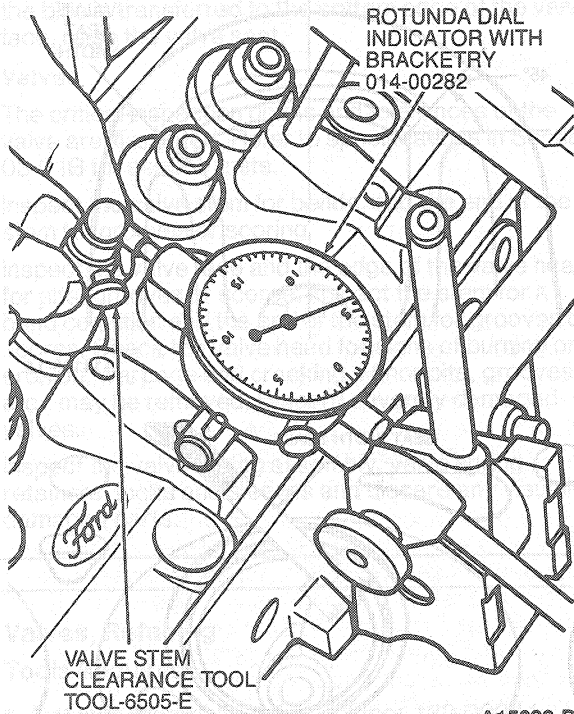


OVERHAUL (Continued)

Install the tool on the valve stem until it is fully seated. Tighten the knurled setscrew firmly. Permit the valve to drop away from its seat until the tool contacts the upper surface of the valve guide.



Position the Rotunda Dial Indicator with Bracketry 014-00282 or equivalent with its flat tip against the center portion of the tool spherical section at approximately 90 degrees to the valve stem axis. Move the tool back and forth in-line with the indicator stem. Take a reading on the dial indicator without removing the tool from the valve guide upper surface. Divide the reading by two, the division factor for the tool. If valve stem-to-valve guide clearance exceeds the wear limit, ream the valve guide for the next oversize valve stem as outlined under Valves.

Valves, Select Fitting

If the valve stem-to-valve guide clearance exceeds the service clearance, ream the valve guide for the next oversize valve stem. Valves with oversize stem diameters of 0.38mm (0.015 inch) and 0.76mm (0.030 inch) are available for service in diameters of 0.41mm and 0.81mm (0.016 inch and 0.032 inch) oversize. **Always reface the valve seat after the valve guide has been reamed.** Refer to Reaming Valve Guides.

In the case of valve stem-to-valve guide clearance, the service clearance is intended as an aid to diagnosing engine noise only, and does not constitute a failure or indicate need for service. However, when overhauling or reconditioning a cylinder head, the service clearance should be regarded as a practical working value, and used as a determinant for installing the next oversize valve to ensure extended service life.

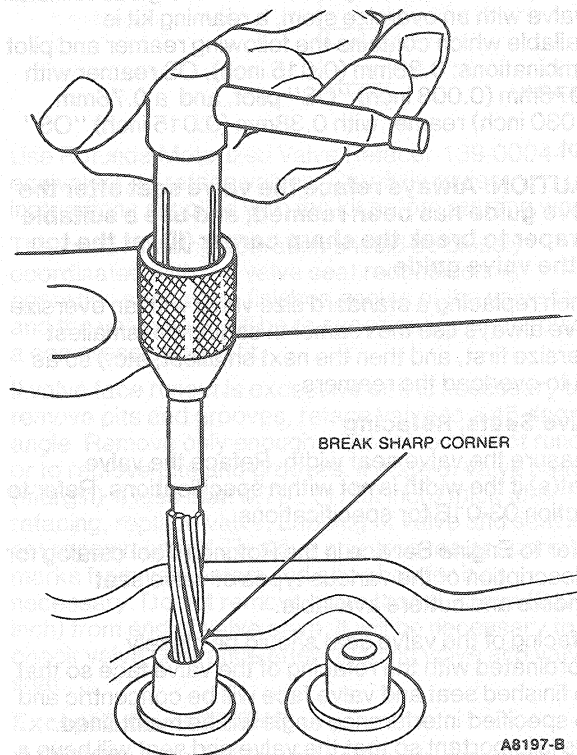
Valves, Select Fitting — 3.0L/3.2L SHO

If the valve stem-to-valve guide clearance exceeds the service clearance, ream the valve guide for the next oversize valve stem. Valves with oversize stem diameters of 0.38mm (0.015 inch) and 0.76mm (0.030 inch) are available for service for all engines. **Always reface the valve seat after the valve guide has been reamed.** Refer to Reaming Valve Guides.

Valve Guides, Reaming

CAUTION: Always reface the valve seat after the valve guide has been reamed, and use a suitable scraper to break the sharp corner (ID) at the top of the valve guide.

If it becomes necessary to ream a valve guide to install a valve with an oversize stem, a reaming kit is available which contains the following reamer and pilot combinations: 0.38mm (0.015 inch) "OS" reamer with 0.076mm (0.003 inch) "OS" pilot, and a 0.76mm (0.030 inch) reamer with a 0.38mm (0.015 inch) "OS" pilot.



When replacing a standard size valve with an oversize valve always use the reamer in sequence (smallest oversize first, and then next smallest, etc.) so as not to overload the reamers.

NOTE: If oversize valve stems and oversize stem seals are not available, bore out original guide and install service bushing. Ream ID for specified clearance for standard size valve. Reface valve seat, as required. Install standard size valve stem oil seal.