

TECH TIP

08MY-10MY P2002 DPR System Malfunction (2-Digit Diagnosis Codes)

OVERVIEW:

In the event that DTC (Diagnostic Trouble Code) P2002 – DPR (Diesel Particulate Reduction) System Malfunction sets in the engine ECU (Engine Control Unit), additional diagnostic information is provided through the use of a 2 digit diagnosis code (DGCODE). This publication provides the definition for these double digit codes.

SUBJECT VEHICLES: 08MY-10MY Conventional trucks

Note: This technical tip is provided as technical information and is not authorization for a warrantable repair.

Freeze frame information			
Freeze frame item	At work start	At the end of work	Unit
<P2002: DPR system malfunction>			
Year	2014	2014	Year
Month	11	11	Month
Day	18	18	Day
Hours	3	3	Hours
Minutes	15	15	Minutes
Engine coolant temperature	189	189	° F
Engine revolution	976	976	rpm
Injection quantity	25.9	25.9	mm3/st
Final accelerator opening	0	0	%
Speed	0	0	Mph
Intake air pressure	16	16	PSI
2 digit diagnosis code (DGCODE)	99	99	
Common rail pressure	9323.50	9323.50	PSI

2-Digit Code

DTC	2 Digit Code	Failure Mode	Judgement Threshold	
P2002	91	High DPF Inlet Temp	DPF inlet temp is higher than 965°C for 5sec.	
	92	High DPF Soot Amount (Caution) <DPR Manual Regen is ALLOWED>	High DPF Soot Amount DPF Soot Amount is higher than 5.0g/L (10BARS).	
		High DPF Differential Pressure	Engine ECU detects high DPF differential pressure 3times.	
	93	Melted DPF	High DPF Inlet Temp	[Idling Condition] - DPF inlet temp is higher than 800°C for 30sec. [Driving Condition] - DPF inlet temp is higher than 700-800°C* for 30sec. * Depending on driving pattern.
			Low DPF Differential Pressure	Engine ECU detects low DPF differential pressure 3times.
	94	High DPF Soot Amount (Warning) <DPR Manual Regen is NOT ALLOWED>	DPF Soot Amount is higher than 5.2g/L (10BARS).	
	95	Deteriorated DOC (DOC can't increase the exhaust gas temp)		Accumulated post injection quantity $\geq 1,000\text{cc}$
			DOC can't build enough temp to start post injection during DPR manual Regen for 1 hour. (DOC can't build enough temp by after injection.)	
99	DPF can't reach target temp although too much post injection was injected.	[J08] Accumulated post injection quantity $\geq 2,300\text{cc}$ [J05] Accumulated post injection quantity $\geq 2,000\text{cc}$		