BOLT-IN PRE-COMBUSTION CHAMBER
SUPERIOR™ 825 ENGINES

Overview
As a part of continuous improvement, Cooper offers an improved pre-combustion chamber for 825 series engines. The new bolt-in design provides emissions reduction, combustion stability and fuel savings.

The original screw-in pre-combustion chamber was redesigned to greatly reduce NOx while improving engine performance and reliability.

Benefits
› Reduction of NOx emission
› Easier removal from the power head, thanks to bolt-in design
› Reduced carbon buildup due to improved pilot fuel parting
› Reduced thermal loading and extended sparkplug life
› Eliminated high-temperature erosion
› Ability to use exiting heads after small modifications

Upgrade summary
Prechamber assembly method was changed from screw-in to bolt-in type. This minimizes risk for component damage during assembly/disassembly operations by reducing tooling size and required torque.

Improved pilot fuel parting reduces carbon build up. Smaller nozzle volume reduces thermal loading, NOx formation and extends sparkplug life. Advanced materials eliminate high-temperature erosion of the nozzle.

Interchangeability
New chambers can be installed on existing 825 series engines. Cylinder heads used for screw-in chamber can be re-used for upgraded bolt-in devices after small modifications.