



Early Villiers conversion has lasted well on hot steam as a regularly working engine.

This system, if fitted to a Stanley type boiler, would give good results. The diesel pump would be driven from the rear axle.

For quick removal of the burner, fit it with self tapping screws. Well, I hope someone may be interested in my ideas. I will give all possible help to anyone who would make the system.

In some recent testing, I have run my modified burners using a pot burner for pilot light to injector. The diesel pump was hand cranked at 50 rpm to burn 6 gallons per minute as photo was taken to burn 50-50 sump oil and diesel fuel.

This brings my developments up to date. I expect to describe more on my generator as I rebuild.

My engine conversion ideas were rejected by *English Engineers* and *Light Steam Power* would not publish them. However, the word soon got around and I have letters from all parts of the world for information on how to make a steam conversion of IC engines. Well, perhaps I can help them by giving information through your magazine.

The engines I have converted are the 1962 Ford Consul 4 cylinder with 82.5 mm bore. They will be scarce to get hold of now, though any 4 cylinder

engine can be converted as long as there is access to the cam followers and ushrods. A V-4 engine would be convenient. The older type of Ford engine is better suited, as the cylinders are spaced wider apart, giving plenty of room for fitting steam cylinders. The modern engines of today have cylinders very close together, and the fitting of steam cylinders is harder.

The air-cooled cylinders are from Villiers engines and are still available here. Wisconsin air cooled engines would be suitable and they make a V-4 engine with the cylinders separate from the oil sump. The main things to check are the distance between valve centers and the distance from center of piston to centerline of valves. The push rods from the cam follower can be staggered on a slight angle if not in a straight line.

Fortunately, steam cylinders can be made to fit nearly any type of engine to convert it to steam. I use heavy gauge steam pipe, weld 3/8 plate across the top and around the bottom, bore out, fit a cast iron or chrome cylinder sleeve, then fit valve seats and valve guides to suit the engine block dimensions. The job then looks a lot more professionally engineered.

