

USERS' GUIDE

HEAT WAVE

WOOD STOVE FAN



Thermal Engines Corporation™
www.thermalengines.com

Introduction

Congratulations on your purchase of a Heat Wave heat-powered fan! The Heat Wave is designed to offer you many years of trouble-free, electricity-free service. And, it is backed by the best warranty in the business; if your Heat Wave ever fails, the Thermal Engine Corporation will repair or replace it, free of charge, for as long as you own it.

Using Your Heat Wave

Using your Heat Wave is simple! Place the unit on a flat area of your heating appliance. When the base of the Heat Wave has warmed up, gently flip the fan in a counter-clockwise direction and the fan will start. The fan's speed will automatically increase at higher temperatures and decrease as your stove cools. The Heat Wave is designed to operate most efficiently between 400°F and 650°F, the normal operating temperature of a wood stove. So always remain cognizant of the fact that the unit may be quite hot when operating on a heating appliance. It is best not to move your Heat Wave while it is warm, but if you must, use extreme care handling the unit and remember not to place the hot unit on anything that will be affected by heat. Also note; if your Heat Wave is accidentally knocked over, or if an object interferes with the rotation of the fan blade, the unit will cease running until you manually restart it.

Maintaining Your Heat Wave

Under normal use, your Heat Wave should require no maintenance. It was designed to run quietly and efficiently whenever you need it. However, many Heat Wave owners choose to display and run their Heat Wave with the cover removed to admire the inner workings of the Stirling-cycle engine. Using your Heat Wave in this way is fine, but, with the cover removed, dirt and dust can accumulate on the moving parts of the engine.

If you notice a decrease in your unit's performance, you should gently wipe the Displacer rod with a clean, lint-free cloth and apply a very small amount of oil to the Displacer rod, and Connecting rod bearings (See Figure 1). Use only a high-quality, low-viscosity lubricant that does not evaporate and does not leave a residue. (For example, a high-quality gun or clock oil.) NEVER use WD-40 or a similar lubricant; as they evaporate, they leave behind a sticky residue that will harm the performance of your product. NEVER lubricate the graphite power piston with ANY lubricant; graphite is self-lubricating, and the addition of any outside lubricant will degrade the performance of your Heat Wave.

NEVER adjust the unit's linkage or any other system; these are all set at the factory and EVERY Heat Wave is test run before it is shipped. Making adjustments or disassembling your Heat Wave WILL leave the unit inoperable. If you believe you have a performance problem after cleaning and lubricating the unit as described above, call the Thermal Engine Corporation technical support line at (256) 694-4015, or see your included warranty card for instructions on returning your Heat Wave to the factory for service.

We truly hope you find tremendous utility and fun using your Heat Wave! If you have any questions or comments, please let us know. We would love to hear from you!

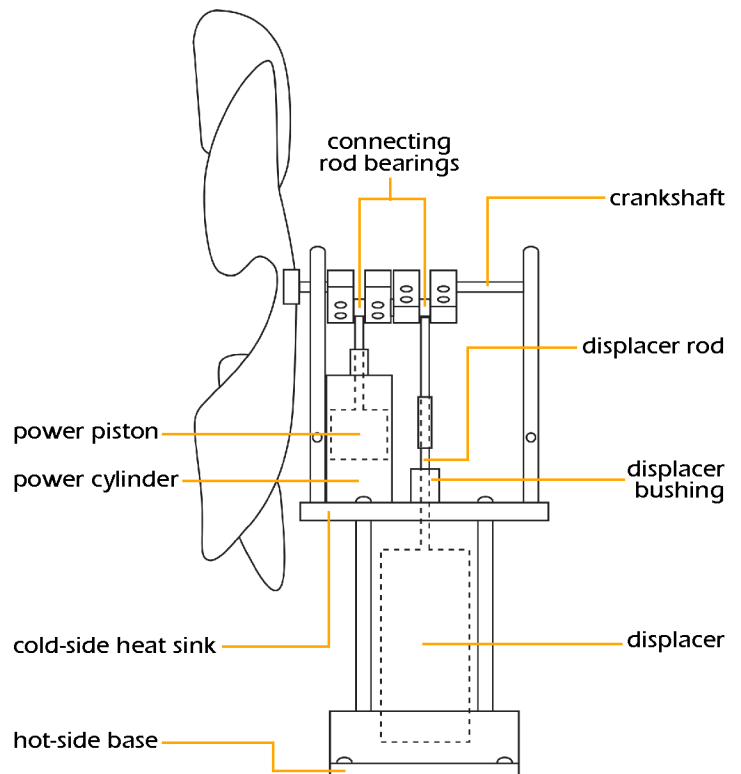


Figure 1: *Heat Wave* components