



# FITTING INSTRUCTIONS

Part Number: 3936030. F/KIT: 6173658 & 6173665

Product

Description: S/BAR F250/350 – 99-04 4X4/2 W/TUBE NFO 12-16.5

Suited to  
vehicle/s:

FORD F250/350 2000 MODELS ON

Optional  
Fitting Kit:

3500590 – ARB FFR FOG LIGHT KIT.

3500640 - ARB AUX FOG LIGHT ADAPTOR

3500530 – ARB AUX FOG LIGHT LOOM - NON FACTORY FOG LAMP VEHICLES.

3500680 – FOG LAMP HOUSING CLEAR LENSE KIT.

## WARNING

### REGARDING VEHICLES EQUIPPED WITH SRS AIRBAG:

When installed in accordance with these instructions, the front protection bar does not affect operation of the SRS airbag.

### ALSO, NOTE THE FOLLOWING:

- ◆ This product must be installed exactly as per these instructions using only the hardware supplied.
- ◆ In the event of damage to any bull bar component, contact your nearest authorised ARB stockist. Repairs or modifications to the impact absorption system must not be attempted.
- ◆ Do not use this product for any vehicle make or model, other than those specified by ARB.
- ◆ Do not remove labels from this bull bar.
- ◆ This product or its fixing must not be modified in any way.
- ◆ The installation of this product may require the use of specialized tools and/or techniques
- ◆ It is recommended that this product is only installed by trained personnel
- ◆ These instructions are correct as at the publication date. ARB Corporation Ltd. cannot be held responsible for the impact of any changes subsequently made by the vehicle manufacturer
- ◆ During installation, it is the duty of the installer to check correct operation/clearances of all components
- ◆ Work safely at all times
- ◆ Unless otherwise instructed, tighten fasteners to specified torque

## ARB 4x4 ACCESSORIES

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# GENERAL CARE AND MAINTENANCE

By choosing an ARB Bar, you have bought a product that is one of the most sought after 4WD products in the world. Your bar is a properly engineered, reliable, quality accessory that represents excellent value. To keep your bar in original condition it is important to care and maintain it following these recommendations:

- Prior to exposure to the weather your bar should be treated to a Carnauba based polish on all exposed surfaces. It is recommended that this is performed on a six monthly basis or following exposure to salt, mud, sand or other contaminants.
- As part of any Pre Trip Preparation, or on an annual basis, it is recommended that a thorough visual inspection of the bar is carried out, making sure that all bolts and other components are torqued to the correct specification. Also check that all wiring sheaths, connectors, and fittings are free of damage. Replace any components as necessary. This service can be performed by your local authorized ARB Stockist.



## FITTING REQUIREMENTS

**IMPORTANT:** This winch bumper is suitable for Warn 15,000lb winch only.

### REQUIRED TOOLS FOR FITMENT OF PRODUCT:

METRIC SOCKET SET	METRIC RING AND OPEN ENDED SPANNER SET
ELECTRIC DRILL 13 MM CAPACITY	10, 12.5mm & 13mm DRILL BITS
SMALL EXT CIR CLIP PLIERS	PHILIPS AND FLAT BLADE SCREW DRIVER SETS
TAPE MEASURE OR STEEL RULE	FELT TIP MARKER PEN

### HAVE AVAILABLE THESE SAFETY ITEMS WHEN FITTING PRODUCT:

Protective eyewear		Hearing protection	
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**NOTE:** 'WARNING' notes in the fitting procedure relate to OHS situations, where to avoid a potentially hazardous situation it is suggested that protective safety gear be worn or a safe work procedure be employed. If these notes and warnings are not heeded, injury may result.

### FASTENER TORQUE SETTINGS:


SIZE	Torque Nm	Torque lbft
M6	9Nm	7lbft
M8	22Nm	16lbft
M10	44Nm	32lbft
M12	77Nm	57lbft

<b>PARTS LISTING</b>			
<b>APPLICATION</b>	<b>PART No.</b>	<b>QTY</b>	<b>DESCRIPTION</b>
<b>BUFFER FITMENT</b>	6151128	12	NUT FLANGE M6
	3162153	1	BUFFER LHS
	3162154	1	BUFFER RHS
<b>SAHARA TUBE FITMENT</b>	6151255	2	BOLT M12 X 40mm
	4581049	2	WASHER FLAT M12
	4581050	2	WASHER SPRING M12
	6131506	1	SAHARA TUBE
<b>MOUNT BRACKETS TO VEHICLE</b>	3756501L	1	BRACKET BAR MOUNT LHS
	3756501R	1	BRACKET BAR MOUNT RHS
	3193695	4	PLATE
	6151321	8	M10 FLANGED NUT
	4581011	8	WASHER M12 X 4mm THICK
	6151232	8	BOLT M10 X 30mm
	4581048	8	WASHER M10 SPRING
	6151255	6	M12 x 40 BOLTS
	4581049	12	FLAT WASHER M12
	4581050	6	WASHER SPRING M12
6151305	6	NUT CAGED M12	
<b>WINCH</b>	4581044	4	WASHER M8 x 17 x 1.2
	180302	4	CABLE TIE
	BLB850	2	BATTERY LEAD BLACK
	BLR850	1	BATTERY LEAD RED
<b>TOW HOOK REPLACEMENT</b>	4581049	6	M12 WASHER FLAT
	4581050	6	M12 WASHER SPRING
	6151255	6	BOLT M12 X 40
	6151189	4	NUT M12
<b>CONTROL BOX FITMENT</b>	3756499	1	CONTROL BOX BRACKET
	6151021	2	BOLT M8 X 20mm
	4581044	2	WASHER, FLAT M8 x 17 x 1.2
	180302	4	CABLE TIE
	6151132	2	NUT FLANGE M8
	EG50	2	GROMMET RUBBER
<b>NUMBER PLATE FITMENT</b>	6151017	2	BOLT M6 X 16mm
	6151128	2	NUT FLANGE M6
	6781408	1	TAPE DOUBLE SIDED
<b>AIR DEFLECTOR FITMENT</b>	6151022	3	BOLT M8 x 25
	4581063	3	WASHER FLAT M8 x 25.4 x 3
	6151303	3	NUT M8 CAGED
	6522022	1	AIR DEFLECTOR PANEL
	4581046	3	WASHER M8 SPRING
<b>TENSION BRACKET</b>	3756432	2	TENSION BRACKET
	6151255	4	BOLT M12 X 40mm
	4581050	4	WASHER SPRING M12
	4581007	8	WASHER FLAT M12 LARGE
	6151189	4	NUT M12
<b>WINCH COVER FITMENT</b>	6151128	2	NUT FLANGE M6
	6151256	2	SCREW M6 S/STEEL BUTTON HEAD
	6191006	1	WINCH COVER EXTRUSION
	6522023	1	WINCH COVER
	4581304	2	WASHER M6 S/S
<b>FOG LAMP HOUSINGS TO BULL BAR</b>	3163082	1	FOG LAMP HOUSING KIT

**PARTS LISTING (Continued)**

<b>APPLICATION</b>	<b>PART No.</b>	<b>QTY</b>	<b>DESCRIPTION</b>
<b>BAR TO MOUNT ASSEMBLY</b>	6151255	4	BOLT M12 X 40mm
	4581050	4	WASHER SPRING M12
	4581007	4	WASHER FLAT M12 LARGE
	4581048	4	WASHER SPRING M10
	6151321	4	NUT M10 FLANGED
	6151232	4	BOLT M10 X 30mm
	4581040	4	WASHER FLAT 3/8"
<b>CB</b>	3162152	2	PLASTIC PLUG DIA16
<b>INDICATORS TO BULL BAR</b>	6821287	1	LED INDICATOR/CLEARANCE KIT PAIR
	6821116	4	NYLON PLUGS
	180302	6	CABLE TIES

## FITTING PROCEDURE – PREPARATION TO VEHICLE

	<p>1. Remove the bumper bar and both recovery hooks from the vehicle.</p>
	<p>2. Connect the LED indicator/clearance harnesses to the vehicle using the wiring looms (6821286) and scotch locks provided in the LED indicator/clearance kit (6821287).</p> <p><b>Connect vehicle RH indicator wire to Green wire on LED loom.</b></p> <p><b>Connect vehicle RH parker wire to Red wire on LED loom</b></p> <p><b>Connect vehicle ground wire to Black wire on LED loom.</b></p> <p><b>Repeat for LH of vehicle.</b></p> <p>3. Allow the LED Looms (6821286) to hang freely for connecting to the bull bar LED's at Step 37.</p>
	<p>4. <b>Optional Fog Lamp Fitment:</b></p> <p><b>For vehicles with Factory Fog lamps:</b></p> <p>Connect RH &amp; LH Fog Lamp wiring using 3500640-ARB Aux fog light adaptor and connect to Factory Fog Lamp loom.</p> <p><b>For vehicles without Factory Fog lamps:</b></p> <p>Connect RH &amp; LH Fog Lamp wiring using Fog Lamp Wiring Loom kit – 3500530.</p> <p>5. Allow the Fog Lamp looms to hang freely for connection to the Bull Bar Fog Lights at Step 38.</p>
	<p>6. Fit M12 cage nuts to slots on each mount bracket as shown and fit mount brackets onto chassis ends, gusset should locate inside chassis end.</p> <p>7. Using M12 x 40mm bolts, flat washers, spring washers, re-fasten through the holes where the recovery hooks were removed.</p> <p><b>Do not fully tighten bolts.</b></p>

## PREPARATION TO VEHICLE (Continued)



8. Fasten brackets with the M10 bolts, large 4mm thick washers, M10 spring washers, M10 flange nuts and plates, finger tight only.

**Note: The plates mount to the front face of the bull bar mounting bracket as shown.**



9. With the bull bar mounting brackets now in place (but not tightened) bolt the tension strap to the chassis using the hole next to the horizontal slot.

Using the M12 bolt, thick washers, spring washer and nut bolt up the tension strap as shown.

The tension strap will need to be bent out slightly, to pass alongside the bull bar mounting bracket.

As the bolt is tightened the bracket will bend slightly to allow the strap to sit flat against the chassis.



10. Bend the end of the strap inward, as shown, to allow the strap to sit against the bull bar mounting bracket.

Drill through the strap and bracket using a 12.5mm drill bit and bolt up using the same hardware as described in the above step.

**IMPORTANT: STRAP POSITION MUST BE AS LOW AS PRACTICAL ON MOUNT BRACKET (AS SHOWN).**

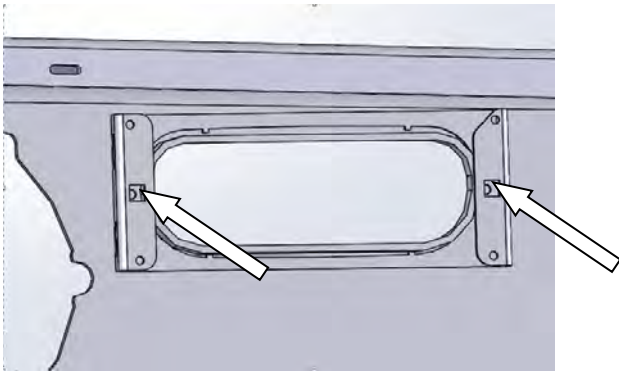


## PREPARATION TO BULL BAR

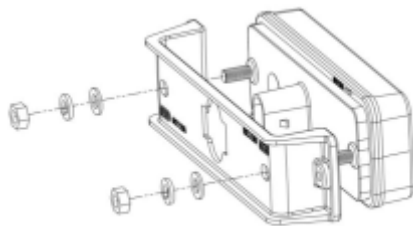


11. Insert the side buffers through the holes and fix using the M6 flange nuts. (LH Shown).

**NOTE: Do not over-tighten.**




12. Install Nylon plugs (6821116). (4 off) Into Clearance Light/Turn Signal Brackets. (RH Shown).



13. Install 6821285 bracket onto LED lamp with 2 x flat washer, 2 x spring washers and 2 x M6 nuts as shown.

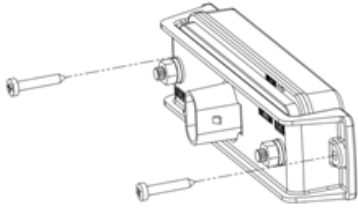
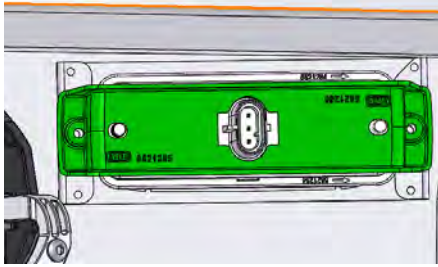
**Torque to specification.**

 M6 - 3 Nm.

**NOTE: Do not over-tighten.**



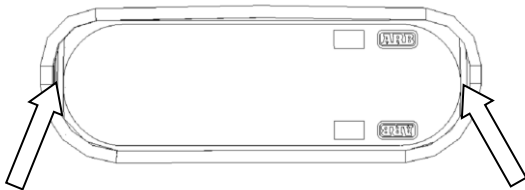
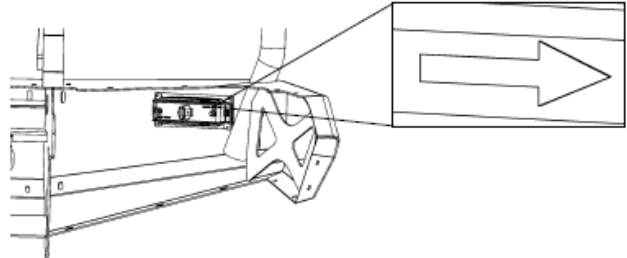
## PREPARATION TO BULL BAR (Continued)



14. Install LED lamp with bracket into bull-bar using 2 x 15mm mounting screws provided. (RH Shown).

**Note: Do not fully tighten.**

**IMPORTANT:** The clearance LEDs must be on the outboard edge of the bull-bar. To achieve this, position lamp with arrows facing outside of vehicle as shown below.



**ADJUST GAPS TO BE THE SAME**

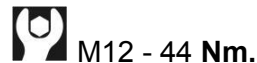
15. Viewing the installed LED Lamps from the front of the bull bar – adjust the Lamp positions so that they are central in the formed apertures and any gap on either side is the same.

- Once adjusted fully tighten the 15mm mounting screws.



16. Push the top Sahara tube through the hole in the buffer and fasten using the M12 x 40mm bolts, washers and spring washers.

**Torque to specification.**



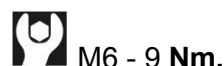
## NON-WINCH FITMENT ONLY



**IF FITTING A WINCH MOVE ON TO STEP 21.**

17. Wrap rubber extrusion around the winch cover and trim excess.
  18. Place spacer washers over the winch cover fixing holes, located on the top face of the winch bumper.
  19. Place the winch cover on top of the winch bumper in line with the mount holes.
- Bolt together using the M6 button head stainless steel screws and M6 nuts.

**Torque to specification.**



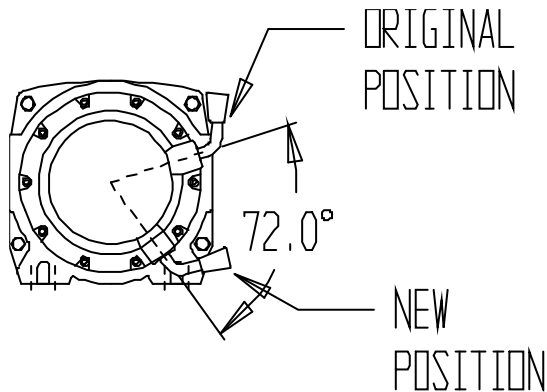


## NON-WINCH FITMENT ONLY (Continued)



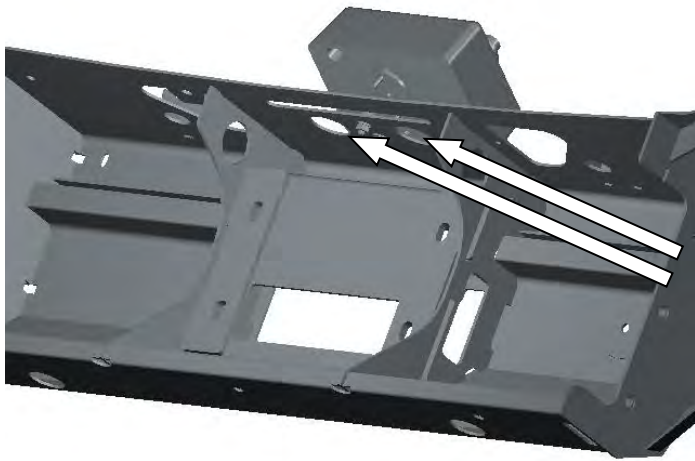
20. Bolt the number plate through the top holes using M6 X 16mm bolts and M6 flange nuts. If desired the double sided tape can be used down the sides of the number plate.

## WINCH FITMENT ONLY



21. To place the winch clutch handle in a convenient location the winch gearbox must be rotated 2 hole spacing's, 72 degrees, in an clockwise direction when viewed from the gearbox end. Place the winch on its end and remove all gearbox bolts. Gently raise the gearbox just enough to rotate it. Do not completely remove the gearbox and avoid damaging the gasket. Refit all bolts and tighten.

**NOTE: To avoid un-meshing the gears take care not to lift the assembly more than a couple of millimetres while rotating to the desired position.**

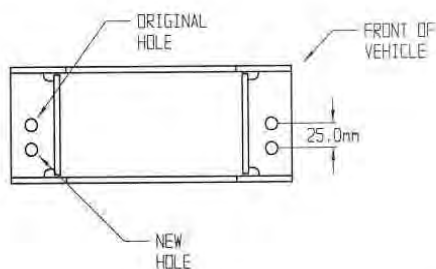


22. The three control box leads which connect to the winch, need to be replaced with the longer leads supplied in the fitting kit. Replace the leads with the longer leads of the same colours.

Bolt the control box bracket to the control box, (refer to photo).

Fit the two grommets into the round holes then thread the cable through.

23. Mount the control box bracket onto the top pan, using M8 bolts, flat washers and flanged nuts. Use the cables ties to ensure the winch cables are secure, tying them together.



24. **The roller fair lead must be drilled prior to fitment.**

-Using a 13.0 mm drill bit drill two holes 25mm below the original holes as shown in diagram.



## WINCH FITMENT ONLY (Continued)



25. Install the winch and roller fairlead using bolts, nuts and spring washers supplied by Warn, and the M8 x 17 x 1.2 flat washers supplied in the bolt kit. Refer to Warn installation instructions for correct procedure. Adjust winch in slots until the winch is centralized in the bull bar.

26. Connect Control box leads to winch. Refer to the Warn winch handbook for additional information.

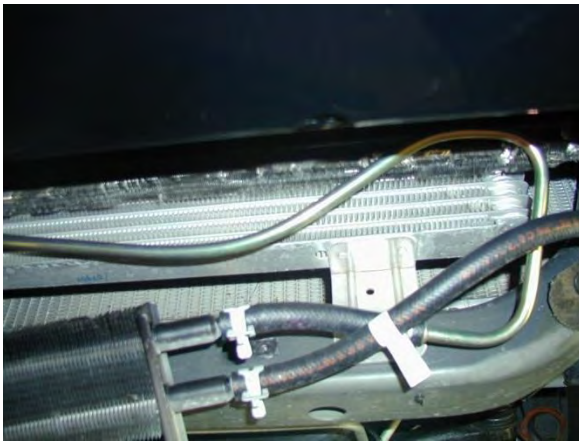
**NOTE: Connect the long winch + & - cables to the vehicle after the bar is installed.**



27. Peel off one side of the double sided tape and adhere to the top rear side of the number plate. **Note:** Clean the adhering surfaces before applying tape with an alcohol solvent.

Peel off the other side of the tape and bolt to the winch bumper with the M6 X 16mm bolts and M6 flange nuts through the lower holes of the number plate.

Press firmly to the top of the number plate so the tape can properly adhere.

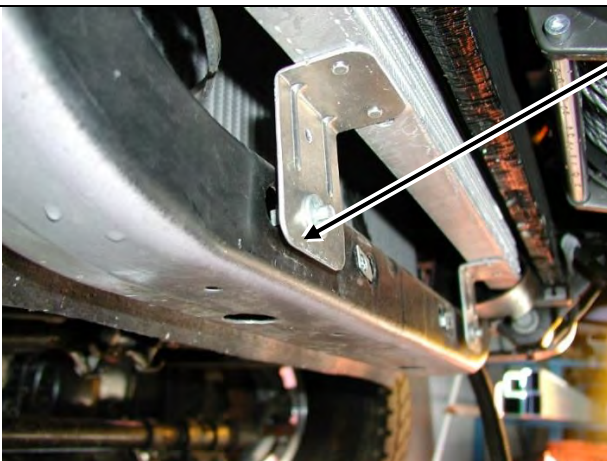


28. Remove the rubber air guide and discard.

**IMPORTANT:-** When fitting a winch, on some models the top power steering cooler line (steel) will interfere with the winch and must be bent down to provide clearance as shown .

Take care when bending the cooler line tube that you do not kink it.

**Leave the power steering cooler in its original position.**



29. Bolt the deflector to the original bolts located in the chassis cross member.

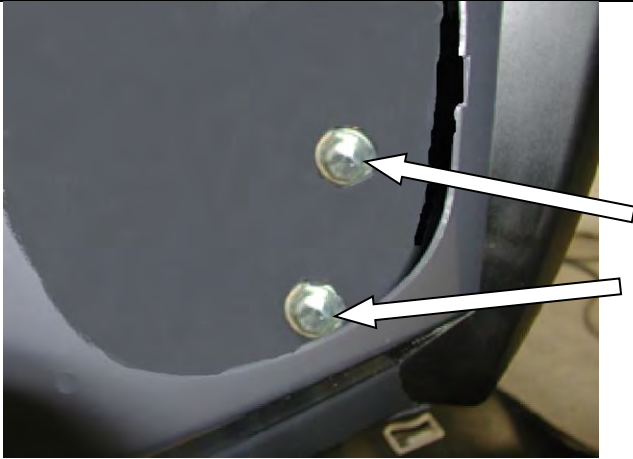
Tie the power steering lines to the chassis away from sharp edges and moving parts with cable ties provided.



## BULL BAR FITMENT TO VEHICLE




30. Using two people, three if a winch is fitted, position the bar assembly on the vehicle mounts. Make sure the deflector is held down for the bar to be pushed back.



31. Bolt the bar to the mounts using M12 bolts, large flat washers and spring washers. Align the bar to the profile of the guards and tighten all bolts including the mount brackets.

**Torque to specification.**


 M12 - 77 Nm.

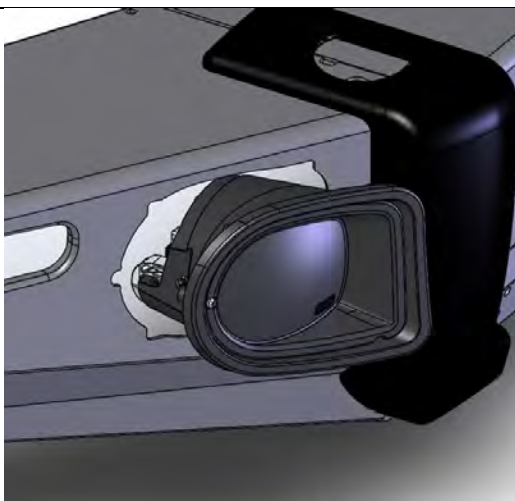


32. The bar must be pin bolted to the mount brackets. Using a drill and 10mm drill bit, drill through the upper and lower Ø10mm holes located in the mount brackets.

Fasten the holes using M10 bolts, flat washers and spring washers.

**Torque to specification.**

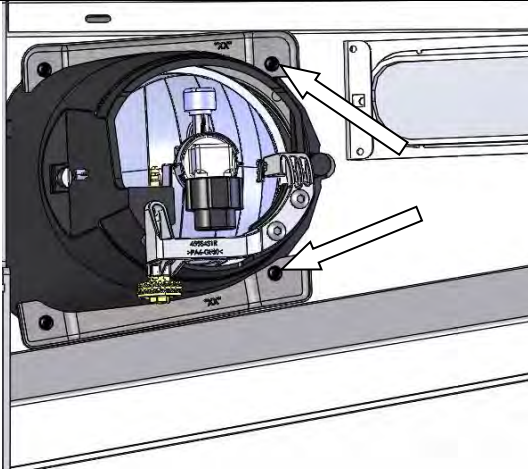
 M10 - 44 Nm.



33. Fit fog lamp housings (3163082) into the bull-bar fog lamp cutouts as shown. (RH Shown).

If fitting fog lights refer to fitting instructions (3789190) in the fog lamp housing kit (3163082) for details before mounting the housings in the bull bar.

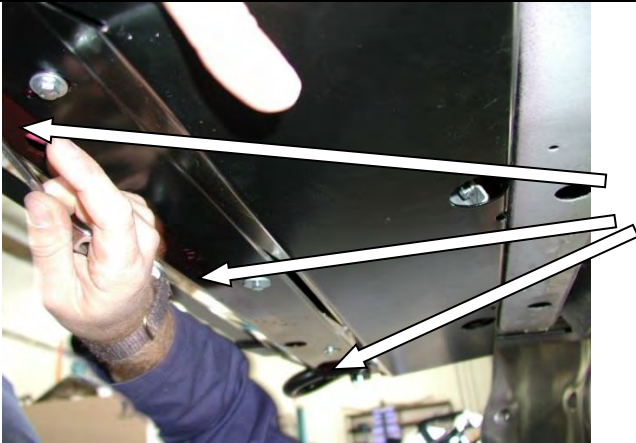
## BULL BAR FITMENT TO VEHICLE (Continued)



34. Secure into position as indicated using the 2 x fog lamp clamps and 4 x self-tapping screws.

**(RH Clamps Part No. 3759115R).  
(LH Clamps Part No. 3759115L).**

**Note: Shown with generic Fog Lamp fitted in this view.**



35. Fit three M8 cage nuts to square holes inside the bar. Bolt the deflector to the bar using M8 bolts, large M8 flat washers and spring washers.

**Torque to specification.**



M8 - 22 Nm.

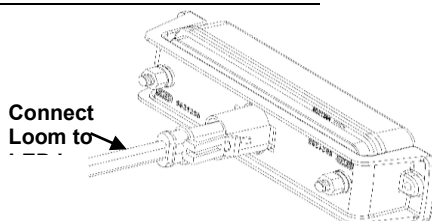


36. Bolt the tow hooks to the mount brackets using the M12 x 40mm bolts, flat washers and spring washers.

**Torque to specification.**



M12 - 77 Nm.



37. Connect the indicator/clearance lamps to the looms fitted during Steps 2-3.

38. If fitting fog lights connect the bumper fog light loom, fitted at Steps 4-5, to the fog lights.

**-Cable-tie all wiring and wiring looms into safe and convenient locations.** Ensure that all cables are installed well clear of all sharp or moving parts using cable-ties from the bolt kit.

**-Check that all lights work correctly.  
-Check and test winch if installed.**

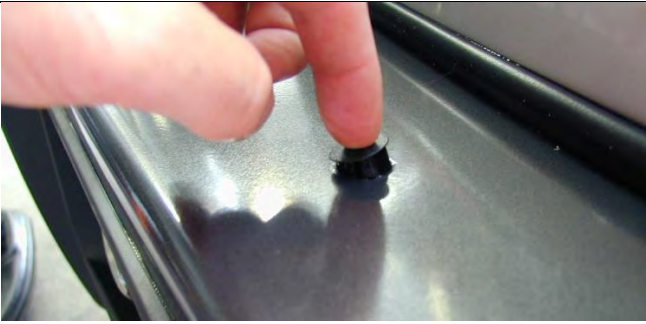


## BULL BAR FITMENT TO VEHICLE (Continued)



### 39. If vehicle has been fitted with a winch.

Feed the winch cable through the roller fair lead. Mount the hook to the end of the cable.



40. There are two Ø16 holes located on the top face of the bar. If no CB aerials are fitted the holes can be covered with the plastic plugs provided in the fitting kit.

Place the ARB logo on the front face of the bar in the indentation.

### ONCE BAR IS FITTED:

- ◆ Ensure all bolts are tensioned correctly
- ◆ All wiring is clear of sharp edges or moving surfaces and secured properly
- ◆ Piping is secured well away from sharp or moving components
- ◆ Check operation of winch if fitted
- ◆ Check all wiring and connections to turn signal lamps, sensors, headlamp washers etc. are functioning correctly.

## VEHICLE WITH FITTED PRODUCT

