SERVICE SPECIFICATIONS SERVICE DATA

E9124-01

Pressure regulator	Fuel pressure	at No vacuum	265-304 kPa 2.7-3.1 kgf/cm ² 38-44 psi		
Cold start injector	Resistance Fuel leakage		$2 - 4 \Omega$ One drop or less per minute		
Injector	Resistance Injection volume Difference between eac Fuel leakage	h injector	 13.4 - 14.2 Ω 45 - 55 cm³/15 sec. (2.7 - 3.4 cu in.) 6 cm³ (0.37 cu in.) or less One drop or less per minute 		
Volume Air Flow Meter	Resistance	$E_2 - Vs$ $E_2 - Vc$ $E_2 - Vs$ $E_1 - Fc$ $E_2 - THA$	20 - 400 Ω (Measuring plate fully closed) 20 - 1,200 Ω (Measuring plate fully open) 100 - 300 Ω 200 - 400 Ω ∞ (Measuring plate fully closed) 0 Ω (Measuring plate open) 10 - 20 k Ω (-20°C, -4°F) 4 - 7 k Ω (0°C, 32°F) 2 - 3 k Ω (20°C, 68°F) 0.9 - 1.3 k Ω (40°C, 104°F) 0.4 - 0.7 k Ω (60°C, 140°F)		
Throttle body	Throttle valve fully close	ed angle	6°		
Throttle position	Clearance between lever and stop screw		Between terminals	Resistance	
sensor	0 mm	0 in.	$VTA - E_2$	0.47 <mark>— 6</mark> .1 kΩ	
	0.57 mm	0.0224 in.	IDL - E ₂	2.3 kΩ or less	
	0.85 mm	0.0335 in.	IDL - E ₂	Infinity	
	Throttle valve fully open position		VTA – E ₂	3.1 − 12.1 kΩ	
		-	Vcc - E ₂	3.9 — 9.0 kΩ	
Start injector time switch	Resistance	STA – STJ STA – Ground	30 - 50 Ω (below 10°C, 50°F) 65 - 90 Ω (above 30°C, 86°F) 30 - 90 Ω		
Engine coolant temp. sensor	Resistance		$10 - 20 \text{ k}\Omega (-20^{\circ}\text{C}, -4^{\circ}\text{F})$ $4 - 7 \text{ k}\Omega (0^{\circ}\text{C}, 32^{\circ}\text{F})$ $2 - 3 \text{ k}\Omega (20^{\circ}\text{C}, 68^{\circ}\text{F})$ $0.9 - 1.3 \text{ k}\Omega (40^{\circ}\text{C}, 104^{\circ}\text{F})$ $0.4 - 0.7 \text{ k}\Omega (60^{\circ}\text{C}, 140^{\circ}\text{F})$ $0.2 - 0.4 \text{ k}\Omega (80^{\circ}\text{C}, 176^{\circ}\text{F})$		

Specifications (Cont'd)

Oxygen sensor heater	Resistance	at 20°0	C (68°F)	5.1 - 6.3 Ω		
EGR gas temp. sensor	Resistance			69 - 89 kΩ (50°C, 122°F) 11 - 15 kΩ (100°C, 212°F) 2 - 4 kΩ (150°C, 302°F)		
Fuel cut rpm	Of Fuel return rpm 2V	VD A/T (stop light thers VD A/T (stop light	t switch ON)	1,300 rpm 1,900 rpm 1,000 rpm 1,600 rpm		
ECM (Voltage)	Others 1,600 rpm HINT: Perform all voltage and resistance measurements with the ECM connected. • Verify that the battery voltage is 11 V or above when the ignition switch is ON. • The testing probes must not make contact with the ECM oxygen VF terminals.					
	Terminals	STD voltage		Condition		
	BATT - E		_			
	+B - E ₁	9 - 14				
	+ B ₁ - E ₁			Ignition SW ON		
	$IDL - E_2 (E_{21})$	9 - 14		Throttle valve open		
	$Vcc - E_2 (E_{21})$	4.5 - 5.5	Ignition SW	_		
	$VTA - E_2 (E_{21})$	0.3 - 0.8	ON	Throttle valve fully closed		
		3.2 - 4.9		Throttle valve fully open		
	$Vc - E_2 (E_{21})$	6 - 10		-		
		0.5 - 2.5	Ignition S	W Measuring plate fully closed		
	$Vs - E_2 (E_{21})$	5 — 10		Measuring plate fully open		
		2 – 8		Idling		
	$THA - E_2 (E_{21})$	0.5 - 3.4	Ignition SW	Intake air temperature 20°C (68°F)		
	$THW - E_2 \ (E_{21})$	0.2 - 1.0	ON	Coolant temperature 80°C (1 76°F)		
	STA – E ₁	6 - 12		Ignition SW START position		
	No. 10 E_{01} No. 20 E_{02}	[.] 9 — 14		Ignition SW ON		
	IGt – E ₁	0.7 - 1.0		Cranking or idling		
	W – E,	9 - 14	No trouble (M	IL off) and engine running		
	STJ – E,	6 - 12	Ignition SW START position	on Coolant temperature 80°C (176°F)		
	STP - E	7.5 - 14		Stop light switch ON		

Specifications (Cont'd)

ECM	Terminals	Resistance (k Ω)	Condition
(Resistance)		Infinity	Throttle valve open
	$IDL - E_2(E_{21})$	2.3 or less	Throttle valve fully closed
		3.1 - 12.1	Throttle valve fully open
	$VTA - E_2 (E_{21})$	0.47 - 6.1	Throttle valve fully closed
	$Vcc - E_2 (E_{21})$	3.9 - 9.0	_
	THA - E ₂ (E ₂₁)	2 - 3	Intake air temperature 20 °C (68°F)
	THW – $E_2 (E_{21})$	0.2 - 0.4	Coolant temperature 80 °C (176°F)
	$+B - E_2 (E_{21})$	0.2 - 0.4	_
	$Vc - E_2 (E_{21})$	0.1 - 0.3	-
		0.02 - 0.4	Measuring plate fully closed
	$Vs - E_2 (E_{21})$	0.02 - 1.00	Measuring plate fully open
	Ne — E ₁	0.185 - 0.275	Cold
		0.240 - 0.325	Hot
	STJ — E1	Infinity	-
	FPU — E ₁	Infinity	
	HT - E1	Infinity	-

TORQUE SPECIFICATIONS

Part tightened	N·m	kgf-cm	ft-lbf
Fuel hose x Fuel filter	30	310	22
Fuel hose x Fuel main tube	30	310	22
Fuel filter x Fuel filter bracket	19	195	14
Delivery pipe x Pressure regulator	30	300	22
Delivery pipe x Intake manifold	19	195	14
Delivery pipe x Fuel tube	44	450	33
Delivery pipe x Fuel pipe	19	195	14
Fuel pipe x Cold start injector	19	195	14
Air intake chamber x Cold start injector	7.8	80	69 inIbf
Air intake chamber x Throttle body	19	195	14
Fuel pump	3.9	40	35 in.·lbf
Fuel drain plug	6.4	65	56 in. Ibf
Fuel tank x Body	29	300	22

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