

T7000 Heavy-Duty Truck Service Guide

Official Diagnostic and Repair Procedures

Vehicle Specifications

Model: T7000

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

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