DTC	78 (5)	Fuel Pressure Regulator Circuit Malfunction (Open/Short)

DTC	78 (6)	Fuel Pressure Regulator System Malfunction

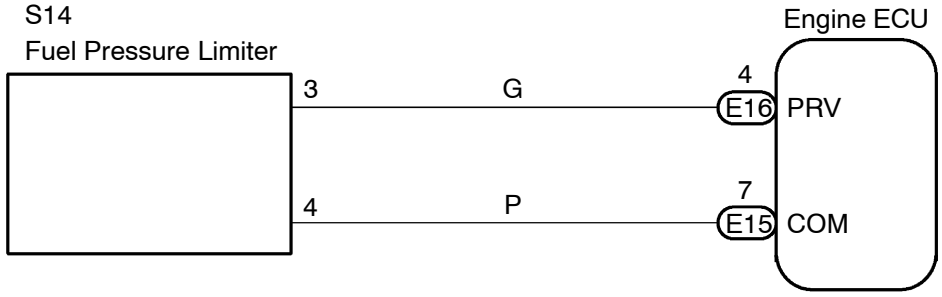
CIRCUIT DESCRIPTION

The fuel pressure limiter on the common rail controls the fuel pressure in the common rail.

DTC No.	DTC Detection Condition	Trouble Area
78 (5)	Open or short in fuel pressure limiter circuit	• Open or short in fuel pressure limiter circuit • Fuel pressure limiter (built in common rail) • Engine ECU
78 (6)	Fuel relief valve remain closed	• Fuel pressure limiter (built in common rail) • Engine ECU

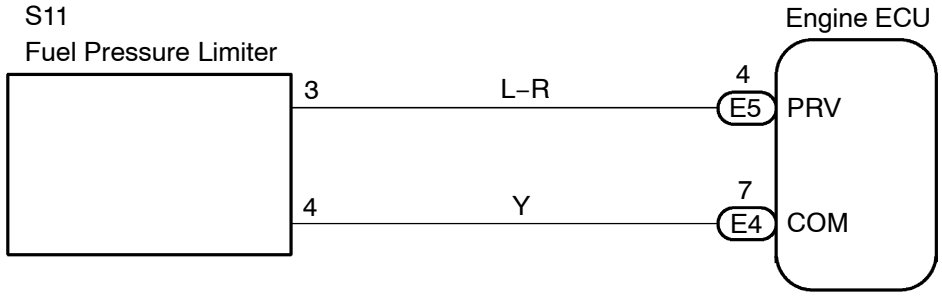
WIRING DIAGRAM

KLH



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INSPECTION PROCEDURE

HINT:
Read freeze frame data on the hand–held tester, as freeze frame data records the engine conditions when a malfunction is detected. When troubleshooting, it is useful for determining whether the vehicle was running or stopped, the engine was warmed up or not, etc. at the time of the malfunction.

1	**Are there any other codes (besides DTC 39, 49 or 97) being output?**

YES → **Go to relevant DTC chart (See page DI–12).**

NO

2	**Check fuel pressure limiter (See page FU–23).**

NG → **Replace common rail assembly (See page FU–21).**

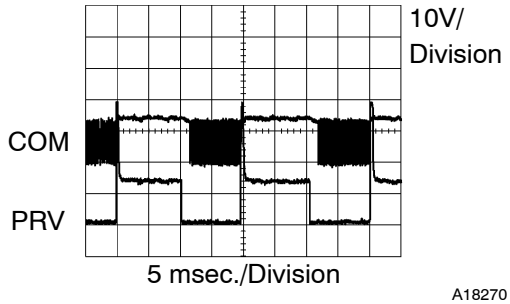
OK

3	**Check for open and short in harness and connector between fuel pressure limiter and engine ECU (See page IN–20).**

NG → **Repair or replace harness or connector.**

OK

4	Check voltage between terminals PRV and COM of engine ECU.



Reference: INSPECTION USING OSCILLOSCOPE
Check the waveforms between terminals PRV and COM of the engine ECU connector while the engine speed is decreasing after the engine racing.
HINT:
The correct waveforms are shown in the illustration.

NG → **Check and replace engine ECU (See page ED–25).**

OK

Replace common rail assembly (See page FU–21).