

VALVE GUIDE REPLACEMENT

Chill the valve guides in the freezer section of a refrigerator for about an hour.

▲ WARNING

Wear insulated gloves to avoid burns when handling the heated cylinder head.

Heat the cylinder head to 130°C – 140°C (275°F – 290°F) with a hot plate or oven. Do not heat the cylinder head beyond 150°C (300°F). Use temperature indicator sticks, available from welding supply stores, to be sure the cylinder head is heated to the proper temperature.

CAUTION:

- Using a torch to heat the cylinder head may cause warping.
- Be careful not to damage the mating surface.

Support the cylinder head and drive the valve guides out of the cylinder head from the combustion chamber side.

TOOL:

Valve guide driver, 3.8 mm 07GMD- KT70100

While the cylinder head is still heated, drive new valve guides in the cylinder head from the camshaft side until the exposed height is following dimensions.

TOOL:

Valve guide driver, 3.8 mm 07GMD- KT70100

VALVE GUIDE PROJECTION:

IN: 15.5 mm (0.61 in)

EX: 13.1 mm (0.52 in)

Let the cylinder head cool to room temperature.

Ream the new valve guides.

TOOL:

Valve guide reamer 07JMH- KY20100

NOTE:

- Take care not to tilt or lean the reamer in the guide while reaming. Otherwise, the valve is installed slanted, that causes oil leaks from the stem seal and improper valve seat contact and results in the valve seat refacing not able to be performed.
- Insert the reamer from the combustion chamber side of the head and always rotate the reamer clockwise.
- Use cutting oil on the reamer during this operation.

Clean the cylinder head thoroughly to remove any metal particles after reaming and reface the valve seat.

