

**R44-series & R66 Aft Strobe Ground Wire Upgrade Kit Instructions**

For use when installing C023 tailcone Rev AR and subsequent [equipped for LED-Strobe only], on R44 S/N 2479 & prior, R44 II S/N 14087 & prior, Cadet S/N 30022 & prior, and R66 800 & prior. Kit adds secondary ground wire from tailcone to airframe. If helicopter is equipped with A708 strobe power supply, also install KI-204-1 (for 14V) or KI-204-2 (for 28V).

**NOTE**

Visit <https://robinsonheli.com> to verify kit instructions are current revision. Review instructions before installation; contact RHC Technical Support with questions. Verify kit contents match list; contact RHC Customer Service if parts are missing or damaged.

ITEM	PART NUMBER	KIT CONTENTS	QTY
1	KI-251Instr.	Kit Instructions . . . . .	1
2	B158-8-1	Heat Shrink, 1/2 inch diameter (1 inch length) . . . . .	1
3	B161-2.2FT	Spirap, 1/8 inch diameter (2 foot length) . . . . .	1
4	B263-2	Socket . . . . .	1
5	B263-13	Housing (2-socket) . . . . .	1
6	KI-251-2854	Wire Assembly . . . . . Includes: [1] B260-9 Terminal – Ring [1] B274-20 Wire, 75 inches (marked “-2854”)	1
7	MS3367-5-9+	Ty-rap (Note: “+” in part number indicates 20-qty pack) . . . . .	1
8	MS3367-7-9+	Ty-rap (Note: “+” in part number indicates 10-qty pack) . . . . .	1

**Special Tools**

- Wire stripper
- Pin extractor
- Pin/socket crimper
- Heat gun

**Kit Instructions**

1. Turn BATTERY switch OFF. Pull STROBE, LTS, & WARN LTS circuit breakers.
2. Disconnect ELT antenna lead from antenna mounted to C706-1 (R44) or F706-1 (R66) tailcone cowling assembly, as required. Remove tailcone cowling assembly.

**Kit Instructions (continued)**

## NOTE

Temporarily securing KI-251-2854 wire assembly to main harness will assist to determine adequate wire length.

## NOTE

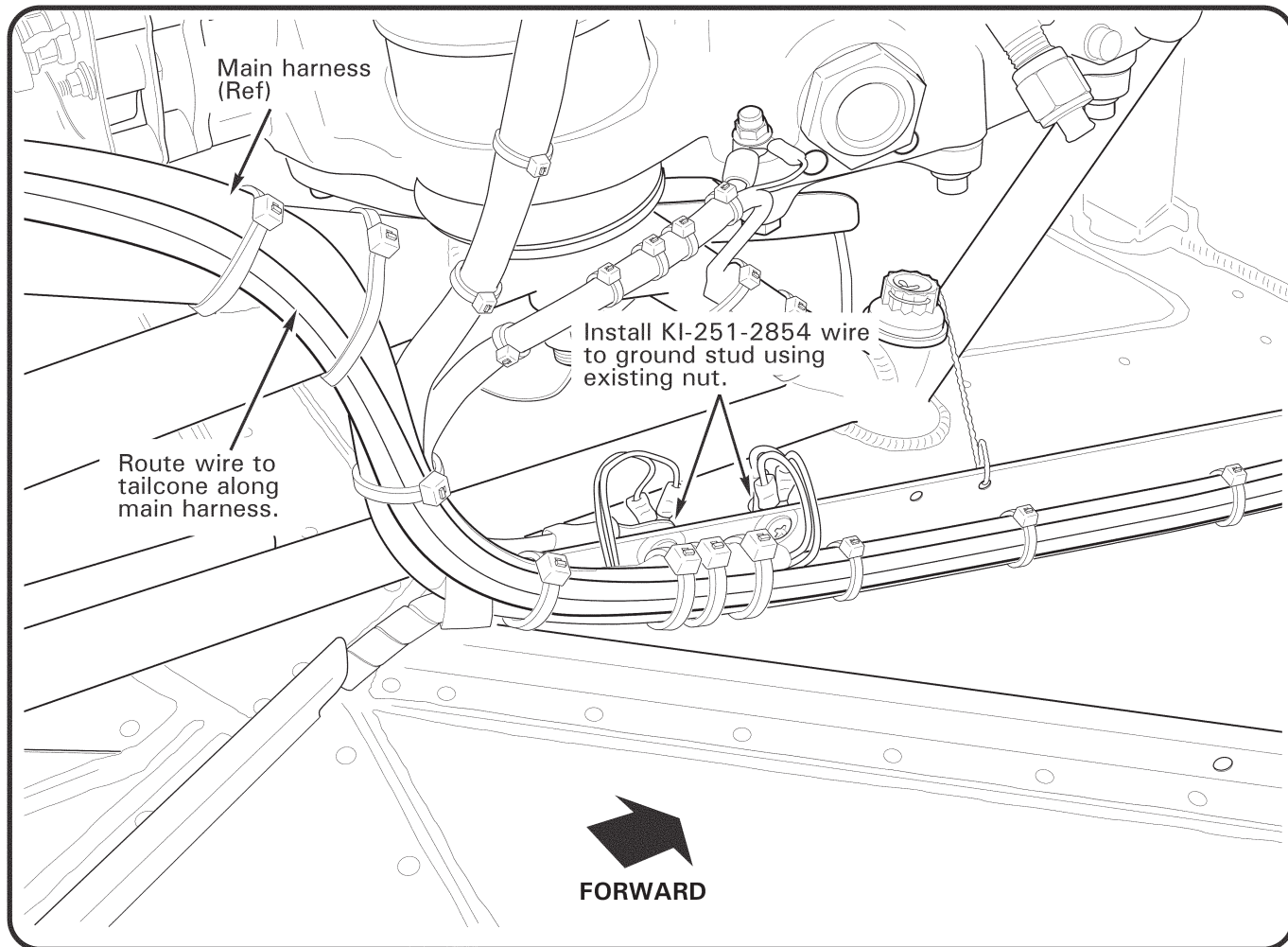
Parenthetic dash numbers, such as (-2388), indicate number marked on wiring.

**3. R44-series helicopters:** Refer to Figure 1. Gain access as necessary.

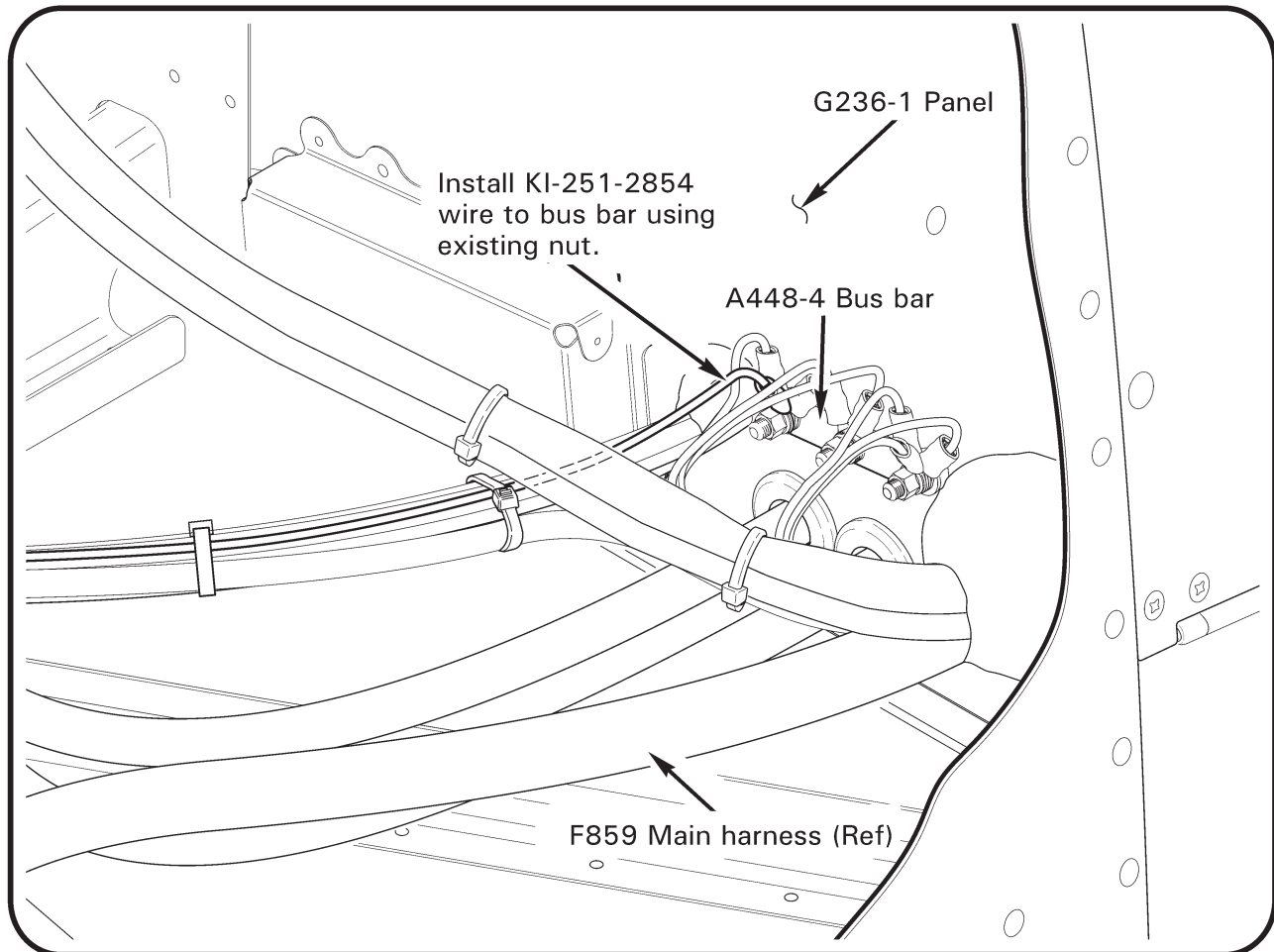
- a. Install KI-251-2854 wire assembly ring terminal to least populated ground stud located on stiffener near right side of main rotor gearbox and secure with existing nut.
- b. Locate wire (-2388) connector at right-hand side of upper frame. Remove spirap and release pin from B263-11 housing. Discard housing.
- c. Route KI-251-2854 wire aft along main harness to wire (-2388). Trim wire (-2854) to length. Strip wire (-2854) and crimp B263-2 socket on wire. Perform crimp inspection per R44 Maintenance Manual §23-84. Verify security of socket.

**R66 helicopters:** Refer to Figure 2. Gain access as necessary.

- a. Install KI-251-2854 wire assembly ring terminal to least populated ground stud located at A448 bus bar on aft-side of G236-1 panel and secure with existing nut.
  - b. Locate wire (-2388) connector at right-hand side of upper frame. Remove spirap and release pin from B263-11 housing. Discard housing.
  - c. Route KI-251-2854 wire aft along wire bundle (as shown in Figure 2) to wire (-2388). Trim wire (-2854) to length. Strip wire (-2854) and crimp B263-2 socket on wire. Perform crimp inspection per R66 Maintenance Manual § 20-94. Verify security of socket.
4. Refer to Figure 3. Install wire (-2854) socket in position 2 of B263-13 housing (supplied) and existing wire (-2388) socket in position 1. Verify security of sockets in housing. Slide B158-8-1 heat shrink over housing wire entrance and apply heat.
  5. Wrap wires with B161-2 spirap as required. Connect housing to corresponding plug on new C023 tailcone. Secure wire (-2854) to main harness or wire bundle with appropriately-sized ty-raps.
  6. Push in all circuit breakers. Turn BATTERY and strobe switches on and verify both strobes function. Turn strobe and battery switches off.
  7. Install tailcone cowling. Connect ELT antenna lead to antenna mounted to tailcone cowling assembly, as required.
  8. Make appropriate maintenance record entries. No change to Weight and Balance Record is required.



**FIGURE 1 R44 Ground stud location**

**FIGURE 2 R66 Bus bar ground location**

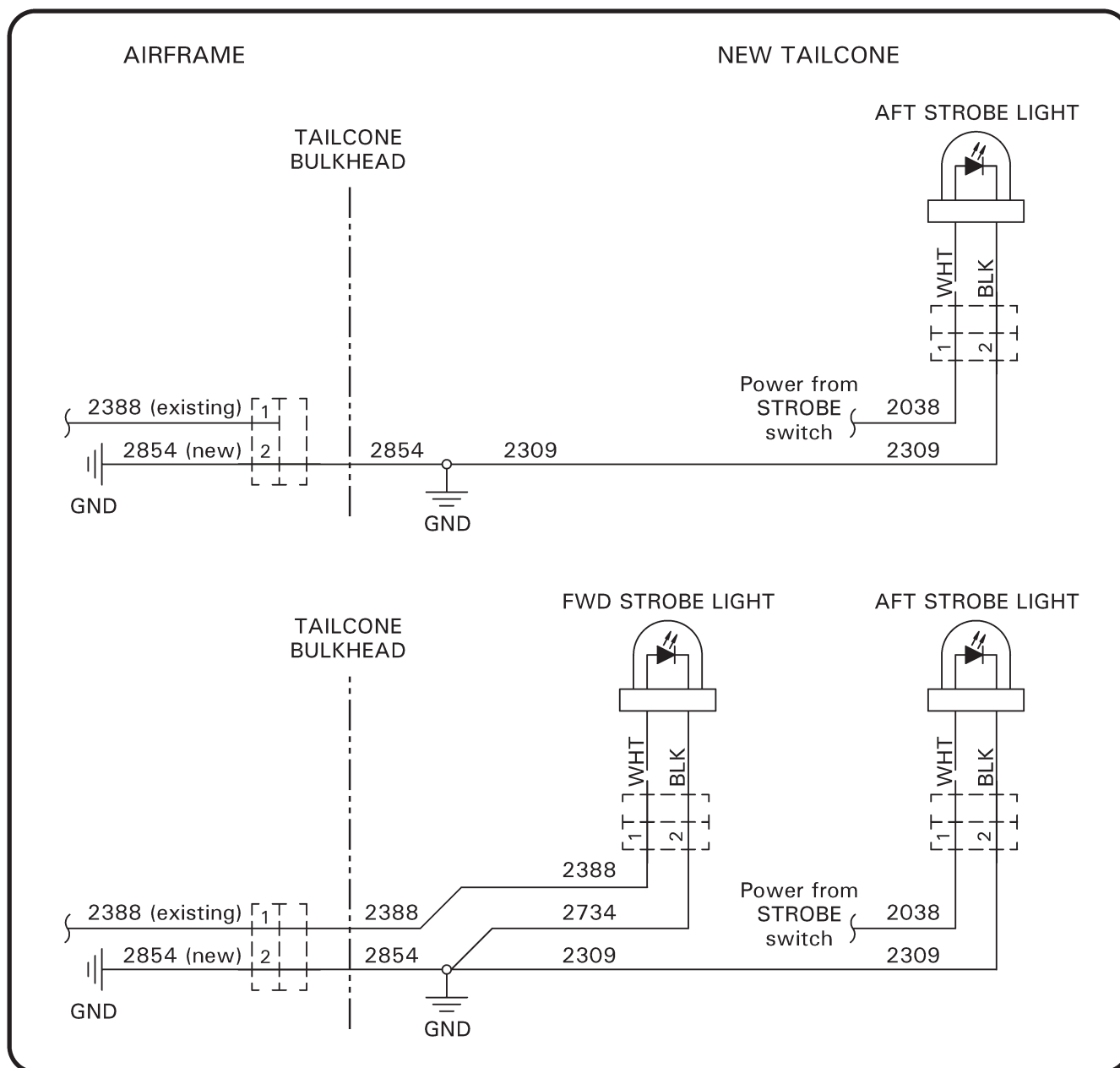


FIGURE 3 Wiring schematic