

THE THOMPSON MODEL "A" STEAMER
NEW UNIT ASSEMBLY INSTRUCTIONS

Included with this unit are 1 propane regulator, 1 propane hose assembly, 1 filler plug wrench and 100' of steam hose.

In order to operate this unit, some assembly is required.

*Locate propane regulator and hose.

-Using appropriate thread sealant on all threaded joints, tighten one end of the propane hose into the "outlet" port of the regulator.

-Tighten the other end into the coupling located on top of the upright frame adjacent to the propane mounting platform (ahead of the water tank).

-Loosen the ratchet strap and unhook the end from the ring.

-Place 100 lb. **vapour** propane tank in this location, wrap the strap around the tank and rehook into the ring. Tighten the strap until the tank is held securely in place then fully close the ratchet buckle to lock the strap in place. NOTE: The strap should have at least 1 full wrap on the ratchet mandrel.

-Thread tank fitting on regulator into propane tank and tighten taking care not to overtighten. Note: Thread sealant is not required at this connection.

-Ensure that all propane valves are closed.

-Open propane tank and adjust propane regulator to 5 psi. of pressure.

-Using soap and water solution check for leaks at all connections that have just been assembled.

-If bubbles appear, close tank, remove fitting, reseal and/or tighten until no leaks are detected.

-Please note that all factory connections are factory tested.

WARNING: IF YOU SMELL GAS SHUT OFF GAS SUPPLY TO THE APPLIANCE. EXTINGUISH ALL OPEN FLAME, AND TEST ALL JOINTS WITH A SOAP SOLUTION. IF ODOUR PERSISTS, CALL THE MANUFACTURER IMMEDIATELY.

*Unwrap supplied length of steam hose and thread one end of the hose into the swivel union located at the top and front of the boiler.

-Storage for the hose is provided by a three-armed storage rack located immediately ahead of the boiler on the tongue. Once the hose is loaded on the storage rack, the loose end will slide over the pin located on the face of the vertical arm of the rack.

*Located above the gas valves on the upright frame is a horizontally mounted pin. The sewer snake reel mounts here for transport and to facilitate use. NOTE: THE SEWER SNAKE IS MADE OF SPRING STEEL AND IS HELD UNDER SOME TENSION - EXERCISE CAUTION WHEN WINDING AND UNWINDING SNAKE TO AVOID INJURY.

*Located just above the lighter control valve is a short round tube with a mitred end for storage of filler plug wrench. NOTE: The wrench will insert into this tube only one way to ensure that it cannot bounce out when the unit is transported.

OPERATING INSTRUCTIONS FOR THE THOMPSON MODEL "A" STEAMER

- An operator must be in attendance at all times when the unit is activated.
- Operation of the unit is not recommended at ambient temperatures below -30 degrees C.
- Ensure that the unit is relatively level from front to back, and that the boiler/tank drain valve (located beneath the reserve water tank) is closed.
- Using filler plug wrench, remove filler plug located on the top of the boiler unit near the burner end.
- Fill with clean water until level is approximately 3/4" from the top of the water level sight glass (on the side of the boiler below the filler opening).
- Replace filler plug and tighten.
- Remove filler plug on top of the reserve water tank if extended operation is desired.
- Open water level / vent valve on the bottom of the tank (marked "VENT") and ensure that the drain valve on the bottom of the tank is closed.
- If the water in the tank is to be preheated, fill with clean water until it appears in the centre of the top water level sight glass.
- If the water in the tank is NOT to be preheated, the tank may be filled with clean water until it runs out the "VENT" valve. Allow all excess water to drain from this valve and then close it.
- Replace the filler plug and tighten.
- Ensure that the unit is located outdoors and that all combustible materials are located a minimum of 12" from the burners.
- Open the propane tank.
- Remove the lighter from the holder and rotating counter clockwise, partially open the lighter valve (located above the main propane valve assembly) and ignite the lighter.
- Rotate the left main gas valve 90* counter clockwise to the open position and while depressing the plunger on the propane safety valve, place the lighter into the ignition hole beside the copper gas line on the left burner until ignited.
- Hold the plunger in for up to 1 minute after which the burner should remain lit.
- If burner goes out, wait 1 minute and repeat the above procedure.
- Once the ignition of the first burner is successful, repeat the procedure for the second burner.

-Once ignition of the second burner is successful, rotate the lighter valve clockwise to close and replace lighter in holder.

-If either burner will not remain lit, close both main gas valves and refer to the maintenance section.

-To shut burners down, rotate both main burner valves clockwise and close the valve on the propane tank. Propane safety valves will close automatically within one minute.

-With both burners operating, adjust the propane regulator at the tank to 5 PSIG maximum.

-Ensure that all steam valves are closed.

-As pressure starts to build, open the steam pressure safety relief valve (located on the piping assembly that also leads to the top of the reserve water tank) once or twice to vent trapped, expanding air and to ensure proper operation of the relief valve.

-NOTE: AS BOILER WARMS UP, A SMALL AMOUNT OF WATER WILL RUN OUT OF THE BOILER TUBES. THIS IS CONDENSATION FROM WITHIN THE TUBES AND WILL DISAPPEAR AS THE BOILER TEMPERATURE RISES.

-Steam pressure should reach 15 PSIG within 30 to 35 minutes. If attaining 15 PSIG requires an unusually long time or if the boiler will not maintain operating pressure, refer to the maintenance section.

-If outside temperature is below 0° C (32° F), it is recommended that the boiler pressure be built up prior to travelling with the unit to ensure that the water level sight glass on the boiler does not freeze. Also, especially in extreme cold conditions, it is recommended that the water in the reserve water supply tank be preheated.

-NOTE: DO NOT TOW OR MOVE THE STEAMER WHILE BURNERS ARE ACTIVATED.

-Once boiler pressure has reached approximately 15 PSIG., the steamer is ready to work. At this point, steam can be directed into the reserve water supply tank to either preheat the water, or to pressurize the tank, or into the discharge hose, through the steam outlet valve. NOTE: The boiler operating pressure will drop dramatically if the tank heater and steam discharge hose are used simultaneously.

-If the reserve water tank heater is to be used, the water level prior to heating should be in the centre of the top water level sight glass. With the boiler up to operating pressure, open the valve marked "HEATER" while leaving all other steam and water control valves closed. The valve marked "VENT" must be opened to allow pressure to escape in order for the heater to work.

- In approximately 15 minutes the water in the tank will be extremely hot. At about the same time the water will start to run out of the "VENT" valve. At this point, close the "HEATER" valve and allow any excess water to drain from the "VENT" valve, then close the "VENT" valve. Now the tank can be left as is or it can be pressurized using the "PRESSURIZE" valve in preparation of adding water to the boiler.

-Open the steam outlet valve allowing steam to flow into the discharge hose.

-CAUTION: STEAM IS HOT AND CAN BURN. Ensure that steam exits hose is a safe location.

-WARNING: RISK OF INJECTION OR SEVERE INJURY. KEEP CLEAR OF NOZZLE. DO NOT DIRECT DISCHARGE STEAM AT PERSONS. THIS EQUIPMENT IS TO BE USED ONLY BY TRAINED OPERATORS.

-AVERTISSEMENT: RISQUE D'INJECTION ET DE BLESSURES GRAVES. SE TENIR A L'ECART DU JET. NE PAS DIRIGER LE JET DE SORTIE VERS D'AUTRES PERSONNES. CONFIER L'UTILISATION DE CE MATERIEL A UN OPERATEUR QUALIFIE.

-With the steam outlet valve fully open, 100' of discharge hose connected and both burners activated at 5 PSIG, the steamer should operate at approximately 12 PSIG.

-If during operation, the steam pressure safety relief valve continually opens, the propane supply pressure should be reduced by rotating the knob on the propane regulator counter clockwise until 12 - 15 PSIG of steam pressure is maintained. Excessive steam pressure relief valve operation dramatically increases water consumption.

-Attention must be given to the water level in the boiler unit at all times. When the water level in the boiler is approximately 3/4" from the bottom of the water level sight glass, water MUST be added for continued operation.

-If the "PRESSURIZE" valve on the reserve water supply tank has not already been opened, do so now to equalize the pressure between the tank and the boiler.

-Open the valve on the bottom rear of the reserve water supply tank to add water to the boiler. The water level in the boiler water level sight glass should slowly rise.

-When the water reaches 3/4" from the top of the boiler water level sight glass, close the valve at the bottom of the reserve water supply tank. The "PRESSURIZE" valve may be closed or left open to help maintain water temperature.

-As the water entering the boiler from the reserve water tank may be significantly cooler than that in the boiler, a drop in pressure may be experienced when adding water. To minimize this effect, partially or totally close the steam outlet valve to maintain boiler pressure until the water temperature is stabilized.

-The "operating" water in the boiler and the 50 gallons in the reserve water supply tank is sufficient for approximately 5 hours of continuous operation. If additional water is required, close the "HEATER", "PRESSURIZE", and tank drain valves and open the "VENT" valve. Once the pressure is released, the water filler plug may be removed and the tank refilled with clean water.

-CAUTION: NEVER REMOVE THE WATER FILLER PLUGS WHEN THE TANK OR THE BOILER ARE PRESSURIZED.

-CAUTION: NEVER ADD WATER DIRECTLY TO THE BOILER UNIT WHEN IT IS HOT AS BOILER DAMAGE MAY OCCUR.

-If the boiler or reserve water supply tank are allowed to cool with the steam control valves closed, ensure that the valves are opened prior to either reaching 0 PSI. Significant levels of vacuum will be produced as they cool, which may damage some components.

-When the steamer is not in use, it is recommended that the boiler and tank be drained of all water and that all valves be left open. All ball valves should be slightly closed to allow the water in the case (surrounding the ball) to drain. If the steamer is left overnight containing water, ensure that it cannot freeze.

MAINTENANCE INFORMATION

As the steamer is of a simple design with very few moving parts, maintenance requirements are minimal. However, through time some maintenance may be required.

-If the steamer is unable to maintain operating pressure and/or requires an unusually long period of time to reach operating pressure, or if a burner will not remain lit, the burner orifices may be partially plugged. Should this occur, ensure that the propane tank valve is closed, remove the wing nuts that secure the plates at the rear of the burners, remove the copper gas lines and the elbows inside the burners. Using compressed air, blow through all lines, fittings and through the orifices in the burners. Then using a small wire (.055" or less in diameter) ensure that orifice opening is clear. Visually inspect the interior of the orifice to ensure that no foreign material remains. Using a small amount of suitable thread sealant, reinstall the elbow. Be certain not to allow thread sealant to enter the burner as it can plug the orifice.

Considerable care must be taken to ensure that the orifice mounting tube is not moved during the removal and reinstallation of the brass elbow(s). Movement to the tube may adversely affect propane safety valve operation and boiler performance. Reinstall copper lines and prior to reinstalling burner plates, ignite both burners (be sure to have sufficient water in the boiler) and test all connections for leaks with a soap and water solution. Reinstall the plates and wing nuts. Once the burners are both ignited, you should notice that the sound from the flames is less "muffled" in quality.

-Through a long service life, scale may build up inside the boiler and water tank. Periodic flushing is recommended.

-If, when attempting to add water to the boiler during operation, water will not flow from the reserve water tank to the boiler, the tank fitting could be obstructed. Close the "PRESSURIZE" valve on the top of the reserve water tank and the drain valve at the bottom of the tank. Open the "VENT" valve to vent pressure from the tank and then momentarily reopen the tank drain valve. The pressure in the boiler will force water from the boiler into the tank, thereby clearing any obstruction. The temperature of the water in the tank may increase dramatically as this reverse flow takes place. Repressurize the tank and reopen the tank drain valve allowing water to flow into the boiler. NOTE: If the water level in the boiler goes lower than 3/4" from the bottom of the water level sight glass, shut down the burners until the level can be raised from the water tank or until the boiler cools - NEVER ADD WATER DIRECTLY TO THE BOILER WHEN HOT!!

-Periodically inspect the condition of the wheel bearings and service as necessary.

-If any difficulties arise when servicing the steamer, please don't hesitate calling the manufacturer for assistance at 1-705-382-3221 or 1-800-367-5451.

-All piping and valves should be available from a local plumbing supplier. All other parts are stocked by the manufacturer.

-Parts have not been catalogued as only one model of steamer is manufactured.

PARTS LIST

PART NAME	PART NUMBER (if applicable)
Propane regulator	597 FA
Propane pressure gauge (0-30 psi)	
Regulator inlet fitting (p.o.l. fitting)	FF2002
Propane hose assembly	

2" propane tank ratchet strap	
Burner (complete with fittings and door)	
Burner orifice	
Burner retaining screws 3/8" NC x 3/4" Sq. Head	
Copper gas lines 3/8" x 21 1/2" or 24 1/2"	
3/8" flare nuts	49 x 6
1/4" pipe thd. to 3/8" 90° elbow	49-6B
1/4" lighter and main gas valve	3380
Propane safety valve	H19-TA3
1/4" brass hex nipple for gas valves	122B
Thermocoupling	K16BT-36
Lighter assembly (complete with hose and fitting)	
All gas piping - 1/4" malleable black iron	
2" ball coupler	
3" drawbar	BDB-16137 or BDB-1385
Safety chain hook	320N
Trailer tongue jack	
Fender	
Front spring hanger	
Rear spring hanger	
2000 lb. slipper spring	
U-bolt	
U-bolt tie plate	
3200 lb. axle assembly	
Wheel hub	
Wheel nut	
Replacement bearings/seal kit	
15" 5-bolt wheel	
Tail light	50862
Trailer light connector	
Boiler hood	
Boiler hood end	
Steamer identification plate	
Filler plug wrench	
Sewer snake and reel	
Boiler tank complete	
Filler plug	
Filler plug gasket	
Water level sight glass valves	81-A
Water level sight glass	
Water level sight glass gaskets	
Safety pressure relief valve - 15 psi. set	13-211-08
Pressure relief pipe U-bolt	
Steam pressure gauge 0-30 psi.	
Steam valves 3/4"	R&W 210
All steam and water piping - 3/4" malleable black iron	
Tank steam supply hose assembly	
Tank pressurize hose assembly	
Tank drain hose assembly	

Hose connection swivels

100' 3/4" steam hose

Boiler drain valve - 3/4" ball valve

Reserve water tank complete with fittings

2" water level sight glass

Reserve water supply tank marking decal set