

R44-series Low Voltage Alternator Light Upgrade Kit Instructions

Kit installs low voltage module to improve voltage drop detection. Module warns of low voltage condition by illuminating the ALT light if voltage drops below alternator voltage. Eligible for installation on R44 S/N 2624 thru 2421, Cadet S/N 30070 & prior, and R44 II S/N 14411 & prior. Helicopter must be equipped with 28V system.

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-265-4Instr.	Kit Instructions	1
2	B261-2	Butt Splice	2
3	F693-8	Harness Assembly – Low Voltage Sensor	1
4	305183	Pin & Socket Extractor – Amp	1
5	XSSVS-0802	Low Voltage Sensor	1
6	MS3367-4-9+	Ty-rap (Note: “+” in part number indicates 20-qty pack)	1
7	MS3367-7-9+	Ty-rap (Note: “+” in part number indicates 10-qty pack)	1

Special Tools

- Wire stripping and crimping tools

Kit Instructions

1. Turn BATTERY switch OFF. Disconnect or remove lead-acid battery per R44 Maintenance Manual (MM) § 37-11 or lithium-ion battery per MM § 37-12, as applicable.
2. Remove RH aft seat back assembly per MM § 15.220.
3. Refer to R44 Illustrated Parts Catalog (IPC) Figure 71-63. Locate A942-4 alternator control unit (ACU) and carefully remove both ty-raps from ACU-to-airframe harness connection. Disconnect the housing. Remove all ty-raps securing airframe harness wires (-199), (-18), & (-507).
4. Refer to Figures 1 & 2. Locate wire (-18) in wire bundle attached to B263-19 housing, cutting ty-raps as required. Splice F693-8 harness assemblies' wire (-3060) to wire (-18) using B261-2 butt splice; verify security.
5. Locate wire (-507) in wire bundle attached to B263-19 housing, cutting ty-raps as required. Splice F693-8 harness assemblies' wire (-2895) to wire (-507) using B261-2 butt splice; verify security.
6. Using pin extractor, extract pin of wire (-199) from B263-19 housing at pin location 4. Connect ACU to airframe harness connection.

Kit Instructions (continued)

7. Cut wire (-199) to length, ensuring wire has sufficient slack to F693-8 harness assembly's B261-2 butt splice without pre-loading wire; strip wire end. Crimp wire (-199) to B261-2 butt splice; verify security.
8. Route F693-8 harness assembly's wire (-3059) to ground stud on C351-2 RH aft seat back brace. Install ring terminal to ground stud.
9. Connect XSSVS-0802 Low voltage sensor to F693-8 harness assembly.
10. Secure F693-8 harness assembly and sensor along main harness using appropriately-sized ty-raps. Cinch ty-raps until snug without over-tightening, and trim tips flush with head.
11. Install RH aft seat back assembly per MM § 15.220.
12. Connect or install lead-acid battery per MM § 37-11 or lithium-ion battery per MM § 37-12, as applicable.
13. Make appropriate maintenance record entries. Weight and Balance change is negligible.

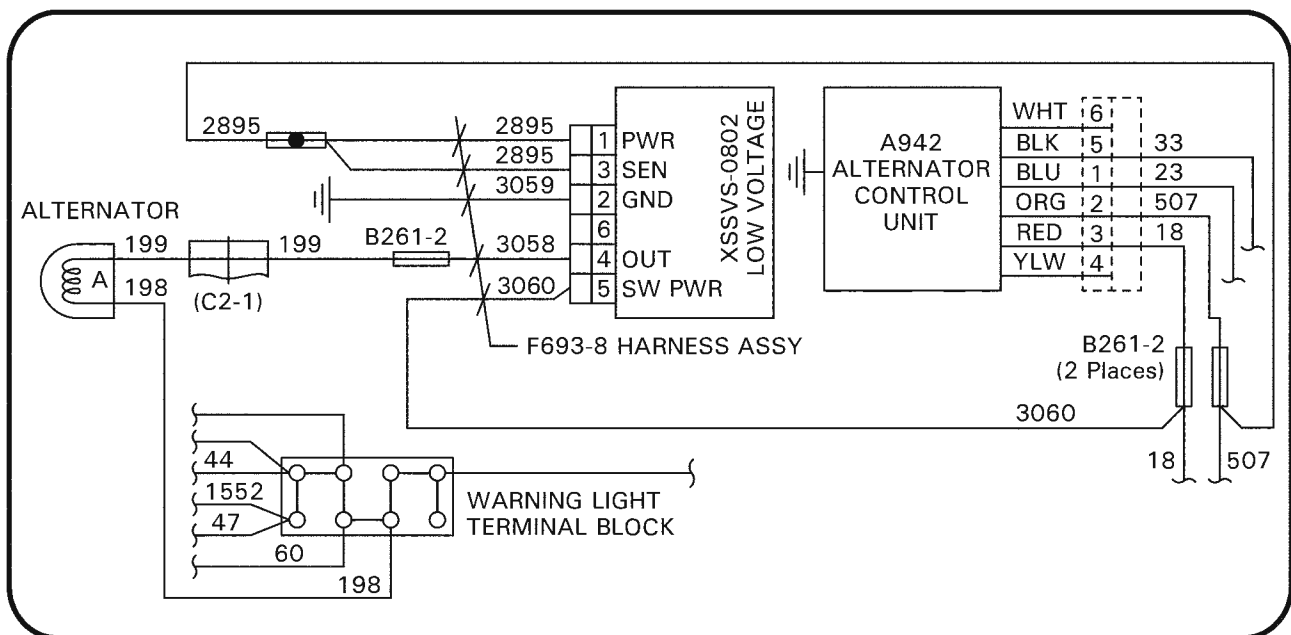


FIGURE 1

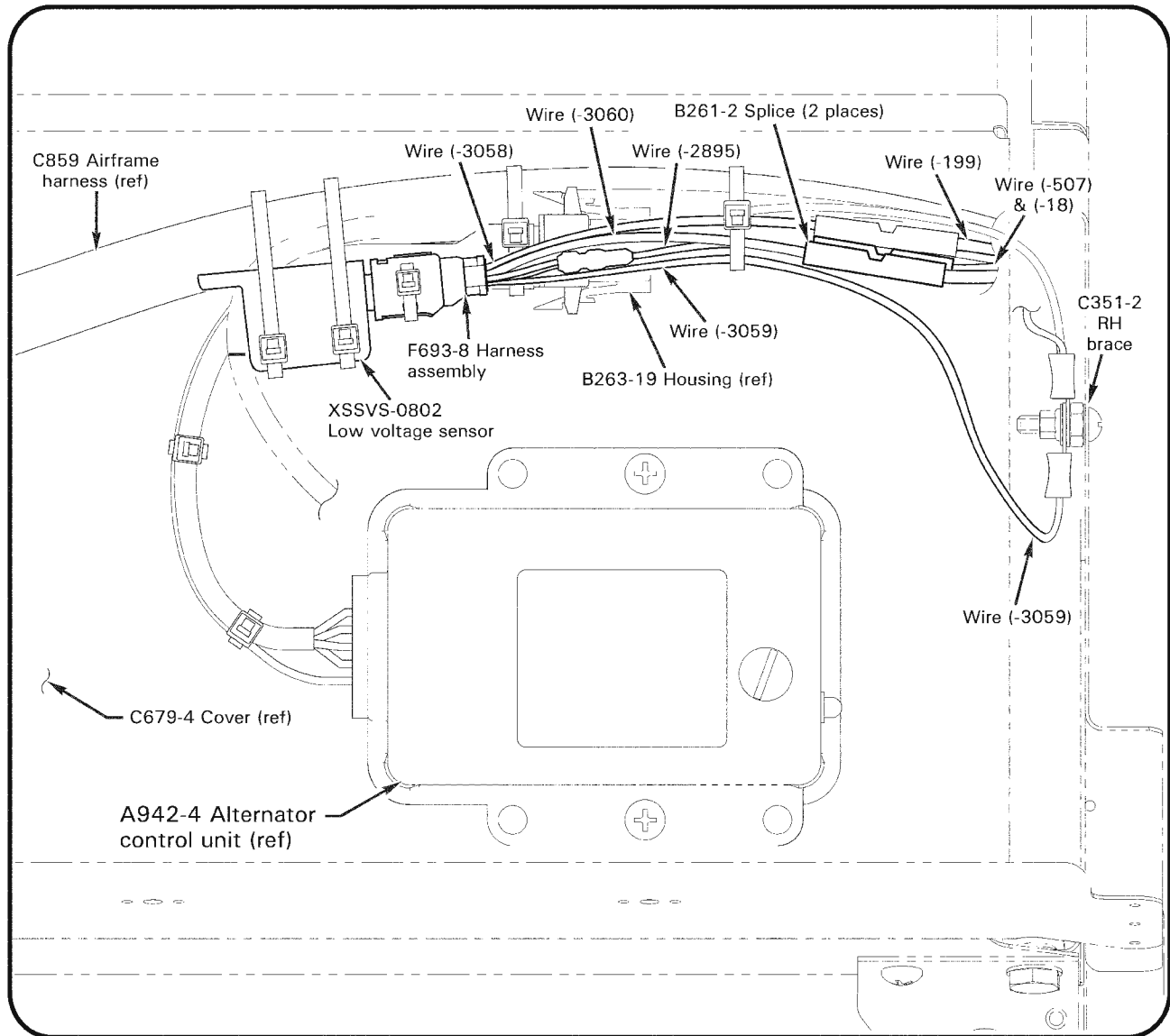


FIGURE 2 F693-8 Harness assembly installation
(view looking down with RH aft seat back assembly removed)