



Vegas Carts
& PERFORMANCE

Engine Preparation Guide

Predator 13hp (420cc)

Part 1 of 2

Revised 10/27/2022

Tools Needed:

- 14mm or 9/16" Wrenches (Open-End or Closed)
- 10mm, 12mm, 14mm Sockets & Ratchet
- Torque Wrench - 50ft.lb
- Screwdriver Set

1. Remove your engine from its packaging and set it on your workbench.



You will be removing the gas tank, air box, muffler, ignition box, and factory throttle bracketry. Use the pictures below as a guide. The bolts that need to be removed are circled in red.





WARNING
To prevent serious injury, damage, and fire:
1. Read manual before use. 2. Do not fill gas tank while engine running or hot, or if damaged. 3. Do not smoke while filling gas tank. 4. Do not overfill gas tank. 5. Do not use to power any vehicle. 6. Operation of this equipment may create sparks that can start fires around dry vegetation. A spark arrestor may be required. The operator should contact local fire agencies for laws or regulations relating to fire prevention requirements.

WARNING
To prevent serious injury and DEATH:
Only use OUTSIDE and far away from open windows, doors, and vents.
Using an engine indoors CAN KILL YOU IN MINUTES.









The pulse isolator that is provided with our kit allows you to power the vacuum fuel pump the same way that the factory engine does.

Installation is as simple as replacing the old with the new, however, you need to be mindful of the gaskets. Take extra care not to crush or rip your intake gaskets.

The carb will have to be temporarily removed to do this, we simply let it hang down with the linkage still connected.



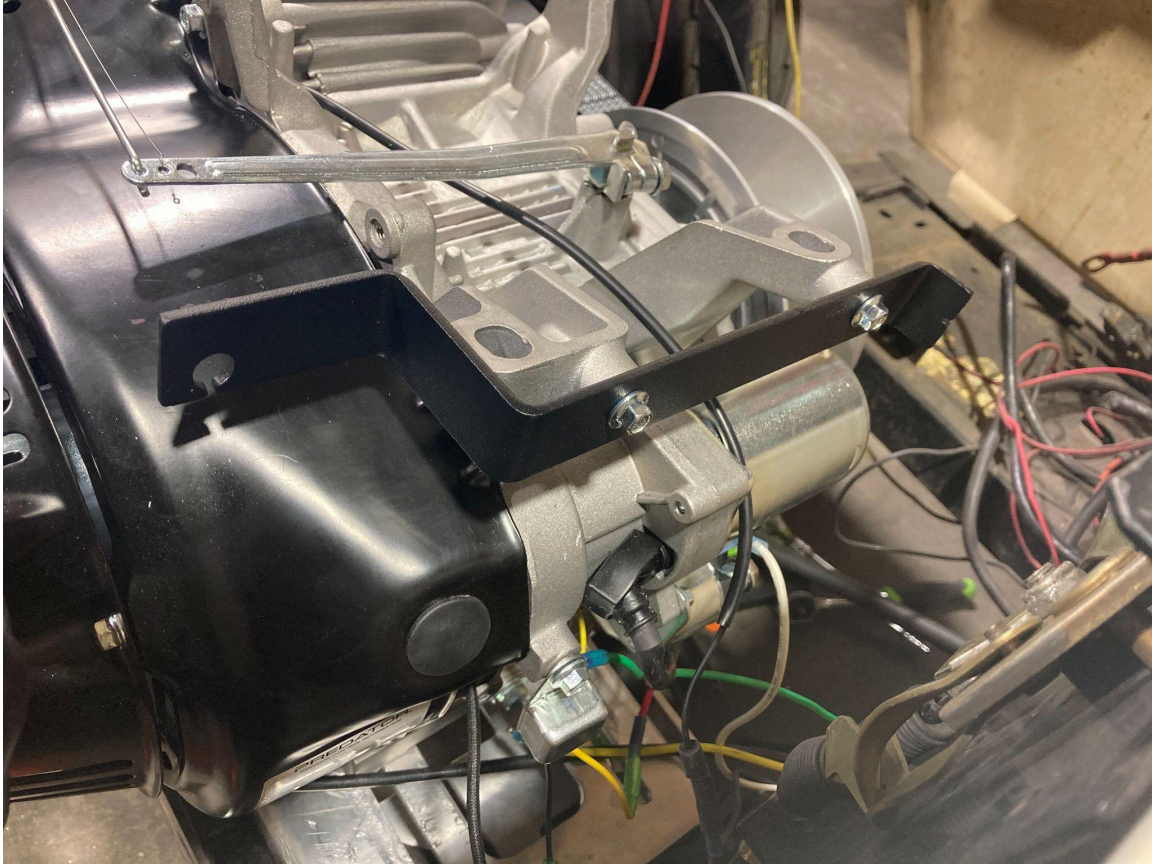
You will need to install the air filter adapter as shown below using the factory studs. It slides on the studs after the carb and gasket, use the lock nuts provided.



The air filter slides over the aluminum adapter and is held on with a hose clamp. Tighten the hose clamp until it is snug.

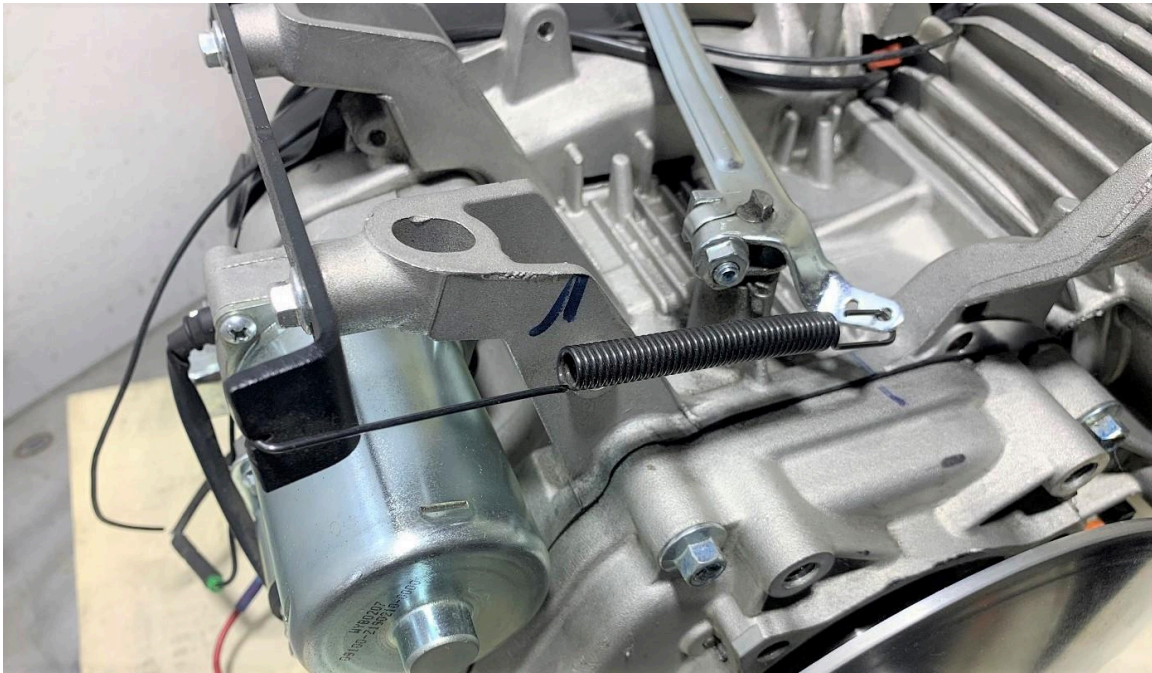


The throttle bracket bolts to the gas tank support posts as shown below using the factory hardware removed from your engine:



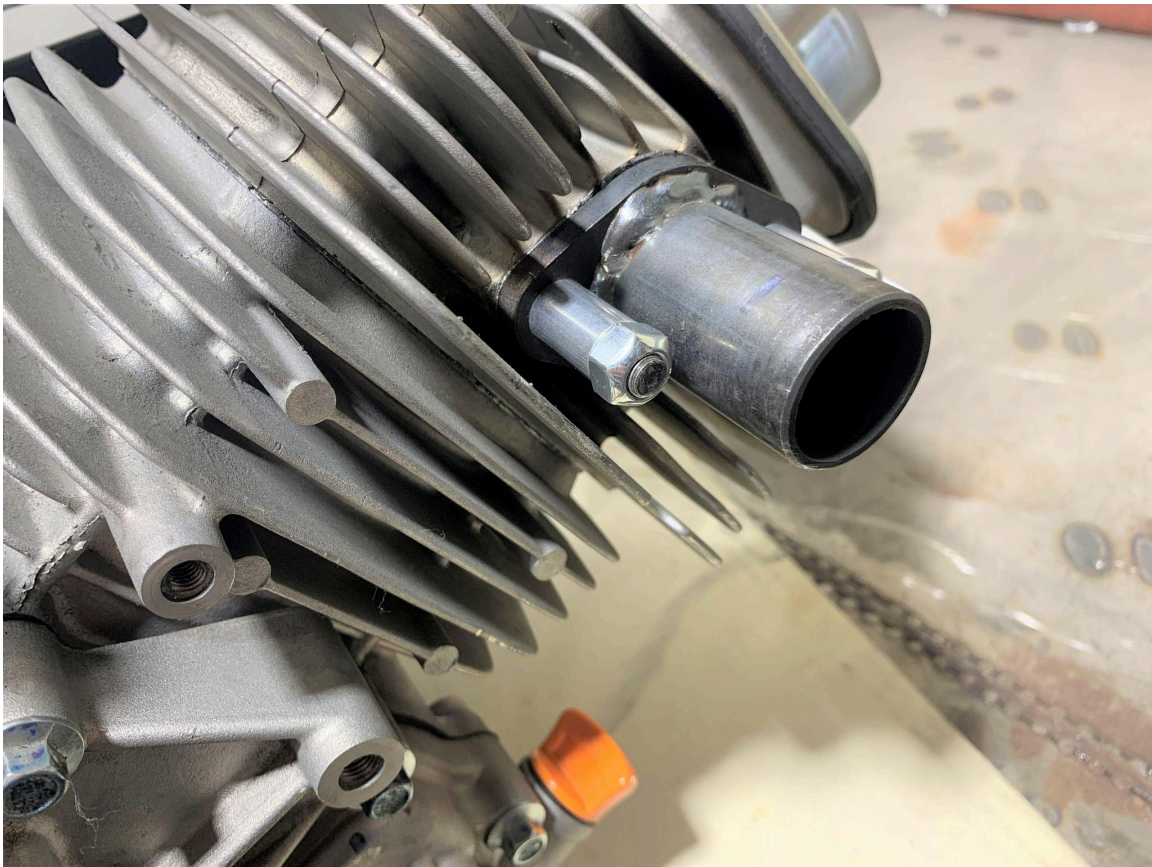
You will need to relocate the return spring so that it will pull the throttle arm back in the correct direction.

WARNING: FAILURE TO DO THIS PROPERLY COULD CAUSE YOUR ENGINE TO GO FULL THROTTLE ON STARTUP.



The exhaust stub will slide right onto the exhaust studs. Make sure to use the original gasket from the muffler that you removed earlier.

Install the provided ½” spacers and tighten the M8 locking exhaust nuts that came with the engine..



CLUTCH

It is recommended (but not required) to install the clutch onto the engine with the engine on the bench.

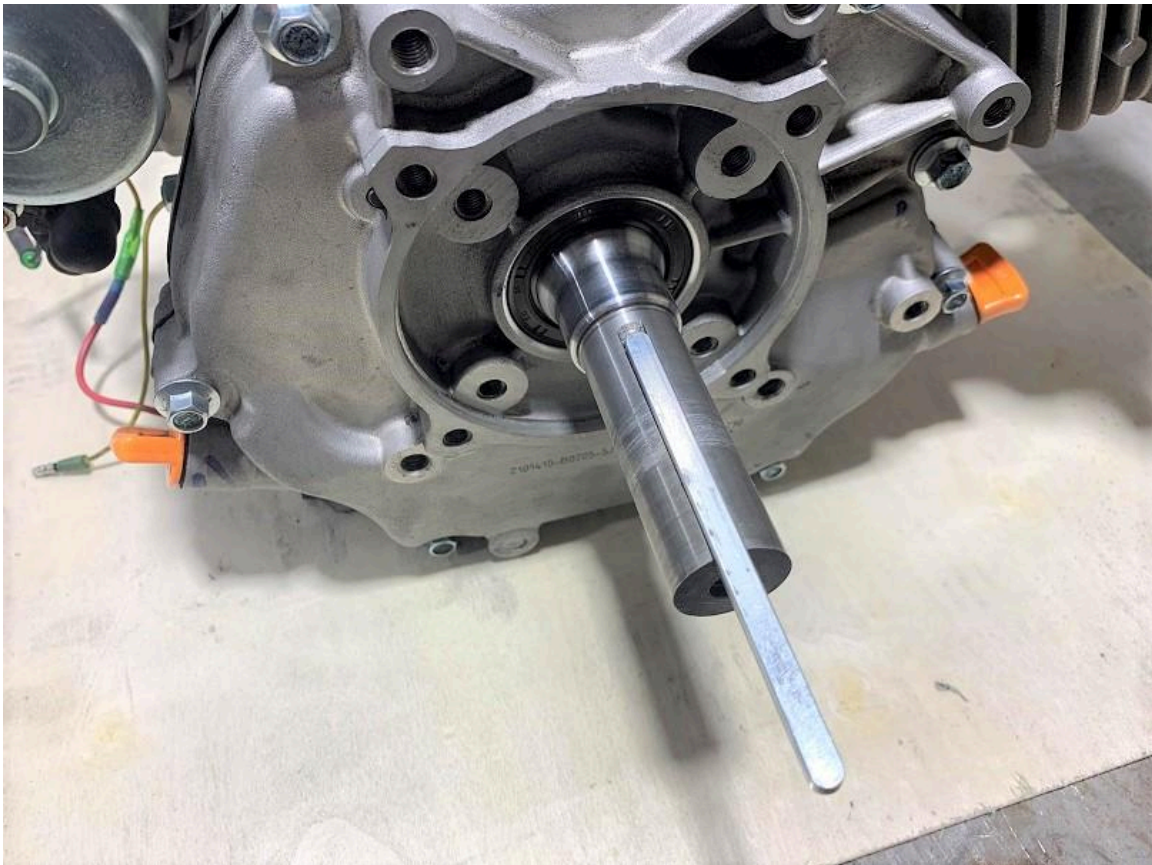
There are 2 clutch options:

1. If you added a clutch to your order (780R or CVTech 06) then continue on with the instructions on the next page.
2. If you DID NOT order a clutch, that is OK as the factory EZGO clutch is an excellent unit. The standard kit comes with a Tapered Shaft Adapter that allows you to use your tapered EZGO clutch with the 1" shaft that came on your engine. Ignore the instructions below and download our "Tapered Shaft Adapter" Instructions from our website.

Your kit came with a 4" x 1/4" x 3/16" key.

Due to the tolerance between the slot and the key, you may have to gently tap the key into the slot with a hammer or dead-blow.

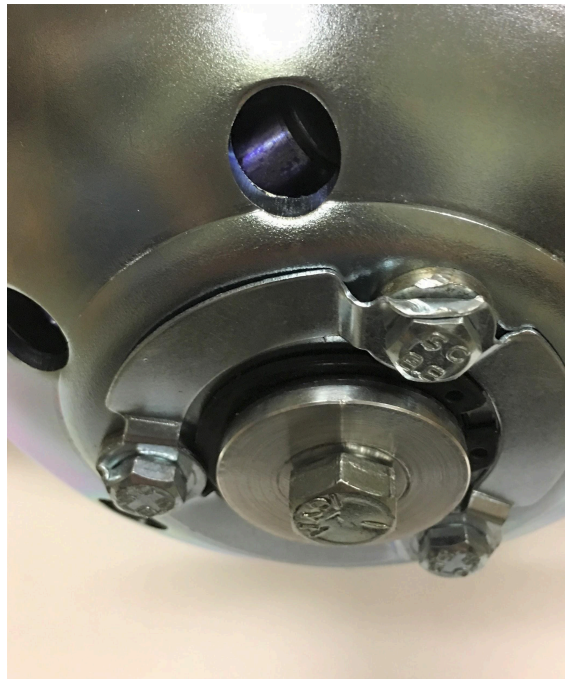
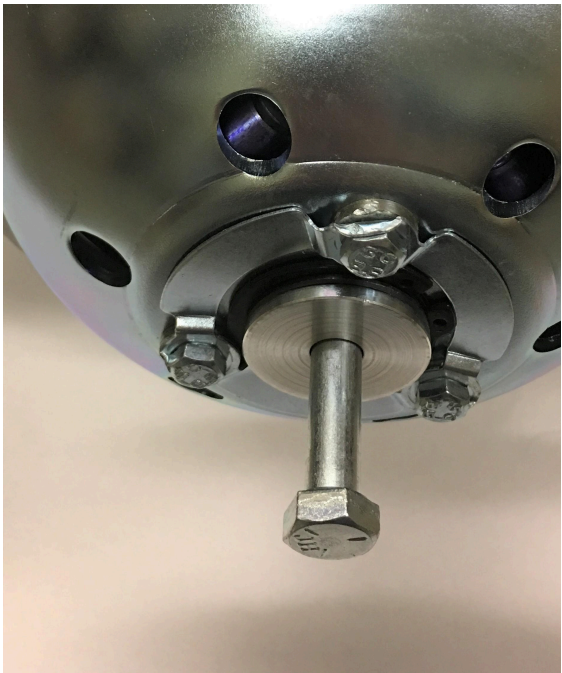
If you cannot get the key to fit, you can lightly sand or file one side of the key until it fits. Remember, we DO NOT want a loose fitting key!



Apply a light coat of Anti-Seize lubricant onto the crankshaft to make future removal of the clutch easier.

Slide your clutch onto the output shaft and secure the clutch using the provided aluminum step washer and the 3/8-24 bolt .

Apply blue loc-tite to the 3/8-24 x 3.5" clutch bolt threads and Torque to 40 ft-lbs.



You are now ready to proceed to part 2 of the instructions, you should have an engine that looks like this (clutch will differ):



PROCEED TO PART 2 ...