

Special Tuning Conditions

There are some unique atmospheric conditions or situations that may require additional adjustments.

It should not be necessary to go more than one jet size richer or leaner to fine tune your CRF. If larger jetting changes are necessary, check for air leaks, blocked or restricted exhaust or fuel systems, or a dirty air cleaner.

Condition	Main Jet Adjustment
long straights	next larger
uphill sections	
sand	
mud	
high humidity	next smaller
raining	
hotter than 113 °F (45 °C)	

Once you've adjusted the carburetor for temperature and altitude, it shouldn't need major readjustment unless race conditions change drastically. However, there are some unique atmospheric conditions or race day situations that may require additional adjustments. They are as follows.

To prevent engine damage, always adjust the main jet before adjusting the jet needle. Always choose the next richer jet if there is any doubt so there is a margin for safety.

- Main Jet**
- Go richer on the main jet by one size when: the track has a very long straightaway or uphill section, a high percentage of sand, or the track is muddy.
 - Go leaner on the main jet by one size when: it is very humid or raining, or it is hotter than 113°F (45°C).

After using the chart, and making any adjustments for special conditions, it shouldn't be necessary to go more than one jet size richer or leaner to fine tune your CRF. If larger jetting changes are necessary, check for worn crankshaft seals, air leaks, blocked or restricted exhaust or fuel systems, or a dirty air cleaner.

Pre-Adjustment Checks

Before adjusting carburetor settings, check the following:

- air cleaner
- air leaks
- float level
- clogged carburetor jets
- spark plug fouling (improper heat range or other cause)
- freshness of fuel
- owner modifications (such as exhaust system, holes in the air cleaner housing, etc.)
- ignition timing
- compression

If the above check out, adjust the carburetor for your specific racing conditions. Engine response and appearance of the firing end of a spark plug are highly indicative of the engine condition.

Refer to the list on [page 143](#) for the optional carburetor parts.

To prevent engine damage, always adjust the main jet before adjusting the jet needle. If there is any doubt — always choose the next richer jet so there is a margin for safety.