

RAM 1500 DT MY2021 ON (AU Market) ROCK SLIDERS

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.
- Do not use this product for any vehicle make or model other than that specified on these instructions.
- Do not remove labels from this product.
- This product and its fixings must not be modified in any way unless stated in these fitting instructions.
- 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.
- Fitting time estimated 1-2 hours

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 general fasteners, unless otherwise specified.

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

Use the following bolt torques on all structural front bar mount and tow point fasteners, and rear towbar fasteners, unless otherwise specified.

FRONT BAR MOUNTS AND TOW POINTS + REAR TOWBAR		
Size Torque Nm		
M10	57 Nm	
M12	100 Nm	
M14	164 Nm	
M16	248 Nm	

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.

PARTS LISTING

IMPORTANT: Check all parts are present before beginning work! Contact OFFROAD ANIMAL if something is missing.

Bracket Kit Parts - In the Box

Qty	Part Number	Description	Image
1	RS-R15-DT-21- ASM2R	Ram1500 DT Slider- Front Chassis Mount Assy	
1	RS-R15-DT-21- ASM2L	Ram1500 DT Slider- Front Chassis Mount Assy	
2	RS-R15-DT-21- ASM1	Ram1500 DT Slider-Rear Mid Chassis Mount Assy	
2	RS-R15-DT-21- ASM5	Ram1500 DT Slider-Front Mid Chassis Mount Assy	
1	RS-R15-DT-21- ASM4R	Ram1500 DT Slider- Rear Mount Assy	
1	RS-R15-DT-21- ASM4L	Ram1500 DT Slider- Rear Mount Assy	

8	B-0683	Ram1500 DT Slider- 2MM Mount Shim	
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Step Kit Parts – In the Box

Qty	Part Number	Description	Image
2	B-0307	Slider Step - 2100 Extrusion (US Trucks)	
2	B-0306L	Slider End Cap - Stub Nose	0
2	B-0306R	Slider End Cap - Stub Nose	

Extrusion Kit Parts – In the Box

Qty	Part Number	Description	Image
2	E-0002-2100	Slider extrusion -2100MM	

Bracket Kit Small Parts – Contained in Small Parts Kit Bag

Qty	Part Number	Description
6	M12 FLANGE NUT	Flange Nut, M12x1.75 G8.8 ZP
4	M12 FLAT WASHER	M12 FW
4	M12X110	Bolt Hex, M12X110x1.75, GR8.8 ZP
6	M12 FW LHD	M12 FW Large Heavy Duty
4	M12X30	Bolt Hex, M12X30x1.75, GR8.8 ZP
2	NP-COM-M12-30-ASM0	M12 NUT PLATE SHORT, 30MM STEM
28	M10 FLANGE NUT	Flange Nut, M10x1.5 G8.8 ZP
28	M10 x 25	Bolt Hex, M10X25x[1.5], GR8.8 ZP

Step Kit Small Parts - Contained in Small Parts Kit Bag

Qty	Part Number	Description	
36	M8 FLAT WASHER- BLACK ZINC	M8 FW- BLACK ZINC	
36	M8 NUT	Hex Nut, M8x1.25 G8.8 ZP	
20	M8 X 20 BHCS BLACK	SCREW, BUTTON HEAD CAP,	
20	ZINC	M8X20X1.25 BLACK ZP	
16	M8X20 CAP SCREW	CAP SCREW, M8X20X1.25 GR10.9 ZP	
4	M6 FLAT WASHER	M6 FW BLACK ZP	
4	BLACK ZINC	IVIO FVV BLACK ZP	
4	M6CN3MM	CAGE NUT M6x2.6-3.5	
4	M6x16 BHCS BLACK	SCREW, BUTTON HEAD CAP,	
4	ZINC	M6X16X1 GR12.9 BLACK ZP	
8	M10V1E BLCC	SCREW, BUTTON HEAD CAP,	
8 M10X15 BHCS	MITOYI2 BUC2	M10X16X1.5 GR12.9 ZP	
8	M10 NUT	Hex Nut, M10x1.5 G8.8 ZP	
8	M10 Flat Washer	M10 FW	

The following tools will be required to install the product.

Hand Tools	Power Tools	Workshop Equipment
Metric Socket Set 8-	Electric/Air Impact	Hydraulic Floor Jack
19mm	Driver (Optional)	
Socket Extension Bar		
Metric Spanner Set 10-		
19mm		
Hex (Allen) Key Set 4-		
6mm		
Flat Blade Screwdriver		
set		
Phillips Head		
Screwdriver set		
Trim Tool		

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.

Hearing Protection	Always wear ear protection when using power tools.
Eye Protection	Ensure eye protection is always worn when cutting or drilling.
Manual Handling	Do not attempt to lift bar assemblies or rock sliders on your own. Always use two people to lift or use mechanical Lifting aid such as hydraulic lifting trolley.
Vehicle Support	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.

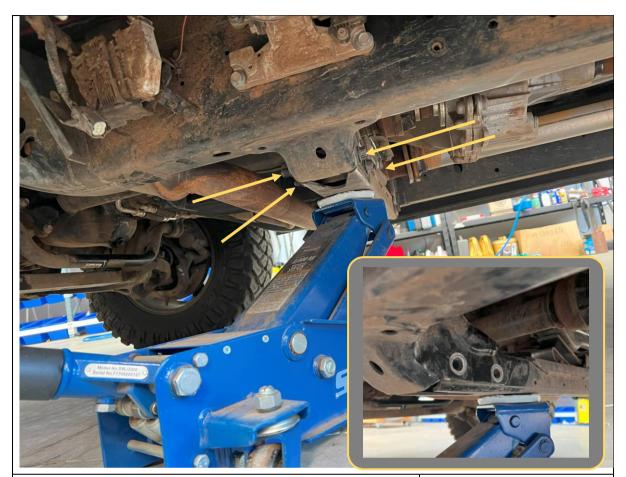


- 1. Remove Factory side steps if fitted by removing the 6x Bolts (2 Per mount) securing them to the body using a 13mm socket.
- 2. If fitted with electrical deployable steps such as this vehicle, ensure that the wiring harness is also disconnected
- 3. Discard (or sell!) Factory steps and bolts.

13mm socket

FASTENERS

6x Factory Flange head Bolts (per side)



- 4. Support the gearbox crossmember with a trolley jack, just inboard of the main crossmember to chassis bolts. Apply just enough pressure to see the vehicle start to move.
- 5. Remove the 2x Factory M12 Bolts that secure the crossmember to the chassis. Retain bolts for re-fitment.

Jack 18mm Socket/Spanner

FASTENERS Factory M12 Bolts

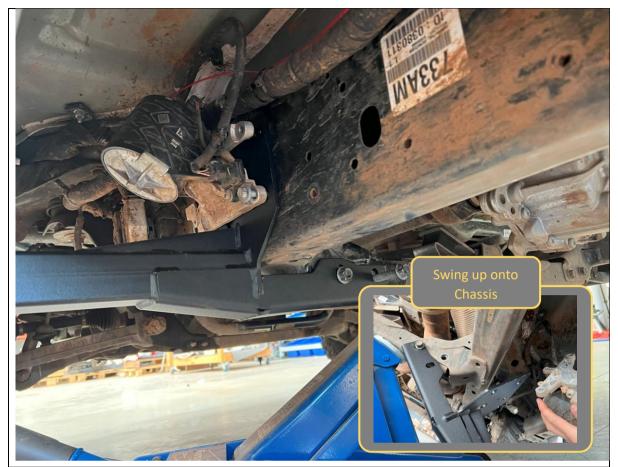


- 6. Loosen the 4x M8 Bolts that secure the anti-vibration module to the chassis rail. Use 13mm Socket/
- 7. Remove 2x of the bolts, leave 2x bolts in to support the weight of the module.

13mm Spanner / Socket

FASTENERS

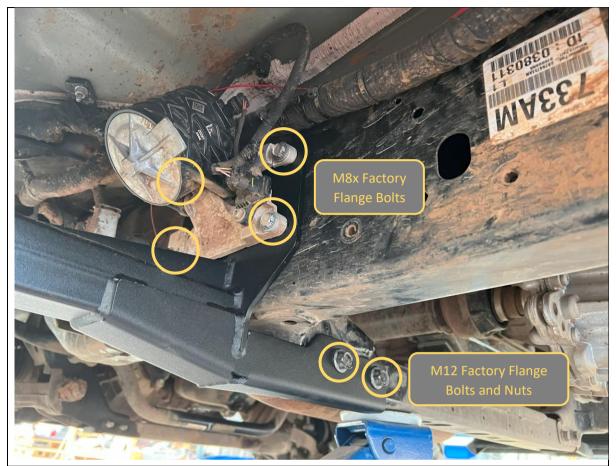
Factory M8 Bolts.



- 8. With assistance fit the front mount. Start by removing the remaining two bolts holding up the anti-vibration module to the chassis.
- 9. Whilst holding the anti-vibration module, fit the mount to the crossmember with one of the Factory bolts removed earlier, Leave bolt finger tight.
- 10. Swing up the mount into position and place the antivibration module on top. Secure with factory M8 bolts, mounted through the AV module, Slider Mount and into the M8 Threads in the chassis.

FASTENERS

Factory M12 and M8 Bolts

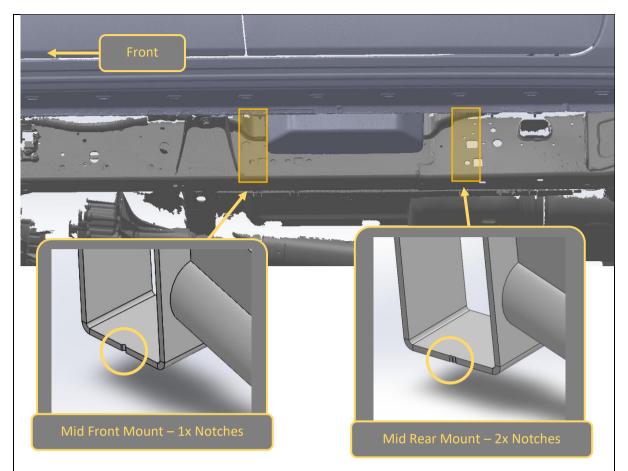


- 11. Replace the rest of the factory bolts in original positions, as shown.
- 12. Tighten all bolts on mounts.
- 13. Repeat front mount procedure for opposite side of vehicle.

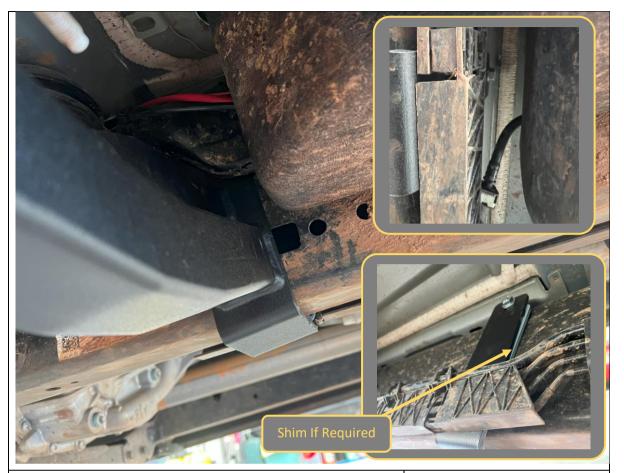
13mm Spanner / Socket 18mm Spanner / Socket

FASTENERS

Factory M12 and M8 Bolts



- 14. Identify the correct Mid front and mid rear brackets using the Identifying notches.
- 15. Identify the correct front mid and rear mid mounting points on the chassis. The front mid goes just to the front of the storage bin, and rear mid goes just aft of the bin



- 16. Using a trim tool, unclip the wiring harnesses from the chassis at all points close to where the slider mount needs to go, for both mid mount points.
- 17. Unclipping the harnesses is only required on the LHS of the vehicle.
- 18. Fit the Mid Front mount, sliding the U bracket between the chassis rail and the hoses / harnesses unclipped before.
- 19. If required inset shim plates to ensure tight fit.
- 20. Secure with M12x110 Bolt. Leave finger tight at this stage.

Trim Tool

FASTENERS

M12x110 Bolt M12 Flat Washer M12 Flange Nut



- 21. Fit the Mid Rear mount, sliding the U bracket between the chassis rail and the hoses / harnesses unclipped before.
- 22. If required inset shim plates to ensure tight fit
- 23. Secure with M12x110 Bolt. Leave finger tight at this stage.
- 24. Fit Mid mounts on other side of vehicle, using same process.

FASTENERS

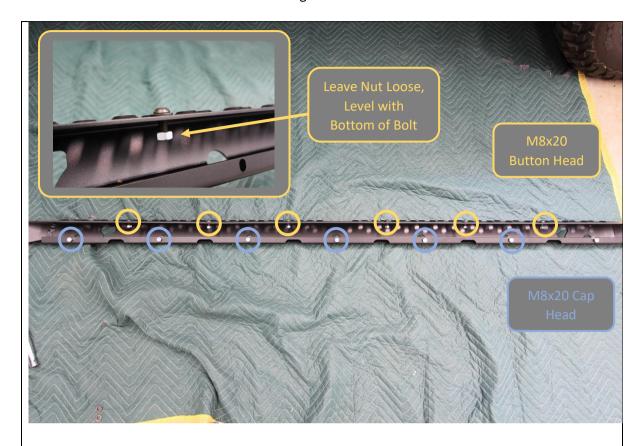
M12x110 Bolt M12 Flat Washer M12 Flange Nut



- 25. Fit the rear mount to the chassis. Secure first with M12x30 Bolt, Large flat washer, and Flange nut through side of body mount bracket on chassis.
- 26. Secure bottom of Mount using M12x30 Bolt, Large Flat washer, and short stem nut plate through bracket near rear suspension mounting point.
- 27. Leave bolts finger tight at this stage
- 28. Fit Rear mounts on other side of vehicle, using same process.

FASTENERS

2xM12x30 Bolt 2xM12 HD Flat Washer 1xM12 short Lollypop Nut Plate 1x



- 29. Prepare step plate by loosely pre fitting the fasteners to the step
- 30. Use M8x20 black button head screws, black M8 washers and M8 Nuts on 10x locations on top of step as shown
- 31. Use M8x20 cap head screws M8 washers and M8 nuts on 8x locations on bottom side of step.

NOTE THERE ARE 2 WAYS TO FIT THE STEP ON THE EXTRUSION, IF YOU FIND THIS WAY DIFFICULT SKIP STEP 29-33 AND GO TO STEP 34-39

TOOLS REQUIRED

FASTENERS

10x M8x20 Black Button Head 8xM8x20 Cap Head 18x M8 Black Washer 18x M8 Nut



- 32. Slide the step plate onto the main slider structural extrusion. Align the nuts as they enter the T Slots on the extrusion.
- 33. Center the Step on the extrusion, by measuring distance from extrusion to tip of step, and adjusting until both sides are equal.



- 34. Lie extrusion down and place step on top.
- 35. Feed nut into slot with something long and skinny (like a dowl or piece of all thread). Do centre ones first the move outwards

Long dowel or skinny stick



36. Thread cap screws into each hole.

6mm Allen Key

FASTENERS

M8 x 20 Cap screws (8) M8 hex nuts (8) M8 flat washers (8)



37. Flip entire slider up as shown.

38. Clamp step hard to extrusion.

TOOLS REQUIRED

Clamps



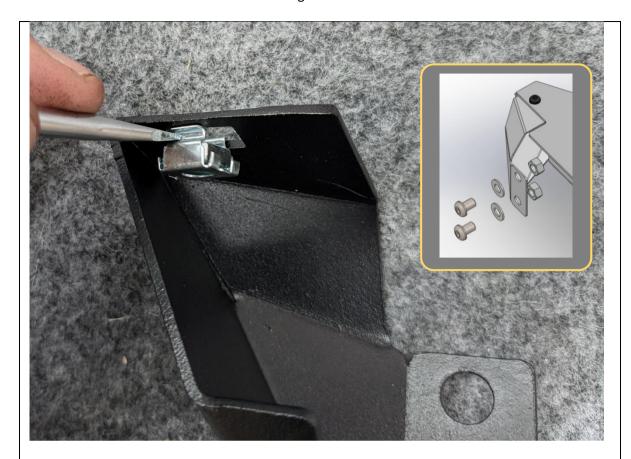
39. Using long tool feed nuts in to centre first and thread in with black M8 button head cap screws and washers.

TOOLS REQUIRED

5mm Allen key

FASTENERS

M8 x 20 BHCS black (10) M8 hex nuts (10) M8 flat washer black (10)



- 40. Fit Cage nut to square hole in top of end cap. Use a flat blade screwdriver to assist if required.
- 41. First slide 2x M10 Nuts into the T slots on back side of extrusion.
- 42. Fit end cap over these nuts.
- 43. Secure with M10x16 Button Head Screws into Nuts and M6x20 bolt in top, through tread plate. End cap should align with end of tread plate if tread plate is centered correctly.

Flat blade Screwdriver

FASTENERS

2x M10x16 Button Head 1x M6x20 Button Head bolt 1xM6Flat Washer 2x M10 Nut 1x M6 Cage Nut



- 44. Slide the 16x M10x25 Hex bolts into the T slots on back side of extrusion. 8 bolts per slot.
- 45. Loosely arrange the bolts in 4x groups of 4, in approximate location of mounts, as shown.

FASTENERS

16x M10x25 Hex bolts



- 46. Fit mirrored end cap to remaining end of slider, using 2x M10x16 Button bolts and M6x20 Button head bolt with flat washer as per previous steps 34-36.
- 47. Check alignment of end caps, End cap should align with edge of tread plate if properly centered. Adjust end cap / tread plate position as required.
- 48. Once happy with alignment tighten all bolts on slider extrusion, using 5/6mm hex key.

5mm Hex key 6mm Hex key

FASTENERS

2x M10x16 Button Head 1x M6x20 Button Head bolt 1xM6 Flat Washer 2x M10 Nut



- 49. With Assistance from another person, or mechanical lifting aid such as a lift trolley, Lift the slider onto the mounts.
- 50. Manipulate the position of bolts in T slot to align with mounts to get slider on. Secure with M10 Flange Nuts
- 51. Adjust fore / aft position of sliders on mounts to achieve even appearance if required.
- 52. **IMPORTANT:** Once happy with position Tighten the mount bolts on the mid and rear mounts left Finger tight earlier.
- 53. Take care to ensure adequate clearance where panel curves toward wheel at front end, near end cap.

5mm Hex key 6mm Hex key 15mm spanner 18mm Socket / Spanner

FASTENERS

16x M10 Flange Nut



54. Tighten all mount to slider M10 flange nuts using 15mm spanner. A ratcheting spanner or socket makes this process easier

15mm Socket / Spanner



- 55. Fit the Offroad Animal logo plate to the small gap between pierced features on tread plate, using the pre applied double sided adhesive.
- **TOOLS REQUIRED**
- 56. Complete the step fitment for the other side of vehicle using same procedure.
- 57. After that you are done!



Congratulations!
Head for the tracks and enjoy your newly protected RAM!