

VALVE GUIDE REPLACEMENT

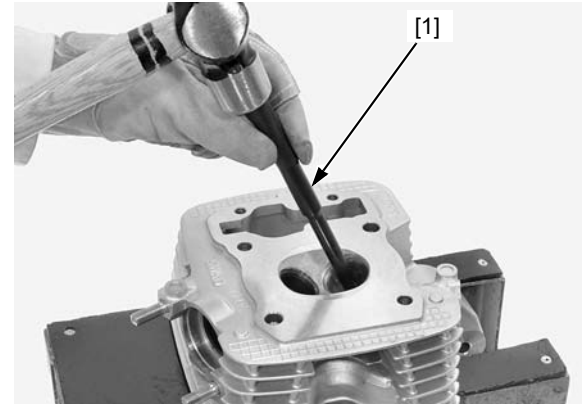
Chill the replacement valve guides in the freezer section of a refrigerator for about an hour.

Wear insulated gloves to avoid burns when handling the heated cylinder head. Using a torch to heat the cylinder head may cause warping.

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.

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

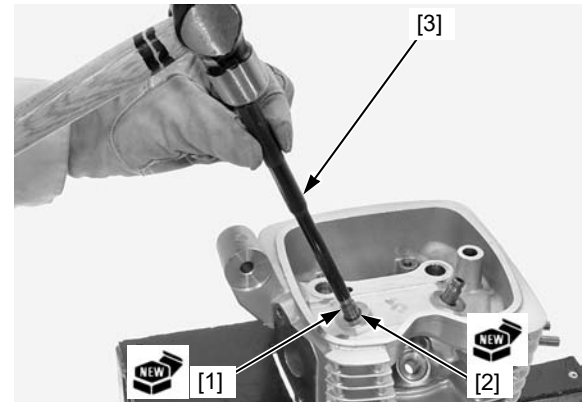
TOOL:
[1] Valve guide driver 07942-8920000



While the cylinder head is still heated, take off the new valve guides [1] from the freezer and install new clips [2] to the new guides. Drive new guides in the cylinder head from the camshaft side.

TOOL:
[3] Valve guide driver 07942-8920000

Let the cylinder head cool to room temperature.

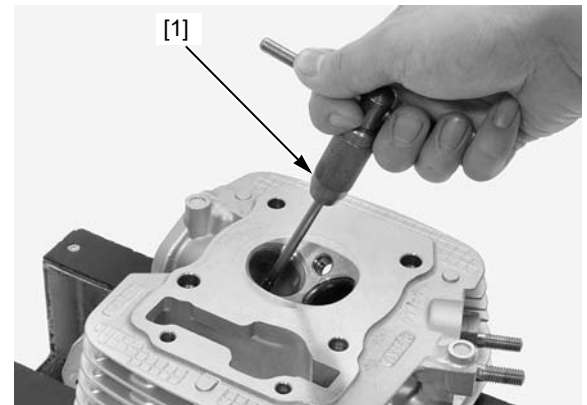


Take care not to tilt or lean the reamer in the guide while reaming. Use cutting oil on the reamer during this operation.

Ream the new valve guides. Insert the reamer from the combustion chamber side of the cylinder head and always rotate the reamer clockwise.

TOOL:
[1] Valve guide reamer 07984-MA60001

Clean the cylinder head thoroughly to remove any metal particles after reaming, and inspect and reface the valve seats (page 8-16).



VALVE SEAT INSPECTION

Clean the intake and exhaust valves thoroughly to remove the carbon deposits.

Apply light coating of Prussian Blue to the valve seats. Tap the valve against the valve seat several times without rotating the valve, using a rubber hose or other hand lapping tool [1].

