# R44-series & R66-series 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 <a href="www.robinsonheli.com">www.robinsonheli.com</a> 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   | 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 Figure 2. Verify security of socket.

**R66-series helicopters:** Refer to Figure 3. Gain access as necessary.

- d. 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.
- e. Locate wire (-2388) connector at right-hand side of upper frame. Remove spirap and release pin from B263-11 housing. Discard housing.
- f. Route KI-251-2854 wire aft along wire bundle (as shown in Figure 3) to wire (-2888). Trim wire (-2854) to length. Strip wire (-2854) and crimp B263-2 socket on wire. Perform crimp inspection per Figure 2. Verify security of socket.
- 4. Refer to Figure 4. 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.

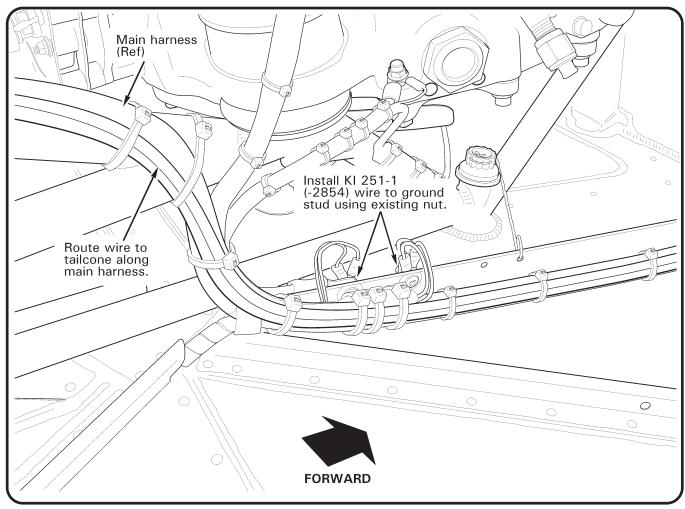


FIGURE 1 R44 Ground stud location

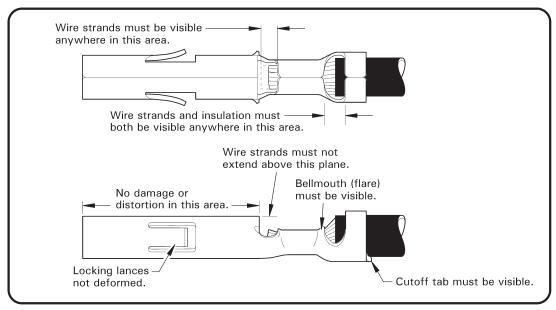


FIGURE 2 Crimp Inspection (installed socket shown)

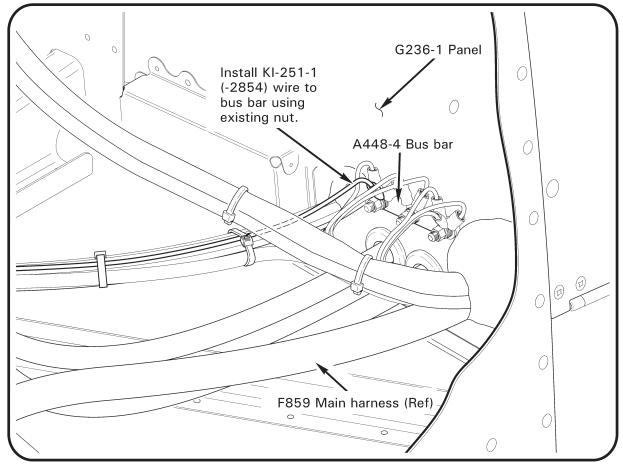


FIGURE 3 R66 Bus bar ground location

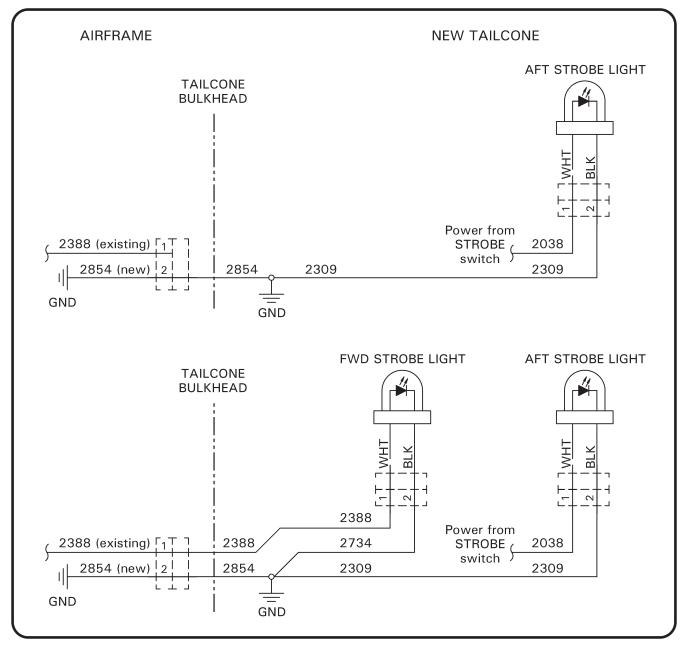


FIGURE 4 Wiring schematic