FRANKLIN SERVICE BULLETIN



SERVICE BULLETIN

AIRCOOLED MOTORS INC.

SYRACUSE 8, NEW YORK

DATE: 10/22/47 Revised 9/22/53 NO. FSB 59R (2 pages)

SUBJECT: CHECKING FLOATING OIL SCREEN ON FRANKLIN ENGINES MODEL $\underline{6A8-}$ 215-B8F & B9F AS USED IN SEABEE INSTALLATION

The effect of extremely high oil level was clearly indicated during investigations which we have made several cases of low oil pressure or no oil pressure. In those cases it was found that the oil inlet pipe bracket and clamp were broken, which, in turn, would eventually cause breakage of the pipe itself. Tests conducted prove that extremely high oil level is responsible for this type of failure.

The possibility of a method for checking parts involved which would not involve dismantling of engine parts has been studied. It has been found that with the oil drain plug removed, permitting oil to drain out of the engine, it is possible to determine whether or not the floating type oil inlet screen is in its normal location and properly supported. This floating type oil inlet screen should be located directly above the oil drain opening in the oil pan and with the oil out of the engine it is at its lowest position just above the bottom of the oil pan. It is possible to reach in at the right side of the aircraft at the oil drain opening and with the hand locate the floating oil screen.

In checking with the finger, the floating oil screen, if in position, can be contacted. Contacting one of the holes in the bottom metal cap under the screen makes it possible to check sideways movement by moving the screen assembly with your finger.

A slight amount of looseness or play is permissible and is due to normal fit of the assembled parts.

Very light pressure only is required to check normal play. Attempt to move the unit in a horizontal plane with additional pressure will result in additonal movement if any of the attaching parts are broken.

If parts are determined to be broken or floating oil inlet is not in position, the internal parts of the oil inlet assembly must be replaced.

(Cont'd)

FRANKLIN SERVICE BULLETIN

Franklin Service Bulletin No. FSB 59(R)

It is requested that this check be made when investigating any possible case of very low oil pressure if it is not found due to oil gauge condition or possible foreign material causing the oil relief valve assembly to stick. The oil relief valve assembly is located just below the #2 cylinder on the engine. It is requested also that at each oil drain at the 25 hour period the position of the floating oil inlet assembly be checked through the oil drain hole in the oil pan.

The floating oil screen used on all engines up to and including #24065 should be checked at each 25 hour period. With the floating screen, an 11 quart oil capacity should be used.

Beginning with Engine #24066, we have eliminated the floating section of the inlet screen and all engines from that number may be operated with a 12 quart oil level.

It is <u>mandatory</u> that all engines up to and including #24065 be modernized to include the late type non-floating oil inlet screen assembly at the first removal of the engine from the aircraft or at the first major overhaul.

For engines up to and including Engine #24065, we have available a replacement kit under Aircooled Motors, Inc. Part No. 15276. When ordering for engines in this series, the kit should be ordered and the engine number included with your order.

After installation of the replacement parts, the 12 quart oil level may be used.

This revision incorporates all information previously released in Franklin Service Bulletins Nos. 58 and 59.

AIRCOOLED MOTORS, INC.

F. J. Schaefer Service Engineering Manager