

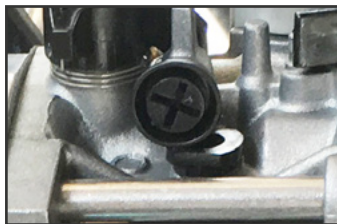
TX250 SUPERMAXX JETTING YOUR CARBURETTOR

JETTING YOUR CARBURETTOR FOR:

- BEST PERFORMANCE
- CORRECT ENGINE TEMPERATURE
(Cylinder head 210~220°C)
- INCREASED ENGINE LIFE

FROM THE FACTORY: The carburettor is supplied with **Main Jet 98 - Pilot Jet 42**. In many cases, this would be considered as a rich setting but is done to protect against running the engine too lean straight out of the box.

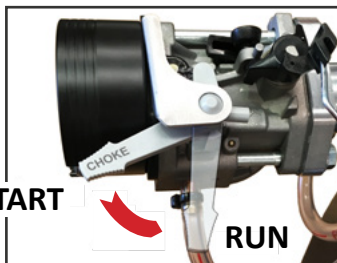
AS A STARTING POINT, in areas less than 300m above sea level and with temperatures above 20°C, we suggest starting with a 96 Main Jet and a larger 40 Pilot Jet.



ADJUSTING YOUR IDLE SPEED:

ENGINE IDLE SPEED - 2,000RPM

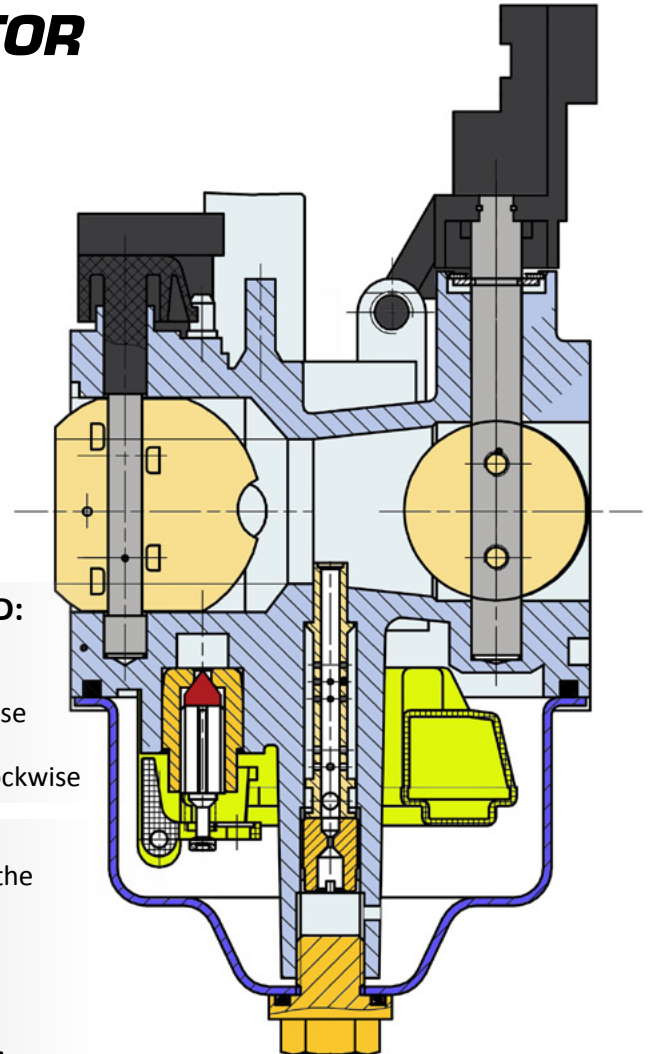
- **Increase Idle Speed:**
Using a screwdriver, turn clockwise
- **Decrease Idle Speed:**
Using a screwdriver, turn anti-clockwise



CHOKE LEVER:

The choke lever opens and closes the choke valve in the carburetor.

- **Move the choke lever into the START position for starting.**
- **After starting, slowly move the choke lever to the RUN position.**



The carburettor mixes fuel and air at a precise ratio, before it goes into the engine to be burnt.

When the fuel air mixture is correct, the engine performs at its best. However this precise fuel air ratio is affected by a number of outside influences, most significantly – altitude (air pressure) and temperature, but is also affected to a lesser degree by humidity.

The factory supplied jetting is a starting point only; for optimum performance you will need to read the spark plug and engine temperature under track conditions to determine the optimum jet sizing required.

Racing on tracks that are more than 300 meters above sea level, or in a different temperature range (+ - 10°C), requires that you re-jet your carburettor to compensate.

Going higher results in lower air pressure (lower air density). When racing at higher elevations your engine is getting less air, so it needs less fuel (a smaller jet) in order to maintain the correct fuel/air ratio. Under such conditions your horsepower will also go down, this is both unavoidable and universal for all competitors, you can figure on losing about 3% of your engine power for every 300m (1000 ft) of elevation.

Now if overnight it gets really COLD! You should also be thinking about re-jetting again! Cold air is dense air, and dense air requires more fuel (a bigger jet). The jet you won the race with yesterday afternoon (when it was hot), will be too lean now, you need a bigger jet to run properly when it's cold. Air temperature makes that much difference! If the temperature is just 10 degrees colder than it was when last you raced, then you risk damaging the engine by running too lean, if you don't change to a larger main jet.

The Main Jet; is the most critical for ensuring full power operation, correct engine temperature and thereby a long engine life.

The Pilot jet and the low-speed idle mixture screw; work together, the pilot jet controls the amount of fuel available and the low-speed idle mixture screw allows you to precisely control the idle mixture being allowed into the engine at idle.

To recap a bigger main jet has a bigger hole in it, which lets more fuel into the engine making it richer! Straight forward enough, but the main jet is also absolutely CRITICAL to high-speed engine operation in another way. Not only does it meter the amount of fuel going into the engine, it also controls the running temperature of the engine as well. If you run too lean the engine will overheat causing damage.

A correctly sized main jet will let the engine make good power for a long time without overheating. The problem is that a main jet just 1 size too small may make greater power, but the engine life will suffer as the operating temperature becomes extreme. A slightly rich mixture burns cooler than a lean one, so be sure the main jet is big enough.

MAIN JET SIZES:
91, 92, 93, 94, 95,
96, 97, 98, 99, 100

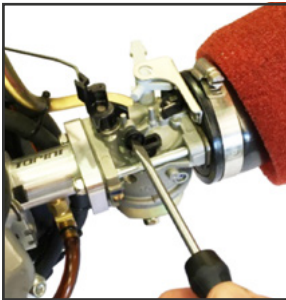


PILOT JET SIZES:
40, 41, 43

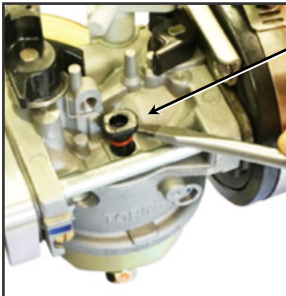


JET REMOVAL:

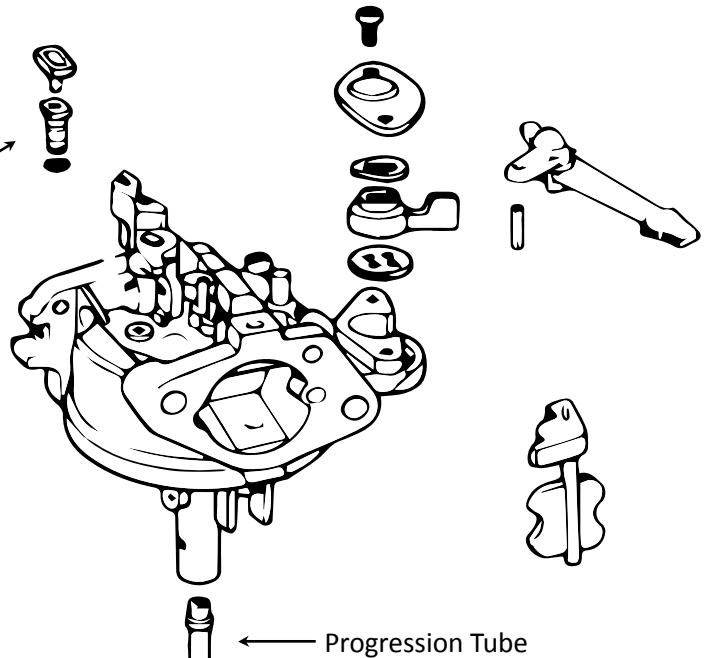
PILOT JET



1 Take out the Idle Speed screw



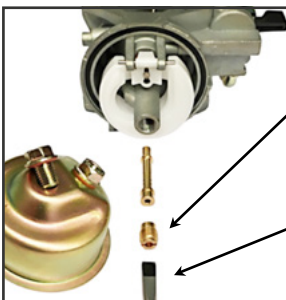
2 Lever the Pilot Jet up gently



MAIN JET

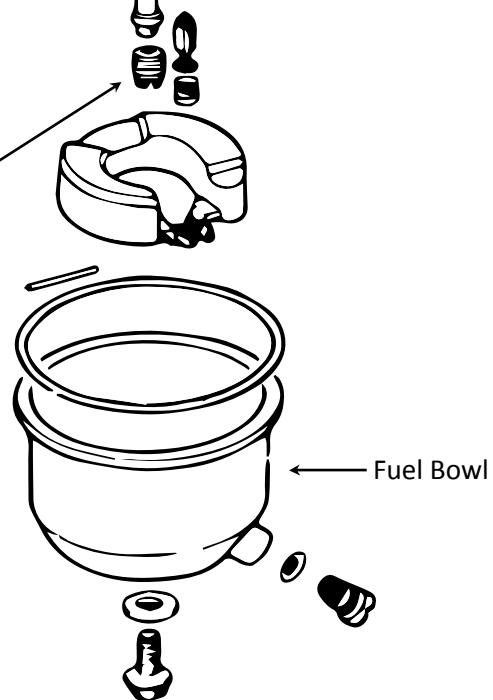


1 Take out the centre fuel bowl bolt (10mm) - and remove the fuel bowl



2 Undo the Main Jet

Use a flat blade screw driver
Be careful not to drop the progression tube (it may fall out of the body) once the Main Jet is removed.



READING THE SPARK PLUG FOR AIR FUEL MIXTURE:

To obtain an accurate plug reading, run the engine on track for at least 20 minutes, as a new plug will not colour immediately. A spark plug can only be read correctly, if the engine is shut down immediately after entering the pit lane area; do not allow the engine to idle.

What does a spark plug look like for different mixture conditions?



RICH <<< << << <<<<<<<< >>>>>>>> >>>>>>>> **LEAN**

SAFE

ENGINE DAMAGE

RICH = Sooty, Black in colour

OPTIMAL = Light Grey / tan in colour

LEAN = Extreme white with aluminium specs

The area you are interested in, is known as the **Fuel Ring**



TOPINI
SUPERMAXX