TTC FX5 XR Dune Buggy Assembly Start Guide

The Instructions are based on the older model and will differ from your new model. For example, there is no muffler bracket/cover for the new model.

If you have purchased this unit in the crate and are not mechanically competent to assemble or troubleshoot such machines, then it is highly recommended that you use the money you saved purchasing it in the crate to pay a mechanic to assemble and PDI the unit. Labor costs to assemble and troubleshoot are not covered under warranty.

The new models come with prefilled batteries. They will be 80% charged. It is recommended that you trickle charge the battery until it is full before first use. You can use the unit without the battery connected but the electric start, remote etc will not function. If not using your buggy regularly, please fully charge your battery, using a 12V 2-amp trickle charger, at regular intervals or keep on a battery maintainer.

The remote will be hooked under the dash.

Please make sure that you put the rubber spindle boots under on the lower end or the spindles before connecting to the lower a arm. The rubber boots may be located in a bag or place on the spindle shaft.

The long vacuum line that runs along the back of the frame behind the seat must be connected to the breather on top of the tank.

The fuel line, with the inline fuel filter, connects to the petcock under the tank.

Check oil. Uses 10W30 Regular engine oil. This engine is a replica Honda GX160 Engine. Many if the specs will be identical.

Check all nuts and bolts – During assembly and after first use.

Check and lube both chains. Use chain lube NOT WD40.

The choke is crucial to starting these models. Ensure that the choke is held all the way out when starting. There is an adjustment screw on the cable at the back where it connects to the engine.

If you have difficulty starting the unit you may have to remove the fuel line from the fuel filter to make sure that there is no vacuum lock. Make sure fuel is flowing freely through the fuel filter.

You may have to pull start the unit the first few times. Choke must be pulled out.

If you still have difficulty starting the unit you can remove the air filter cover housing and put a small amount of gas in the top. (Hole leading to the top of the carburetor). You can also remove the spark plug and put a small amount of fuel in the head.

Seat belts latches should be lubed after initial assembled. Spray some lube inside the latch. If not, the latch may not close or may become jammed. They should be cleaned and lubed frequently.

It is preferred that these units be stored in a heated location during winter. If stored outside, they **must be covered** for protection from snow and rain. When not in use it is recommended that you drain all the fuel out of the float bowl. Shut off the gas petcock and drain the float bowl by turning the screw at the bottom of the carburetor. If not stored in heated location, you should remove the battery and charge it periodically.

Things to Know about a 5.5hp Centrifugal Clutch

How does a clutch work?

- the clutch is an automatic transmission that is activated by the increased rpm of the engine.
- the clutch should not engage when the kart is at idle.
- the engine manufacturer sets the idle speed of an engine at the factory. The idle speed of the engine is normally around 1,650 rpm +/- 200 rpm.

Avoid Heat Damage

- by properly oiling your clutch you can avoid heat damage. When heat damage occurs, the clutch will never disengage, and the machine will start taking off by itself as soon as you start the engine. You can see heat damage inside the clutch drum, the metal turns from black to a blue color. The clutch must be replaced if it has heat damage and won't disengage. Heat damage is never covered by warranty.

Oil the Bushing:

- Oil the bushing that is in the sprocket at least every two (2) hours of driving time.
- You will have to oil the clutch even more often if you have small children, riding in a small area, never going fast enough to engage the clutch all the way. The clutch continues to generate heat until it engages.

How do I oil the clutch?

- Behind the snap ring, next to the sprocket teeth at the end of the clutch. There's an internal bronze bushing behind the snap ring that requires lubrication and it's up to you to put it there each time.
- with the engine off, squirt several drops of oil behind the snap ring while the bushing is warm.
- You can also oil the clutch before you ride, oil the clutch and give the oil a few minutes to penetrate down into the bushing, if you don't give the oil time to get down to the bushing, the oil will just fling off which is the same as not oiling it at all because the oil never reaches the bushing.
- Don't put oil inside the clutch. The holes on the drum are to let the hot air out of the clutch. DON'T SQUIRT OIL IN THESE HOLES! When oil gets in the drum portion of the clutch it will cause excessive slippage, which means undue heat will be generated.

What oil should I use?

- A good automotive oil like 10W30 or a straight 30 weight oil is perfect. It is a good idea to oil the chain at the same time. If the chain gets kinky from lack of oil it should be replaced before it damages the clutch sprocket. A new chain is cheaper than a new clutch.

Some of the driving habits that can ruin a clutch are:

- Driving too slowly. A clutch starts to engage around 2,000 rpm and will lock up around 2,600 rpm. Driving at full throttle gives the clutch a chance to cool down. Full throttle locks the shoes in the clutch against the drum. When the clutch is not locked up, the shoes slip against the drum causing tremendous heat which dries up the lubrication in the oil impregnated bushing. The tremendous amount of heat generated can also anneal the spring which is the heart of the clutch. If the shoes turn purple from excessive heat more than likely the clutch is ruined, and the spring no longer can pull back the shoes at idle.
- Short stop and go driving. The longer you drive at full throttle the better off it is for the clutch because it gives it a chance to cool off before the next engagement.
- Driving with the foot on the brake. This is a problem with new drivers that are unsure of themselves. When riding a go-kart for the first time, try to find an open area that has no obstacles that you

must maneuver around until you get use to the brake and gas pedals. The driver must first be able to build up his or her confidence on the kart before putting obstacles in their path. A small back yard is not a good place to learn to drive a go-kart. In my opinion, a minimum of ¾ of an acre is the yard needed for a go kart. Teach your child to drive with one foot on the pedal—be it the brake or the gas but not to press on both pedals at the same time. You either want to go or to stop but you cannot do them both at the same time.

- Changing the size of the tires. Putting on tires that are larger than what came with the kart will result in clutch problems. Tires exceeding 13" in diameter stress out a clutch if the kart is not properly geared for the larger tires. If you are driving on smooth flat terrain than you may be able to get by with 14" tires but once you get on hilly terrain, deep grass, then you are putting additional strain on the clutch, which will cause premature wear. Big tires look neat on a go-kart, but you create your own problem changing to a bigger tire when the clutch isn't designed to handle them.
- Weight. A centrifugal clutch is designed to be able to move a certain amount of weight. Once the weight limit is exceeded, then the life of the clutch will be shortened. A good rule of thumb is the kart and driver (and passenger when it is a two-seat kart) should not exceed 400 pounds. The kart weighs around 150 pounds add to this the driver (and passenger weight, if it is a two-seater kart). If you know ahead of time that you will exceed the 400 pounds then buy a torque converter go-kart and avoid the problems of burning up the clutch asking it to do more than it was designed for.

How a chain affects your clutch?

- All chains stretch over time.
- When the chain starts falling off the sprocket then it is time to move the engine forward or backward to take up the slack in the stretched chain.
- There are four bolts that hold the engine on the motor mount plate. Take an open-end wrench and a socket wrench (most likely a 9/16") and loosen the four bolts- pull back the engine until you take up the slop in the chain.
- Tighten the bolts back again but make sure the two sprockets are perfectly aligned with each other. You don't want the sprockets out of alignment because this will cause the chain to come off or wear the sprockets unevenly.
- Leave about a ½" of play between the top of the chain and the bottom—don't pull the engine back where the chain is a tight as you can get it. A tight chain can cause the kart to move in neutral with no one in the driver's seat.
- A tight chain puts friction on the bushing or roller bearing, which could cause it to engage when the engine is idling.

Educate the rider?

- Teach your child how to do the maintenance on the kart and accept responsibility for its upkeep. Every second tank of gas in the kart is about the interval for oiling the chain and the bushing.