



FITTING INSTRUCTIONS

Part Number: 3623040

Product Description: SUMMIT REAR STEP TOW BAR (RSTB) TACOMA 160N

Suited to vehicle/s: TACOMA 160N

Optional Fitting Kits:

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 The eyelets on the rear bar have been designed and tested for connection of trailer safety chains. They are not to be used for recovery or direct towing.
- ◆ For recovery, fit a suitable and rated tow hitch to the central tow hitch receiver.
- ◆ Position high lift jack at lift locations beneath the middle of the wings and corner of the RSTB. Do not lift directly from the end of the wing.

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

REQUIRED TOOLS FOR FITMENT OF PRODUCT:

BASIC TOOL KIT	SIDE CUTTERS
INSULATION TAPE	70mm HOLE SAW BIT
Ø6.0mm-8.0mm DRILL BIT	FINE ROUND FILE
2 PART EPOXY	POWER DRILL
RUST PREVENTATIVE PAINT	SOCKET SET
ALLEN KEY SET	TAPE MEASURE
MASKING TAPE	TORQUE WRENCH 9Nm-95Nm
24mm STEP DRILL	BAR CLAMP
	HIGH TEMP PAINT

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:

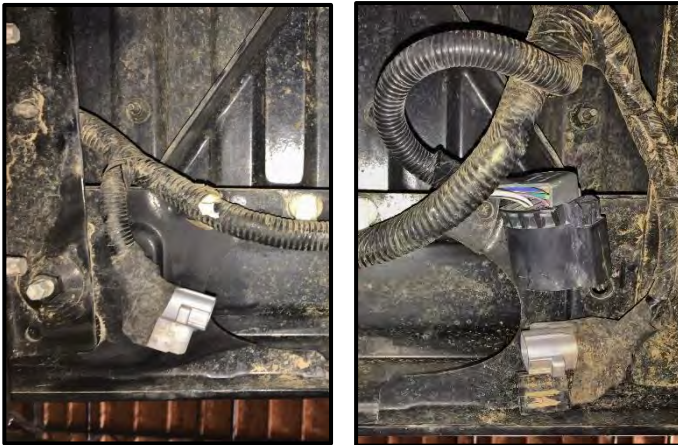
SIZE	Torque Nm	Torque lbft
M6	9 Nm	7 lbft
M8	22 Nm	16 lbft
M10	44 Nm	32 lbft
M12x1.75	77 Nm	57 lbft
M12x1.25	95 Nm	71 lbft

RSTB PARTS LISTING			
APPLICATION	PART NO.	QTY	DESCRIPTION
PREPARE REAR STEP TOW BAR (RSTB)	6151715	8	NUT M6 CAGED 3.6-4.5mm
CAP RSTB TO VEHICLE	3163183R	1	CAP RSTB-TACOMA RH
	3163183L	1	CAP RSTB-TACOMA LH
	3750035R	1	BRKT-CAP MOUNT RH
	3750035L	1	BRKT-CAP MOUNT LH
	3750101R	1	BRKT-CAP MOUNT RH
	3750101L	1	BRKT-CAP MOUNT LH
	6151213	8	BOLT M6 X 20
	4581082	16	WASHER M6 FLAT
	6781438	1	DOUBLE SIDED TAPE (x2)
	6151549	8	M6 NYLOC NUT
RSTB TO VEHICLE	4654235	1	RSTB WELDMENT
	6151340	4	BOLT M12 X 50
	4581064	4	WASHER SPRING M12
	4581007	8	WASHER FLAT 1/2 x 1 1/2 x 4 SILVER TZP
	6151657	4	HEX NUT FLANGE M12
	3194928	1	PLATE FRAME MOUNT
	6151300	6	NUT M6 CAGED 2.6-3.5mm
	6151638	6	BOLT M10 X 40
	6151752	6	HEX NUT FLANGE M10
	5848455	2	PACKER-RSTB TREAD PLATE
BEAVER PANEL TO VEHICLE	6523127	1	BEAVER PANEL-TACOMA
	3750041	2	BRKT-BEAVER PANEL MOUNT
	3750042	2	BRKT-BEAVER PANEL MOUNT
	6151300	8	NUT M6 CAGED 2.6-3.5mm
	6151459	6	SCREW BTN HD M6 X 16 BLK
	4584329	6	WASHER FLAT M6 X 12.2 X 1.2
	6151213	4	BOLT M6 X 20
	4581082	8	WASHER M6 FLAT
	6151549	2	M6 NYLOC NUT
	6821189	4	PLASTIC SNAP-IN LARGE GROMMET
	6151384	4	LICENSE PLATE SCREWS
	5848302	4	PACKER RB NYLON
PREPARE RSTB/VEHICLE FOR PANELS	3789691	1	TEMPLATE FENDER CUT
	3750023R	1	BRKT WING MNT RR RH
	3750023L	1	BRKT WING MNT RR LH
	3750024R	1	BRKT WING MNT FRT RH
	3750024L	1	BRKT WING MNT FRT LH
	3194723	2	WING DOUBLE NUT PLATE
	3194724	2	WING TRIPLE NUT PLATE
	4581048	2	WASHER SPRING M10 TZP480
	6151022	14	BOLT M8 x 1.25 x 25 Gd 8.8 ZP
	4581063	18	WASHER FLAT M8 x 25 x 3 GOLD ZN
	4581046	12	WASHER SPRING M8 x 3/32 x 3/32
	6151032	4	NUT NYLOC M8
	6151340	2	BOLT M12 X 50
	4581064	2	WASHER SPRING M12
	4581007	4	WASHER FLAT 1/2 x 1 1/2 x 4 SILVER TZP
	6151657	2	HEX NUT FLANGE M12

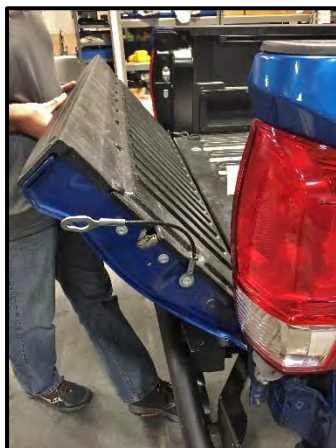
PANELS TO RSTB/VEHICLE	3135189R	1	WING RH
	3135189L	1	WING LH
	6523141	1	DIFFUSER PANEL RH
	6523142	1	DIFFUSER PANEL LH
	6151459	10	SCREW BTN HD M6 X 16 BLK
	4584329	10	WASHER FLAT M6 X 12.2 X 1.2
	6151397	4	SCREW BTN HD M6 x 35 SS
	3194904	1	PLATE EXTRUSION-RSTB TACOMA
	6151213	2	BOLT M6 x 1.0 x 20 Gd8.8 BZ
	4581082	2	WASHER FLAT M6 x 19 x 1.6 BLK ZN
	4584295	2	WASHER FLAT M6 x 12 x 1.3 BLK ZN
	6151549	2	NUT NYLOC M6 x 1.0 GR8.8 BTZP480
OTHER	3789692	1	TEMPLATE WING SENSOR
	4721885	1	EXHAUST TIP
	6582475	1	EXHAUST CLAMP

Vehicle/Bar Preparation

Note: If your vehicle has rear backup sensors, read through the section 'Sensor Relocation Steps' at the end of this document. These steps will be referenced throughout these instructions.



1. Remove the spare wheel from beneath the tub using the wheel nut wrench and jack handle pieces supplied with the vehicle.
2. Disconnect all the accessory electrical connectors to the rear bumper:
 - License plate lights
 - Back up camera to tailgate
 - Trailer plug port
 - Rear parking sensors (if equipped)



3. Remove the tailgate from the truck by unhooking the support cables on each side. Bring the tailgate to roughly a 45° angle and pull rearward on the passenger side. Once the passenger side hinge is released pull tailgate to the right to release it from the left side hinge. Be sure to carefully push the wiring harness through the cutout in the truck body before walking away with tailgate. Place in a safe place to avoid damage.



- Remove the receiver hitch and bumper in one piece from the truck by unbolting the (7) hex bolts from each side and removing.

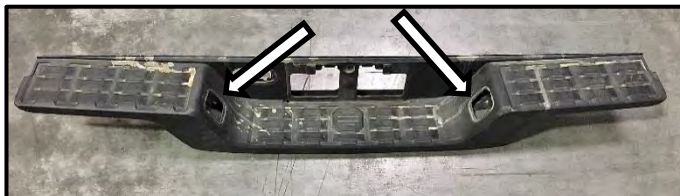
Hint: The stock hitch/bumper is held onto the frame with a pin at each side. To remove pull the bumper up and then rearward. Picture shows cutout in the frame that accepts the pins.



- On the bottom of the hitch bumper assembly, remove the (2) hex screws shown on both the left and right side.
- Remove the center pop rivet shown on both the left and right sides.

Note: If your vehicle has rear backup sensors be sure that you remove the sensors from the bumper as outlined in the 'Sensor Relocation Steps' Section.

Vehicle/Bar Preparation



- Disconnect the bulbs from the license plate light ports by turning counter clockwise and pulling out. Set aside this wiring harness to be reinstalled later.
- Remove the license plate lenses by pushing in the tabs shown in the picture and pushing through towards the middle. Set these pieces aside for re-installation later.

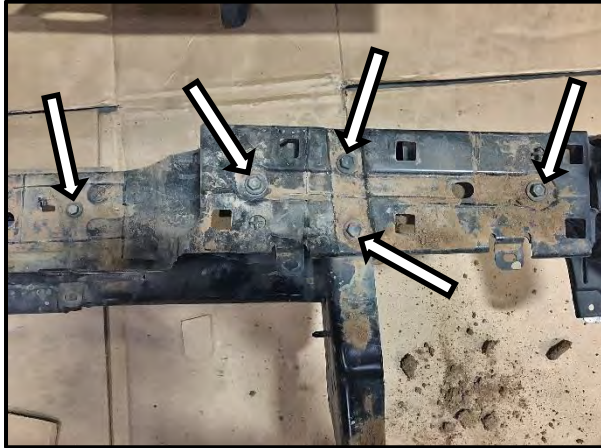


- Remove the light housings from the plastic bumper cover. Using a blade or flathead screwdriver, pry them out carefully.
- Once removed clean the inside flanges of any excess adhesive and set aside for reinstallation later.



11. Remove the center pop rivet from behind the license plate.

12. Remove the plastic top cover from the bumper assembly by pry up on the edges towards the middle of the bumper. Discard this piece.



13. Remove the (10 total) hex screws holding the metal support plate attached to the receiver hitch.

14. Remove the two corner sections and metal support plate leaving the receiver hitch bare as shown in the photo below.



Vehicle/Bar Preparation

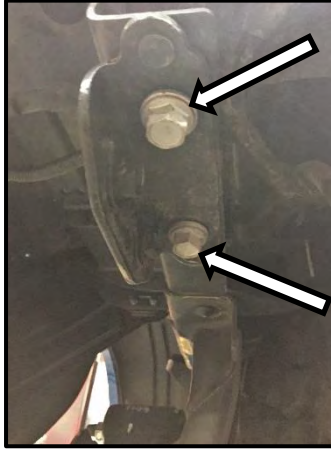


15. Separate the supplied M6 cage nuts into (2) piles, based on the size of their legs. From the diagram, you'll notice the subtle difference in these cage nuts.

16. Also, note that all M6 hex bolts utilize the larger black flat washer as the M6 button head bolts utilize the smaller black flat washers.



17. Install (6) long leg M6 cage nuts into the bar assembly at the locations shown in the picture.



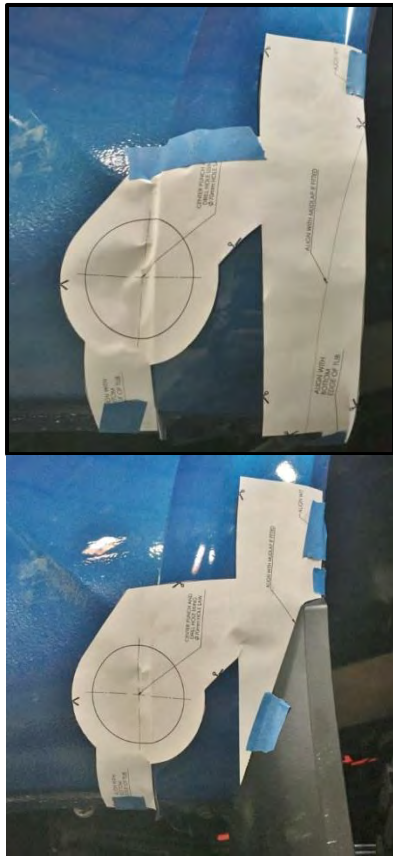
18. Remove the angle brackets on the bottom of each frame rail by removing the (2) hex screws shown on each side. Discard these brackets.



19. Remove the (2) plastic covers on the bottom of each fender if equipped.



20. Remove the plastic corner covers just under the headlights on both sides, by removing the (3) center pop rivets. Keep them for re use later. Discard these plastic covers.



21. Using the supplied template, line up with the fender flares or the mud flap (if fitted) of the truck and mark the center of the circle to be cut. Using a $\text{Ø}70\text{mm}$ hole saw, cut a hole centered about the mark.

22. De-burr each hole to remove sharp edges

23. Treat raw edges with rust preventative.

24. Repeat steps for opposite side fender.

25. Re-install mud flaps, if desired.



Warning: Drilling operations can result in flying metal debris, safety glasses should be worn.

Bar Installation

26. With help from one or two other people, re-install the bare, factory receiver hitch, back onto the frame rails. Hand tighten the (3) stock hex screws on each side, into the frame rails.

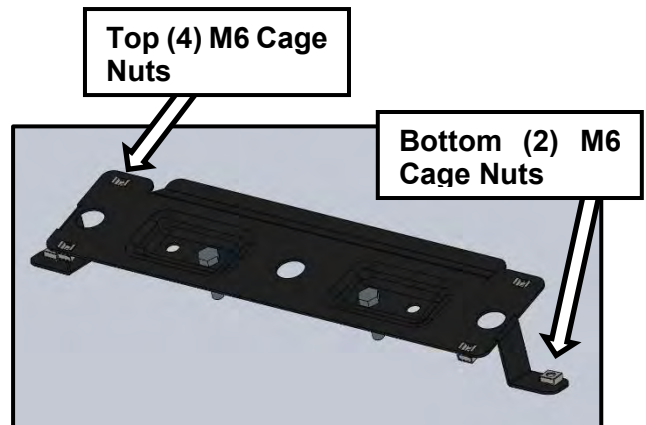


27. Lift the Frame of the ARB bar onto the factory hitch from the under-side. You'll notice the bottom flanges of the factory hitch mate up with channels on the frame. Using the supplied M10 x 50 hex bolt, flat washer, and flange hex nut sets, hand tighten the frame to the factory hitch.

28. Position the (2) 4 mm thick spacer plates on the OE tow bar as shown



29. Install (6) short leg M6 cage nuts into the frame mount plate as shown below. Note, the top (4) should have the nuts on the bottom and the bottom (2) have the nuts on the top.



30. Place the frame mount plate from the previous step over the (2) spacers. Hand tighten (2) M10 x 40mm Hex Bolts, and Flange Nuts sets, securing the frame mount plate to the plate on the ARB bar frame.

Corner Caps Installation



31. Assemble the Rear Quarter Cap and mount bracket with (2) M6 hex bolts, flat washers and nyloc nuts.

 M6 X 1.0 - 9 Nm.

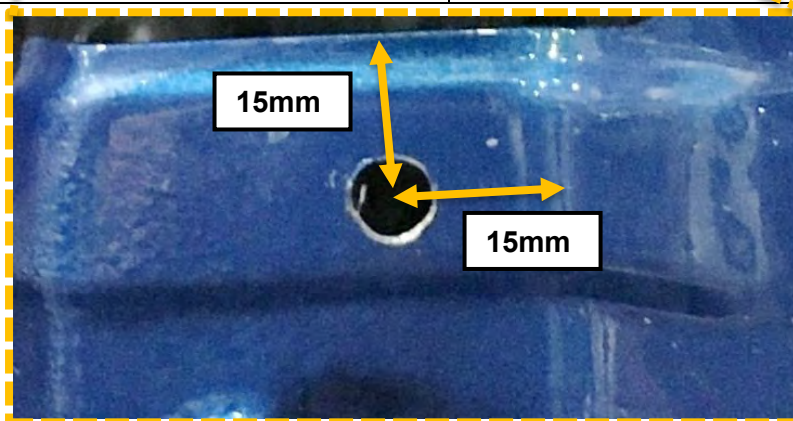
Note: If your vehicle has rear backup sensors be sure that you drill the sensor hole and route the sensor wiring, as outlined in the 'Sensor Relocation Steps' Section.



32. Mark and drill an \varnothing 8mm hole 15 mm from upper edge and 15mm from inside edge as shown. Repeat on opposite side.




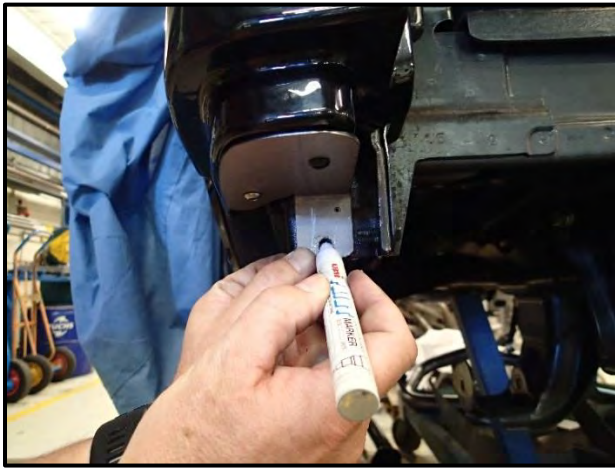
Warning: Cutting operations can result in flying metal debris, safety glasses and hearing protection should be worn.



33. Install the upper corner cap bracket to the vehicle using an M6 hex bolt, flat washer, and nyloc hex nut. Tighten this bracket in place as shown.

34. Place double sided tape on the flat outside edge of the bracket as shown.

 M6 X 1.0 - 9 Nm.



35. Mark and drill an Ø8mm hole for the lower cap bracket as shown in the diagram.

36. Secure the lower cap bracket to the vehicle using an M6 hex bolt, flat washer, and nyloc hex nut.

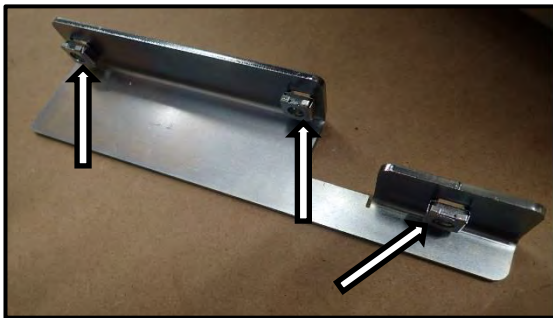


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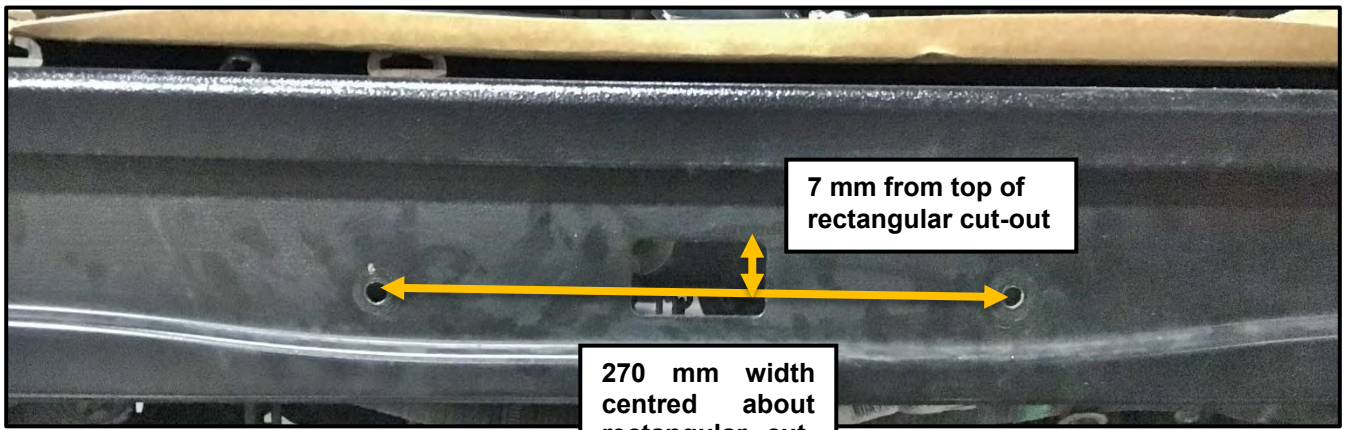
37. Secure the inside edge of the corner caps to the vehicle using the plastic rivet from the OE part, as shown in the diagram.

Beaver Panel Installation



38. Insert (3) short leg M6 cage nuts into both of the beaver panel support brackets, as shown in the picture.

39. Drill (2) Ø8 mm holes in the rear sheet metal under the tail gate area, centered about the existing rectangular cut-out, as shown in the diagram on the top of the next page.

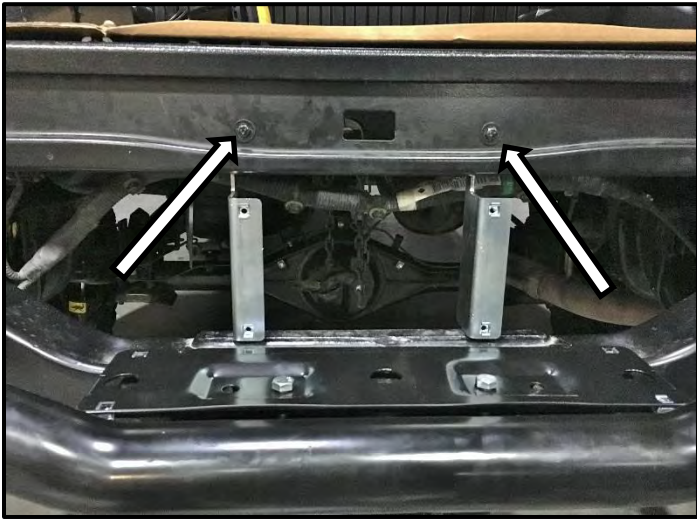


7 mm from top of rectangular cut-out


270 mm width centred about rectangular cut-out



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40. Secure the (2) beaver panel support brackets through these holes, using the supplied M6 hex bolt, spring washer, and flat washer sets.

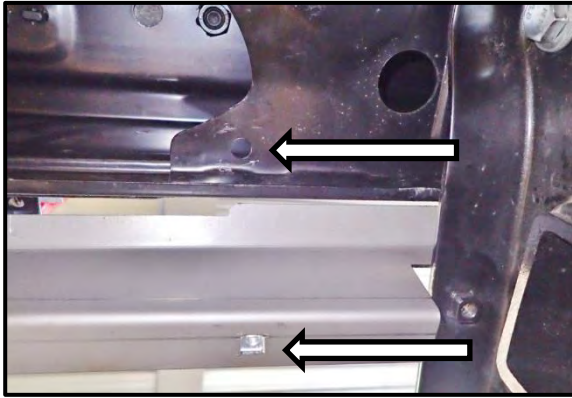
 M6 X 1.0 - 9 Nm.




41. Temporally fit the beaver panel to the support brackets with (4) M6 button head bolt, and flat washer sets.



42. Fit (2) short leg M6 cage nuts to the beaver panel outside flanges. Note that the nut should be on the top side of the flange.



43. Using (2) M6 hex bolt, flat washer, and nyloc hex nut sets, fit the outer beaver panel mount brackets to the chassis and beaver panel.

 M6 X 1.0 - 9 Nm.

Wing and Final Installation



44. Insert the plate nuts into the wing panels inside tabs as shown in the picture. (1) plate nut per wing.

Note: If your vehicle has rear backup sensors be sure that you drill the sensor holes and route the sensor wiring for the wings, as outlined in the 'Sensor Relocation Steps' Section.



45. With the help of another person. Starting with the driver side, position the wing onto the tow bar.

Note: Use caution when positioning wing panel around the vehicle's painted surfaces.



46. Hand tighten the link between the frame and forward most wing tab protruding through the rear fender using M8 hex bolts, flat washers, and nyloc nuts. Do not torque bolts at this point.

47. On the other side of this link secure to the frame of the vehicle with an M12 hex bolt, flat washer, and flange hex bolt.



48. Hand tighten the other link between the rear corner of the wing panel to the tow bar frame plate as shown below. Do not torque bolts at this point.

49. Use the triangle shaped nut plate behind the matching tab on the wing panel to secure this connection with M8 hex bolts, spring washers, and flat washers.






50. With the aluminum tread plate secure the inside flanges of the wings to the top of the frame using (4) Stainless (silver) button head bolts.


 M6 X 1.0 - 9 Nm.




51. Adjust the wings so that the gap between the wing and the beaver panel are parallel. Ensure that the gaps between the wings and fender panels are even. Once you have achieved the gaps and margins required tighten all nuts and bolts to required torque settings.



 M8 – 22 Nm

 M12 – 77Nm

 M10 – 44 Nm



52. Clean the edges of the factory license plate light housings with a grinder or blade and make sure it is free of grease and dirt. Using a two-part epoxy, glue the housings into the cut-outs of the wings as shown in the diagram.

Note: There are 'RH' and 'LH' markings on these housings relative to the drivers view. Also, the deeper end is towards the bottom as shown in the diagram.

Hint: A bar clamp is useful to hold the housings in place as the glue dries.

53. Install the license plate lenses (removed in step 8) back into the housings. Re-install the lights back into the lenses.



54. Install the bottom diffuser panels using the supplied (6) M6 black button head bolt and flat washer sets. The bottom outside corner attachment uses a flat washer and nyloc nut with the button head bolt.



M6 X 1.0 - 9 Nm.



55. Push the (4) grommets into the beaver panel for the license plate. Use the (4) supplied plastic spacers behind the plate and secure it to the beaver panel using the supplied phillips screws.

56. Re-install the trailer plug receptacle into the corresponding beaver panel cut-out. Plug the trailer plug wiring back into the factory harness.



57. Cut the exhaust back at it's end, and install the supplied exhaust tip leaving a good distance between the tip and the wing panel. A high temperature paint can be used to avoid corrosion if desired.

Installed Product



Sensor Relocation Steps



1. On the driver side, under the rear end of the bed you will see these (2) wire connectors (one for blind spot monitor, one for back up sensors).
2. Unplug these wire connectors.

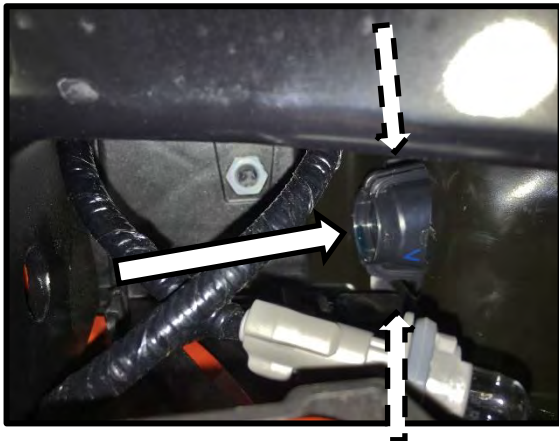


3. Unplug the connector from the back of the (2) back up sensors closest to the middle of the truck as shown in the adjacent picture.

4. Remove the license plate light bulbs by twisting counter-clockwise and pulling. Be careful not to break bulbs.

Hint: Squeeze the ends of the connector and then push forward and backwards until it comes loose.

5. Push the backup sensors through the fascia, towards the rear of the vehicle. Keep these in a safe location for re-installation later.



6. Remove the license plate light housings from the bumper fascia.

Hint: Squeeze the tabs on the ends and push the housing through to the outside.



7. Remove the plastic pop rivet behind the rear license plate.



8. Remove the (4) plastic clips on the underside of the bumper fascia.



9. Pull off the tread plate portion of the rear bumper by starting at the ends and prying up. This part will not be re-used, but to avoid cracking this part, be sure to not use excessive force during this operation.



10. Starting with the left side, remove the (2) hex bolts on the underside flange of the receiver as shown in the picture.



11. Unclip the wire harness from the metal tabs of the rear bumper sub-frame

12. Remove the hex bolts exposed by removing the rear bumper tread plate on the left side. Be sure to support the left corner section as it will be unsupported once these bolts are removed.



13. Pull the corner section away from the vehicle without overstretching the wire harness connecting to the rear back up sensors and blind spot monitor radar.
14. You'll notice that the corner pieces are constructed of (2) parts, the plastic frame and an outer fascia. To separate these parts, remove the remaining plastic clips that are visible and the alligator clip in the corner. Push in the ends of the plastic tabs protruding through the frame and push the fascia away from the frame.



15. At this point it is possible to remove the wire connectors from the blind spot monitor radar and the rear back up sensor in each corner piece.
16. Push the backup sensor through the fascia. Keep in a safe location for re-installation later.

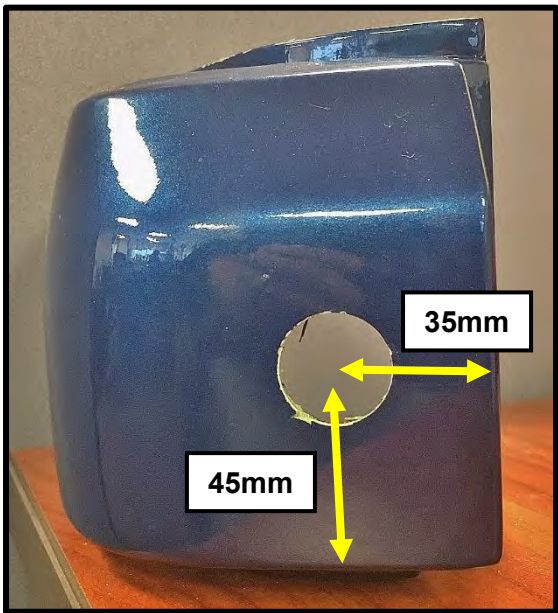
17. Repeat steps 10-16 to remove the backup sensor from the opposite side corner piece.
18. Remove the metal sub frame from the receiver hitch.



19. Using the supplied template center punch the wing panels to be drilled for the backup sensors. Pre-drill these center punch marks using a $\text{Ø}6\text{-}8$ mm drill bit.
20. Using a step drill, bore these holes out to $\text{Ø}22\text{mm}$.



Warning: Cutting operations can result in flying metal debris, safety glasses and hearing protection should be worn.



21. Pre-drill the supplied plastic corner buffers with a 6-8mm drill bit at the location in the adjacent diagram.
22. Using a step drill, bore these holes out to 22mm.

Note: Measurements shown are to the center of the hole



Warning: Cutting operations can result in flying metal debris, safety glasses and hearing protection should be worn.



23. Clean up the drilled holes to remove any burrs or sharp edges.
24. Apply rust preventative paint to exposed bare metal on the wing panel.
25. Insert the backup sensors into the holes in the corner buffers and wing panels by feeding the connector in through from the outside and pushing to 'snap' them into place.



26. Before installing wing panels reconnect the wiring harness (from step 1-2) and ensure that all connection terminals are in the correct areas to reconnect to the corresponding sensors.

Note: Be careful while installing all Rear Step Tow Bar components to avoid pinching these wires. Once everything is installed and tighten secure the wire harness to nearby areas using zip ties.



27. Reattach the re-located sensors to their corresponding wire connectors.

Hint: It is easier to reconnect these harnesses during the wing panel installation before the wing panels are in place and secured.

On the corner buffers be sure that the wire harness is routed through the recess in the bottom edge and not pinched against the vehicle.



Note: When fitting parking sensors to the bar it is important that they are installed in the correct orientation. The arrows to the left show the direction the plug end of the sensors should face.

FINAL CHECKS:

- Check wiring connections to fitted lights and winch.
- Check operation of winch and all lights.
- Check Parking sensor function

IMPORTANT: Check that all piping and wiring is clear of sharp edges and pinch points. Adjust any piping to clear the bull bar or mounts by a minimum of 15mm.