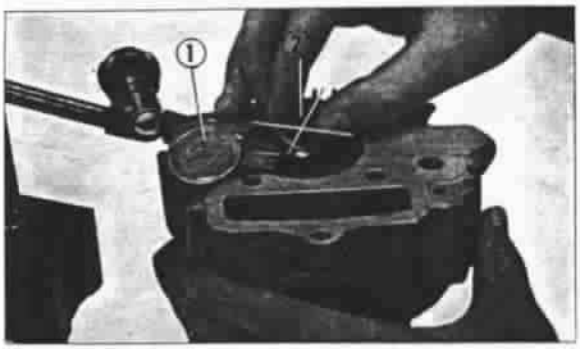
3. Measuring the wear of the valve stem and valve guide.

   Place a dial gauge against the valve stem and move the valve sideways, and fore and aft. The amount of wear in any direction will be indicated on the gauge **(Fig. 19)**.

Item	Standard Value	Serviceable Limit
Inlet	0.0004~0.0012 (0.01~0.03 mm)	Replace if over 0.0032 (0.08 mm)
Exhaust	0.0012~0.002 (0.03~0.05 mm)	Replace if over 0.004 (0.10 mm)

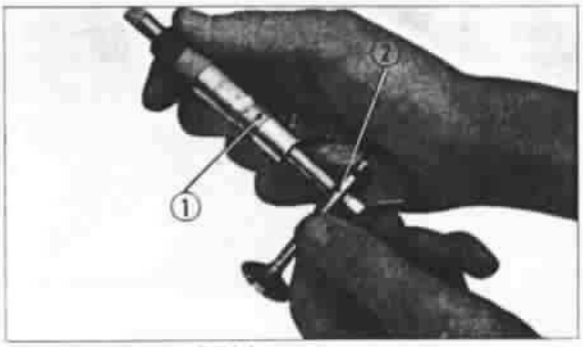


① Small dial gauge ② Valve
Fig. 19

4. Measuring the valve dimension

   The valve stem diameter is measured with a micrometer. **(Fig. 20)**

Item	Standard Value	Serviceable Limit
Inlet	0.2148~0.2187 (5.455~5.465mm)	Replace if under 0.2126 (5.40 mm)
Exhaust	0.2070~0.2109 (5.435~5.445mm)	Replace if under 0.2048 (5.38mm)



① Micrometer ② Valve
Fig. 20

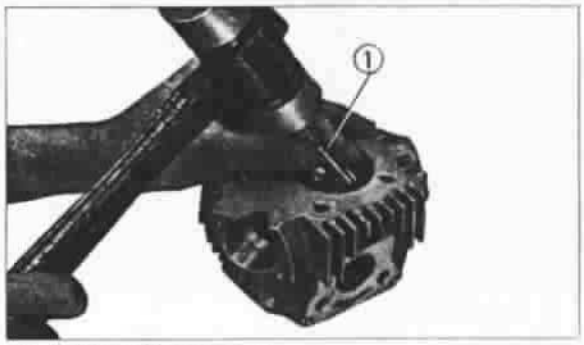
5. Replacing the valve guide

   If the valve guide is worn excessively and requires replacement, follows the procedure below.

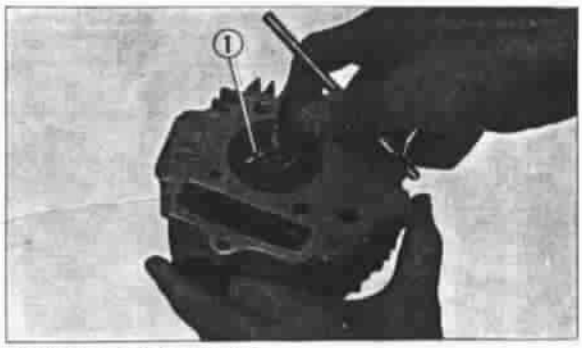
   a. Remove the valve guide from the cylinder head using the valve guide remover (Tool No. 07942-3290100).

   b. Install the new valve guide using the valve guide driver (Tool No. 07942-3290200), and carefully drive the guide into the head. The replacement valve guide should be one that is of an oversize.

   c. After the new valve guide has been installed, it must be reamed to the proper finish size using a guide reamer (Tool No. 07984-0980000). Excercise care when using the reamer and apply small amount of oil occasionally to lubricate when the reamer starts to operated hard, pull out the reamer and remove the metal chip before continuing to ream.
   The standard valve guide diameter is **0.2156-0.2159 (5.475-5.485 mm)**.
   Measurement can be made with a cylinder gauge **(Fig. 22)**.



① Valve guide remover
Fig. 21



① Valve guide reamer
Fig. 22