## PATENTED SYSTEMS INC.

## Retrofit Ignition System for Ruston TA\* 1750 and TB\* 5000 Gas Turbines using Gas Fuelled ignition.

The PSI / Chentronics retrofit ignition system is an exact fit replacement for the existing Ruston exciter and igniter. It has been designed to eliminate the unreliable operation of the old system that occurrs when (1) moisture condensation on the igniter prevented it from firing, (2) Low LCV gas for ignition is difficult to ignite

The new system consists of a 24 VDC exciter unit, which fits in the same place and utilize the same mounting holes as the old transformer. A shielded cable connects the exciter to the igniter plug and the plug. The igniter plug utilizes an adapter to allow installation on the turbine without further modification.

The igniter plug is designed to produce 4 sparks per second and has a lifetime output of 250,000 to 350,000 sparks or 3900 to 5460 starts. The spark is so powerful it will fire underwater! If the gas is combustible it will light. The plug will withstand temperatures to 1000 deg. C. so retraction is not required.

The storage capacitor in the exciter has a life expectancy of 5 million output pulses or 3125 starts; the average exciter life is 10 years.

The exciter utilizes patented solid-state technology including power factor correction and solid state switching.

\*Please be advised that Patented Systems Inc is not an authorized dealer of Siemens, Alstom.



The illustration above shows the igniter plug, adapter and housing.



This illustration shows the exciter and the input power lead.

The complete system weighs about 8 pounds and installs in less than 2 hours even allowing time to remove the old units.

Installation start reliability increased from 8% to 95% essentially removing the igniter from consideration when troubleshooting a failed start.



Booster coil (64/51001096) with a Lodge plug (TA-23119). Both old and new are powered by the same 24VDC power supply

Please be further advised that the terms "TA" and "TB" are trade names of Siemens, Alstom.

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