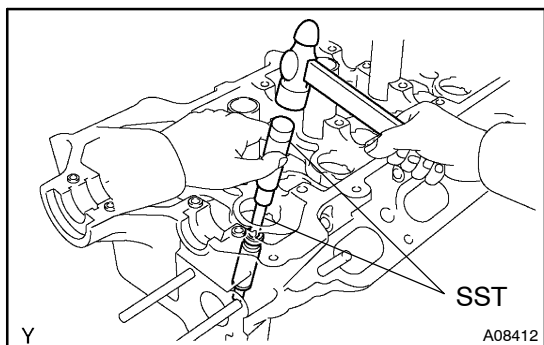


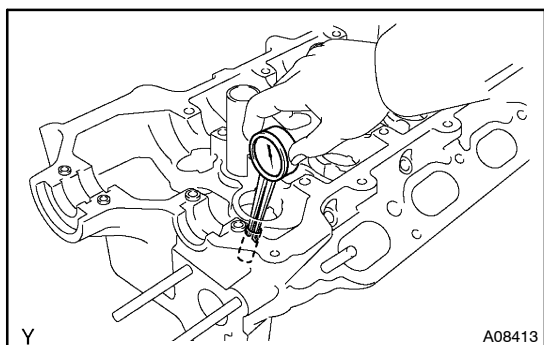
REPLACEMENT

1. REPLACE VALVE GUIDE BUSHINGS

- (a) Gradually heat the cylinder head to 110 – 130°C (230 – 266°F).



- (b) Using SST and a hammer, tap out the guide bushing.
SST 09201-10000 (09201-01050),
09950-70010 (09951-07100)



- (c) Using a caliper gauge, measure the bushing bore diameter of the cylinder head.

Both intake and exhaust

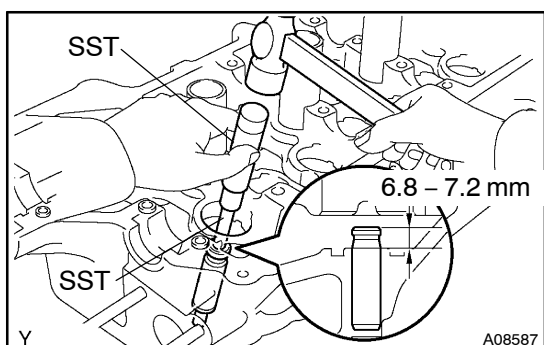
Bushing bore diameter mm (in.)	Bushing size
9.679 – 9.701 (0.3811 – 0.3819)	Use STD
9.729 – 9.751 (0.3830 – 0.3839)	Use O/S 0.05

- (d) Select a new guide bushing (STD or O/S 0.05).
If the bushing bore diameter of the cylinder head is greater than 9.701 mm (0.3819 in.), machine the bushing bore to the following dimensions:

9.729 – 9.751 mm (0.3830 – 0.3839 in.)

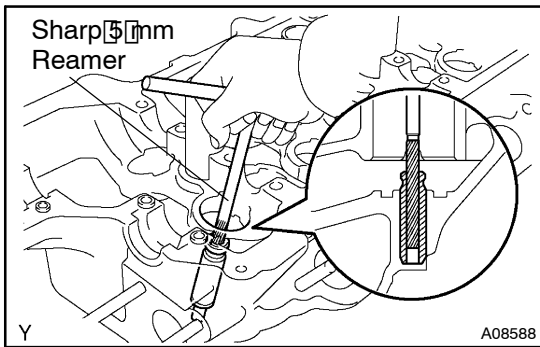
If the bushing bore diameter of the cylinder head is greater than 9.751 mm (0.3839 in.), replace the cylinder head.

- (e) Gradually heat the cylinder head to 110 – 130°C (230 – 266°F).

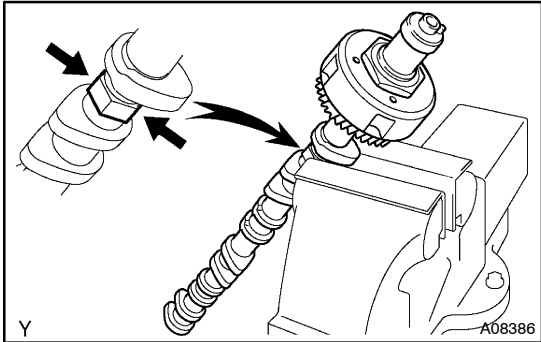


- (f) Using SST and a hammer, tap in a new guide bushing until there is 6.8 – 7.2 mm (0.268 – 0.283 in.) protruding from the cylinder head.

SST 09201-10000 (09201-01050),
09950-70010 (09951-07100)



- (g) Using a sharp 5mm reamer, ream the guide bushing to obtain the specified standard clearance (See page EM-44) between the guide bushing and valve stem.



2. REPLACE CAMSHAFT TIMING GEAR (VVT-i)

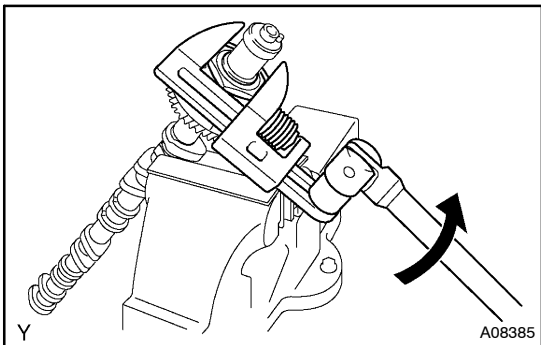
NOTICE:

Do not remove or install the camshaft timing gear (VVT-i) beside changing the camshaft timing gear (VVT-i) or camshaft.

- (a) Mount the hexagon wrench head portion of the camshaft in a vise.

NOTICE:

Be careful not to damage the camshaft.



- (b) Using SST, remove the lock nut and camshaft timing gear (VVT-i).

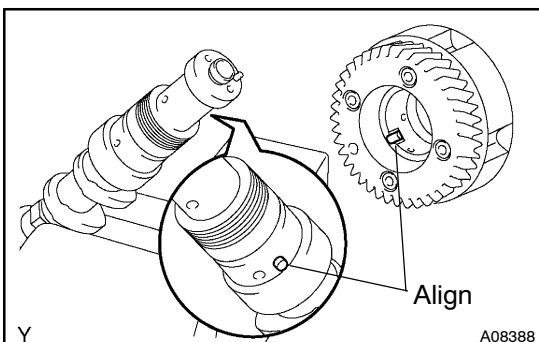
SST 09922-10010

NOTICE:

- Remove it under the condition that the lock pin is operated, and lock at the maximum delay angle position.
- Never remove the 4 bolts on the gear.

HINT:

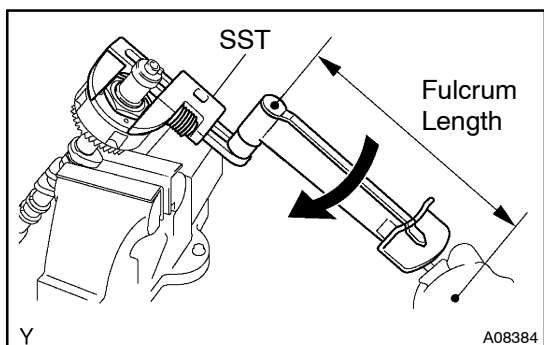
In case of having difficulty to remove the timing gear (VVT-i), apply a slight hitting using a plastic-faced hammer and then remove it.



- (c) Align the knock pin and knock pin groove and install the camshaft timing gear (VVT-i) on the camshaft.

NOTICE:

Install it under the condition that the lock pin is operated and lock at the maximum delay angle position.



- (d) Apply the engine oil on a new nut, the placing surface of the timing gear (VVT-i) and the screw portion.

NOTICE:

Must change the nut to a new one when to change the camshaft timing gear (VVT-i).

HINT:

Be sure to apply the oil, otherwise the prescribed torque cannot be obtained.

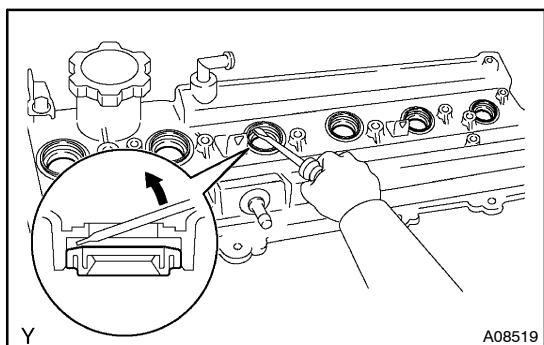
- (e) Using SST, install and torque the lock nut.

SST 09922-10010

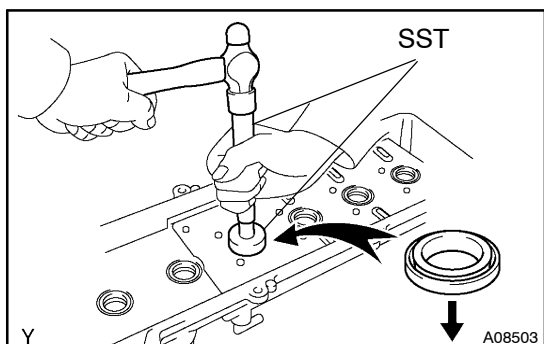
Torque: 120 N·m (1,200 kgf·cm, 87 ft·lbf)

HINT:

Use a torque wrench with a fulcrum length of 380 mm (14.96 in.).

**3. REPLACE SPARK PLUG TUBE GASKETS**

- (a) Using a screwdriver, pry off the tube gasket.



- (b) Using SST and a hammer, tap in a new tube gasket until its surface is flush with the upper edge of the cylinder head cover.

SST 09950-60010 (09951-00240, 09951-00450, 09952-06010), 09950-70010 (09951-07100)

- (c) Apply a light coat of MP grease to the tube gasket lip.