

THREE ANGLE VALVE SEATS

1980 1000, 1200 and 1340 cc FLT, FL, FX AND XL MODELS

All production models incorporate three angle valve seats on both the intake and exhaust of the cylinder head ports.

There are specific procedures that must be followed when cutting this type of valve seat. Always be sure to reface the valves before you cut the seats. We recommend using a Neway Valve Seat Cutter, No. 444-HDF or other quality equipment. The proper cutting procedure follows.

1. Follow the procedures outlined in the Service Manuals for removing and refacing valves and guides and decarbonizing the combustion chamber.
2. See Figure 1. Cut 46° seat angle first. Cut only enough to clean up the seat.

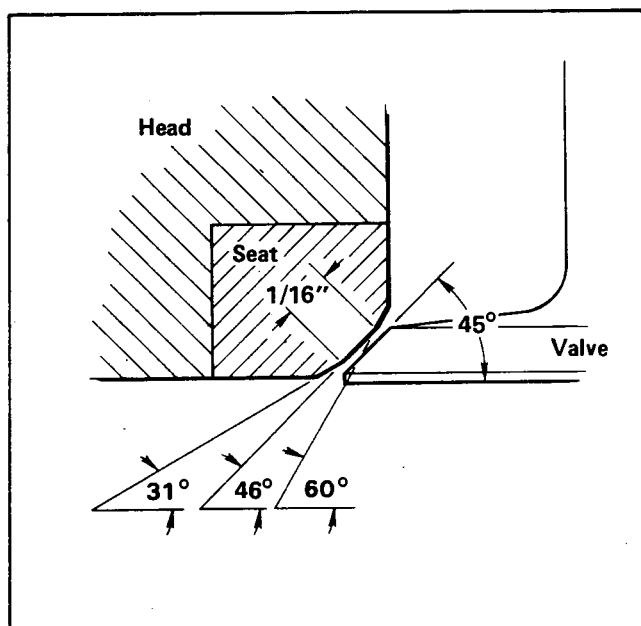


Figure 1. Valve Seat Angles - Late 1980 and Later

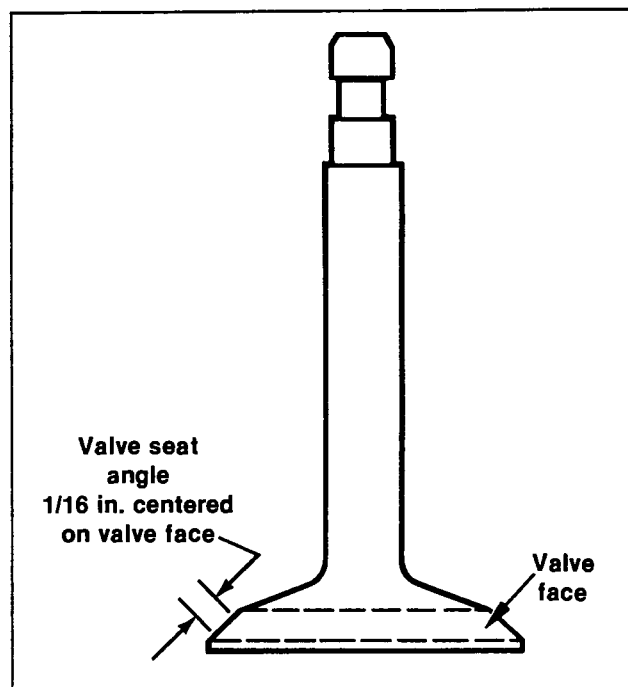


Figure 2. Intake Valve

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- Figure 1. Valve Seat Angles - Late 1980 and Later**
3. Apply blueing to valve and install valve in head. Rotate valve against seat. Remove valve and check contact pattern. Valve seat should be 1/16 in. wide and centered on valve. (See Figure 2.)
 4. If valve seat pattern is too close to stem side of valve face, cut 60° angle to raise seat. If pattern is too close to the edge of the valve face, cut 31° angle to lower seat.
 5. After cutting either or both 31° or 60° angles to position seat, final cut 46° seat angle to obtain proper 1/16 in. width.
 6. Recheck valve seat width and location with blueing as described in Step 2.
 7. When reassembling, follow the inspection and assembly instructions found in the 1980 Service Manuals to assure proper valve seat height, valve guide installation and valve spring length and tension.
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