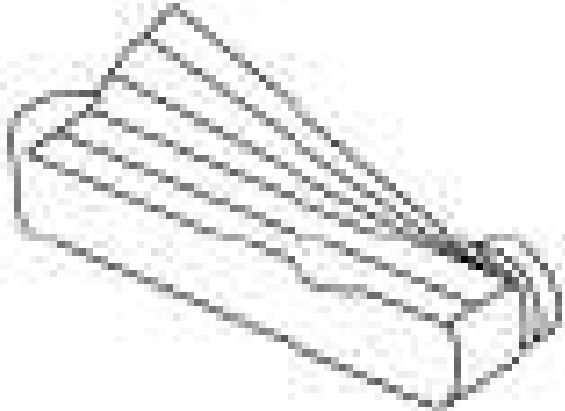


# GENERAL PROCEDURES

## VALVE CLEARANCE CHECK

Special Tool(s)

### SPECIAL TOOL SPECIFICATION

 <p>ST1271-A</p>	<p>Feeler Gauge Set 303-D027 (D81L-4201-A) or equivalent</p>
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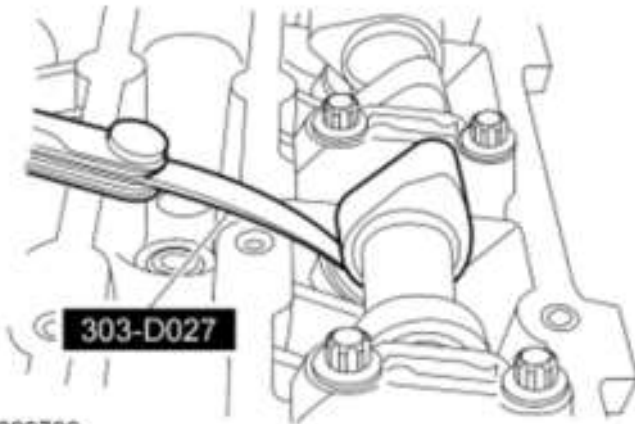
1. Remove the valve cover. For additional information, refer to VALVE COVER.

**NOTE:** Turn the engine clockwise only and use the crankshaft bolt only or the engine may be damaged.

2.

**NOTE:** Measure the clearance of each valve at base circle with the lobe pointed away from the tappet, before removing the camshafts. Failure to measure all clearances prior to removing the camshafts will necessitate repeated removal and installation and wasted labor time.

Using the Feeler Gauge Set, measure the clearance of each valve and record the location.



**Fig. 3: Measuring Valve Clearance**  
Courtesy of FORD MOTOR CO.

3. **NOTE:** The number on the valve tappet only reflects the digits that follow the decimal. For example, a tappet with the number 0.650 has the thickness of 3.650 mm.

**NOTE:** The nominal desired mid-range clearance is:

- Intake: 0.25 mm (0.0095 in)
- Exhaust: 0.30 mm (0.0115 in)

Select tappets using this formula: tappet thickness = measured clearance + the base tappet thickness - most desirable thickness.

**NOTE:** The acceptable clearances after being fully installed are:

- Intake: 0.22-0.28 mm (0.008-0.011 in)
- Exhaust: 0.27-0.33 mm (0.010-0.013 in)

Select the closest tappet size available and mark the installation location.

4. If any tappets do not measure within specifications, install new tappets in those locations. For additional information, refer to VALVE TAPPETS.