

Battery Installation

1. Place the fully charged battery in its holder.
2. Attach the hold-down strap(s).
3. Connect and tighten the red positive (+) cable first.
4. Connect and tighten the black negative (-) cable last.
5. Torque the battery terminal bolts to 3.5 ft. lbs. (4.7 Nm)
6. Verify that the cables are properly routed.

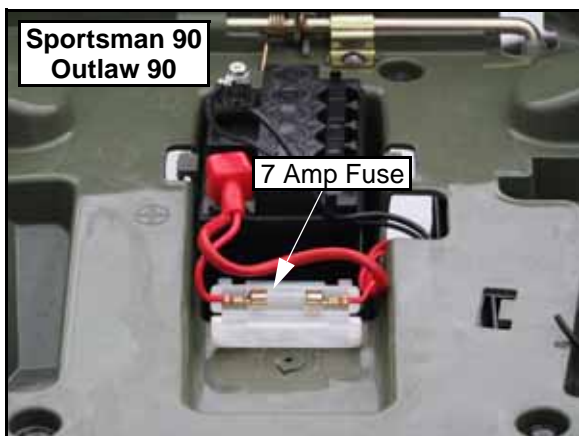
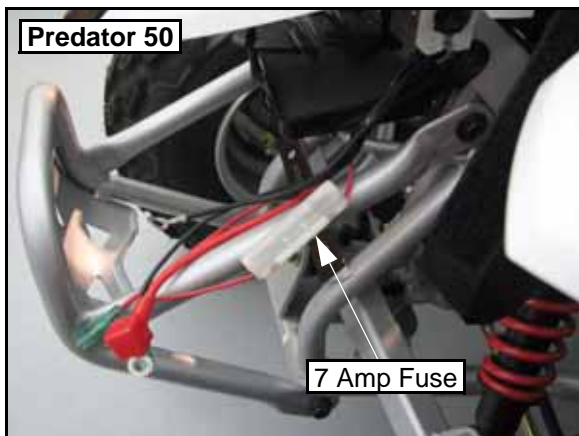
NOTE: When installing a new battery, make sure it's fully charged prior to its initial use. Using a new battery that has not been fully charged can damage the battery and result in a shorter life. It can also hinder vehicle performance. If charging is necessary, use a .5 amp battery charger.

Battery Storage

Whenever the vehicle is not used for a period of three months or more, remove the battery from the vehicle, ensure that it's fully charged, and store it out of the sun in a cool, dry place. Check battery voltage each month during storage and recharge as needed to maintain a full charge.

Fuses / Fuse Holder Location

A 7 Amp fuse protects the main electrical system on all youth models. See illustrations for fuse locations.

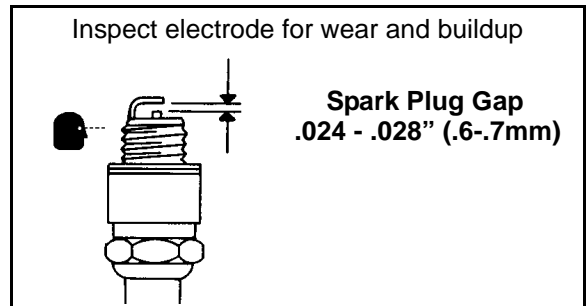


Spark Plug Inspection

1. Remove spark plug high tension lead. Clean plug area so no dirt and debris can fall into engine when plug is removed.



2. Remove spark plug.
3. Inspect electrodes for wear and carbon buildup. Look for a sharp outer edge with no rounding or erosion of the electrodes.



4. Clean with electrical contact cleaner or a glass bead spark plug cleaner only. **CAUTION:** A wire brush or coated abrasive should not be used.
5. Measure gap with a wire gauge. Refer to specifications for proper spark plug type and gap. Adjust gap if necessary by bending the side electrode carefully.
6. If necessary, replace spark plug with proper type. **CAUTION:** Severe engine damage may occur if the incorrect spark plug is used.

Recommended Spark Plug:
NGK CR6HSA

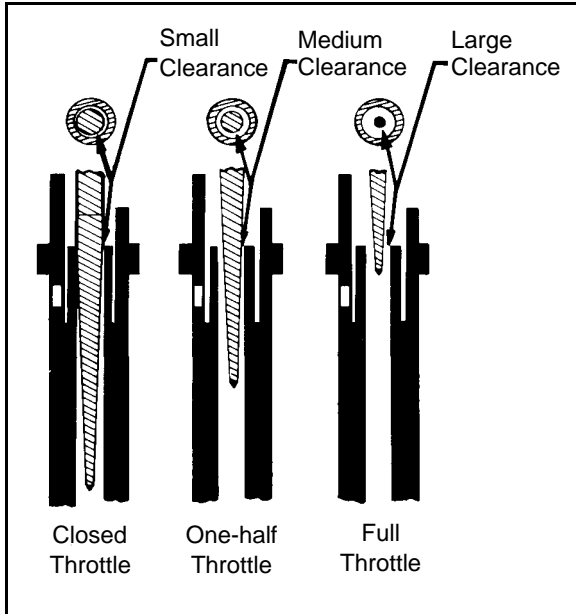
Spark Plug Torque:
9 ft. lbs. (12 Nm)

7. Apply a small amount of anti-seize compound to the spark plug threads.
8. Install spark plug and torque to **9 ft. lbs (12 Nm)**.

FUEL SYSTEM

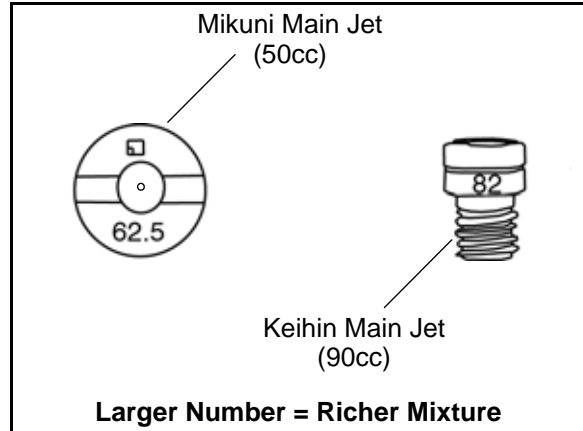
Throttle Opening vs. Fuel Flow

In a full throttle condition the cross sectioned area between the jet needle and the needle jet is larger than the cross sectioned area of the main jet. The main jet therefore has greater control over fuel flow.



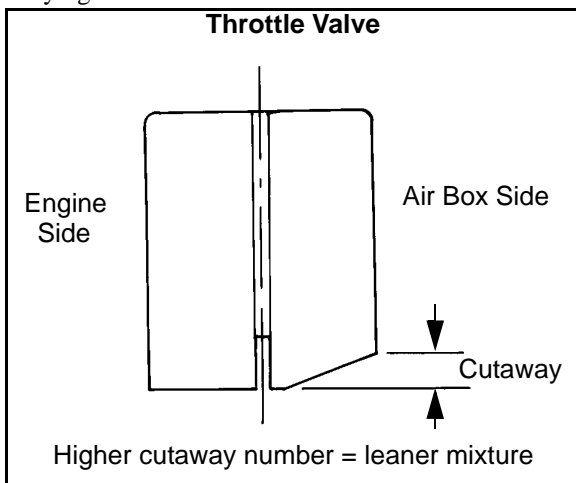
Main Jet

When the throttle opening becomes greater and the area between the needle jet and jet needle increases, fuel flow is metered by the main jet. The number on the jet indicates the amount of fuel CCs which will pass through it in one minute under controlled conditions. Larger numbers give a greater flow, resulting in a richer mixture.



Throttle slide

The throttle slide controls the rate of engine air intake by moving up and down inside the main bore. At small throttle openings, air flow control is performed chiefly by the cutaway. By controlling air flow the negative pressure over the needle jet is regulated, in turn varying the fuel flow.



Throttle valves are numbered 1.0, 1.5, 2.0, etc., according to the size of the cutaway. The higher the number, the leaner the gasoline/air mixture.