



652 Oliver Street  
Williamsport, PA. 17701 U.S.A.

Tel. 570-323-6181  
Fax. 570-327-7101  
www.lycoming.textron.com

# SERVICE INSTRUCTION

DATE: October 17, 2008

Service Instruction No. 1125D  
(Supersedes Service Instruction No. 1125C)  
Engineering Aspects are  
FAA Approved

SUBJECT: Alternate Crankcase Parting Surface Sealants

MODELS AFFECTED: All Lycoming opposed cylinder engines.

TIME OF COMPLIANCE: During engine assembly.

The use of POB No. 4 Perfect Seal sealant (POB) and silk thread has been used generally for sealing finished parting surfaces that do not employ gaskets. This practice has always been satisfactory when correctly applied. However, we have tested and approved General Electric Company's RTV-102 and LOCTITE-515 as alternate sealants which may be used at field service overhaul facilities where trouble may have been experienced in applying POB and silk thread.



ONLY LYCOMING APPROVED SEALANTS ARE TO BE USED IN THIS APPLICATION. USE OF ANY OTHER NON-APPROVED SEALANT COULD RESULT IN A LOSS OF CLAMPING FORCE AND/OR TORQUE, WHICH WILL RENDER THE ENGINE UNAIRWORTHY.

See Figure 1 for proper application of POB and silk thread or Figure 2 for application of RTV-102 or LOCTITE-515 sealants.

**NOTE: Do not use silk thread when using RTV-102 or LOCTITE-515.**

### Sealing of crankcase parting surfaces with POB sealant and "00" silk thread is as follows:

POB sealant, a non-hardening compound, is to be applied only to one half of the crankcase. On the outside mating surfaces, as shown in Figure 1, apply a thin film of POB sealant. No build-up is permissible. Visibly, where sealant is properly applied, it will produce a wet appearance on the machined surface. If it does not have a wet appearance, reapply. Note that this sealant is used primarily to hold the silk thread in place. Be certain to wipe clean all inner edges of any excess sealant. Also, ascertain that no sealant has come in contact with the bolt holes or any surface other than the shaded areas shown in Figure 1.



ISSUED			REVISED			PAGE NO.	REVISION
MO	DAY	YEAR	MO	DAY	YEAR	1 of 3	D
04	09	65	10	17	08		

After sealant is properly applied, run lengths of “00” silk thread on the inside of the bolt holes without touching together and press firmly into sealant to keep thread in place. Any commercial grade of No. “00” silk thread is satisfactory for use with POB.

**Sealing of crankcase parting surfaces with RTV-102 or LOCTITE-515 sealant is as follows:**

RTV-102 or LOCTITE-515 is to be applied only to one half of the crankcase. On the outside mating surfaces, as shown in Figure 2, apply a thin film of sealant. No build-up is permissible for this application. Visibly, where sealant is properly applied, it will produce a wet appearance on the machined surface. If it does not have a wet appearance, reapply. Be certain to wipe clean all inner edges of any excess sealant. Also, ascertain that no sealant has come in contact with bolt holes or any surface other than the shaded areas shown in Figure 2.

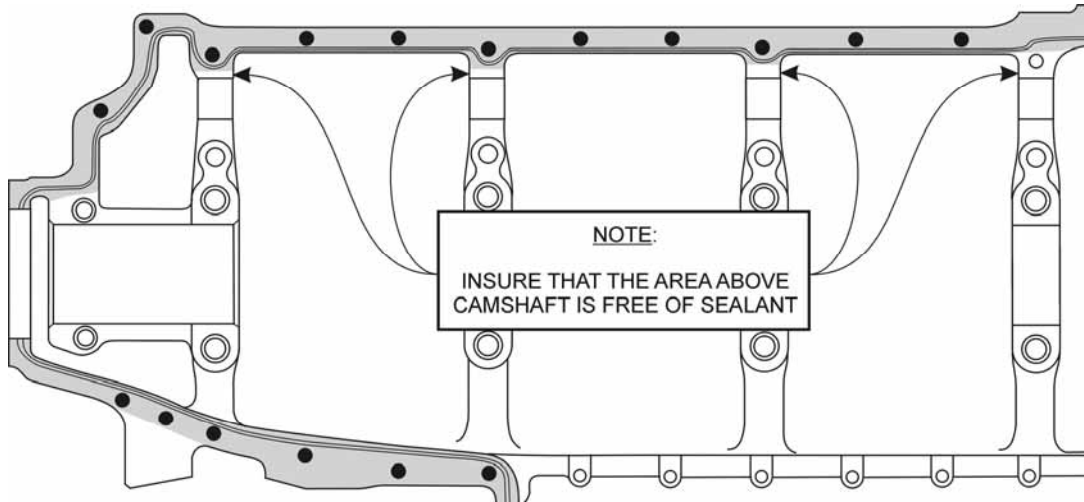


Figure 1. Sealing Area for POB Sealant and “00” Silk Thread

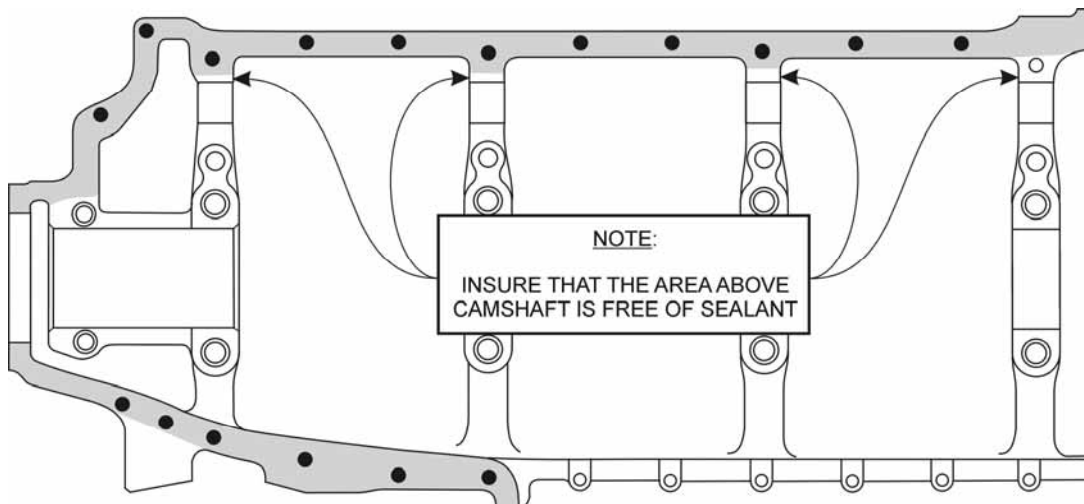


Figure 2. Sealing Area for RTV-102 and LOCTITE-515

ISSUED			REVISED			PAGE NO.	REVISION	S.I. 1125
MO	DAY	YEAR	MO	DAY	YEAR			
04	09	65	10	17	08	2 of 3	D	

POB NO. 4 PERFECT SEAL is available from:	RTV-102 is available from:	LOCTITE-515 is available from:
Perfect Seal Cincinnati, OH 45223 Phone: (513) 542-8444	General Electric Co. World Headquarters 187 Danbury Rd. Wilton, CT 06897 Website: <a href="http://www.gesilicones.com">www.gesilicones.com</a>	Henkel Loctite Corp. 1001 Trout Brook Crossing Rocky Hill, CT 06067 Website: <a href="http://www.loctite.com">www.loctite.com</a>

ISSUED			REVISED			PAGE NO.	REVISION	S.I. 1125
MO	DAY	YEAR	MO	DAY	YEAR			
04	09	65	10	17	08	3 of 3	D	