

SPECIFICATIONS FOR KEEN STEAMLINER - MODEL S

For many years we have done considerable development work on steam automobiles and will attempt to give you a general idea on what is practical. The first boilers we built were the water level type, and with these boilers we tried out first vaporizing burners which were much superior to the old burners used on the steam cars in the past. However, we were not satisfied with the vaporizing type burner. From practical experience, we decided the atomizing burner with electrical ignition would be more suitable for motor vehicle use. Then we built and installed the atomizing type burner under the water level boiler and in some respects this gave us better performance than the former burners. We then decided an entirely different type of boiler would have to be designed. We decided the next thing to do was to try a mono-tube boiler with enough steaming capacity and also with some reserve capacity. After considerable preliminary lay out and design, we started to build this new boiler. After the boiler was completed we installed it in a 1920 Stanley Steamer with a regular 4 x 5 engine together with a new condenser which replaced the old Stanley condenser. In addition to this we used a tubular condenser made of 1/2" O.D. steel tubing in the place of the old exhaust pipe which was placed under the running board. This boiler which would produce at least twice as much steam as the large Stanley boiler certainly gave this car good performance and with the improved condensing arrangement the car would make over 100 miles on a tank of water in summer weather, which was unusually good for a Stanley. Despite many of the critics of the Stanley engine we agree that it is not the most economical engine on steam, but with the modern boiler it still will give a good showing. The reason we show a Stanley engine is that this is about the only engine that can be had at this time. There is no question that a more modern engine would give better performance but the high cost of labor and materials would be beyond the reach of the average steam car builder.

BOILER FEED PUMPS

The feed pumps shown on the drawing are the easiest to construct. The only objection to them is that they are not as quiet a pump as a multi-cylinder pump. These are driven with a spiral bevel gear off the rear axle through a drive shaft with universal joints. However this is quite a costly arrangement. The feed pumps are controlled by a solenoid valve and this solenoid is operated by a thermostat and a switch in the control box. When the boiler does not demand water, it is by-passed back to the water tank. We do not have any boiler prints for sale. We have built a few of these boilers and burners and they run around \$1200.00 and up. However, at the present time we are not building any boilers.

BOILER

This boiler steams up from all cold in 35 seconds to 1 minute. Maximum steam pressure is 1500 pounds. Steam temperature can be adjusted to suit individual engine 600 degrees to 800 degrees fahrenheit. Boiler diameter is 24" and height approximately 28". Burner will burn gasoline, kerosene or furnace oil without any change or adjustments.

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NOT NOW AVAILABLE - SORRY