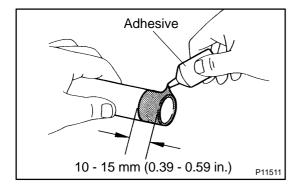
EM0Z4-02

REASSEMBLY

HINT:

- Thoroughly clean all parts to be assembled.
- Before installing the parts, apply new engine oil to all sliding and rotating surfaces.
- Replace all gaskets and oil seals with new ones.



1. INSTALL SPARK PLUG TUBES

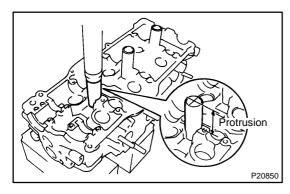
HINT:

When using a new cylinder head, spark plug tubes must be installed.

(a) Apply adhesive to the end of a spark plug tube.

Adhesive:

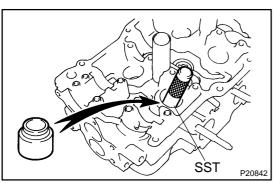
Part No. 08833-00070, THREE BOND 1324 or equivalent



(b) Using a press, press in the spark plug tube until there is 49.0 - 49.4 mm (1.929 - 1.945 in.) protruding from the camshaft bearing cap installation surface of the cylinder head.

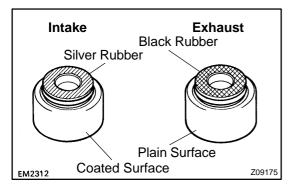
NOTICE:

Avoid pressing the spark plug tube in too far by measuring the amount of the protrusion while pressing.



2. INSTALL VALVES

(a) Using SST, push in a new oil seal. SST 09201-41020



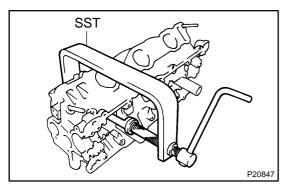
HINT:

The intake valve oil seal is silver and the exhaust valve oil seal is black.

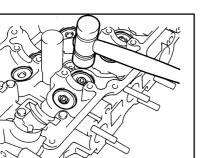
(b) Install the valve, spring seat, valve spring and spring retainer.

2002 4RUNNER (RM887U)

Author: Date: 862



(c) Using SST, compress the valve spring and place the 2 keepers around the valve stem.SST 09202-70020

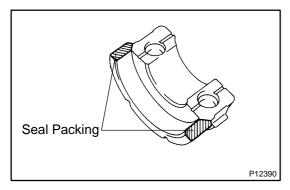


P20848

(d) Using a plastic-faced hammer, lightly tap the valve stem tip to ensure a proper fit.

3. INSTALL VALVE LIFTERS AND SHIMS

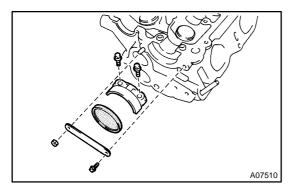
- (a) Install the valve lifter and shim.
- (b) Check that the valve lifter rotates smoothly by hand.



4. INSTALL CAMSHAFT HOUSING PLUGS

- (a) Remove any old packing (FIPG) material.
- (b) Apply seal packing to the bearing cap as shown in the illustration.

Seal packing: Part No. 08826-00080 or equivalent



- (c) Place a new housing plug in position on the cylinder head, facing the cup side inward.
- (d) Install the camshaft bearing cap with the 2 bolts.

Torque: 16 N·m (160 kgf·cm, 12 ft·lbf)

(e) Install the rear plate and ground strap with the bolt and

Torque: 8 N-m (80 kgf-cm, 71 in.-lbf)

2002 4RUNNER (RM887U)

Author: Date: 863