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Model Number: 3HTHP

Little Giant 3HTHP High Pressure Water Heater 120000 BTU Propane Heater Only (Operation under 1000 psi) 3HSQ

Manufacturer: Little Giant

Little Giant 3HTHP High Pressure Propane Water Heater ‐ 120,000 BTU ‐ Heater Only

Part Number: 3HTHP

The Little Giant 3HTHP is a high pressure propane water heater designed for professional carpet cleaning, truckmount, portable extractor, pressure washing, and hard-surface cleaning systems. This 120,000 BTU heater helps raise water temperature for removing grease, oil, wax, tar, gum, and heavy traffic lane soil. Important: This listing is for the heater only. Propane regulator, propane hose, pressure relief valve, spark ignitor, solution hose, fittings, mounting hardware, propane tank, and installation parts are sold separately unless specifically shown as included in your order.

Key Features

- Little Giant 3HTHP high pressure propane water heater
- 120,000 BTU heating capacity
- Designed for higher pressure cleaning systems
- Commonly used with truckmounts, portable extractors, and pressure washing systems
- Helps improve cleaning performance on oily, greasy, and heavily soiled surfaces
- Thermostatically controlled propane burner
- Professional-grade Little Giant Hotomatic heater design

High Pressure Application Note

This is the high pressure Little Giant heater model. Standard Little Giant heaters are commonly used in lower pressure ranges, while the 3HTHP is designed for higher pressure systems.

The high pressure coil is commonly referenced for approximately 1300‐1500 PSI capability; however, this listing is recommended for operation under 1000 PSI when using a 1000 PSI safety relief valve. If your system exceeds the pressure relief valve setting, hot water or steam can discharge from the relief valve.

Critical Safety Requirement

Do not operate this heater without a properly installed pressure relief valve. Without a safety relief valve, trapped heated water can expand and create a dangerous rupture hazard. Use of the heater without a relief valve can void warranty coverage and may cause equipment damage, fire, or serious injury.

Items Commonly Needed But Not Included

- 1000 PSI pressure relief valve for high pressure heater use
- Propane gas regulator properly sized for 120,000 BTU demand
- Propane hose, minimum 1/2" inside diameter for #1, #2, and #3 HT heaters
- Spark ignitor
- Solution hose and quick disconnects
- Brass elbows, nipples, adapters, and pipe thread sealant approved for propane

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- Mounting brackets or platform
- Propane cylinder or approved propane supply

Propane Supply Information

The gas pressure regulator must be rated higher than the BTU consumption of the heater. An undersized regulator or propane hose can reduce gas flow, reduce burner pressure, and lower hot water output.

For Little Giant #1, #2, and #3 Hotomatic heaters, use a minimum 1/2" inside diameter propane hose. Smaller gas hose can restrict propane flow and reduce heater performance.

Water Connection Notes

- Cold water inlet: top inlet, 1/4" male pipe thread
- Hot water outlet: rear outlet where the pressure relief valve is installed
- No pressure hose or 90-degree elbow is included with this heater-only listing

Common Uses

- Truckmount carpet cleaning heat boost
- Portable carpet extractor hot water upgrade
- Pressure washer hot water conversion
- Hard surface cleaning
- Tile and grout cleaning
- Grease, oil, tar, wax, gum, and traffic lane soil removal

Operation Warning

- Always fill the coil completely with water before lighting the burner.
- Never dry-fire the heater. Dry-firing can ruin the coil and void warranty coverage.
- Check all propane fittings with soapy water before lighting.
- Never smoke or allow open flames near propane connections.
- If you smell propane or rotten eggs, shut off the propane tank immediately.
- Wait at least 5 minutes before relighting if the pilot flame goes out.
- Install a fire extinguisher at every service vehicle door opening.
- Route relief valve discharge to a safe location, recovery tank, or under the service vehicle as required.

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(Critically Important! Without a safety relief valve, heater can potentially burst if the hot water has no way out!):

High pressure unit is designed for 1300-1500 psi (use 1000psi safety valve)
while the standard Little Giant heaters are designed for 600-900 psi. (use 600 psi safety valve)

OEM / Cross Reference Numbers

- 3HHP
- 3HSQ
- 122453
- 1643-2522
- AX40

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- AX43
- AX43HP

Need the Installation Parts Too?

If you need the regulator, propane hose, pressure relief valve, ignitor, and solution hose components, consider purchasing the complete starter package instead of the heater-only version. The starter package can reduce the number of separate parts you need to locate before installation.

Frequently Asked Questions

Is this listing for the complete starter package?

No. This listing is for the heater only. Installation parts are sold separately unless clearly listed as included.

Can this heater be used above 1000 PSI?

The high pressure coil is commonly referenced for higher pressure capability, but this listing is recommended for operation under 1000 PSI when using a 1000 PSI safety relief valve. Exceeding the relief valve setting can cause hot water or steam discharge.

Do I need a pressure relief valve?

Yes. A properly rated pressure relief valve is required for safe operation. Operating without one can damage the heater and create a serious safety hazard.

Does this heater include a propane regulator?

No. This heater-only listing does not include the propane regulator unless specifically added separately.

What size propane hose should be used?

Use a minimum 1/2" inside diameter propane hose for #1, #2, and #3 HT Hotomatic heaters. Undersized hose can reduce burner performance.

Can I light the heater before water is flowing through it?

No. The coil must be completely full of water before the burner is lit. Running the heater dry can permanently damage the coil.

SEO Search Terms

Little Giant 3HTHP, Little Giant 3HT high pressure propane heater, Little Giant 120000 BTU water heater, Hotomatic 3HTHP, propane carpet cleaning heater, truckmount propane water heater, portable extractor heater, pressure washer propane heater, 3HSQ, AX43HP, high pressure cleaning water heater.

Optional items: Note the items below are not going to be all the parts you will need to set up your heater but the main parts to start with.

Optional

Propane and Natural Gasline Pipe Thread Sealing (Teflon) Tape 1/2 in X 260 inches 20170513



Optional
Little Giant Spark Ignitor V-1 for Propane Heaters PLI3

Optional
Little Giant: Pressure Relief Valve PR1000 psi

BTU
Optional
Little Giant: Pressure Gas Regulator #204-00 for use up to 140,000

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Optional
Little Giant RHA12 Foot Propane Hose

Important Note: It is extremely necessary that the Gas Pressure Regulator used to supply the heater with LP Gas has a capacity rating higher than the consumption of the heater. Too small a regulator will decrease the gas flow, the gas pressure and the amount of hot water produced. The Model #204­00 Regulator is rated at 140,000 BTU/Hr., which is sufficiently sized to supply the gas for Models #1, #2 or #3 Hotomatic® heaters. The Model LV4403C9 Regulator is rated at 575,000 BTU/Hr., which is the model we recommend for the #4 HT Hotomatic. The top water inlet is 1/4" Mip. No pressure hose or 90 degree elbow is provided. If you need a pressure hose or brass fitting to hook up your heater, please let us know.

A gas supply hose that is too small will reduce the flow rate of the LP Gas. This reduces the gas pressure at the burner and the amount of hot water produced. Use a 1/2" I.D. Hose minimum for the #1, #2 or #3 HT Hotomatic heaters. Use a 3/4" I.D. Hose for the #4 HT Hotomatic heater.

We Have Been Making Water Heaters Since 1904. This long tradition of efficient performance is the result of rigid control of manufacturing details and the use of the finest materials and craftsmanship available. Little Giant Water Heaters have proven to be dependable under the true test of constant daily use. They will provide long, care free service and the maximum is satisfaction.

Little Giant Set Up Diagram
Little Giant Use Instructions
Set Up instructions

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Operation Instructions for Hotomatic Gas Water Heaters

*****Failure to follow these instructions could result in damage to your heater, a fire, and/or injury*****

Install fire extinguisher at every service vehicle door opening.

1. Hook heater to LP gas supply tank with certified LP gas hose with regulator. The hookup is on the left side of the Unitrol gas valve. ****Make sure the Unitrol gas valve is in the OFF position.**** You should also make sure you are not smoking, and there are no open flames or sparks within 20 feet of the vehicle.
2. Turn on the gas on the tank and check to ensure there are no gas leaks. You can use a spray bottle with soapy water mix to spray on the joints where your fittings are. If you see bubbles, you have a leak.
3. Make sure the pressure relief valve is installed into the "female" water outlet on the back side of the heater. **ATTENTION:** Use of this heater without a pressure relief valve voids your warranty and could cause damage to your heater and/or result in severe injury.
4. Hook your wand into the "water outlet where the pressure relief valve is.
5. Hook the cold water supply to the "male nipple at the top of the heater.
6. Turn on water, check for leaks, and double check to make sure coil is full. Failure to do so could cause a dry-fire situation on your coil, which will ruin your heater coil and could cause a rupture. A dry-fire is running your heater without water in the coil, which softens the metal and voids your warranty.
7. Once the heater is full of water, you may turn the Unitrol gas valve to the "PILOT" position to ignite the pilot flame. You will then need to push the plunger down numerous times and hold it down on the last time to purge any air out of the lines.
8. While holding the plunger down, you will then push the spark igniter down numerous times until you can see the pilot flame ignite. Keep holding the plunger down for 10-15 seconds so the pilot flame will heat up the thermocouple. You may then release the plunger, and the pilot flame should stay on. **IMPORTANT:** If the pilot flame does not light on the initial try, or goes out when you release the plunger, wait 5 minutes so that any built up gas will dissipate and reduce the risk of an explosion. After 5 minutes, start again at #7.
9. Once the pilot flame is lit, you may then turn the on/off/pilot valve to the "ON" position and set the thermostat to the desired temperature range. **AT THIS POINT, DOUBLE CHECK TO MAKE SURE YOUR WATER SUPPLY IS ON!!!** The heater should then fire its main burner and heat until the desired temperature is reached. Once the temperature is reached, the main burner will shut off and the heater will go into a standby mode with the pilot flame still burning. If the pilot flame should ever go out, do not attempt to relight it for at least 5 minutes to allow dissipation of any built-up gas inside the heater.
10. If you ever smell rotten eggs, this is a sure sign you are leaking propane gas or have a build-up of gas in the immediate area. **STOP WHAT YOU ARE DOING AND TURN THE GAS VALVE OFF ON YOUR LP TANK.**
11. These heaters are designed to run 600psi max unless you have the high pressure

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coil which has the capacity of 1400-1500psi max. Running a psi higher than the recommended specs for your heater, even once, can result in a coil rupture and is NOT covered under warranty. We will know if you do, so don't! Please note the pressure relief valve is set for 1000 psi so once you set your pressure over 1000psi steam will spray out this relieve valve! Be sure to install a hose from the relief valve discharge to your vacuum tank or under your service vehicle.

12. These heaters have the capacity of heating the water to 180+ degrees F, please take any and all precautions to protect yourself, and your equipment, by following these instructions.

Related Documents

Hotomatic Instructions
Hotomatic Operating Setup Diagram
Hotomatic 2HT Parts List
Hotomatic 3HT Parts List
Hotomatic H Parts Breakdown Page 1
Hotomatic H Parts Breakdown Page 2
Hotomatic HT Parts Breakdown Page 1
Hotomatic HT Parts Breakdown Page 2
Hotomatic Troubleshooting Guide Page 1
Hotomatic Troubleshooting Guide Page 2

Be sure to check with your local state rules on using propane.
Always store and use propane bottles outside.
Read more about propane use at
<https://www.rrc.state.tx.us/media/8606/homesafehome.pdf>

\$1299.00 (less than dealer cost)

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Optional

Magnetic Clamp-On Water Softener Descaler for Truckmount & Portable
Carpet Cleaning Machines 20260425

- Helps prevent scale buildup in pipes, coils, heaters, and carpet cleaning heat exchangers
- Reduces or eliminates routine monthly descaling in many applications
- Clamp-on installation — no cutting, plumbing, salt, chemicals, or cartridge replacement
- Maintenance-free design — no salt, resin, plastic pellets, filters, or media to flush
- Improves heat transfer efficiency by helping keep mineral buildup off heater surfaces
- May improve water flow / GPM by helping reduce mineral restriction over

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time

- Only 4 inches long for installation in tight areas on portable and truckmount equipment
- Longer Equipment lifespan

Availability: This product was added to our catalog on Thursday 03 April, 2008