

Valve Seals

Special Tool(s)

Valve Spring Compressor

303-452 (T93P-6565-AR)

Valve Stem Seal Replacer

303-383 (T91P-6571-A)

Compressor, Valve Spring

(Exhaust)

303-567 (T97P- 6565-AH)

Material

Item Specification

Super Premium SAE 5W-20

Motor Oil

XO-5W20-QSP

WSS-M2C153-H

Removal and Installation

1. Remove the roller followers. For additional information, refer to [Camshaft Roller Follower](#) in this section.

2. Remove the spark plug (12405) from the applicable cylinder.

3. Position the piston (6102) of the cylinder being serviced at the bottom of the stroke.

4. **CAUTION:** If air pressure has forced the piston to the bottom of the cylinder, any loss of air pressure will allow the valve to fall into the cylinder. If air pressure must be removed, support the valve prior to removal.

Use compressed air in the cylinder to hold both valves in position.

5. Using the special tool, compress the valve spring (6513).

6. **NOTE:** Valve stem seals should be visually inspected if not installing new seals. Remove the valve stem seals.

1. Remove the valve spring retainer keys.

2. Remove the valve spring retainers.

3. Remove the valve springs.

4. Remove the valve stem seals.

7. **NOTE:** Lubricate the lip of the new seal with clean engine oil prior to installation. To install, reverse the removal procedure.