



Jensen Steam Engine Electrically Heated Engine Operating Instructions

Models: 20, 20G, 25, 25G, 55, 55G, 70, 70G
Jensen Steam Engines -1-800-525-5245, Technical information
www.jensensteamengines.com

ELECTRICALLY HEATED STEAM ENGINE - Operates on 115Volts AC or DC only. Refer to engine name plate for power rating of unit.

DO NOT IMMERSE IN WATER, WIPE CLEAN WITH DAMP CLOTH.

CAUTION: Boiler, Steam Pipe, Cylinder, Firebox - **HOT** - **DO NOT TOUCH AFTER POWER IS APPLIED.** Do not remove Safety Valve or Whistle until heat is removed and all pressure is released from boiler, either through whistle or engine.

As with all electric products, precautions should be taken during handling to avoid electrical shock.

This Steam engine is operated by means of steam pressure generated by heating water in the boiler, using an electrical heating element. The boiler is equipped with a safety valve (top rear) and whistle (top center). The engine is equipped with a throttle (on steam pipe) to control the speed of the engine from full throttle (handle parallel with the steam pipe) to complete stop (handle in cross position to the steam pipe) All electrically powered engines except the model #70 have a reversing lever. Place unit on a level surface which will not be harmed by heat or water. Be sure the safety valve is operable by pulling up spring loaded stem.

TO OPERATE:

- #1 Open Whistle to vent air. Remove Safety Valve and pour distilled water (preferably warm or hot) into the boiler until view glass shows 1/2 to 2/3 full. Check level by lifting one end of boiler so as to actuate water in boiler. when water again is stable, glass will show correct level.
(**TIP:** a plastic squeeze bottle such as those used in restaurants is excellent for filling the boiler safely)
- #2 Replace Safety Valve, making sure washer is in place
- #3 Turn on current to the boiler element. **WARNING: NEVER TURN ON CURRENT UNLESS SUFFICIENT WATER IS IN THE BOILER. OTHERWISE DAMAGE MAY RESULT.** Note that the boiler may smoke slightly on the first heat-up. This is natural and indicates no defect. Steam pressure will develop after several minutes as indicated by water or steam at the exhaust or whistle. Rotate the flywheel to start. Rotation may be reversed on all models except the model #70 & #70G.
- #4 When water disappears in the site glass, turn off current.
CAUTION - RELIEVE BOILER PRESSURE THROUGH WHISTLE BEFORE REMOVING SAFETY VALVE TO FILL BOILER.

MAINTENANCE:

All moving parts should be oiled occasionally. Cylinder walls may be oiled by placing a few drops of oil in the exhaust and turning the engine backwards. If engine will not run, check the following:

- #1 Tightness or binding - oil as needed.
- #2 Check for proper alignment between eccentric and crank. If incorrect, loosen allen screw to adjust and retighten for all models except model #70 **Style #70, #70G - Have no adjustment**
- #3 Should gauge glass leak, use rectangular wrench to tighten retaining ring.