Subject: Fuel Leaking from carburetor.

Carburetor: Huayi Standard of Japan, Model #: P27-1 carburetor, and similar.


Models: Generac, Honeywell (with Generac engine), Centurion by Generac, Honeywell by North Shore Power Systems LLC, Champion Power Equipment, Cummins Onan, Powerhouse (Northern Tool), & others.

Complaint: The Consumer Product Safety Commission has received reports of fuel leakage with Generac GP5500 generators. Some reports indicate that fuel started leaking when the generator was new out of the box, while other reports indicate that leaks occurred after the generator was taken out of storage.

Cause: Carburetor leaks are caused by a float stuck in the lower position. This can be caused by dirty or old fuel, or Ethanol and water mixing in the fuel. Most water in fuel comes from condensation in the tank or fuel can, or by storing generator & fuel outside.

Diagnosis: I own a two year old Generac GP 5500 (model 005623-1) with Huayi carb that has this problem. Inspection of the float needle showed it to be made of a bright aluminum alloy, with a synthetic tip. This needle had corrosion and pitting on it’s body, while the synthetic tip had minor wear. There was no corrosion on the float shaft or needle spring. The needle did not appear to have an plating to protect it from corrosion. I believe the lack of an plating to be the cause of this fuel leak problem.

Solution: It’s recommended that all generators with Chinese made carburetors, have the float needle removed, inspected and replaced if necessary. **Use a fuel stabilizer made specifically for Ethanol.**

Parts: Internal carburetor parts are not available from Huayi, or the generator manufacturers. The Huayi design is a clone of certain Honda carburetors, used on some models of GX-340 & GX-390 engines. Honda parts or generic equivalents can be used for repairs. See Honda parts manuals for detailed drawings.

Use Honda Part #16011-ZA0-931 Float Valve, or equivalent, for all repairs. The Honda part is made of a synthetic polymer. The generic parts from Rotary and Stens appear to be made of Aluminum with a dull finish. This finish may or may not resist corrosion. All generic samples came with a spring, and were rated for use with E-10 fuel.

Note: Generators that use a smaller style needle, may be compatible with Honda Part 16011-ZE0-005 or generic equivalent. See Honda parts manuals for detailed drawings.
Cross Reference for Generac GP5500 Generator Carburetor Parts.
Generac 389 cc Engine & Chinese Type 188F Generator Engine.

Markings: Huayi Standard of Japan. Other version may be Jingke, RuiXing or Xieli. These carburetor's appear to be clones of carburetors used on Honda GX 390.

Air Cleaner Gasket:
Generac: 0G4420156
Honda: 16269-ZA0-800^
Prime Line: 7-02516

Carburetor Mounting Gasket:
Generac: 0G9916
Honda: 16221-ZF6-800^
Prime Line: 7-02515
Oregon: 49-189

Carburetor Needle & Spring: (Large )
Fit Honda GX240 - GX390
Generac: Not Available
Honda: 16011-ZA0-931
Prime Line: 7-02343
Rotary: 22-10475
Stens: 525-554
Oregon: 49-997

Carburetor Needle & Spring: (Small )
Fit Honda GX110 - GX160
Honda: 16011-ZE0-005
Prime Line: 7-02342
Rotary: 22-10463
Stens: 525-699
Oregon: 49-996

Carburetor Gasket Set or Bowl Gasket only:
Generac: Not Available
Honda: 1601-0ZE3-701*(set)
Stens: 485-974 (Bowl Gasket only)
*Not an exact match, but will work.

Carburetor Rebuild Set: GX340-GX390
Generac: Not Available
Prime Line: 7-070027
(for NON EPA engines)
See web links for additional parts.

Solenoid Fuel Valve Screws:
Screw, Pan Head, 5mm x 12mm  0.80 Thread Pitch
Generic: 5mm x 12mm, 0.80, Grade 8.8.
Honda: 93500-05012-0A

Solenoid Fuel Valve:
Honda: 16230-ZE3-701 or
Honda: 16230-ZE3-702 or
Honda: 16230-ZE3-707 or
Jingke: 39007200A

Notes:

^ Honda carburetor gaskets have a green color on one side. This is a sealer. Mount the green side to the carburetor body only.

For 2 piece foam air filters, install the light grey filter first then the dark grey filter.
Generic In-line Fuel Filter:
Kohler: 25 050 07-S1 (75 Micron)
Kohler: 25 050-07-S (75 Micron)
Stens: 055-117 (75 Micron)
Rotary: 20-13652 (75 Micron)
Prime Line: 7-023008 (75 Micron)
Visu Filter: FF901C (60 Micron)
Rotary: 20-10351 (60 Micron)

Bulk Fuel Line: 3/16” id: (replaces 4.5mm)
Tygon: F4404-A: 5/16 od (E-10)
Tygon: LP1100: 1/4 od (E-85)
Stens: 115-303: 13/32 od (E-10)

Fuel Line Clamp:
Stens: 120-122: For 1/4 - 5/16 od
Stens: 120-251: For 13/32 od

# CARB & EPA listed Low Permeation Fuel Line and Filter.

Common Generator Spark Plugs, 14mm Thread, 9mm Reach:
Champion: #415 (RN9YC)
Bosch: # 7900 (WR7DC)
Torch F7RTC (Stens: 131-055)
NGK BPF6ES

Note: Parts compatibility with Chinese made engines is not guaranteed. Always compare replacement part to OEM part and determine suitability for intended use.

Manuals On The Web.
Champion Power Equipment.
http://www.championpowerequipment.com/support/

Cummins Onan.
http://www.cumminsonan.com/manuals


Generac owners manuals.
http://www.generac.com/Service/ManualSearch/

Generator Parts Dot Com. Manuals for Generac.
http://www.generator-parts.com/

Honeywell Generators, manufactured & sold by Generac.
http://www.honeywellgenerators.com/ManualSearch/

Honeywell Generators, manufactured & sold by North Shore Power Systems.
North Shore is out of business. Don't know how long this web page will be available.

Northern Tool Generators. Powerhouse and North Star Brands. About 10 other brands are available.
Northern Tool post the owners manual for most all.
http://www.northerntool.com/shop/tools/category_generators+portable-generators

Carburetor disassembly. Many brands.
http://outdoorpowerinfo.com/repairs/.


Ethanol Gasoline Blends And Small Engines Fact Sheet
Generator Storage Procedures
Follow owners manual for storage instructions with the following additional steps.

• Turn fuel tank valve off. Run engine until out of fuel.
• Turn switch off and disconnect spark plug wire. Clean fuel filter under gas cap.
• Remove fuel cup on bottom of fuel tank valve. Clean and reassemble.
• Remove carburetor bowl drain screw, and slowly pull starter rope. Clean up fuel that comes out.
• For longer than 30 days of storage, drain fuel tank, disconnect battery.
• Replace drain screw, reconnect spark plug wire. Generator is now ready for short term storage.

Chinese Carburetor Parts Suppliers

Diesel Generator Parts Ebay Store. Parts for Type 188F (389cc) Chinese Engines.
http://stores.ebay.com/dieselgeneratorparts

Mefast Motors. Honda 23mm clone carburetors for generator. Chinese generator parts
http://mefastliquidation.com/CARBURETOR.html
http://mefast.com/KENOWA/KenowaParts/Kenowa_Generator_Parts.html

OMB Warehouse. Huayi & RuiXing Internal Carb Parts
http://ombwarehouse.com/carburetors/

Pat’s Small Engine Parts Plus. Clone Honda carb parts.
http://www.psep.biz/store/honda_small_engine_carburetor_parts.htm

Parts World Company Ebay Store. Honda clone engine parts.
http://stores.ebay.com/Parts-World-Company

The Parts Bar Ebay Store. Honda clone engine parts.
http://stores.ebay.com/THE-PARTS-BAR

Water Cannon. Honda GX clone engine parts.

Small Engine Parts Suppliers

Jacks Small Engine. Briggs, Techumse, Honda, Generac and others
http://www.jackssmallengines.com/

MFG Supply. Briggs, Techumse, Honda, Generac and others.
http://www.mfgsupply.com/smallengine.html

Repair Clinic. Briggs, Techumse, Honda, Generac and others.
http://www.repairclinic.com/Small-Engine-Parts

Rotary Parts Direct
http://shop.rotarycorp.com/home/index/10664.0

Stens Parts Direct
http://www.stenspartsdirect.com/

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