



A I R C R A F T

CUSTOM KIT

CK-AG-62

REV. C: 05/29/2025

LEADING EDGE SHIELDS INSTALLATION

AIRCRAFT AFFECTED:

MODEL

S2R

SERIAL NUMBERS

ALL

David E. Yarbrough

David Yarbrough
Director of Engineering

LOG OF REVISIONS

NOTE: Reformatting and correction of typographical errors is not considered revision.

REV	PAGE	DESCRIPTION OF REVISION	BY
IR	All	New Document Initial Release	T. Surratt 01/07/2025
A	5, 9, & 13	Identified 521UV SIKAFLEX sealant optional to SIKAFLEX 291 for fillet sealant.	T. Surratt 04/09/2025
B	5 5, 9, & 13 7 & 12	Revised quantities and names of sealants. Removed "Optional" from 521UV description. Revised note for steps 8.1.6 & 8.2.7.	T. Surratt 12/09/2025
C	5, 6, 7, 8, 12, 13	Added part numbers for milled finish option. Added image of brushed and milled leading edge shields. Updated Figures.	T. Surratt 05/29/2026

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1. PURPOSE/REASON FOR PUBLICATION

This Custom Kits provides installation instructions for Thrush's newly developed Leading Edge Shields. The Shields are designed to increase the impact resistance of the wings' leading edges.

2. SCOPE/COMPLIANCE

This document will provide the necessary parts and instructions for the successful installation of the Leading Edge Shields on the wings of Thrush S2R aircraft.

3. BY WHOM WORK WILL BE ACCOMPLISHED

The work is to be accomplished by an FAA Certified A&P or foreign equivalent.

4. APPROVAL

4-1 THRUSH AIRCRAFT, LLC

This Custom Kit is approved by the Engineering Department at Thrush Aircraft, LLC as a minor installation that does not affect flight.

4-2 FAA APPROVAL

The technical content of this Custom Kit is FAA approved.

5. MAN HOURS

Approximately 16 hours required.

6. SPECIAL TOOLS

N/A

7. PARTS LIST

7.1 BRUSHED FINISH

PART NUMBER	NOMENCLATURE	KITS & QUANTITIES			
		(A)	(B)	(C)	(D)
572020002-001	SHIELD – LEADING EDGE	9	9	9	9
572020002-003	SHIELD – LEADING EDGE	1	/	1	/
572020002-005	SHIELD – LEADING EDGE	1	/	1	/
572020002-007	SHIELD – LEADING EDGE	1	/	1	/
572020002-009	SHIELD – LEADING EDGE	4	/	/	/
572020002-011	SHIELD – LEADING EDGE	/	2	/	2
572020002-013	SHIELD – LEADING EDGE	/	1	/	1
572020002-015	SHIELD – LEADING EDGE	/	1	/	1
572020002-017	SHIELD – LEADING EDGE	/	1	/	1
572020002-019	SHIELD – LEADING EDGE	/	2	/	/
572020002-021	SHIELD – LEADING EDGE	/	/	2	/
572020002-023	SHIELD – LEADING EDGE	/	/	/	2
572020002-025	SHIELD – LEADING EDGE	/	/	/	2
SIKAFLEX 291 MARINE	SEALANT (FAY)	4	4	4	4
SIKAFLEX 521UV	SEALANT (FILLET)	2	2	2	2

7.2 MILLED FINISH

PART NUMBER	NOMENCLATURE	KITS & QUANTITIES			
		(E)	(F)	(G)	(H)
572020002-027	SHIELD – LEADING EDGE	9	9	9	9
572020002-029	SHIELD – LEADING EDGE	1	/	1	/
572020002-031	SHIELD – LEADING EDGE	1	/	1	/
572020002-033	SHIELD – LEADING EDGE	1	/	1	/
572020002-035	SHIELD – LEADING EDGE	4	/	/	/
572020002-037	SHIELD – LEADING EDGE	/	2	/	2
572020002-039	SHIELD – LEADING EDGE	/	1	/	1
572020002-041	SHIELD – LEADING EDGE	/	1	/	1
572020002-043	SHIELD – LEADING EDGE	/	1	/	1
572020002-045	SHIELD – LEADING EDGE	/	2	/	/
572020002-047	SHIELD – LEADING EDGE	/	/	2	/
572020002-049	SHIELD – LEADING EDGE	/	/	/	2
572020002-051	SHIELD – LEADING EDGE	/	/	/	2
SIKAFLEX 291 MARINE	SEALANT (FAY)	4	4	4	4
SIKAFLEX 521UV	SEALANT (FILLET)	2	2	2	2

7.3 KIT ORDERING KEY

Use the list below to determine the appropriate kit needed for order placement.

- CK-AG-62 (A) = 510-gallon aircraft without Bird Lights (Brushed Finish)
- CK-AG-62 (B) = 660-gallon aircraft without Bird Lights (Brushed Finish)
- CK-AG-62 (C) = 510-gallon aircraft with Bird Lights (Brushed Finish)
- CK-AG-62 (D) = 660-gallon aircraft with Bird Lights (Brushed Finish)
- CK-AG-62 (E) = 510-gallon aircraft without Bird Lights (Milled Finish)
- CK-AG-62 (F) = 660-gallon aircraft without Bird Lights (Milled Finish)
- CK-AG-62 (G) = 510-gallon aircraft with Bird Lights (Milled Finish)
- CK-AG-62 (H) = 660-gallon aircraft with Bird Lights (Milled Finish)



8. INSTALLATION

8.1 W/O BIRD LIGHTS

1. Verify Shields fit between wing skin upper and lower rivet rows, adjust profile fit by hand as necessary.
2. Locate -003 / -029 and -005 / -031 (510) or -013 / -039 and -015 / -041 (660) shields at stall horn, verify fit. (Reference Figures 8-1 & 8-3)

NOTE: Do not trim for length.

3. Locate remaining shields on both wings as shown in Figures 8-1 through 8-4 starting with those located closest to rivet rows.

NOTE: Trim length as necessary.

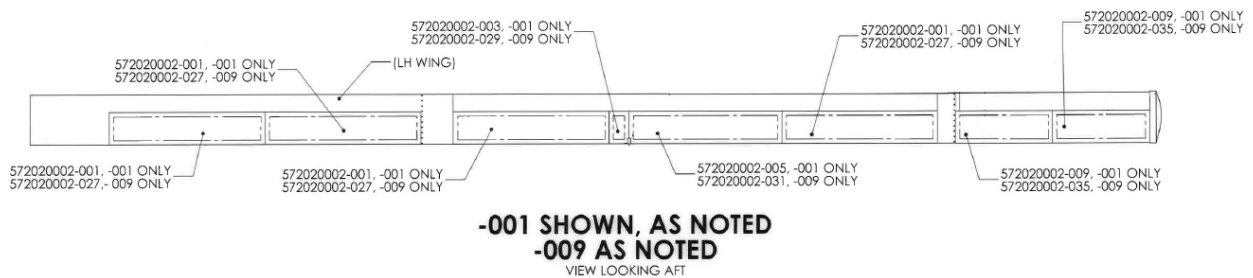


Figure 8-1

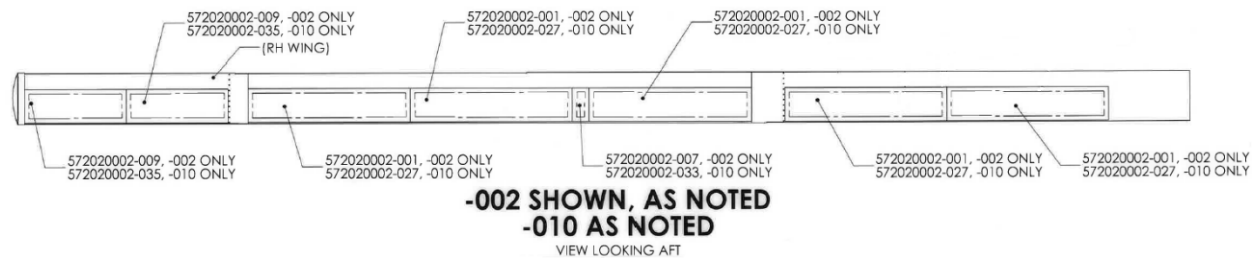


Figure 8-2

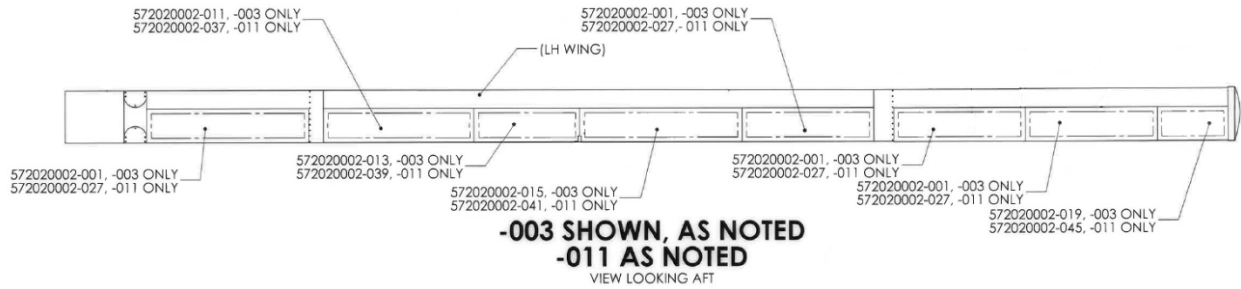


Figure 8-3

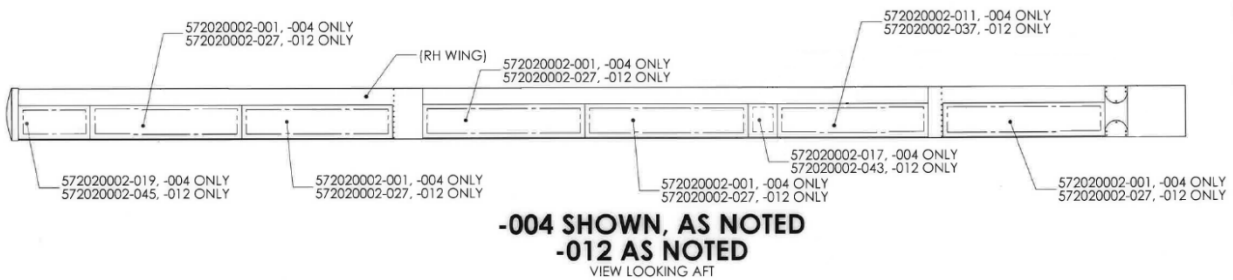


Figure 8-4

4. Clean shield and wing skin faying surfaces with isopropyl alcohol.
5. Cover forward side of shields with film or masking tape.
6. Starting in same order as alignment process, place bead of SIKAFLEX 291 MARINE sealant around perimeter on aft side of shield.
NOTE: Apply 1" bead of sealant around perimeter of shield as shown, 1/8" thick.
7. Using the "double kiss method" place shield into position and press onto wing, work shield to spread sealant to a thin film. Remove shield and press shield into final position and ensure no gap between shield and leading edge.

8. Secure shield down with straps or masking tape. (Reference Figure 8-5)

NOTE: When using straps to secure shields, be careful not to apply too much force as damage to trailing edges may occur.

NOTE: Place a cushion between strap latches and wing surface. (Reference Figure 8-6)



Figure 8-5

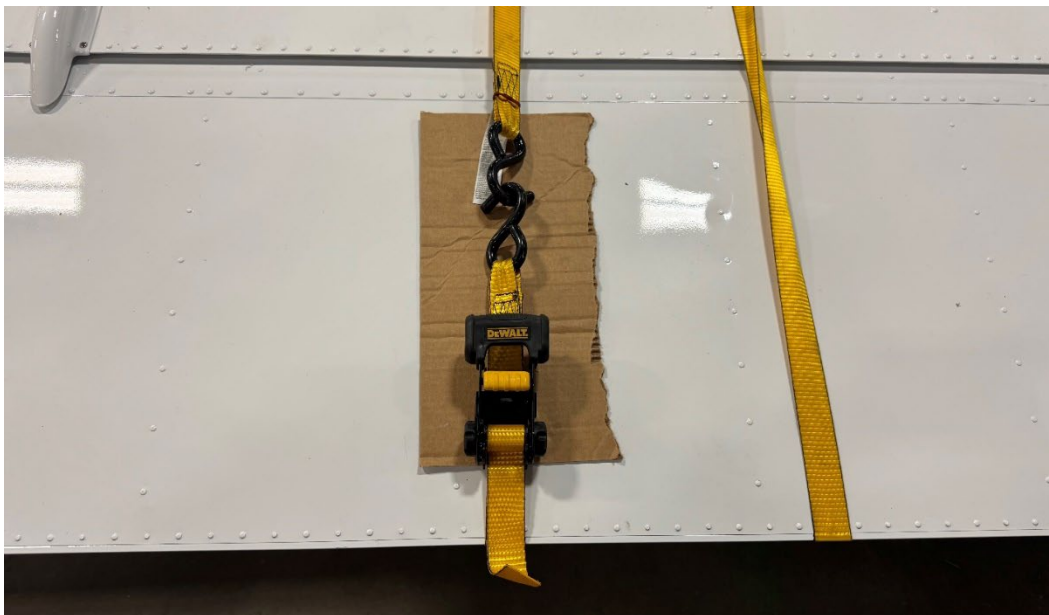


Figure 8-6

9. Remove excess sealant.
10. Repeat process for each shield.
11. Allow sealant to cure 4 hours minimum.
12. Remove straps or masking tape securing shields to wing leading edge skins and verify shields have proper adhesion.
 - NOTE:** Shields should not shift when hand pressure applied.
13. If shield is loose, remove and repeat installation process.
14. Apply fillet seal using SIKAFLEX 521UV as shown. (Reference Figure 8-7)

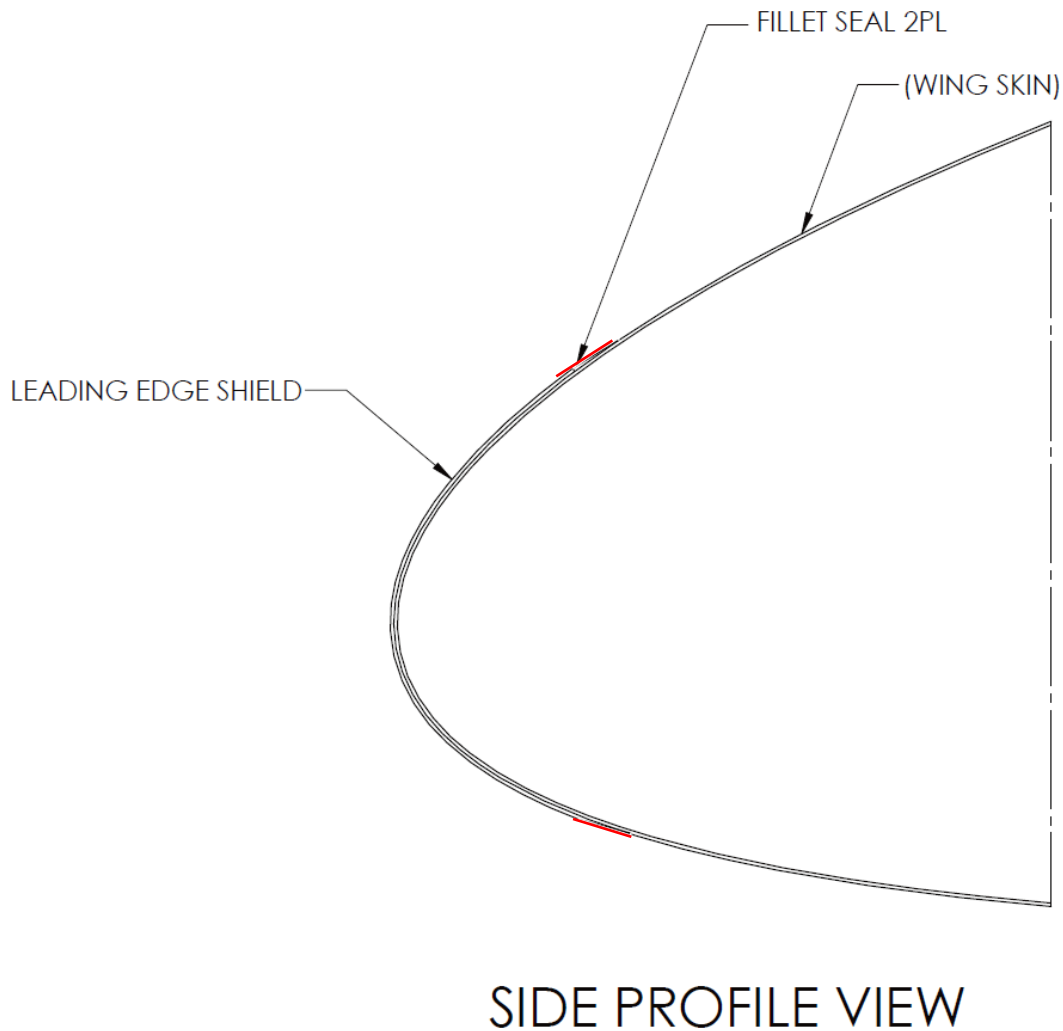


Figure 8-7

15. Allow sealant to cure 4 hours minimum.
16. Remove film or masking tape from leading edge shields. (Reference Figures 8-8 & 8-9)



Figure 8-8



Figure 8-9

8.2 WITH BIRD LIGHTS

1. Verify Shields fit between wing skin upper and lower rivet rows, adjust profile fit by hand as necessary.
2. Locate -003 / -029 and -005 / -031 (510) or -013 / -039 and -015 / -041 (660) shields at stall horn, verify fit. (Reference Figures 8-10 & 8-12)

NOTE: Do not trim for length.

3. Align -021 / -047 (510 LH & RH) and -025 / -051 (660 LH & RH) shields at bird light, verify fit. (Reference Figures 8-10 – 8-13)

NOTE: Trim length as necessary.

4. Locate remaining shields on both wings as shown in Figures 8-10 through 8-13 starting with those located closest to rivet rows.

NOTE: Trim length as necessary.

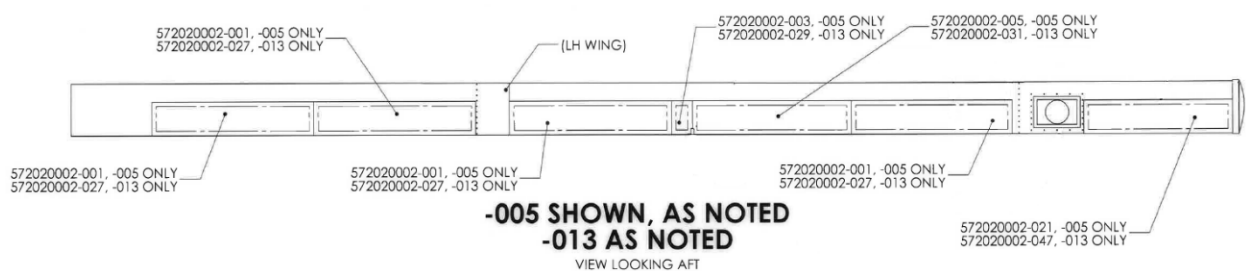


Figure 8-10

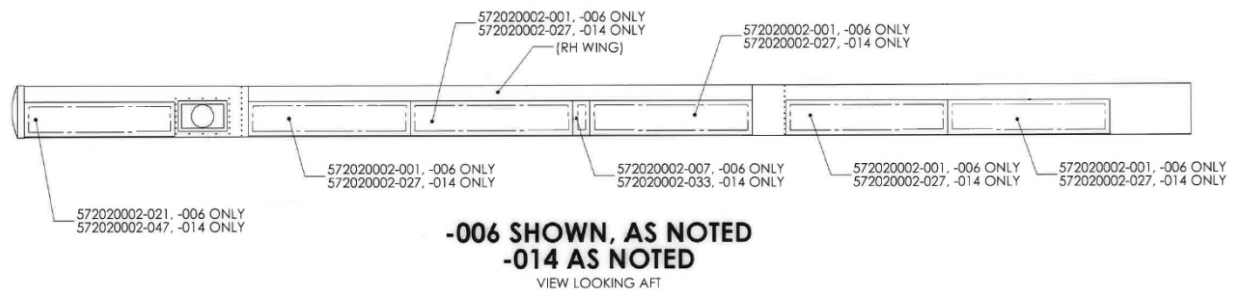


Figure 8-11

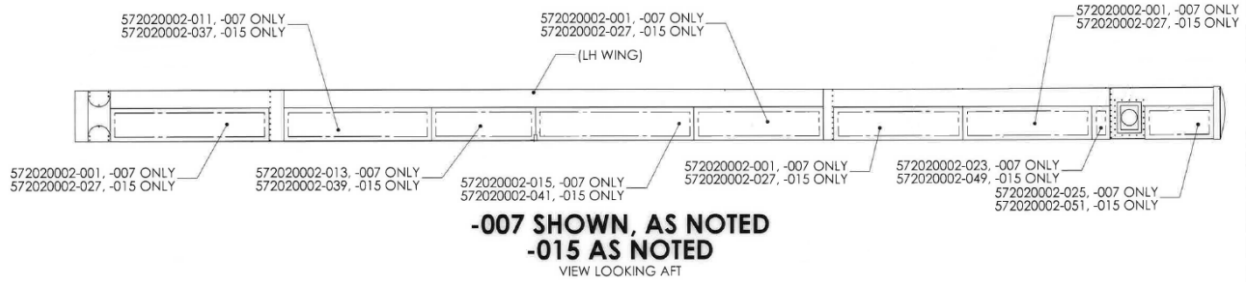


Figure 8-12

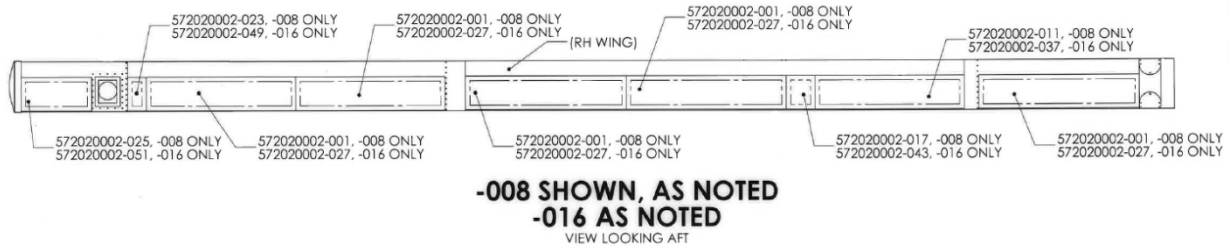


Figure 8-13

5. Clean shield and wing skin faying surfaces with isopropyl alcohol.
6. Cover forward side of shields with film or masking tape.
7. Starting in the same order as alignment process, place bead of SIKAFLEX 291 MARINE sealant around perimeter on aft side of shield.
NOTE: Apply 1" bead of sealant around perimeter of shield as shown, 1/8" thick.
8. Using the "double kiss method" place shield into position and press onto wing, work shield to spread sealant to a thin film. Remove shield and press shield into final position and ensure no gap between shield and leading edge.
9. Secure shield down with straps or masking tape. (Reference Figure 8-5)
NOTE: When using straps to secure shields be careful not to apply too much force as damage to trailing edges may occur.
NOTE: Place a cushion between strap latches and wing surface. (Reference Figure 8-6)
10. Remove excess sealant.
11. Repeat process for each shield.

12. Allow sealant to cure 4 hours minimum.
13. Remove straps or masking tape securing shields to wing leading edge skins and verify shields have proper adhesion.
NOTE: Shields should not shift when hand pressure applied.
14. If shield is loose, remove and repeat installation process.
15. Apply fillet seal using SIKAFLEX 521UV sealant as shown in Figure 8-5.
16. Allow sealant to cure 4 hours minimum.
17. Remove film or masking tape from leading edge shields. (Reference Figures 8-8 & 8-9)

9. RECORD OF COMPLIANCE

Make appropriate entry in airplane maintenance records as follows:

“Thrush Custom Kit CK-AG-62 C complied with at _____ total hours on aircraft.”

Modification accomplished by:

Name & Certificate #	Date
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10. RESPONSE CARD

The final step in compliance with this Custom Kit is to complete and return the compliance card on the next page. It may be mailed, faxed, or scanned and e-mailed.

Fax:	Thrush Support	229-317-8225
Email:	Thrush Support	support@thrushaircraft.com

11. CUSTOM KIT CK-AG-62 C COMPLIANCE REPORT

Aircraft S/N:	Aircraft Owner:
Aircraft Registration #:	Address of Owner:
Airframe Total Time:	City & State:
Engine Total Time:	Physical Location:
Complied With By:	Date of Compliance:
Signature:	Certificate #:

PLEASE RETURN THIS REPORT ONLY AFTER MODIFICATION IS MADE

This response card may be mailed, faxed to (229) 317-8225, or emailed to support@thrushaircraft.com.

Fold, Tape, & Mail (Do Not Staple)

Return Address:

Thrush Aircraft LLC.
Attn: Customer Assurance and Support
300 Old Pretoria Road
Albany, GA 31721