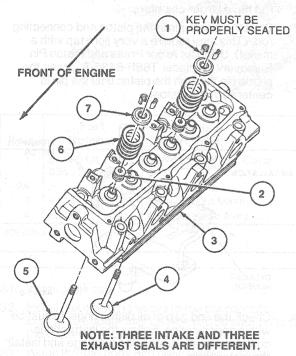
## **DISASSEMBLY AND ASSEMBLY (Continued)**

# Cylinder Head Tool Required:

Valve Spring Compressor T81P-6513-A

#### Disassembly

- Remove rocker arm fulcrum retaining bolts, fulcrums and rocker arms.
- Remove exhaust manifolds, if required, and spark plugs.
- Clean carbon out of the cylinder head combustion chambers before removing the valves.
- 4. Compress valve springs using Valve Spring Compressor T81P-6513-A. Remove spring retainer locks and release spring.
- Remove spring retainer, spring, stem seal and valve. Discard valve stem seals. Identify all valve parts as to which cylinder they were removed from and whether intake or exhaust.



A8812-R

ltem	Part Number	Description
1	6518 (1) (1) (1) (1) (1) (1) (1) (1) (1) (1)	Valve Spring Retainer Key
2	6A517	Valve Stem Seal (6 Req'd)
3	6049	Cylinder Head
4	6505	Exhaust Valve (3 Req'd)
5	6507	Intake Valve (3 Req'd)

(Continued)

Item	Part Number	Description
6	6513	Valve Spring Assy (6 Req'd)
7	6514	Valve Spring Retainer (6 Req'd)

TA8812B

 Clean, inspect and service the cylinder head as required, or prepare to transfer all usable parts to a new cylinder head.

#### Assembly

All valves, valve stems and valve guides are to be lubricated with Engine Assembly Lubricant D9AZ-19579-D (ESR-M99C80-A) or equivalent heavy oil. The valve tips are to have Multi-Purpose Grease D0AZ-19584-AA (ESR-M1C159-A) or equivalent, applied before installation.

- Install each valve in the port from which it was removed or to which it was fitted.
  - NOTE: Intake seals come with a silver band around them while the exhaust seals use a red band.
- Install valve stem seal. Use a 5/8-inch deep-well socket and a light mallet or hammer to seat seal on valve stem. Ensure intake seals and exhaust seals are on proper stem.
- Install valve spring over valve and then install spring retainer. Compress spring and install retainer locks.
  - CAUTION: Do not install the spacers unless necessary. Use of spacers in excess of recommendations will result in overstressing the valve springs and overloading the camshaft lobes which could lead to spring breakage and/or worn camshaft lobes.
- 4. Measure the assembled height of the valve spring from the top of the spring seat to the underside of the spring retainer with dividers. Check the dividers against a scale. If the assembled height is greater than specification, install the necessary 0.030 inch thick spacer(s) between the cylinder head spring pad and the valve spring to bring the assembled height to the recommended height.
- Position rocker arms and fulcrums on cylinder head and install fulcrum retaining bolt. Do not tighten bolts. The bolts must be loose enough to allow the rocker arm to be rotated to the side.
- 6. Install exhaust manifolds, if removed, and spark plugs.

#### INSPECTION

### Tool Required:

Rotunda Dial Indicator with Bracketry 014-00282