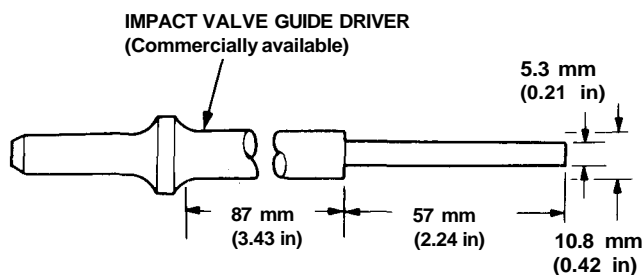


Valve Guides

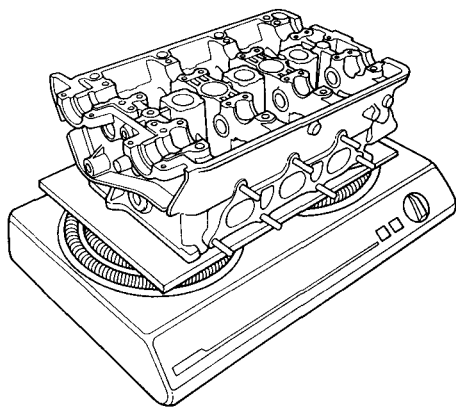
Replacement

1. As illustrated below, use a commercially - available air-impact valve guide driver attachment modified to fit the diameter of the valve guides. In most cases, the same procedure can be done using the special tool and a conventional hammer.



or
VALVE GUIDE DRIVER, 5.5 mm
07742-0010100

2. Select the proper replacement guides, and chill them in the freezer section of a refrigerator for about an hour.
3. Use a hot plate or oven to evenly heat the cylinder head to 300°F (150°C). Monitor the temperature with a cooking thermometer.



CAUTION:

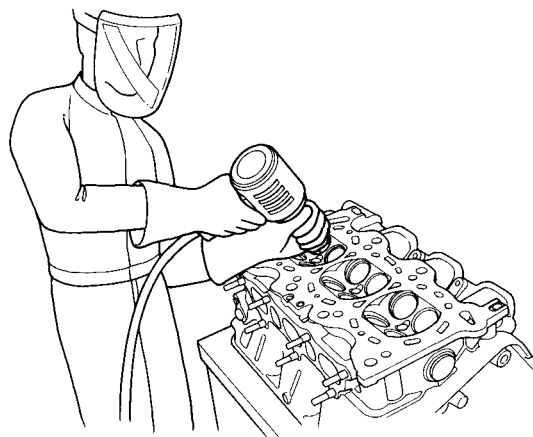
- Do not use a torch; it may warp the head.
- Do not get the head hotter than 300 F (150 C); excessive heat may loosen the valve seats.
- To avoid burns, use heavy gloves when handling the heated cylinder head.

4. Working from the camshaft side, use the driver and an air hammer to drive the guide about 2 mm (0.1 in) towards the combustion chamber. This will knock off some of the carbon and make removal easier.

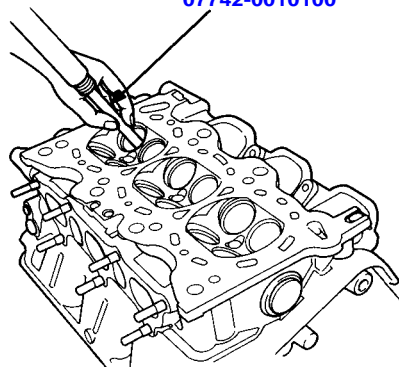
CAUTION:

- Always wear safety goggles or a face shield when driving valve guides.
- Hold the air hammer directly in line with the valve guide to prevent damaging the driver.

5. Turn the head over, and drive the guide out toward the camshaft side of head.



VALVE GUIDE DRIVER, 5.5 mm
07742-0010100



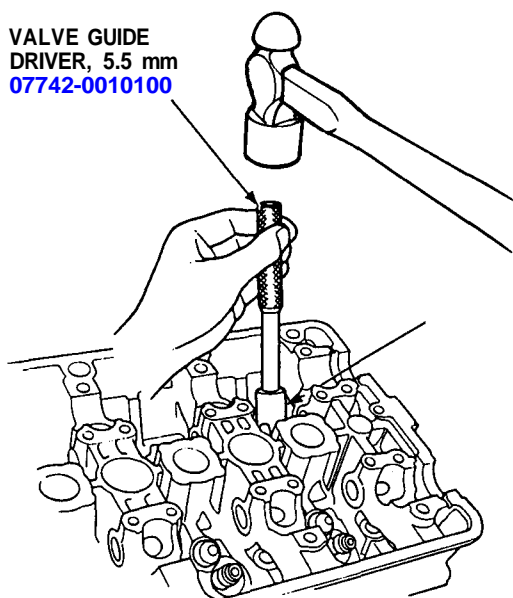
If a valve guide still won't move, drill it out with a 8 mm (5/16 inch) bit, then try again.

CAUTION: Drill guides only in extreme cases; you could damage the cylinder head if the guide breaks.

6. Remove the new guide(s) from the freezer, one at a time, as you need them.



7. Apply a thin film of clean engine oil to the outside of the new valve guides, and install them from the camshaft side of the cylinder head. Drive each guide to the specified height (measured from the top of the valve guide to the cylinder casting as shown).
8. After installing the guides, inspect them for damage. Replace any damaged guides.



Valve Guide Installed Height:

Intake: 13.75-14.25 mm (0.541-0.561 in)

Exhaust: 13.75-14.25 mm (0.541-0.561 in)

