam to fit around ECB steel mounting bracket.
- Refit to vehicle using original equipment.



Stage 11.

- Remove eighteen (18) 10mm head bolts from bumper stiffener to unclip wiring loom.
- Relocate wiring loom onto lower tie bar rail below intercooler using zip ties (supplied).



Stage 12.

- Remove one (1) 7mm head bolt from FM antenna behind bumper and relocate onto drivers side lower headlight panel.



BF174SY

Stage 13.

- Fit ECB steel winch mounting bracket (supplied) to front of chassis by sliding down from top of chassis.
- Rear of steel winch mounting bracket will be tight on outside of chassis. This is an expansion fit. It is important that the mount is level and lined up square with the vehicle body.
- Fit two (2) M10 x 1.5 x 30mm bolts, spring washers, flat washers and nuts (supplied) in outer holes. **Finger tighten only.**



Stage 14.

- Using mount as a guide drill two (2) 10mm holes, rear leg on mount to chassis rail.
- Enlarge holes on inside of chassis rail to suit the sizing of the chassis spacing tube (supplied).

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



Stage 15.

- Fit four (4) holes with M10 x 1.5 x 40mm bolts, spring washers, flat washers (supplied).
- Install two (2) M10 x 1.5 x 100mm bolts, flat washers, spacer tubes, spring washers and nuts (supplied) to holes on side of chassis (per side).
- Align winch mounting bracket to front of vehicle and **tighten all bolts.**



Ford Raptor 05/19 on

Stage 16.

- Install winch mounting bracket support brackets to the rear of winch mounting bracket using two (2) M12 x 1.75 x 40mm bolts, flat washers, spring washers and nuts (supplied).



Stage 17.

- Fit fairlead and winch to winch cradle using equipment supplied with the winch.

NOTE: Included in the fitting kit is a control box bracket designed for older warn winches. This control box bracket mounts to the motor side of the winch using worm drive hose clamps (supplied). Newer center mount control boxes should not need this bracket.



Stage 18.

- Refit grille using original equipment.



BF174SY

Stage 19.

- Disconnect indicator and parking lights on vehicle. Install ECB quick click wiring harnesses (supplied) between disconnected harness and indicator / park lights on vehicle. Run wiring out from under lights ensuring clearance from sharp edges and moving parts.
- Disconnect fog light on vehicle. Install ECB quick click harness (supplied) onto bumper light and wiring harness.

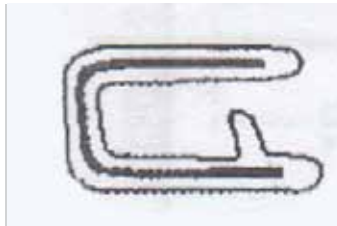
Stage 20.

- 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 21.

- 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.



Ford Raptor 05/19 on

Stage 22.

- Fit ECB protection bar to winch mounting bracket using four (4) M12 x 1.75 x 40mm bolts, spring washers, flat washers and nuts (supplied) (per side).
- Align protection bar and **tighten all bolts**.



Stage 23.

- 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 bumper light surrounds (supplied) to bumper light openings and winch openings. Large side of surround to inside of opening on lights and to rounded side of winch openings.



Stage 24.

- Fit ECB under body guard (supplied) using original equipment. The front of guard sits on top of steel mounting bracket.
- In front holes use two (2) M10 x 1.5 x 30mm bolts, flat washer, spring washer and nut and washer on wire (supplied) (per side).



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

| | |
|---------------------------------------|-------------------------------------------|
| 1 - Steel winch mounting bracket | 16 - M10 spring washers |
| 1 - Control box mount | 6 - M10 x 1.5 nuts |
| 1 - Pair winch frame support brackets | 2 - M10 nut and washer on 300 wire |
| 1 - Underbelly guard | 2 - M6 x 20mm bolts |
| 4 - 10 Nb tube spacers 48mm long | 2 - M6 spring washers |
| 2 - Large hose clamps | 2 - M6 nuts |
| 12 - M12 x 1.75 x 40mm bolts | 1 - ECB Indicator/park/DRL kit |
| 24 - M12 flat washers | 1 - Quick click harness (1C18FORAIPDH) |
| 12 - M12 spring washers | 1 - Bumper light kit |
| 12 - M12 x 1.75 nuts | 1 - Quick click harness (IC1040S1004ECBH) |
| 4 - M10 x 1.5 x 30mm bolts | 4 - Bumper light trims |
| 8 - M10 x 1.5 x 40mm bolts | 1 - 2550mm length 6mm clip lock |
| 4 - M10 x 1.5 x 100mm bolts | 1 - 800mm length 6mm clip lock |
| 22 - M10 flat washers | 10 - 300mm zip tie |

Finished Product



Warranty Registration

Contact Details

Name: _____

Address: _____

Product: _____

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.

Or Register Online

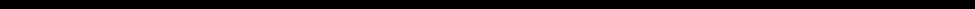
For online registration please go online to www.ecb.com.au/TBC. If you have any questions please contact our national office on 1800 069 145 or www.ecb.com.au.



PN: BF174SY

**Please post to: PO Box 122,
Margate QLD 4019**

Notes

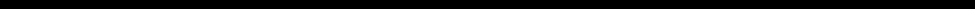


A series of 20 horizontal lines for writing notes, spaced evenly down the page.

_____ Full Name

_____ Date

Notes



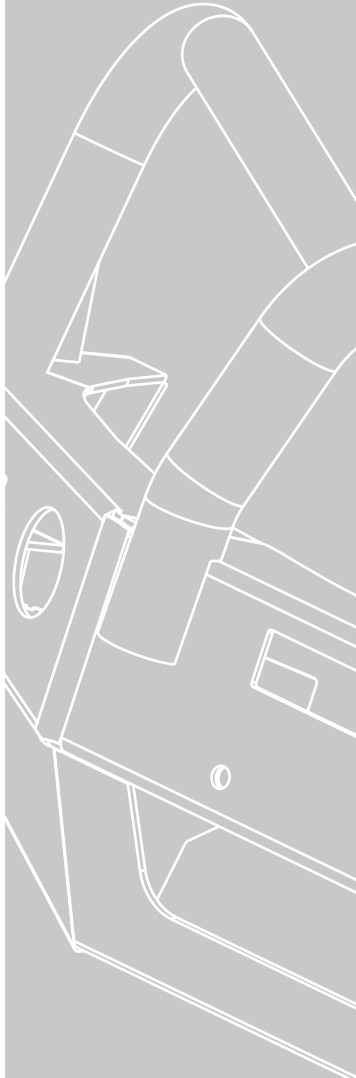
A series of 18 horizontal lines for writing notes, spaced evenly down the page.

_____ Full Name

_____ Date

REPLACES: 15.08.18

REVISED: 23.09.19



1800 069 145
www.ecb.com.au

Strongest Built Australian Made Lifetime Warranty

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