



## SERVICE BULLETIN

AIRCOOLED MOTORS INC.

SYRACUSE 8, NEW YORK

DATE: 6/11/47

NO. FSB 58

SUBJECT: CHECKING FLOATING OIL SCREEN ON FRANKLIN ENGINES MODEL 6A8-215-B8F AND B9F AS USED IN SEABEE INSTALLATION

Franklin Service Bulletin #53, dated April 30, 1947, covered the subject of oil level on models 6A8-215-B8F and B9F engines as used in Republic Seabee, outlining the importance of avoiding to high a level.

The effect of extremely high oil level was clearly indicated during investigations which we have made in 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 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 additional 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.

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.

With the change in oil pump, which took place at engine #23376, a change in oil inlet pipe and related parts was made, however, extremely high oil level at any time within the engine may cause difficulty regardless of engine number.

Beginning with engine #24066, we have eliminated the floating section of the inlet screen and engines from #24066 up may be operated with a 12 quart maximum oil level. Replacement kits furnished will include the latest type screen and after installation the 12 quart oil level should be used.

Although cases of difficulty in the past have been isolated and only a few have been experienced, we are shipping one kit of replacement parts to each Republic distributor at no charge for use in modernizing engines with respect to oil inlet assembly where required.

It is requested in the event you at any time have an engine out of the airplane for overhaul or for any other reason that you contact us and we will, in turn, forward a kit of oil inlet parts for installation.

The kit, Aircooled Motors Inc. part #15276, which will be furnished, is used as a whole on any of the engines up to and including engine #23375 and is used only in part on later engines. For that reason we must have the engine number to insure shipment of proper parts. Instructions covering installation will be included with the kits.

It is requested that a check, as outlined above, be made on Seabees in your territory upon receipt of this bulletin and that inspection be made each time engine oil is changed at the 25 hour period. Parts required to modernize engines will be furnished at no charge in any case where they are required.

Please give us engine numbers covering any installations you make.

AIRCOOLED MOTORS, INC.



F. J. Schaefer  
Service Engineering Manager