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# CUSTOM KIT

## CK-AG-51

Initial Release: 08/20/2020

### Battery Installation

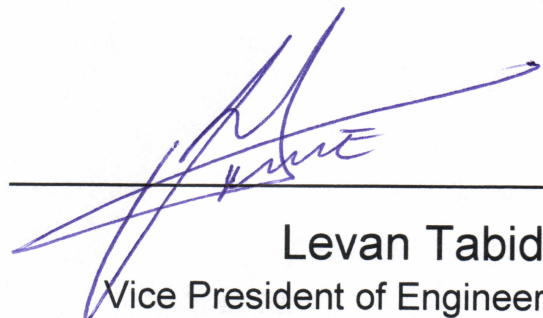
**AIRPLANES AFFECTED:**

**MODEL**

**SERIAL NUMBERS**

S2R-T34  
S2RHG-T65  
S2R-G10  
S2RHG-T34  
S2R-T660  
S2R-H80  
S2R-R1340

ALL  
ALL  
ALL  
ALL  
ALL  
ALL  
ALL



Levan Tabidze  
Vice President of Engineering

## **LOG OF REVISIONS**

**NOTE:** Reformatting and correction of typographical errors is not considered revision. True revisions are indicated by a dark vertical line at the right margin of the lines revised.

Rev.	Page	Description of Revision	By:
IR	All	New Document Initial Release.	I.Verma 08/20/2020

## **CONTENTS**

<b>1. PURPOSE/REASON FOR PUBLICATION:</b> .....	3
<b>2. SCOPE/COMPLIANCE:</b> .....	3
<b>3. BY WHOM WORK WILL BE ACCOMPLISHED:</b> .....	3
<b>4. APPROVAL:</b> .....	3
<b>5. MAN HOURS:</b> .....	3
<b>6. SPECIAL TOOLS:</b> .....	3
<b>7. WEIGHT AND BALANCE:</b> .....	3
<b>8. PARTS LIST</b> .....	3
<b>9. ACCOMPLISHMENT INSTRUCTIONS:</b> .....	4
<b>9. RECORD OF COMPLIANCE:</b> .....	4
<b>10. RESPONSE CARD</b> .....	8

**1. PURPOSE/REASON FOR PUBLICATION:**

This Custom Kit provides instructions and parts information for the installation of Battery and Connector (Part Number: Gill 7638-44, Concorde RG-380E/44 and 7017) respectively.

**2. SCOPE/COMPLIANCE:**

This Custom Kit is approved for the following Thrush models:

S2R-T34	S2R-T660
S2RHG-T65	S2R-H80
S2R-G10	S2R-R134
S2RHG-T34	

**3. BY WHOM WORK WILL BE ACCOMPLISHED:**

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

**4. APPROVAL:**

This Custom Kit is approved by the Vice President of Engineering at Thrush Aircraft, LLC

**5. MAN HOURS:**

1.75 hours will be required.

**6. SPECIAL TOOLS:**

No special tools required.

**7. WEIGHT AND BALANCE:**

No change.

**8. PARTS LIST****For S2R-H80 Single Cockpit:**

QUANTITY	PART NUMBER	DESCRIPTION	SUPPLIER
ALT	<b>Concorde RG-380E/44</b>	Battery	Concorde Battery
1	<b>Gill 7638-44</b>	Battery	Teledyne Battery
	<b>7017-1 (MS3349-2)</b>	Quick Disconnect	Teledyne Battery/ Rebling

## For All Models Single & Dual Cockpit and S2R-H80 Dual Cockpit:

QUANTITY	PART NUMBER	DESCRIPTION	SUPPLIER
ALT	<b>Concorde RG-380E/44</b>	Battery	Concorde Battery
2	<b>Gill 7638-44</b>	Battery	Teledyne Battery
	<b>7017-1 (MS3349-2)</b>	Quick Disconnect	Teledyne Battery/ Rebling

\*May be purchased locally

## ACCOMPLISHMENT INSTRUCTIONS:

**NOTE:** Turn off Master Battery switch located on cockpit start panel.

**CAUTION:** Remove both side panels on cowling to get access to batteries. Unplug connector and ensure they do not come in contact with any metal surface.

1. Cut brass safety wire and disconnect batteries.
2. Use a flat tip screwdriver to remove hose clamps that attach battery vent hoses and remove vent hoses from batteries.
3. Use 7/16" deep well socket with ratchet to remove battery retainers and battery covers.
4. Remove old batteries (Gill GE-50C) shown in Figure 5 from battery plate.
5. Use a 5/32" Allen wrench to remove the five screws to separate the battery connectors (8003-1).
6. Use a 1/2" wrench to remove wires assemblies 29043T137, 29043T138, 29043T139, 29043T140 (Except S2R-H80)

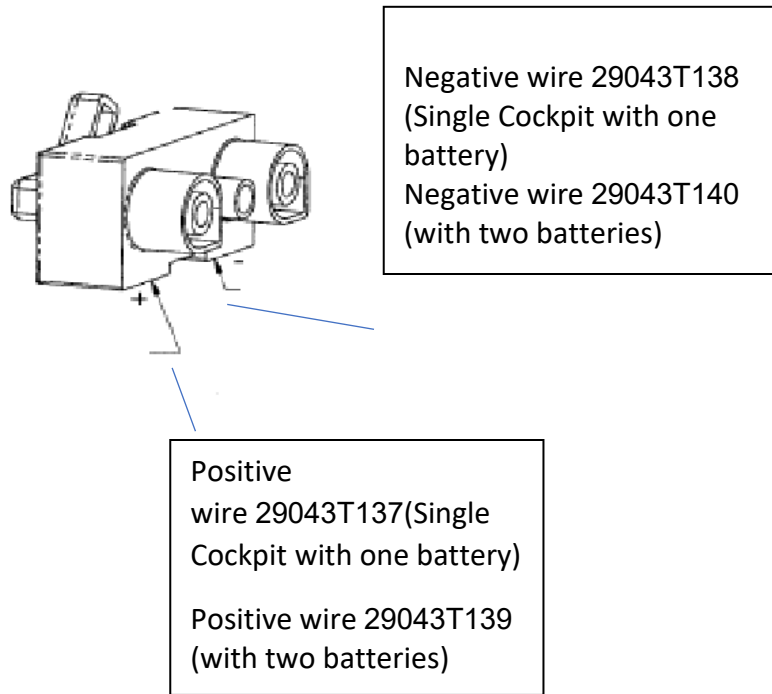


Figure 1 Wire Assembly (Except S2R-H80)

**Similarly, for Dual cockpit S2R-H80**

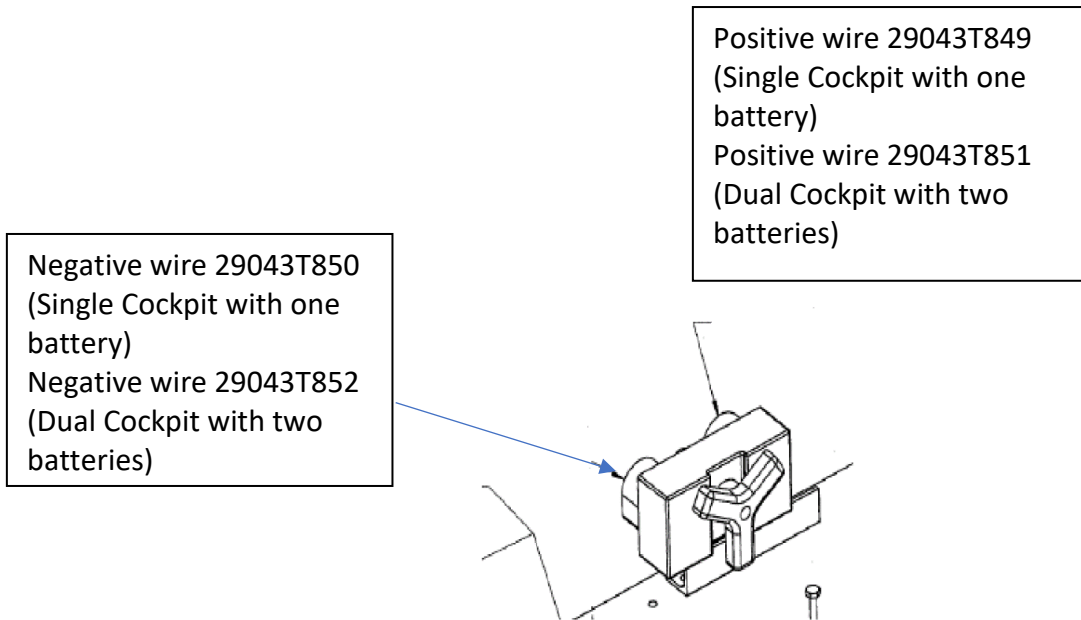


Figure 2 Wire Assembly S2R-H80

7. Use a 1/2" wrench to remove wire assemblies for S2R- H80 that are 29043T849, 29043T850, 29043T851, 29043T852 (for S2R-H80)
8. To install new connector (7017-1) shown in Figure 3, use a 3/8" wrench and 3/8" socket with ratchet to remove the two bolts on each side of the connector. This will allow the removal of cover.

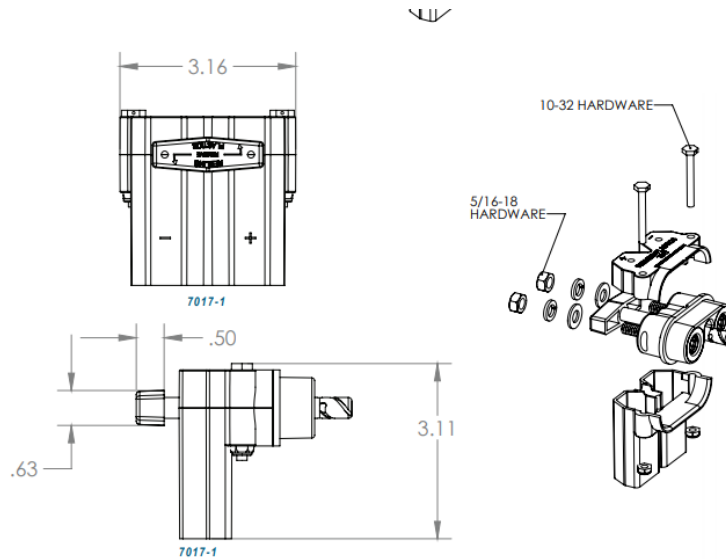


Figure 3 Quick Disconnect 7017-1

9. Slide wires up through the bottom of the new battery connector making sure each wire is in correct position -/+.
10. Use a 1/2" wrench to attach wire assembly (Figure 1) for S2R- T34 29043T137 to the positive post and wire assembly 29043T138 to the negative post. Similarly, for dual cockpit applications, use a 1/2" wrench to attach wire assembly 29043T139 to the positive post and wire assembly 29043T140 to the negative post.

7638-44



Figure 4 New Gill 7638-44 Battery

GE-50C



Figure 5 Old Gill GE-50C

11. Before installation of new batteries (Gill 7638-44 shown in Figure 4) reference the installation manual for charging instructions.
12. Remove retainers off old battery covers.
13. Reinstall new batteries with connector ends facing outboard.
14. Reinstall retainers on new batteries make sure not to over torque (10 in-lbs. MAX)
15. Reinstall battery vent lines.
16. Make sure both connectors are clear of any metal surface before reconnecting batteries
17. Safety wire battery connectors

## 9. RECORD OF COMPLIANCE:

Make appropriate entry in airplane maintenance records as follows:

“Thrush Custom Kit CK-AG-51 Rev. IR complied with at \_\_\_\_\_ total hours on aircraft.”

Modification accomplished by:

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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 to:	Ed Rusk	229-439-9790
Email to:	Ed Rusk	ed.rusk@thrushaircraft.com



**Custom Kit CK-AG-51 Rev. IR 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, or emailed.

Fax: 229-439-9790 Attn: Ed Rusk

Email: [ed.rusk@thrushaircraft.com](mailto:ed.rusk@thrushaircraft.com)

Fold, Tape & Mail (Do Not Staple)

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Return Address

**Thrush Aircraft, LLC**  
**Attn: Ed Rusk**  
**300 Old Pretoria Road**  
**Albany, GA 31721**