



# Ajax Emissions Challenges: Solved.

Reduce emissions without jeopardizing your Ajax engine's low maintenance and easy operation. GE's solutions work alone or in combination to help engines meet local regulations in just about any environment.



## Combustion Efficiency Solutions

Ajax pre-combustion chambers greatly reduce NOx and improve fuel economy, while the resulting smoother combustion leads to reduced misfires and maintenance costs.

A pre-combustion chamber acts as a high energy ignition system – igniting a fuel-rich mixture in a cavity outside of the power cylinder and forcing it into the power cylinder while still burning. The result is a much more complete combustion of the lean fuel mixture in the power cylinder.

Depending on the Ajax engine model being upgraded, customers will need the Low Emission (LE) Conversion Kit or the Ajax Screw-in Pre-combustion Chamber.

## Screw-in Pre-combustion Chamber

The screw-in pre-combustion chamber simply screws into the existing power head through the spark plug hole – in most cases, no modifications or new power parts are needed. Currently available for 12" through 13¾" power cylinder bore sizes.

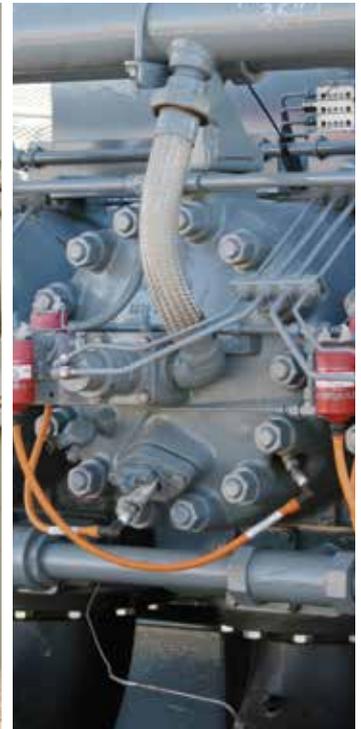
### Features

- Water cooled, self contained water jacket
- Replaceable O-ring seals
- Fuel check valve
- Fuel orifice nozzle
- Advanced high-temperature materials

## Ajax LE Conversion Kit

The LE conversion kit is a "matched set" of power-end components and generally includes the power cylinder (15" bore only), power piston, and power cylinder head.

An LE conversion kit can easily be installed during a scheduled maintenance period. Ajax service representatives and distributors can perform the work for you, or your own maintenance people can do the conversion following our guide book. The conversion generally requires one day per power cylinder.



## Exhaust Optimization Solutions

Ajax expansion chambers and catalytic converters offer improved emissions with exhaust optimization.

### Exhaust Expansion Chambers

The Ajax exhaust expansion chamber uses exhaust pulsations to optimize the scavenging of the power cylinders while providing substantial increases in the mass of fresh air that is trapped inside the cylinders. The expansion chamber can be supplied as original equipment or can easily be retrofitted to existing installations.

This method of exhaust emissions reduction does not rely on any moving mechanical devices nor does it require system adjustments and maintenance to achieve the emissions reduction.



The length and shape of the pipes controls the process of scavenging and trapping fresh air in the power cylinders.



This tuned exhaust system features diverging and converging sections of pipe.

### Oxidizing Catalytic Converter

The Ajax oxidizing catalytic converter is designed to meet the new environmental guidelines for 2-stroke, lean-burn (2SLB) gas engines. As a result of an exhaustive research and development program, the converter is now available for new units as well as retrofit applications. Patent pending.

- One element per power cylinder
- System of internal baffles and pipes designed to silence exhaust and protect the catalyst element
- Catalyst elements in retainer rack
- Continuous O-ring seal
- Can be utilized on any fuel injected Ajax



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