

Cat[®] Emissions Upgrade Kits

For Select 3508, 3512, and 3516 Marine Engines



Today's Technology. Yesterday's Engines.

Cat[®] Emissions Upgrade Kits for select Marine 3500 engines offer significant benefits for your next overhaul.

- Kit includes proven system parts required to convert to EPA equivalent Tier 1 or Tier 2 configurations
- Certified for compliance with the US EPA Marine Final Rule (Remanufacturing Program) under 40 CFR Part 1042
- Upgrades can be accomplished in hull without major modifications to the vessel
- Kit design simplifies the installation process
- Provides exceptional life with Genuine Cat[®] parts

Bottom Line: Emissions Upgrade Kits can help you achieve emissions compliance, and provide many operational benefits.



Cat® Emissions Upgrade Kits for Select 3500 Marine Engines

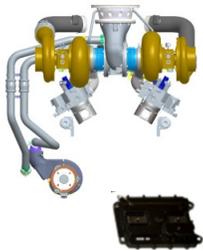
Impact on Your Business



Sustainability and Compliance

- Demonstrated significant reductions of particulate matter, nitrogen dioxide, hydrocarbons, and carbon monoxide
- U.S. Environmental Protection Agency (EPA) certified the Cat® 3500 Series Marine Emissions Kits according to EPA Rule 40 CFR Part 1042

The EPA adopted an emissions program for many marine engines already in operation. The rule requires a 25% PM reduction at the time of major overhaul. It applies to engines manufactured between 1973 and the last Tier 2 model year, powered at or above 600 kilowatts, have a displacement of less than 30 liters per cylinder, and installed on a vessel that is flagged or registered in the U.S. Refer to the EPA for details.



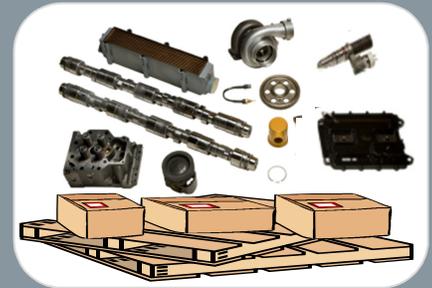
Features and Benefits

- Can implement during a scheduled major overhaul
- Gain benefits of a new engine at a lower cost
- Improve acceleration and load acceptance
- Less vibration and noise
- Improved diagnostic capability
- Live messages and alarms
- Optional user configured display with real time information to: www.cat.com/EmissionsSolutions



How it works

Installation of the Cat® Emissions Upgrade Kits can be accomplished in hull without major modifications to the vessel, and the kit design simplifies the process. The primary components are listed below.



Electronic Control	Aftercooler
Camshafts	Valve Mechanisms
Cylinder Heads	Cylinder Packs
Water Lines	Flywheel Housing
Exhaust Manifold	Fuel Injectors
Turbo Oil Lines	Heat Shields*
Oil, Fuel, & Air Lines	Turbocharger
	Wiring

Applicability

Solutions apply to many 3508, 3512, and 3516 marine engines. Consult with your Cat® Dealer for application requirements.

*ordered separately

CAT® DEALERS DEFINE WORLD-CLASS PRODUCT SUPPORT.

We offer you the right parts and service solutions, when and where you need them.

The Cat Dealer network of highly trained experts keeps your entire fleet up and running to maximize your equipment investment.

