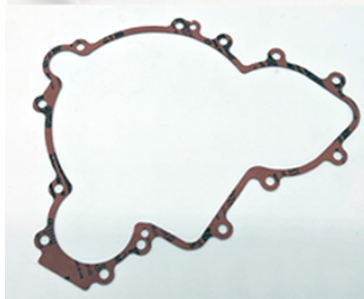


# Dirt Launch Powersports

## Polaris RZR Alternator Installation Instructions



**New Modified Stator Cover with Crank Seal installed**



**Stator Cover Gasket**



**Alternator Belt**



**Belt Guard**



**Electrical Harness**



**Drive Pulley**



**Lower Standoff**



**Upper Standoff**



**Upper Standoff Offset Bracket**

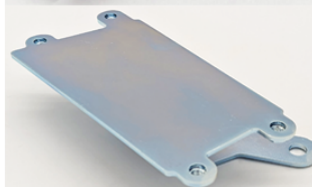
**These come pre-assembled**



**Concentric Spacer**



**Alternator Tensioning Arm**



**Belt Guard Bracket**



**CPS-Coolant hose support bracket**



**Drive Pulley**



**Upper Alternator to Tensioning Arm**



**Belt Guard to Belt Guard Bracket**



**Lower Alternator Mount to Lower Standoff**



**Belt Guard to Stator Cover**



**Tensioning Arm to Upper Standoff**



**CPS-Coolant hose support bracket to secure hose clamp**

Removing the rear wheels and shocks is not necessary, some may find it easier to do the install with these removed.

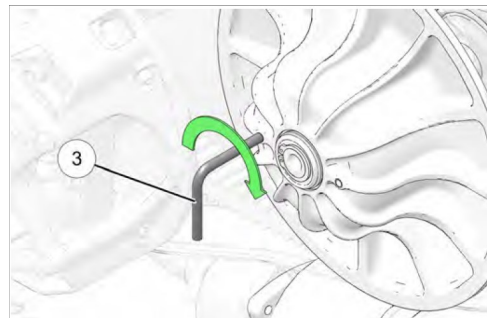
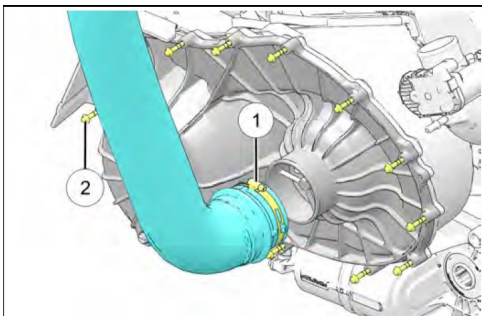
Please remember to properly support the chassis with jack-stands. Do not work on a lifted vehicle supported only by a floor jack.

1. Disconnect the battery (under the drivers seat)
2. Disconnect Crank Sensor from Stator Cover and the plastic clip holding the crank sensor harness to the bracket. Route sensor and harness away from the stator. You can leave it connected to the main harness.

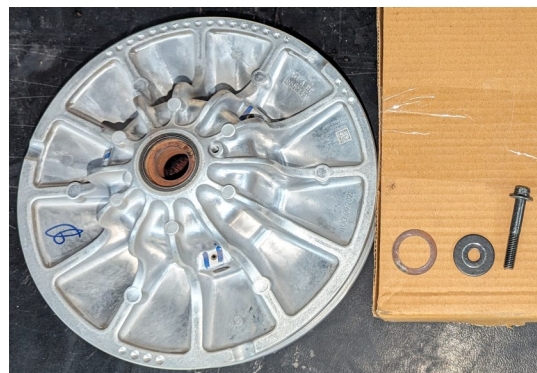


Harness clip for Crank Sensor

3. Remove Clutch Vent Pipe and Clutch
4. Remove Belt—Mark the drive belt direction of rotation so that it can be installed in the same direction. Insert clutch spreader tool (3) into the driven clutch and turn the tool clockwise to open the sheaves on the driven clutch. Walk the belt out of the driven clutch and drive clutch.

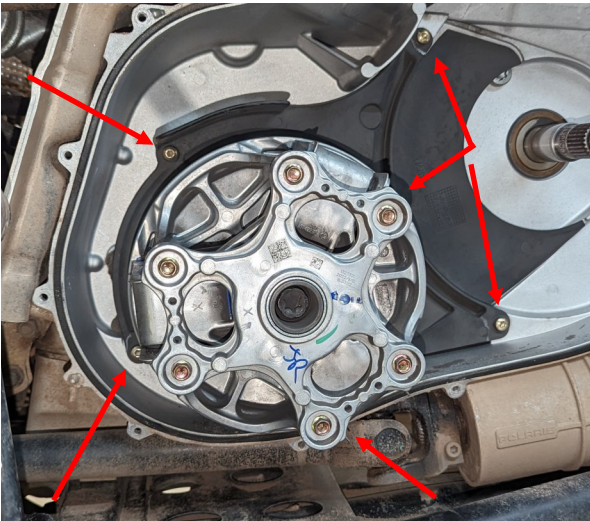


5. Remove the clutch secondary—Be careful when removing the bolt. Make note of any washers and spacers. These must be reinstalled exactly the same as they were removed.





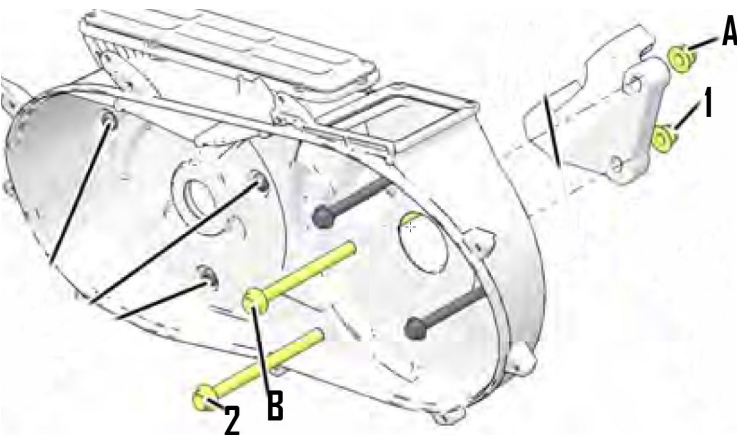
6. Remove the 6 fasteners for the belt air duct / inner cover



7. **\*\*OPTIONAL STEP\*\*** - If you have the tools and knowledge to remove the clutch primary, you may do so at this time, then remove the belt air duct / inner cover, then skip to step 9
8. Using a punch, mark the inner cover plastic over the center of Fastener (B). Using a 1/2" drill bit, make a hole where the mark is.



9. Remove the upper trans mount nut (A) while counter holding fastener (B) through the hold drilled in previous step (unless you removed the clutch primary). This nut can be discarded.

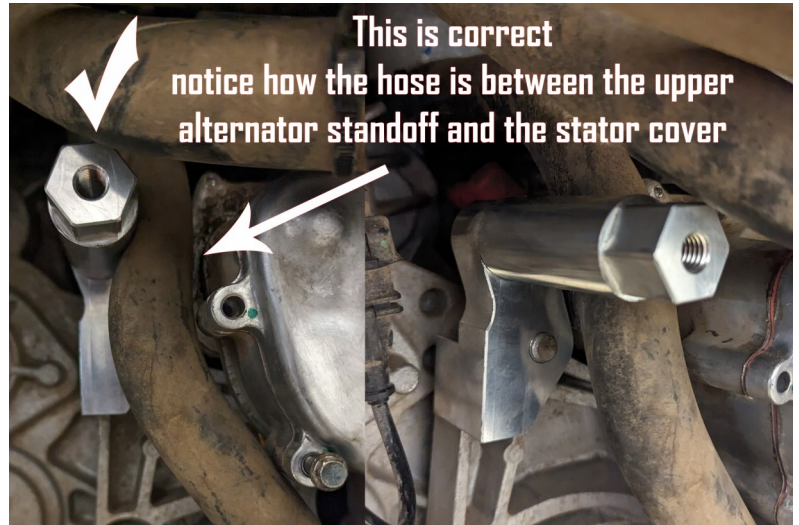
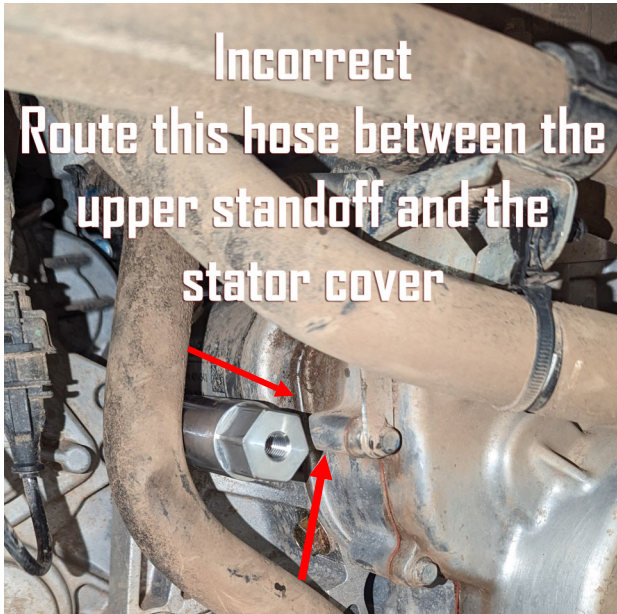




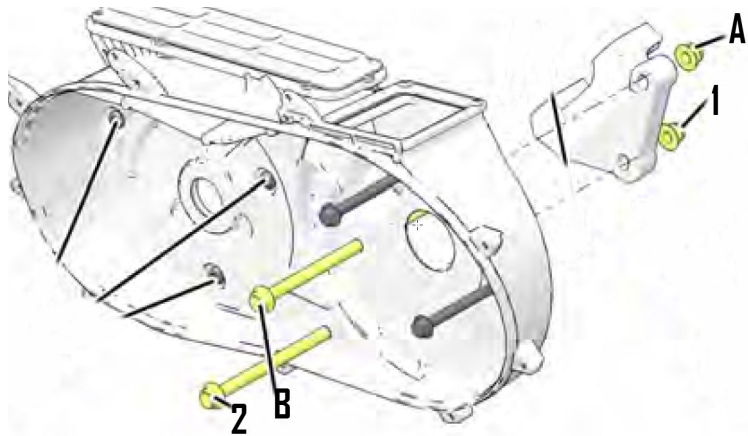
10. Install upper alternator standoff in place of bolt (A) removed in previous step.

See images below. It's important to route the coolant hose between the standoff and stator cover. Also make sure the crank sensor is out of the way and not caught between the hose and the engine.

Torque to 50 ft-lbs (68Nm)



11. Remove the lower trans mount nut (1) while counter holding fastener (2). This nut can be discarded. If you opted to do this install leaving the clutch primary in place, see step 12.



12. Skip this step if you removed the clutch primary.

To counter hold fastener (2) in the above diagram. You can either drill another 1/2 hole or use the technique shown below to hold the Torx bit with an open end wrench behind the plastic cover.



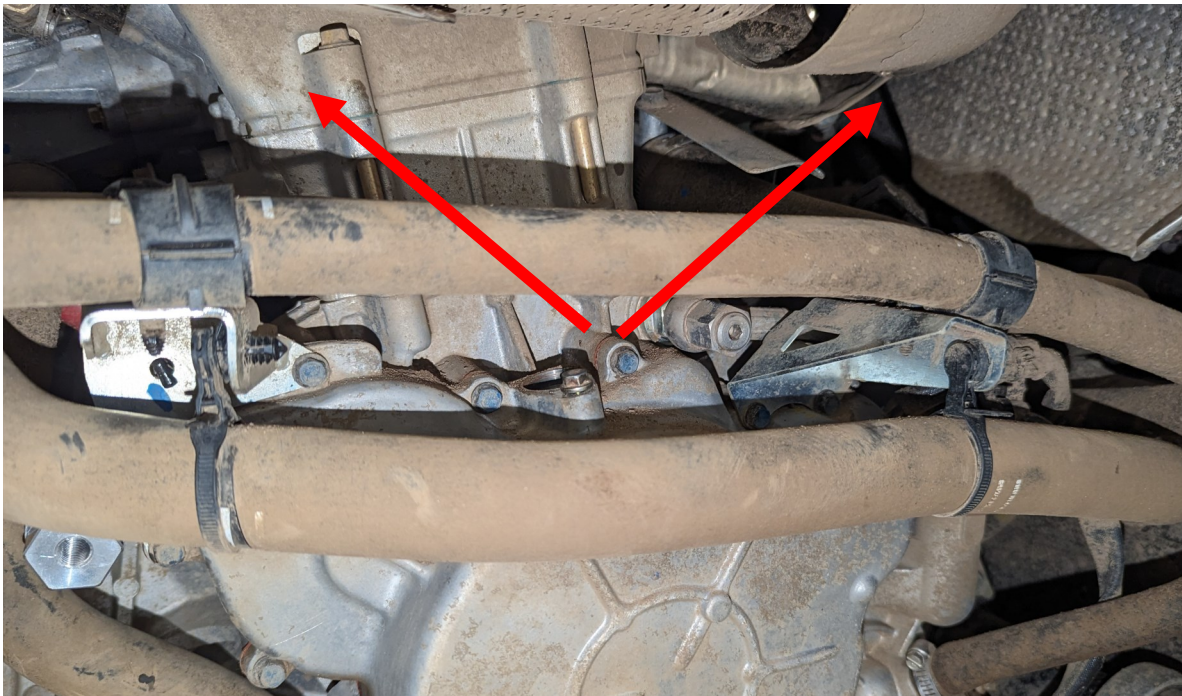


13. Install Lower Alternator Standoff.

Torque to 50 ft-lbs (68Nm)



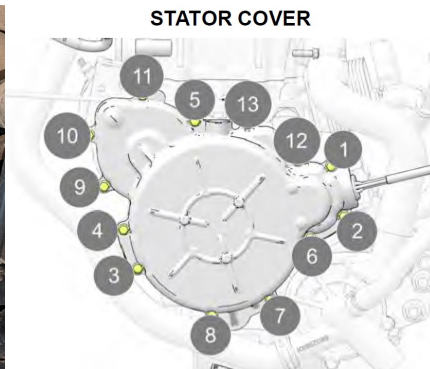
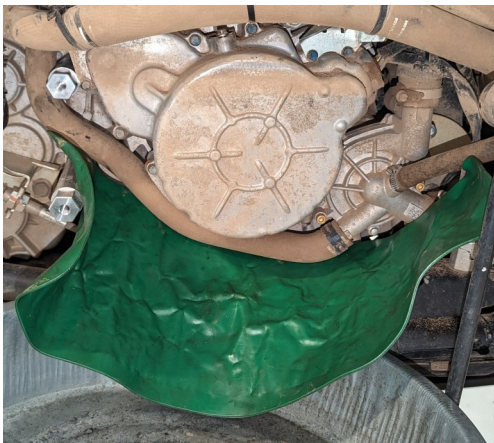
14. Move the hoses above the stator cover out of the way. Do this by removing the hose clips from the brackets attached to the stator cover (see below). Once removed, zip tie the hoses up and out of the way





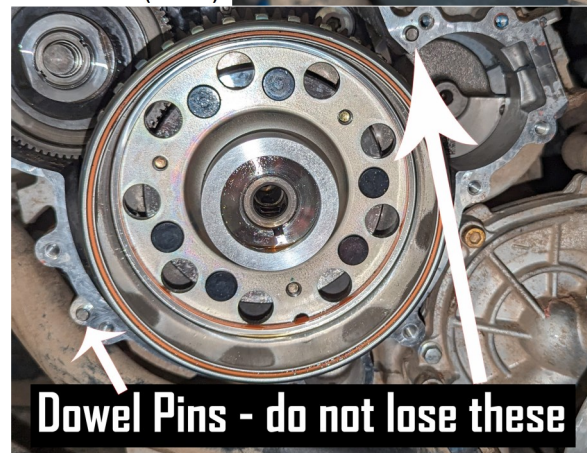
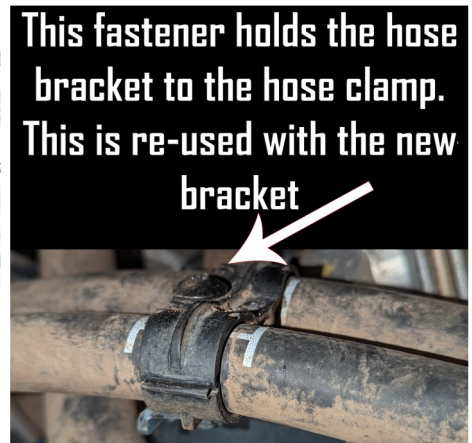
## 15. Stator Cover Removal

- a Place some kind of container under the stator to catch any fluid that come out (should be minimal)
- b Remove all of the fasteners holding the stator cover on.
- c Remove the left hose bracket and discard (new bracket included with kit)
- d Stator and Magneto are under strong magnetism, be careful not to pinch your fingers. You may need to tap the cover with a soft mallet to loosen it from the gasket
- e Be sure the Pin & Gear stay in place
- f Make sure the two dowel pins are in place on the engine and didn't fall out or stay with the stator cover
- g Carefully set the stator cover to the side with the harness and stator still in place. This will keep the stator safe while you clean off the gasket material. Use either a zip tie, bungee cord etc.. to support the cover so the stator wires are not pulled on
- h Carefully clean off any gasket material



Stator Cover Bolts

9 ft-lb (12 Nm)

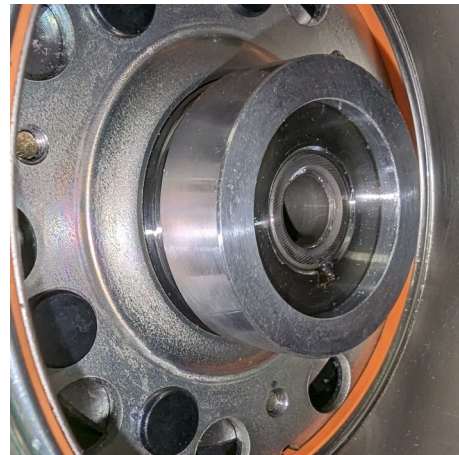


16. If removed, install Clutch Primary—follow shop manual instructions

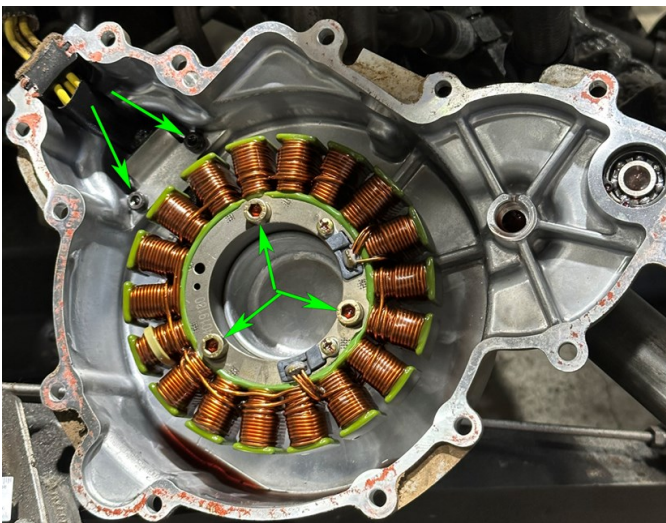
17. Remove flywheel retaining bolt either with an impact or a commercially available strap wrench to hold the flywheel. This bolt can be discarded—save the washer, this will be reused



18. Install Concentric Spacer on the flywheel threads. Slide on as far as it will go, if needed tap on with a rubber or plastic mallet. It shouldn't take a lot of force to install. Make sure it's fully seated.



19. Remove Stator & Wire Cover plate

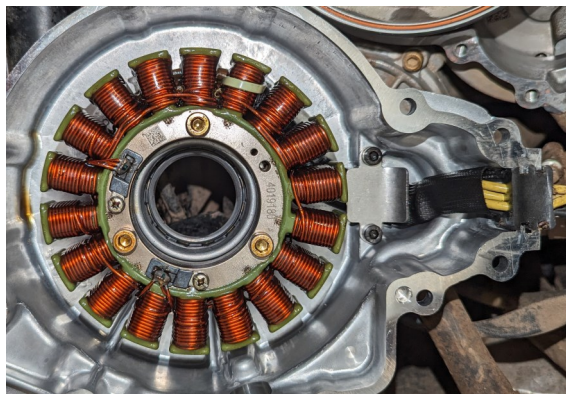




20. Install Stator and Wire Cover into the new DLP modified Stator Cover.

Wire Cover Fasteners—7 ft-lbs (10 Nm)

Voltage Regular Fasteners—8 ft-lbs (11 Nm)



21. Install new gasket (double check the Pin & Gear along with the Dowel Pins are in place. Also make sure the wire grommet is fully seated in the new stator cover

22. Install stator cover along with Hose Support Bracket. Torque all bolts to 9 ft-lbs (12Nm) except the two bolts for the Hose Support Bracket. Leave those loose for now.

23. Apply some motor oil to the crank seal and DLP Crank Pulley Shaft.

24. Install DLP Pulley. Make sure you feel it seat into the concentric spacer.

25. Install new crank bolt with the original washer you removed in step 17

26. Torque to 133 ft-lbs (180 Nm) It will be necessary to use a strap wrench to hold the flywheel or a block of wood to hold the clutch primary when torquing this bolt.

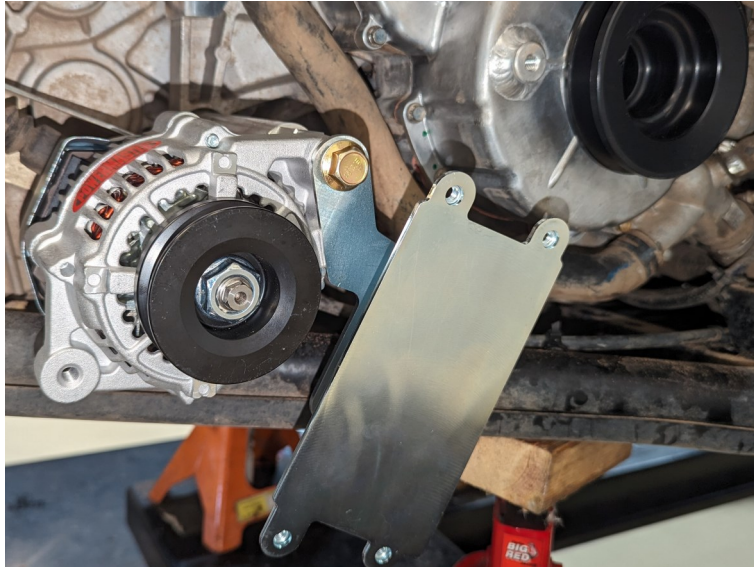
27. Install Alternator Tensioning Arm to upper standoff—Make this bolt snug so the arm doesn't move on its own, but not so tight it cannot move at all.

28. Torque the two bolts on the stator cover holding the DLP CPS-Coolant Hose Support Bracket to 9 ft-lbs (12Nm)

29. Attach hose clamp to DLP CPS-Coolant Hose Support Bracket using the supplied nyloc nut



- 30. Install Belt Air Duct / Inner Cover Fasteners—Torque to 7 ft-lbs (10Nm)
- 31. Install Clutch Secondary—Torque to 43 ft-lbs (58Nm)
- 32. Install belt
- 33. Install Clutch Cover—torque fasteners to 7 ft-lbs (10Nm) and apply Loctite 204 to bolt threads—pay attention to the gasket, this may have fallen out of its groove.
- 34. Install Clutch Air Duct
- 35. Install lower alternator bolt with Belt Guard Bracket—Do Not tighten

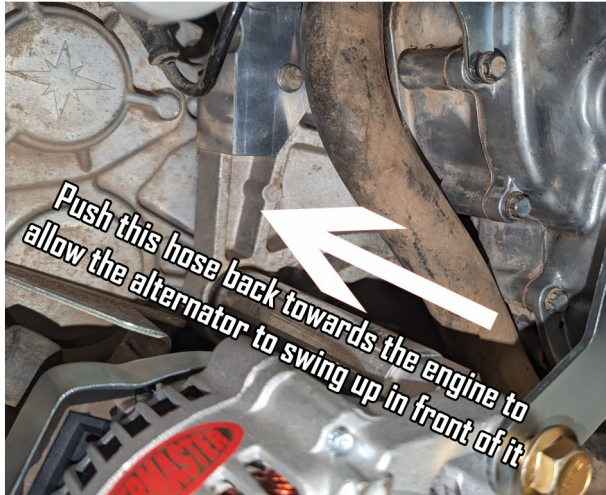


- 36. Attach Belt Guard Bracket to stator cover





37. Swing alternator up into position. It may be necessary to push the water line back towards the engine so the back of the alternator can be positioned in front of it. Once in place, install bolt to hold alternator to tensioning arm. Tighten just enough so the alternator stays in the “fully forward” position.



38. Install alternator belt over alternator pulley

Route the belt over the top of the crank pulley as far as it will go

Using a wrench on the crank bolt, rotate the crank pulley to walk the belt onto the pulley







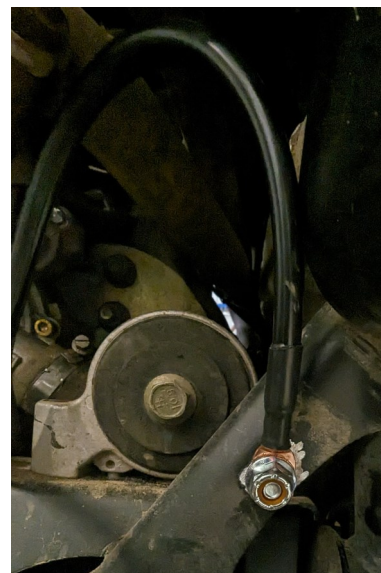
44. Install Red Electrical cable to the positive terminal on the alternator

45. For PowerMaster Alternator Only—Connect Black Electrical Cable to the ground post on the alternator

46. Route the cable along the bottom of the frame—secure with zip ties as needed



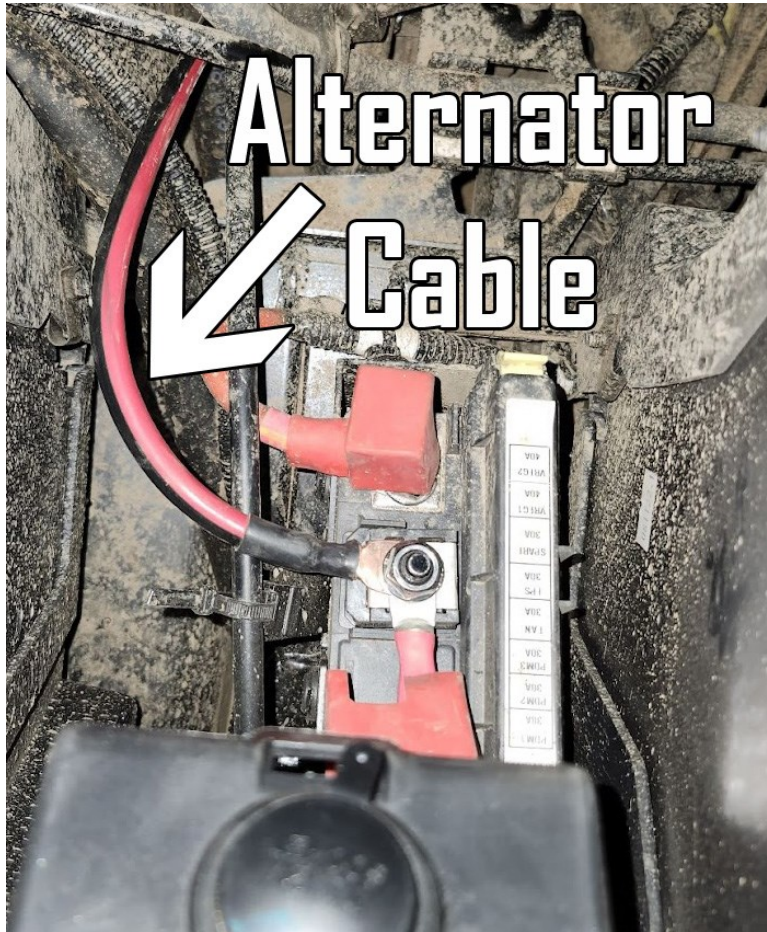
47. For PowerMaster Alternator Only—sand off some of the paint from the spot in the frame as seen in the photos below. Route the Black Cable to this location, secure with provided nut and bolt



48. Open Center Console, remove inner tray. You should see the two connections below



49. Route Red cable to the underside of the center console and secure as shown in the photo below



50. Check & top off oil (If necessary)

51. Double check all fasteners are properly torqued

52. Check wire routing for alternator, crank sensor and coolant lines. Use zip ties as needed to secure them

53. Reconnect battery

54. Start the engine and confirm charging