

Instructions for the 91HZ-R Conversion Set

This parts set will convert your 91HZ or the 91HZ-PS engine into the 91HZ-R with pressurized fuel tank regulator system.

Set Contents:

- 61E-R Carburetor with Integrated Regulator
- Cover Plate with Pressure Nipple
- Cover Gasket (O-Ring) Installed
- Check Valve

Installation

For the 91HZ:

Remove the currently installed carburetor and replace it with the 61E-R carburetor. Then, remove the currently installed cover plate with heatsink and install the supplied cover plate. Using the heatsink is not recommended because it may damage the silicone tubing.

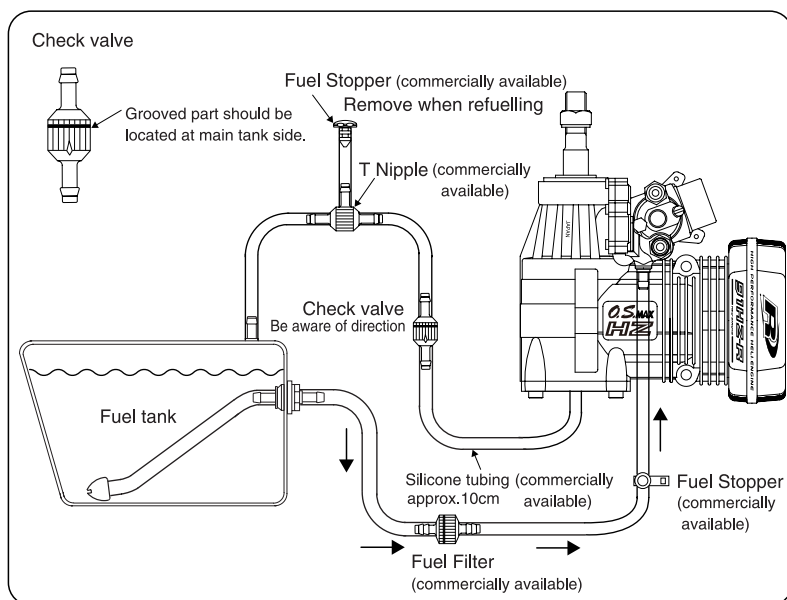
For the 91HZ-PS:

Remove the currently installed carburetor and install the 61E-R carburetor. Then, remove the PD-08 pump with carbon mount. Use the currently installed cover plate as it is.

Tubing

Refer to the sketch below to lay out your tubing.

Cut an approximately 4-inch (10cm) length of silicone tubing and connect it to a pressure nipple on the cover plate. Connect the check valve to the opposite end. Pay attention to the direction. Since this regulator system does not use muffler-pressurized fuel feed, plug the nipple on the muffler or replace it with a bolt to prevent exhaust leakage.



Code No.	Description
29088000	61E-R Carburetor with Integrated Regulator
29067010	Cover Plate
22681953	Nipple No.1
29061410	Cover Gasket (O-Ring)
72403070	Check Valve

The specifications are subject to alteration for improvement without notice.

Initial Needle Positions

After all of the tubing is installed, set the needles at their initial positions as follows. Open the main needle two-and-a-half turns from fully closed. Then open the medium speed needle one turn from fully closed.

You can expect the engine to run rich with these initial positions, depending on the fuel and muffler used.

After making sure the mixture is rich, close the needles gradually with repeated adjustments. If at this point mixture is lean, open the main needle 90 degrees.

Starting

This system requires filling the fuel tank with pressure. Open the throttle fully. Rotate the engine with an electric starter without heating a plug.

When the fuel comes into the regulator, return the throttle to idle position. Heat a plug and start the engine.

Carburetor Adjustments

Carry out adjustments when actually flying the model.

Check the engine running conditions carefully with idle-up on.

After confirming a rich mixture, close the main needle gradually to the optimum position.

After setting the main needle position, check the mixture at hovering.

Adjust the medium speed needle so that the mixture at hovering is not lean.

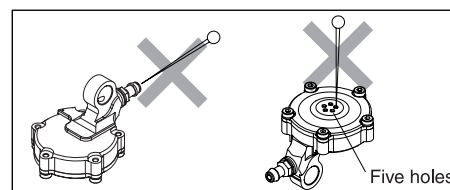
Care of Regulator

■ **NEVER** disassemble the pressure regulator. You may not be able to restore its original performance after reassembly.

■ **NEVER** try to clear a suspected obstruction by inserting anything into the inlet nipple.

■ **DO NOT** block the five holes on the top of the regulator or the regulator may not work properly. Do not insert needles or anything else into these holes.

■ **DO NOT** allow foreign matter into the fuel system. Dirt inside the regulator, no matter how small, may obstruct the fuel flow and prevent the engine from working properly.



■ **ALWAYS** use fuel filters.

Keep the fuel tank extremely clean and filter all fuel as it enters the tank (for example, by using an O.S. Super Filter Code No.72403050). Also use a good quality in-line filter between the tank and regulator. Remember to inspect filter screens at regular intervals and rinse clean as necessary.

■ **DO NOT** clean the regulator with organic solvent such as kerosene, light machine oil, gasoline, thinner or CRC, as the silicone rubber parts inside will deteriorate. Only use methanol or fuel.

■ **DO NOT** allow fuel to remain in the regulator. After the day's final flight, run out any fuel in the regulator. Block the fuel flow to the regulator with a stopper and run the engine at idle to use up fuel remaining inside. Turn the engine by electric starter after stopping to eliminate any fuel left in the engine.

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