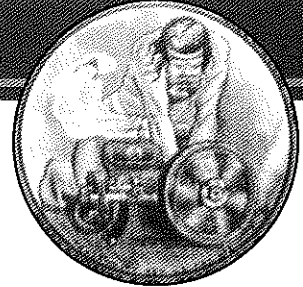


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Hercules Engine News



By Glenn Karch

ARCO Engine in Disguise

At the recent Old Threshers Reunion at Mt. Pleasant, Iowa, I was going through the gas engine area looking for Hercules-built engines so I could record the serial numbers. I happened onto an Economy engine being shown in one of the exhibitor spaces.

I looked at the tag and it was identified as 2 HP Model FW, engine no. 291057. Hmmm ... ? There aren't supposed to be any 2 HP Model FW Economy engines in that 3-1/4-inch bore size.

The next thing I looked at was the fuel mixer. There was surprise number two. It had a Lunkenheimer mixer with a pipe reducer screwed into the air intake to help richen the fuel mixture for a slow running engine. While I was looking over the mixer, the engine's owner came over to see what was going on. That is when I met Perry Smith of Alleman, Iowa. He said he just recently purchased the engine.

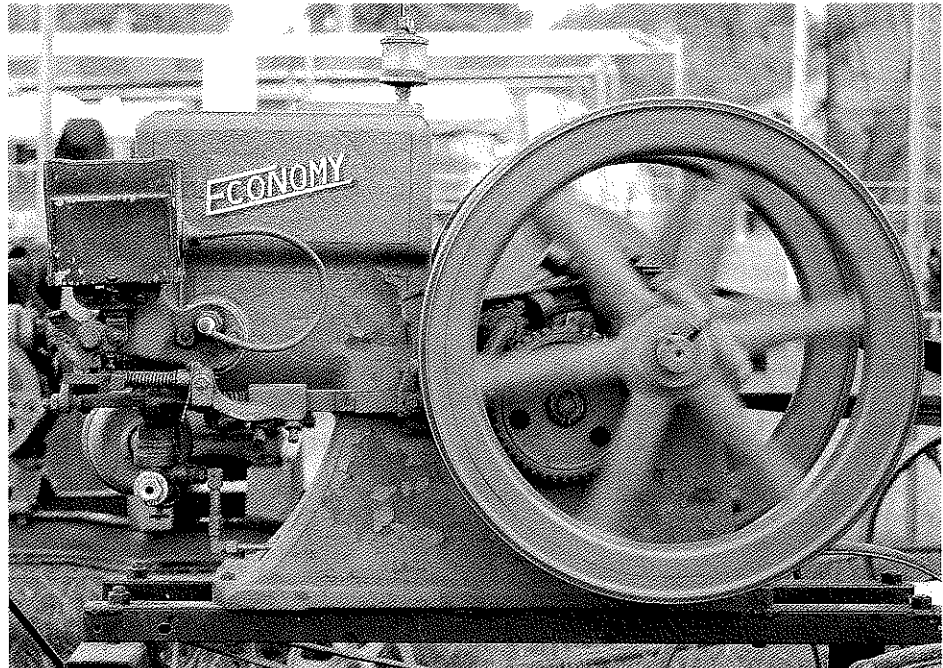
We talked about the engine a little more and I told him it was not an Economy brand engine. He looked at me sort of surprised

and I told him that he had an ARCO engine. His reply was to the effect that he had really wanted an ARCO. I then told him, "You got one."

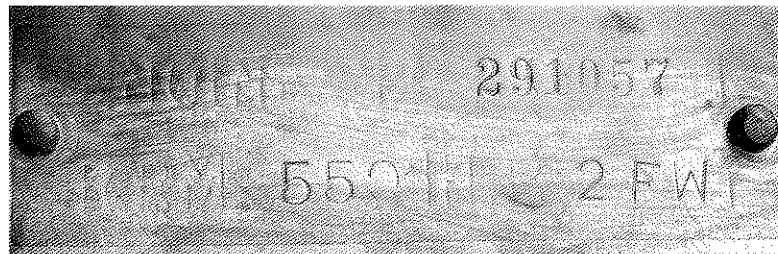
At serial no. 291057, only the Model FW ARCO was rated at 2 HP. Someone else had unknowingly or purposely painted it red and

put an Economy decal on it.

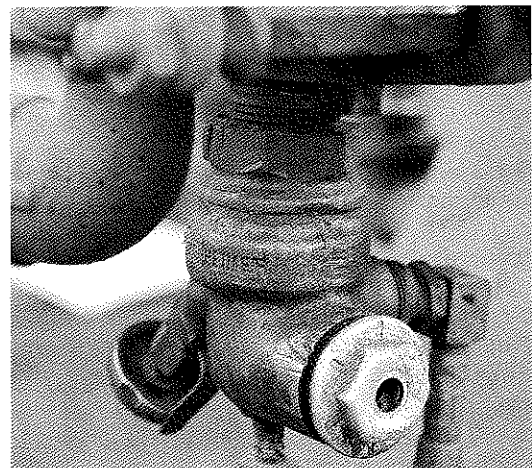
Further examination revealed several other interesting things relating to the ARCO engine of that time. The side rod bracket that holds the magneto trip finger is one piece with no



The ARCO engine, labeled as an Economy, was displayed at the 2005 Mt. Pleasant, Iowa, Old Threshers Reunion by owner Perry Smith.



Above: The Economy (ARCO) tag identifies the engine as a Model FW, no. 291057, rated at 2 HP. Right: The Lunkenheimer mixer has a pipe reducer screwed into the air intake.

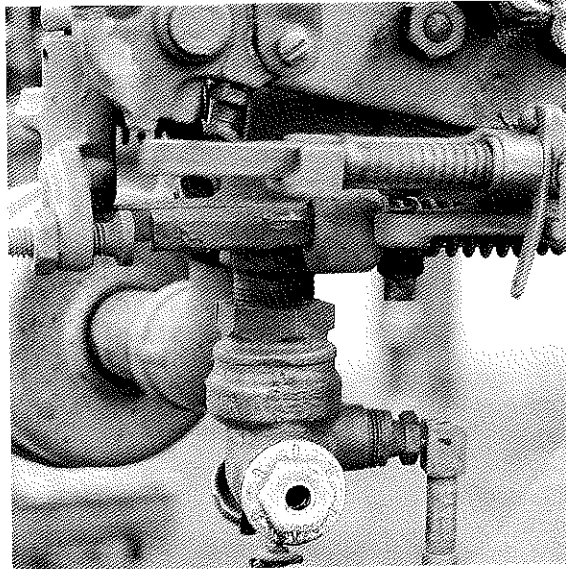


provision for adjustment other than moving it on the side rod. The bracket is typical of engines built at that time. This bracket is often broken and welded because it was built too weak. Later, it had a reinforcing rib cast onto it. The trip finger bracket does not have the Oct. 30, 1923, patent date on it and there is no clip to hold the trip finger in the bracket.

The next interesting thing is the magneto trip rocker. If you look closely, it is the rocker for the Wico PR magneto. It

has had a projection brazed to it and a bracket made to support the EK magneto armature return spring. Someone has modified it for the Wico EK magneto. The Wico PR magneto has an internal return spring. The ARCO brand engines were the first engines built by Hercules that use a Wico magneto. They started out using the Wico PR magneto, which predates the EK. This engine is likely a very early 1923 or possibly a late 1922 model.

The 2 HP FW ARCO engine began appearing around serial no. 260000 and continued into



The one piece side rod bracket holding the magneto trip finger has no provision for adjustment other than moving it on the side rod.

the 293000 numbers. During this same era there were small-block Hercules, Economy and Jaeger engines with the FW model letters, but they were all rated at 1-1/2 HP rather than 2 HP. Within this same serial number range there were E and F models commingled with the FWs. Good old Hercules continues to keep us confused.

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