A SUSTAINABLE FUTURE

YANMAR is engaged in the relentless pursuit of high efficiency, low emission diesel engines. With technology that already meets the next generation of environmental emissions standards, YANMAR is providing sustainable solutions towards a new era of prosperity.
Perfect Technology for Clean Power

YANMAR smart diesel technology from a future where all devices operate under constant electronic control (4ll/veva) provides unparalleled levels of efficient combustion. By monitoring a host of factors from the temperature and oxygen level of the surrounding air to the current engine loading, the engine itself can determine the optimum running conditions to deliver maximum combustion efficiency in any environment.

Through moment-by-moment feedback and control, a powerful and cleanest engine in its category is born, the likes of which the world has never seen.

- EU Stage5 Ready
  Cleanest engine in its category
- No Scheduled Maintenance DPF* for 6,000 hours
  Seamless operation in the field
- Tough and Reliable Power
- Best in Class Fuel Consumption

* DPF is the Diesel Particulate Filter, which removes harmful particulates from exhaust gas.
- **COOLED EGR SYSTEM**
  The cooled Exhaust Gas Recirculation (EGR) system cools a portion of the engine's exhaust gas and mixes it with intake air and coolant. This reduces the combustion temperature within the cylinders and reduces NOx emissions. This helps improve fuel economy, reduce exhaust emissions, and improve fuel efficiency.

- **COMMON RAIL SYSTEM**
  The fuel injection system uses an electronically-controlled common rail fuel injection system. In operation, the system injects fuel directly into the engine's combustion chambers, reducing the need for high-temperature parts and improving the efficiency and performance of the engine.

- **DIRECT INJECTION COMBUSTION**
  In 2003, YANMAR was one of the first companies to implement direct injection combustion into its small diesel engines. Since then, YANMAR has used its innovative DFV (Direct Fuel Injection Valve) technology to develop the DFV direct injection combustion technology that reduces emissions, increases fuel efficiency, and reduces engine noise and vibration.

- **ECU**
  The ECU (Engine Control Unit) is an electronic control module that monitors engine performance and calculates the injection timing and amount of fuel. It also controls other engine functions such as air-fuel ratio and throttle position.

- **DIESEL PARTICULATE FILTER (DPF)**
  The DPF is a filter that traps soot and smoke particulates from exhaust gases, preventing them from being released into the atmosphere. It reduces emissions and helps improve fuel efficiency.

- **REGENERATION MODES**
  During the process of releasing the accumulated ash from the DPF, two modes of regeneration can be initiated: passive regeneration and active regeneration. Passive regeneration occurs when the engine's exhaust temperature is high enough to melt and release the ash. Active regeneration involves the engine's exhaust gas being directed into the DPF, where the high temperature and high oxygen content of the exhaust gas burn the ash and release it into the atmosphere.
SPECIFICATION

**Engine Model**: 4TNV94FHT

**Engine Displacement**: 940 cc

**Rated Power (ISO)**: 70.4 kW (95 PS)

**Max. Torque (ISO)**: 232 Nm at 1800 rpm

**Performance Curve**: [Graph showing performance curve]

**Dimensions**: [Diagram showing engine dimensions]

**Applications**: Wide Range Application

- Construction
- Agriculture
- Material Handling

**SMARTASSIST-Direct**: [Section on SMARTASSIST-Direct technology]

**Research & Development**: [Section on YANMAR's research and development efforts]

YANMAR - To conserve fuel is to serve mankind