Ignition system upgrade

Increased safety and operational stability

Improved safety and condition monitoring

All gas engines are delivered with a CPU system for ignition control. The system receives signals from speed sensors on the flywheel and camshaft, and delivers distributed low voltage to the individual coils on each cylinder.

The first generation of our K gas engines was delivered with an Altronic CPU-90 system. Modern engines feature an advanced CPU-95 system, with considerable improvements related to safety and condition monitoring of the ignition system.

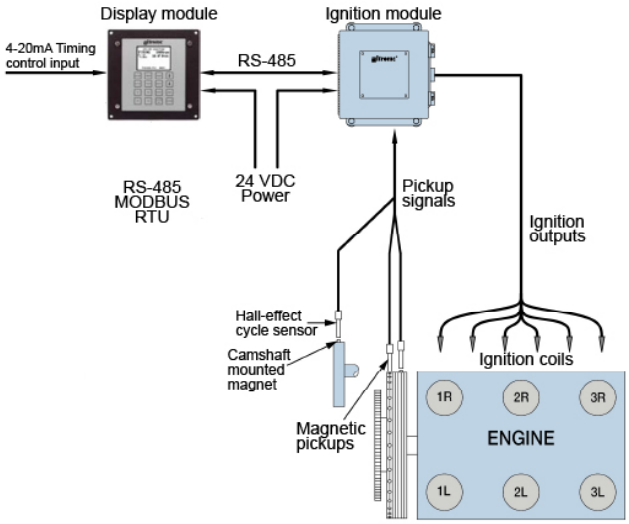
The CPU-95 system is field-programmable and offers a variety of advanced controls, emissions reduction, spark diagnostics, self-diagnostics, serial communications and engine protection features. It consists of two main parts: an engine mounted ignition module and a user interface display module.

Mounted on the engine control panel, the display module offers comprehensive display and control functionality. It provides direct access to critical operating information such as global and individual cylinder timing, engine RPM and overspeed setpoint, as well as diagnostic information. Its user-friendly design enables simple adjustment of system settings, and access to critical ignition operating information including all diagnostic messages along with datalogs and the ability to upload the ignition programming code directly to the CPU-95 ignition module.

A suite of comprehensive, easy-to-use, troubleshooting diagnostics have been developed and embedded into the CPU-95 system. The goal of these diagnostics is to reduce engine downtime and all associated costs.

Self-diagnostic and monitoring features include:

- Status of system pickups
- Verification of number of teeth/holes
- Overspeed condition
- Alarm and shutdown outputs
- Sparkplug condition monitoring (energy level)
- Fault description, such as wire-beak, pickup fault, electronic fault, etc.
- Full-time primary and secondary discharge diagnostics
- Early registration of ignition faults



Benefits from the upgrade

- Enhanced fuel efficiency
- Better peak pressure adjustment of each individual cylinder
- Improved ignition voltage according to average energy levels
- Optimized engine combustion and performance
- Enhanced spark plug service life
- User-friendly display enabling faults to be found and fixed easily and quickly
- Advanced and patented self-diagnostics, self-test, and alarm/shutdown capabilities
- Improved start sequence due to optimized soft ramp timing during start
- Robust, vibration resistant components
- Maintenance free

Applicable installations

Engine type	Fuel type
KV	Gas

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