

Measuring and Adjusting Valve Clearance

Note: The engine should be cold before adjusting valve clearance.

To adjust valve clearance, the piston must be at or near TDC of the compression stroke. When the piston is at TDC of the compression stroke, both the intake and exhaust valves will be closed and both rocker arms will be loose.

If the cooling fan housing is removed, the TDC mark on the flywheel can be aligned with the TDC mark on the cooling fin to locate piston TDC of the compression stroke.

If the cooling fan housing is not removed, piston TDC of the compression stroke may be found by rotating the flywheel and watching each valve open and close. Rotate the flywheel clockwise, allowing the exhaust valve to open then close, and then the intake valve to open and close. After the intake valve has closed, rotate the flywheel clockwise an additional 1/4 turn. At this position the piston will be on the compression stroke and both valves will be closed allowing valve clearance adjustment to be completed.

1. Remove the rocker arm (valve) cover bolts, valve cover and gasket. Discard the gasket.
2. Rotate the crankshaft to piston TDC of the compression stroke.
3. Check the valve clearance (**Figure 6-34, (1)**) using a feeler gauge. If adjustment is required, proceed to the next step. See *Valve Clearance* on page 6-5 for the specification.
4. Loosen the adjusting screw locknut (**Figure 6-34, (3)**). Turn the valve adjustment screw (**Figure 6-34, (2)**) to adjust the valve clearance so there is a slight "drag" on the feeler gauge when sliding it between the rocker arm and the valve cap. Hold the adjusting screw while tightening the valve adjusting screw locknut. Recheck the clearance.

Standard Intake/Exhaust Valve Clearance - All Models

0.006 ± 0.002 in. (0.15 ± 0.05 mm)

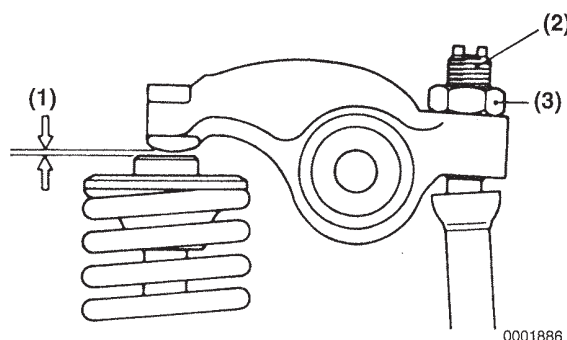


Figure 6-34

Note: There is a tendency for the clearance to decrease slightly when the locknut is tightened. It is suggested that you make the initial clearance adjustment slightly on the "loose" side before tightening the locknut. Recheck the clearance after tightening the locknut.

5. Apply oil to the contact surface between the adjusting screw and push rod.
6. Install a new rocker arm (valve) cover gasket.
7. Install the rocker arm (valve) cover and bolts.