

MANDATORY

MEL-57-01

TITLE

WINGS - FORWARD LOWER SPAR CAP INSPECTION

EFFECTIVITY

This service letter applies to the models and serials that have 15,000 or more flight hours as follows

MODEL	SERIAL NUMBERS
401	401-0001 thru 401-0322
401A	401A0001 thru 401A0132
401B	401B0001 thru 401B0221
402	402-0001 thru 402-0322
402A	402A0001 thru 402A0129
402B	402B0001 thru 402B1384
402C	689, 402C0001 thru 402C1020
411	411-0001 thru 411-0250
411A	411-0251 thru 411-0300
414	414-0001 thru 414-0965
414A	414A0001 thru 414A1212
421	421-0001 thru 421-0200
421A	421A0001 thru 421A0158

This service letter applies to the models and serials that have 12,000 or more flight hours as follows

MODEL	SERIAL NUMBERS
421B	421B0001 thru 421B0970
421C	421C0001 thru 421C1807

REASON

Cracks have been found in the forward lower carry through spar cap. An undetected crack can cause the spar cap to break which could result in flight instability and potential loss of control.

DESCRIPTION

This service document provides instructions to complete an initial and recurring detailed visual inspection of the forward spar, lower carry through spar cap. The detailed visual inspection is of the bottom surface of the carry through spar cap in the area around the fasteners located just inboard, of the left and right, forward lower wing fitting. A surface eddy current inspection will be necessary if a crack is suspected.

WARNING: Further flight with a cracked carry through spar cap is prohibited. The carry through spar cap must be replaced before further flight.

NOTE: In order to reduce possible damage to the structure, it is recommended that the access panels be installed with MEB-57-01, MEB-57-02, SK402-49 or SK421-152.

December 18, 2017

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TOOLING

NAME	NUMBER	MANUFACTURER	USE
10X Magnifying Lens		Commercially Available	For detailed visual inspection of forward spar cap

REFERENCES

- Cessna Model 401 and 402 (1967-1978) Service Manual
- Cessna Model 402C (1979-1985) Maintenance Manual
- Cessna Model 411/411A (1965-1968) Service Manual
- Cessna Model 414/414A (1970-1985) Service Manual
- Cessna Model 421, 421A, 421B Series (1968-1975) Service Manual
- Cessna Model 421C (1976-1985) Service Manual

NOTE: To make sure all publications used are complete and current. Refer to www.txtavsupport.com.

PUBLICATIONS AFFECTED

None

ACCOMPLISHMENT INSTRUCTIONS

1. Prepare the airplane for maintenance.
 - A. Make sure that the airplane is electrically grounded.
 - B. Make sure that all switches are in the OFF/NORM position.
 - C. Disconnect electrical power from the airplane.
 - (1) Disconnect the airplane battery.
 - (2) Disconnect external electrical power.
 - D. Attach maintenance warning tags to the battery and external power receptacle that have "**DO NOT CONNECT ELECTRICAL POWER - MAINTENANCE IN PROGRESS**" written on them.
2. Remove access panels as follows:

NOTE: Forward spar access panels were installed with service bulletins MEB-57-01 or MEB-57-02 - Access Panel Installation for Forward Spar or service kits SK402-49, and SK421-152 - Access Panel Installation and Stub Wing Fitting Removal/Installation. These panels are directly below the forward spar wing fitting.

- Model 401 and 402 series airplanes remove panels 32 and 94. (Refer to the Model 401 and 402 (1967-1978) Service Manual.)
- Model 402C airplanes remove panels 511AB, 511AT, 512BT, 611AB, 611AT and 612BT. (Refer to the Model 402C (1979-1985) Maintenance Manual)
- Model 411 airplanes remove panels 35 and 57. (Refer to the Model 411/411A (1965-1968) Service Manual.)
- Model 414 airplanes remove panels 34, 35 and 41. (Refer to the Model 414/414A (1970-1985) Service Manual.)
- Model 414A airplanes remove panels 511AB, 511AT, 512AT, 611AB, 611AT and 612AT. (Refer to the Model 414/414A (1970-1985) Service Manual.)
- Model 421, 421A, and 421B airplanes remove panels 35, 57 and 93. (Refer to the Model 421, 421A, 421B Series (1968-1975) Service Manual.)

- Model 421, 421A, 421B airplanes, refer to the Model 421, 421A, 421B Series (1968-1975) Service Manual, Supplement Inspection Number 57-10-10 - Lower Carry-Thru Main Spar Cap
- Model 421C airplanes, refer to the Model 421C (1976-1985) Service Manual, Supplement Inspection Number 57-10-14 - Lower Carry-Thru Front Spar Cap

NOTE: The eddy current technician must be qualified and certified to Level 2 or 3 per the requirements of NAS 410 or equivalent.

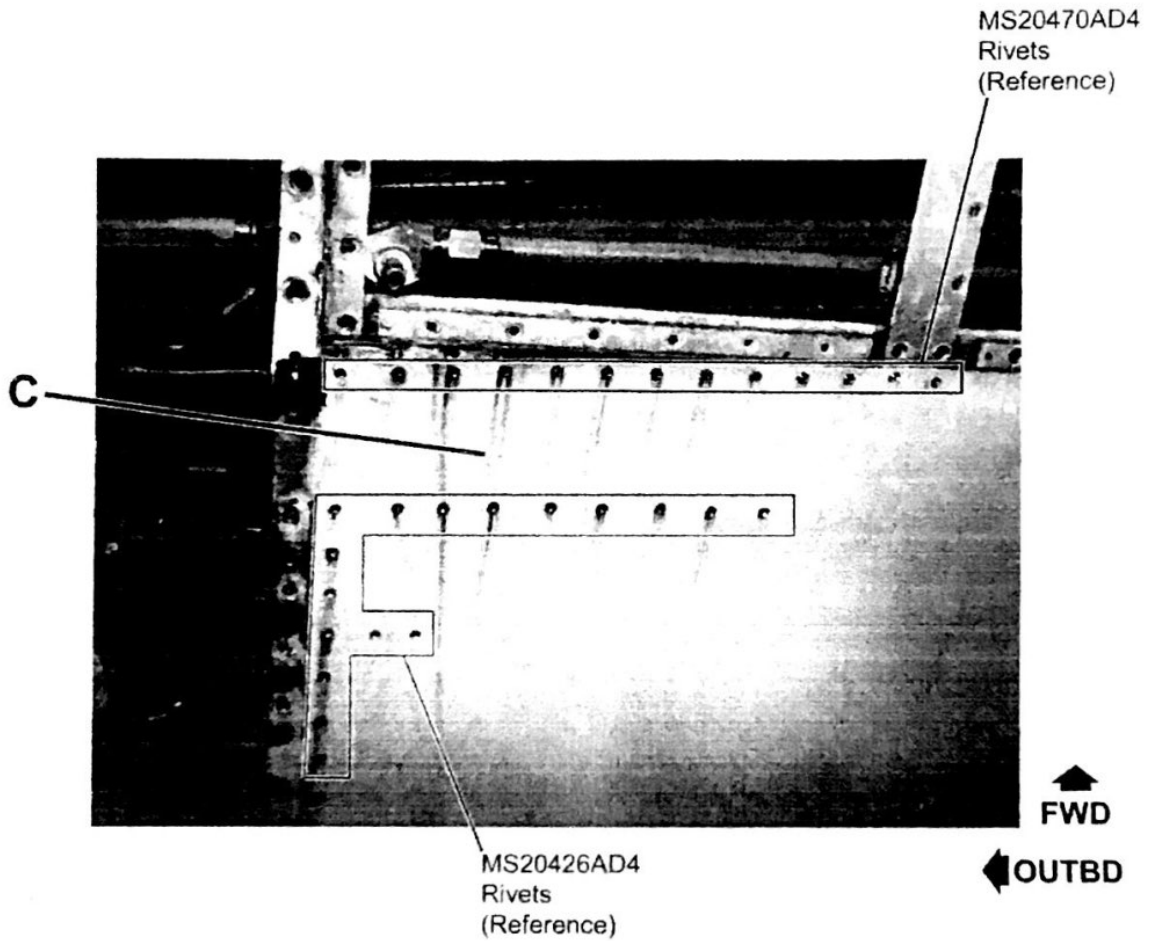
- A. If a crack is found. Contact Cessna Structures at: csstructures@txtav.com, or phone: 316-517-6061.
6. Complete the attached INSPECTION RESULTS FORM and return to Cessna Structures at csstructures@txtav.com. (Refer to the attached INSPECTION RESULTS FORM.)
- NOTE:** Return the INSPECTION RESULTS FORM to Cessna Structures even if no crack is found.
7. (Airplanes without forward spar access panels) Install MS20426AD4-X and MS20470AD4-X Rivets to secure the stub wing skin.
- NOTE:** Rivet length can vary, determine correct length at time of install.
8. Install all removed access panels.
9. Remove the maintenance warning tags and connect the airplane battery.
10. Make a logbook entry that states the recurring inspection is due at the specified flight hour interval as listed in the COMPLIANCE section of this service letter.

NOTE: An example of a log book entry on an airplane that currently has 25,500 flight hours, the next inspection is due at 25,550 flight hours.

MEL-57-01 Forward Lower Spar Cap Inspection must be accomplished at or before 25,550 flight hours.

11. Make an entry in the airplane logbook that states compliance and method of compliance with this service document.

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DETAIL B

Airplanes Without Forward Spar Access Panel

NOTE: For airplanes that do not have access panel installed.
The rivet length determined at time of installation.

Figure 1. Carry Through Spar Cap Inspection (Sheet 2)

Multi-engine

SERVICE LETTER



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MATERIAL INFORMATION

No parts are required to complete this service document.

Multi-engine

ATTACHMENT



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SPAR CAP INSPECTION RESULTS FORM CONTINUED

Was a crack found: Yes/No? No
Detailed description: (Attach pictures and additional details as necessary, if a crack was found with visual inspection or with a surface eddy current inspection?)

Send completed form/attachments to Cessna Structures at csstructures@txtav.com