For Harmonious Living with Global Environment

Normally, when NOx emissions are reduced, the fuel consumption and smoke generation will increase, adversely affecting both the environment and management. As a solution to this, YANMAR has developed "Eco Diesel", which is designed to as to comply with severe environmental protection.

The benefits of low NOx and smoke generation in addition to reducing NOx emissions.

Reborn V12 power
you can rely on,
developed from years of experience with
the latest technology

Since the 2LA and 4LA series engines were first sold in 1970, Yanmar has supplied more than 2,500,000 of them around the world. Based on this success, we have developed the new high performance V12 engine series for our best-selling 6AY series, meeting IMO Tier II exhaust emission standards without electronic control system. This new engine features a prolonged lifecycle design that ensures the 10% and 20% reconditioning renewals in a new, efficient combustion method. Improved durability, and ease of maintenance. The engine will help cut costs and reduce downtime.

Good Fuel Economy together with Lean Exhausts.

The new speed/quality bases in the slurry injection position or more from lateral side combustion. The result is a high-performance 12 cylinder intake and exhaust valve. The new combustion system will help improve fuel efficiency and reduce emissions.

Performance

Max. t orque (N•m)

Output (kW)

Fuel consumption (g/kWh)

Amount of savings

Annual saving=30,000 liters

12AYM-WGT

L-rating 1246kW | 1620mhp |

12AYM-WGT

L-rating 1246kW | 1620mhp |

Reborn

Power and Quality

IMO Tier II Compliant / Mechanical Engine Control

YANMAR MARINE DIESEL ENGINE

1822 mhp

LONG STROKE
**YANMAR, Providing Quality Propulsion Engine Packages for Over 60 Years.**

**High Torque**

Excellent Torque Rise Characteristics in High Speed and High Load Range Enables Stable Performance of 245 BHP even at High Load

**Toughness**

1. Less, smoother LCC (Lubricating Oil Consumption), and long overhaul interval thanks to ultradur® (kind of artificial ceramic) treatment cylinder liners and nitrided stainless steel rings and the finely judged clearance between piston and liner.

2. Tufftride treatment cylinder liners and nitrided stainless steel rings to provide superior wear resistance and durability.

3. Improved wear resistance and reduced oil consumption in combination with "Silicard" liners and "Silicard" treated pistons.

4. "Silicard" treated cylinder liners and "Silicard" treated pistons to provide superior wear resistance and durability.

5. Type Approved by Marine Class Societies.

**Lower Down Time**

- Easy routine inspection, easy routine maintenance.
- Long overhaul interval thanks to ultradur® (kind of artificial ceramic) treatment cylinder liners and nitrided stainless steel rings and the finely judged clearance between piston and liner.
- Easy routine maintenance thanks to "Silicard" treated cylinder liners and "Silicard" treated pistons.
- Reduced oil consumption in combination with "Silicard" liners and "Silicard" treated pistons.

**Techniques for Complying with IMO Tier II Emission Standards:**

Exhaust Gas Recirculation (EGR)

In the 12AY engine, the Internal EGR System is used. The unique configuration of the internal EGR system does not require any external control devices or any significant changes to the engine structure. In external EGR, the line of the engine and supercharger must be equipped with devices such as EGR solenoid valves and coolers, and control must be performed for them. But in internal EGR, these functions can be performed by controlling the lift of the intake and exhaust valve.

**Rubber mounts (option)**

Optional wiring to suit classification society requirement available.

**Yanmar Original Heavy Duty Fuel Injection Pump**

Used the same fuel pump as the six-cylinder 6AY Series for improved reliability.

**Photograph may show optional equipment.**