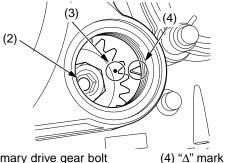
## **Valve Clearance**

3. Rotate the crankshaft by turning the primary drive gear bolt (2) (crankshaft) clockwise until aligning the punch mark (3) on the primary drive gear with the " $\Delta$ " mark (4) on the right crankcase cover. In this position, the piston may either be on the compression or exhaust stroke. If the crankshaft passed the punch mark, rotate the primary drive gear bolt clockwise again and align the punch mark with the " $\Delta$ " mark.

The inspection must be made when the piston is at the top of the compression stroke when both the intake and exhaust valves are closed. This condition can be determined by moving the exhaust rocker arm (5). If it is free, it is an indication that the valves are closed and that the piston is on the compression stroke. If it is tight and the valves are open, rotate the primary drive gear bolt  $360^{\circ}$  and realign the punch mark to the " $\Delta$ " mark.



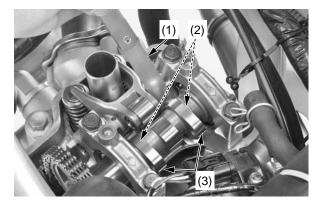
(2) primary drive gear bolt(3) punch mark



(5) exhaust rocker arm

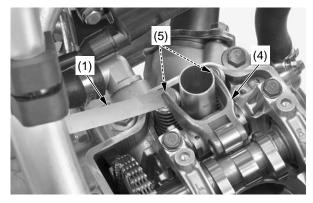
## **Valve Clearance Inspection**

1. Measure the intake valve clearance by inserting a feeler gauge (1) between the valve lifters (2) and intake cams (3).



(1) feeler gauge(2) valve lifters(3) intake cams

2. Measure the exhaust valve clearance by inserting a feeler gauge (1) between the exhaust rocker arm (4) and exhaust valve shims (5).



(1) feeler gauge(4) exhaust rocker arm(5) exhaust valve shims

Valve Clearances:

IN:  $0.005 \pm 0.001$  in  $(0.12 \pm 0.03$  mm) EX:  $0.011 \pm 0.001$  in  $(0.28 \pm 0.03$  mm)

If intake valve clearance and exhaust valve clearance need adjustment, see *Camshaft Removal* (page 65) and select the correct shim for each valve.