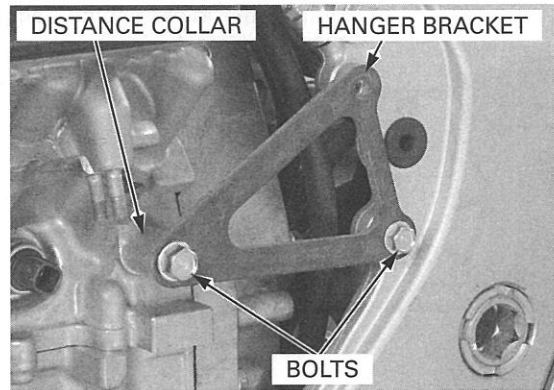


ENGINE REMOVAL/INSTALLATION

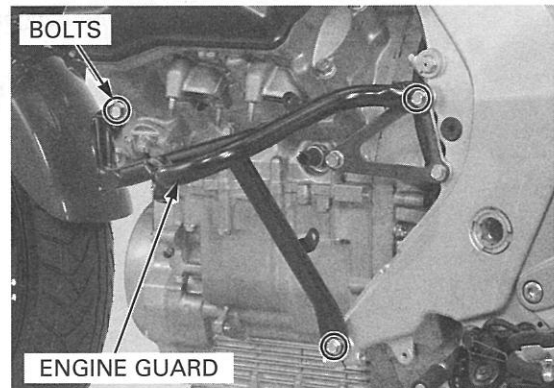
Install the distance collar, left rear engine hanger bracket and bolts.



Install the left engine guard and mounting bolts, tighten the mounting bolt and middle engine hanger bracket bolt (frame side) securely.

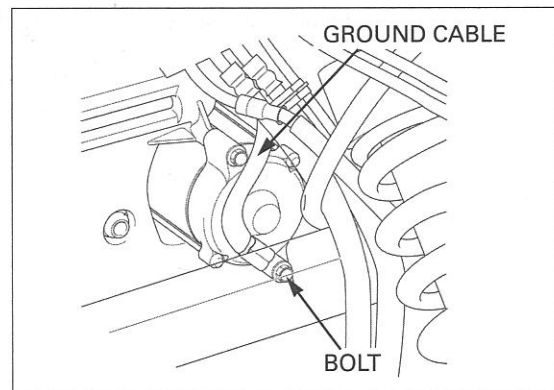
Tighten the middle engine hanger bracket bolts (engine side) to the specified torque.

TORQUE: 39 N-m (4.0 kgf-m, 29 lbf-ft)

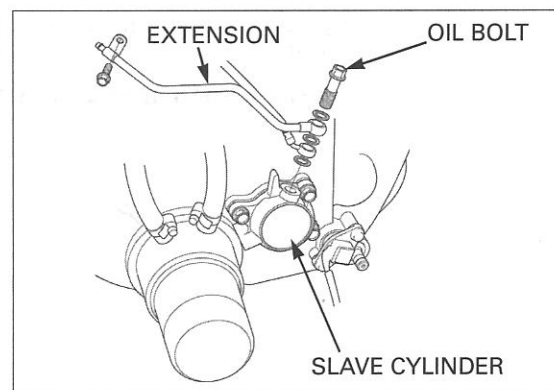


Route the starter motor ground cable and secure it with a starter motor mounting bolt.

Route the starter motor cable and tighten the terminal nut (page 21-11).



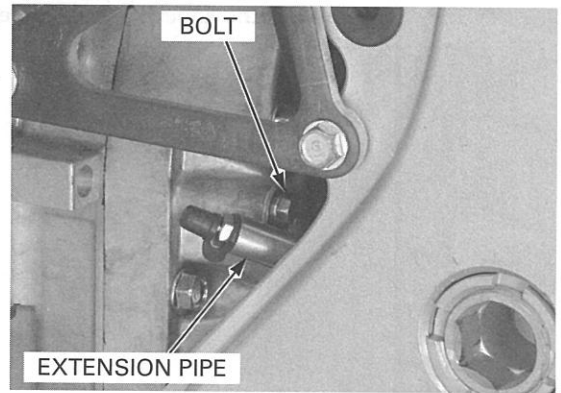
Install the clutch bleeder extension and clutch hose to the clutch slave cylinder with new three sealing washers and oil bolt.



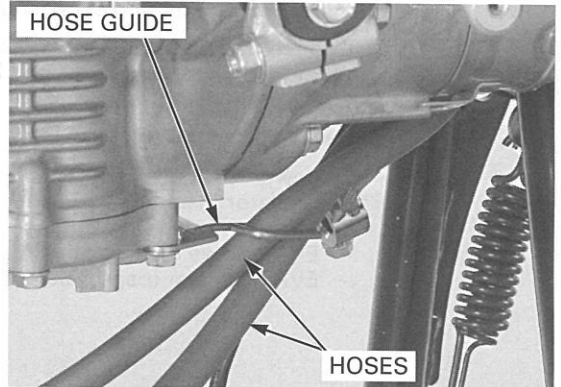
Install the clutch air bleed extension pipe mounting bolt.

Tighten the clutch slave cylinder oil bolt to the specified torque.

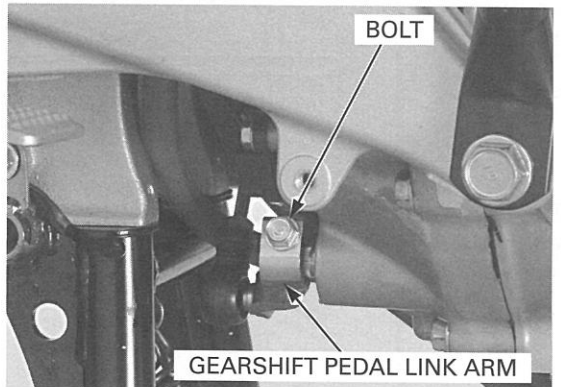
TORQUE: 34 N·m (3.5 kgf·m, 25 lbf·ft)



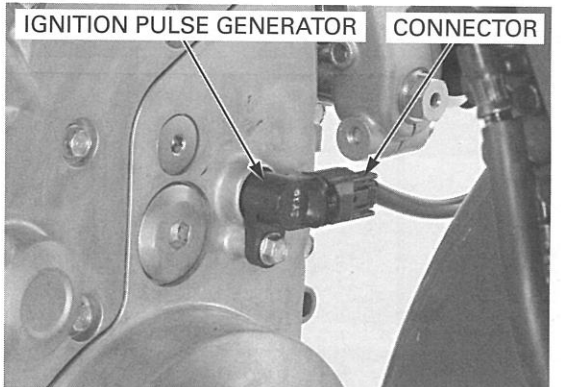
Route the fuel tank breather hose and drain hose and install them into the hose guide.



Install the gearshift pedal link arm to the gearshift spindle aligning the link arm slit with a punch mark on the gearshift spindle.

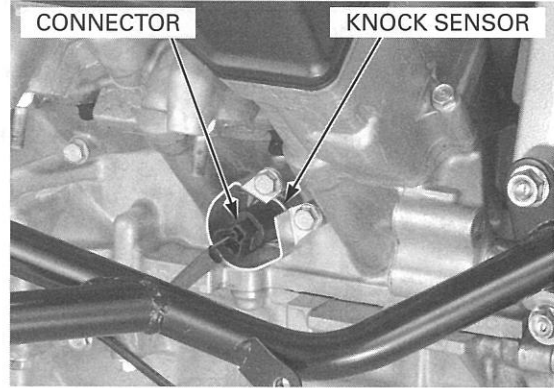


Connect the ignition pulse generator connector.



ENGINE REMOVAL/INSTALLATION

Connect the knock sensor connectors from the sensor.

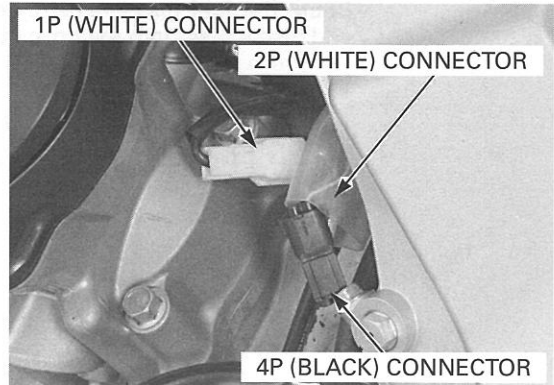


Install the muffler and exhaust pipe (page 2-18).

Connect the alternator 1P (White) connector, alternator 2P (White) connector and No.1/3 O₂ sensor 4P (Black) connector.

Install the following:

- Lower fuel tank (page 5-58)
- Radiator (page 6-17)
- Throttle body (page 5-68)
- EVAP purge control valve (page 5-88)
- EVAP canister (page 5-89)

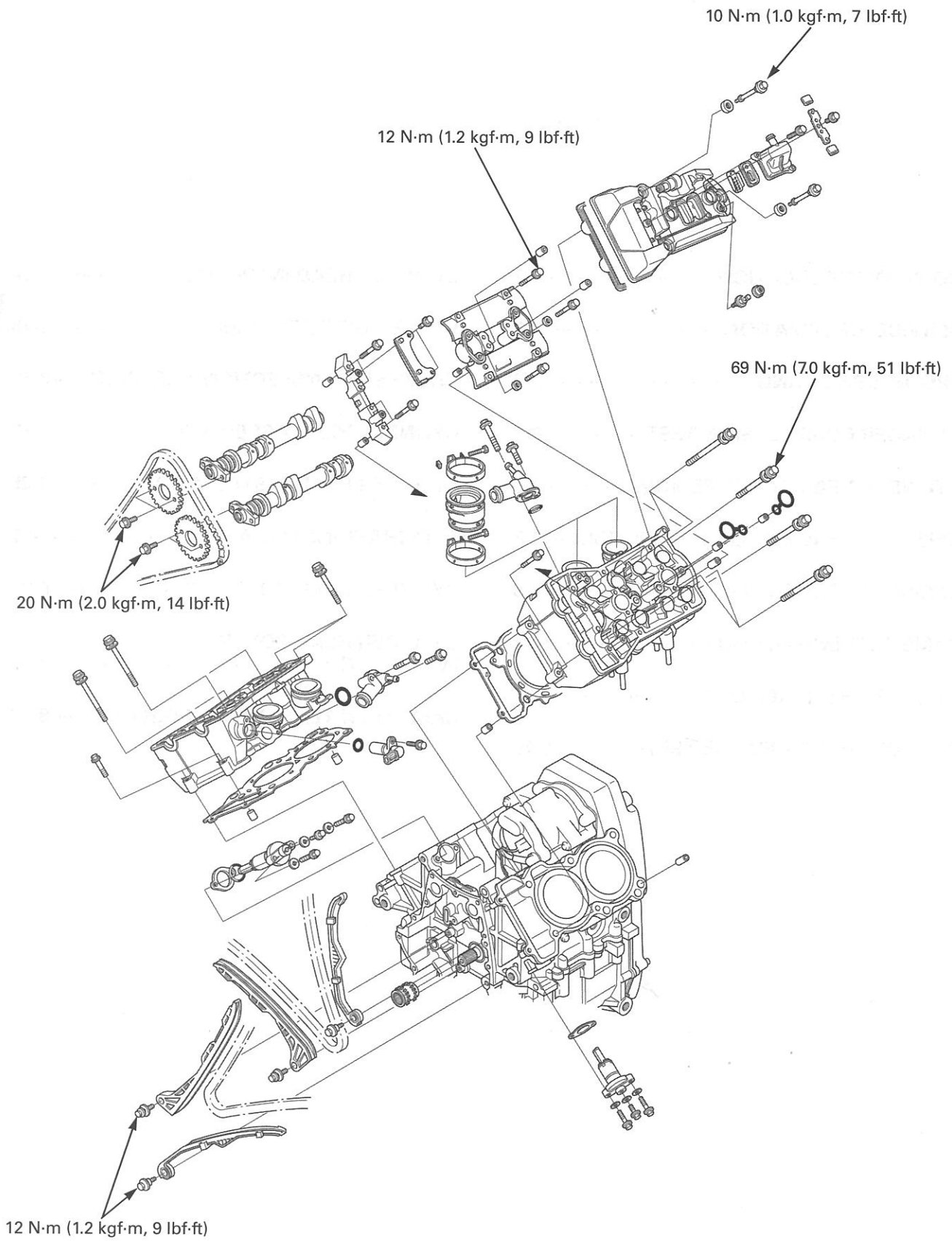


8. CYLINDER HEAD/VALVES

COMPONENT LOCATION	8-2	CYLINDER HEAD INSPECTION	8-16
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TROUBLESHOOTING	8-5	VALVE SEAT INSPECTION/REFACING	8-19
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CAMSHAFT REMOVAL	8-8	CYLINDER HEAD COVER ASSEMBLY	8-31
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CYLINDER HEAD REMOVAL	8-13	CAM CHAIN TENSIONER LIFTER	8-34
CYLINDER HEAD DISASSEMBLY	8-15		

CYLINDER HEAD/VALVES

COMPONENT LOCATION



SERVICE INFORMATION

GENERAL

- This section covers service of the cylinder head, valves and camshaft.
- The camshaft and cylinder head services can be done with the engine installed in the frame.
- When disassembling, mark and store the disassembled parts to ensure that they are reinstalled in their original locations.
- Clean all disassembled parts with cleaning solvent and dry them by blowing them off with compressed air before inspection.
- Camshaft lubricating oil is fed through oil passages in the cylinder head. Clean the oil passages before assembling cylinder head.
- Be careful not to damage the mating surfaces when removing the cylinder head cover and cylinder head.

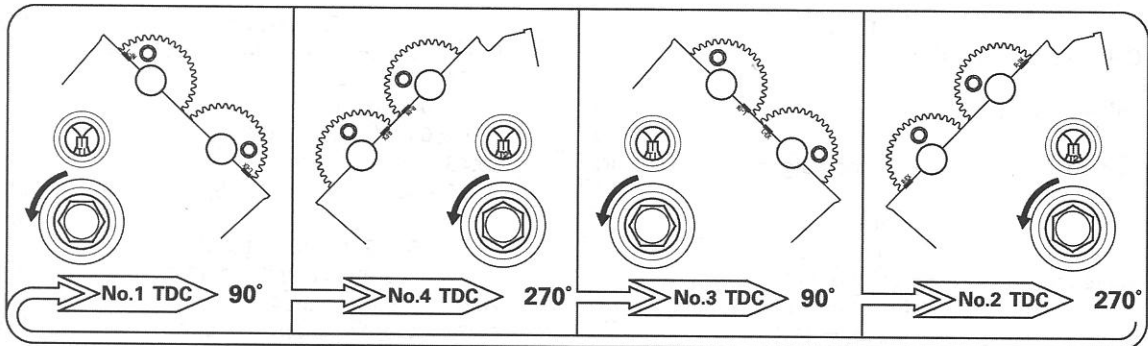
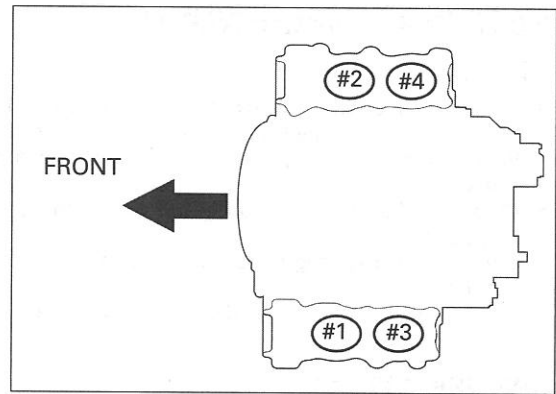
SPECIFICATIONS

Unit: mm (in)

ITEM		STANDARD	SERVICE LIMIT
Cylinder compression		981 – 1,373 kPa (10.0 – 14.0 kgf/cm ² , 142 – 178psi) at 300 rpm	–
Valve clearance		IN	0.16 ± 0.03 (0.006 ± 0.001)
		EX	0.25 ± 0.03 (0.010 ± 0.001)
Camshaft	Cam lobe height	IN	36.48 – 36.64 (1.436 – 1.443)
		EX	36.37 – 36.53 (1.432 – 1.438)
	Runout	–	0.05 (0.002)
	Oil clearance	0.020 – 0.062 (0.0008 – 0.0024)	0.10 (0.004)
Valve lifter	Valve lifter O.D.	25.978 – 25.993 (1.0228 – 1.0233)	25.97 (1.022)
	Valve lifter bore I.D.	26.010 – 26.026 (1.024 – 1.0246)	26.04 (1.025)
Valve, valve guide	Valve stem O.D.	IN	4.975 – 4.990 (0.1959 – 0.1965)
		EX	4.960 – 4.975 (0.1953 – 0.1959)
	Valve guide I.D.	IN/EX	5.000 – 5.012 (0.1969 – 0.1973)
	Stem-to-guide clearance	IN	0.010 – 0.037 (0.0004 – 0.0015)
		EX	0.025 – 0.052 (0.0010 – 0.0020)
	Valve guide projection above cylinder head	IN	15.6 – 15.8 (0.61 – 0.62)
EX		15.8 – 16.0 (0.62 – 0.63)	
Valve seat width	IN/EX	0.90 – 1.10 (0.035 – 0.043)	
			1.5 (0.06)
Valve spring free length	IN	43.4 (1.71)	
	EX	43.4 (1.71)	
Cylinder head warpage		–	0.10 (0.004)

CYLINDER HEAD/VALVES

VALVE TIMING/CYLINDER NUMBER



TORQUE VALUES

Cylinder head flange bolt	69 N·m (7.0 kgf·m, 51 lbf·ft)	Apply oil to the threads and flange surface
Camshaft holder flange bolt	12 N·m (1.2 kgf·m, 9 lbf·ft)	Apply oil to the threads and flange surface
Cylinder head cover bolt	10 N·m (1.0 kgf·m, 7 lbf·ft)	
Breather plate flange bolt	12 N·m (1.2 kgf·m, 9 lbf·ft)	Apply a locking agent to the threads
PAIR check reed valve cover SH bolt	12 N·m (1.2 kgf·m, 9 lbf·ft)	CT bolt
Cam sprocket flange bolt	20 N·m (2.0 kgf·m, 14 lbf·ft)	Apply a locking agent to the threads
Cam chain tensioner pivot bolt	12 N·m (1.2 kgf·m, 9 lbf·ft)	Apply a locking agent to the threads
Cam chain guide bolt/washer	12 N·m (1.2 kgf·m, 9 lbf·ft)	Apply a locking agent to the threads
Cylinder head stud bolt (exhaust pipe stud bolt)	See page 1-14	
Primary drive gear flange special bolt	93 N·m (9.5 kgf·m, 69 lbf·ft)	Apply oil to the threads and flange surface
Spark plug	16 N·m (1.6 kgf·m, 12 lbf·ft)	

TOOLS

Compression gauge attachment	07RMJ-MY50100	Equivalent commercially available in U.S.A.
Valve spring compressor	07757-0010000	
Valve spring compressor attachment	07959-KM30101	
Tappet hole protector	07HMG-MR70002	
Valve guide driver, 5.0 mm	07942-MA60001	or 07942-MA60000 (U.S.A. only)
Valve guide reamer, 5.0 mm	07984-MA60001	or 07984-MA6000D (U.S.A. only)
Valve seat cutters		-these are commercially available in U.S.A.
Seat cutter, 29 mm (45° EX)	07780-0010300	
Seat cutter, 33 mm (45° IN)	07780-0010800	
Flat cutter, 30 mm (32° EX)	07780-0012200	
Flat cutter, 33 mm (32° IN)	07780-0012900	
Interior cutter, 30 mm (60° EX)	07780-0014000	
Interior cutter, 34 mm (60° IN)	07780-0014700	
Cutter holder, 5 mm	07781-0010400	