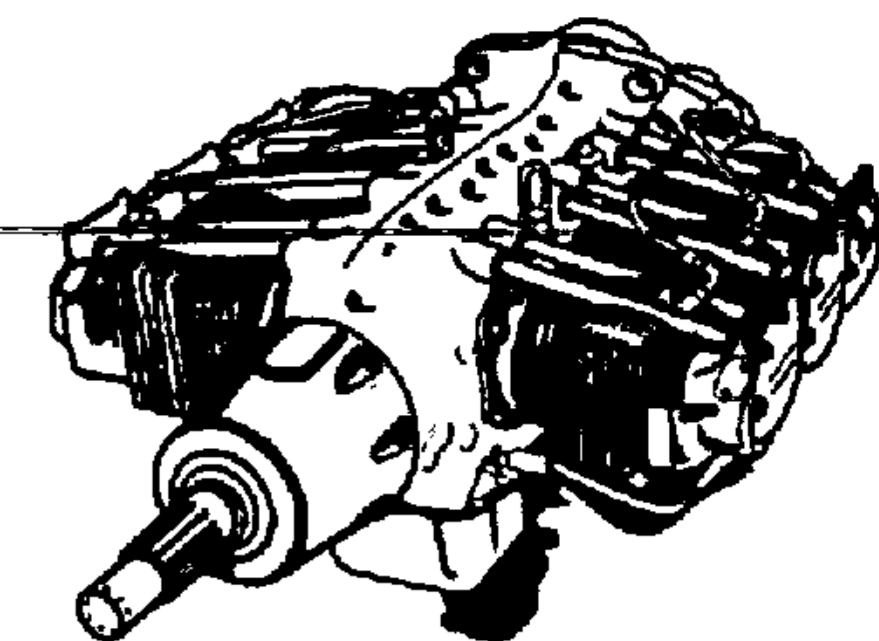


LYCOMING



SERVICE BULLETIN

LYCOMING DIVISION



WILLIAMSPORT, PA., U.S.A.

Date: December 15, 1953 Service Bulletin No. 169
Subject: Prevention of Detonation
Reason: To avoid damage to the engine
Models Affected: Lycoming Model O-290-D2
Time of Compliance: Immediately

It has been found that the Model O-290-D2 engine is subject to incipient detonation under certain atmospheric and altitude conditions. This detonation has been due to a variance in the octane rating of gasoline, as well as a tendency of some operators not to follow Service Bulletin No. 152 which specifies that the timing should be set at 18° B.T.C.

Effective immediately all Lycoming O-290-D2 engines must have the timing checked and set at 18° B.T.C., and this item must be checked at each 50 hour inspection period.

It is further recommended that operators use 91/96 or 91/98 octane fuel if it is available. If it is necessary to use 80/87 octane fuel due to the non-availability of the 91/96 or 91/98 octane, it is absolutely essential that the correct spark timing be maintained.

It must be remembered that this O-290-D2 engine is a highly developed high compression engine and unless the recommendations relative to spark timing are strictly adhered to, detonation will result, thus causing damage to pistons and cylinder heads. The use of the higher octane fuel will, of course, prevent detonation and its use is recommended when operating where it can be procured.