

PRODUCT BULLETIN

PB NO.103

REV. 3

**Subject: 8GTL Conversion Kits for
White Superior 8GT-825 Engines**

PROBLEM: Are you experiencing problems with your older 8GT-825 engines such as detonation, piston and liner scuffing, premature wear, and unbalanced due to the control system?

SOLUTION: If so, we suggest you join our list of satisfied customers by installing an 8GTL Conversion Kit during your next scheduled overhaul to reduce fuel consumption, maintenance costs and downtime.

Major improvements include:

1. Lower Compression Six Ring Pistons

The new 8.20:1 compression ratio reduces peak firing pressures by 20%. This reduces dynamic stresses on the cylinder block, crankshaft, bearings and other internal components.

In addition, the kit provides more stable operation and enhances engine tolerance for variations in fuel composition.

2. Fuel Supply System

The new larger diameter fuel header reduces pulsations and precision orifice plates at each cylinder head improves combustion stability and maintains balance of loading between cylinders.

The fuel metering valve is controlled by the governor to maintain speed regardless of load.

3. Camshaft

The cam profile has been revised and material specifications improved to reduce wear. The timing has been changed to maximize time for fuel mixing to reduce fuel consumption by 6%.

Air flows are greater and the lower average peak firing compression pressure results in lower sensitivity to detonation.

4. Air/Fuel Control System

The new simplified system improves control of the air/fuel ratio throughout various speed and load ranges. Pneumatic or electrical controller positions a single air butterfly valve to maintain air manifold pressure in relationship to gas header pressure at all times.

Items included in the conversion kit are:

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| 1. Pistons | 11. Turbocharger Nozzle Ring |
| 2. Piston Rings | 12. Air/Fuel Control Panel-
Pneumatic or Electronic |
| 3. Piston Pin Snap Rings | 13. Starting System with Start
and Run Regulators
(If Required) |
| 4. Cylinder Head Gasket Kits | 14. All Necessary Fittings,
Hardware & Gaskets for
Mounting |
| 5. Camshaft Assembly or Re-Lobe
Existing Camshaft | 15. Assembly Drawing, Initial-
Start-up Adjustments and
Instructions and Operating
Data |
| 6. Gas manifold Assembly
& mounting Elbows | |
| 7. Gas Orifice Plates | |
| 8. Gas Metering Valve & Control
Shaft Gas Inlet Piping | |
| 9. Air Butterfly Housing
with Fixed Deflectors | |
| 10. Single Air Butterfly and
Air Actuating Cylinder
Installed by EnDyn | |

5. Upgrade Manual

EnDyn provides a user friendly upgrade kit manual to assist customers during the conversion, as well as detailed listings of the kit components.

Prior to your next overhaul, contact **EnDyn** or your local **PowerParts**[®] Distributor for a quotation on the complete kit and assistance in calculating your return on investment.

GTL/SGT CONVERSION KIT SALES DATA SHEET

Company Name: _____ Plant Location: _____
Mailing Address: _____ Mailing Address: _____

Engine Model: _____ Serial Number: _____
Operating Speed Range: _____ RPM To _____ RPM
Engine Rating: _____ BHP@ _____ RPM Plant Elevation: _____
Ambient Temperature Extremes: _____ °F to _____ °F
Fuel Gas Temperature: _____ °F Heating Value _____ BTU/SCF
Governor Manufacturer: _____ Model: _____
Serial Number: _____ Designation: _____
Turbo Manufacturer: _____ Model: _____
Part Number: _____ Designation: _____
Starting System (√): Internal _____ External _____
Type and Model of Starter: _____
Control System (√): Pneumatic _____ Electric _____
Manual Start _____ Auto Start _____
Air/Fuel Control Preference (√) Pnuematic _____ Electric _____
Ignition System Manufacturer: _____ Model _____
Type (√): Shielded _____ Non-Shielded _____
Timing Control Preference (√) Manual _____ Auto _____
Cylinder Head P/N: _____ Camshaft P/N- _____
Intercooler P/N: _____ Jacket Water Pump P/N: _____
Oil Cooler Included with (√): Intercooler Water System _____
Jacket Water System _____
Air Manifold Temperature Controller (√) Yes _____ No _____
Type & Model _____
Additional Information: _____

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