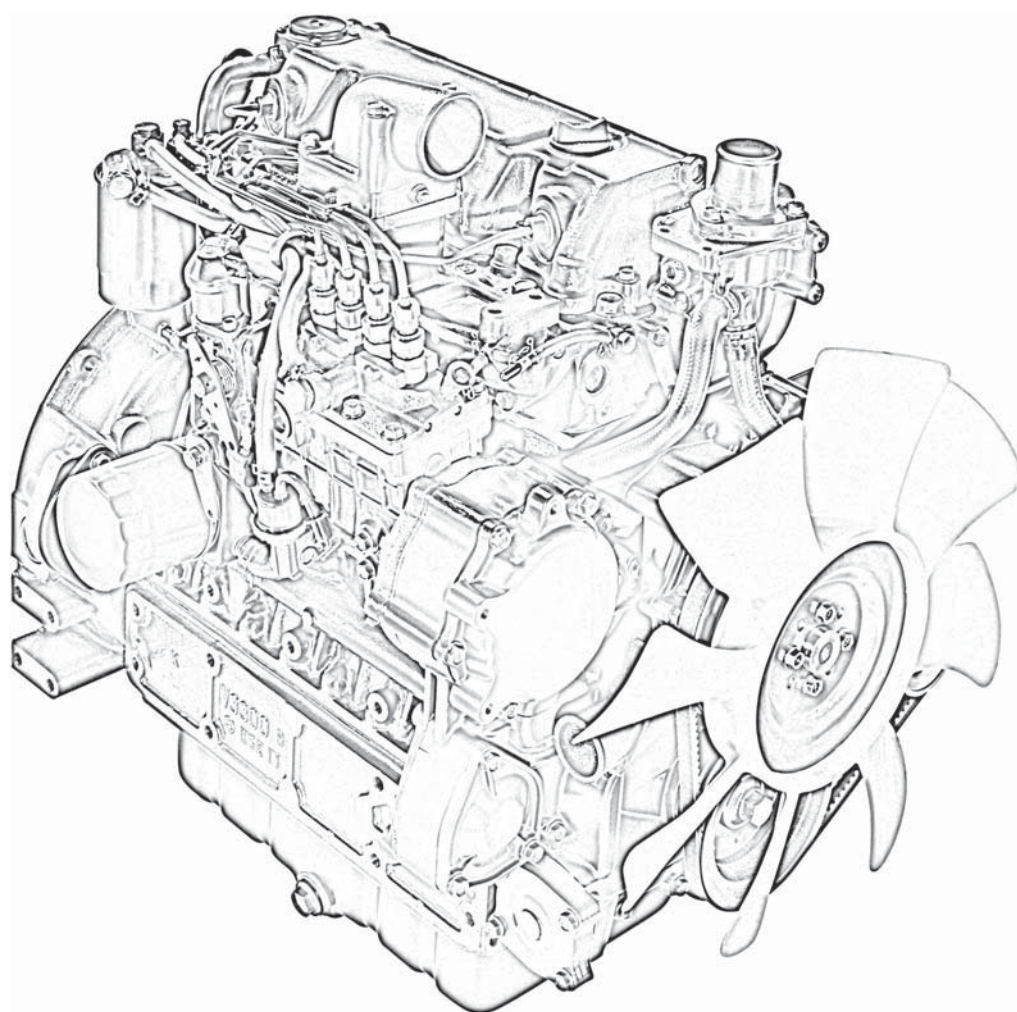


**Werkstattdaten
für
Kubota Dieselmotoren**

**V3300-DI
V3300-DI-T**

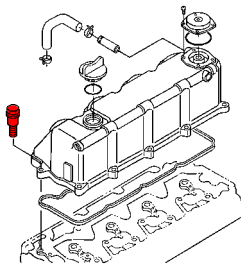


TIGHTENING TORQUES

(1) Special Tightening Torques

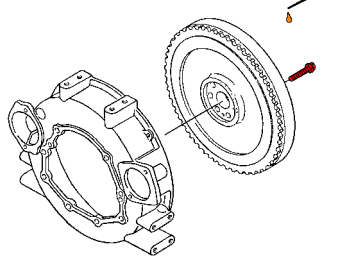
For " * " marked screws, bolts and nuts on under table, apply engine oil to their threads and seats before tightening.

Cylinder head cover screw



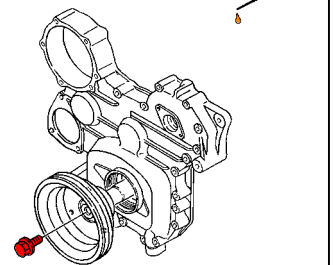
V3300DI-B	6.9 to 11.3 N·m 0.70 to 1.15 kgf·m
V3300DI-TB	5.1 to 8.3 ft-lbs

Flywheel screw *



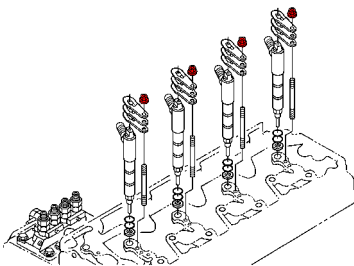
V3300DI-B	98.1 to 107.9 N·m 10.0 to 11.0 kgf·m
V3300DI-TB	72.3 to 79.6 ft-lbs

Crankshaft screw *



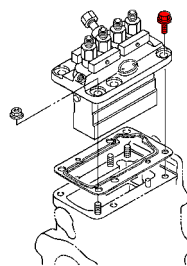
V3300DI-B	255.1 to 274.7 N·m 26.0 to 28.0 kgf·m
V3300DI-TB	188.1 to 202.5 ft-lbs

Nozzle holder clamp nut



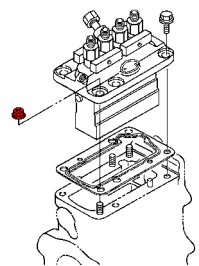
V3300DI-B	17.7 to 20.6 N·m 1.8 to 2.1 kgf·m
V3300DI-TB	13.0 to 15.2 ft-lbs

Injection pump mounting screw



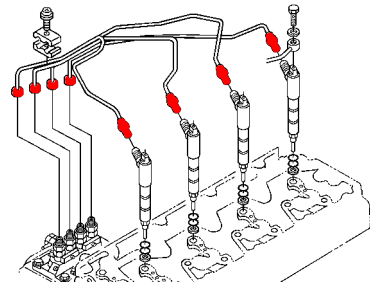
V3300DI-B	23.5 to 27.5 N·m 2.4 to 2.8 kgf·m
V3300DI-TB	17.4 to 20.3 ft-lbs

Injection pump mounting nut



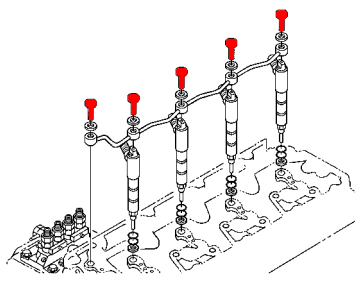
V3300DI-B	17.7 to 20.6 N·m 1.8 to 2.1 kgf·m
V3300DI-TB	13.0 to 15.2 ft-lbs

Injection pipe retaining nut



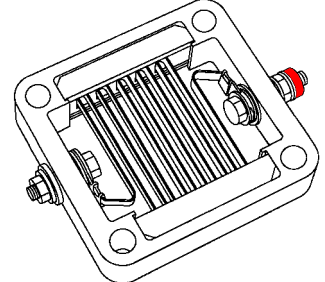
V3300DI-B	19.6 to 24.5 N·m 2.0 to 2.5 kgf·m
V3300DI-TB	14.5 to 18.1 ft-lbs

Overflow pipe assembly retaining screw

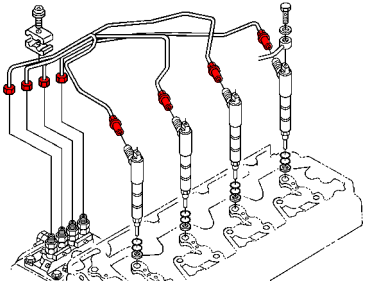


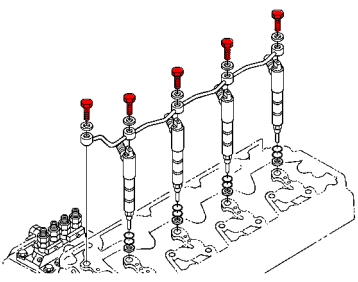
V3300DI-B	9.8 to 11.3 N·m 1.00 to 1.15 kgf·m
V3300DI-TB	7.2 to 8.3 ft-lbs

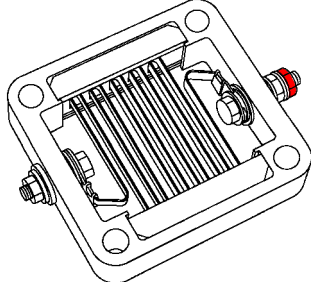
Intake air heater terminal nut

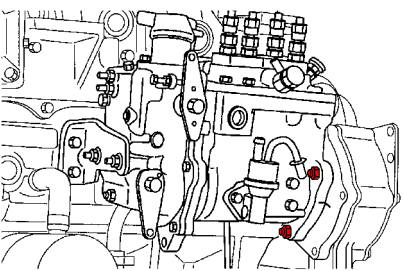


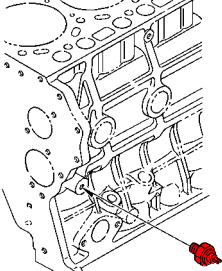
V3300DI-B	3.4 to 5.4 N·m 0.35 to 0.55 kgf·m
V3300DI-TB	2.53 to 3.98 ft-lbs

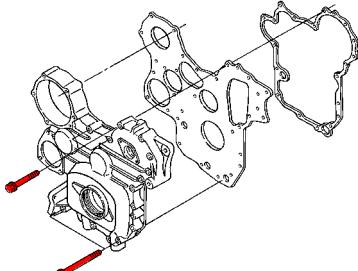
Injection pipe retaining nut	
	
V3300DI-B	19.6 to 24.5 N·m 2.0 to 2.5 kgf·m
V3300DI-TB	14.5 to 18.1 ft-lbs

Overflow pipe assembly retaining screw	
	
V3300DI-B	9.8 to 11.3 N·m 1.00 to 1.15 kgf·m
V3300DI-TB	7.2 to 8.3 ft-lbs

Intake air heater terminal nut	
	
V3300DI-B	3.4 to 5.4 N·m 0.35 to 0.55 kgf·m
V3300DI-TB	2.53 to 3.98 ft-lbs

Injection pump unit mounting nut	
	
V3300DI-B	17.7 to 20.6 N·m 1.8 to 2.1 kgf·m
V3300DI-TB	13.0 to 15.2 ft-lbs

Oil switch taper screw	
	
V3300DI-B	14.7 to 19.6 N·m 1.5 to 2.0 kgf·m
V3300DI-TB	10.8 to 14.5 ft-lbs

Gear case cover mounting screw	
	
V3300DI-B	23.5 to 27.5 N·m 2.4 to 2.8 kgf·m
V3300DI-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.

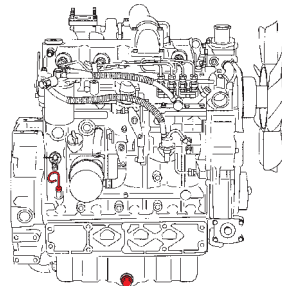
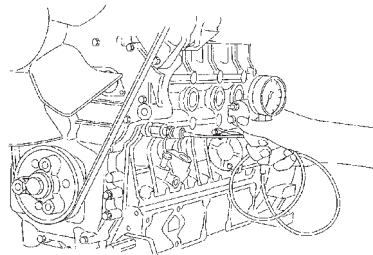
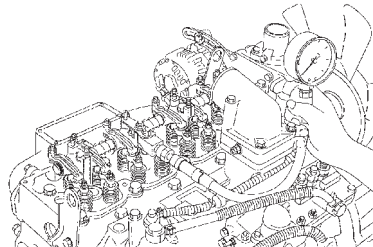
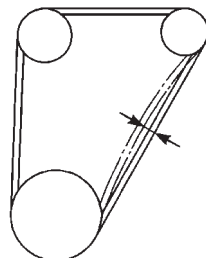
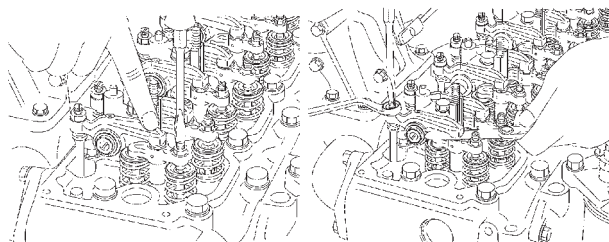
None or 4 : Standard grade

7 : Special grade

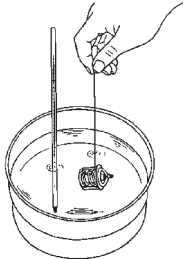
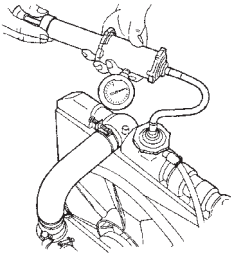
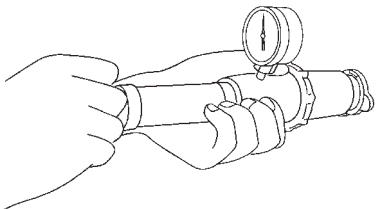
Nominal Diameter	Standard Grade	Special Grade
M6	7.9 to 9.3 N·m 0.80 to 0.95 kgf·m 5.8 to 6.9 ft-lbs	9.8 to 11.3 N·m 1.00 to 1.15 kgf·m 7.23 to 8.32 ft-lbs
M8	17.7 to 20.6 N·m 1.8 to 2.1 kgf·m 13.0 to 15.2 ft-lbs	23.5 to 27.5 N·m 2.4 to 2.8 kgf·m 17.4 to 20.3 ft-lbs
M10	39.2 to 45.1 N·m 4.0 to 4.6 kgf·m 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

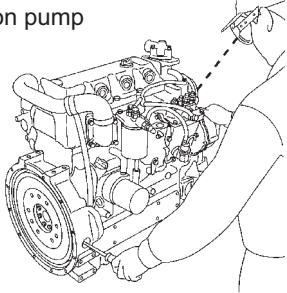
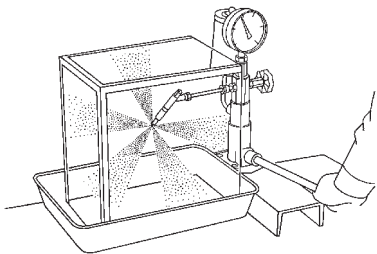
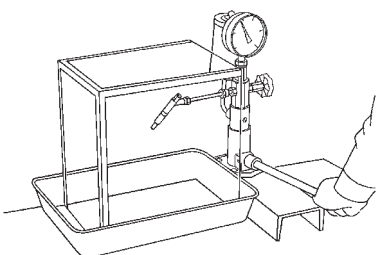
(1) ENGINE BODY

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 		V3300DI-B	3.82 MPa / 250 min ⁻¹ (rpm) 39 kgf/cm ² / 250 min ⁻¹ (rpm) 554 psi / 250 min ⁻¹ (rpm)	2.83 MPa / 250 min ⁻¹ (rpm) 28.9 kgf/cm ² / 250 min ⁻¹ (rpm) 411 psi / 250 min ⁻¹ (rpm)
		V3300DI-TB	3.43 MPa / 250 min ⁻¹ (rpm) 35 kgf/cm ² / 250 min ⁻¹ (rpm) 498 psi / 250 min ⁻¹ (rpm)	2.53 MPa / 250 min ⁻¹ (rpm) 25.8 kgf/cm ² / 250 min ⁻¹ (rpm) 367 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	V3300DI-B	0.23 to 0.26 rad. before T.D.C. 13 to 15° before T.D.C.	—
		V3300DI-TB	0.21 to 0.25 rad. before T.D.C. 12 to 14° before T.D.C.	—
Injection nozzle 	Injection pressure (1st stage)	All models	15.69 to 16.67 MPa 160 to 170 kgf/cm ² 2276 to 2418 psi	—
Injection nozzle 	Valve seat tightness	All models	No fuel leak at 13.73 MPa 140 kgf/cm ² 1991 psi	—