

INSTRUCTIONS

DIFFICULTY



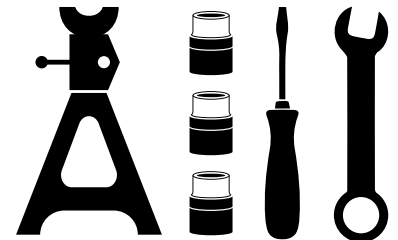
IN THE BOX

Time Needed - 5 hours

- Ram 1500 Pre Runner Bull Bar
- 2 x Chassis Mounts (LHS + RHS)
- 1 x Winch Cradle
- 2 x Winch Cradle Strengthening Brackets (LHS + RHS)
- 1 x Bolt Kit
- 2 x 13" Light Bars
- 2 x Sensor Patch Harnesses
- 1 x Light Bar Harness

TOOLS REQUIRED

- Ratchet/Electric Ratchet
- Breaker Bar/Rattle Gun
- Various Sized Sockets
- Various Sized Spanners
- Drill/Drill Bits
- Electrical Tape
- Air Saw
- Side Cutters
- Stanley Knife
- Clip Removal Tool
- Ruler and Marker Pen
- Qualified Auto Electrician Recommended
- Second person to help with lifting



NOTES

NOTE: Failure to install this product as specified in the installation procedure will void all warranty. If any parts have arrived damaged or were not supplied in the kit, please take photos and then proceed to contact your supplier.

NOTE: If not using the Outback Kitters plug and play patch harnesses, a qualified auto electrician is needed to wire the lights in.

BAR INSTALLATION

1

A.
Start by parking the car on flat level ground (or utilise a hoist) with the handbrake on, then remove the number plate and set aside for later fitment.

Refer figure 1.

B.
Remove the bolts securing the inner guard to the bumper on both sides of the vehicle, retain the guards and bolts for later fitment.

Refer figure 2.



Figure 1



Figure 2

2

Locate the bumper sensor harness plug on the LHS of the vehicle, disconnect this plug and allow it to hang.

Refer figure 3 and 4.



Figure 3

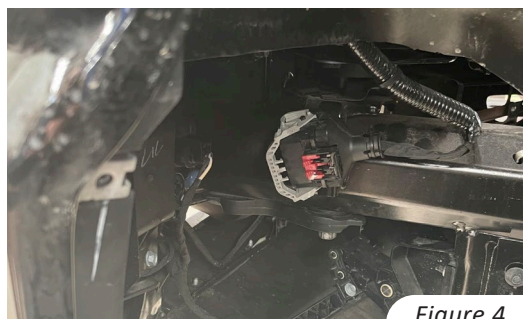


Figure 4

3

- A.**
Locate the electronic motor on the LHS that controls the air dampening system attached to the chassis and unclip the wiring plug.

Refer figure 5 and 6.

- B.**
Tape the plug up and cable tie it out of the way to the existing factory harness.

Refer figure 7.

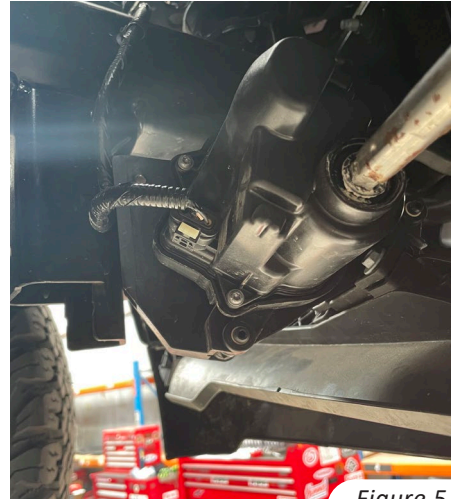


Figure 5

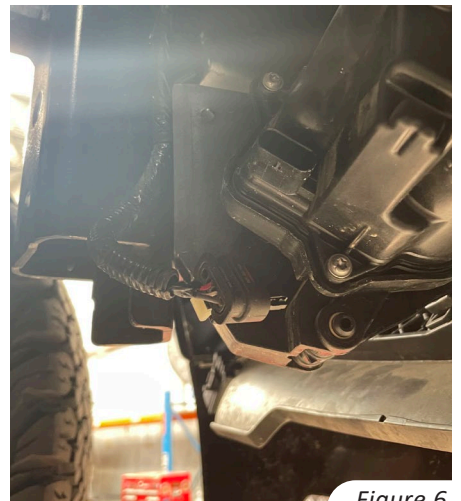


Figure 6



Figure 7

4

Remove the 2x nuts holding the air dampening system on each side of the vehicle, remove and discard the system as it is no longer used.

Refer figure 8.

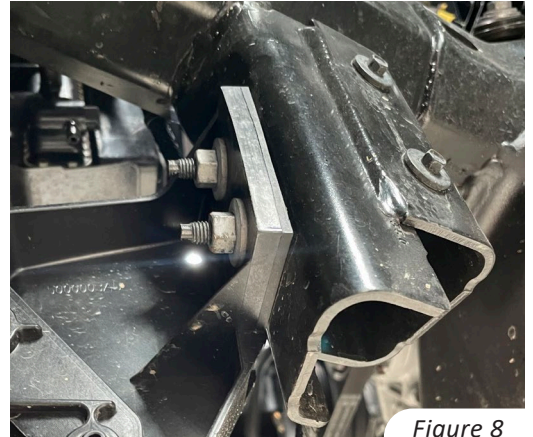


Figure 8

5

Remove the 2x bolts securing the bumper tow points, discard the tow points and retain the bolts for later use.

Refer figure 9 and 10.



Figure 9



Figure 10

6

A.
Locate the 3x nuts securing the bumper to the chassis on each side of the vehicle, remove and discard these nuts.

Refer figure 11 and 12.

B.
With the help of a second person, remove the bumper from the vehicle in an area ready to strip components.

Refer figure 13 and 14.

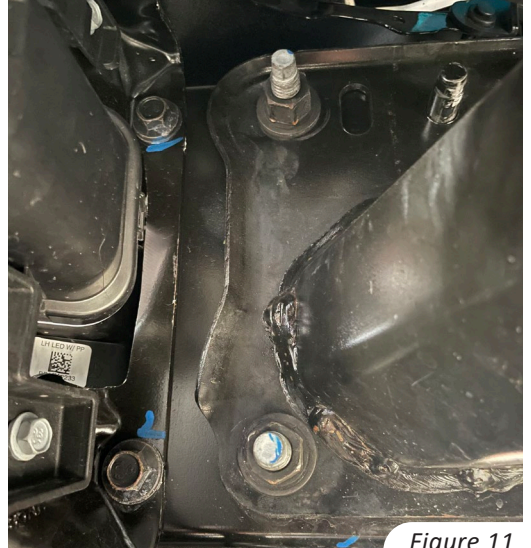


Figure 11

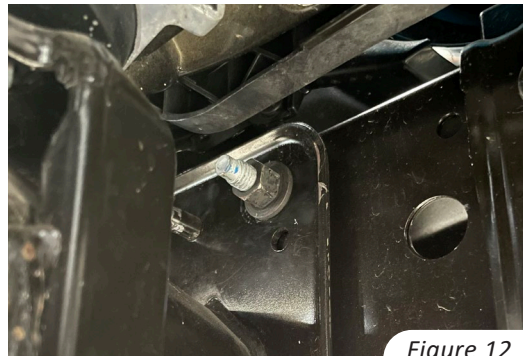


Figure 12



Figure 14

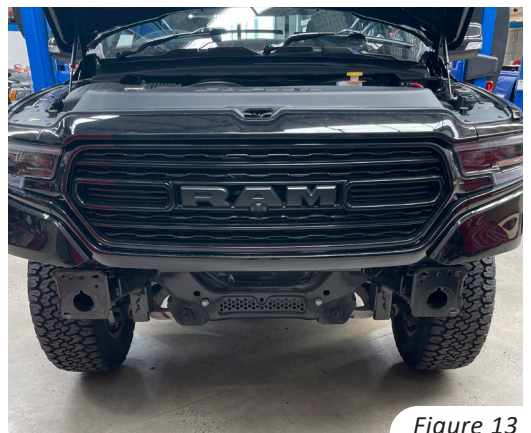


Figure 13

7

A.
Begin removing the sensor harness from the bumper by unclipping the white locking tabs on the sensors and then unplugging them, do the same for the factory fog lights on both sides.

Refer figure 15 and 16.

B.
Remove the fog light assembly on both sides to gain access to the sensors on the trim panel underneath and disconnect them also.

Refer figure 17.

C.
Complete the removal of the entire sensor harness by cutting all the clips holding it to the bumper.

Refer figure 18.

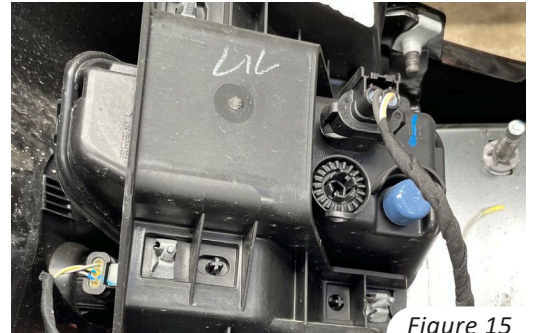


Figure 15

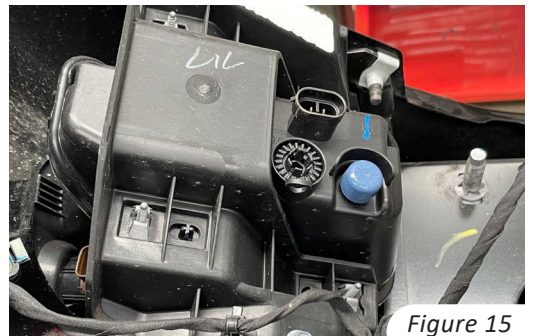


Figure 15



Figure 15



Figure 13

8

- A.**
Remove all 6x sensors by carefully unclipping them from their bezels in the bumper and set them aside.

Refer figure 19 and 20.

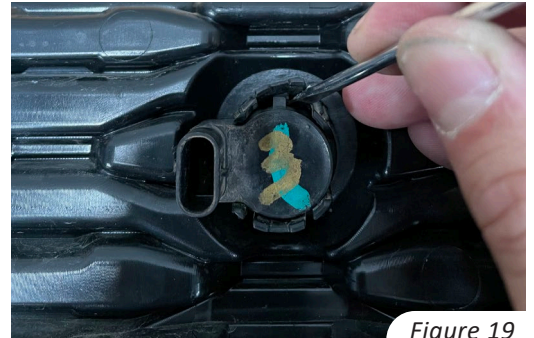


Figure 19

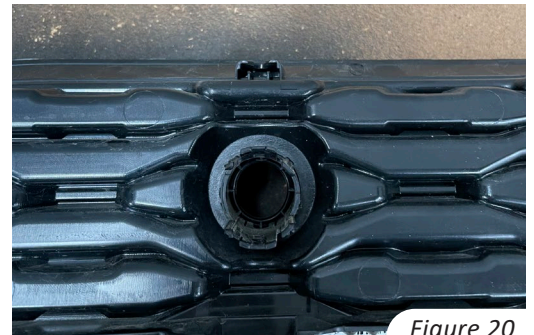


Figure 20

- B.**
Remove all 6x sensor bezels from the bumper and bumper trims by depressing the top and bottom retaining clips.

Refer figure 21.



Figure 21

9

A.
Locate the 2x fog light plugs on the bumper harness and strip back the tape.

Refer figure 22.

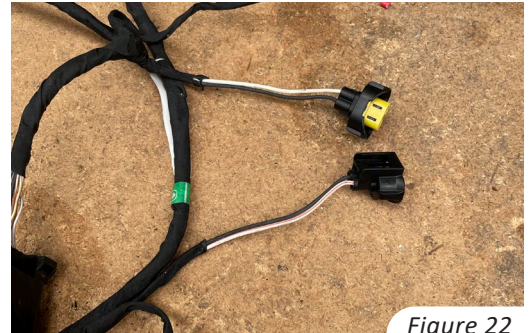


Figure 22

B.
Cut both plugs off making sure to offset the cuts.

Refer figure 23.



Figure 23

C.
Loop the wires backwards and proceed to tape them up neatly into the harness.

Refer figure 24,25 and 26.

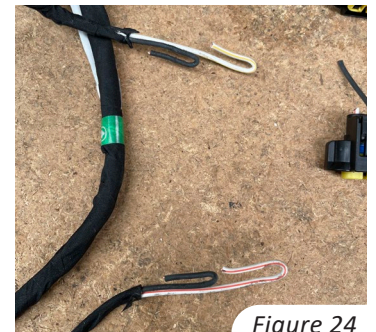


Figure 24



Figure 26



Figure 25

10

Install all sensor bezels and sensors into the pre runner bar, you may have to tap the bezels carefully in place with a rubber mallet.

Refer figure 27,28,29 and 30.



Figure 27



Figure 28

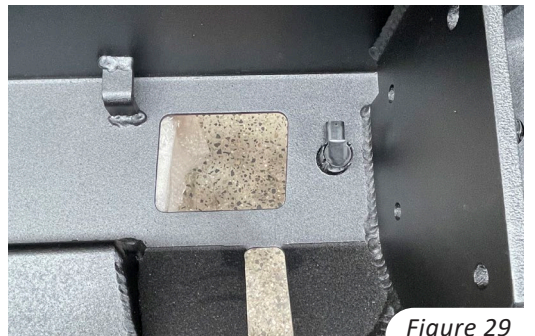


Figure 29



Figure 30

11

Install the 2x supplied 13" light bars into the pre runner bar using the supplied M8 bolts, spring washers and washers.

Refer figure 31.

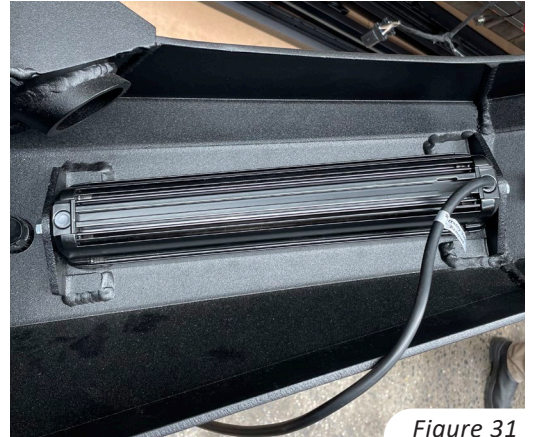


Figure 31

12

A. Begin manoeuvring the bumper harness through the bullbar starting on the LHS and finishing at the last sensor on the RHS.

Refer figure 32 and 33.

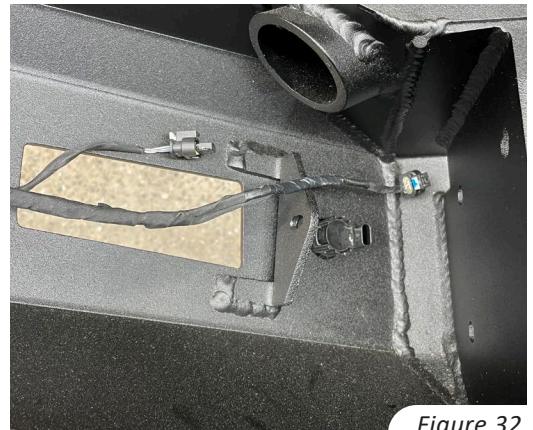


Figure 32



Figure 33

12

- B.**
Extend the wiring of the 2x sensors located on the outwards side of the pre runner bar mounting brackets using the supplied harnesses.

Refer figure 34, 35 and 36.

- C.**
Make sure all sensors have been plugged in and secured with the locking tabs.



Figure 34



Figure 35



Figure 36

13

- A.**
Identify the LHS and RHS chassis brackets.

Refer figure 37.



Figure 37

- B.**
Install both brackets to the vehicle using the supplied M12 bolts, washers and lock nuts on the front face and the 2 OEM bolts removed in **step 5** on the bottom. Leave all bolts loose.

Refer figure 38 and 39.



Figure 38

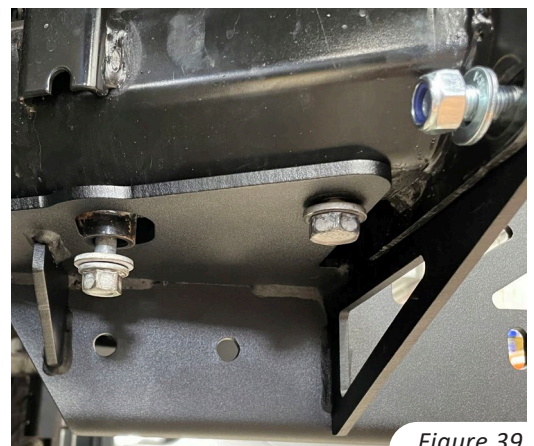


Figure 39

- A.**
Install the winch cradle to the 2x chassis brackets using the supplied M12 bolts, washers and lock nuts. Leave all bolts loose.

Refer figure 40 and 41.

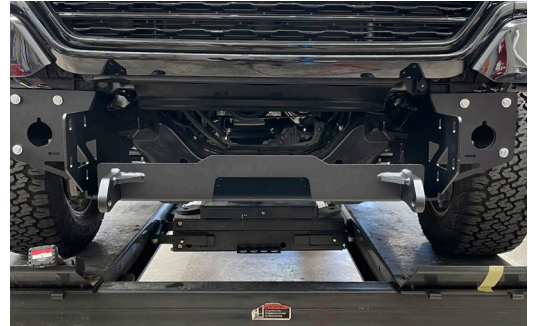


Figure 40

- B.**
Install the winch cradle strengthening brackets on both sides using the supplied M12 bolts, washers and lock nuts. Leave all bolts loose.

Refer figure 42.

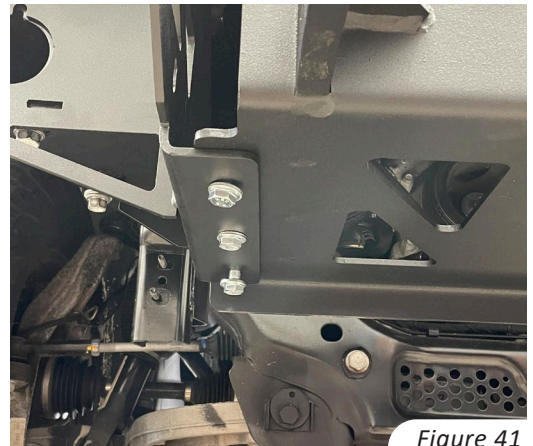


Figure 41

NOTE: These brackets **MUST** be installed as they are integral for the vehicle's recovery points strength.



Figure 42

15

If installing a winch, it is advised to do that now along with the wiring and control box.

Refer figure 43.

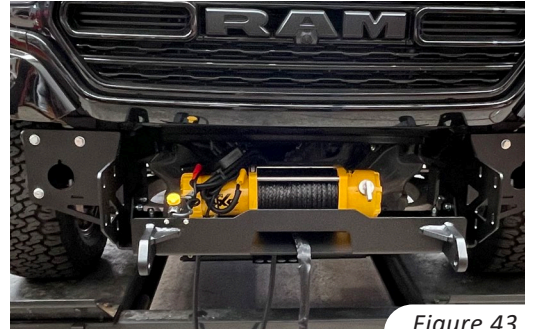


Figure 43

A.
With the help of a second person, lift the pre runner bar onto the chassis mounts.

Refer figure 44.



Figure 44

B.
Secure the bar to the brackets using the supplied M12 bolts, washers and lock nuts.

Refer figure 45.

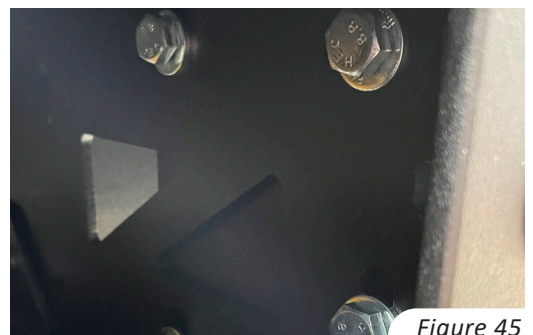


Figure 45

16

C.
With the help of a second person, lift the bar up and lightly tighten all bolts from the previous step while allowing them to be loose enough for adjustment. Make sure there is a minimum 15mm gap between the bar and bumper to allow for body movement.

Refer figure 46.



Figure 45

17

- A.**
Adjust the bar on the sides to line up with the body of the vehicle and adjust the winch cradle to ensure the bar has even gaps around the recovery points.

Refer figure 47 and 48.



Figure 47



Figure 48

- B.**
Tighten the chassis mount bolts starting with the bottom bolts then proceed to tighten the bolts on the front face.

Refer figure 49 and 50.



Figure 49

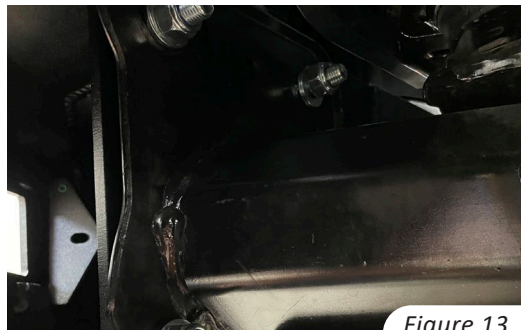


Figure 13

17

C.
Tighten the winch cradle starting with the strengthening bracket side bolts and then all the bolts underneath

Refer figure 51 and 52.

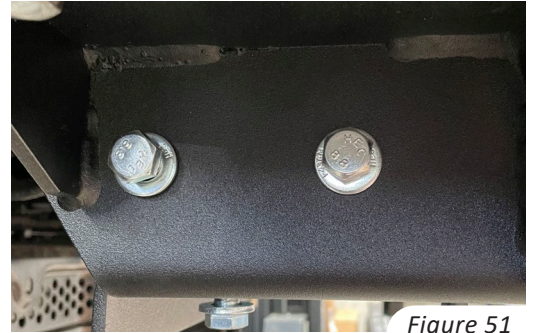


Figure 51



Figure 52

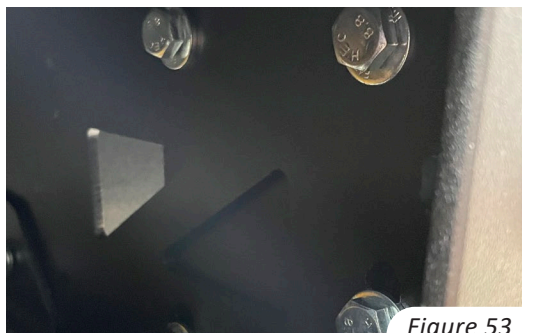


Figure 53

D.
Do a final bar adjustment, check all the gap measurements then proceed to tighten all the bar bolts.

Refer figure 53 and 54.



Figure 54

18

A.
Reinstall the inner guards removed in **step 1 B)** using only the bolts on the chassis.

Refer figure 55.

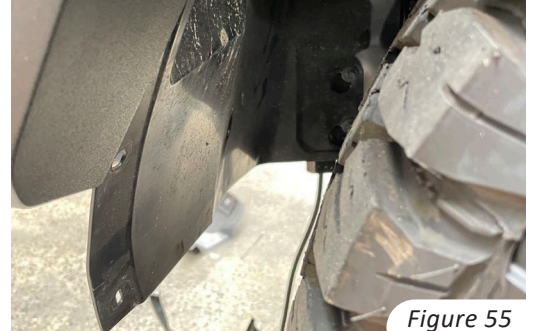


Figure 55

B.
Locate the second hole down from the top of the inner guard and install the inner guard bracket with the M6 Bolt, washers and lock nut supplied.

Refer figure 56.



Figure 56

C.
With the inner guard bolt in place, mark out the hole on the bull bar for drilling.

Refer figure 57.

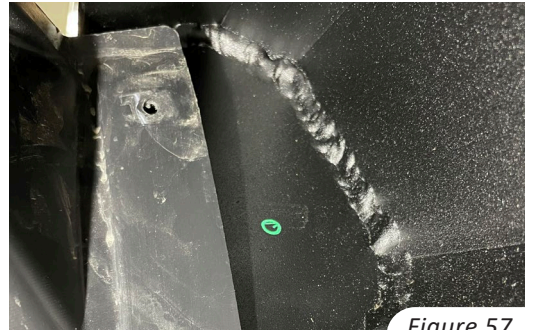


Figure 57

D.
Once the hole is drilled, secure the bracket to the drilled hole with supplied M6 bolt, washers and lock nut. Repeat this process for both sides and tighten all bolts.

Refer figure 58.



Figure 58

A.
Measure up 125mm from the bottom of the inner guard on the tab side and mark a line.

Refer figure 59.

B.
Measure up 135mm from the bottom of the inner guard on the chassis side and mark a line.

Refer figure 60.

C.
Using a ruler, connect both marks by drawing a line across the inner guard

Refer figure 61.



Figure 59

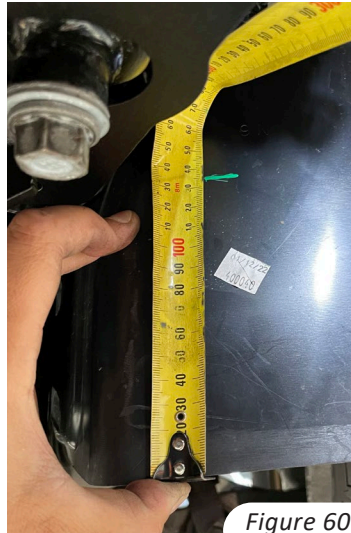


Figure 60

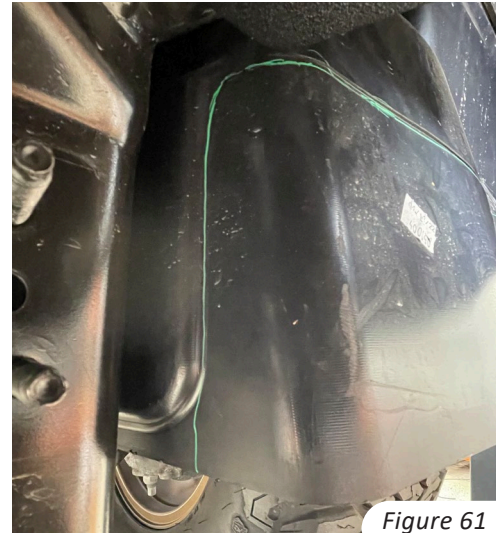


Figure 61



Figure 62

D.
Using a ruler, continue the line down the moulded outline of the inner guard.

Refer figure 62.

20

Using a Stanley knife or air saw, cut out the inner guard following the marked line. Clean up the cut and repeat this process for the other side

Refer figure 63.



Figure 63

A. Identify the last mounting hole on the chassis mounting brackets (underneath) and mark a centre drilling point.

Refer figure 64 and 65.



Figure 64

21

B. Drill a pilot hole and proceed to drill the hole out to 13mm in diameter.

Refer figure 66 and 67.



Figure 65



Figure 66



Figure 67

21

C.
Paint the hole previously drilled to avoid any rust from forming, repeat this whole process on both sides of the vehicle.

Refer figure 68.



Figure 68

A.
Using the bolt on a wire supplied, measure 240mm from the head of the bolt and bend the wire 90 degrees.

Refer figure 69.



Figure 69

22

B.
Manipulate the bolt into the hole drilled in the previous step and secure it with the nut supplied. Repeat this process for both sides of the vehicle and tighten both bolts.

Refer figure 70 and 71.

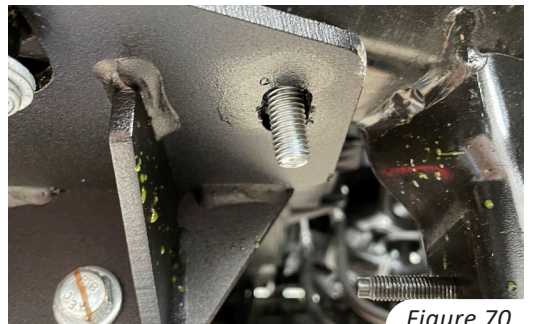


Figure 70

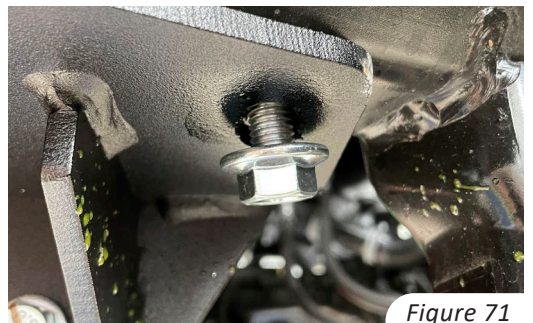


Figure 71

WIRING INSTALLATION

23 Make sure to reconnect the sensor harness plug.

Refer figure 72.



Figure 72

A.
If the optional Outback Kitters fuse and relay bracket was not bought, find a spot to mount the supplied bar light bar harness. If the optional bracket was bought, install that now and secure the relay harness to the bracket.

24 **B.**
Run the wiring to the front of the vehicle and down to the bar, proceed to run the wiring harness through to both lights the same way you ran the bar sensor harness.

C.
Once all the pugs have been connected, make sure to zip tie everything neatly out of the way.

A.
If the optional Outback Kitters headlight patch harness was bought, install this now and plug the single high beam trigger wire plug into the mating end of the patch harness.

25 **B.**
If the optional headlight patch harness was not bought, you will need to cut off the high beam trigger plug on the light bar harness and solder the wire into the high beam feed of the headlight.

Headlight Plug High Beam Trigger Wires

Premium Lighting (16 pin plug):

Solder trigger wire to pin #3 (white wire, green trace)

Base Lighting (12 pin plug):

Solder trigger wire to pin #2 (white wire, green trace)

26

- A.**
Run the switching wires into the vehicle via the grommet on the LHS firewall.
- B.**
Run the switching wires behind the dash to the RHS inside the vehicle.
- C.**
Find a spot on the dash to drill and mount the switch.
- D.**
Connect the switching wires to the switch and retrace the wire backwards making sure to cable tie it all neatly.

27

- A.**
Connect the positive and negative wiring for the relay harness to the battery.
- B.**
Install the supplied fuse into the fused holder of the relay harness.
- C.**
Test the function of all lights and sensors installed on the bar.

28

After making sure every bolt has been tightened and all lights and sensors are functioning, wipe down and clean the vehicle and bar.

Installation of the Ram 1500 DT
Pre-Runner Bar is now complete.