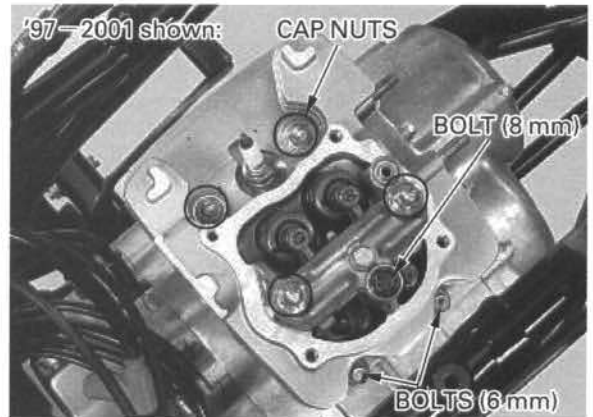


'97-2001: Install the rocker arm holder onto the cylinder head. Install the new washers and cap nuts. Install the flange bolt (8 mm). Tighten the cap nut and flange bolt (8 mm), in a crisscross pattern in two or three steps.

TORQUE:

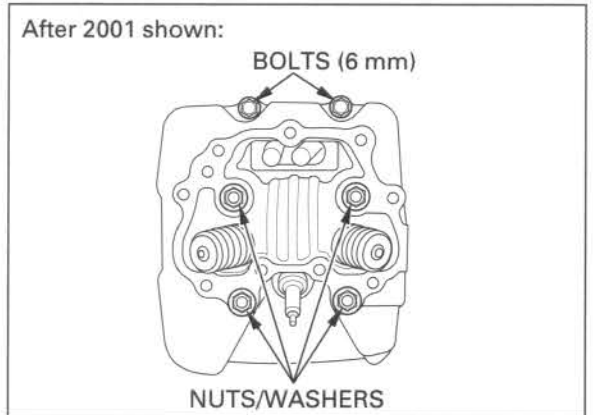
- Rocker arm holder cap nut:**
30 N·m (3.1 kgf·m , 22 lbf·ft)
- Cylinder head cap nut:**
30 N·m (3.1 kgf·m , 22 lbf·ft)
- Rocker arm holder flange bolt:**
30 N·m (3.1 kgf·m , 22 lbf·ft)



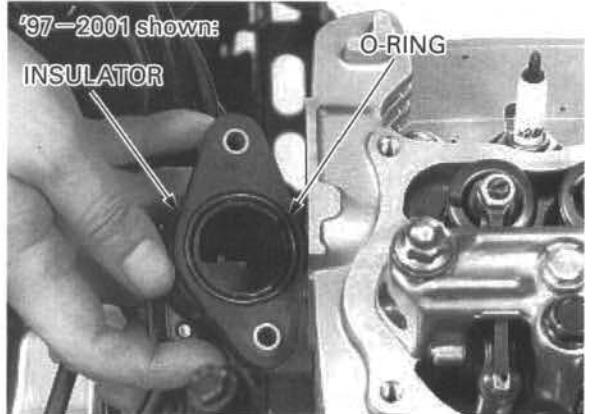
After 2001: Apply engine oil to the cylinder head flange nut threads and seating surfaces. Install the four washers and four cylinder head flange nuts and tighten the cylinder head flange nuts in a crisscross pattern in two or three steps to the specified torque.

TORQUE: 30 N·m (3.1 kgf·m , 22 lbf·ft)

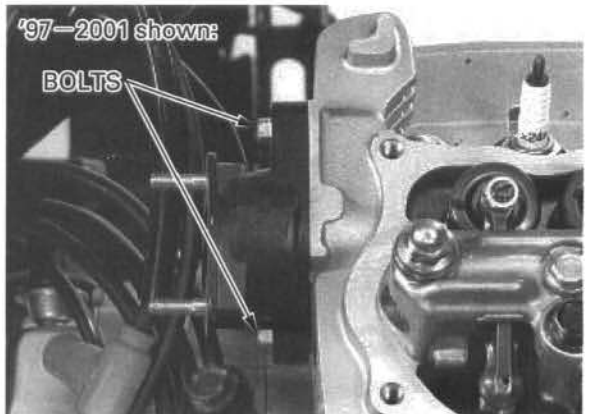
Install the two cylinder head mounting bolts (6 mm). Tighten the mounting bolts securely.



Check the O-ring is in good condition, install the carburetor insulator.



Tighten the insulator bolts.



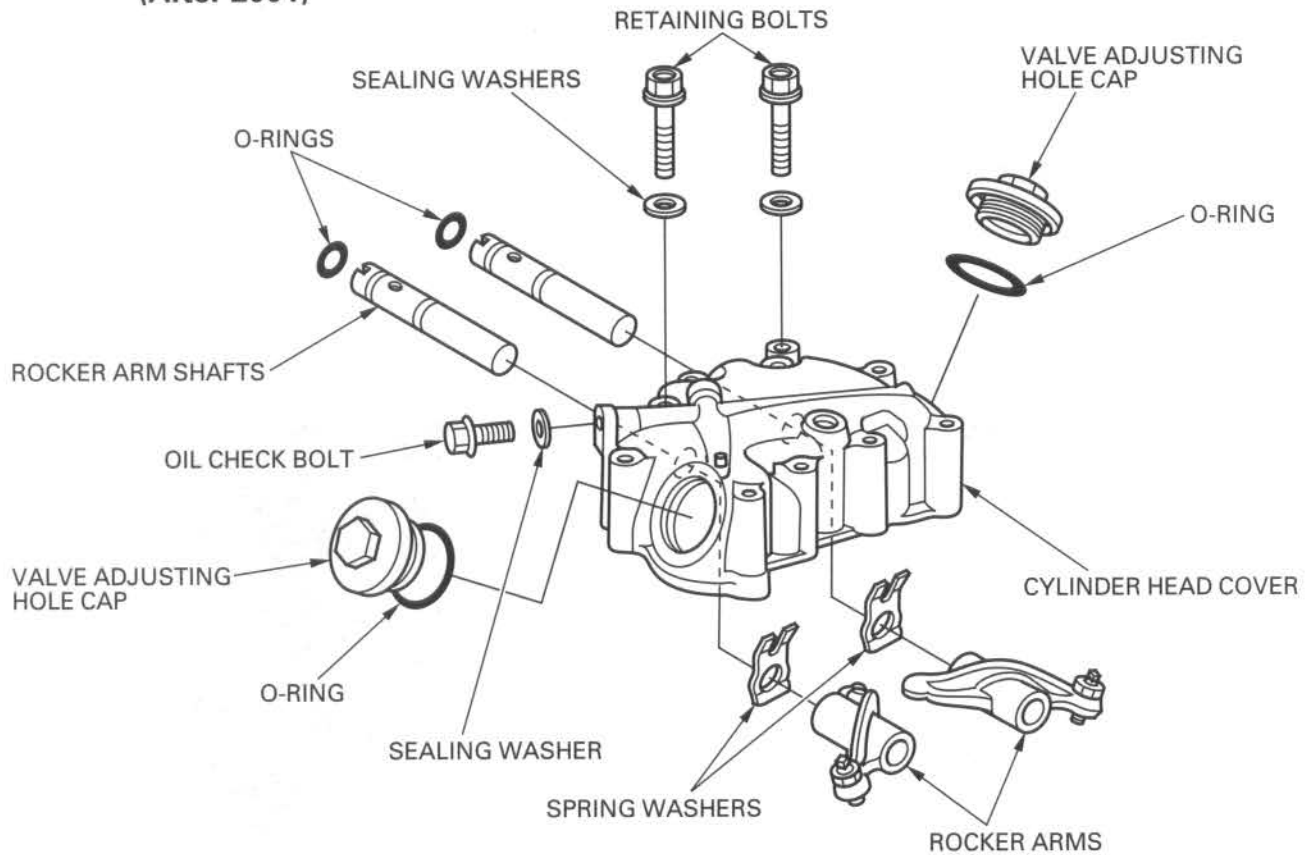
CYLINDER HEAD/CYLINDER/PISTON

Install the following:

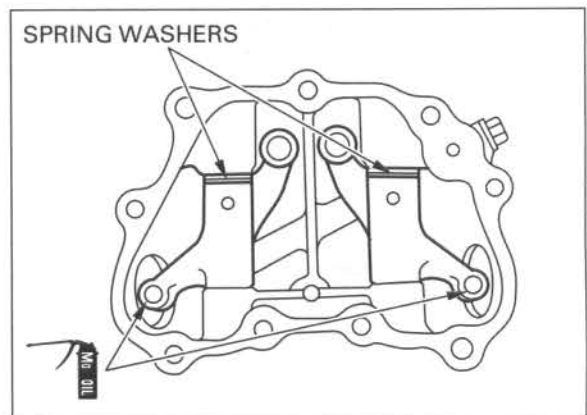
- Spark plug cap
- Carburetor (page 5-12)
- Exhaust pipe (page 2-10)



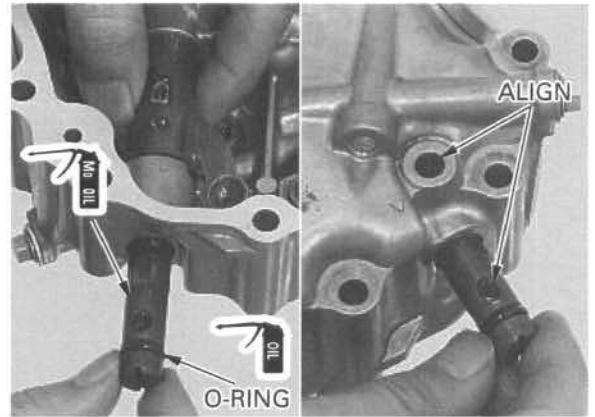
CYLINDER HEAD COVER ASSEMBLY (After 2001)



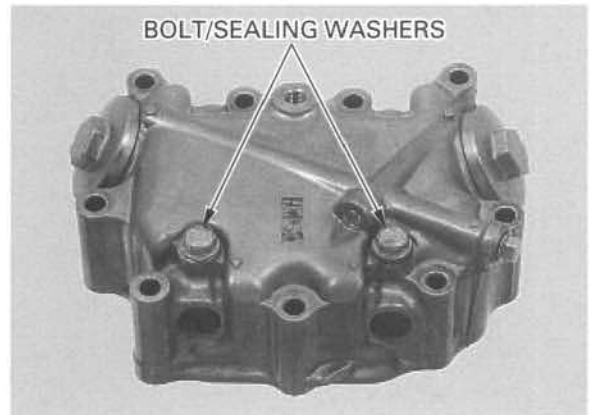
Lubricate the rocker arm slipper surface with molybdenum oil solution.
Install the spring washers and place the rocker arms into the cylinder head cover as shown.



Lubricate the rocker arm shaft outer surfaces with molybdenum oil solution.
 Coat the new O-rings with engine oil and install them onto the rocker arm shaft grooves.
 Insert the rocker arm shaft using a screwdriver to align the hole between the cylinder head cover and shaft.



Install the rocker arm shaft retaining bolts with new sealing washers and loosely tighten them.



CYLINDER HEAD COVER INSTALLATION

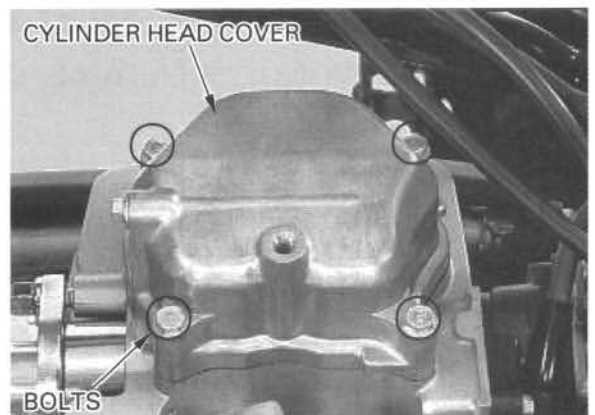
'97 – 2001:

Install a new cylinder head cover gasket.
 Install a new O-ring into the groove of the rocker arm holder.



Install the cylinder head cover and tighten the bolts.

Install the fuel tank heat insulator and fuel tank (page 5-18).

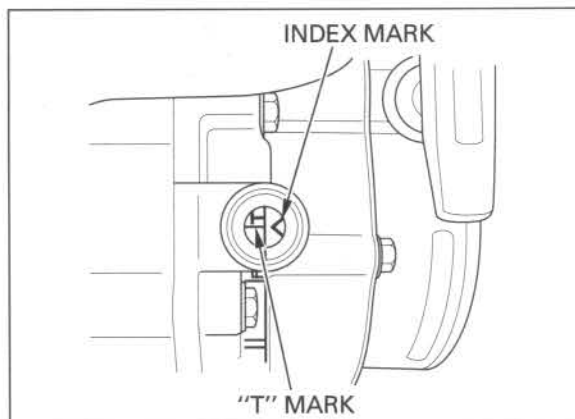


CYLINDER HEAD/CYLINDER/PISTON

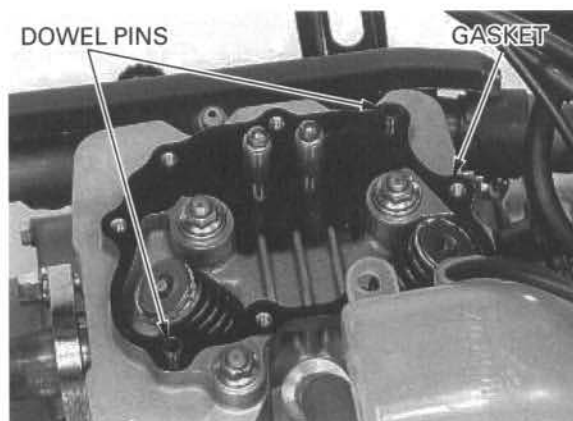
After 2001:

Turn the crankshaft with the recoil starter and align the "T" mark on the flywheel with the index mark on the rear crankcase cover.

Make sure the piston is at TDC of the compression stroke. If not, turn the crankshaft one full turn and realign the "T" mark with the index mark.



Install the dowel pins and new gasket.



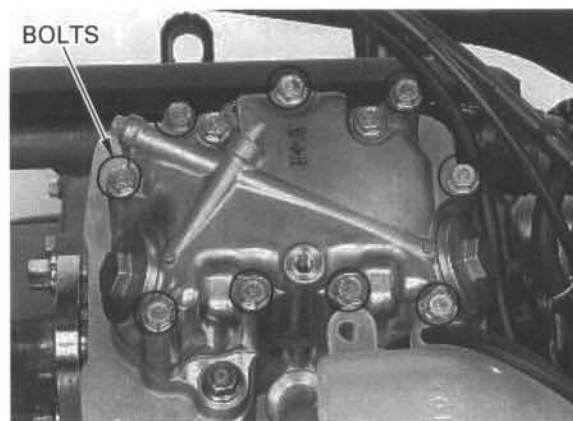
Install the cylinder head cover with the nine cover bolts.

Tighten the cover bolts in a crisscross pattern in two or three steps to the specified torque.

TORQUE: 12 N·m (1.2 kgf·m , 9 lbf·ft)

Tighten the rocker arm shaft retaining bolts securely if they were removed.

Adjust the valve clearance (page 3-10).



CYLINDER/PISTON REMOVAL

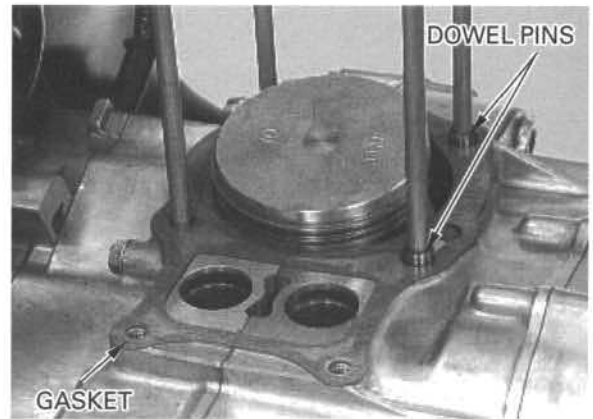
CYLINDER REMOVAL

Remove the cylinder head (page 7-4).

Remove the cylinder.



Remove the cylinder gasket and dowel pins.



PISTON REMOVAL

Do not let the piston pin clips fall into the crankcase.

Remove the piston pin clip with pliers.

Press the piston pin out of the piston and remove the piston.



CYLINDER/PISTON INSPECTION

CYLINDER

Inspect the cylinder bore for wear or damage. Measure the cylinder I.D. in the X and Y axes at three levels.

Take the maximum reading to determine the cylinder wear.

SERVICE LIMIT: 68.6 mm (2.70 in)

Calculate the piston-to-cylinder clearance.

Take a maximum reading to determine the clearance.

Refer to page 7-23 for measurement of the piston O.D.

SERVICE LIMIT: 68.4 mm (2.69 in)

Calculate the taper and out-of-round at three levels in the X and Y axes. Take the maximum reading to determine the measurements.

SERVICE LIMITS:

Taper: 0.10 mm (0.004 in)

Out-of-round: 0.10 mm (0.004 in)

The cylinder must be rebored and an oversize piston fitted if the service limits are exceeded.

The following oversize pistons are available:

0.25 mm (0.010 in)

0.50 mm (0.020 in)

0.75 mm (0.030 in)

1.00 mm (0.039 in)

The piston-to-cylinder clearance for the oversize piston must be: 0.018 – 0.048 mm (0.0007 – 0.0019 in).

