

# T8000 Heavy-Duty Truck Service Guide

## Official Diagnostic and Repair Procedures

### Vehicle Specifications

Model: T8000

Category: Heavy-Duty Commercial Truck

Model Years: 2015-Present

### Section 1: Common Diagnostic Codes

#### **P0420 - Catalyst System Efficiency**

Diagnostic Sequence (DIAG-SEQ):

1. Verify fault code with scanner
2. Visual inspection of exhaust system
3. Test downstream oxygen sensor voltage (0.1-0.9V)
4. Test upstream oxygen sensor
5. Perform catalyst efficiency test
6. Analyze fuel trim data

Repair:

- O2 Sensor: \$285 + 0.8 hrs
- Catalyst: \$2,800 + 3.5 hrs

**WARNING** Always test O2 sensor BEFORE replacing catalyst!

#### **P0087 - Fuel Pressure Low**

Diagnostic Steps:

1. Test fuel system pressure
2. Inspect/replace fuel filter (every 15,000 miles)
3. Test high pressure fuel pump
4. Check fuel pressure regulator

Repair:

- Fuel Filter: \$65 + 0.5 hrs
- Fuel Pump: \$1,850 + 4.0 hrs

#### **P0300 - Random Misfire**

Diagnostic Steps:

1. Retrieve freeze frame data
2. Inspect spark plugs/ignition coils
3. Test fuel injectors
4. Check compression
5. Analyze fuel trim

Repair:

- Spark Plugs: \$180 + 1.5 hrs
- Ignition Coils: \$320 + 2.0 hrs
- Fuel Injectors: \$450 + 2.5 hrs

### Section 2: Preventive Maintenance

Every 5,000 Miles:

- Oil and filter change

## Service Documentation

- Multi-point inspection

Every 15,000 Miles:

- Fuel filter replacement
- Air filter service
- Tire rotation

Every 30,000 Miles:

- Transmission service
- Differential service

Every 60,000 Miles:

- Major service
- Fuel system cleaning
- Emissions system inspection

## Section 3: Warranty Notes

### Emissions Coverage

Catalyst: 8 years / 80,000 miles

O2 Sensors: 8 years / 80,000 miles

### Claim Requirements

Complete diagnostic documentation

O2 sensor voltage test results for P0420 claims

Maintenance records showing regular service

### Common Claim Denials

Declined preventive maintenance

Missing O2 sensor voltage test

Overdue maintenance

Document Version: 2.0

Last Updated: October 2025

This document is proprietary and confidential.