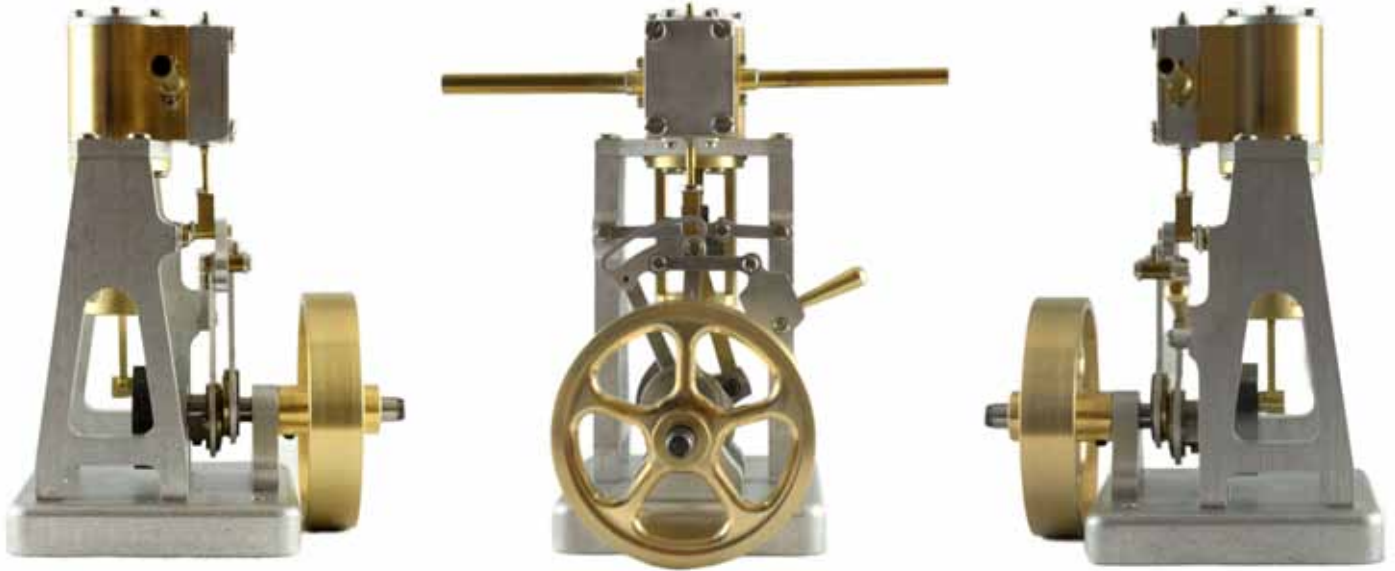


# VR1A

## Steam Engine Assembly Kit



The VR1A is a double acting, reversible engine suitable for operation on 5 to 30 PSI steam or air. The classic "Stephenson" reversing gear using two eccentrics and lots of linkage provides plenty of visible action when the engine is running, especially at a "tick over" speed of two or three hundred RPM. With a high end of over 4000 RPM, everything becomes an impressive blur. A "D" slide valve, driven by the reversing gear, provides smooth steam distribution to the 1/2" bore by 5/8" stroke double acting cylinder. The crosshead guide is a trunk type. A heavy 1 3/4" flywheel (included) provides low speed operation.

The VR1A is completely machined and ready for assembly. The only tools required are a set of small screwdrivers and a small flat file. The kit contains all of the parts completely machined and all of the necessary hardware needed to build an engine that is ready to hook up to your boiler or air supply. The detailed instruction manual contains assembly, adjustment, and operating instructions and also includes assembly drawings. This engine is also offered as a fully-assembled, ready to run out of the box model. The engine is assembled, tested, and run in for several hours.

### Dimensions:

- Base: 1.891" x 2.047"
- Crankshaft extension past base: .594"
- Crankshaft end diameter: 3/16" (.187")
- Crankshaft centerline height: .875"
- Height: 3.781"
- Weight: 225g

### Models available:

- VR1A (Ready to assemble kit)
- VR1A-FA (Fully assembled ready to run engine)

### Graham Industries

PO Box 15230  
Rio Rancho, NM 87174-0230  
FAX 24 hours (505) 715-4527  
Website: [www.grahamind.com](http://www.grahamind.com)

