



## QUICK FUEL TECHNOLOGY® SSR CARBURETORS



Thank You for your purchase of a Quick Fuel SSR Carburetor. The SSR Carburetor is an NHRA legal replacement for various Holley® modular 4150 or 4160 vacuum and or mechanical secondary carburetors. If you have any questions regarding the proper dimensions allowed for your combination please consult the NHRA Accepted Products List: <http://promod.nhra.com/userfiles/file/NHRAAcceptedProducts.pdf>

The SSR Carburetors have tuning features you should be aware of. The power valve channel restrictions, idle feed restrictions and air bleeds are changeable. The secondary mixture screws are pre-set, but they are accessible for tuning. **The lead balls supplied in the box must be in the metering blocks covering the secondary mixture screws when in competition to be legal.** We have enclosed four lead balls, use two of them to cover the secondary mixture screws, keep the extra two in case you need to remove them in the future and readjust.

**BE SURE TO INSTALL THE LEAD BALLS OVER THE SECONDARY MIXTURE SCREWS BEFORE COMPETING AT NHRA EVENTS.**

### Installation Instructions:

Please stop and read these instructions before proceeding. If you do not fully understand the installation and tuning instructions you should seek professional help. Failure to follow the proper installation and tuning may result in damage or injury.

Quick Fuel Technology would like to congratulate and thank you for purchasing this carburetor. We feel you have purchased the finest street performance carburetor currently on the market. If you need assistance please call the QFT Tech Support staff via phone Monday through Friday from 8AM to 6PM CST, and Saturday from 9AM to 3PM CST @ 270 781-9741.

This QFT™ carburetor has been run on an engine to ensure all components are functional. The calibration should be very close for all adjustments. Different engine combinations could require adjustment of idle mixture, idle speed, and main jets. The fuel level was set with 6 ½ lbs. of fuel pressure. **The recommended fuel pressure for this carburetor is 6 ½ PSI.**

**NOTE:** This QFT™ carburetor has not been submitted for emission testing, therefore it is not C.A.R.B. (California Air Resources Board) legal in all 50 states - please check with local authorities regarding the use of this carburetor.

**WARNING:** There are several manufacturers that produce quality components to facilitate the use of kick-down on the QFT Carburetors with an overdrive transmission. Please ensure you have the proper hardware before using this carburetor and that it is installed per the manufacturer's specifications.

### Removal of Old Carburetor:

1. Disconnect negative battery terminal to prevent any accidental arcing in the presence of fuel.
2. Remove air cleaner, PCV hose and any other vacuum lines connected to the carburetor.
3. Remove fuel line(s)...be careful not to twist fuel line(s) when removing fuel inlet fitting(s), use penetrating oil or similar chemical to assist in breaking the fuel inlet fitting nut loose. Protect the open ends of the fuel lines, so no foreign particles can enter.

4. Disconnect electric choke wires if equipped.
5. Disconnect all linkage and return springs.
6. Remove the 4 hold down nuts and washers (if used).
7. Remove carburetor from intake manifold.
8. Cover intake manifold carburetor flange with a clean rag or towel to prevent any foreign objects from falling into the engine.

## Installation of New Carburetor:

1. Set old carburetor and new carburetor side-by-side on work bench.
2. Examine linkage connection (throttle cable [rod] and kick-down cable [if applicable]) transfer to new carburetor in same location if possible.
3. Install flange gasket over intake manifold studs on intake manifold, then install your new carburetor. Install throttle cable bracket on driver's side rear stud if applicable.
4. Install hold down nuts and washers (if used), finger-tighten in a criss-cross pattern, but **DO NOT TIGHTEN HOLD DOWN NUTS COMPLETELY.**
5. Attach throttle and kick-down linkage then operate from inside the vehicle to be certain there is no interference of throttle plates, throttle linkage, accelerator pump arms or fast idle cam lever.
6. **\*\*If there is no interference or resistance in throttle operation then you can tighten the hold down nuts to their final torque value, 100 Inch Lbs. (8 Ft. Lbs.). Most intake manifold studs are fine thread and therefore must be tightened in a criss-cross pattern and in a number of steps before arriving at the final torque value. Rapidly tightening the hold down nuts to the final torque spec or over-tightening will cause performance problems as this process can warp or potentially break the throttle body.**
7. Install fuel inlet fittings **DO NOT USE PTFE TAPE ON INVERTED FLARE FUEL INLET FITTINGS.** Clean threads and flare of any dirt and debris before installation. Check to be certain the fuel inlet fittings in the fuel bowl are tight, then install the fuel line nuts. Tighten sufficiently to prevent fuel leakage.

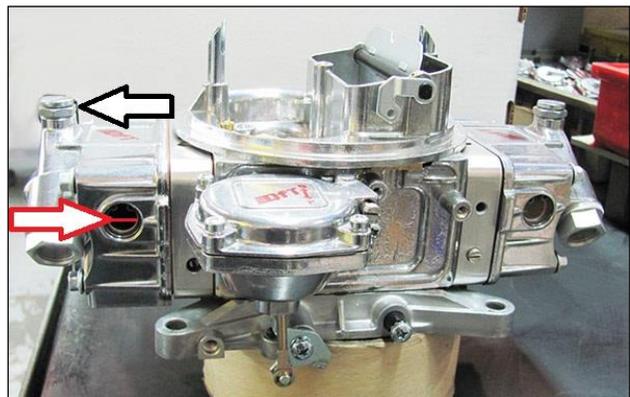
## Starting the Engine:

1. Reattach the negative battery cable, you are now ready to start the engine.
2. Before attempting to start; the fuel bowls need to be filled with fuel. Whether you have an electric fuel pump or a mechanical pump, it is necessary to operate the fuel pump for 15 seconds or so, a couple of 10 second cranks for mechanical pumps, to enable the bowls to fill with fuel.
3. Before starting the engine make an initial check of the float level. This carburetor was pre-set at the factory to be in the middle of the sight glass at 6.5 P.S.I. **RED ARROW** - If the initial float level is not visible in the sight-glass then it might be necessary to re-adjust the float level before starting the engine.

Fuel pressure greater than 6.5 P.S.I. will cause the float level to be too high.

Fuel pressure below 6.5 P.S.I. will cause the float level to be too low.

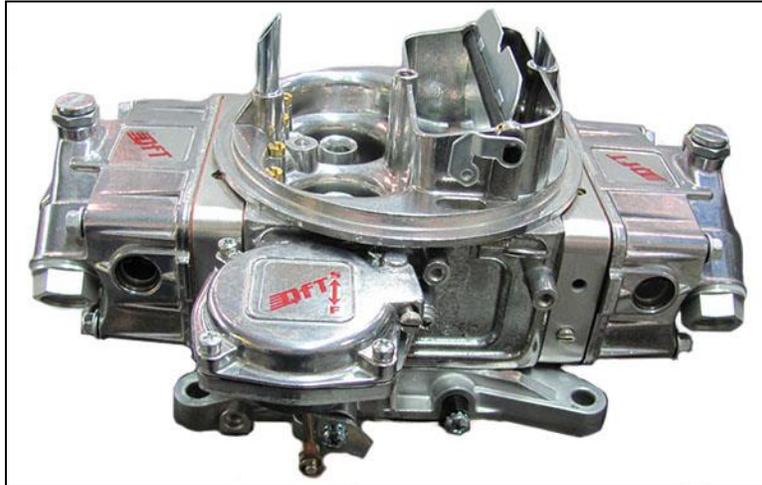
For the carburetor to operate correctly the float levels must be in the middle of the sight glass. The most accurate way to establish the correct float level is to check it while the engine is running. If adjustment is necessary, the engine should be off for adjustment. **BLACK ARROW** - raise or lower float with a 5/8" wrench, (the screw is the lock and the 5/8" hex is the adjustment.) Clockwise lowers the fuel level, counter-clockwise raises the fuel level.



**NOTE:** After starting the engine, check the fuel lines and inlet fittings for possible fuel leaks. If detected, shut off engine immediately and wipe any fuel. Locate the source of the leak and correct before going any further.

4. With the float level verified and correct, rotate the throttle to wide open twice. The accelerator pump nozzles should discharge fuel. You can now start the engine.
5. It should not be necessary to continue operating the throttle while attempting to start the engine. If it does not start on the first attempt, rotate the throttle a couple of additional times, then try starting the engine again.
6. If the engine still will not start, try holding the throttle open slightly while starting in the event too much fuel entered the engine while operating the throttle or the idle speed might be too low for your application.
7. If possible using a manifold vacuum gage, set the idle mixture screws to attain the highest manifold vacuum reading at idle. It is not necessary to keep all four mixture screws at exactly the same number of turns from seated, but they should be close to the same number of turns. Make adjustments in small increments of  $\frac{1}{4}$  turn per adjustment. See how the engine responds then adjust the mixture screws to smooth out the idle. Turning in one mixture screw could not have any noticeable effect, if the other three mixture screws are out too far. The mixture screws should be adjusted in conjunction with each other to achieve the proper mixture. If the engine's RPM increases during the adjustment process, adjust it back down to the desired rpm by lowering the curb idle screw and continue mixture screw adjustment until the engine RPM or vacuum drops. When the engine RPM or vacuum drop, the idle mixture is too lean and the mixture screws will need to be backed out to the highest vacuum or RPM.
8. Turning the mixture screws in (clockwise) leans the mixture, turning the mixture screws out (counter-clockwise) richens the mixture.
9. After you have attained the highest manifold vacuum (or best idle quality), with an automatic transmission apply the brake then shift the transmission into gear. This will create a load on the engine and may change the idle characteristics. With performance camshafts with longer duration it is often necessary to add a little more fuel because the engine is not as efficient and therefore must be over fueled slightly to keep the engine from laboring when a load is placed on the engine such as shifting the transmission into gear. You are now ready to drive the vehicle. It may require some minor adjustments with the mixture screws and idle speed but the engine should drive smoothly and have good throttle response.
10. Once you are satisfied with the general drivability then take the car out on the highway to determine how well the engine runs while holding a steady RPM. Generally any RPM above 2,000 RPM the carburetor is operating off the main metering system. The air fuel ratio in this system is usually controlled by the main metering jets. If the engine surges while driving at a steady RPM on flat ground then the mixture is probably too lean and the main jets need to be increased in size. If the engine labors and has difficulty holding a steady speed without opening the throttle more, then the mixture is probably too rich. Ultimately, you should look at the spark plug color after 75 to 100 miles to help determine the general air/fuel mixture the carburetor is delivering and the engine is operating. White plug color indicates a lean mixture, dark gray or black indicates a rich mixture.

This carburetor has been calibrated to operate on a broad cross-section of engine combinations. While it is not possible for a single calibration to work virtually every conceivable application it should work on most engines and it will not be necessary to make any additional adjustments and/or tuning. Should it be necessary to alter the fuel curve in our SSR Series there is plenty of tuning capability available with changeable air bleeds, power valve channel restrictions, and idle feed restrictions.



These SSR Race series carbs have been used successfully in various classes and categories. Built with the same dimensions and specs of the original counterparts and guidelines set by the NHRA rulebook. They have a choke plate with no choke mechanism.

See Applicable Notes for each class at  
<http://promod.nhra.com/userfiles/file/NHRAAcceptedProducts.pdf>.

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