



SPECIFICATIONS

Items	Specifications
Engine Management System (ECM)	Siemens
Fuel tank Capacity Return system Fuel filter F/Pressure regulator Regulator pressure Fuel pump	55 lit. (14.5 U.S. gal., 12.1 Imp.gal.) Returnless High pressure type (built in F/Pump Assembly) Built in F/Pump Assembly 350 kpa (3.5 kg/cm ² , 49.8 psi) Electrical, in-tank type
INPUT SENSORS Mass Air Flow (MAF) sensor Output voltage Throttle body Throttle Position Sensor (TPS) Resistance Output voltage at curb idle Knock sensor Intake Air Temperature sensor (IAT Sensor) Resistance Engine Coolant Temperature sensor (ECT Sensor) Resistance Heated Oxygen Sensor (HO2S) Output voltage (V) Heated Oxygen Sensor (HO2S) for SULEV Vehicle Speed Sensor Camshaft Position Sensor (CMP Sensor) Output voltage (V) Crankshaft Position Sensor (CKP Sensor) Output voltage (V) Differential Pressure Sensor (DPS)	Hot film type 0 ~ 5V Variable resister type 0.7 ~ 3.0 k 0.1 ~ 0.875V Piezoelectric type Thermistor type (built in MAF sensor) 2.0 ~ 3.0 k at 20°C (68°F) Thermistor type 2.27 ~ 2.73k at 20°C (68°F) 0.30 ~ 0.32k at 80°C (176°F) Zirconia sensor (Heated) 0 ~ 1V Linear Oxygen Sensor Wheel speed sensor (Inductive) Hall effect sensor 0 ~ 5V Hall effect sensor 0 ~ 5V Piezo-Resistivity type

OUTPUT ACTUATORS	Electromagnetic type
Injector type	4
Number	14.5 ± 0.7
Coil resistance ()	Duty type
EVAP Canister Purge solenoid valve	26
Resistance	Double coil type
Idle Speed Control actuator (ISC Actuator)	100Hz
Control frequency (Hz)	ON/OFF type
Canister Close Valve (CCV)	

SERVICE STANDARDS

Items	2.0L
Basic idle rpm	700 ± 100 (N,A/C OFF)
Ignition timing (°) - BTDC	8° ± 5°

SEALANTS

Engine coolant temperature sensor assembly	LOCTITE 962T or equivalent
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TIGHTENING TORQUES

Items	Nm	Kg-cm	lb-ft
Delivery pipe installation bolts	19 ~ 28	190 ~ 280	14 ~ 20.7
Heated oxygen sensor	50 ~ 60	500 ~ 600	37 ~ 44
Crankshaft position sensor installation bolts	4 ~ 6	40 ~ 60	3 ~ 4.4
Knock sensor installation bolt	17 ~ 27	170 ~ 270	12.5 ~ 20
Engine coolant temperature sensor	15 ~ 20	150 ~ 200	11 ~ 15
Throttle position sensor installation bolts	1.5 ~ 2.5	15 ~ 25	1.1 ~ 1.8
Throttle body to surge tank bolts	19 ~ 28	180 ~ 280	14 ~ 20.7