

GOKARTS USA®

GOKARTS MINIBIKES BUGGIES SCOOTERS ATVs PARTS

HPO High Performance Option Installation

rev 2.1

GokartsUSA.com

High Performance Option

- **Honda GX160/200/clone**
- **Titan TX200S**
- **Predator**

Superior Performance

GTC Industries

Titan TX200S Powersport 196cc Engine Based



with HPO kit installed

- **Mikuni 22MM Carburetor**
- **Mikuni Intake, Curved or Inverted**
- **Exhaust Header, Stinger or Fatty**

NOTE: If you are installing this engine on a minibike, this engine is 14" tall. Measure your minibike to make sure it will fit before ordering. If you are ordering this engine for use on one of our minibike kits, there may be an issue whereby the gas cap is difficult to remove. We recommend Tank Removal and installation of our 7" or 11" Cylindrical Gas Tanks with Engine Mount

TITAN TX200S STOCK

Front View



Rear View



Right View



Left View



Engine Specifications:

Model	TX200S
Engine type	4-stroke 25° inclined single cylinder
Bore×Stroke	68mm × 45mm
Displacement	196cc
Compression ratio	8.5/1
Horsepower	6.5HP/3600rpm
Max. Torque	13Nm/2500rpm
Ignition	Non-contact transistorized ignition(TCI)
Starter	Recoil hand-operated
Air cleaner	Semi-dry, oil bath, dual, double silent cyclone
Fuel tank capacity	3.6 L
Fuel Consumption	290g/HP-hour
Engine oil capacity	0.6 L
Dimensions	L:12-3/4", W:11.0", H:14-3/4" Crankshaft: 3/4" x 2-7/16"
Dry weight	35 lbs.

Deconstruction Instructions



Step 1

Unboxing the engine

1. Carefully open the box to take out the engine.
2. Take the engine out of the box and take off the cover.
3. Set your engine down on your work table.

Deconstruction of the air filter and carburetor:

Step one; carefully take off the gas tank with a SAE 5/16" or 8MM and SAE 3/8" or 10MM socket and a 3/8" ratchet (Standard American Edition). The gas tank is attached to engine with 3 bolts. The front 2 bolts require you to use the 3/8" socket and the rear bolt requires you to use the 5/16" socket. Lift up the gas tank and set it aside for now.

Step two; take off the wing nut on top of the air filter. Next lift up the air cleaner cover, then loosen the second wing nut and remove the foam filter. The last step is to remove the gasket and the grid cover.

Step 1 Diagram:



3/8 Socket



Lift up the gas tank and set it aside for now



Step 2 Diagram:



Step 3

Choke cover removal:

Step three; using the 3/8" socket and ratchet remove the fuel lever and choke lever cover. After the bolts have been loosened, move the fuel lever and choke lever all the left so that both of them are in the off position.

Use a 3/8" socket with a 3/8" ratchet



You will need to remove this bolt in order to take the cover



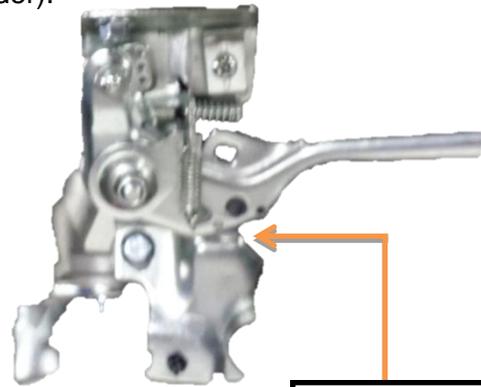
Fuel lever and choke cover

Stock carburetor

Step 4

Throttle-lever removal:

Step four; now it's time to take off the throttle lever arm. The lever is attached to the engine with 2 (5/16" bolts). Remove the spring and lift up the lever (make sure that you do not remove the governor or it will drop down into your engine cylinder).



Throttle lever arm

Step 5

Carburetor removal:

Step five; after the throttle lever has been removed, you can now remove the carburetor and set it aside for now. Now you see that there are two 4.5" bolts. To remove them use a pair of vice grips. Clamp down on the bolt with vice grip, make sure that the vice grip is clamped on the bolt at 1.5" in. Start applying pressure to remove the bolt. Repeat the same process on the other bolt



Pull forward upon the



Twist to the left

Installing the Mikuni Carburetor and

Exhaust Pipe:

Now that you have removed the exhaust and the carburetor, it is time to install the HPO kit on your engine.

Step 1

Installing the exhaust pipe:

Step one; attach your Stinger or Fatty exhaust to the engine block and start to tighten the 1.5" nut on to the exhaust. Stop tightening it when you feel the nut is snug on the bolt.



Step 2

Installing the exhaust pipe:

Step two; now it is time install your new Mikuni carburetor. First install the exhaust manifold to the intake. Use two 3/8" bolts to attach the manifold to the intake, tighten until you feel it is snug.

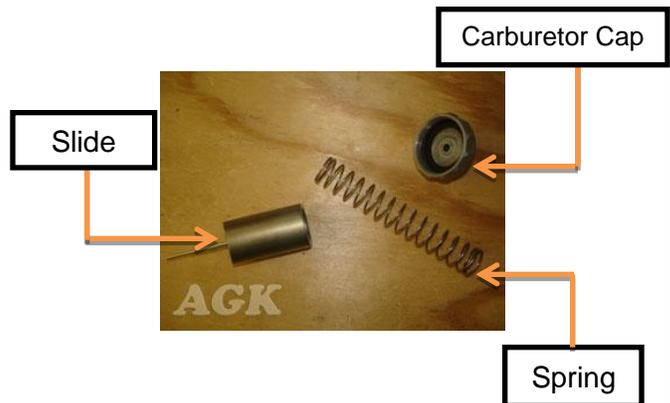
Step 2 Diagram:



Step 3

Installing the exhaust pipe

Step three; now it's time to install the throttle cable to your carburetor. To attach the throttle cable, make sure that the cable is already set place on your bike. Now unscrew the cap on the carb and take out the spring. Now that you have removed the cap and the spring you will be able to see the slide inside the carburetor. Reach in with your index finger and pull out the slide.



Now push the needle jet out threw the slide.

Notice that there are five notches at the top of the needle where the clip can be adjusted. You can adjust the clip by putting it on the desired setting. The bottom notch would be the richest air to fuel ratio and the top notch would be the leanest setting. But for the base line test adjust the clip to its center notch.

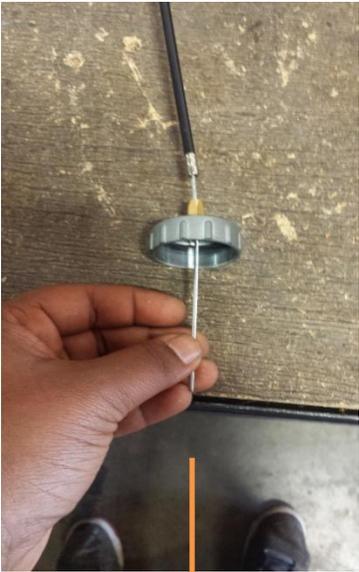


Needle Jet

Step 4

Finish building the carburetor:

Step four; now thread the throttle cable through the top of your cap and out through the slide. The slide will have an opening at the bottom. Once the cable is through the slide grab your wire stop and thread the cable through the wire stop and then adjust the tightness of the cable with the screw on top of the wire stop. Now it's time to thread the spring in threw your wire cable. To do this, take the end piece of the spring and open it slightly so that you can twist on the spring on to the cable.



Step 5

Installing the carburetor:

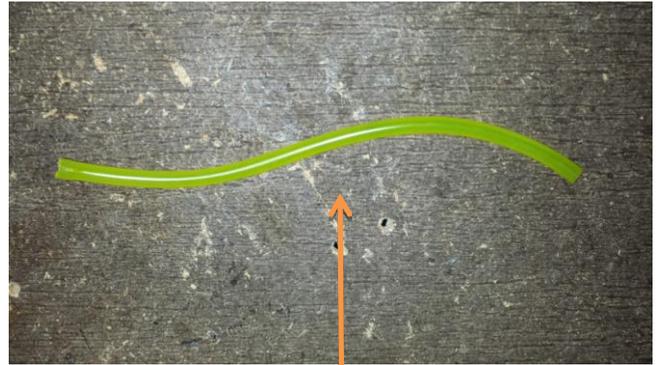
Step five; screw the carb back on to the carburetor. Now you can attach the carb to the manifold. You will need two 3/8" bolts and two 3/8" nuts. Now attach the air filter to carb with the hose clamp. Stop once you feel the hose clamp is snug on the carb.



Step 6

Installing the gas tank:

Step 6; now that you have attached the carburetor and the exhaust pipe, it's time to install the gas tank again. Cut the piece of fuel line to the correct length and attach it to the fuel tank with two hose clamps. Now you can finally install the fuel tank on to the engine. Bolt back the nuts to the engine.



Fuel Line



Congratulations you have successfully installed your HPO kit on to your TitanTX200S.