ENGINE FUEL

SERVICE DATA

S306R-01

Fuel heater	Resistance at 20°C (68°F)		0.5 – 2.0 Ω
Injection nozzles	Nozzle opening pressure	New nozzle 2L, 2L–T, 3L	14,810 – 15,590 kPa (151 – 159 kgf/cm², 2,148 – 2,262 psi)
		5L	15,790 – 16,570 kPa (161 – 169 kgf/cm², 2,290 – 2,404 psi)
		Reused nozzle 2L, 2L–T, 3L	14,220 – 15,200 kPa (145 – 155 kgf/cm², 2,062 – 2,205 psi)
		5L	15,200 – 16,181 kPa (155 – 165 kgf/cm², 2,205 – 2,347 psi)
	Adjusting shim thickness		0.900 mm (0.0354 in.) 0.950 mm (0.0374 in.)
			1.000 mm (0.0394 in.) 1.050 mm (0.0413 in.)
			1.100 mm (0.0433 in.) 1.150 mm (0.0453 in.)
			1.200 mm (0.0472 in.) 1.250 mm (0.0492 in.)
			1.300 mm (0.0512 in.) 1.350 mm (0.0531 in.)
			1.400 mm (0.0551 in.) 1.450 mm (0.0571 in.)
			1.500 mm (0.0591 in.) 1.550 mm (0.0610 in.)
			1.600 mm (0.0630 in.) 1.650 mm (0.0650 in.)
			1.700 mm (0.0669 in.) 1.750 mm (0.0689 in.)
			1.800 mm (0.0709 in.) 1.850 mm (0.0728 in.)
			1.900 mm (0.0748 in.) 1.950 mm (0.0768 in.)
Injection pump	Direction of rotation		Clockwise as seen from drive side
	Injection order		1 – 3 – 4 – 2 (A – B – C – D)
	Plunger spring deviation		2.0 mm (0.079 in.)
	Spring free length		
	Delivery valve spring		24.4 mm (0.961 in.)
	Plunger spring		30.0 mm (1.181 in.)
	Coupling spring		16.6 mm (0.654 in.)
	Pneumatic bellows spring	w/ HAC	30.0 mm (1.181 in.)
	Boost compensator spring	2L–T	19.4 mm (0.764 in.)
	Roller height variation		0.02 mm (0.0008 in.)
	Fuel cut solenoid resistance	at 20°C (68°F)	9.5 – 11.9 Ω
	Pickup sensor resistance	at 20°C (68°F)	650 – 970 Ω
	Timer adjusting screw protrusion pre–setting		5.0 – 6.0 mm (0.197 – 0.236 in.)
	Plunger spring shim thickness		0.5 mm (0.020 in.) 0.8 mm (0.031 in.)
			1.0 mm (0.039 in.) 1.2 mm (0.047 in.)
			1.5 mm (0.059 in.) 1.8 mm (0.071 in.)
			2.0 mm (0.079 in.)
	Plunger adjusting shim thickness		1.9 mm (0.075 in.) 2.0 mm (0.079 in.)
			2.1 mm (0.083 in.) 2.2 mm (0.087 in.)
			2.3 mm (0.091 in.) 2.4 mm (0.094 in.)
			2.5 mm (0.098 in.) 2.6 mm (0.102 in.)
			2.7 mm (0.106 in.) 2.8 mm (0.110 in.)
			2.9 mm (0.114 in.)
	Flyweight holder thrust clearance		0.15 – 0.35 mm (0.0059 – 0.0138 in.)
	Governor gear adjusting washer thickness		1.05 mm (0.0413 in.) 1.25 mm (0.0492 in.)
			1.45 mm (0.0571 in.) 1.65 mm (0.0650 in.)
			1.85 mm (0.0728 in.)
	Governor shaft protrusion		0.5 – 2.0 mm (0.020 – 0.079 in.)
	Governor sleeve plug head thickness		3.0 mm (0.118 in.) 3.1 mm (0.122 in.)
			3.2 mm (0.126 in.) 3.3 mm (0.130 in.)
			3.4 mm (0.134 in.) 3.5 mm (0.138 in.)
			3.6 mm (0.142 in.) 3.7 mm (0.146 in.)
			3.8 mm (0.150 in.) 3.9 mm (0.154 in.)
			4.0 mm (0.157 in.) 4.1 mm (0.161 in.)
			4.2 mm (0.165 in.)

TORQUE SPECIFICATION

SS065–01

Part tightened		N·m	kgf·cm	ft·lbf
Fuel heater x Fuel filter cap		3.19	32.5	28 in.·lbf
Nozzle holder body x Nozzle holder retaining nut		46.58	475	42
Injection nozzle x Cylinder head		64	650	47
Nozzle leakage pipe x Injection nozzle		29.5	300	22
Injection pipe x Injection nozzle, Injection pump		24.5	250	18
Fuel inlet hollow screw x Injection pump body		36.8	375	27
Regulator valve x Injection pump body		8.85	90	78 in.·lbf
Feed pump cover x Injection pump body		2.45	25	22 in.·lbf
Timer cover, Governor cover x Injection pump body		8.35	85	74 in.·lbf
Timer adjusting screw x Timer cover		14.2	145	10
Governor link support bolt x Injection pump body		13.75	140	10
Connector bracket (w/ TCV), Distributive head x Injection pump body		11.75	120	9
Delivery valve holder x Distributive head		58.85	600	43
Distributive head plug x Distributive head		68.65	700	51
Bolt for control lever x Governor cover	2L–T, w/ HAC	6.85	70	61 in.·lbf
Diaphragm cover x Governor cover	2L–T	7.35	75	65 in.·lbf
Pneumatic bellows cover x Governor cover	w/ HAC	7.35	75	65 in.·lbf
Bolt for lever control spring x Governor cover	2L–T, w/ HAC	11.3	115	8
Overflow screw x Governor cover	2L–T	24.55	250	18
No.2 adjusting lever x Governor adjusting shaft		8.35	85	74 in.·lbf
No.2 adjusting lever x No.1 adjusting lever		6.05	62	54 in.·lbf
Fuel cut solenoid x Distributive head		22.1	225	16
Lead wire x Fuel cut solenoid		1.7	17.5	15 in.·lbf
Connector bracket x Distributive head	w/o TCV	20.1	205	15
Pickup sensor x Injection pump body		20.6	210	15
Timing control valve x Injection pump body	w/ TCV	8.35	85	74 in.·lbf
Lead wire x Timing control valve	w/ TCV	1.7	17.5	15 in.·lbf
Overflow pipe x Injection pump body	w/ TCV Upper union bolt	14.2	145	10
	Lower union bolt	19.6	200	14
Overflow pipe clamp x Injection pump body, Connector bracket	w/ TCV	8.35	85	74 in.·lbf
Thermo wax x Injection pump body		8.35	85	74 in.·lbf
Idle–up lever x Governor cover, Injection pump body	w/ ACSD	8.35	85	74 in.·lbf
Idle–up actuator x Governor cover	w/o ACSD for w/ A/C	8.35	85	74 in.·lbf
Fuel inlet pipe, Fuel return pipe x Injection pump		24.55	250	18
Injection pump x Timing belt case		20.5	210	15
Injection pump stay x Injection pump, Cylinder block		18	185	13