

## **GVW-ENG-MNT-ADPT**

## Adaptor Brackets to Update Vanagon Engine Mount from 1.9L to 2.1L Style

## **INSTALLATION PROCEDURE**

- 1. Unbolt the catalytic converter from the J-pipe and remove the catalytic converter, muffler, and tailpipe assembly. Remove all brackets and mounting braces for the muffler.
- 2. Remove the three M6 bolts that attach the coolant bottle support bracket to the heat shield.
- 3. Remove the two M10 bolts that attach the heat shield to the engine mount.
- 4. Remove the four M6 bolts located on the underside of the heat shield at the rear of the van, and remove the heat shield.





#### CAUTION!

The heat shield bolts are often seized due to corrosion, and excessive force can cause the captured nut to break free and spin.



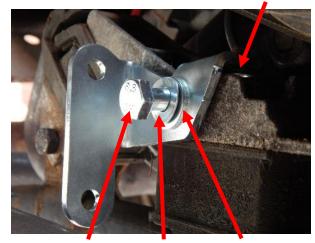
Use a quality penetrating oil to lubricate the threads prior to removal.

Heat Shield Hardware Locations

- 5. Place a floor jack underneath the center of the engine case and raise the jack until the weight of the engine is supported and the load is removed from the engine mount bolts.
- 6. Remove the two M10 bolts from the engine mount and set them aside. They will be replaced with the longer M10 bolts included in the kit.

  M8 Washer
- 7. Remove the two M8 nuts from the two central engine mount bushing studs.
- 8. Place one M8 washer on each of the two engine mount bushing studs, on top of the engine mount.
- 9. Place the adaptor brackets over the engine mount bushing studs, on top of the M8 washers.
- 10. Place a wavy and a flat M10 washer on each M10 bolt, then insert each bolt into the lower hole of the adaptor brackets. Thread the M10 bolts into the engine block, but do not tighten them yet.





M10 Bolt Wavy Washer Flat Washer



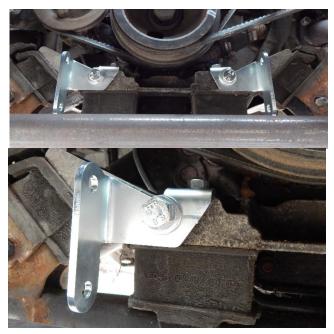
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11. Align the two brackets so that the muffler saddle flanges are vertical and parallel to each other. Use the horizontal bottom edge of the adaptor brackets to help line align the brackets.

Tighten the M10 bolts to 45 Nm (33 ft-lb).

12. Place an M8 flat washer, wavy washer, and nut over each engine mount bushing stud, and tighten the nuts to 20Nm (15 ft-lb).



13.In order to fit the heat shield, two sections must be cut out to clear the muffler saddle brackets. Refer to the images below. Several tools can be used to cut these openings, including heavyduty tin snips, cut-off wheels, or a body saw. Dress all sharp edges with a file or sandpaper after cutting.

#### 2.1 L HEAT SHIELD







- 14. Bolt the heat shield back into place. Do not overtighten the four M6 bolts on the rear of the heat shield. Bolt the coolant reservoir bracket to the heat shield.
- 15. From here, proceed with the installation of the 2.1L-style exhaust system. Use the four M8 bolts included in this kit to attach the late-style muffler saddle brackets to the engine mount adaptors.