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BT82SY

REPLACES: 30.09.04 REVISED: 15.07.10

FITTING INSTRUCTIONS

LANDCRUISER 100 SER IFS BIG TUBE™ PROTECTION BAR with 9000LB WARN WINCH MOUNTING BRACKET VEHICLE FRONTAL PROTECTION SYSTEM (VFPS) FOR AIR BAG and ADR COMPLIANT VEHICLES

Check installation hardware before commencing.

NOTE: Ensure any exposed ends of clip lock trim are sealed with silicone or similar to prevent corrosion.

- 1. Lift Bonnet. Remove grille, three PK screw at top and two plastic clips at bottom. Remove bumper cover. Three plastic clips behind bottom of grille area, **See figure 1**, one 10mm head PK screw (each side at top of bumper side returns and four to six 10mm head bolts (depending on model) along bottom of bumper.
- 2. Remove foam from bumper sub-frame to access sub-frame bolts.
- 3. Remove bumper sub-frame.
- 4. Remove tow hook tie and down brackets.
- 5. Bend bumper cover locating tab under headlight downwards (98-9/02 models only).
- 6. Remove indicators from vehicle (1 PK screw under bonnet, top outside of headlight) push out from under guard. Splice ECB wiring into original indicator wiring loome. Use cable locks (supplied). Splice ECB park light wiring into original park light wiring. Refit original indicators.
- 7. Attach the 200mm lengths of 6mm black clip (supplied) to each side of the roller fairlead cut out, trim to edge of skirt. **See figure 2.**
- 8. Attach infill trim (supplied) to top sides of ECB protection bar. **NOTE:** Trim 30mm off lower edge so trim will sit over end of protection bar. **See figures 3 and 4. Trim excess off end to follow protection bar. See figure 5. NOTE:** Seal any exposed edges of trim with silicone or similar to avoid corrosion of inner steel.
- 9. Fit ECB LED indicator / park lights into protection bar as per instructions supplied with the LED indicator kit. **NOTE: Ensure park light is to outside. See figure 6.**
- 10. Attach round cut out surrounds (supplied) into the round cut outs on the front of the protection bar. **NOTE:** Wider part of trim faces to bottom side of cut out.
- 11. Attach ECB steel mounting brackets (supplied) to vehicle. **NOTE:** Tilt steel mounting brackets slightly in towards centre and feed onto chassis. Use M10 x 30 high tensile bolts (supplied) for front holes. **FINGER TIGHTEN ONLY.** Do not fit lower tow hook bolts. **See figures 7 and 8**.
- 12. Insert ½ x 6 bolts (supplied) vertically through mount hole at front of chassis. Place 40mm round spacer (supplied) between mount and top of chassis. Use nuts/washers (supplied). **DO NOT TIGHTEN**. **See figure 8. NOTE:** Ensure all air conditioning lines are clear of nut/bolt on passenger side. Bend slightly to clear if necessary.



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- 13. Attach fairlead to ECB winch mount. Use 3/8 x 1 1/4 bolts/washers and nuts (supplied). **TIGHTEN FIRM ONLY AS HIGH AS POSSIBLE ON WINCH MOUNTING BRACKET.**
- 14. Loosely bolt winch to winch frame. Use bolts and spring washers supplied with winch along with 3/8 flat washers (supplied). **See figures 9 and 10. NOTE:** Feed winch cable through roller fairlead as installing.
- 15. Attach control box cables to winch. **TIGHTEN CABLES** loosely sit control box on top of winch **See figure 10.**
- 16. Place winch mount and winch onto trolley jack or similar. Ensure all cables are at top of winch and not at back.
- 17. Jack winch mount/ winch up onto chassis rails. See figure 11.
- 18. Reattach tow hook on drivers side and tie down brackets on drivers and passengers side over winch mount. **DO NOT TIGHTEN. Use original bolts**.
- 19. Position control box bracket on inside of winch mounting bracket. Use 3/8 x 1 ½ bolt/nut and washers (supplied). **FINGER TIGHTEN ONLY. See figure 12**.
- 20. Attach control box to control box bracket. Use ½ flat washer (supplied) each side of control box bracket. Position control box socket approximately 2-5mm in front of grille panel and top of socket 20-30mm from with underside of grille panel. **TIGHTEN ALL BOLTS/NUTS. See figure 13 and 14.**
- 21. Route positive and negative cables to battery and connect as per winch instructions.
- 22. Refit grille to vehicle.
- 23. Attach ECB protection bar to inside of steel mounting brackets using ½ x 1 ½ bolts and nuts (supplied). **DO NOT TIGHTEN.**

NOTE: Use $\frac{1}{2}$ x 1 $\frac{3}{4}$ bolts (supplied) for lower protection bar mount hole. Pass bolt through winch mount, steel protection bar mount, alloy mount and winch mount.

- 24. TIGHTEN M10 x 30 x 1.25 bolts and ½ x 6 bolts/nuts on Protection bar steel mounts.
- 25. Align protection bar with vehicle adjust on slot holes for protection bar to sit neatly around grille and headlight under panels. Adjust at side returns so protection bar infill trim just makes contact with vehicle guards. **See figure 15. TIGHTEN FOUR UPPER PROTECTION BAR BOLTS/NUTS ONLY TO 130 N-m (100ft/lb)**
- 26. Position winch frame on slot holes so that winch frame is clear of protection bar and chassis cross member. **TIGHTEN ALL BOLTS. Including lower protection bolts/nuts.**
- 27. Align winch in winch frame and **TIGHTEN** four winch bolts.
- 28. Realign roller fairlead if necessary. **TIGHTEN IN POSITION**.
- 29. Connect ECB wiring to ECB indicators / park lights. Use cable lock (supplied). **CHECK FOR CORRECT OPERATION.**

ENSURE NUMBER PLATE IS CLEARLY VISABLE

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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

1 – Winch mounting plate.	$8 - \frac{1}{2}$ spring washers.
1 – Control box bracket.	$4 - \frac{1}{2} \times 1 \frac{1}{2}$ bolts and nuts.
2 – Steel mounting brackets.	$2 - \frac{1}{2} \times 1^{\frac{3}{4}}$ bolts.
2 – 40mm alloy washers c/w 13mm round holes.	$16 - \frac{1}{2}$ flat washers.
4 – M10 x 30 x 1.25 bolts.	1 – ECB LED Indicator / Park light kit
$4-3/8 \times 1^{1/4}$ bolts and nuts.	6 – Cable locks.
16 - 3/8 flat washers.	1 – 2500mm length 6mm black infill trim.
8 - 3/8 spring washers.	2 – 200mm lengths 6mm black clip lock.
$2 - \frac{1}{2} \times 6$ bolts and nuts.	2 – Round cut out surrounds.

3 plastic clips

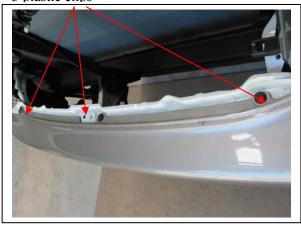


Figure 1

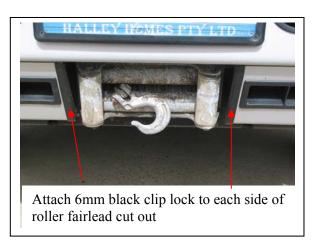


Figure 2



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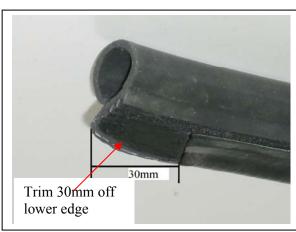


Figure 3

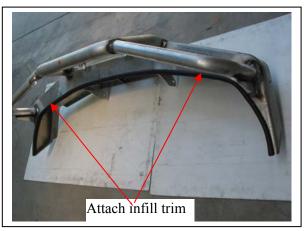


Figure 4

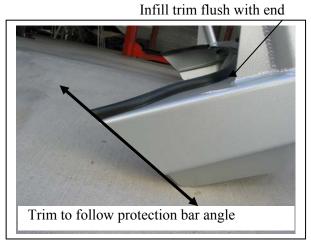
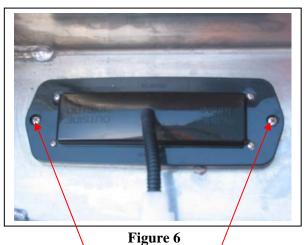


Figure 5

Note: Example only angle on bar maybe different to the above



Stainless steel self-tappers

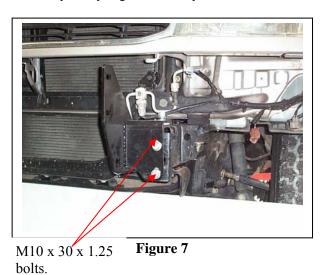




Figure 8 ½ x 6 bolt/nut



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Figure 9 Figure 10



Figure 11





Figure 13

Control box bracket



Figure 12

Control box socket 20-30mm under panel

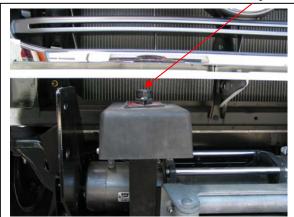


Figure 14



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Infill trim



Figure 15



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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.				

Post to Reply Paid 122 PO Box 122 Margate QLD 4019 **Fax to** (07) 3283 1168



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Final wrap check:

East Coast Bullbars (ECB Pty Ltd)

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DESPATCH CHECKLIST BT82SY

vvork Or	der#				
F	inish:				
Trans	sport:				
Due	Date:				
O 2-	– Steel 1	nounting brackets.	[See other side of	
O 1 − Winch mounting plate.				this page for	
<i>O</i> 1 -	– Contro	l box bracket.		photos of all	
<i>O</i> 1 -	– Bolt K	it.		mounts	
O 1 − LED ECB indicator / park light kit.					
O = 1 - 2500mm length 6mm clip lock.					
O 2 – 200mm lengths 6mm clip lock.					
O 2 – Round cut out surrounds.					
O 2 – ECB Overriders – Fitted to Bar					
O 2 – 6mm Air Scoops – Fitted to Bar					
STOP	If NO	product "the best it fix before continuing	can be'' `	Yes / Checker initials	
All parts <u>che</u>	ecked ar	d <u>completed</u> by:			
Nut and	d bolts:		· · · · · · · · · · · · · · · · · · ·	Date//	
Order c	control:			Date//	

Date__/__/__



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