

## U.S. EPA-NVFEL Small SI Engine Setup

1. Please specify the following:
  - Cylinder Head temperature (location or port for thermocouple)
  - Inlet Air temperature (location or port for thermocouple)
  - Engine Oil temperature (location or port for thermocouple)
  - Exhaust temperature (location or port for thermocouple)
2. The engine must be supplied with any necessary external cooling, if applicable.
3. The manufacturer must supply all oil needed for testing in a labeled container separate from the engine (i.e., may be one shipment consisting of two containers). The manufacturer must also supply the relevant MSDS Sheets.
4. The engine must be supplied with a manually adjustable throttle and governor control, if applicable. A procedure to disable the governor must be supplied.
5. The engine must be supplied with the operator's manual.
6. The direction of crankshaft rotation must be marked on the outside of the engine.
7. The engine must be equipped with an hour meter with 1/10 hour resolution. The hour meter must be installed on the engine and reflect the number of operating hours accumulated on that engine.
8. The engine must be equipped with a muffler, air cleaner, all emissions components consistent with the certification applications, and any other components needed to run the test.
9. The manufacturer must supply a properly positioned fuel tank or the appropriate fuel system information if the engine is sold without a fuel tank.
10. Manufacturer must supply exact diameter of engine driveshaft in either inches or millimeters. If the driveshaft is tapered, the manufacturer must supply taper specifications.