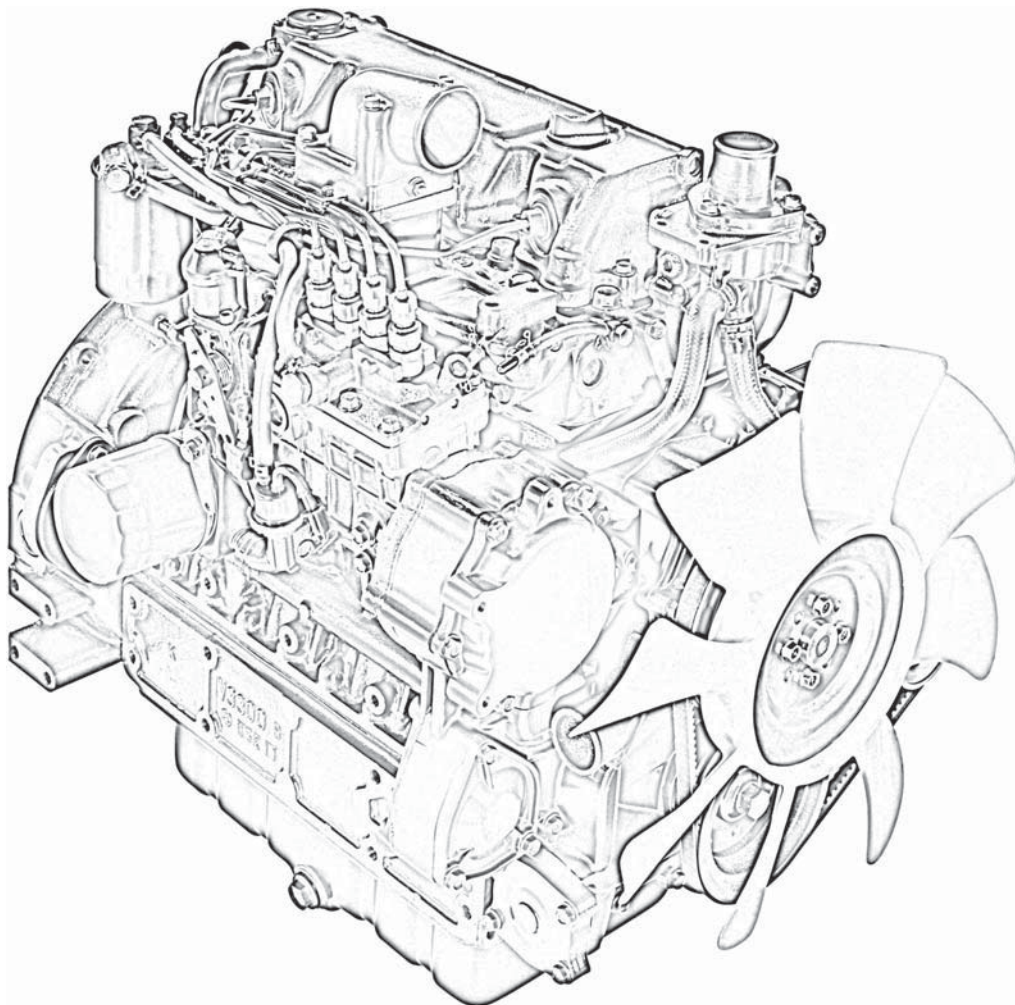


**Werkstattdaten
für
Kubota Dieselmotoren**

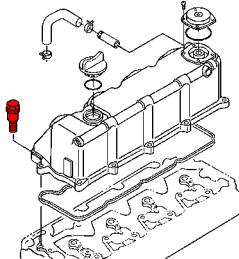
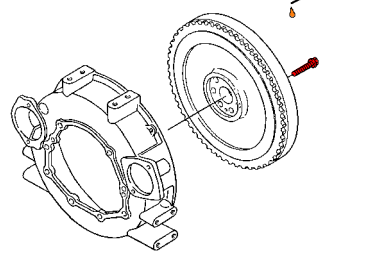
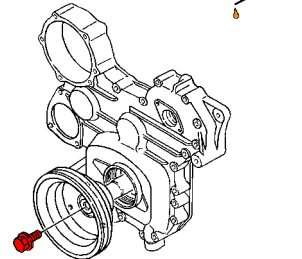
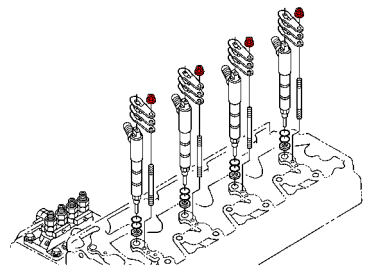
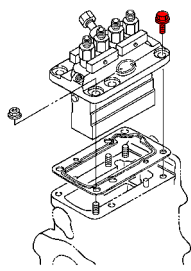
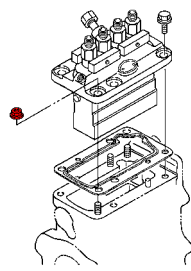
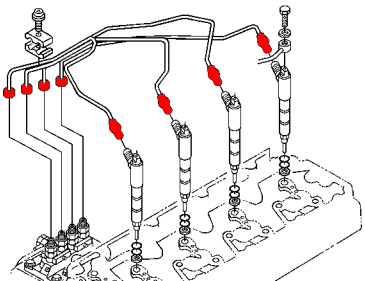
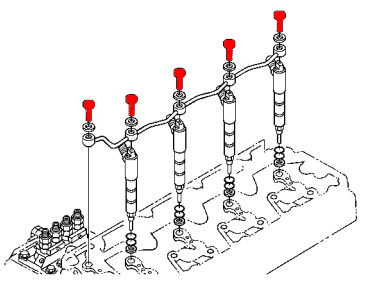
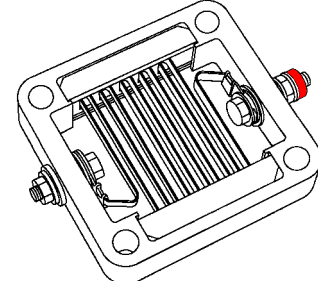
**V3800-DI
V3800-DI-T**

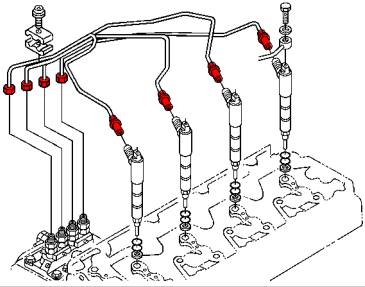
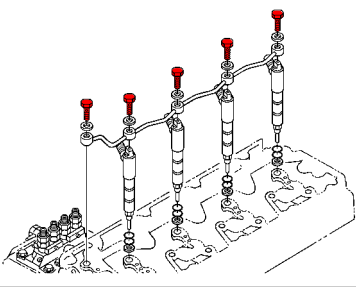
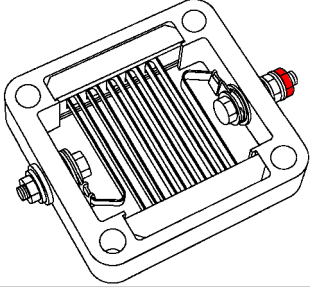
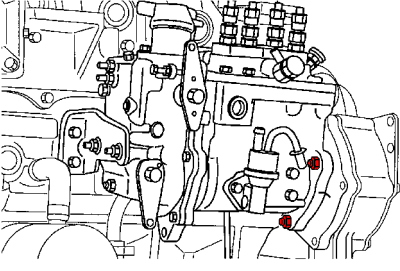
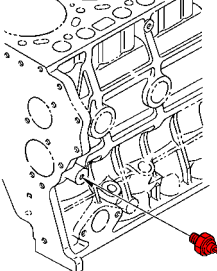
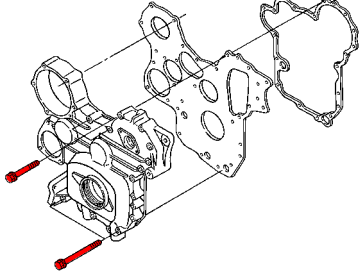


TIGHTENING TORQUES

(1) Special Tightening Torques

For "*" marked screws, bolts and nuts on under table, apply engine oil to their threads and seats before tightening.

Cylinder head cover screw 		Flywheel screw * 		Crankshaft screw * 	
V3800DI-B	6.9 to 11.3 N·m 0.70 to 1.15 kgf·m	V3800DI-B	98.1 to 107.9 N·m 10.0 to 11.0 kgf·m	V3800DI-B	255.1 to 274.7 N·m 26.0 to 28.0 kgf·m
V3800DI-TB	5.1 to 8.3 ft-lbs	V3800DI-TB	72.3 to 79.6 ft-lbs	V3800DI-TB	188.1 to 202.5 ft-lbs
Nozzle holder clamp nut 		Injection pump mounting screw 		Injection pump mounting nut 	
V3800DI-B	17.7 to 20.6 N·m 1.8 to 2.1 kgf·m	V3800DI-B	23.5 to 27.5 N·m 2.4 to 2.8 kgf·m	V3800DI-B	17.7 to 20.6 N·m 1.8 to 2.1 kgf·m
V3800DI-TB	13.0 to 15.2 ft-lbs	V3800DI-TB	17.4 to 20.3 ft-lbs	V3800DI-TB	13.0 to 15.2 ft-lbs
Injection pipe retaining nut 		Overflow pipe assembly retaining screw 		Intake air heater terminal nut 	
V3800DI-B	19.6 to 24.5 N·m 2.0 to 2.5 kgf·m	V3800DI-B	9.8 to 11.3 N·m 1.00 to 1.15 kgf·m	V3800DI-B	3.4 to 5.4 N·m 0.35 to 0.55 kgf·m
V3800DI-TB	14.5 to 18.1 ft-lbs	V3800DI-TB	7.2 to 8.3 ft-lbs	V3800DI-TB	2.53 to 3.98 ft-lbs

Injection pipe retaining nut 		Overflow pipe assembly retaining screw 		Intake air heater terminal nut 	
V3800DI-B	19.6 to 24.5 N·m 2.0 to 2.5 kgf·m	V3800DI-B	9.8 to 11.3 N·m 1.00 to 1.15 kgf·m	V3800DI-B	3.4 to 5.4 N·m 0.35 to 0.55 kgf·m
V3800DI-TB	14.5 to 18.1 ft-lbs	V3800DI-TB	7.2 to 8.3 ft-lbs	V3800DI-TB	2.53 to 3.98 ft-lbs
Injection pump unit mounting nut 		Oil switch taper screw 		Gear case cover mounting screw 	
V3800DI-B	17.7 to 20.6 N·m 1.8 to 2.1 kgf·m	V3800DI-B	14.7 to 19.6 N·m 1.5 to 2.0 kgf·m	V3800DI-B	23.5 to 27.5 N·m 2.4 to 2.8 kgf·m
V3800DI-TB	13.0 to 15.2 ft-lbs	V3800DI-TB	10.8 to 14.5 ft-lbs	V3800DI-TB	17.4 to 20.3 ft-lbs

(2) General Tightening Torques

Screw and bolt material grades are shown by numbers punched on the screw and bolt heads.

Prior to tightening, be sure to check out the numbers as shown below.

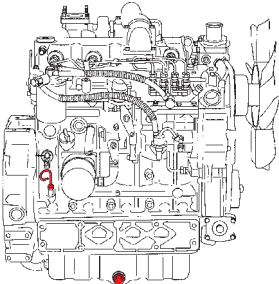
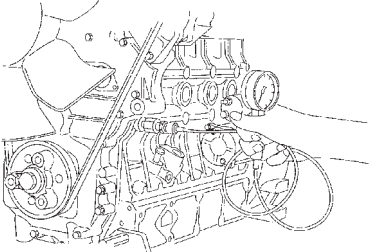
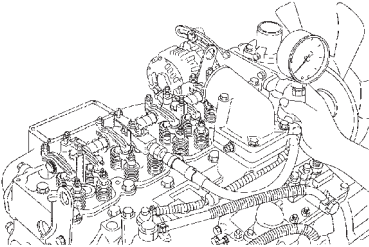
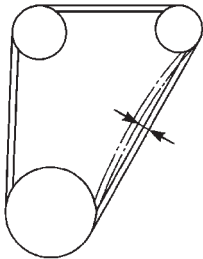
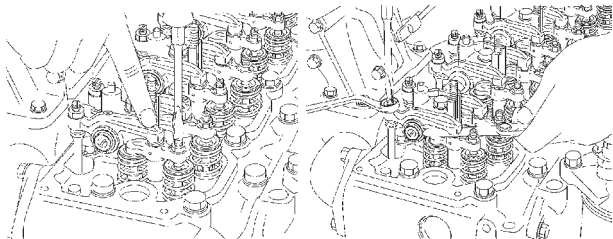
None or 4 : Standard grade

7 : Special grade

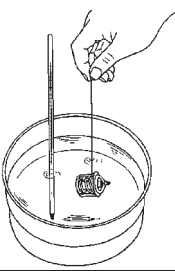
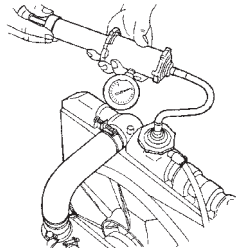
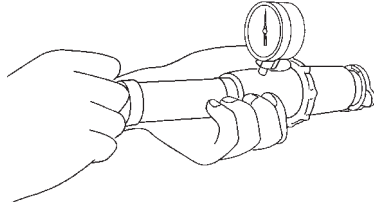
Nominal Diameter	Standard Grade	Special Grade
M6	7.9 to 9.3 N·m 0.80 to 0.95 kgf·m 5.8 to 6.9 ft-lbs	9.8 to 11.3 N·m 1.00 to 1.15 kgf·m 7.23 to 8.32 ft-lbs
M8	17.7 to 20.6 N·m 1.8 to 2.1 kgf·m 13.0 to 15.2 ft-lbs	23.5 to 27.5 N·m 2.4 to 2.8 kgf·m 17.4 to 20.3 ft-lbs
M10	39.2 to 45.1 N·m 4.0 to 4.6 kgf·m 28.9 to 33.3 ft-lbs	48.1 to 55.9 N·m 4.9 to 5.7 kgf·m 35.4 to 41.2 ft-lbs
M12	62.8 to 72.6 N·m 6.4 to 7.4 kgf·m 46.3 to 53.5 ft-lbs	77.5 to 90.2 N·m 7.9 to 9.2 kgf·m 57.1 to 66.5 ft-lbs

SERVICING SPECIFICATIONS

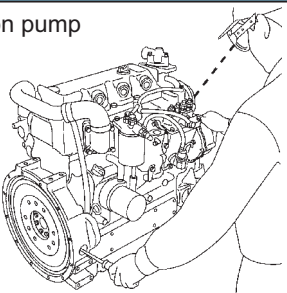
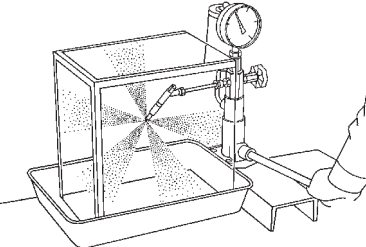
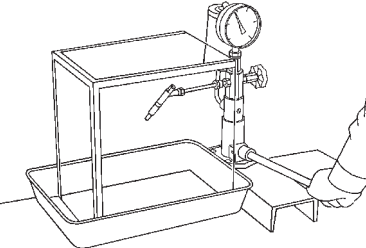
(1) ENGINE BODY

Item		Factory Specification	Allowable Limit	
Lubricating oil capacity 		All models 13.2 L 3.49 U.S.gals. 2.90 Imp.gals.	—	
Engine oil pressure 	Engine oil pressure (At idle speed)	All models	49.0 kPa 0.5 kgf/cm ² 7.1 psi	
	Engine oil pressure (At rated speed)	All models	196.1 to 392.3 kPa 2.0 to 4.0 kgf/cm ² 28.4 to 56.9 psi	147.1 kPa 1.5 kgf/cm ² 21.3 psi
Compression pressure 		V3800DI-B	3.92 MPa / 250 min ⁻¹ (rpm) 40 kgf/cm ² / 250 min ⁻¹ (rpm) 569 psi / 250 min ⁻¹ (rpm)	2.90 MPa / 250 min ⁻¹ (rpm) 29.6 kgf/cm ² / 250 min ⁻¹ (rpm) 421 psi / 250 min ⁻¹ (rpm)
		V3800DI-TB	3.47 MPa / 250 min ⁻¹ (rpm) 35.4 kgf/cm ² / 250 min ⁻¹ (rpm) 503 psi / 250 min ⁻¹ (rpm)	2.56 MPa / 250 min ⁻¹ (rpm) 26.1 kgf/cm ² / 250 min ⁻¹ (rpm) 371 psi / 250 min ⁻¹ (rpm)
Fan belt 	Tension	All models	10 to 12 mm (0.394 to 0.472 in.) deflection at 98 N (10 kgf, 22 lbs) of force	—
Valve clearance (When cold) 		All models	0.23 to 0.27 mm 0.0091 to 0.0106 in.	—

(3) COOLING SYSTEM

Item			Factory Specification	Allowable Limit
Thermostat 	Valve opening temperature (At beginning)	All models	74.5 to 78.5 °C 166.1 to 173.3 °F	—
	Valve opening temperature (Opened completely)	All models	90 °C 194 °F	—
Radiator 	Water tightness	All models	No water leak at 137 kPa 1.4 kgf/cm ² 20 psi	—
Radiator cap 	Pressure falling time	All models	10 seconds or more for pressure falling from 88 to 59 kPa (from 0.9 to 0.6 kgf/cm ² , from 13 to 9 psi)	—

(4) FUEL SYSTEM

Item			Factory Specification	Allowable Limit
Injection pump 	Injection timing	V3800DI-B	0.22 to 0.24 rad. before T.D.C. 12.5 to 13.5° before T.D.C.	—
		V3800DI-TB	0.22 to 0.24 rad. before T.D.C. 12.5 to 13.5° before T.D.C.	—
Injection nozzle 	Injection pressure (1st stage)	All models	18.63 to 19.61 MPa 190 to 200 kgf/cm ² 2702 to 2845 psi	—
Injection nozzle 	Valve seat tightness	All models	No fuel leak at 16.67 MPa 170 kgf/cm ² 2418 psi	—