



**HUGHES
SERVICE INFORMATION
LETTER**

LETTER NO. L-5
DATE August 1, 1966
PAGE 1 OF 2

(This letter cancels Service Information Letter No's. 2A-1045, 2A-1-1014, 2B-1015 dated February 16, 1965)

TO—All owners and operators of Hughes Helicopters

SUBJECT: REPLACEMENT OF THERMOSTATIC OIL COOLER
BY-PASS VALVES, PER AVCO, LYCOMING DIVISION,
SERVICE BULLETIN NO. 304A (RED BORDERED
MANDATORY) DATED JUNE 24, 1966

MODELS AFFECTED: All 269A, 269A-1 and 269B Helicopters

Your attention is directed to the subject Lycoming data reprinted as a part of this Service Information Letter. Information as given describes the new type of thermostatic by-pass valve now being installed in all Lycoming engines, starting with serial no. 1332-51.

The manufacturer recommends that all owners and operators comply with the Lycoming Bulletin as soon as possible.



LYCOMING DIVISION
WILLIAMSPORT, PA. 17701

Service Bulletin



DATE: June 24, 1966 Service Bulletin No. 304A
(Supersedes Service Bulletin No. 304)
Approved by FAA

SUBJECT: Replacement of Thermostatic Oil Cooler By-Pass Valves

MODELS AFFECTED: Avco Lycoming Models O-360-C2D; HO-360-B1A and -B1B;
HIO-360-A1A, -B1A and -B1B installed in Hughes Model
269 Helicopters

TIME OF COMPLIANCE: Not later than next 50 hour inspection of the engine.

In addition to reports of premature valve seat wear, several reports have been received of failure of the thermostatic oil cooler by-pass valve, Avco Lycoming Part No. 69451. All of these reports have been confined to the above listed, high speed helicopter engines. Investigation indicates that the thermostatic oil cooler by-pass valve assembly is subject to greater vibratory stresses in these engines than it is in engines that operate normally at lower cruising speeds.

In order to improve the durability of this valve under conditions of higher stress, it has been modified by chrome plating the valve seat face and revising the by-pass spring to one having a higher spring rate. These modifications were incorporated in all thermostatic oil cooler by-pass valves, Part No. 69451, beginning with Serial No. 24725. We believe these changes will improve the operating characteristics as well as insure the expected service life of the valve.

NOTE

Part No. 69451 valves with the suffix "A" on the serial number have been modified to incorporate the above improvements.

Recently this valve has been further modified to incorporate a stronger, stainless steel main shaft and the part number changed to 75944. This thermostatic oil cooler by-pass valve was introduced in current production engines beginning with Serial No. 1332-51.

It is recommended that all owners and operators of Hughes helicopters examine the serial number stamped on the top of the hex nut on the thermostatic oil cooler by-pass valve and replace any valve having a six digit serial number and serial numbers below 24725 with the current production valve, No. 75944.

For a limited time, Avco Lycoming will replace all valves at a special exchange cost of \$8.00 f. o. b. Williamsport, Pennsylvania. Replacement valves may be ordered through your nearest authorized Avco Lycoming Distributor. Orders must include serial number of the engine.

NOTE: Revision "A" changes Hughes model number from 296 to 269 and adds note on modification identification.

12613, 13190 - These numbers for Avco Lycoming reference only.