

EAGLE TECHNICAL BULLETIN

REF. TCCA STC: SH14-47

REF. FAA STC: SR03496NY

Eagle Technical Bulletin Number: **TB-E407-789-19**

Purpose: To provide instructions for the replacement of the 4962-R3/R4 Manual Mode resistors.

Eligible Serial Numbers: ALL

Compliance: **MANDATORY.** This bulletin shall be complied with at the next 300 hour inspection or immediately upon the detection of 4962-R3/R4 Manual Mode resistor overheating.

Description: This technical bulletin (TB) describes the replacement of the 4962-R3 and 4962-R4 3W resistors with improved 10W resistors.

Parts List:

QTY -011	PART NUMBER	DESCRIPTION
X	TB-E407-789-19-011	FADEC REPLACEMENT RESISTOR
1	0789-02-161-1	RESISTOR ASSEMBLY (4962-R3/R4)
6	M81824/1-1	SPLICE, RED
4	HML-8 *	SPLICE, SOLDER W/ TAIL
1	MDA-3792 OR WHS-1 *	SPOON, WIRE
1	GNF150ASP45710 *	BIT, DRILL #40
1	GNF150ASP45697 *	BIT, DRILL #27
1	0789-08-901-1	DRILL TEMPLATE
2	AN526-632R6	SCREW
2	AN960-6	WASHER

* OR EQUIVALENT

Weight and Balance: The incorporation of this TB has a negligible effect on the aircraft weight and balance.


CANADA
DEPARTMENT OF TRANSPORT
AIRCRAFT CERTIFICATION
BRANCH
DAO # 01-O-01

APPROVED

BY: 
D. SHEPHERD (DE # 02)

DATE: 2021-03-29
CERT. NO.: SH14-47
ISSUE NO.: 1

APPROVED

A	NEW ISSUE	WK	2021-01-01
REV.	DESCRIPTION	BY	DATE
DESIGN	KB	EAGLE COPTERS LTD CALGARY, ALBERTA, CANADA	
DRAWN	WK		
CHECKED	KB	DRAWING NO.	REV. A
MFG. APPR.	RL	TB-E407-789-19	SHEET 1 OF 8
APPROVED	KB	TITLE	
DE APPR.	DS 	4962-R3/R4 RESISTOR REPL	
DATE	2021-01-01	COPYRIGHT © 2021 BY EAGLE COPTERS LTD. <small>THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM EAGLE COPTERS LTD.</small>	

Installation Procedure:

1. Disconnect the battery and external DC power from the helicopter and open the FADEC CH A and FADEC CH B circuit breakers IAW ICA-E407-789.
2. Gain access to the existing 4962-R3 and 4962-R4 resistors, located near 4962-J196, by removing the left side (co-pilot) headliner, as shown in Figure 1, IAW BHT-407-MM.
3. Gain access to the new 4962-R3/-R4 resistor location on the right side (pilot) of the circuit breaker panel by removing the right side (pilot) headliner, as shown in Figure 3, IAW BHT-407-MM.
4. Locate mounting holes (the included 0789-08-901-1 Drill Template may be used to help locate), as shown in Figure 3. Drill through the breaker panel flange with the included #40 drill bit (2 places) and open the holes using the included #27 drill bit. Maintain 0.20 in edge distance. Debur the holes.
5. Mount 0789-02-161-1 Resistor Assembly along the top of the circuit breaker panel angle, as shown in Figure 2, using (2) AN526-632R6 screws and (2) AN960-6 washers.
6. Following the existing wire bundle and using the included wire spoon, route the new wires around the front of the circuit breaker panel to the 4962-J196 area, as shown in Figure 1 and Figure 2. Ensure all clamps are sized appropriately and any removed cable ties are re-installed.
7. Remove wires 4962-1ECU2023B22 WHT and BLU from existing resistor 4962-R3.
8. Install the HML-8 solder sleeves on the shield. It is permissible to remove one of the wire "tail" as required to ensure shield continuity. Alternatively both wires can be installed and spliced or soldered together, as shown in Figure 4.
9. Using the red M81824/1-1 splice, connect 4962-1ECU2023B22 WHT to 4962-1ECU2023C22 WHT and 4962-1ECU2023B22 BLU to 4962-1ECU2023C22 BLU, as shown in Figure 4.
10. Remove wires 4962-2ECU2023B22 WHT and BLU from existing resistor 4962-R4.
11. Install the HML-8 solder sleeves on the shield. It is permissible to remove one of the wire "tail" as required to ensure shield continuity. Alternatively both wires can be installed and spliced or soldered together, as shown in Figure 4.
12. Using the red M81824/1-1 splice, connect 4962-2ECU2023B22 WHT to 4962-2ECU2023C22 WHT and 4962-2ECU2023B22 BLU to 4962-2ECU2023C22 BLU, as shown in Figure 4.
13. Re-install the left and right side headliner IAW BHT-407-MM.
14. Close the FADEC CH A and FADEC CH B circuit breakers and connect the battery or external dc power to the helicopter IAW ICA-E407-789.

APPROVED

DESIGN	KB	EAGLE COPTERS LTD CALGARY, ALBERTA, CANADA	
DRAWN	WK		
CHECKED	KB	DRAWING NO.	REV. A
MFG. APPR.	RL	TB-E407-789-19	SHEET 2 OF 8
APPROVED	KB	TITLE	
DE APPR.	DS	4962-R3/R4 RESISTOR REPL	
DATE	2021-01-01	COPYRIGHT © 2021 BY EAGLE COPTERS LTD. <small>THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM EAGLE COPTERS LTD.</small>	

Test Procedure:

1. Turn the BATT Switch to ON and ensure the FADEC FAIL annunciator is **NOT** illuminated.
2. Turn the BATT switch to OFF.
3. If the test is successful, continue to the next step. If the test is not successful, ensure all connections are made and there is continuity between the ECU and the resistors and repeat steps 1 and 2.
4. Notify Eagle Copters that this Technical Bulletin has been accomplished by filling in the attached form (Sheet 8) and emailing it to Eagle Copters.
5. Make entry into aircraft technical reports to indicate TB-E407-789-19 has been completed.

APPROVED

DESIGN	KB	EAGLE COPTERS LTD CALGARY, ALBERTA, CANADA	
DRAWN	WK		
CHECKED	KB	DRAWING NO.	REV. A
MFG. APPR.	RL	TB-E407-789-19	SHEET 3 OF 8
APPROVED	KB	TITLE	
DE APPR.	DS	4962-R3/R4 RESISTOR REPL	
DATE	2021-01-01	COPYRIGHT © 2021 BY EAGLE COPTERS LTD. <small>THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM EAGLE COPTERS LTD.</small>	

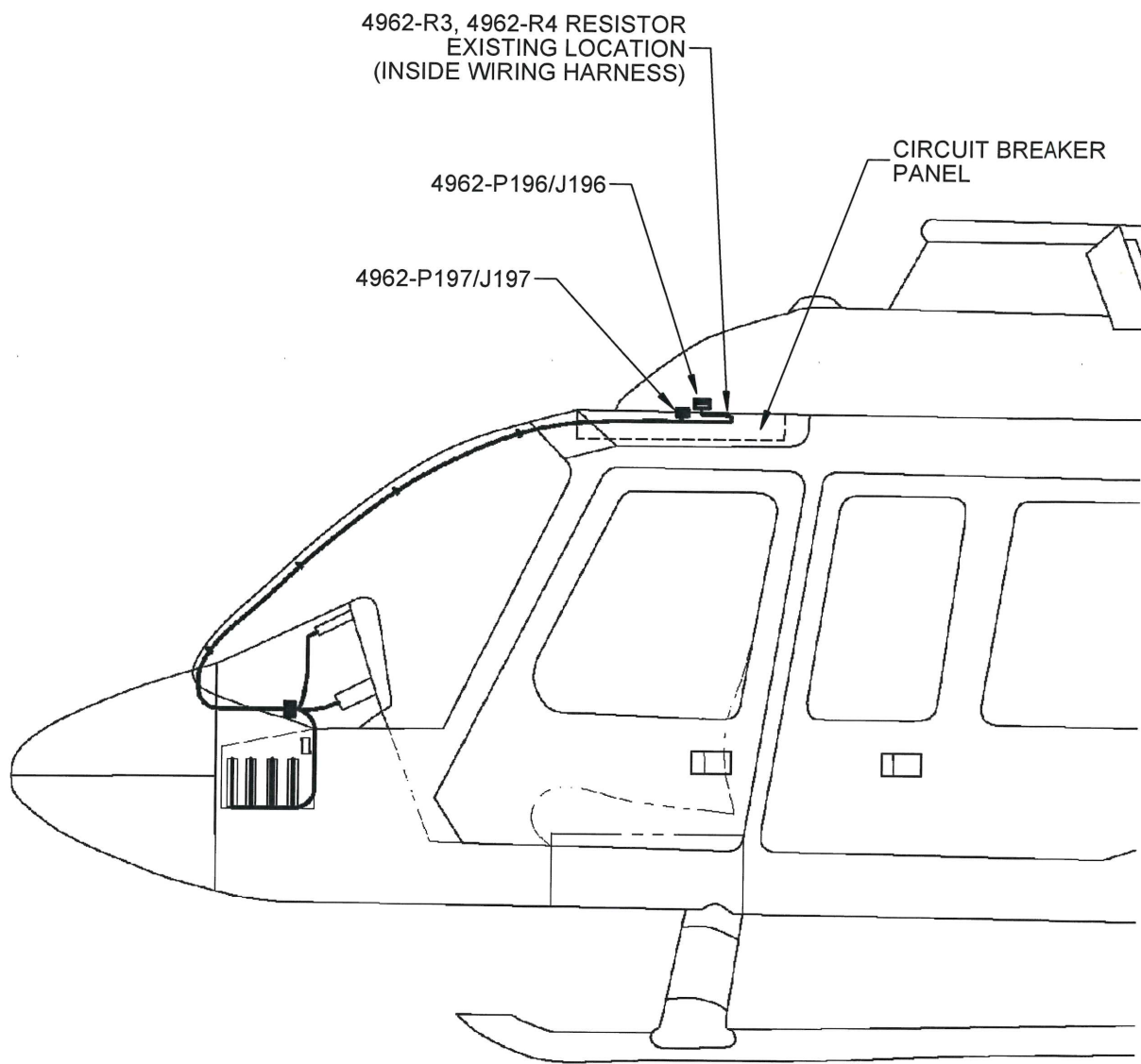


FIGURE 1: EXISTING WIRE ROUTING
(VIEW LOOKING AT LEFT HAND SIDE)

APPROVED

DESIGN	KB	EAGLE COPTERS LTD CALGARY, ALBERTA, CANADA	
DRAWN	WK		
CHECKED	KB	DRAWING NO.	REV. A
MFG. APPR.	RL	TB-E407-789-19	SHEET 4 OF 8
APPROVED	KB	TITLE 4962-R3/R4 RESISTOR REPL	
DE APPR.	DS		
DATE	2021-01-01	COPYRIGHT © 2021 BY EAGLE COPTERS LTD. <small>THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM EAGLE COPTERS LTD.</small>	

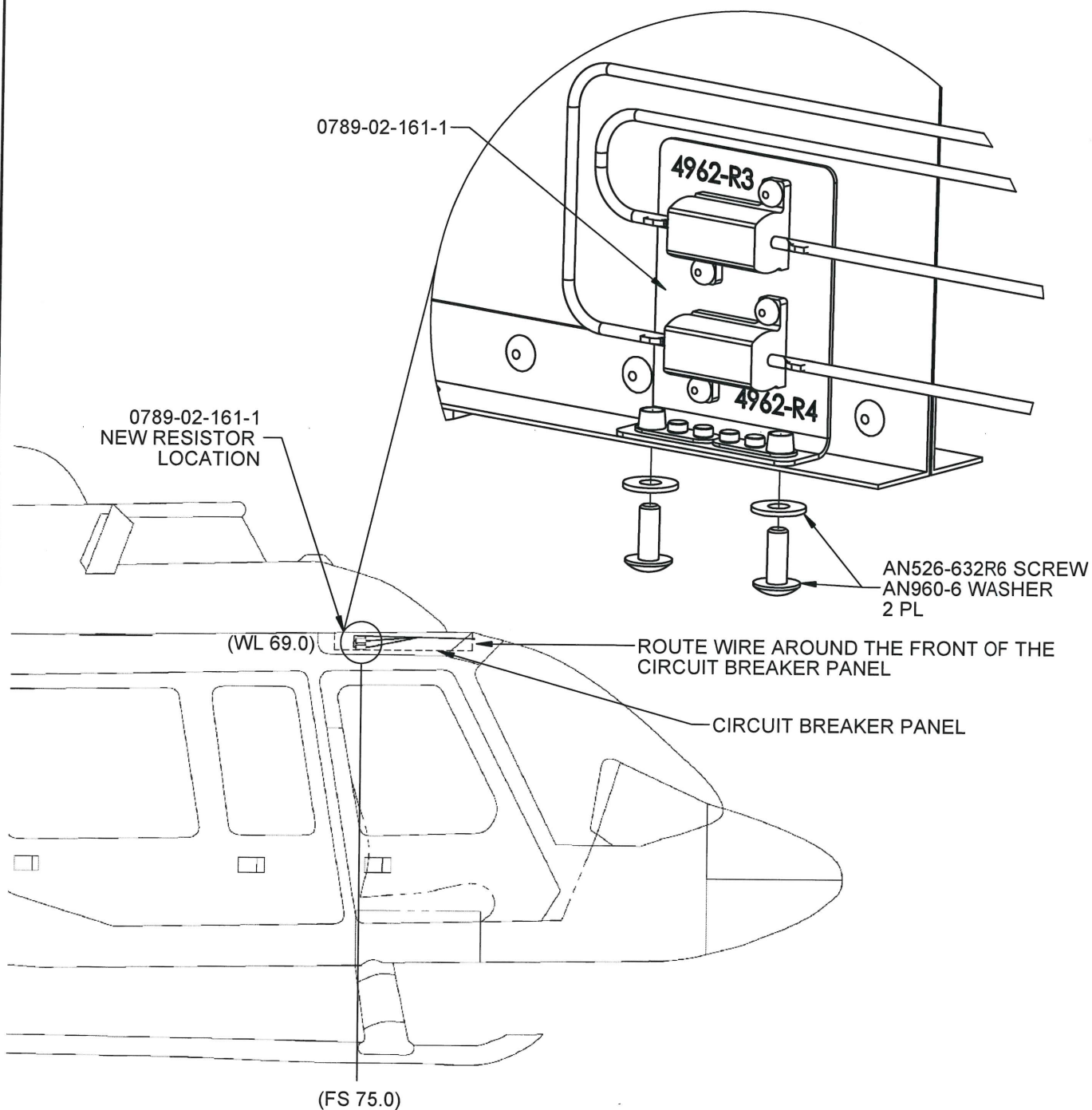


FIGURE 2: NEW RESISTOR MOUNTING LOCATION
(VIEW LOOKING AT RIGHT HAND SIDE)

APPROVED

DESIGN	KB	EAGLE COPTERS LTD CALGARY, ALBERTA, CANADA	
DRAWN	WK		
CHECKED	KB	DRAWING NO.	REV. A
MFG. APPR.	RL	TB-E407-789-19	SHEET 5 OF 8
APPROVED	KB	TITLE	
DE APPR.	DS	4962-R3/R4 RESISTOR REPL	
DATE	2021-01-01	COPYRIGHT © 2021 BY EAGLE COPTERS LTD. THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM EAGLE COPTERS LTD.	

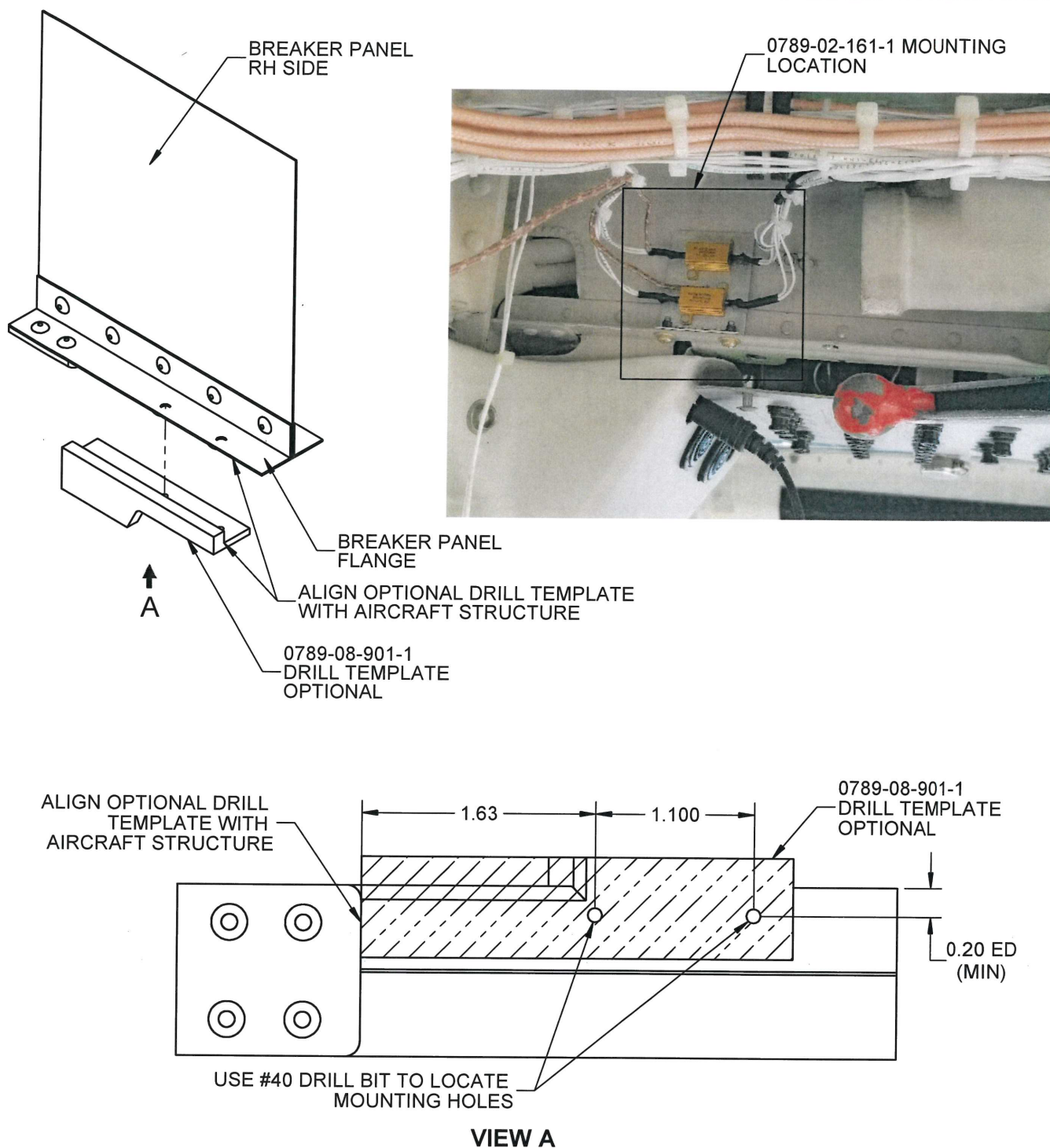


FIGURE 3: 0789-02-161-1 MOUNTING HOLE LOCATION

APPROVED

DESIGN	KB	EAGLE COPTERS LTD CALGARY, ALBERTA, CANADA	
DRAWN	WK		
CHECKED	KB	DRAWING NO.	REV. A
MFG. APPR.	RL	TB-E407-789-19	SHEET 6 OF 8
APPROVED	KB	TITLE	
DE APPR.	DS	4962-R3/R4 RESISTOR REPL	
DATE	2021-01-01	COPYRIGHT © 2021 BY EAGLE COPTERS LTD. <small>THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM EAGLE COPTERS LTD.</small>	

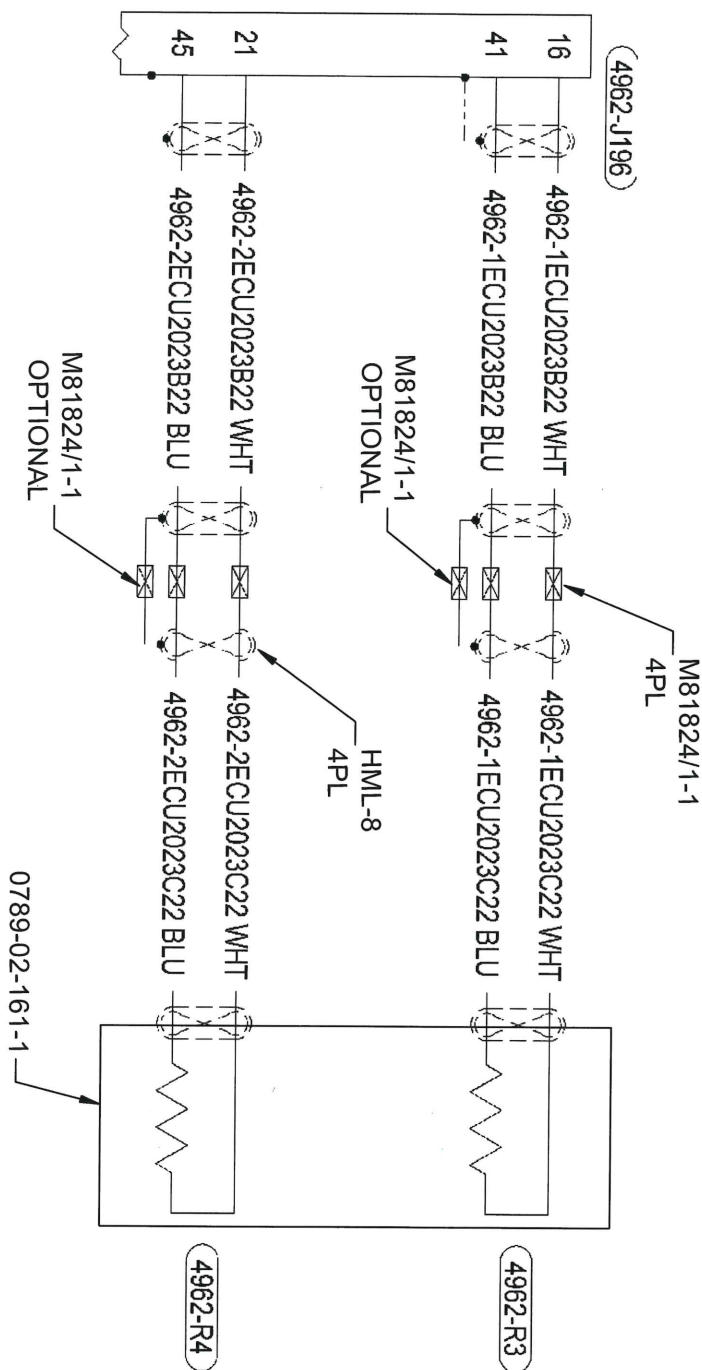


FIGURE 4: WIRING DIAGRAM

APPROVED	DESIGN	KB	EAGLE COPTERS LTD CALGARY, ALBERTA, CANADA	
	DRAWN	WK		
	CHECKED	KB	DRAWING NO.	REV. A
	MFG. APPR.	RL	TB-E407-789-19	SHEET 7 OF 8
	APPROVED	KB	TITLE	
	DE APPR.	DS	4962-R3/R4 RESISTOR REPL	
DATE		2021-01-01	COPYRIGHT © 2021 BY EAGLE COPTERS LTD. THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM EAGLE COPTERS LTD.	

NOTIFY EAGLE COPTERS THAT THE TB-E407-789-19 HAS BEEN INCORPORATED INTO THE AIRCRAFT LISTED BELOW.

AIRCRAFT SERIAL NUMBER: _____

AIRCRAFT OWNER: _____

DATE TB-E407-789-19 WAS INCORPORATED ON THE ABOVE AIRCRAFT:

SIGNATURE OF PERSON RESPONSIBLE FOR ENTRY INTO AIRCRAFT TECHNICAL RECORD:

PRINT NAME OF PERSON RESPONSIBLE FOR ENTRY INTO AIRCRAFT TECHNICAL RECORD:

EMAIL THIS PAGE TO: customersupport@eaglecopters.com

APPROVED

DESIGN	KB	EAGLE COPTERS LTD CALGARY, ALBERTA, CANADA	
DRAWN	WK		
CHECKED	KB	DRAWING NO.	REV. A
MFG. APPR.	RL	TB-E407-789-19	SHEET 8 OF 8
APPROVED	KB	TITLE	
DE APPR.	DS	4962-R3/R4 RESISTOR REPL	
DATE	2021-01-01	COPYRIGHT © 2021 BY EAGLE COPTERS LTD. <small>THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM EAGLE COPTERS LTD.</small>	