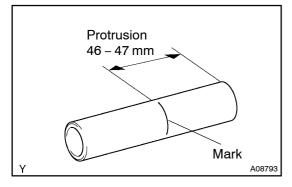
EM11G-01

REASSEMBLY

HINT:

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



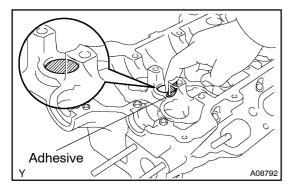
1. INSTALL SPARK PLUG TUBES

HINT:

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

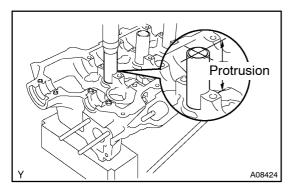
(a) Mark the standard position away from the edge, onto a new spark plug tube.

Standard protrusion: 46 – 47 mm (1.81 – 1.85 in.)



(b) Apply adhesive to the spark plug tube hole of the cylinder head

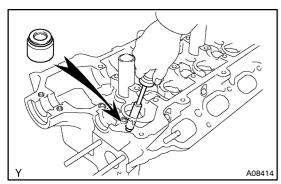
Adhesive: Part No. 08833-00070, THREE BOND 1324 or equivalent



(c) Using a press, press in the spark plug tube until there is standard protrusion protruding from the camshaft bearing cap installation surface of the cylinder head.

NOTICE:

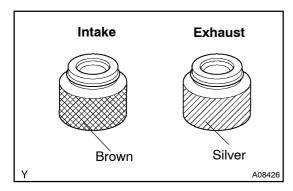
Avoid pressing a new spark plug tube in too far by measuring the amount of the protrusion while pressing.



2. INSTALL VALVES

(a) Install a new oil seal on the valve guide bushing.

LEXUS IS200 (RM684E)

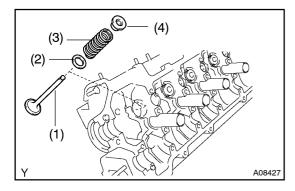


HINT:

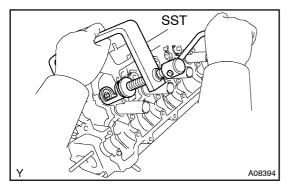
The intake valve oil seal is brown and the exhaust valve oil seal is silver.

NOTICE:

Pay much attention when assembling the oil seal for intake and exhaust. Assembling the wrong one may cause a failure.

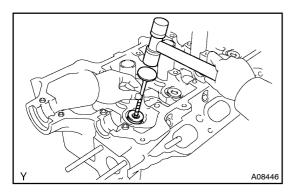


(b) Install the valve (1), spring seat (2), valve spring (3) and spring retainer (4).



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

SST 09202-70020 (09202-00010)



(d) Using a plastic–faced hammer and the valve stem (not in use) tip wound with vinyl tape, lightly tap the valve stem tip to assure proper fit.

NOTICE:

Be careful not do damage the valve stem tip.

- 3. INSTALL VALVE LIFTERS
- (a) Install the valve lifter.
- (b) Check that the valve lifter rotates smoothly by hand.
- 4. A/T

INSTALL CYLINDER HEAD REAR PLATE

Install a new gasket and the rear plate with the 2 bolts and nut.

Torque: 13 N·m (130 kgf·cm, 9 ft·lbf)

- 5. INSTALL CAMSHAFT POSITION SENSOR
- (a) Install a new O-ring to the camshaft position sensor.
- (b) Install the camshaft position sensor with the bolt.

Torque: 9 N·m (90 kgf·cm, 78 in.·lbf)

6. INSTALL WATER TEMPERATURE SWITCH

Torque: 20 N·m (200 kgf·cm, 14 ft·lbf)

7. INSTALL WATER OUTLET

Install a new gasket and the water outlet with the 2 bolts and 2 nuts.

Torque: 29 N·m (290 kgf·cm, 21 ft·lbf)