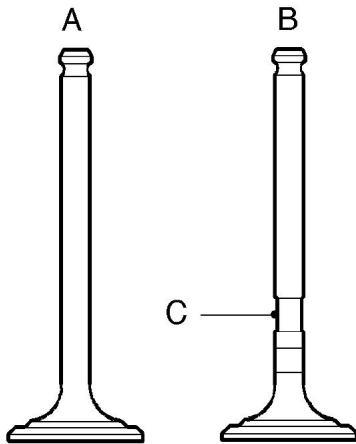




## Valves, valve springs and guides - inspection

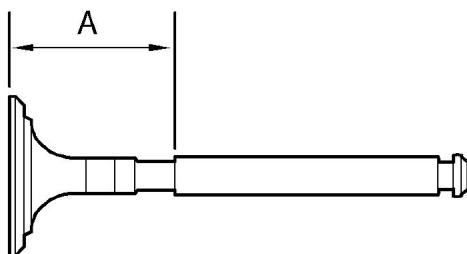
### Valves



12M3676

**NOTE:** Two types of exhaust valve may be fitted - standard valves **A** in illustration or carbon break valves - **B** in illustration. Carbon break valves may be identified by the machined profile **C** on the valve stem. To prevent exhaust valves sticking, standard exhaust valves should be replaced with carbon break valves during engine overhaul.

**NOTE:** Modified inlet valves, carbon break exhaust valves and valve guides are fitted to later engines. The modified exhaust valves may be identified by measuring the distance **A** from the valve head face to the top of the undercut on the valve stem. Additionally, the exhaust valves have a black nitrided finish whilst the inlet valves have a chrome finish.



M12 7488

Early valves - dimension **A** = 29.5 to 30.5 mm (1.16 to 1.20 in)

Later valves - dimension **A** = 32.5 to 33.5 mm (1.28 to 1.32 in)

The modified valves may be fitted to early engines in engine sets provided that the modified valve guides are also fitted.

### Valve guides

**NOTE:** The modified valve guides fitted to later engines are 5 mm (0.211 in) shorter than the early type guides, the overall length of the modified guide being 57 mm (2.24 in); the reduction in length being the distance the guide protrudes into the combustion chamber side of the cylinder head. The modified guides may be fitted to early engines in engine sets provided that the modified inlet and carbon break exhaust valves are also fitted.