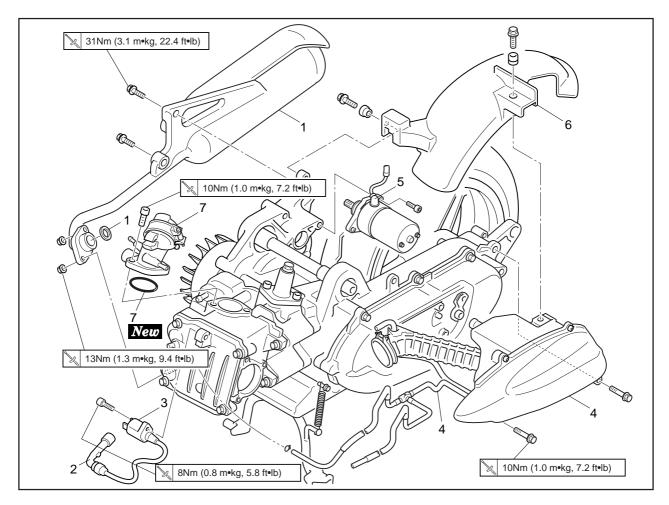
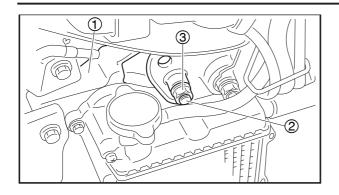


# MANIFOLD, AIR FILTER AND MUFFLER ASSEMBLY



Order	Job/Part	Q'ty	Remarks
Order 1 2 3 4 5 6	Job/Part Removing the manifold, air filter and muffler assembly Rear brake cable(adjuster/pin) Rear wheel lock cable Hose(to air cut-off valve) Vacuum hose(to air cut-off valve) Vacuum hose(to fuel cock) Throttle cable kit Auto choke lead Throttle position sensor lead Muffler assembly/Gasket Spark plug cap Ignition coil Air filter assembly/Breather hose Starter motor assembly Rear fender	Q'ty 	Remarks Remove the parts in the order listed. Refer to "LEADS, HOSES AND REAR BRAKE". Refer to "CARBURETOR"in chapter 7.
7	Manifold/O-ring	1/1	For installation, reverse the removal pro- cedure.





#### EAS00192

## INSTALLING THE ENGINE

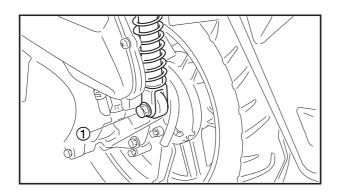
- 1. Install:
  - •engine ①
  - engine mounting bolt (2)self lock nut(3)

NOTE:

Do not fully tighten the bolts.

Tighten:
 self lock nut

🔌 46Nm(4.6 m • kg, 33.3 ft • lb)



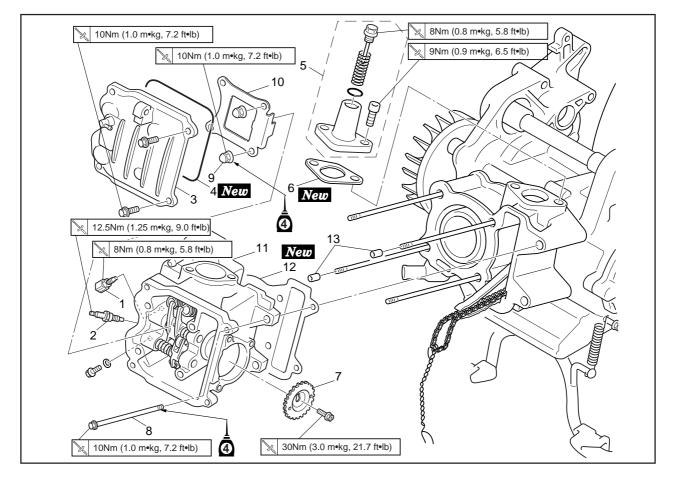
3. Tighten:

 rear shock absorber assembly lower bolt(1)

🔌 16 Nm (1.6 m • kg, 11.6 ft • lb)



CYLINDER HEAD



Order	Job/Part	Q'ty	Remarks
	Removing the cylinder head		Remove the parts in the order listed.
	Muffler assembly	_	
	Air filter assembly/Breather hose		Refer to "MANIFOLD, AIR FILTER AND MUFFLER ASSEMBLY".
	Manifold/O-ring	_	4
1	Thermostat unit	1	
2	Spark plug	1	
3	Cylinder head cover	1	
4	O-ring	1	
5	Timing chain tensioner assembly	1	
6	Timing chain tensioner gasket	1	
7	Camshaft sprocket	1	Refer to "REMOVING THE CYLINDER HEAD".
8	Bolt	2	
9	Nut	4	
10	Plate	1	
11	Cylinder head	1	
12	Cylinder head gasket	1	
13	Dowel pin	2	
			For installation, reverse the removal pro- cedure.

ENG 0 **CYLINDER HEAD** 

EAS00225

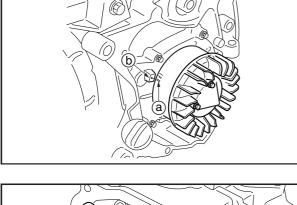
#### **REMOVING THE CYLINDER HEAD**

- 1. Remove :
  - crankcase cover (left) Refer to "BELT DRIVE".
  - cylinder head cover
- 2. Align:
  - "I" mark (a) on the magneto rotor (with the stationary pointer (b) on the crankcase cover)

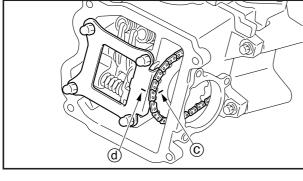
\*\*\*\*\*

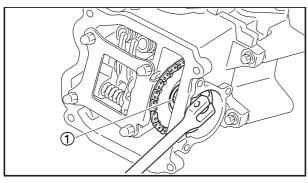
- Turn the primary fixed sheave counterclocka. wise.
- When the piston is at TDC on the compresb. sion stroke, align the "I" mark (c) on the camshaft sprocket with the mark (d) on the plate.

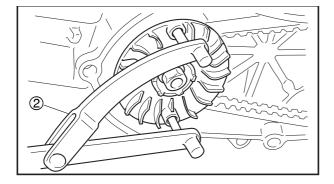
- 3. Loosen:
  - •timing chain tensioner bolt
  - •camshaft sprocket bolt ① While holding the crank bolt with a wrench2, remove the camshaft sprocket bolt 1.
  - Rotor holding tool 90890-01235 YU-01235



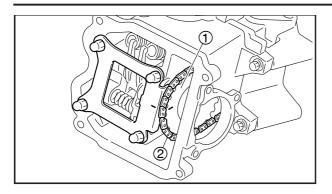
IC

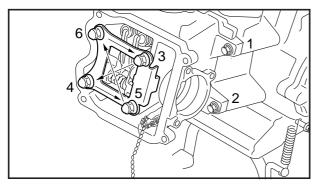






ENG





- 4. Remove:
  - timing chain tensioner (along with the gasket)
  - camshaft sprocket ①
  - timing chain 2

**CYLINDER HEAD** 

#### NOTE: \_\_

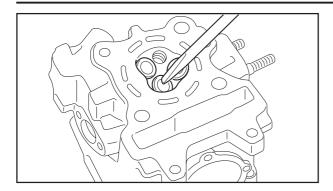
To prevent the timing chain from falling into the crankcase, fasten it with a wire.

- 5. Remove:
  - cylinder head

#### NOTE: \_\_\_\_

- Loosen the nuts in the proper sequence as shown.
- Loosen each nut 1/2 of a turn at a time. After all of the nuts are fully loosened, remove them.

CYLINDER HEAD ENG



EAS00227

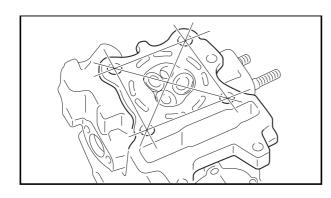
### CHECKING THE CYLINDER HEAD

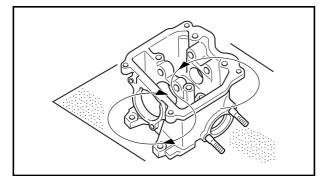
- 1. Eliminate:
  - combustion chamber carbon deposits (with a rounded scraper)

### NOTE: \_\_\_

Do not use a sharp instrument to avoid damaging or scratching:

- spark plug bore thread
- valve seats
- 2. Check:
  - cylinder head Damage/scratches → Replace.





- 3. Measure:
  - cylinder head warpage Out of specification → Resurface the cylinder head.

Maximum cylinder head warpage 0.05 mm (0.002 in)

a. Place a straightedge and a thickness gauge across the cylinder head.

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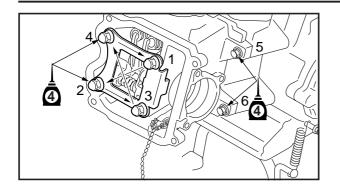
- b. Measure the warpage.
- c. If the limit is exceeded, resurface the cylinder head as follows.
- Place a 400 ~ 600 grit wet sandpaper on the surface plate and resurface the cylinder head using a figure-eight sanding pattern.

### NOTE: \_

To ensure an even surface, rotate the cylinder head several times.

CYLINDER HEAD





EAS00231

- INSTALLING THE CYLINDER HEAD
- 1. Install:
  - gasket New
  - dowel pins
- 2. Install:
  - cylinder head
- 3. Tighten:
  - cylinder head nuts

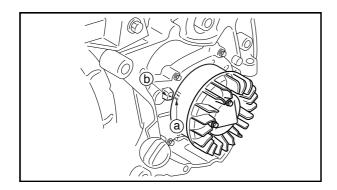
🔀 10 Nm (1.0 m • kg, 7.2 ft • lb)

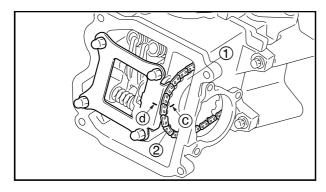
• cylinder head bolts

🔌 10 Nm (1.0 m • kg, 7.2 ft • lb)

#### NOTE:

- Lubricate the cylinder head nuts with engine oil.
- Tighten the cylinder head nuts in the proper tightening sequence as shown and torque them in two stages.





- 4. Install:
  - camshaft sprocket ① ● timing chain ②
- a. Turn the primary pulley counterclockwise.
- b. Align the "I" mark (a) on the AC magneto rotor with the stationary pointer (b) on the crankcase cover.
- c. Align the "I" mark ⓒ on the camshaft sprocket with the stationary pointer ⓓ on the plate.
- d. Install the timing chain onto the camshaft sprocket, and then install the camshaft sprocket onto the camshaft.

### NOTE: \_

- When installing the camshaft sprocket, be sure to keep the timing chain as tight as possible on the exhaust side.
- Align the slot on the camshaft with the tab in the camshaft sprocket.