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#### BF66SY / BMA36SY

REPLACES: 08.02.10 REVISED: 12.01.18

### FITTING INSTRUCTIONS

#### FORD RANGER & MAZDA BT50 12/06-03/09 XLT BIG TUBE™ BAR VEHICLE FRONTAL PROTECTION SYSTEM (VFPS) FOR AIR BAG & ADR COMPLIANT VEHICLES

Check installation hardware before commencing.

- 1. Remove bumper cover from vehicle. Lift bonnet. Two plastic clips (one each side of bonnet latch) two Phillips head screws and four plastic clips (one screw, two clips each side) beside headlamps, two 10mm head bolts and two 8mm bolts from rear of bumper wings under guards (one each side), light wiring from rear of lights and two plastic clips from under front of bumper cover. Carefully pull cover toward side of vehicle and unclip. Gently lift bumper forward and remove.
- 2. Remove bumper cover support. Access from under front of support, two 17mm head bolts (one each side) and inside engine bay on top of chassis rail. Two 17mm head bolts (one each side). See figure 1.
- 3. Find vehicle wiring loom for indicator / park lights and fog lamps on front of radiator support under headlamps. Splice ECB LED indicator / park light wiring and fog lamp wiring into vehicle wiring loom. Use cable locks (supplied). Secure to vehicle fog lamp wiring using 150mm cable ties (supplied).
- 4. Remove passenger side tow hook / tie down bracket. Four 17mm head bolts. See figure 2.
- 5. Remove driver's side tie down bracket and crush bracket on front of chassis. Four 17mm head bolts.
- 6. Attach ECB 130mm steel angle bracket (supplied) to tie down hook encapsulated nuts. Angle leg to inside of vehicle on driver's side, angle leg to outside of vehicle on passenger's side. Use three M12 x 35mm bolts, flat and spring washers (supplied). Two on underside of chassis and one to front of chassis. **FINGER TIGHTEN ONLY.** See figure 3.
- 7. Gently bend front tube on oil cooler vertically (if fitted) as per **figures 4 and 5**, to clear mount. **CAUTION**: Excessive force will damage cooler.
- 8. Attach steel mounting brackets (supplied) to chassis where bumper cover support brackets were removed. Use original bolts for top fitment and two 3/8 x 1 ½ bolts, flat and spring washers and nuts (supplied) (each side) for lower leg. Align with vehicle, checking that brackets are centred and that the space in between the mounts is sufficient for the protection bar to fit on inside. **TIGHTEN IN POSITION. NOTE: Steel mounting bracket must not touch turbo cooler, oil cooler or air conditioning receiver dryer. See figures 6 and 7. If steel mounting brackets are scratched when fitted then treat with a rust inhibitor or similar.**

#### 9. TIGHTEN ALL BOLTS.

- 10. Remove original fog lamps from vehicle.
- 11. Refit bumper cover in the reverse order to step 1.
- 12. Fit ECB LED indicator / park lights (supplied) into protection bar as per instructions supplied with the LED indicator kit. **NOTE: Ensure park light is to outside. See figure 8.**



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13. 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. See figure 9. TIGHTEN ALL BOLTS FIRM ONLY. Do not fit fog light trims at this stage.

- 14. Fit 6mm clip lock trim (supplied) to rear of protection bar **NOTE:** Trim off lower edge on 6mm trim on an angle so trim will sit flush with end of protection bar. **See figures 10, 11 and 12.**
- 15. Attach protection bar to inside of steel mounting brackets. Use six ½ x 1 ½ bolts, flat and spring washers and nuts (supplied) **DO NOT TIGHTEN.**
- 16. Align protection with vehicle. See figures 13 and 14. TIGHTEN ALL BOLTS.
- 17. Connect ECB LED indicator / park light wiring. CHECK OPERATION.
- 18. Connect fog lights. **CHECK OPERATION**. Aim with low beam, **TIGHTEN IN POSITION**. Fit ECB fog light trims (supplied) to protection bar, wider part of trim to inside.

**NOTE:** For turbo diesel models upper three air vents are to be fitted with ECB logo at bottom direct air onto turbo cooler.

#### 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:**

- a) Do not attach VFPS to the vehicle using anchorages not intended for this purpose (e.g. engine mounting bolts).
- b) Do not use this product for any vehicle make or model, other than those specified by the VFPS manufacturer.
- c) Do not remove the plaque or label from the VFPS.
- d) Do not modify the structure of the VFPS in any way.
- e) No accessory or fitment should project forward of the VFPS forward profile.
- f) ENSURE THESE INSTRUCTIONS ARE LEFT WITH VEHICLE OWNER AND/OR OPERATOR.

#### **IMPORTANT INFORMATION**

Periodically check bolts and nuts for correct tightness, especially if travelling on rough roads

#### FITTING KIT

2 – Steel mounting brackets.	2 – ECB fog lights.
2 – 130mm steel mounting brackets.	2 – fog light surrounds
$4 - 3/8 \ge 1 \frac{1}{2}$ bolts and nuts.	$2 - M6 \ge 20$ bolts.
8 - 3/8 flat washers.	2 – M6 flat washers.
4 - 3/8 spring washers.	2 – M6 spring washers.
6 – M12 x 1.5 x 35mm bolts.	2 - M6 nuts
$6 - \frac{1}{2} \ge 1/2$ bolts and nuts.	10 – Cable locks
$18 - \frac{1}{2}$ flat washers.	1 – 2200mm length of 6mm clip lock trim
$12 - \frac{1}{2}$ spring washers.	2 – 150mm zip ties.
1 – ECB LED Indicator / Park light kit.	



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17mm bolt Bumper Cover Support 17mm head bolt

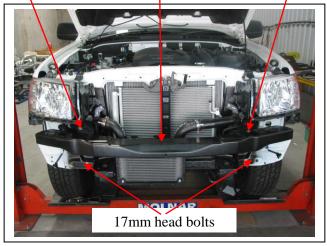


Figure 1

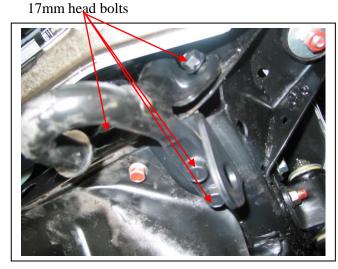


Figure 2 – Passenger side shown



Figure 3

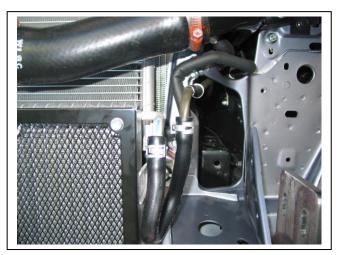


Figure 5

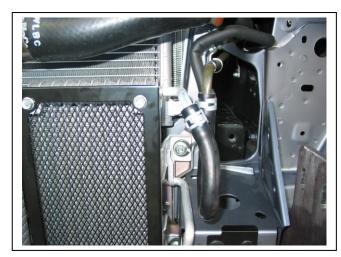


Figure 4



Figure 6 – Drivers side shown



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Figure 7 – Passenger side shown

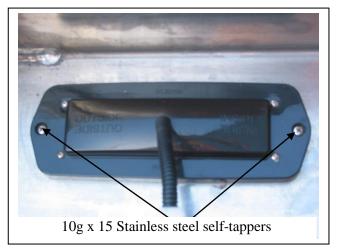


Figure 8

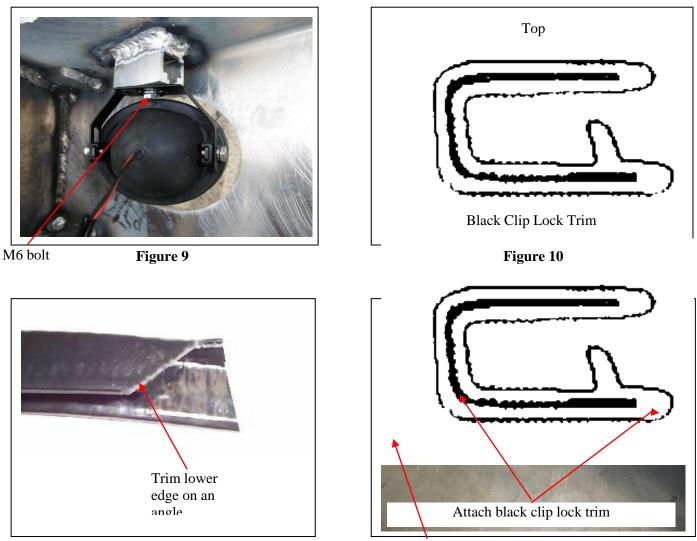


Figure 11

Trim level with the back of protection bar

Figure 12



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Figure 13 – Front view shown



Figure 14 – Side view shown



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## We value your comments

Dear Fitter,

ECB would like to know how you went with the installation of this product. We value your comment and may need to contact you to clarify some details so please complete your contact details clearly.

We would appreciate if you could complete as many of the following details as possible.

Your Name:	Your contact No.
Product Part No.	Product Invoice No.
Product Description:	Make, model, and year of vehicle:
Product Work Order No.	Company your from/Company product purchased from:
Date of Fitment://	Yes No
Was the fitting hardware supplied complete?	
If no what was not supplied	
Did the installation go well?	Yes No
Please provide comments	

Please draw diagrams if you need to.

**Fax to** (07) 3283 1168



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# DESPATCH CHECKLIST BF66SY / BMA36SY

ICZBKCF66

Work Order #	
Finish:	
Transport:	
Due Date:	

- O 2 Steel mounting brackets.
- O 2 130mm steel mounting brackets.
- O = 1 Bolt kit.
- *O* 1 ECB LED Indicator / Park lights kit.
- O 2 ECB fog lights.
- O 2 Fog light surrounds.
- O = 1 2200mm length 6mm clip lock trim.
- *O* 2 ECB overriders **Fitted to Bar**
- *O* 6 6mm air scoops **Fitted to Bar**

Is this product "the best it can be" Yes // Wrapper's initials / Checker initials If NO fix before continuing

All parts checked and completed by:

Nut and bolts:	Date//
Order control:	Date//
Final wrap check:	Date//

See other side of this page for photos of all mounts



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