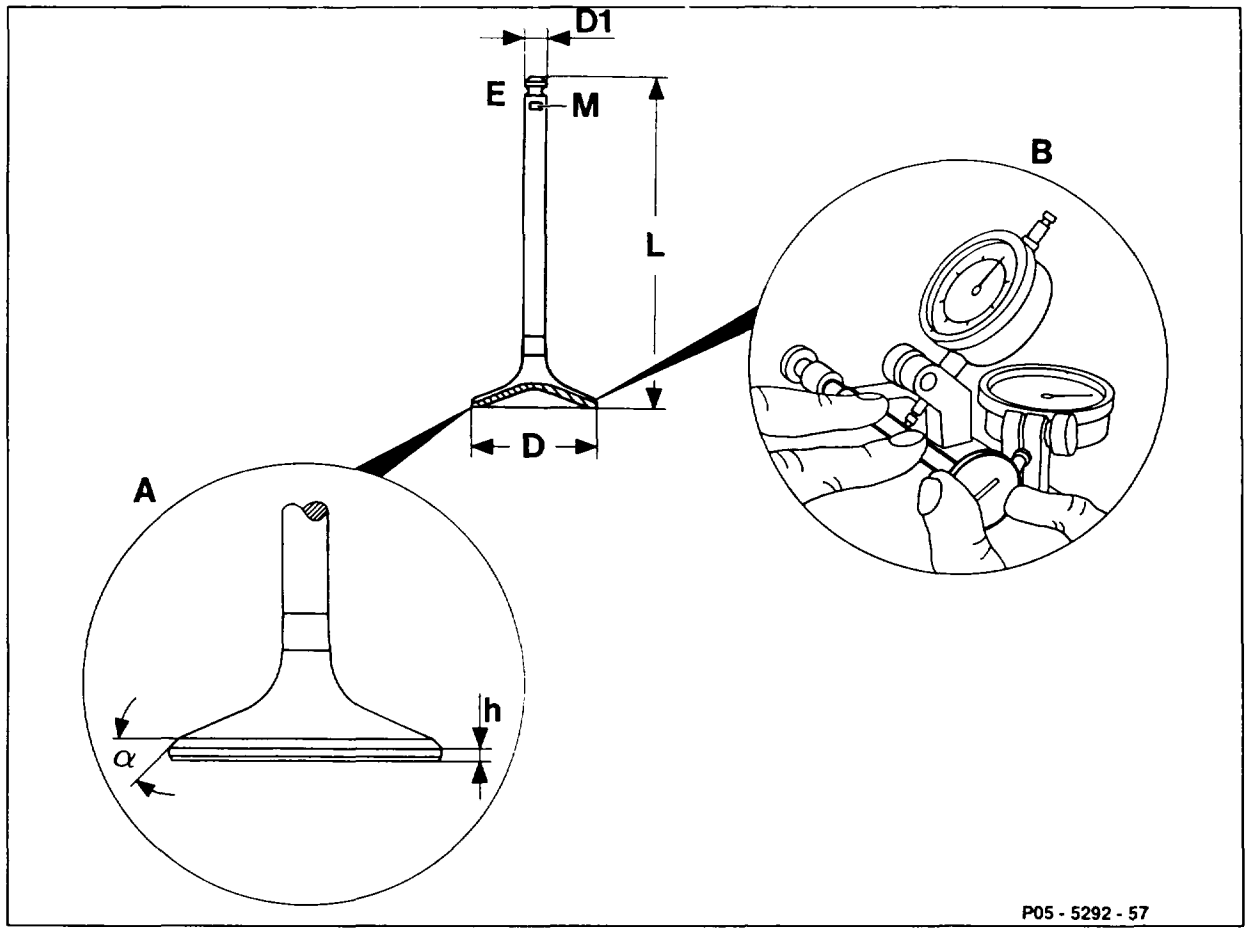
## 05–2895 Checking valves

Preceding work:
Valves removed (05-2500).




Valves ..... clean.

**A Visual inspection**

If valve disc scorched ..... replace valve.
If height "h" insufficient ..... replace valve.
If valve stem worn or scored ..... replace valve, see note.
Valve length (L) ..... check; if the length (L) is exceeded (refer to table), the valve has stretched and should be replaced.

**B Clamping valve in chuck**

Valve seat ..... check (see table for value).

**Data**

| | Inlet valve | | Exhaust valve | |
|---|---|---|---|---|
| Engine | 103.94 | 103.98 | 103.94 | 103.98 |
| Valve disc dia. D | 40 | 43 | 35 | 39 |
| Valve stem dia. D1 | 7.955 – 7.970 | | 8.938 – 8.960 | |
| Valve length L | 110.2 | 110.2 | 112.4 | 110.9 |
| Width of valve seat b | 2.0 | | | |
| Setting angle | 45° | | | |
| Height "h" of valve disc | when new 1.7<br>limit value 1.2 | | when new 2.2<br>limit value 1.6 | |
| Sodium filling | no | | yes | |
| Permissible out-of-roundness at valve seat | 0.03 | | 0.03 | |
| Marking "M" (at stem end) | E 103 15 | E 103 20[1])<br>E 103 22[2]) | A 103 04 27 | A 103 17 27 |

[1]) Engine 103.981/983
[2]) Engine 103.985/987

**Note**

Modified exhaust valves engine 103.98.
Exhaust valves strenghtened in the transition range from valve stem to valve disc.
When performing repairs, install only valves with the marking (M) according to the table. Indefinite production breakpoint as of September 1988.

Modified inlet valves. When performing repairs, install only valves with the marking (M) according to table. Indefinite production breakpoint as of February 1990.

After machining or replacing the valves, the installation position of the hydraulic valve clearance compensating elements must be checked (05–2130).