



Service Bulletin

Tuesday, August 26, 2008

SB07-01 rev. D

Record of Revision

Rev. A – Additional Affected Serial Numbers Added 5/1/2007

Rev. B – Additional Affected Serial Numbers Added 5/1/2007

Rev. C – Additional Affected Serial Numbers Added 5/3/2007

Rev. D – Additional Affected Serial Numbers Added 8/26/2008, Reason(s), and Corrective Actions

TITLE

SKY-TEC PM MODEL STARTER REPLACEMENT

EFFECTIVITY

Lycoming 540 series engines fitted with the following starter units:

Model	Serial Numbers	
149-12PM	F2P-020701 thru – 020710	10pcs
	Added w/Rev. B: F2P-040701 thru – 040715	15pcs
	F2P-110715 thru – 110724	10pcs
	F2P-150701 thru – 150706	6pcs
149-24PM	F4P-010701 thru – 010750	50pcs
	Added w/Rev. A: F4P-060701 thru – 060735	35pcs
	F4P-110705 thru – 110729	25pcs
	F4P-120701 thru – 120702	2pcs
	F4P-130709 thru – 130718	10pcs
	F4P-150701 thru – 150717	17pcs
	Added w/Rev. C: F4P-040701 thru – 040712	12pcs
	Added w/Rev. D: F4P-040701 thru – 040712	12pcs
	F4P-390701 thru – 390722	22pcs
	F4P-400701 thru – 400711	11pcs
	F4P-430701 thru – 430729	29pcs
	F4P-440701 thru – 440703	3pcs
	F4P-450701 thru – 450705	5pcs
	F4P-470701 thru – 470711	11pcs
	F4P-490701 thru – 490712	12pcs
	F4P-500701 thru – 500712	12pcs
	F4P-010801 thru – 010811	11pcs
	F4P-020801 thru – 020820	20pcs
	F4P-040801 thru – 040822	22pcs
	F4P-050801 thru – 050809	9pcs
	F4P-060801 thru – 060814	14pcs
	F4P-070801 thru – 070810	10pcs
	F4P-080801 thru – 080814	14pcs
	F4P-100801 thru – 100815	15pcs
	F4P-110801 thru – 110838	38pcs
	F4P-130801 thru – 130829	29pcs
F4P-140801 thru – 140812	12pcs	
F4P-150801 thru – 150825	25pcs	
F4P-180801 thru – 180803	3pcs	
F4P-190801 thru – 190843	43pcs	

	F4P-200801 thru – 200812	12pcs
	F4P-220811 thru – 220818	8pcs
	F4P-220820 thru – 220840	21pcs
	F4P-230801 thru – 230813	13pcs
122-12PM	C2P-030701 thru – 030705	5pcs
	C2P-050701 thru – 050719	19pcs
	C2P-100701 thru – 100708	8pcs
	C2P-110701 thru – 110706	6pcs
	C2P-120701 thru – 120706	6pcs
	C2P-140701 thru – 140706	6pcs
	C2P-150701 thru – 150703	3pcs
122-24PM	C4P-100701 thru –100703	3pcs
	C4P-120701 thru –120702	2pcs
	C4P-150701 thru –150707	7pcs

707 pcs Total

All affected units were manufactured and sold in 2007 and 2008. This bulletin does not apply to any other PM model units manufactured/sold. This applies only to PM model starters. No other Sky-Tec starter models are affected.

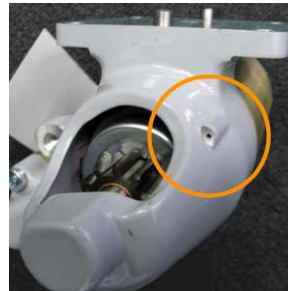
REASON

On some Lycoming 540 series engine powered aircraft fitted with affected starters listed, the cast aluminum starter mount housing can crack causing failure of the starter assembly.



- Picture 1 -

Mount Castings on Affected Starters Have 1) Sharper Radii Geometry Around Nose Opening Cutout and 2) Little/No Edge Distance Between Timing Mark and Nose Opening Cutout



- Picture 2 -

Unaffected Mount Castings Have 1) More Generous Radii Geometry Around Nose Opening Cutout and 2) Significantly More Edge Distance Between Timing Mark and Nose Opening Cutout

Reason for failure appears to be a combination of the location and depth of the timing mark hole and improper metallurgy on the mount castings on affected units. It appears that on some units, the timing mark hole was machined too deeply while metallurgy variances increased brittleness possibly allowing cracks to initiate in the mount casting.

Corrective action is twofold:

1. Manufacturer has implemented mandatory lot inspection for proper metallurgical characteristics of mount casting materials.
2. Manufacturer will modify design of casting to use larger radii geometry, increased wall thickness and additional strengthening features (more similar to previously unaffected units such as shown in Picture 2) to lessen chances of crack initiation.

COMPLIANCE

Recommended: should be accomplished at next convenient maintenance opportunity.

ACCOMPLISHMENT INSTRUCTIONS

Contact Sky-Tec via phone or e-mail at 800-476-7896 or info@skytecair.com with serial number of affected unit. Sky-Tec will ship a replacement unit. Ship affected unit to Sky-Tec at the following address once replacement is accomplished:

RE: SB 07-01
Sky-Tec Repair Station
350 Howard Clemmons Rd
Granbury, Texas 76048

Ship affected unit via UPS using receiver account number E3542E.

QUESTIONS AND COMMENTS

Contact Rich Chiappe at Sky-Tec. 800-476-7896 or richc@skytecair.com.