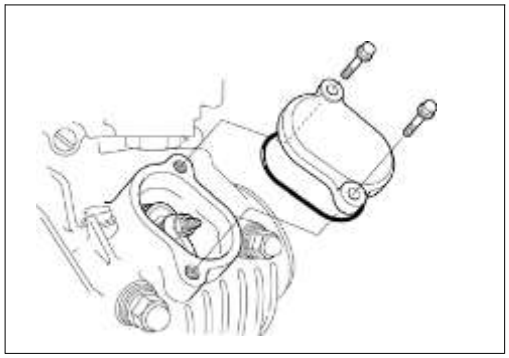
VALVE CLEARANCE

INSPECTION/ADJUSTMENT

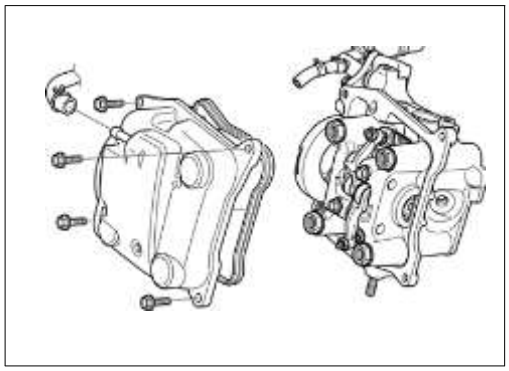
- Inspection and adjustment of valve clearance should be performed with the piston at TDC (Top Dead Center) of the compression stroke. This position can be obtained by confirming that there is slack in the rocker arm when the stamped “T” mark on the flywheel rotor and index mark on the crankcase are aligned.
- Inspect and adjust the valve clearance while the engine is cold (below 35°C/95°F).

Type 1:



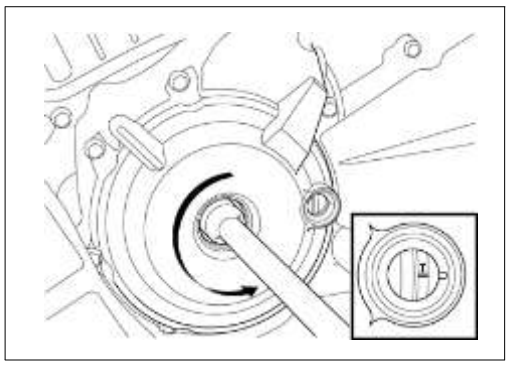
- Bolts
- Valve adjusting hole caps
- O-ring

Type 2:



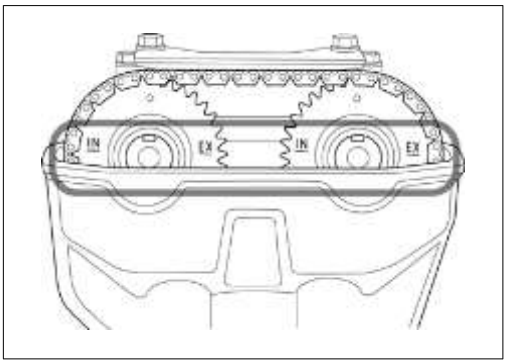
- Bolts
- Cylinder head cover
- Packing

Set TDC (Motorcycle Type)



- Timing Hole Cap
- Crankshaft Hole Cap

- Rotate the crankshaft counterclockwise and align the “T” mark on the flywheel with the index notch on the left crankcase cover.

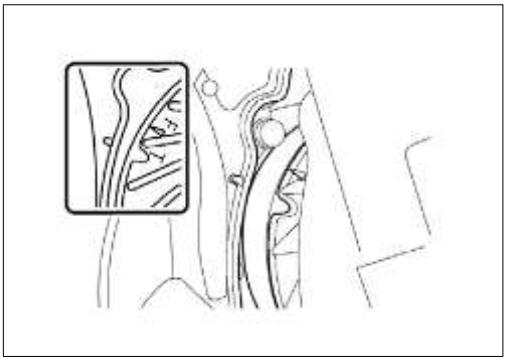


Set TDC (Scooter Type)

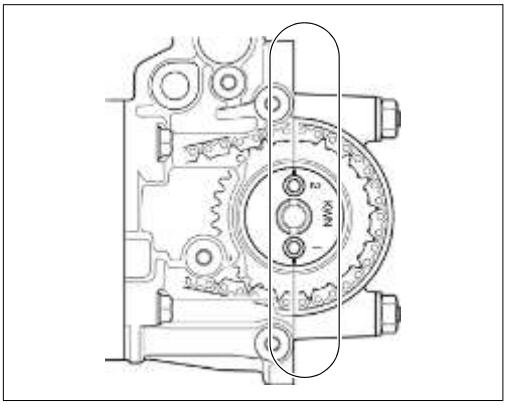
- Make sure that the outside index lines and index marks (“IN” mark and “EX” mark) on the cam sprockets are flush with the cylinder head top surface and facing outward.

NOTE:

- If the “IN” and “EX” marks are facing inward, turn the crankshaft counterclockwise one full turn (360°) and realign the “T” mark with the index notch.

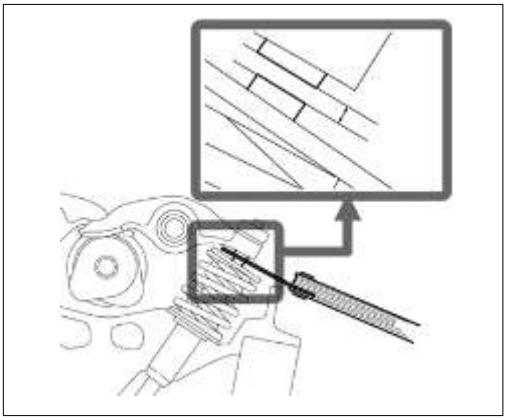


- Rotate the crankshaft and align the cut out (“T” mark) on the cooling fan with the index mark on the crankcase.

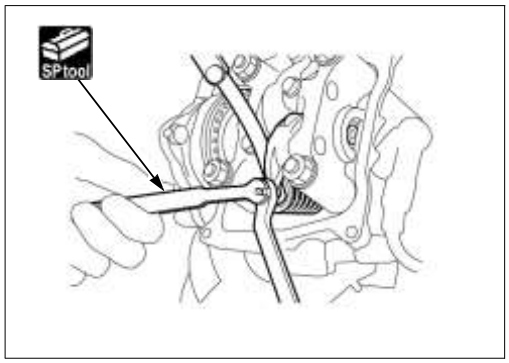


Rocker Arm Type:

- Make sure that the index lines on the cam sprocket are flush with the top surface of cylinder head and that the identification mark on the cam sprocket is facing up.

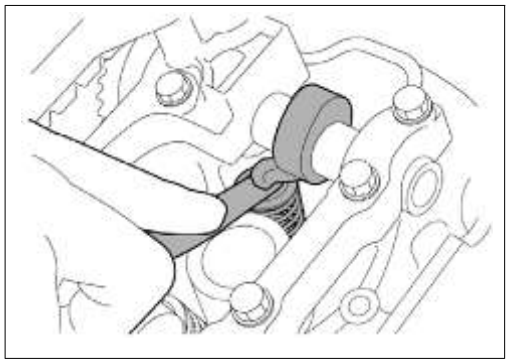


- Valve clearance

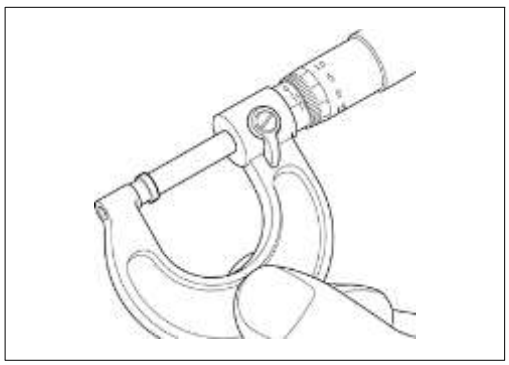


- Loosen the valve adjusting screw lock nut.
- Adjust the valve clearance by turning the adjusting screw until there is a slight drag on the feeler gauge.
- Valve adjusting screw lock nut threads and seating surface
- Hold the adjusting screw using a special tool.
- Valve adjusting wrench
- Valve clearance

Shim Type:



- Set the piston to the TDC (Top Dead Center) on the compression stroke
- Valve clearance



NOTE:

- Mark all shims to ensure correct reassembly in their original locations.
- The shims can be easily removed with a tweezers or magnet.
- Shim thickness

NOTE:

- Sixty-nine different thickness shims are available from the thinnest 1.200 mm thickness shim to the thickest 2.900 mm thickness shim in increments of 0.025 mm.

Calculate the new shim thickness using the equation below.
A = (B – C) + D

- A: New shim thickness
- B: Recorded valve clearance
- C: Specified valve clearance
- D: Old shim thickness

- Make sure of the correct shim thickness by measuring the shim by micrometer.
- Reface the valve seat if carbon deposit result in a calculated dimension of over 2.800 mm.