



RAM 1500 DT + TRX

CAMERA RELOCATION KIT

Suits Stealth Hoop and Rally Hoop ONLY

IMPORTANT! – READ BEFORE INSTALLATION

- This product must be installed exactly as per these instructions using only hardware supplied.
- Take a few moments to read instructions thoroughly before beginning work.
- In the event of damage to any bar component please contact OFFROAD ANIMAL to arrange repair/replacement of components.
- The installation of this product is recommended for trained personnel.
- These instructions are correct at time of publication. OFFROAD ANIMAL cannot be held responsible for the impact of any changes subsequently made by the vehicle manufacturer. If you find something has changed, please contact us to let us know!
- During installation it is the duty of the installer to check correct operation/clearances of all components.
- If Instructions are to be printed for reference in the workshop, it is recommended that they are printed in colour, for best legibility.
- **Approx. Install Time 30 minutes**

GENERAL CARE AND MAINTENANCE

Only wash the product with a PH neutral car wash to prevent paint damage and discolouration.

Plastic parts may be maintained with silicone spray.

Do not use acidic or alkaline based cleaning products.

It is important to perform regular checks (pre trip or on an annual basis) on the installed product. Checks include:

- Visual inspection for damage (eg. cracks, chips, dents etc.)
- Electrical wiring is not rubbing anything or worn out
- Bolts are torqued to correct specification (see torque guide below)

For touching up small stone chips, Offroad Animal recommends the following paint products:

- Dupli-Color Trim & Bumper Paint Black (TB101)
- VHT Hood, Bumper & Trim Paint Black (SP27)

BOLT TORQUE SETTINGS

Use the following bolt torques on all fasteners, unless otherwise specified.

Always use a torque wrench to set correct torque settings. Ensure torque wrench is set to Nm unit of measurement. Otherwise perform conversion to lb-ft.

Size	Torque Nm
M5	5 Nm
M6	9 Nm
M8	22 Nm
M10	44 Nm
M12	77 Nm

TOOLS REQUIRED

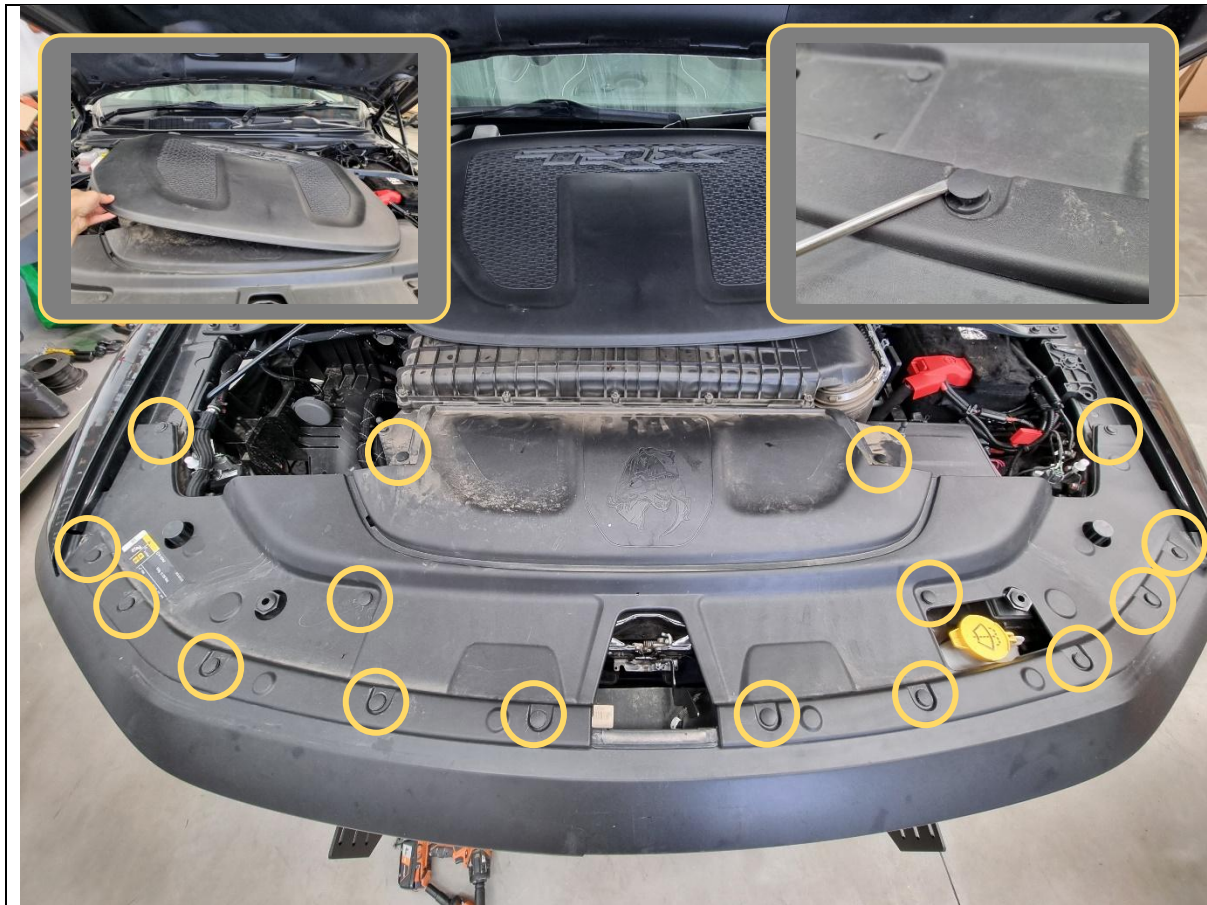
The following tools will be required to install the product.

Hand Tools	Power Tools	Workshop Equipment
Hex (Allen) Key 4mm Metric Socket/Spanner 8mm Metric Socket/Spanner 10mm Flat Blade Screwdriver or Trim Tool	N/A	Cable Ties (Optional)

WORKSHOP SAFETY

It is the responsibility of the installer to always complete works in a safe manner. Make sure the following safety equipment is available and precautions are observed whilst fitting this product.

<p>Hearing Protection</p> 	<p>Always wear ear protection when using power tools.</p>
<p>Eye Protection</p> 	<p>Ensure eye protection is always worn when cutting or drilling.</p>
<p>Manual Handling</p> 	<p>Do not attempt to lift bar assemblies or rock sliders on your own.</p> <p>Always use two people to lift or use mechanical Lifting aid such as hydraulic lifting trolley.</p>
<p>Vehicle Support</p> 	<p>Always ensure vehicle is properly supported when working on it. Do not attempt to fit products whilst suspension work is being carried out. Do not work under a vehicle supported only by a jack.</p>



Note: Camera relocation only suits Offroad Animal Predator bars fitted with a 32" Stealth Hoop or Quad Rally Hoop. This does not suit Toro bars or Predator bars without top hoops.

The bull bar needs to be off the vehicle in order to remove the grille and access the camera.

Disclaimer: Most photos shown in this instruction are from a RAM 1500 TRX. Standard 1500 DT models may differ slightly.

1. Open the bonnet.
2. **TRX only.** Remove engine cover by pulling upwards by hand.
3. Remove 16x push clips (12x for some trim levels) holding radiator cover, by levering centre section upwards using flat bladed screwdriver or trim tool, as shown.

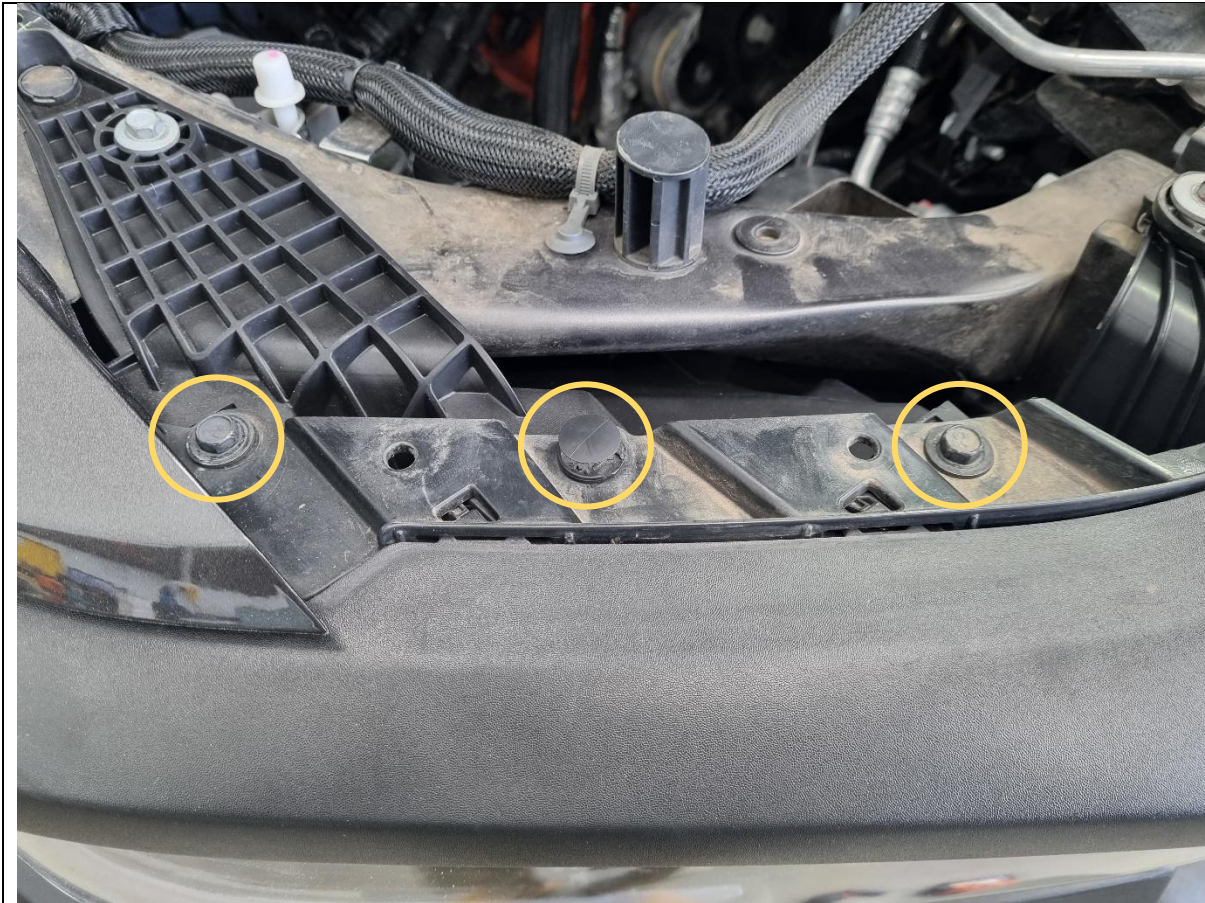
TOOLS REQUIRED

Flat Blade Screwdriver
Or
Trim Tool

FASTENERS

16x Plastic Push Clips

Retain for Reassembly



4. Remove 1x push clip on the grille top trim above each headlight.
5. Then remove 8x 10mm hex bolts running along the top of the grille top trim.

TOOLS REQUIRED

Flat Blade Screwdriver
Or
Trim Tool

10mm socket/spanner

FASTENERS

2x Plastic Push Clips
8x 10mm hex bolts

Retain for Reassembly



<p>6. Once all clips and bolts are removed, pull outwards to remove the grille top trim and set aside for re-fitment.</p>	<p>TOOLS REQUIRED</p>
	<p>FASTENERS</p>



7. Remove 4x 10mm hex bolts along top of grille.

TOOLS REQUIRED

10mm socket/spanner

FASTENERS

4x 10mm hex bolts

Retain for Reassembly



Note: If following the TRX front bar instructions, these steps are already completed. Skip to Step 12.

8. If flares are present, remove the 8mm hex bolts holding the underside of the flares to the body.

Only the front half needs to be removed to take the grille off, however if desired, all the bolts can be removed to fully remove the flare.

9. Starting the base, pull the flare outwards to release the clips holding it to the under headlight trim.

TOOLS REQUIRED

8mm socket/spanner

FASTENERS

8mm hex bolts

Retain for Reassembly



10. If no flares are present, remove 8mm hex bolts holding the wheel arch liner to the body.
11. Pull the wheel arch liner outwards and reach in to remove 1x 10mm hex bolt holding the under headlight trim to the fender panel. Do this on both sides.

TOOLS REQUIRED

10mm socket/spanner

FASTENERS

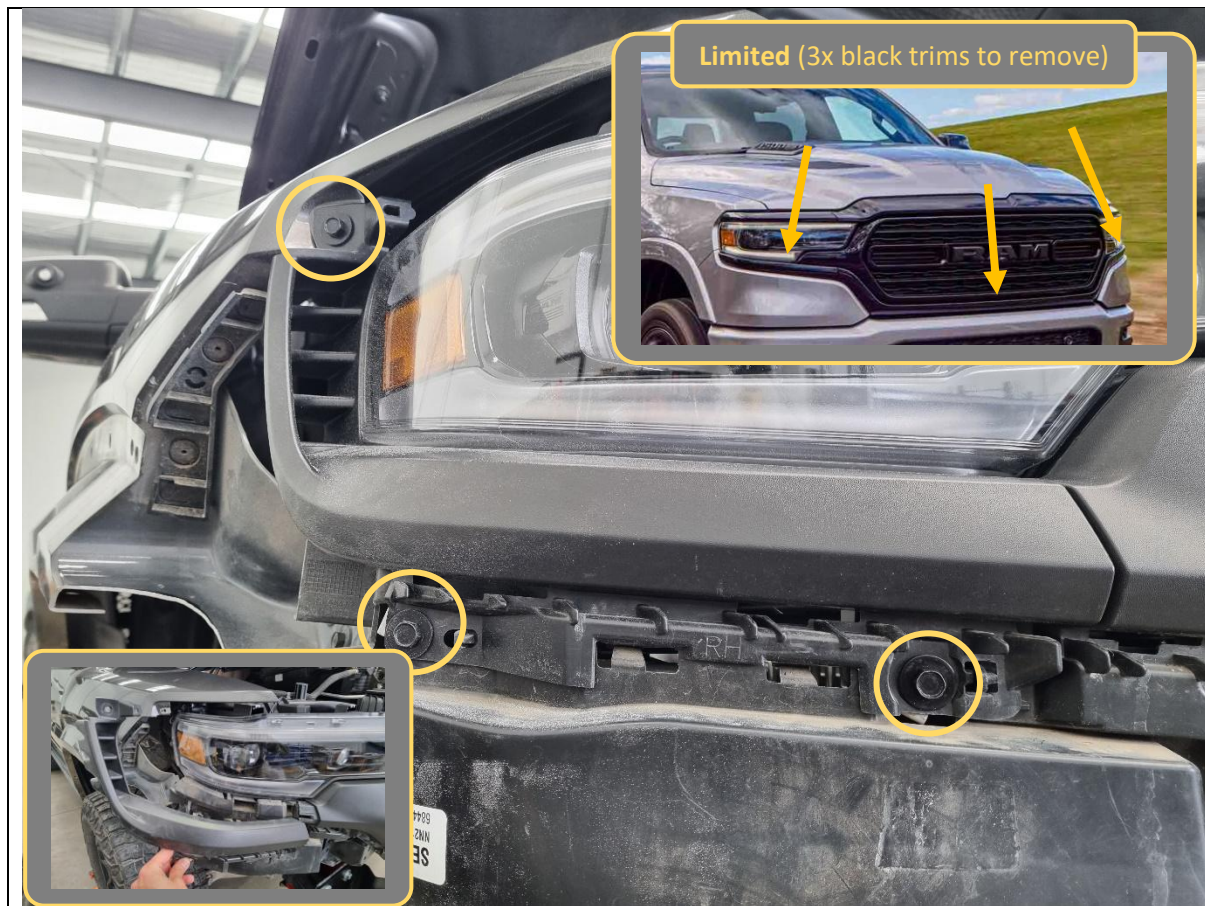
2x 10mm hex bolt

Retain for Reassembly



12. Remove the plastic trim under each headlight. Start at the base of the grille and pull the trim outwards to release the clips.

TOOLS REQUIRED**FASTENERS**



13. **Limited and TRX only.** Remove 3x 10mm hex bolts securing secondary trim below each headlight.
14. **Limited and TRX only.** Pull outwards to release the clips holding the trim to the body.
15. **Limited only.** Also pull outwards and release the clips holding the centre trim below the grille.

TOOLS REQUIRED

10mm socket/spanner

FASTENERS

6x 10mm hex bolts

Retain for Reassembly



<p>16. Remove 3x 10mm hex bolts on bottom outer corners of grille (per side).</p>	<p>TOOLS REQUIRED</p> <p>10mm socket/spanner</p>
	<p>FASTENERS</p> <p>6x 10mm hex bolts</p> <p>Retain for Reassembly</p>



17. Locate the camera plug on top of the grille, below where the radiator cover was. Press down on the connector tab and disconnect the camera harness.

TOOLS REQUIRED**FASTENERS**



18. Lift upwards and outwards to remove the grille.

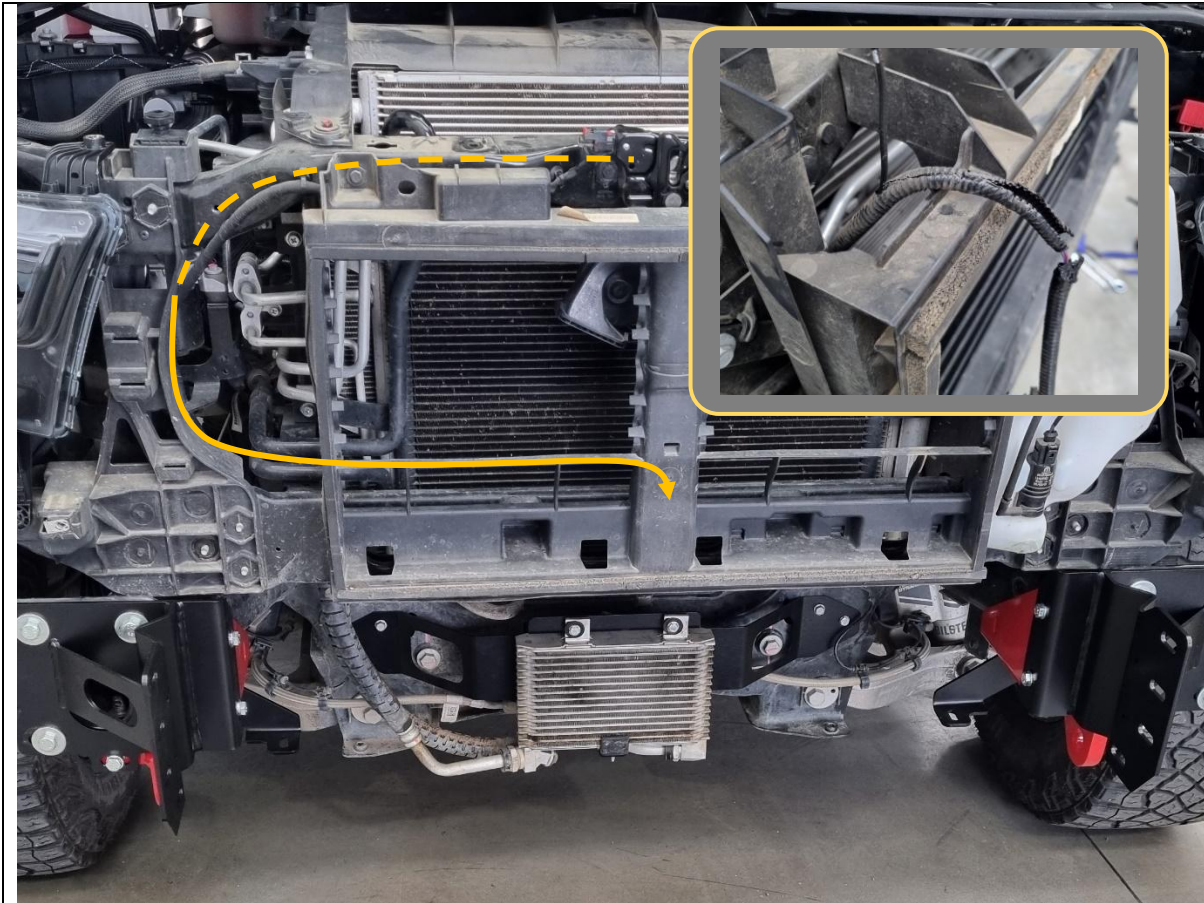
TOOLS REQUIRED

FASTENERS



19. On the back of the grille, locate the camera.
20. Pull back on the plastic locking tab to unclip the camera from grille.
21. Note down the orientation of the camera (eg. which way is up or which way the plug is pointing), then remove the camera and unclip the harness from the grille.
22. Disconnect the camera from the grille harness, then plug the grille harness back to the main harness on the vehicle.

TOOLS REQUIRED**FASTENERS**



23. Check to confirm if the wiring harness is long enough to reach where the Stealth Hoop or Rally Hoop would sit on the bull bar. It is roughly 100mm in front of where the camera sits originally in the grille.
24. If the harness is not long enough, on the vehicle side, separate the camera wiring harness from the bonnet open sensor harness by cutting open the corrugated split tubing.
25. Split it all the way down until you have enough cable. Repair the cut open corrugated split tubing with electrical tape.
26. Route the camera wiring harness across to the centre of vehicle and secure with cable ties.

Do not route harness through the active shutters/louvres that will open/shut and crush the cable.

TOOLS REQUIRED

Cable ties (optional)

FASTENERS



<p>27. Re-fit the grille and all associated parts in reverse order.</p> <p>28. Have the camera harness poke through the opening in the front of the grille, ready to connect to the camera once on the bar.</p>	TOOLS REQUIRED
	FASTENERS



29. Clamp the camera into the supplied relocation brackets and tighten with 2x M6x16 black button head bolts, black washers and flange nuts.

Note the photos above are orientated to match how the brackets fit on the bar. Ensure the camera is orientated the same way as factory.

The rear bracket has a cut-out for the plug to pass through.

TOOLS REQUIRED

4mm hex/Allen key

FASTENERS

2x M6x16 black button head
2x M6 black flat washer
2x M6 flange nut



30. Relocate the camera and brackets onto the Stealth Hoop or Rally Hoop.
31. Fit the camera relocation bracket to the 2x holes on the bottom of the hoop and secure with 2x M6x16 black button head bolts, washers and flange nuts.
32. Fit the top hoop with camera onto the bull bar and reconnect the camera harness once everything is fitted to the vehicle.
33. And you're done!

TOOLS REQUIRED

4mm hex/Allen key

FASTENERS

2x M6x16 black button head
2x M6 black flat washer
2x M6 flange nut