

DIRECTIONS FOR ASSEMBLING AND OPERATING COLEMAN HOT-RAY HEATER MODEL 480

1. The Coleman Hot-Ray Heater Packed—

The Coleman Hot Ray Heater is packed in a carton in units and assemblies as follows:

1. Fount Complete
2. Burner Unit Complete (with Generator).
3. Reflector.
4. Radiant.
5. Guard.
6. Single Parts Package.

2. How to Assemble—

It is very easy to assemble the Coleman Hot-Ray Heater. Look at the parts illustration on the reverse side of this folder and note the relation of the various parts to each other and how the Coleman Hot-Ray Heater looks when assembled.

- (a) Rub a little soap on the threaded end of Feed Tube which protrudes through top of handle. Do not get any soap inside Feed Tube as it will clog the Generator.
- (b) Then screw Burner Unit Complete (with Generator) on to the Feed Tube, by hand, turning to the right. Do not screw too tightly for fear of stripping threads, and causing a leak at this connection.
- (c) Insert lever on Generator through notch in Reflector. Then push Reflector up and over Vaporizing Tube, fasten the Reflector to Burner Unit with three screws.
- (d) Place the notches of the Radiant on the Generator. Then swing the Radiant into line between Generator and Vaporizing Tube and push it down gently over the Burner Cap.
- (e) Spring Guard over edges of the Reflector. Your Coleman Hot-Ray Heater is now ready to operate.

3. How to Fill—

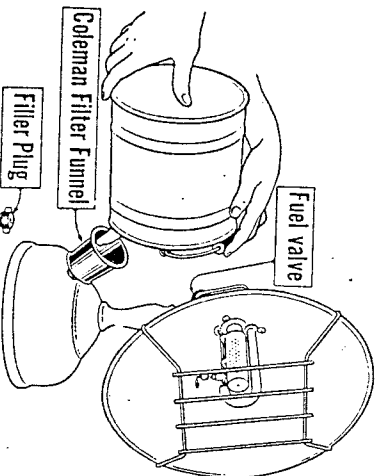


Figure 1

Be sure Fuel Valve is closed tightly, turn Valve Stem to right. Then unscrew Filler Plug, turn to left. Fill Fount with three pints of fresh, clean, undoped, water-white gasoline. Replace Filler Plug, turning to right, and tighten with fingers. (We recommend the use of the new Coleman Filtering Funnel No. 0, which removes dirt and water when filling Fount. Your dealer can ...)

SPECIAL NOTICE

The No. 480-490 Burner Unit, Radiant and Reflector Complete, of the Coleman Hot-Ray Heater will fit several makes of pressure gas Lamp Founts, including the Coleman Quick-Lite. (It cannot be used on a Coleman Instant-Lite Lamp Fount.) First be sure the Fount is thoroughly clean. Assemble old Lamp Fount, and No. 480-490 Burner Unit, Radiant and Reflector Complete, See Paragraph 2, How to Assemble. See Paragraph 3, How to Fill. Pump Fount up as you have been accustomed to do with your Lamp. See Paragraph 5, How to Light. Paragraph 6, How to Close. Paragraph 7, How to Change Position of Reflector.

4. How to Pump—

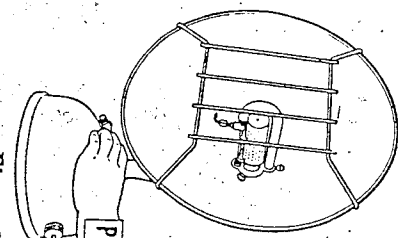
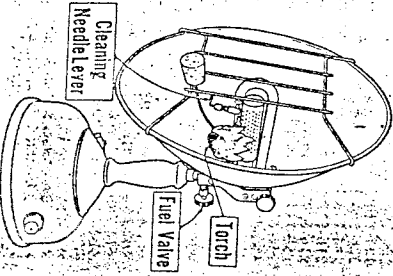


Figure 2

- (a) Turn Pump Plunger two full turns to the left. This unscrews Air Stem from Check Valve located at lower end, inside of pump barrel.
- (b) Place thumb over small hole in Pump Plunger Handle. (See Figure 2), and pump fifty full strokes of air in Fount.
- (c) Now turn Pump Plunger to right, screwing and seating Air Stem in Check Valve, push Pump Plunger back into pump barrel.
- (d) Changing the Pump Leather occasionally or keeping Pump Leather oiled will insure full amount of air being delivered in Fount with each stroke of Pump Plunger.

5. How to Light—

It is necessary to preheat the Generator of the Coleman Hot-Ray Heater with the flame from an Alcohol Torch. An Alcohol Torch and Bottle are furnished with each Heater. Tilt reflector until it points up as shown in Fig. 3. Thoroughly saturate the Torch with alcohol, light it and hook it on to the Generator (see Figure 3). Make sure that the flame is directed on and actually heating the generator. *Count slowly to twenty (It is important to do this that the generator may be thoroughly heated).* Then open fuel valve one full turn to left. Let torch hang on generator until burned.



NOTE.—If Hot-Ray Heater burns with a weak flame—

- (a) Not enough air in the Fount. Pump more air into Fount (See Paragraph 4).
- (b) Fuel Valve not opened enough. Turn Valve Stem one full turn to the left.
- (c) Gas Tip partially clogged or Cleaning Needle pushed in the Gas Tip. Turn Cleaning Needle Lever (See Figure 3) on Generator around several times. This inserts and withdraws the Cleaning Needle through the orifice of the Gas Tip, removing any dirt or obstruction. The Cleaning Needle Lever on the Generator should be turned out toward Guard, the Cleaning Needle is then withdrawn from the orifice of the Gas Tip.

6. How to Shut Off Heater—

Close Fuel Valve, turn Valve Stem to right until seated snugly. Flame will go out in about one minute.

7. How to Change Position of Reflector—

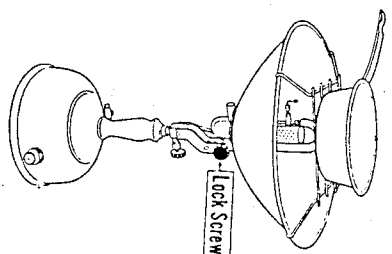


Figure 4

Turn Lock Screw to left as far as possible. (See Figure 4.) Turn Reflector to horizontal position and turn Lock Screw to right until tight. When Reflector is in this position, the Heater can be used to heat water. (It will boil two quarts of water in about eight minutes) boil coffee, fry eggs, meat or cakes.

All gasoline contains some foreign matter which will not vaporize and which remains in the fount. If the fount is not cleaned occasionally, this foreign matter will accumulate and cause trouble. Keeping the fount clean insures longer service from generators, easier lighting and greater efficiency.

The contents cannot be entirely drained through the filler plug opening because of a tube which starts at the filler plug and extends a short way into the fount. The best way