



**Safer
Lighter
Stronger**

PN: NBF185SY



Fitting Guide & Owners Manual

Ford Ranger

06/2022

76mm NUDGE BAR
VEHICLE FRONTAL PROTECTION SYSTEM (VFPS)
FOR AIR BAG & ADR COMPLIANT VEHICLES

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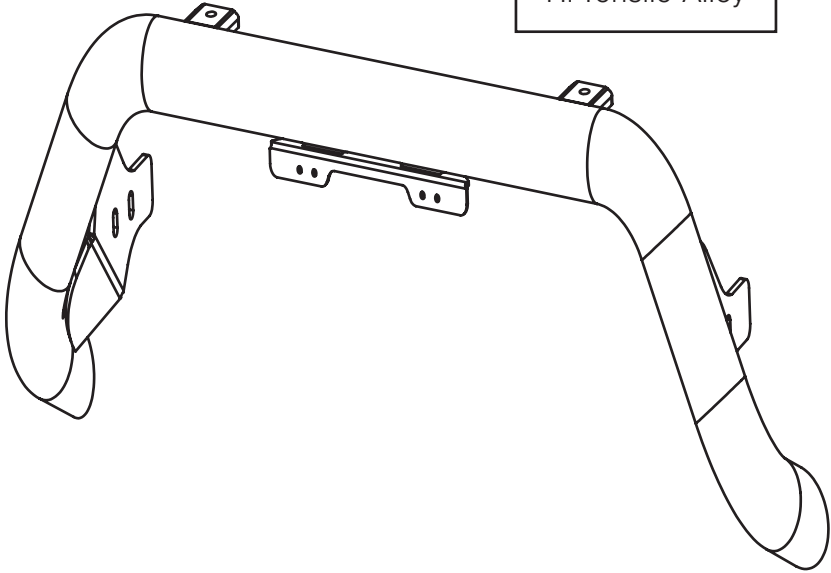
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Notes

The Features of ECB

Rust Free

Hi-Tensile Alloy



Industry Leading
Metal Thickness

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.

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, less tyrewear, and less stress on 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 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.

*12 month warranty on lights and trims.

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.**

Powder Coated Products

Our powder Coated finishes are very low maintenance. In fact 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 stuff works'. Within our decades 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 and Nudge Bars. 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 - Vehicle Preparation

- 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 and discard bolts.
- Ensure these instructions are left with the vehicle owner / operator.



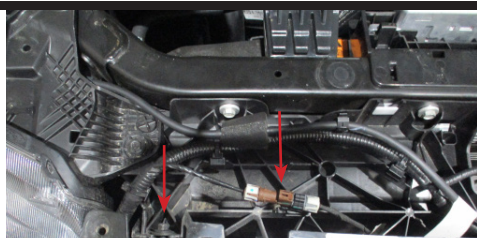
Stage 2 - Radiator Cover

- Models equipped without camera and AEB sensor follow steps 13,14,18,19 and 21.
- Models with camera and AEB sonar continue with Stage 2.
- Remove radiator cover 13 plastic scrivets.



Stage 3 - Outer Grille

- On rear of grille beside headlights remove two (2) 10mm head bolts.
- Disconnect parking sensor/ sonar harness.



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Stage 4 - Underside Bumper

- Underside of bumper remove one (1) T25 torx screw (per side) and 8mm head bolt (second bolt in from end, per side).



Stage 5 - Inner Guard

- From Inner wheel arch remove four (4) push pull clips from inner flare.
- On inner guard cover, remove three (3) plastic scrivets. Remove cover to access inner bumper cover/ guard join.



Stage 6 - Inner Guard

- Inside of bumper / guard join, remove three (3) 10mm head bolts (per side).



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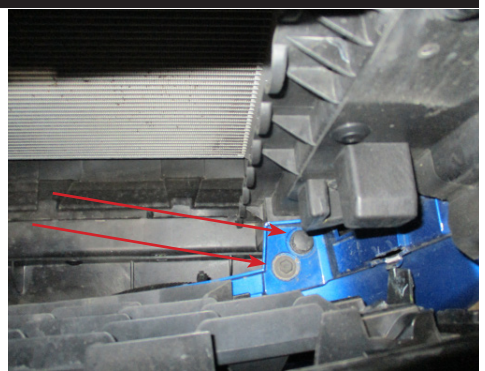
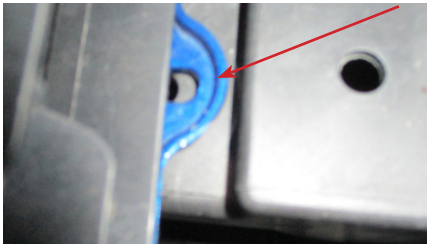
Stage 7 - Number Plate Cover

- Remove number plate cover two (2) 8mm head bolts.



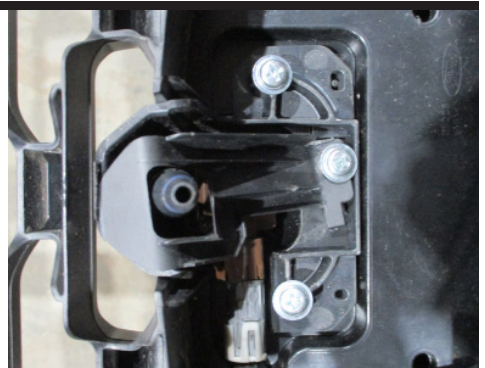
Stage 8 - Centre Grille

- Pull centre grill forward and remove from bumper, three (3) push pull clips and two (2) 10mm head bolts.
- One clip and bolt per side and one clip in centre.



Stage 9 - Camera

- Disconnect camera cable and camera washer hose from rear of camera housing.



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Stage 10 - Bumper Removal

- Pull flares away from vehicle. From inside inner guard squeeze retaining clip and gently pull down on bumper to remove.
- Remove bumper.



Stage 11 - Remove Camera

- Remove camera from bumper three(3) philips head screws.



Stage 12 - Sensor Harness

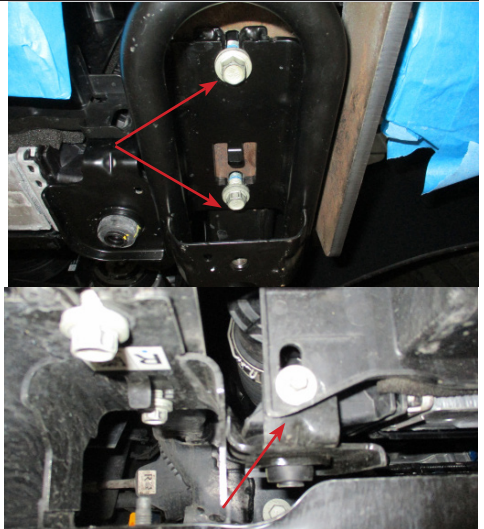
- Remove two centre parking sensors. Note: sensors are sided and directional.
- For two centre parking sensor harness unclip from bumper to allow wiring extra length.
- To extend wiring, release sensor wiring from main harness
- De-pin connector, feed harness through sensor holes and refit connector. Use QR code for video of process to avoid damage to pins.
- Place exposed wires into 10mm convoluted tubing (supplied), cut tubing length to suit.
- Feed harness through existing sensor holes.



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Stage 13 - Mount Fitted

- Above underbelly guard support remove 8mm head bolt and slot hole in shroud down by 8mm.
- One side at a time remove (2) 15mm head bolts from genuine tie down / recovery loop and fit ECB steel mounting brackets between chassis rail and tie-down / recovery loop.
- Place thread lock onto original bolts and secure mounts. Finger tighten only.
- Align mounts and tighten all bolts. Replace 8mm head bolt removed from shroud.



We recommend that the 15mm head tie down / recovery loop bolts have Loctite 243b thread lock added to them on assembly. This is not included with the product

Stage 14 - Trim Bumper

- Measure steel mounts and trim lower bumper to steel mounting brackets.
- Scallop cut out for bolt thread once bumper refitted to vehicle.



Stage 15 - Refit Bumper

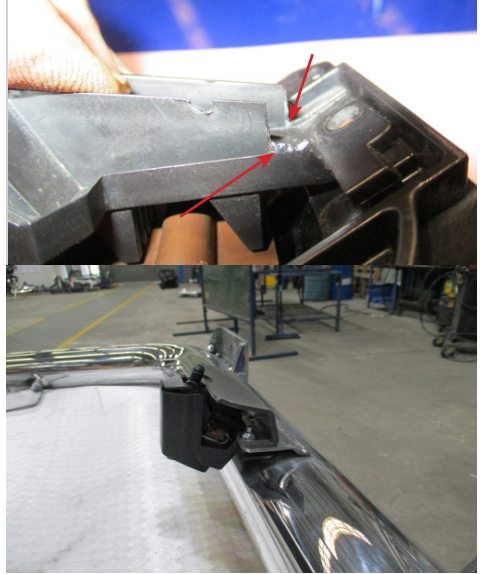
- Refit bumper in reverse as per steps 1 to 9.
- Feed camera harness and camera washer tubing through bottom of grille.



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Stage 16 - Camera Fitment

- Trim gusseting edge of mount as shown in photo.
- Place camera mount onto bracket and protection cover at rear of bracket. Secure with (2) M5 x 20mm bolts, flat washers and nyloc nuts.
- Align and tighten.



Stage 17 - Sensor Fitment

- Fit parking sensor to housings and secure at rear with zip tie. DO NOT OVER TIGHTEN. Connect sensors.



Stage 18 - Protection Bar Fitment

- Fit protection bar to vehicle, four (4) M10 x 1.5 x 50mm bolts, flat washers, spring washers and nuts.
- Use nut and washers on wire on front hole.
- Finger tighten only.



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Stage 19 - Align Protection Bar

- Align protection bar with vehicle and tighten all bolts.



Stage 20 - Connect Camera

- Reconnect camera and camera washer.
- Place convoluted tubing ,trim to suit. (supplied) over camera connection and camera washer hose to protect from the elements.



Stage 21 - Final Checks

- Test all safety features are working correctly.

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 - Pair Mounting Brackets	2 - M5 x 20mm Bolts
1 - Camera Cover	6 - M5 flat washers
4 - M10 x 1.5 x50mm bolts	2 - M5 Nyloc nuts
6 - M10 Flat washers	2 - sensor housings
4 - M10 Spring washers	1 - 900mm length 10mm convoluted tubing
2 - M10 x 1.5 Nuts	2 - 150mm zip ties
2 - M10 x 1.5 nut and washer on 300 wire	

Finished Product



Warranty Registration

Contact Details

Name: _____

Address: _____

Product: **NBF185SY**

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

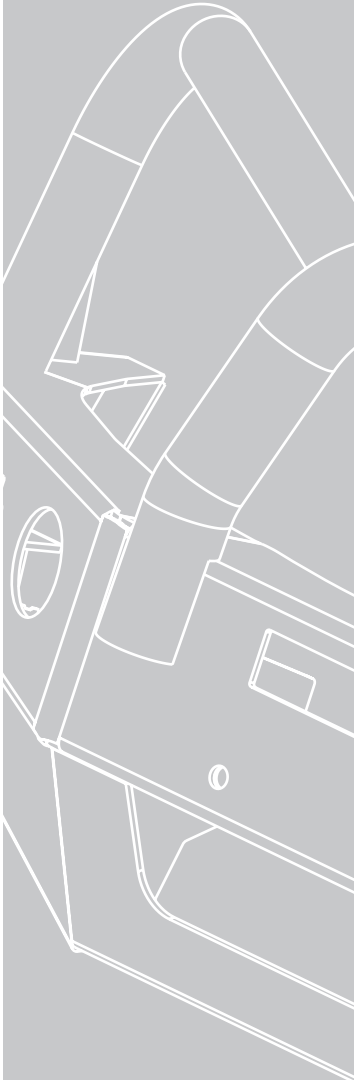
For online registration please go online to www.ecb.com.au/warranty-registration
If you have any questions please contact our national office on 1800 069 145 or
www.ecb.com.au.



PN: NBF185SY
Please post to PO Box 122,
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REPLACES: 06.10.23

REVISED: 14.12.23



1800 069 145
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