

**R44-series Full Throttle Caution Light Kit Instructions**  
*For compliance with R44 Service Letter SL-52*

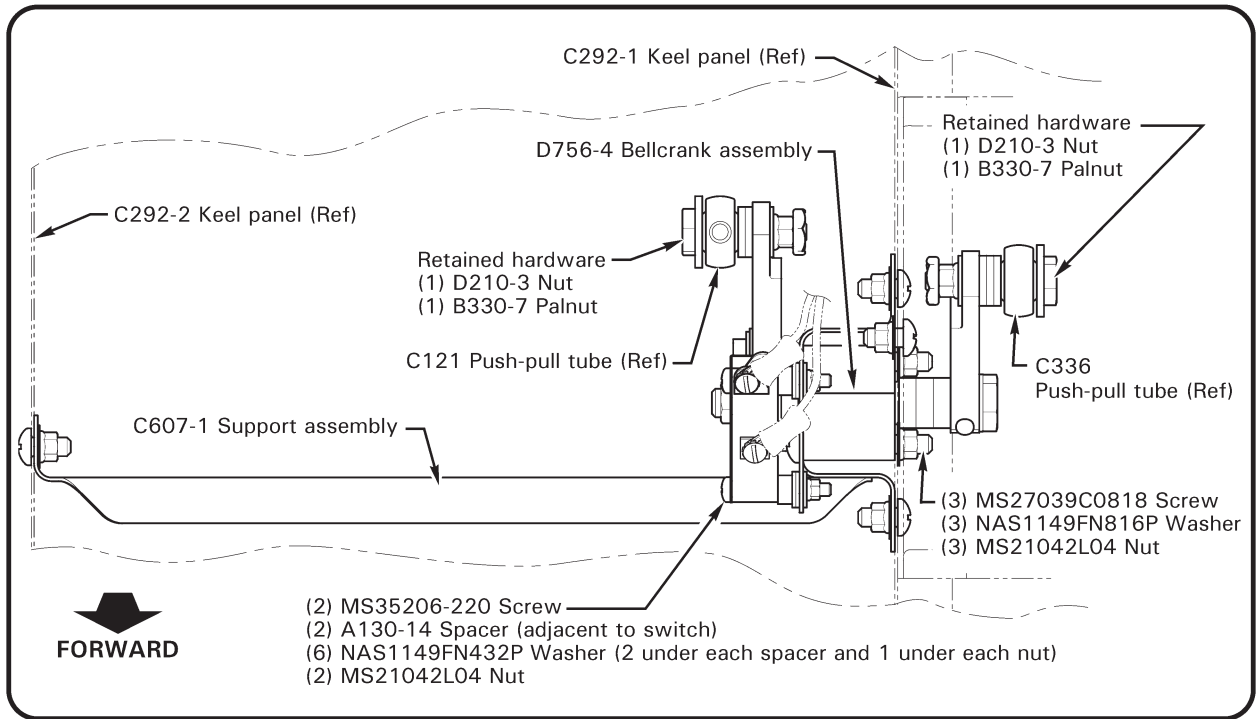
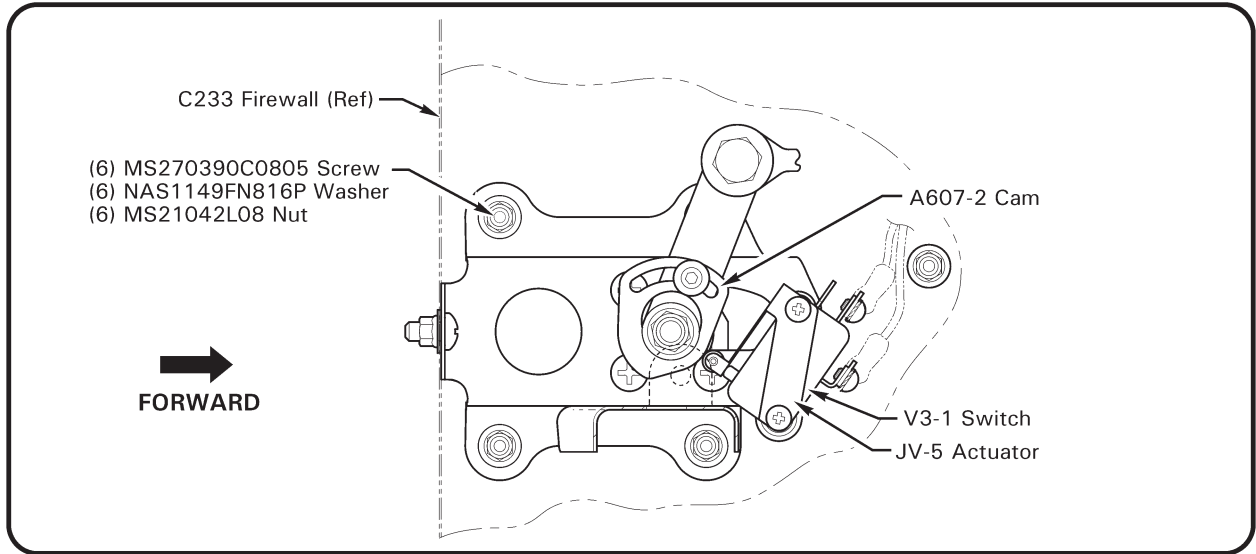
**NOTE**

Visit [www.robinsonheli.com](http://www.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 PER KI-218-2A	QTY PER KI-218-2B
1	KI-218-2Instr.	Kit Instructions . . . . .	1	1
2	A130-14	Spacer . . . . .	2	2
3	B196-1	Lamp (14V) . . . . .	1	1
4	B196-21	Lamp (28V) . . . . .	1	1
5	B198-1	Light – Indicator (Amber) . . . . .	1	1
6	B330-7	Palnut . . . . .	2	2
7	B806-3	Decal – “FULL THROTTLE” . . . . .	1	1
8	C607-1	Support Assembly . . . . .	0	1
9	D210-3	Nut . . . . .	2	2
10	D756-4	Bellcrank Assembly (revision F or subsequent) . . . . .	0	1
11	D828-2	Wire Harness . . . . .	1	1
12	JV-5	Actuator . . . . .	1	1
13	V3-1	Switch . . . . .	1	1
14	MS21042L04	Nut . . . . .	2	2
15	MS21042L08	Nut . . . . .	0	9
16	MS27039C0805	Screw . . . . .	0	9
17	MS27039C0818	Screw . . . . .	0	3
18	MS3367-4-9+	Ty-Rap (Note: “+” in part number indicates 20-qty pack) . . . . .	1	1
19	MS3367-5-9+	Ty-Rap (Note: “+” in part number indicates 20-qty pack) . . . . .	1	1
20	MS35206-220	Screw . . . . .	2	2
21	NAS1149FN432P+	Washer (Note: “+” in part number indicates 20-qty pack) . . . . .	1	1
22	NAS1149FN816P+	Washer (Note: “+” in part number indicates 20-qty pack) . . . . .	0	1

**Kit Instructions**

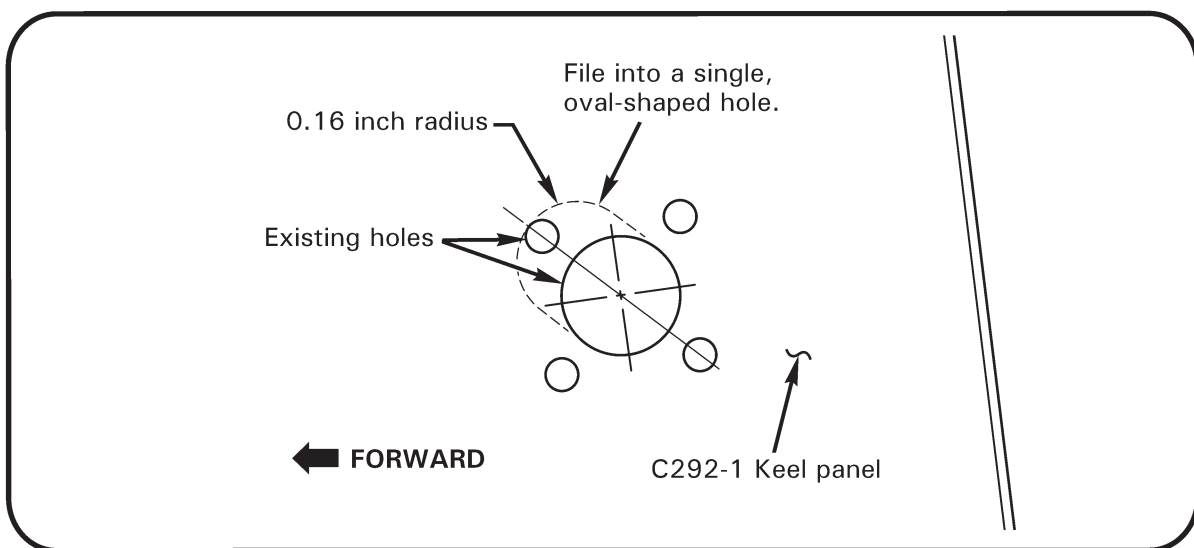
1. Turn battery switch off. Disconnect battery per R44 Maintenance Manual (MM) § 37-10.
2. Remove belly panels, C606-5 cover (under aft left seat), and C474-2 horizontal cover (between aft seats). Open instrument console.



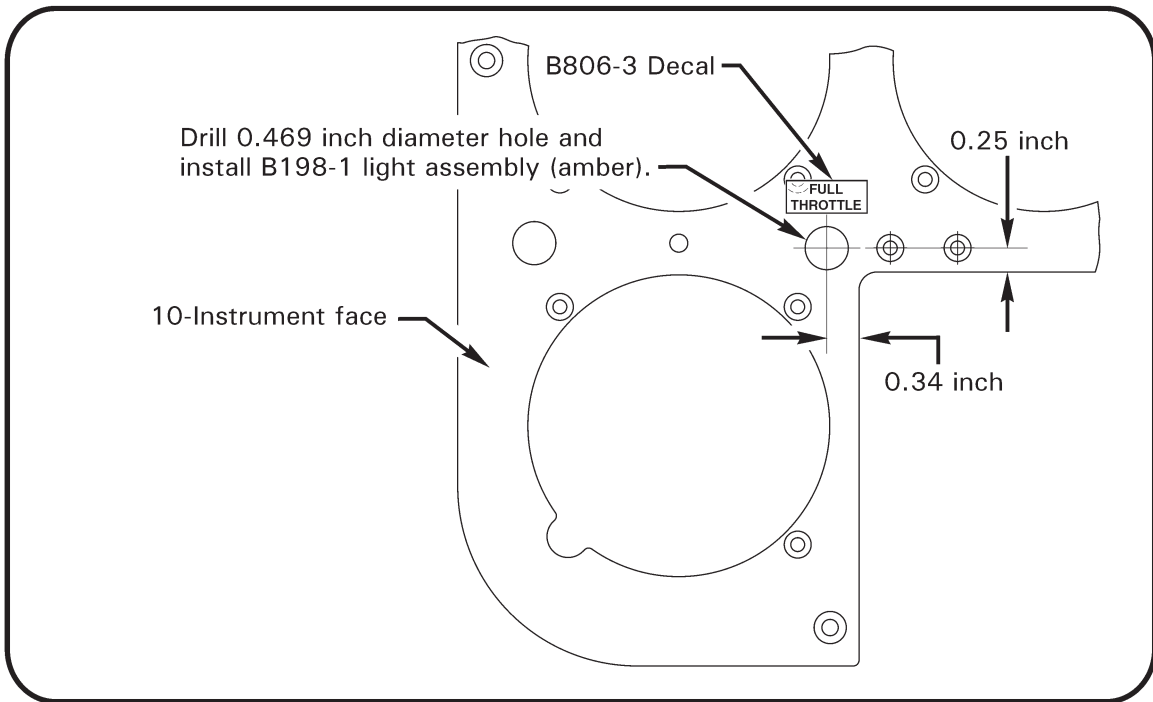
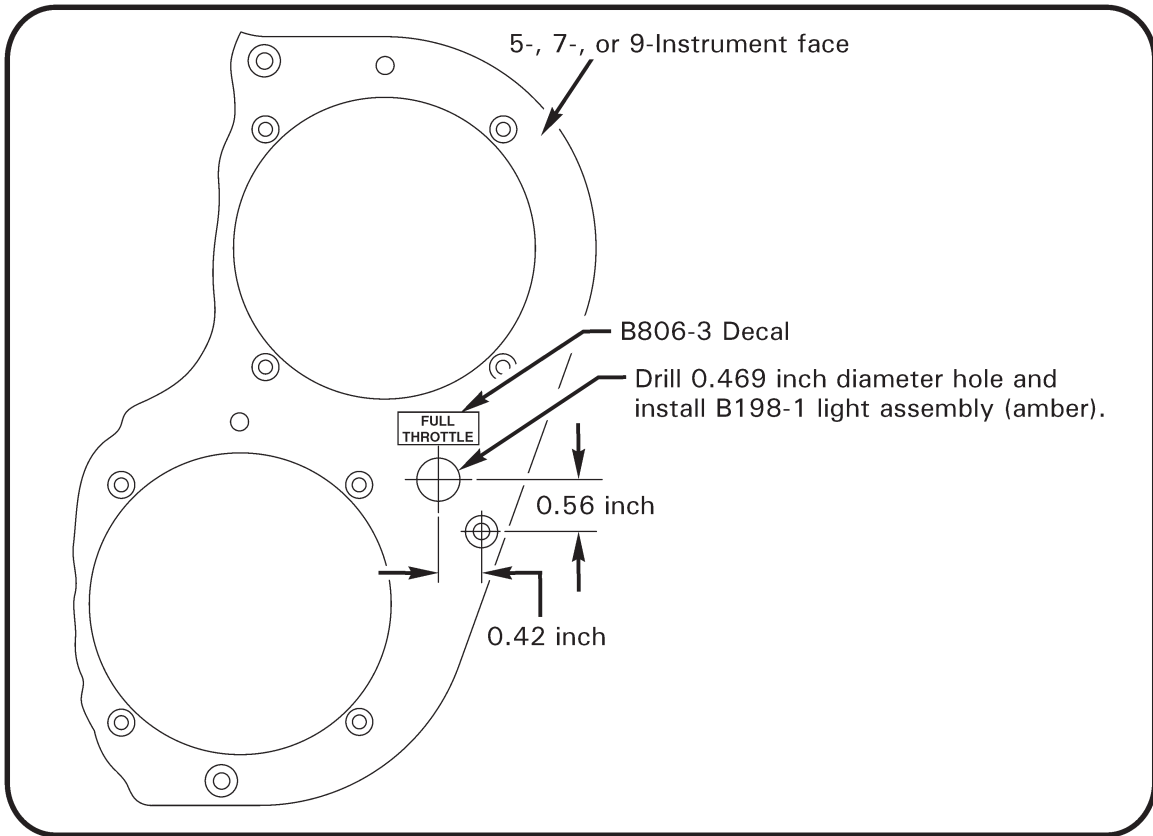
**FIGURE 1**

**Kit Instructions (continued)**

3. Refer to Figure 1. If D756-4 bellcrank assembly does not include A607-2 cam:
  - a. Remove and retain hardware securing C121 and C336 push-pull tubes to bellcrank. Remove and discard safety wire and spring pin securing bellcrank's outboard arm. Disassemble and discard bellcrank assembly. Also, remove and discard C607-1 support and attaching hardware.
  - b. Lay out hole dimensions in C292-1 keel panel per Figure 2. Cut and file existing holes in panel into a single, oval-shaped hole as shown. Solvent clean then epoxy prime bare metal.
  - c. Refer to Figure 1. Insert D756-4 revision F or subsequent bellcrank assembly's outboard arm thru hole in keel panel. Position new C607-1 support assembly on bellcrank and install three fasteners securing support and bellcrank to panel, finger tight.
  - d. Cleco (sheet metal fastener) support to keel panels. Progressively remove clecos and match drill four 0.170-inch diameter holes in support thru C292-1 panel. Cleco support and match drill two 0.170-inch diameter holes in support thru firewall. Remove clecos and support and deburr new holes. Remove drilling debris. Solvent clean then epoxy prime bare metal.
  - e. Install hardware securing support and bellcrank, standard torque per MM § 23-32, and torque stripe per Figure 2-1.
  - f. Install hardware securing push-pull tubes to bellcrank; use retained hardware but install new D210-3 nuts and B330-7 palnuts. Standard torque hardware per MM § 23-32 and torque stripe per Figure 2-1.
4. Refer to Figure 4. Disconnect D828-2 harness at connectors and set aside console portion.
5. Refer to Figures 1 and 4. Attach D828-2 harness's -2487 and -2488 wires to V3-1 switch and remove and discard switch's NC terminal screw and washer. Install switch and JV-5 actuator on support as shown. Verify security.



**FIGURE 2**



**FIGURE 3**

**Kit Instructions (continued)**

6. Open circuit breaker panel. Route -2487 wire to WARN LTS breaker. Remove and discard existing screw and secure -128 and -2487 wire terminal(s) to breaker using new MS35206-226 screw. Secure wires to airframe harness using MS3367 ty-raps as required. Cinch ty-raps until snug without over tightening, and trim tips flush with heads. Close and secure panel.

**CAUTION**

Protect instrumentation using foam padding or equivalent. Handle instruments like eggs.

7. Remove warning and caution lights from lower panel as required. Remove perimeter screws securing face to console and pull face aft. Remove instruments from face and place on foam padding, but do not disconnect wiring, pitot/static lines, or MAP lines. Disconnect post lights.

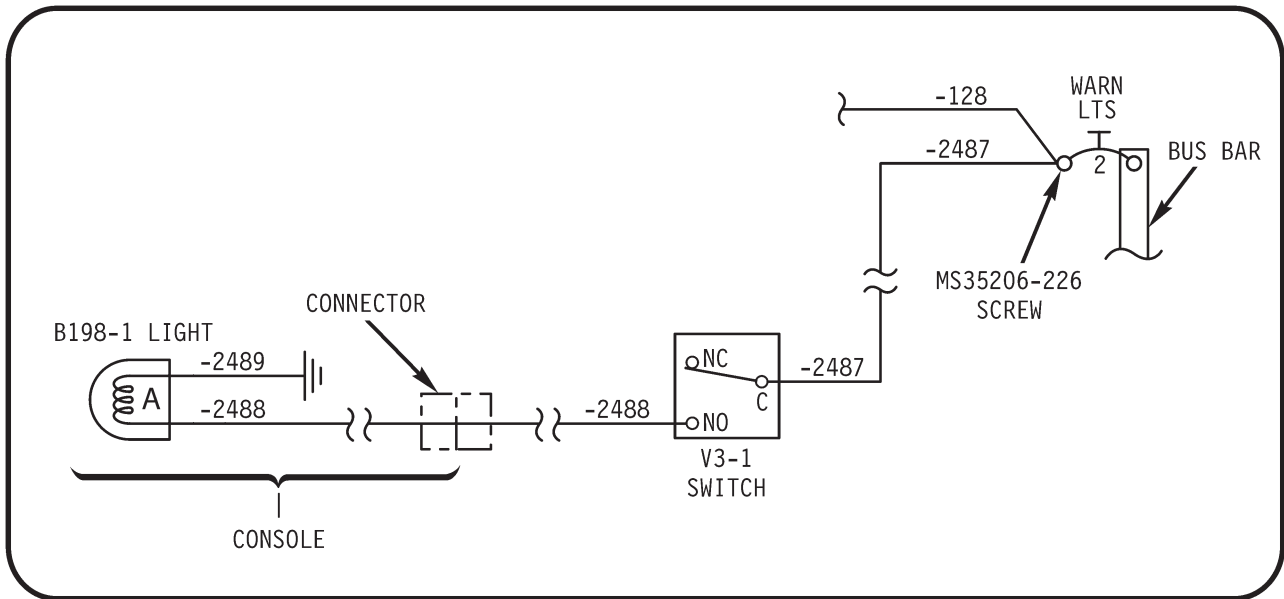
**CAUTION**

Do not drill instrument face with instruments installed. Protect area from drilling debris.

8. Refer to Figure 3. Lay out hole in face. Drill one 0.098-inch diameter pilot hole and enlarge to 0.469-inch diameter hole using a step-up drill bit. Remove drilling debris and deburr hole.
9. Refer to R44 Illustrated Parts Catalog (IPC) Figure 95-65. Install B196-1 (14V) or B196-21 (28V) lamp in B198-1 light, install light (do not overtighten), and verify security. Attach the console portion of D828-2 harness's -2488 and -2489 wires to light (polarity not critical).
10. Install instruments as removed and verify security. Connect post lights. Secure face to console and verify security. Verify wires are not pinched between face and attaching tabs. Verify adequate clearance between light and surrounding structure.
11. Route -2489 wire to console's ground bus and attach to stud with the fewest wires. Route -2488 wire from light and -2488 wire from switch to console connectors and connect wires. Secure wires to console and airframe harness using MS3367 ty-raps as required. Cinch ty-raps until snug without overtightening, and trim tips flush with heads.
12. Install warning and caution lights in lower panel if removed.
13. Verify freedom of flight controls thru full-range of travel, and no contact with wiring.
14. Verify battery switch is off. Connect battery per MM § 37-10.
15. Adjust full throttle caution light and verify rigging per MM § 37-70. Install C606-5 cover.

**Kit Instructions (continued)**

- 16. Install C474-2 cover and belly panels. Close and secure console.
- 17. Refer to Figure 3. Install B806-3 decal as shown.
- 18. Make appropriate maintenance record entries. Weight and balance change is negligible.



**FIGURE 4**