

MODEL-T6000

Medium-Heavy Duty Transition Truck

OFFICIAL SERVICE GUIDE

Engine:	8.0L Inline-6 Diesel
Power Output:	430 HP @ 2,600 RPM
Torque:	1,150 lb-ft @ 1,400 RPM
Emissions:	Tier 4 Final + Advanced DEF
GVWR:	19,500 - 24,000 lbs
Service Class:	Medium-Heavy Duty (Bridge to Heavy-Duty)

■■ IMPORTANT NOTICE: This service guide contains MODEL-SPECIFIC diagnostic procedures required for warranty claim approval. Generic procedures from other models are NOT acceptable. Failure to follow T6000-specific steps may result in claim denial.

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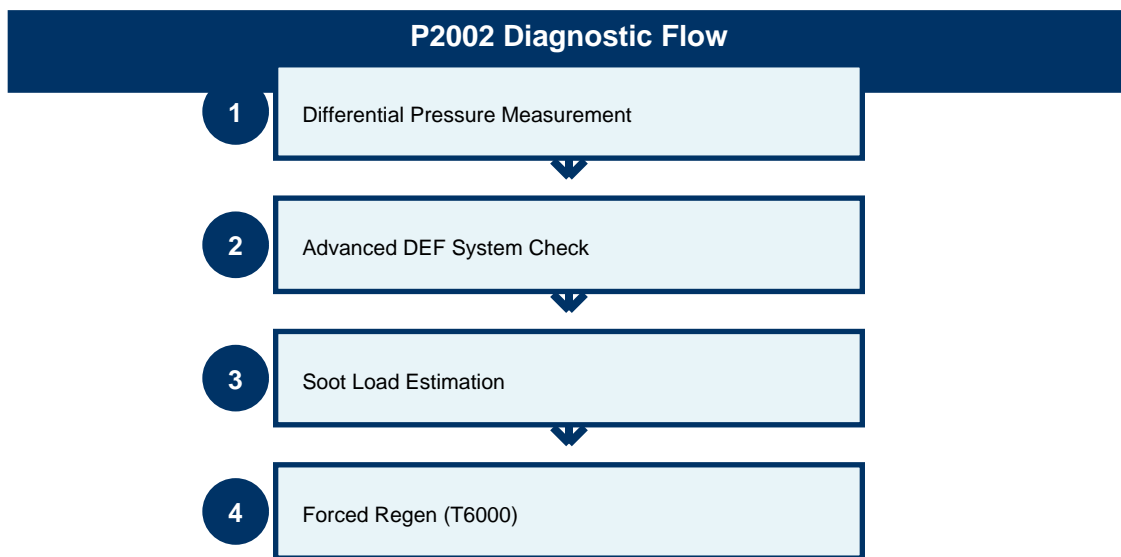
SECTION 1: DIAGNOSTIC PROCEDURE

P2002: DPF Efficiency Below Threshold

■ **CRITICAL FOR T6000:** T6000 bridges medium and heavy-duty. Uses T5000 procedure base but with **TIGHTER** tolerances.

OVERVIEW

T6000 is a transition model with specifications between T5000 and T7000.



DETAILED DIAGNOSTIC PROCEDURE

STEP 1 Differential Pressure Measurement

Measure DPF pressure using T6000 sensor.

■ **SPECIFICATION (T6000):**

T6000: Normal <2.2 PSI (tighter than T5000s 2.5 PSI). Critical >5.8 PSI. T6000 has DUAL pressure sensors (one at inlet, one at outlet).

✓ **EXPECTED RESULT:** BOTH sensors documented

STEP 2 Advanced DEF System Check

T6000 has advanced DEF system with quality sensor.

■ SPECIFICATION (T6000):

DEF concentration: 32.5% ($\pm 1\%$ tighter tolerance). DEF pressure: 88 PSI. DEF temperature must be $>20^{\circ}\text{F}$ for proper operation.

✓ **EXPECTED RESULT:** All DEF parameters within spec

STEP 3 Soot Load Estimation

T6000 includes soot load estimation feature (not available on T5000).

■ SPECIFICATION (T6000):

Soot load $<40\%$ normal. $>40\%$ regen recommended. $>50\%$ regen required.

✓ **EXPECTED RESULT:** Soot load percentage documented

STEP 4 Forced Regen (T6000)

T6000 uses 3.5-stage regen (extended Stage 2).

■ SPECIFICATION (T6000):

Temperature: $1,100\text{--}1,230^{\circ}\text{F}$ (higher than T5000). Duration: 18-28 minutes. Pressure should drop to $<2.5\text{ PSI}$.

■ **REQUIRED TOOLS:** DIAG-T6000-01 or DIAG-T7000-01 (backward compatible)

✓ **EXPECTED RESULT:** Regen documented

COMPLETE T6000 SPECIFICATIONS

Parameter	Specification
Diff Pressure (Normal)	$<2.2\text{ PSI}$ (TIGHTER)
Soot Load (Normal)	$<40\%$
DEF Pressure	88 PSI
Regen Temperature	$1,100\text{--}1,230^{\circ}\text{F}$ (HIGHER)
Post-Regen Pressure	$<2.5\text{ PSI}$

Pressure Sensors	DUAL (inlet and outlet)
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■ ■ WARRANTY CLAIM DOCUMENTATION REQUIREMENTS

- T6000 has DUAL pressure sensors - BOTH must be documented
- Soot load percentage from ECM - MANDATORY (new feature on T6000)
- Cannot use T5000 procedure (missing soot load check)
- Temperature requirements are HIGHER than T5000 (1,100°F vs 1,050°F)

■ COMMON MISTAKES TO AVOID (T6000):

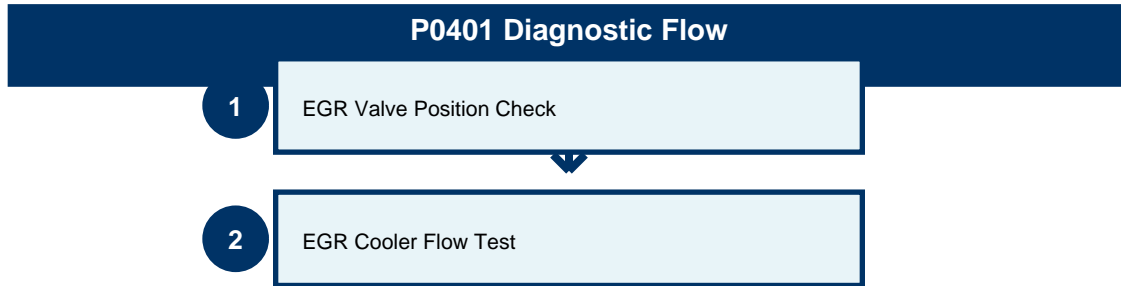
- Only documenting one pressure sensor (T6000 has two)
- Forgetting soot load check (unique to T6000+)
- Using T5000 temperature specs (too low for T6000)

SECTION 2: DIAGNOSTIC PROCEDURE

P0401: EGR Flow Insufficient

OVERVIEW

T6000 EGR system is larger than T5000 models.



DETAILED DIAGNOSTIC PROCEDURE

STEP 1 EGR Valve Position Check

Monitor EGR valve position with scan tool.

■ SPECIFICATION (T6000):

At idle: 5-15% open. At 2000 RPM: 25-45% open. T6000 has larger EGR valve than T5000.

✓ **EXPECTED RESULT:** Position within range

STEP 2**EGR Cooler Flow Test**

Check EGR cooler for restrictions.

■ SPECIFICATION (T6000):

Temperature drop across cooler: 200-350°F. If <150°F: Cooler may be restricted.

✓ **EXPECTED RESULT:** Temperature drop documented

COMPLETE T6000 SPECIFICATIONS

Parameter	Specification
EGR Position (Idle)	5-15%
EGR Position (2000 RPM)	25-45%
Cooler Temp Drop	200-350°F

■■ WARRANTY CLAIM DOCUMENTATION REQUIREMENTS

- EGR valve position at idle and 2000 RPM - BOTH required
- Temperature drop across cooler must be documented

■ COMMON MISTAKES TO AVOID (T6000):

- Using T5000 EGR valve (smaller, wrong part)
- Not checking EGR cooler (common failure point on T6000)

WARRANTY REQUIREMENTS SUMMARY

For Model T6000 Warranty Claims:

- ✓ All diagnostic procedures in this guide are SPECIFIC to the T6000 model
- ✓ Technician notes must include actual measured values with units (PSI, volts, ohms, etc.)
- ✓ Using diagnostic procedures from other models on T6000 vehicles is NOT acceptable
- ✓ Generic statements like 'Replaced part. Cleared code.' will result in claim denial
- ✓ Post-repair verification testing must be documented
- ✓ Model-specific tools (where required) must be used and documented
- ✓ All specifications must be compared against T6000 specifications (not other models)