

Hercules Engine News

The Half Base Project Continues to Take Shape

By Glenn Karch

The saga of the construction of a 7 HP Hercules half base screen-cooled engine replica continues. The cart has been painted dark red with dark hunter green wheels. A copy of the original stenciled design has been put on the cart frame, and it has been moved forward from center so the flywheels will not obscure it when the engine is mounted.

An oaken box seat has been made with room for the battery and coil. There is a removable tool tray above the battery and coil area. The seat itself looks nice, but it will be found to be too narrow for most of us to sit on.

The screen cooler will be positioned at the rear of the frame and held down with four long "J" bolts. The custom-made fuel tank has been mounted between the frame rails, too. All of these features mentioned so far can be seen in the first picture (see Photo #1).

Since a hopper-cooled engine is being converted to a screen-cooled, it is necessary to provide a different water jacket top for the cylinder. The next picture (see Photo #2) shows the wooden patterns that have been made and sent to the foundry. The large cover will be held to the cylinder by six stud bolts screwed in the bottom and fastening to the same six lugs that held the water hopper on. The smaller cover is for the opening of the



Photo #1: Painted cart, dark red with hunter green wheels.

larger cover. It will be held on by six cap screws. The small bump in the middle will be drilled for 1/2-inch pipe. These two patterns were copied from pictures of an original engine.

The final picture (see Photo #3) is my attempt at a sheet metal crank guard. I have never seen a real one, so this one is made from heavy sheet metal to best match what can be

seen in early catalog pictures. A bead had been rolled about an inch in from the edges to help stiffen and decorate it. The ends of the crank guard are held on by one 12-24 screw on the rear of the cylinder and two on the lower rear of the base.

Along with the above, several other parts have been repaired or modified, including the rocker arm and adjusting bolt, side rod, governor, valves and springs, and detent lever. A reproduction igniter has been acquired, along with a right-angle cylinder-priming cup. The igniter trip and bracket were obtained from a parts vendor. All these things will all show up as this project continues. Stay tuned.

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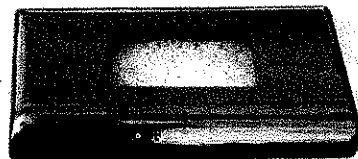


Photo #2: Wooden patterns for foundry work. Smaller cover to left covers larger cover at right, which goes where water hopper originally sat.



Photo #3: Crank guard made from heavy-duty sheet metal. A bead is rolled into the metal to stiffen the guard.