# **VALVE CLEARANCE**

# **INSPECTION**

#### NOTE:

- Inspect and adjust the valve clearance while the engine is cold (below 35°C/95°F).
- After the valve clearance inspection, check the engine idle speed (page 3-15).
- Inspection and adjustment of the valve clearance can be serviced with the engine installed in the frame.

Remove the cylinder head cover (page 10-6).

Remove the timing hole cap [1], crankshaft hole cap [2] and O-rings [3].



Remove the camshaft maintenance cap [1] and O-ring [2].

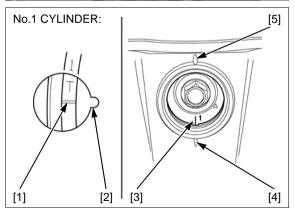


No.1 Cylinder:

Rotate the crankshaft counterclockwise and align the "1T" mark [1] on the flywheel with the index notch [2] on the alternator cover.

Make sure that the "1" mark [3] on the cam sprocket is aligned with the lower cylinder head index line [4].

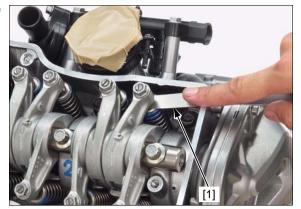
If the "1" mark is facing upper cylinder head index line [5], turn the crankshaft counterclockwise one full turn (360°) and realign the "1T" mark with the index notch.



Check the valve clearance by inserting a feeler gauge [1] between the valve adjusting screw and valve stem.

#### **VALVE CLEARANCE:**

IN:  $0.17 \pm 0.02$  mm  $(0.007 \pm 0.001$  in) EX:  $0.28 \pm 0.02$  mm  $(0.011 \pm 0.001$  in)

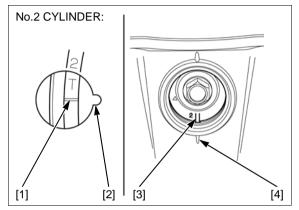


No.2 Cylinder:

Rotate the crankshaft counterclockwise 3/4 turn (270°) and align the "2T" mark [1] on the flywheel with the index notch [2] on the alternator cover.

Make sure that the "2" mark [3] on the cam sprocket is aligned with the lower cylinder head index line [4].

Check the valve clearance in the same manner as No.1 cylinder.



### **ADJUSTMENT**

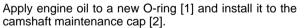
Loosen the lock nut [1] and apply engine oil to the adjusting screw threads and seating surface.

Adjust by turning the adjusting screw [2] until there is a slight drag on the feeler gauge [3].

Hold the adjusting screw and tighten the lock nut to the specified torque.

## TORQUE: 14 N-m (1.4 kgf-m, 10 lbf-ft)

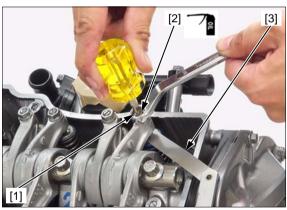
After tightening the lock nut, recheck the valve clearance.



Temporarily Install the camshaft maintenance cap to the cylinder head.

If the engine is removed from the frame, tighten the camshaft maintenance cap to the specified torque.

TORQUE: 4.0 N·m (0.4 kgf·m, 3.0 lbf·ft)





If the engine is installed on the frame, insert a feeler gauge (0.1 mm) [1] between the camshaft maintenance cap and cylinder head.

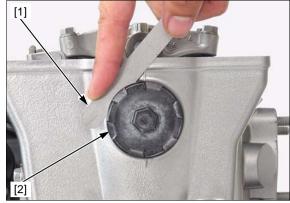
Tighten the camshaft maintenance cap securely.

Remove the feeler gauge.

Further tighten the camshaft maintenance cap at 30°.

NOTE

One concave area [2] size is equivalent with 30°.



Install the cylinder head cover (page 10-6).

Apply engine oil to new O-rings [1] and install them to each hole cap.

Apply grease to the timing hole cap [2] and crankshaft hole cap [3] threads.

Install and tighten the timing hole cap and crankshaft hole cap to the specified torque.

#### TORQUE:

Timing hole cap: 10 N·m (1.0 kgf·m, 7 lbf·ft) Crankshaft hole cap: 15 N·m (1.5 kgf·m, 11 lbf·ft)



# **ENGINE OIL**

### OIL LEVEL INSPECTION

Hold the motorcycle in an upright position.

Start the engine and let it idle for 3-5 minutes. Stop the engine and wait 2-3 minutes.

Remove the oil filler cap/dipstick [1] and wipe it clean.

Reinstall the oil filler cap/dipstick, but do not screw it.

Remove the oil filler cap/dipstick and check the oil level.

If the level is below or near the lower level [2] on the dipstick, fill the recommended engine oil to the upper level [3].

Check that the O-ring [4] is in good condition, replace it if necessary.

Apply engine oil to the O-ring.

Install the oil filler cap/dipstick.

### RECOMMENDED ENGINE OIL:

Pro Honda GN4 4-stroke oil (U.S.A. and Canada) or equivalent motor oil

API service classification: SG or Higher

JASO T 903 standard: MA Viscosity: SAE 10W-30

