

Hercules Engine News

*Including Economy, Arco,
Jaeger & Thermoil*

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At shows that include gas engines, exhibitors often desire to run engines at what might be called a slow idle. Most hit and miss engines as originally set up do not have speed adjustment provisions for 100 to 200 RPM speeds.

On Hercules built engines, there are a number of slow down changes that can be made. First, ignition timing needs to be changed to a range of 3 or 4 degrees advance for each 100 RPM. For an engine that almost stops before the next firing stroke, zero degrees advance may be needed. Engines tuned as outlined

often will not speed up well nor produce much power under load.

On engines properly tuned with the Webster or Wico ignition system, timing can be quickly changed to zero advance by simply setting the advance lever to the start position.

The spring in the governor spindle shaft may need to be changed to a weaker one. If the governor spindle shaft is badly worn, it may not be long enough to operate the detent at slow speeds. It may have to be lengthened. On H and S model engines as well as older models with the updated detent arm, the screw that touches the governor spindle shaft can be turned in or replaced with a longer screw.

On some engines there are one or more washers behind the governor spring in the governor shaft. Removing these washers will help to obtain slow down speeds.

The wedge on the bottom of the speed control lever can be built up so the detent blade is moved closer to the detent block. This way, it will engage at lower RPM.

On most gas engines, there is no compensation in the fuel mixer for lower than normal air speeds through it. To compensate, it is often necessary to close the choke to some degree so that enough fuel is sucked in with the incoming air during the intake stroke to provide a combustible mixture.

The information above is meant as a guide to obtaining slower engine speeds. It often still involves some trial and error. If parts relating to speed control are badly worn or poorly repaired, speed adjustments may still be difficult.

In the next story, repairs and adjustments of the entire governing mechanism will be covered.