

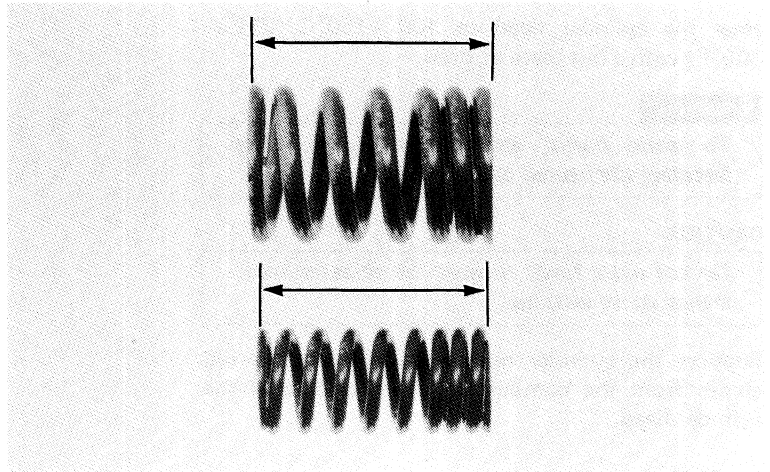
VALVE SPRINGS

Measure the free length of the inner and outer valve springs.

SERVICE LIMITS:

- INNER (IN): 35.2 mm (1.39 in)**
- (EX): 35.2 mm (1.39 in)**
- OUTER (IN): 38.0 mm (1.50 in)**
- (EX): 38.0 mm (1.50 in)**

Replace the springs if they are shorter than the service limits.



VALVE STEM-TO-GUIDE CLEARANCE

Inspect each valve for bending, burning or abnormal stem wear.

Check valve movement in the guide and measure and record each valve stem O.D.

- SERVICE LIMITS: IN: 5.45 mm (0.215 in)**
- EX: 5.43 mm (0.214 in)**

NOTE

Ream the guides to remove any carbon deposits before checking clearances.

Measure and record each valve guide I.D.

- SERVICE LIMIT: 5.525 mm (0.2175 in)**

Subtract each valve stem O.D. from the corresponding guide I.D. to obtain the stem-to-guide clearance.

- SERVICE LIMITS: IN: 0.12 mm (0.005 in)**
- EX: 0.14 mm (0.006 in)**

If the stem-to-guide clearance exceeds the service limits, determine if a new guide with standard dimensions would bring the clearance within tolerance. If so, replace any guides as necessary and ream to fit.

If the stem-to-guide clearance exceeds the service limits with new guides, also replace the valves.

NOTE

Reface the valve seats whenever the valve guides are replaced.

