



# EXTENDED LIFE EXPECTANCY: DIESEL ENGINE MAINTENANCE BENEFITS

Did you know that regular maintenance can significantly extend the life of your diesel engine? By sticking to a proper routine, you'll not only ensure peak performance but also save on long-term operating costs.

## 01. THE POWER OF PREVENTATIVE MAINTENANCE



**Why it matters:**

- **Less Wear & Tear:** Reduces strain on components like pistons and injectors.
- **Avoid Big Failures:** Catches issues before they become costly.
- **Boost Efficiency:** Cleaner engines burn fuel more effectively.

## 02. KEY DIESEL ENGINE MAINTENANCE ROUTINES

Maintenance schedules vary by engine. Always consult your owners manual.

### Oil and Filter Changes

- Change oil every **5,000 to 7,500 miles** max. Getting your oil analyzed regularly is also good practice.

### Fuel System Care

- Replace fuel filters every **15,000 miles**.
- Drain water separators regularly to avoid injector damage.

### Air Filter Replacement

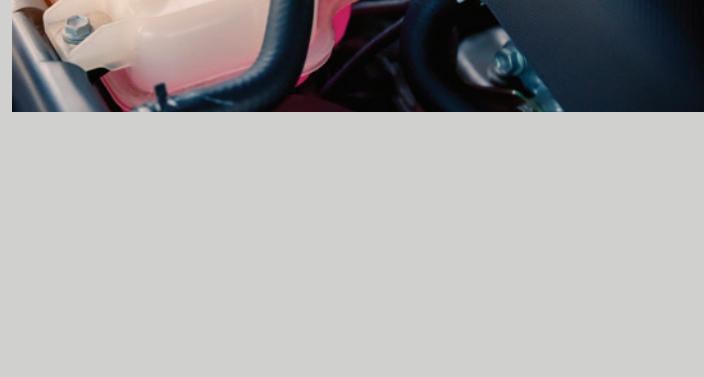
- Inspect air filters every **10,000 miles** and replace around **30,000 miles**.
- Keeps dirt and debris from entering the engine.

### Coolant System Maintenance

- Replace coolant every **100,000 miles** or sooner.
- Check for leaks or degraded hoses.

### Turbocharger and Exhaust Care

- Inspect turbochargers every **50,000 miles**.
- Clean exhaust systems to avoid carbon buildup.



## 03. LONG-TERM BENEFITS OF PROPER MAINTENANCE



- **Longer Engine Life:** Adds years to engine life.
- **Lower Costs:** Saves on fuel and avoids expensive repairs.
- **Better Resale:** Maintained engines sell for more.
- **Eco-Friendly:** Reduces emissions and waste.

## 04. SIGNS YOUR DIESEL ENGINE NEEDS MAINTENANCE



- **Poor Fuel Efficiency:** Signals fuel system, emissions system or air intake issues.
- **Smoke:** *Black* smoke indicates combustion problems. *White* usually indicates coolant leaking into the combustion chamber but can also mean extreme fuel injector issues. *Blue* means oil has made it into the combustion chamber.
- **Knocking:** May mean internal damage or bad fuel.
- **Hard Starts:** Often caused by weak batteries or glow plugs.



## 05. TIPS FOR CONSISTENT MAINTENANCE

- ✓ Stick to the manufacturer's recommended schedule.
- ✓ Keep a log of all service records.
- ✓ Use high-quality lubricants and fuel additives.
- ✓ Work with certified diesel technicians.

