

**Service Letter**

Technical Aspects are FAA Approved

**Number: L00-21A**

**Replaces ServL00-21**

**Date:** 07/09/2004

**Subject:** High Chrome replacement exhaust valve guides for Lycoming engines.

**Application:**

EXHAUST VALVE GUIDES	ENGINE APPLICATIONS
SL11626, Rev. H and later revisions	O-235 Series
SL74230A, Rev. C and later revisions	320, 340, 360 and 540 Series Parallel Valve Cylinder Models
SL75838A, Rev. B and later revisions	360, 480, 540 and 720 Series Angle Valve Cylinder Models

**Compliance:** Any time cylinders are removed for overhaul or repair.

As a product improvement, Superior has changed the material from which its PMA Lycoming exhaust valve guides are fabricated. The valve guides listed above are now made of an alloy that contains more chromium than the earlier guides which they replaced (thus the name "High Chrome"). The increase in chromium results in a harder, more wear resistant, valve guide which complies with the latest Lycoming service data regarding exhaust valve guide material and the elimination of the 400 hour periodic valve stem "wobble" tests. Superior began supplying these improved valve guides in the fall of 1999, both as replacement parts and in their Millennium® cylinder assemblies.

Identification, Installation and Periodic Inspection:

The High Chrome guides may be identified in two ways. First, the guide is machined with 5° taper at the top (rocker box) end, as shown in Figure 1. The second method is by the part number and revision letter, which is metal stamped on the upper, outside diameter. The location is also shown in Figure 1.

The High Chrome guides are to be installed in accordance with the applicable Lycoming overhaul manual and are an exact replacement for the earlier valve guides. The same finish reamers are used to ream these improved valve guides. However, it should be expected that the reamers would wear more rapidly, since the High Chrome material is harder and tougher than the alloy from which the earlier valve guides were made.

It is no longer necessary to perform the 400-hour periodic "wobble" test per Lycoming Service Bulletin No. 388, on cylinders that contain the High Chrome valve guides. However, it is recommended that the "wobble" test still be done at one half of the recommended TBO hours or 1000 hours, whichever is less.

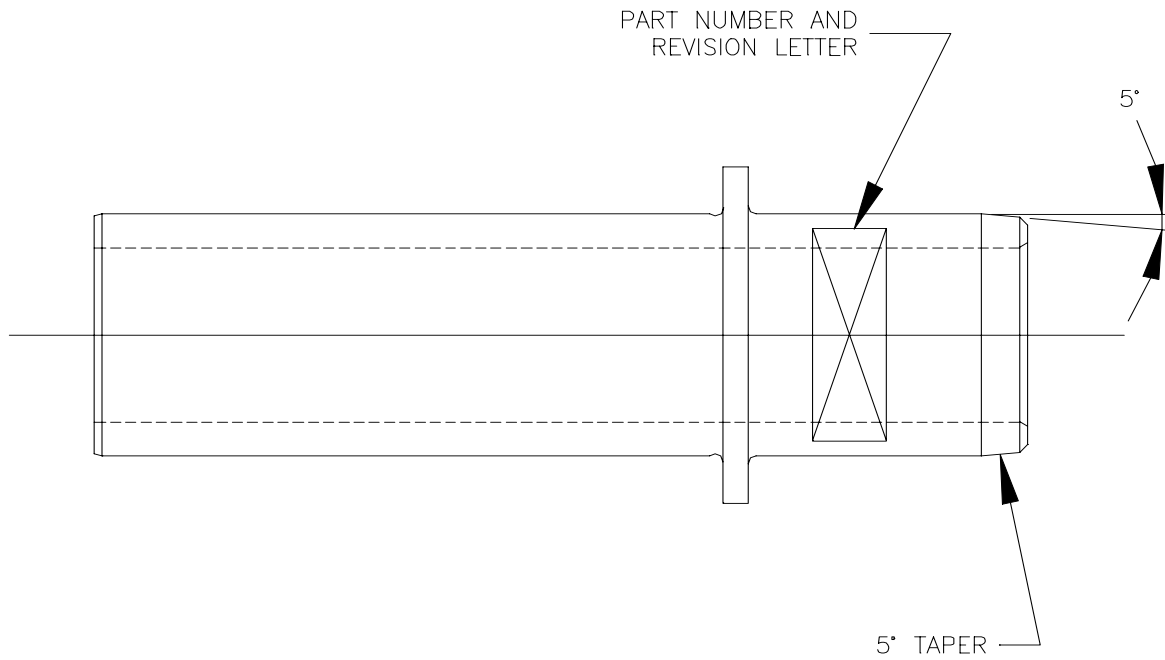


FIGURE 1