



FITTING INSTRUCTIONS

ARB COMBINATION WINCH/NON-WINCH BULL BARS TO SUIT FORD F250/350 PICKUPS 2000-2004 AND 2005 MODELS ON.

PRODUCTS No. 3436030/40

**FITTING KITS No.6171871, 6171873,
6171926 (SUPP. KIT FOR WINCH FITMENT 3436040 ONLY)**

WARNING

FOR VEHICLES EQUIPPED WITH SRS AIRBAG

WHEN INSTALLED IN ACCORDANCE WITH THESE INSTRUCTIONS, THE FRONT PROTECTION BAR DOES NOT AFFECT OPERATION OF THE SRS AIRBAG.

TAKE NOTE OF 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.**

Note :

- 1 **These winch bumpers are suitable for Warn 10, 12, 15, and 16500lb winches.**

Tools Required

Metric Spanner and Socket set	Phillips head screwdriver,
Dia 12.5mm & 10mm drill bits	13mm capacity electric drill.
Plastic trimming cutting tool	Allen (Hex) Key Set
Sikaflex - black	

USE	PART No	QTY	DESCRIPTION
MOUNT BRACKETS TO VEHICLE	3756655L	1	BRACKET BAR MOUNT LHS
	3756655R	1	BRACKET BAR MOUNT RHS
	3193695	4	PLATE
	6151321	8	NUT M10 FLANGED
	4581040	8	WASHER M10 X 3mm THICK
	6151232	8	SCREW M10 X 30mm
	4581048	8	WASHER M10 SPRING
	6151305	6	CAGE NUT M12
	4581049	6	M12 WASHER FLAT
	4581050	6	M12 WASHER SPRING
	6151255	6	SCREW M12 X 40
	3199818	2	PACKER PLATE
TOW HOOK RELOCATION	4581049	6	M12 WASHER FLAT
	4581050	6	M12 WASHER SPRING
	6151255	6	SCREW M12 X 40
CONTROL BOX FITTMENT (If fitting winch)	3756775	1	CONTROL BOX BRACKET UNIV.
	3199790	1	PLATE TRIM FOR 16500LB CNTRL BX
	6151364	2	SCREW CAP M10X30
	4581291	2	WASHER FLAT M10 BZ
	6151321	2	NUT M10 FLANGED
	180302	8	CABLE TIE
NUMBER PLATE FITTMENT	6151017	2	BOLT M6 X 16mm
	6151128	2	NUT FLANGE M6
	6781408	1	TAPE DOUBLE SIDED
AIR DEFLECTOR FITTMENT	6151022	3	BOLT M8 x 25
	4581063	3	WASHER FLAT M8 x 25.4 x 3
	6151301	3	NUT M8 CAGED
	6522045	1	PANEL AIR DEFLECTOR
	4581046	3	WASHER M8 SPRING
TENSION STRAP	3756432	2	PLATE TENSION STRAP
	6151255	4	BOLT M12 X 40mm
	4581050	4	WASHER SPRING M12
	4581049	8	WASHER FLAT M12
	6151189	4	NUT M12
WINCH HOLE COVER FITTMENT (If not fitting winch)	6151128	2	NUT FLANGE M6
	6151256	2	SCREW M6 S/STEEL BUTTON HEAD
	6191013	1	EXTRUSION WINCH COVER
	6522048	1	PANEL WINCH COVER
	6151046	2	WASHER M6

BAR TO MOUNT ASSEMBLY	6151255	6	BOLT M12 X 40mm
	4581050	6	WASHER SPRING M12
	4581049	12	WASHER FLAT M12
	4581048	4	WASHER SPRING M10
	6151189	6	NUT M12
	6151321	4	NUT M10 FLANGED
	6151232	4	BOLT M10 X 30mm
	4581040	4	WASHER FLAT 3/8"
INDICATOR ASSY	6821151R	1	INDICATOR ASSY RHS
	6821151L	1	INDICATOR ASSY LHS
	6151308	4	SCREW SELF TAPPING
	6821116	4	NUT NYLON PLUG
	6821152	2	LOOM
	180701	6	SCOTCH LOCKS
	180302	4	CABLE TIE
SUPLIMENTARY KIT 6171926 FOR WINCH RELIEF FOR 2005ON BAR ONLY			
	4681176	1	BRACE
	3756735	1	BRACKET ANGLE
	6151143	8	SELF DRILL SCREW

NOTE: Shipping brackets connecting bull bar to pallet and associated fasteners are not intended to be reused in fitted bar assembly.

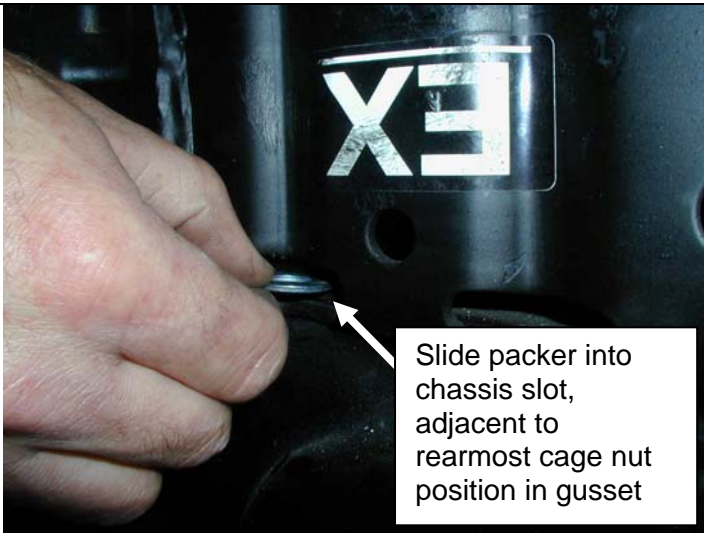
ASSEMBLY SEQUENCE FOR WINCH BUMPER.



1. Fitting mounting brackets

Remove the bumper and two recovery hooks.

Fit M12 cage nuts to slots on each mount bracket as shown; make sure that they can move laterally along the slots for adjustment purposes later on.



2. Sit mount brackets in position as shown in step 3. Check that they sit flush against flange, if not; the edge of chassis may be bearing on weld on underside of welded gusset. Fettle edge of chassis until it clears bracket.

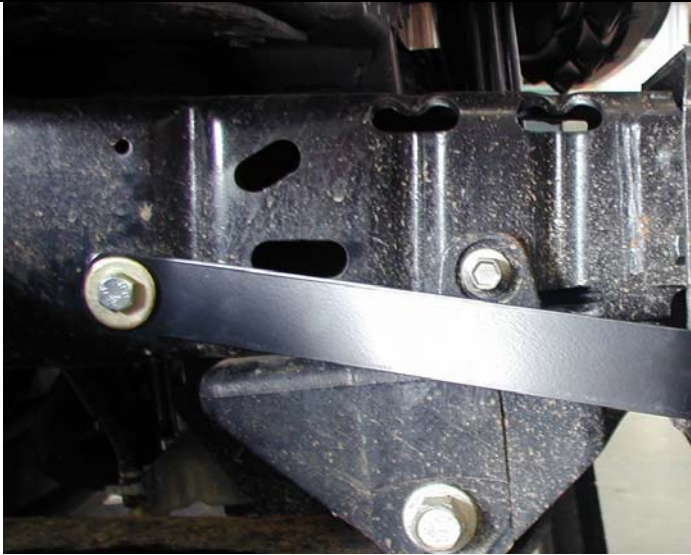
There will be an air gap between the rearmost under face of the gusset to the lower inside face of chassis. Slide in packer plate under rearmost bolt position to support gusset. Using M12 x 40mm bolts, flat and spring washers, fasten through the holes in chassis end including packer, where the recovery hook bolts were removed.

Do not tighten bolts yet.



3. Fasten onto the end flanges on chassis with M10 bolts, large 4mm thick washers, M10 spring washers, nut plates and M10 flange nuts as shown, lightly tension.

Set the pitch between the flanges at 953mm inside, and locate symmetrically to the center of the vehicle.

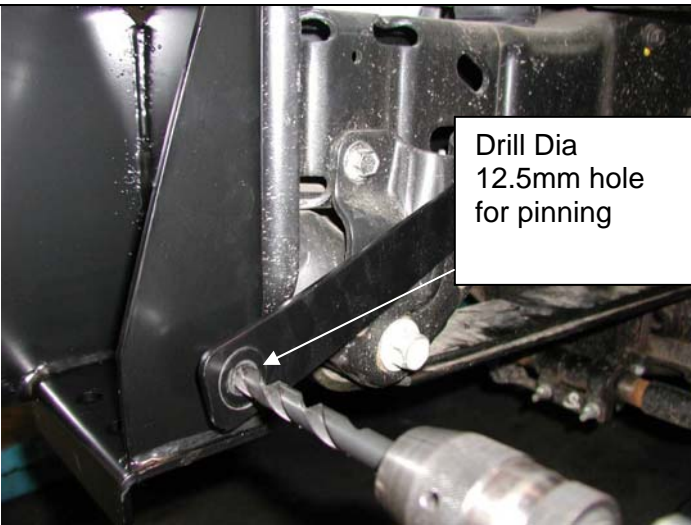


4. With the bull bar mounting brackets now in place (but not tightened) bolt the tension strap to the chassis using the hole next to the horizontal slot.

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

Note: 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.



Drill Dia
12.5mm hole
for pinning

5. 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



ROTATION

ORIGINAL POSITION	NEW POSITION
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6. **If fitting winch.**

Rotate clutch handle end

The clutch handle must be repositioned so it is in a convenient location when mounted to bar.

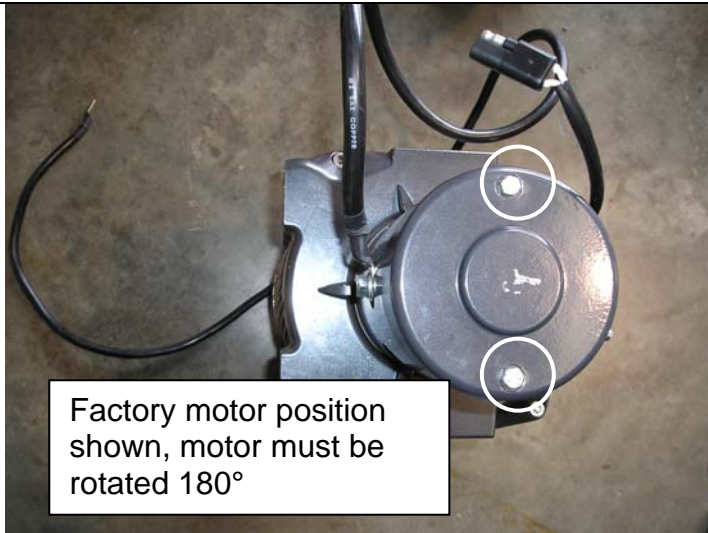
Place the winch on its end and remove all gearbox bolts.

Gently raise the motor just enough to rotate it. Viewing from the gearbox end, rotate the gearbox 72deg clockwise.

Do not completely remove the motor and avoid damaging the gasket.

Refit and tighten all bolts.

Note: Take care not to lift the assembly more than a couple of millimeters while rotating to the desired position to avoid un-meshing the gears.



Rotate motor end 180°.

Undo the 2 x bolts securing the motor in position, withdraw bolts and rotate motor 180°, so terminals will now face away from vehicle when mounted. Tighten up retaining bolts.



7. Fit control box to pan:

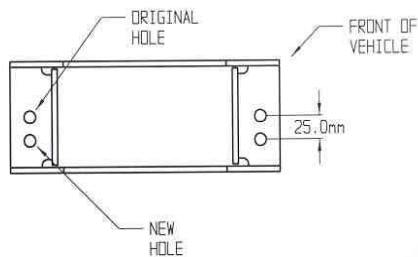
- For 10000-12000lb winches, use universal control box bracket supplied, attaching to rear of control box mount studs.
- Slide bracket flange under pan and align with mount slots.
- Fasten in position with 2 x M10 cap screws, black washers and flange nuts.



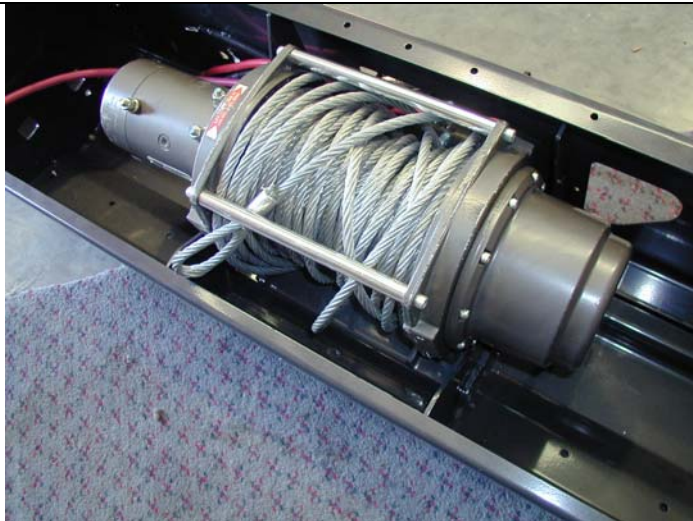
- For 15000lb winches, use Warn supplied control box bracket, attaching to rear of control box mount studs.
- Slide bracket flange under pan and align with mount slots.
- Fasten in position with 2 x M10 cap screws, black washers and flange nuts.



- For 16500lb winches, apply Sikaflex (or similar product) to rear of control box trim plate from fitting kit (note orientation critical to suit final position with control box profile in pan opening).
- Position trim plate on top of pan centrally about control box opening and line up with mount slots.
- Fasten in position with 2 x M10 cap screws and flange nuts from fitting kit.



8. The roller fair lead may need to be drilled prior to fitment.
- Using a 13.0 mm drill bit drill two holes as shown in diagram.



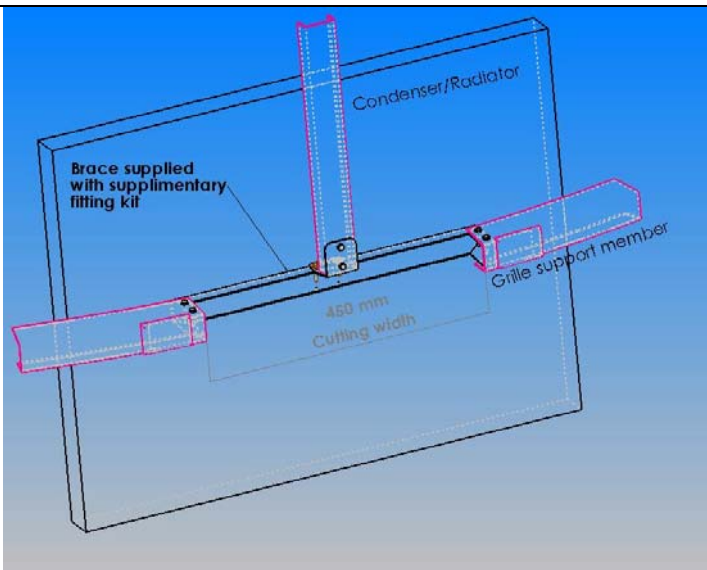
9. Viewed from front of vehicle the winch clutch must be positioned on the LH side. Cable spools from the bottom. Draw off some cable so cable crimp can be pulled through roller fairlead. Bolt in position with the roller fair lead in place and the tail of cable through rollers. Note; To increase access to mount bolts in front of roller fairlead, remove circlips from bottom of each vertical roller shaft, push shaft up so roller can be dislodged sideways. Do up bolts in fairlead and winch, then refit circlip.

Connect the winch control box cables to the winch motor. Refer to the Warn handbook for additional information. Connect the long winch + & - cables to the vehicle after the bar is installed. **Refer to the Warn winch manual for vehicle wiring instructions.**



10. **IMPORTANT:** For 2005ON vehicles, the lower grille and rear support frame must be trimmed for clearance to winch. Cut the grille as marked, 450mm wide x 50mm high, and notch 540mm x 25mm high.

Note: Cutting specified should clear most winches, when putting bull bar in position in step 17, check that adequate clearance has been achieved, if not trim more from grille.



11. Cut out the corresponding lower center section of the grille and headlamp support frame at 450mm wide.

Once the trimming is complete, fix reinforcing brace in place with self drilling screws supplied. Fit the angle bracket to fix the vertical strut in place as shown.



Fitting with winch



Fitting without winch

12. Fitting number plate – with winch

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.

If not fitting winch.

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.



If not fitting winch cont.

13. Wrap rubber extrusion around winch cover.

Place washers over the winch cover fixing holes located on the top middle face of the winch bumper.

Place the winch cover on top of the winch bumper inline with the mount holes.

Bolt together using the M6 button head stainless steel screws and M6 nuts.



14. Fitting indicators

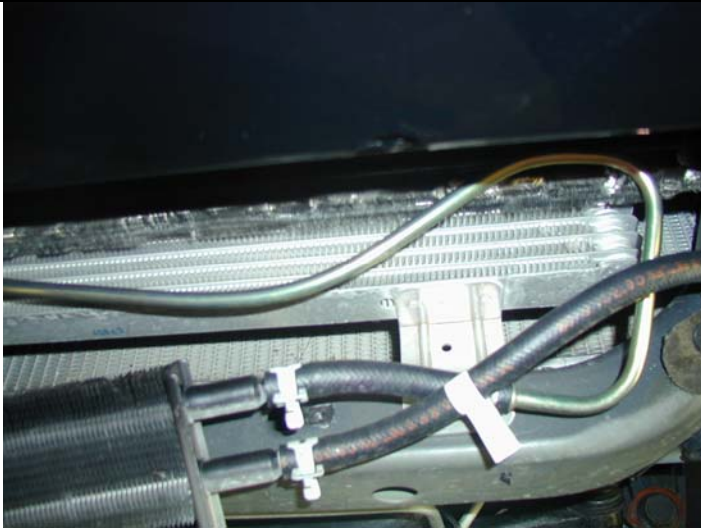
Fit the indicator assemblies noting the RH and LH designation. Use the nylon nut plugs and the self tapping screws in the bolt kit (discard screws, speed nuts and rubber caps supplied with light assemblies) Screws enter from the rear of the light body flange. Position the light with the parker (clear lens) towards the outside of bull bar.

NOTE: It may be easier, at this stage, before bull bar is fitted, to temporarily remove headlight surround or head light and then connect the wiring looms for indicators/clearance lamps to original vehicle wiring through this opening Ref step 19.



15. Fitting bull bar

Fit M8 cage nuts x 3 off to lower pan section



16. On the vehicle, remove the rubber air guide on the lower cross member area 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 don't kink it.

Leave the power steering cooler in its original position.



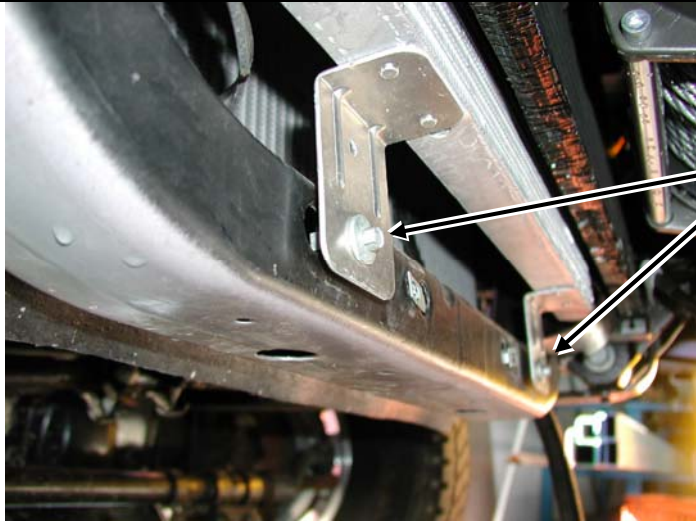
17. Using two people, three if winch fitted, position the bar assembly on the vehicle mounts.

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 and 3 x bolts through each original tow point mount.*



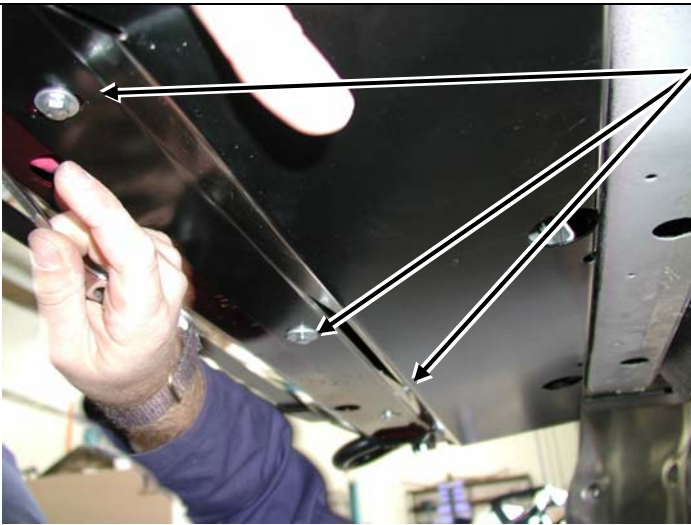
18. When the bar position is finalised, it must be pin bolted to the mount brackets. Using a drill and 10mm drill bit, drill through the upper and lower Ø10mm pinning holes located in the mount brackets.

Fasten through holes using M10 bolts, flat washers, spring washers and flange nuts.



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

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



20. Bolt the flange of the air deflector to the bar using M8 bolts, large M8 flat washers and spring washers.

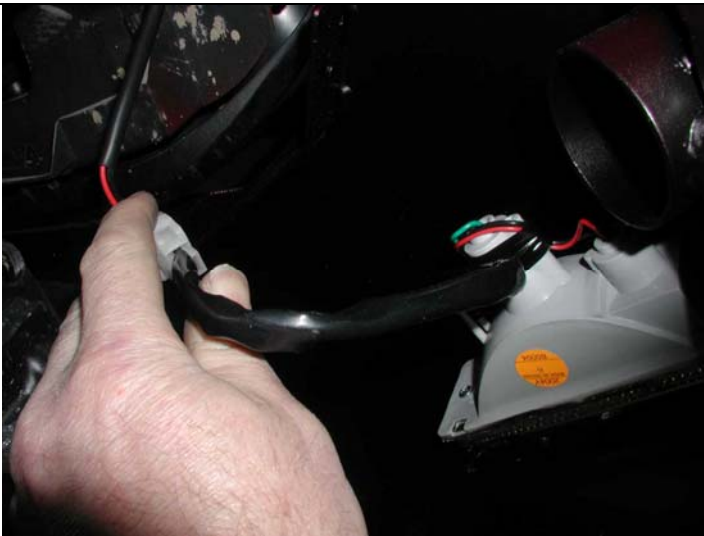


21. Bolt the tow hooks to the mount brackets using the M12 x 40mm bolts, flat washers and spring washers.



If fitting with winch

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



22. Wire up the indicator and clearance lamp assemblies. Use scotch locks to splice cables to existing indicator and clearance lamp wiring and cable tie securely.

23. If fitting with winch.

Connect the long winch '+' (positive) & '-' (negative) cables to the vehicle after the bar is installed.

Refer to the Warn winch manual for vehicle wiring instructions.

Ensure that these cables are installed well clear of sharp, hot or moving objects. Secure the winch cables to the vehicle and winch bumper with the supplied cable ties.

