



2nd Gen RoamRig Revel – Alternator Replacement

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INTRODUCTION

In this guide we will show you how to remove and replace the auxiliary alternator on your 2nd generation RoamRig system.

TOOLS:

- [Belt Tensioner Release Tool](#) (1)
- [10mm Deep Socket](#) (1)
- [13mm Shallow or Deep Socket](#) (1)
- [15mm Shallow or Deep Socket](#) (1)
- [Socket Wrench 3/8" Drive](#) (1)
- [Dead Blow Hammer](#) (1)

PARTS:

- [Balmar Auxillary Alternator](#) (1)

Step 1 — VS30 Battery Disconnect



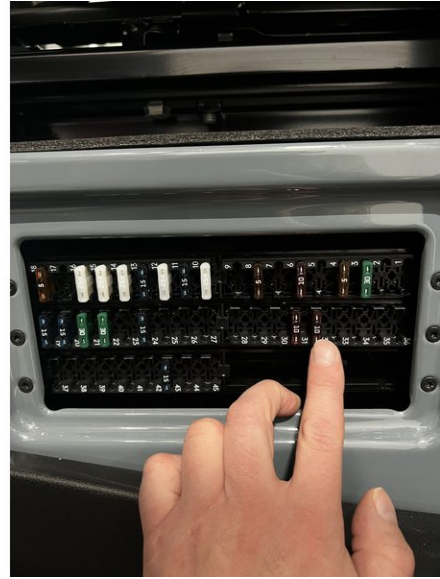
- Remove battery ground disconnect access cover to expose battery ground disconnect

Step 2



- Depress the red tab on the battery ground disconnect, and pull to remove from ground stud

Step 3



- Remove the fuse panel cover from the driver side seat base to expose fuse panel
- Locate and remove fuse #32

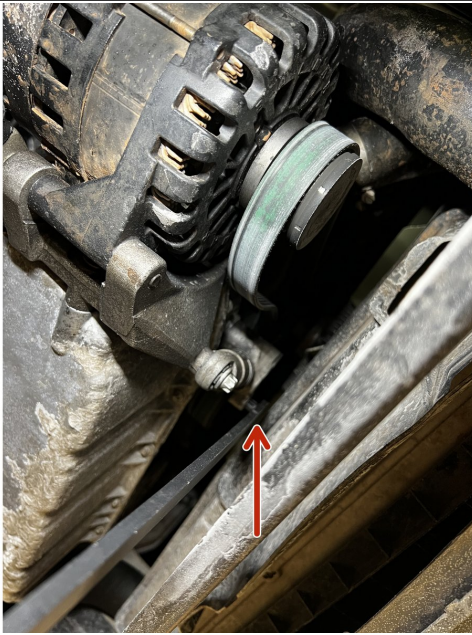
Step 4 — House Battery Disconnection



◦ If your van is NOT equipped with the 5th battery, this breaker must remain in the OFF position

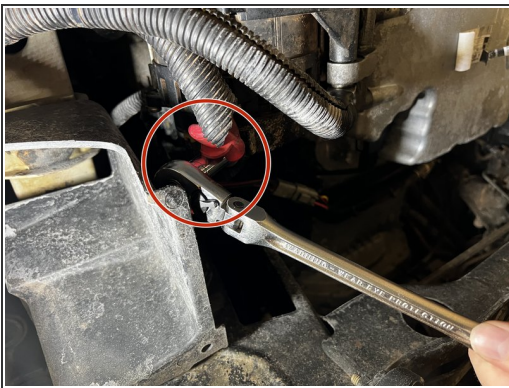
- Shut off all the breakers on the RoamRig system. The breakers are located in the battery compartment on the driver's side rear compartment of the van.

Step 5 — Belt Removal



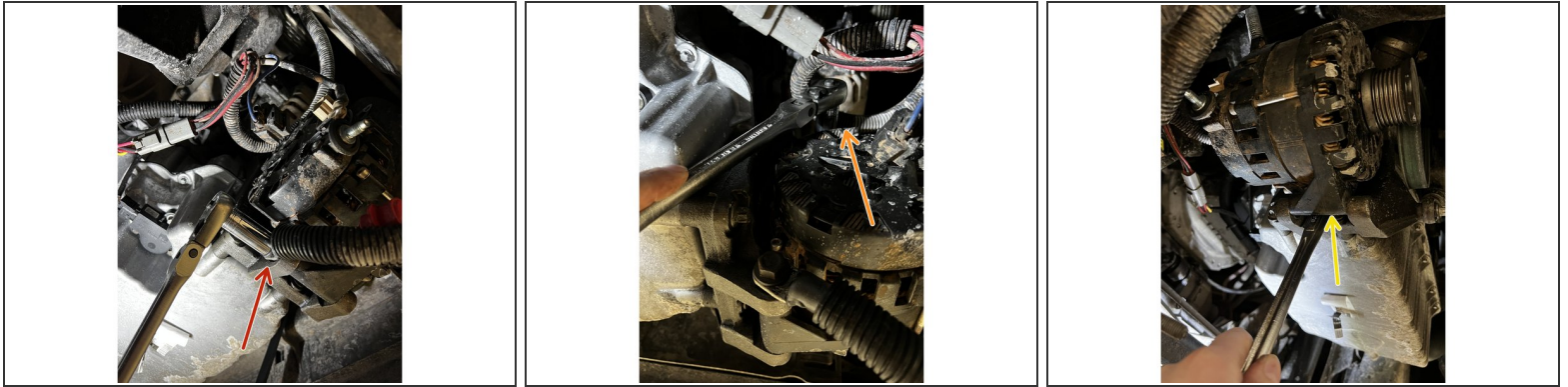
- Using the belt tensioner release tool, insert into tool keyway on the tensioner. Pull the tool towards the passenger side of the vehicle to release the tensioner.
- Once the belt is loose, remove the belt from the alternator pulley and release the tensioner tool.

Step 6 — Alternator Electrical Connection Removal



- Using a 13mm socket and wrench, remove the positive lead from the alternator.
 - Disconnect regulator field output wire connector. Depress the locking tab, and pull out from the alternator.
 - Using a 10mm socket and wrench, remove the alternator temp sensor.
- ⓘ A Phillips head screw is shown in the photo for the alternator temp sensor. In most cases it will be a hex bolt that uses a 10mm socket for removal.

Step 7 — Alternator Removal



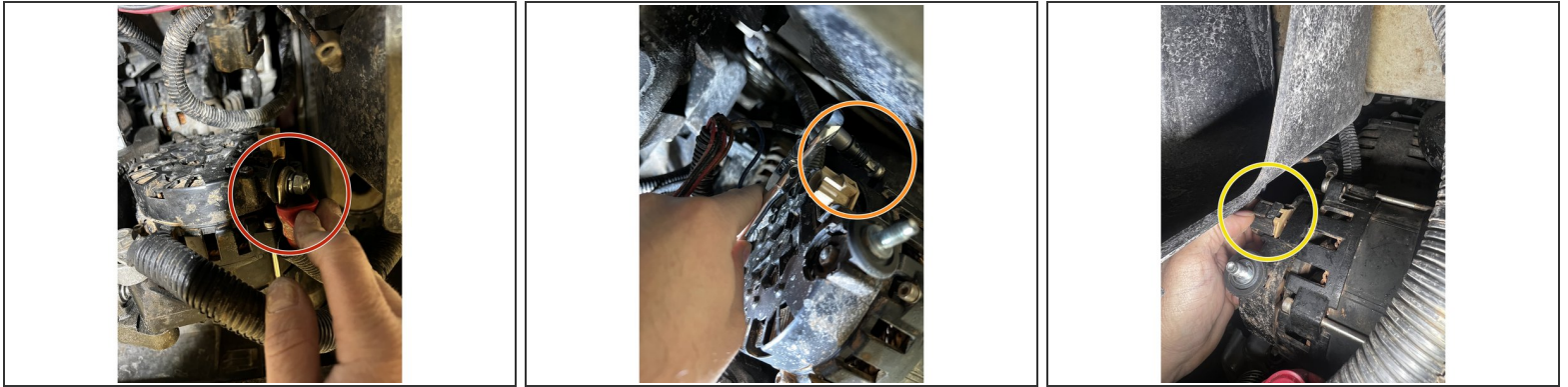
- Using a 15mm socket and wrench, remove the bottom bolt securing the ground wire and the alternator to the bracket.
 - Using a 15mm socket and wrench, remove the top bolt securing the alternator.
 - With both bolts removed, the alternator can be removed. The alternator may be tight in the bracket. It may need to be gently pried from the mounting bracket to help work it loose.
- ⚠ Take care not to drop the alternator when removing.
- ⚠ Do not discard the original bolts securing the alternator. These will be reused!

Step 8 — Replacement Alternator Install



- Place the new alternator onto the bracket, starting with the top mounting point first. Reusing the original bolts, start the top bolt by hand.
- Pivot the bottom of the alternator into the bracket. It may be a tight fit, in which case using a dead blow hammer gently tap the alternator into the bracket so the bottom bolt can be inserted.
- ⓘ Make sure to only strike the alternator mounting points, not the body of the of the alternator when using the dead blow hammer.
- Make sure to attach the negative ground cable to the bottom bolt. Tighten both bolts to secure the alternator, but take care not to over tighten the bolts and damage the threads on the aluminum mounting bracket.

Step 9 — Electrical Reconnections



- Connect the positive wire lug to the positive post on the alternator, and install the flat washer, lock washer, and nut in that order. Tighten the nut snug.
- ⚠ Take care not to over tighten the nut securing the positive wire lug to the stud. Damage to the stud can occur if over tightened.
- Reattach the alternator temp sensor to the alternator using a 10mm socket and wrench to tighten.
- Reconnect the regulator field output plug to the alternator. Ensure the plug is fully seated into the connector.

Step 10 — Drive Belt Install



- Using the tensioner tool, release the tensioner so the belt can be placed over the alternator pulley.
- ⚠ Make sure the belt is properly seated on the pulley for the alternator, as well properly seated on the remainder of the pulleys. Damage can occur if the belt is not properly seated on all pulleys.
- Once the belt is properly installed, the alternator install is complete.

Step 11



* If your van is NOT equipped with the 5th battery, this breaker must remain in the OFF position

- Install Fuse 32 back into the fuse panel on the driver's side seat base
- Reconnect the chassis battery ground.
- Turn on the breakers for the RoamRig system.

⚠ If you have a 4 battery system, the breaker for the 5th battery **MUST** remain in the off position. See image for reference.

conclusion