



Therma-Start^{Off-Highway}

Idle Management System

THERMEX
ENGINEERED SYSTEMS INC.



FOR USE ON: Haul trucks, shovels, dozers, loaders, excavators, graders, articulated trucks, service trucks, **AND MUCH MORE!**

What are the benefits of using Therma-Start?

Using a 789C CAT Haul truck for example:



Payback Period:

The payback from fuel savings is accomplished in less than a month in the example above. When you also factor in significantly extended maintenance intervals over 1000 hours per year, your payback escalates dramatically.



Reduced Fuel Consumption

From 149 Gals (564 L) down to 30 Gals (114 L) per shift.



Reduced Idle Time

From 12 hours down to 2.4 hours per shift.



Reduced Carbon Emissions

From 2,866 lbs (1,300 kg's) of Co2 down to 573 lbs (260 kg's) of Co2 per shift.

Therma-Start is a non-invasive retrofit start-stop system that easily installs on any diesel equipment.



FEATURES

<p>Safety Lockout Protection</p> <p>Daisy chain safety loop on key access doors and panels immediately disables ThermaStart if any access is attempted by maintenance personnel</p>	<p>Air Start Pressure Monitor</p> <p>On air start trucks engine will start when reservoir pressure drops to 100 PSI and shuts off again when pressure reaches 120 PSI (adjustable)</p>
<p>Ambient Temperature Control</p> <p>Engine block temperature response is not enabled until ambient temperature drops below freezing, provides automatic summer/winter switchover</p>	<p>Fast Idle Activation</p> <p>Starts at low idle then ramps up to fast idle after 30 seconds</p>
<p>Engine Block Temperature Control</p> <p>Engine is started when block temperature drops to 15C and then shut off again when block reaches 70C</p>	<p>Pre-Start Warning Siren</p> <p>Activates 40 seconds prior to initiating startup (adjustable)</p>
<p>Battery Charge Monitoring</p> <p>Engine is started when voltage drops below 23.5 Volts and shuts off again when voltage reaches 27.0 Volts (adjustable)</p>	<p>Strobe Monitor</p> <p>White strobe indicates engine is running under ThermaStart control</p>
<p>Pre-Lube Pump Timer</p> <p>For machines with a pre-lube oil pump the system will facilitate up to 1.5 minutes (adjustable) for oil pressure to reach OEM start activation</p>	<p>Data Logging</p> <p>System continuously logs key parameters once every minute to an SD card retrievable for PC downloading to clearly identify operational cost savings</p>

KIT COMPONENTS

