Check if "FUEL PRESSURE MEASURED"data is similar to "FUEL PRESSURE-TARGET". Not only former two data but also "RAIL PRESS. REGULATOR1" and "INJ. PUMP REGULATOR"should be monitored carefully. Although "FUEL PRESSURE MEASURED" is similar to "FUEL PRESSURE-TARGET", if "RAIL PRESS. REGULATOR1" and "INJ. PUMP REGULATOR" is out of specification, it means wear, leakage, stuck of fuel system.

2. Monitoring rail pressure data at acceleration(loading condition).

   1) Connect Scantool to Data Link Connector (DLC).

   2) Warm engine up to normal operating temperature.

   3) Turn "OFF" electrical devices and A/C.

   4) Monitor "FUEL PRESSURE MEASURED", "RAIL PRESS. REGULATOR1", "INJ. PUMP REGULATOR" parameter on the Scantool.

SPECIFICATION :

	Idle(without load)	Accelerating(stall test)	Diagnosis
INJ. PUMP REGULATOR	38 ± 5%	32 ± 5%	duty decreases
FUEL PRESSURE MEASURED	28.5 ± 5 Mpa	145 ± 10 Mpa	press. increases
RAIL PRESS. REGULATOR1	19 ± 5%	48 ± 5%	duty increases

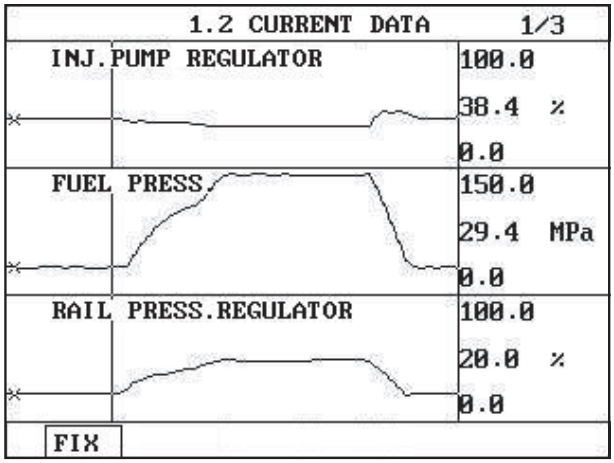

Fig.1

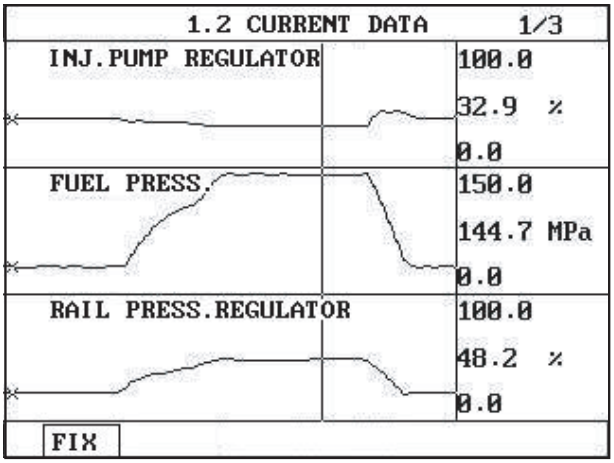

Fig.2

Fig.1) The position of curser on the graph represents idle data.
Fig.2) Data during acceleration(stall test).

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NOTE

The waveform of fuel pressure regulator valve installed at high pressure pump(fuel detecting MPROP) shows 38% duty at idle, duty drops to approx. 32% at acceleration to raise rail pressure. Duty drop means the decrease of current.
→ Fuel delivered to common rail increases as current drops.

The waveform of rail pressure regulator valve installed at common rail shows 19% duty at idle, duty rises to approx. 48% at acceleration to raise rail pressure. Duty rise means the increase of current.
→ If current rises, the returning quantity of fuel deliverd to common rail decreases and common rail pressure rises.