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REPLACES: 00.00.00 REVISED: 12.09.11

BG44SY

FITTING INSTRUCTIONS

GMC DENALI 2011on 2500 HD WINCH COMPATIBLE BIG TUBE™ BAR (WITH FOG LAMPS) VEHICLE FRONTAL PROTECTION SYSTEM (VFPS) FOR AIR BAG & ADR COMPLIANT VEHICLES

Check installation hardware before commencing.

- 1. Lift bonnet
- 2. Remove grille to radiator support cover, ten push pull plastic clips.
- 3. From air opening on bumper, disconnect air damming from front bumper. (Six plastic Christmas tree plugs.)
- 4. From front of wheel arch, remove 2 x 7mm head screws in infill trim under headlight. Gently pull sides away from vehicle to unclip from guard clips, then forward whilst unclipping from bottom of grille between grille and radiator support.
- 5. From under bumper, remove two 10mm nuts from inner guards to bumper (per side) and two 7mm head screws from wheel arch side of bumper. (per side)
- 6. Remove bumper stays. One 15mm bolt (per side) from bumper end and two 15mm bolts (per side) from chassis end. **See figure 1.** Disconnect fog lights.
- 7. Remove two 21mm bolts from bumper brackets. Access from behind grille. **See figure 2.**
- 8. Remove bumper from vehicle.
- 9. Refit original equipment infill trim to vehicle. **Measure infill templates for correct sizing.** *Caution:* Check size of templates as size may vary according to printer. Using a sharp pair of scissors, cut templates to shape. Mask required area of vehicle. Using pre-cut templates, mark cut line on infill area. **See figure 3.** Measure 40mm from front of grille to cut line under grille. **See figure 4.** Join marked lines together using a straight line neatly.
- 10. Double check cut line to template before cutting. Cut neatly on masked line. *Caution:* Infill area has plastic support under. Cutting bumper will dislodge and remove some of these supports. Remove if become dislodged. Bumper will retain shape with the supports no longer attached.
- 11. Attach 3mm clip lock trim to underside of outer cut section of original equipment infill. Cut rear of 3mm clip lock trim to suit rear edge of infill and inner edge of rear shorter to allow for material in bend of plastic.
- 12. Remove bumper brackets and tow hook from front of chassis rails (two 21mm nuts on factory "u" bolts) and one 19mm bolt and nut and 19mm anti twist bolt from tow hook.
- 13. Fit ECB Steel inner mounting brackets (supplied) to inside of chassis rails using three ½ x 5 ½ bolts and flat washers and one 1 x 1 ½ bolt, flat washers, spring washers and nut (per side)(supplied). Fit ECB Steel outer mounting brackets to outside of chassis rail. Attach using flat washer, spring washer and nut (supplied). On lower bolt place space tube on inside of chassis rail over bolt. **See figure 5**. Tighten bolt on underside of chassis only.



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- 14. Fit fairlead rollers to side of winch frame with rectangular cut out using ½ x 1 ¼ bolt flat washers, spring washers and nut (supplied) (place bolt through from inside to front of mount).
- 15. Remove lower tie bar from winch and refit to back of winch using 6mm Allen key. Place winch into winch frame so Winch rope will feed from underside of winch. Attach to underside of winch frame using four 7/16 x 1 ½ bolts, flat washers and spring washers supplied with winch. Fit two 7/16 x 1 ½ bolts, flat washers and spring washers (supplied) to winch from rear of winch frame. Ensure wire winch rope is passed through fairlead rollers upon installation of winch. Fit hook to wire rope. **See figure 6.**
- 16. **For 12,000lb Warn Winch** Fit control box to winch motor. Clamp in position with large hose clamps (supplied with winch) socket on control box mounted vertically on winch. Connect cables to motor as indicated.
- 17. **For 15,000lb Warn Winch** Fit ECB control box bracket (supplied) to winch mounting bracket. Use two 3/8 x 1 ½ bolts, nuts, flat and spring washers (supplied). **TIGHTEN** roller fairlead. Bolt control box to ECB bracket using original nuts. **TIGHTEN IN POSITION.** Connect cables to motor as indicated in winch instructions. **See figure 5.**
- 18. With the help of a second person, place winch frame onto inner steel mounting brackets, between outer steel mounting brackets. Attach to mounts using four ½ x 1 ½ bolts, flat washers, spring washers and nuts (supplied) on lower points of mounts and one ½ x 1 ½ bolts, flat washers, spring washers and nuts (supplied) into outer steel mounting brackets. Align holes from winch frame to outer steel mount and tighten all bolts on inner steel mount only. See figure 6. WARNING: Winch and frame are very heavy, two person lift is required.
- 19. Feed winch wiring to battery. Ensure wiring is protected from sharp edges and other damage. Test winch for correct operation.
- 20. Splice ECB indicator/park light and fog light wiring into original wiring loom. Use cable locks (supplied). Wiring is accessible under headlamps. If original fog lamps not fitted, an accessory wiring kit will be required. **See figure 7**.
- 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. **See figures 8 and 9.**
- 22. Attach 6mm clip lock trim (supplied) to inner edge of skirt cut out for winch. Trim to suit opening.
- 23. 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 10.**
- 24. 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 11. Tighten Firm Only. NOTE:** Do not fit ECB light trims to protection bar at this point.
- 25. Attach ECB Protection Bar to outside of steel mounting brackets. Use one ½ x 1 ½ bolts and two ½ x 2 ½ bolt to lower and rear holes, flat washers, spring washers and nuts (per side). Finger tighten only. Tighten all steel mounting brackets to chassis.
- 26. Align ECB Protection Bar to vehicle. **Tighten all bolts**. **See figures 12 and 13**.
- 27. Connect ECB indicator/park lights and fog lamps. Ensure wiring is routed in such a manner to avoid any sharp edges etc, and fog lamps are pointed forward and at a slightly downward angle. Check for correct operation. Fit Fog light trims (supplied), large side to inside of bar.



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- 28. Trim lower wheel arch splash guard level with bottom of skirt on Protection bar. Cuts will be required to allow splash guard to sit neatly behind Side of Protection Bar.
- 29. Attach round plastic trims (supplied) to which control access cut outs in top of channel. See figure 14.

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 – ECB Outer Steel Mounting Brackets	4 - 3/8 flat washers
1 – Pair ECB Inner Steel Mounting Brackets	2 – 3/8 spring washers
1 – ECB Steel Winch Frame	2 - 3/8 nuts
1 – ECB Steel control box mount	2 – M6 x 20 bolts.
2 – ECB Steel chassis spacer tubes (15 nb x 78mm long)	2 – M6 flat washers.
$6 - \frac{1}{2} \times 5 \frac{1}{2}$ bolts	2 – M6 spring washers.
$10 - \frac{1}{2} \times 1^{\frac{1}{2}}$ bolts	2 – M6 nuts
$2 - \frac{1}{2} \times 1^{\frac{1}{4}}$ bolts	1 – 1650mm length, 6mm clip lock trim.
$4 - \frac{1}{2} \times 2^{\frac{1}{2}}$ bolts	1 – 750 mm length, 6mm clip lock trim
44 − ½ flat washers	2 – 1200mm length, 3mm clip lock trim
22 – ½ spring washers	1 – ECB LED Indicator / Park light kit
22 – ½ nuts	1 – Pair ECB Fog Lamps.
$2 - 7/16 \times 1 \frac{1}{2}$ bolts	4 – Fog lamp surrounds.
4 – 7/16 flat washers	10 – Cable locks
2 – 7/16 spring washers	6 – 300mm cable ties
$2 - 3/8 \times 1^{-1/4}$ bolts	



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Figure 1: Stay mount to chassis, two 15mm bolts



Figure 3: Placement of templates on vehicle. Blue sections indicate template sections.

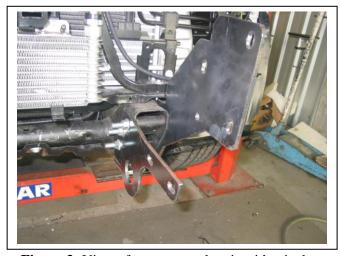


Figure 3: View of mounts no chassis with winch attached

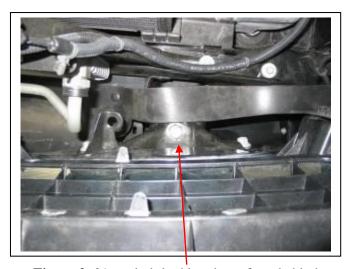


Figure 2: 21mm bolt looking down from behind grille

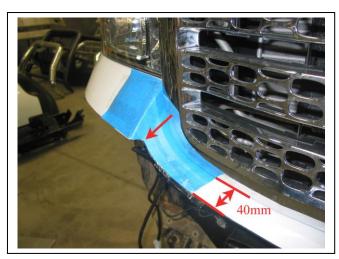


Figure 4: Placement of grille section of template. Cut inner corner no smaller than the size of a 20 cent piece.



Figure 4: Placement of winch in mount



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Figure 5: Direction and mounting of winch control box



Figure 6: Mounting of winch frame to chassis mount



Figure 7: Wiring harness under driver's headlamp

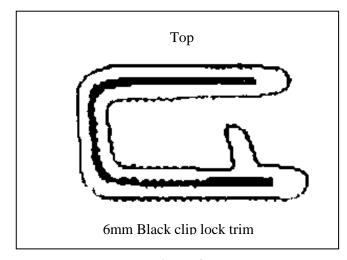


Figure 8

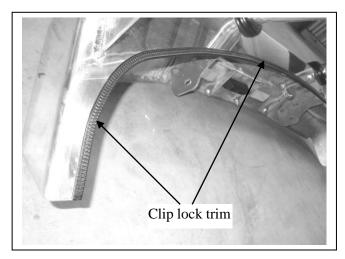


Figure 9

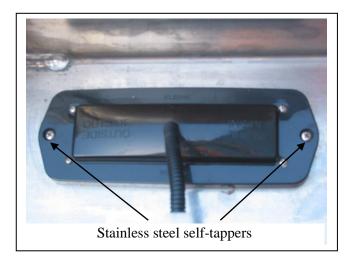


Figure 10



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M6 bolt

Figure 11



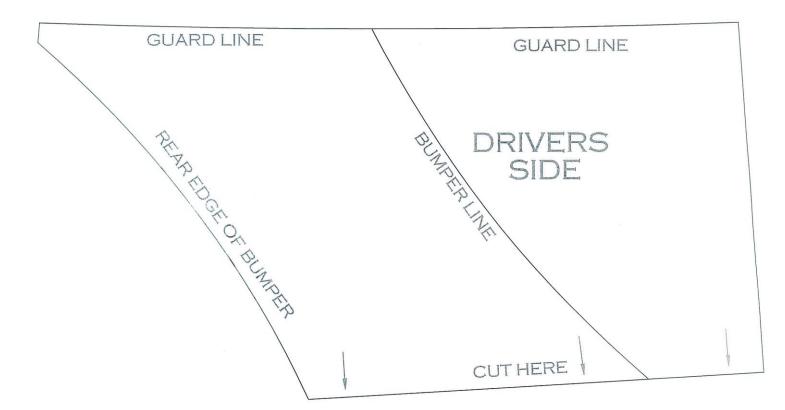
Figure 12: Winch Bar front view shown

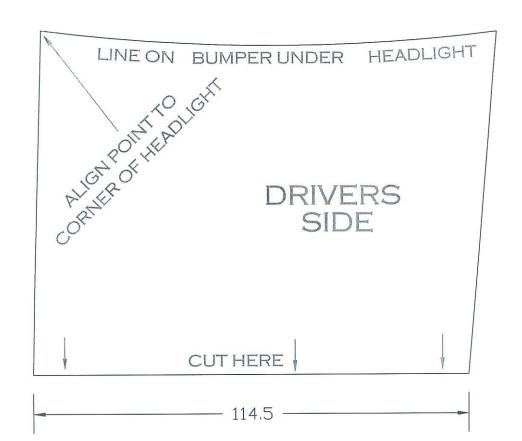


Figure 13: Winch bar side view shown



Figure 14







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ALIGN MARKED TEMPLATES
BUMPER LINE OUTSIDE OF GRILLE LINE ON BUMPER UNDER PARKER CUT TERE DRIVERS SIDE 出出ら LINE ON BUMPER UNDER GRILLE DRIVERS



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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	<u> </u>			
Did the installation go well?	Yes No			
Please provide comments				
Please draw diagrams if you need to.				

Post to Reply Paid 122 Fax to (07) 3283 1168



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DESPATCH CHECKLIST BG44SY

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ICZBKCG44	



Work	Order #				
	Finish:				
Tr	ansport:				
Due Date:					
	ao Dato.				
0	2 - ECB out	er steel mounting brackets.			
0	1 – Pair ECI	3 inner steel mounting brackets.			
0	1 – ECB stee	1 – ECB steel winch frame.			
0	2 1 – ECB steel control box mount.				
0	O 2 – ECB steel chassis spacer tubes (15nb x 78mm long).				
0	1 − Bolt Kit.				
0	1 - ECB Ind	icator / park light kit.	See other side of		
0	1 – Pair ECI	CB fog lamps. this page for			
0	4 – Fog lamp surrounds				
0	1 – 1600mm length 6mm clip lock trim.		photos of all		
0	2 – 1200mm lengths 3mm clip lock trim. mounts				
0	1 – 750mm length 6mm clip lock trim				
0	2 – ECB overriders – Fitted to Bar.				
0	6 – 6mm air scoops – Fitted to Bar.				
STOP	·	product "the best it can be" Yes	initials / Checker initials		
All parts <u>c</u>	checked and	completed by:			
Nut and bolts:			Date//		
Order control:Date/_/		Date//			
Final wrap check:Date/_/_			Date//		



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