

INSTRUCTIONS

915-11655

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Installation and Tuning Instructions

**PLEASE READ INSTRUCTIONS COMPLETELY
BEFORE BEGINNING INSTALLATION.**

Please read instructions completely before beginning installation. These instructions are written in generic form, not for a particular year, make, or model of vehicle. If your application has components which are not covered in this instruction sheet, we recommend that you refer to a service manual for your specific vehicle model. If you do not fully understand these instructions we recommend that you have the carb installed by a professional mechanic. Failure to follow these instructions could result in poor vehicle performance, vehicle damage, or may void your warranty. The 9Super7™ carburetor is designed to use Stromberg 97 type rebuild kits and replacement parts such as floats, jets, power valves and air cleaners.



WARNING: Gasoline and gasoline vapors are extremely flammable. Do not begin installation of carburetor unless engine has cooled down to room temperature. Work only in a well ventilated area to prevent a buildup of dangerous vapors. Do not smoke; use an open flame, nor any tools that could produce sparks in the presence of gasoline or gasoline vapors. Failure to observe these warnings could cause a fire or explosion, resulting in property damage, serious injury, or death.

NOTE: Prior to installing your new carb verify that all of the vehicles mechanical and electrical systems are serviceable. Replace any worn or damaged hardware. Vacuum leaks at the intake gaskets, burned or damaged plug wires, worn spark plugs, and a worn or improperly adjusted distributor will cause poor performance and other drivability problems often blamed on the carburetor. Make sure that all of these systems are in good working order before proceeding with carb replacement. **TODAY'S FUELS MUST FILTER BIG TIME!!**

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FUEL PRESSURE SHOULD BE MEASURED AT THE CARB OR CARBS!

- 1) Remove new carb from package and check for damaged or missing parts. Compare replacement carb to original carb to verify its compatibility.
- 2) Disconnect battery before performing maintenance on the vehicle fuel system.
- 3) Remove air cleaner and disconnect throttle, choke, and hand throttle if so equipped.

Picture 1.



- 4) Disconnect fuel line. Use a shop towel or catch can to eliminate fuel spills.
- 5) Un-bolt carb from manifold. Remove all traces of old gasket from flange of manifold. **Picture 2.**
- 6) Replace any bent or damaged studs, install new gasket (provided) over studs.



- 7) Place carb on top of gasket, using caution to align studs. Install washers and nuts onto studs and torque to 15 ft lbs in an alternating progressive manor. **Do not overtighten! Picture 3.**

ALWAYS USE A FUEL BLOCK OR LOG FOR TWO OR MORE CARBS.



- 8) Re-connect throttle, choke and fuel line. Operate throttle to Wide Open Throttle position and return to idle. Check the linkage for interference, sticking, or binding. Correct any noted deficiencies before proceeding.
- 9) Disconnect coil wire from distributor cap and ground to engine block. Crank engine over several revolutions to pressurize the fuel system and prime the carb bowl (or, switch on electric fuel pump, if so equipped). Closely inspect fuel line connection for leaks, look into throat of carb to check for any evidence of flooding.

CAUTION: Verify that the transmission is in neutral, and the park brake is set or wheels chocked to keep vehicle from moving when engine is started.

- 10) Re-connect coil wire and start engine. Watch closely for fuel leaks or signs of flooding when engine is first started. Stop engine immediately if any discrepancies are noted. If flooding is apparent, disconnect fuel line and remove inlet fitting from the carb. Inspect for foreign material or dirt lodged in fuel inlet needle and seat. Clean as required with compressed air. Re-install inlet fitting, connect fuel line, and start engine again.

NOTE: Any time that the fuel inlet has been removed from the carb body the float level must be checked and / or reset. Review adjustment procedures in step # 14 of these instructions. The fuel inlet fitting on the 9Super7 carb is designed to accept 1/2"x20 bubble flare fitting and 5/16" fuel line. Original applications using the stock 1/4" fuel line should be replaced with 5/16" or 3/8" fuel line to provide suitable fuel flow without increasing the fuel pressure. Multi carb systems should use a fuel block or fuel log.

WARNING: The carb will operate suitably with fuel pressures ranging from 1 1/2 psi to 4 psi, with a desired setting of 2 1/2 psi to 3 psi. Fuel pressure from 4 psi to 7 psi will cause the carburetor to run excessively rich and may cause flooding. Check fuel pressure at the fuel log or carb inlet when the engine is running (it may be necessary to fabricate a "T" fitting and temporary fuel line). Most aftermarket electric and high performance mechanical fuel pumps produce 6 to 9 psi fuel pressure and are not suitable for use with the 9 Super 7 carb without using a pressure reducing regulator (such as our p/n 560-58500). Flooding or leaks caused by excessive fuel pressure do not indicate a faulty carburetor, and may not be covered under warranty.

- 11) Allow engine to reach normal operating temperature. Adjust the idle speed screw as necessary to maintain the desired idle rpm. Check for fuel leaks and loose or missing hardware. Check and adjust ignition timing as required.

NOTE: It is recommended that you use a manifold vacuum gage to make the following carb adjustments. Monitor the vacuum gage as the idle mixture screws are adjusted, proper idle mixture will be achieved when you have the highest observed steady manifold vacuum reading. Turning the idle mixture screws clockwise leans the mixture. Turning the screws counter clockwise richens the mixture.

1/4" LINE SHOULD BE INCREASED TO 5/16" OR 3/8"

The 9 Super 7™ carburetor has been built and calibrated to original factory Stromberg 97 specifications. It is supplied with .045 main jets and a #65 power valve. This combination works well on stock or near stock engines in altitudes ranging from 1000 feet to 2500 feet above sea level. Ultra high performance engines, extremes in altitude, multiple carb applications or forced induction systems may require different calibration settings. Replacement jets are available in a variety of sizes to accomplish the calibration change.

12) To adjust the idle mixture screws, make sure choke is fully open and engine is at normal operating temp. Begin by turning one mixture screw clockwise slowly until the engine begins to stumble or run rough. Then turn the same screw counter clockwise slowly until the engine begins to gallop or surge. (These are the lean and rich limits). Then turn slowly clockwise to a point in between the lean and rich limits until idle is smooth and vacuum is high and steady. Repeat this procedure for the other mixture screw. Re-adjust idle speed screw to obtain desired idle rpm, and repeat procedure again on both idle mixture screws.

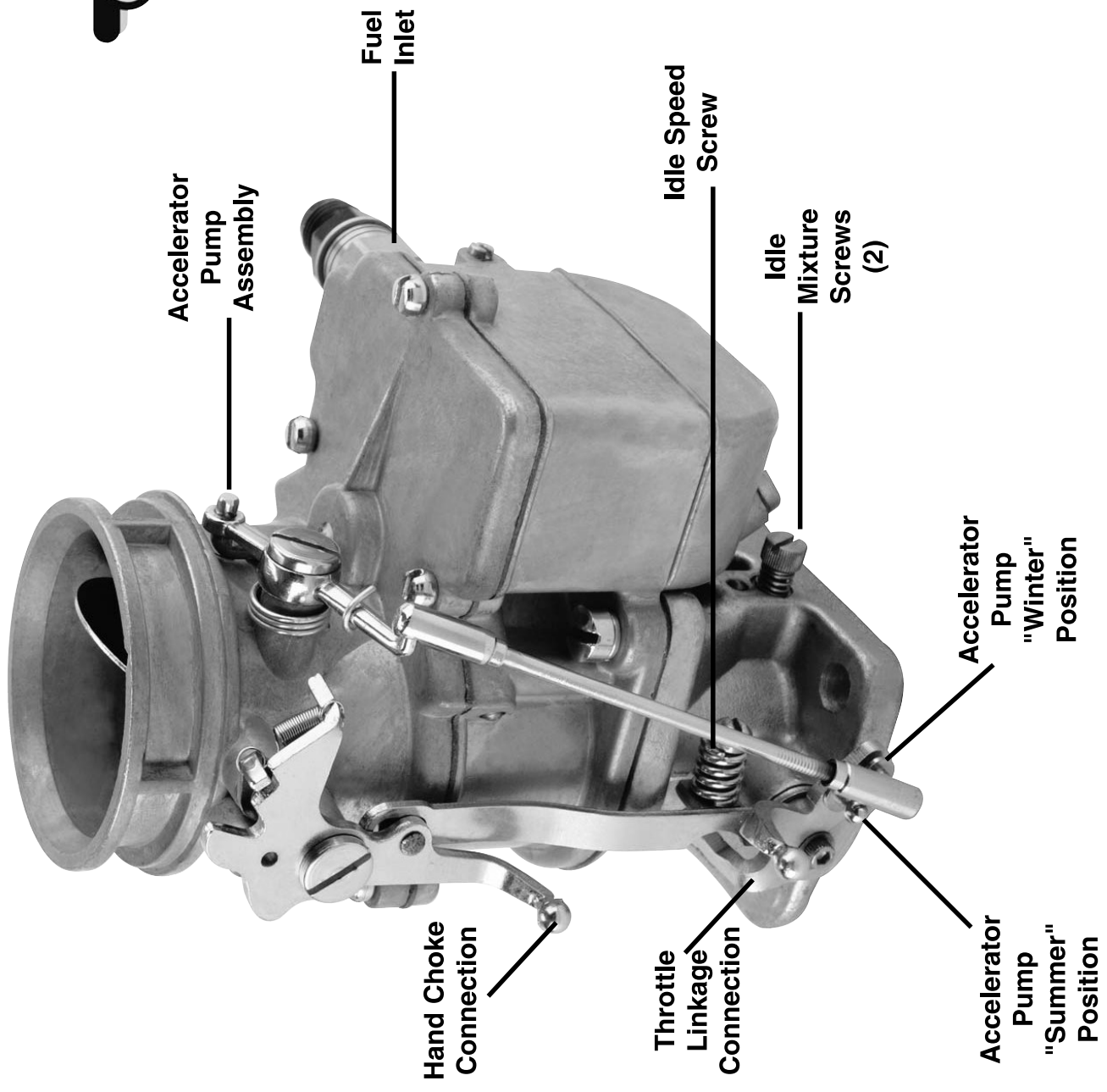
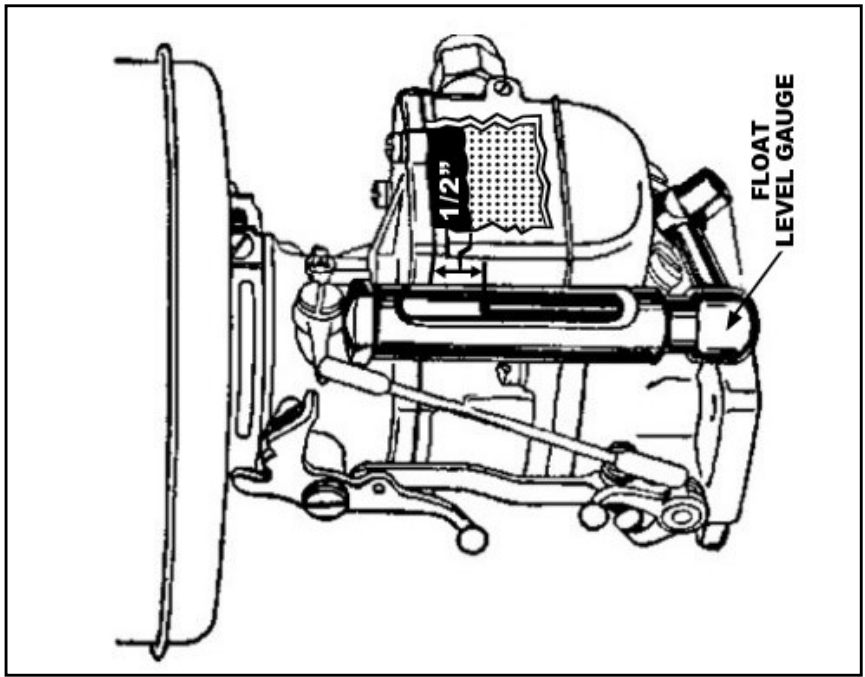
NOTE: If you loose your baseline, or loose track of the amount that you have turned the mixture screws, shut down the engine. Turn both mixture screws clockwise until they are lightly seated in the carb baseplate, then back out 2 turns. Restart engine and perform adjustments as outlined in step 12.

13) The accelerator pump pushrod is connected to the throttle arm in one of two positions; winter or summer. The winter (outer stud) position provides more fuel discharge into the venturi when the throttle is depressed. Start with the pushrod connected to the throttle arm in the same position as your original carburetor. Try different settings to determine which best suits your driving style, vehicle combination, and weather conditions. Most multiple carb systems will perform better in the summer position.

14) To adjust float level the carb must be installed on a running engine. To check float level; start engine and let run for 2 minutes at normal idle. Shut down engine, remove fan belt, disconnect choke and accelerator pump rod, and remove the 5 screws securing the air horn to the main body. Re-start engine and allow idle to stabilize, do not rev engine. Carefully remove air horn from top of carb (if fuel is spilling out of carb, stop engine and investigate cause, such as a sticking needle valve, fuel pressure too high, etc.). With engine idling and air horn removed use a steel rule and measure down from the top edge of the main body to the top of the fuel itself. The dimension should be 1/2" +/- 1/32". If the float requires adjustment shut down engine, siphon half of the fuel out of the fuel bowl, bend tang on float, temporarily re-install the air horn, then re-start engine and check float level again.

15) To synchronize multiple carburetor systems, refer to the instructions included with the linkage kit.

**90% OF TODAY'S CARB PROBLEMS COME FROM
CONTAMINATED FUEL-WATER-DIRT, ETC.**



IMPORTANT

DISCLAIMER

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BRAKE INSTALLATION ALERT

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Always inspect your package upon delivery. Inspect all packages in the presence of the delivery driver. The driver must note any damage. Ask the driver the Carrier's procedures for handling damage claims. You must hold the original box, packing material and damaged merchandise for inspection or the carrier will not honor the claim. Notify Speedway Motors customer service department for instructions on returning damaged goods. Speedway is not responsible if no notification is given within 5 days of receipt.

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Always check the contents of your delivery to insure all the parts that you ordered were received. Please read the invoice. Double check all packing materials, small items may be wrapped inside with these products. Shortages may occur from damage to the box, so save all packing materials. Inspect the box for holes that would allow parts to fall out. If you are missing any item(s) be sure to check your invoice for back orders or canceled items before calling the customer service department. If Speedway has to split a shipment into multiple boxes, packages may be delivered on different days. You need to contact the customer service department within 5 days of delivery to assure the prompt replacement. Speedway Motors assumes no liability after this period.

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FREE CATALOGS

Speedway Motors offers FREE catalogs for Race, Street, Sprint and Midget, Sport Compact and Pedal Car Restoration.

Some items are not legal for sale or use in California on pollution controlled motor vehicles. These items are legal in California for racing vehicles only which may never be used upon a highway.

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