

R44-series & R66 (Halotron BrX) Fire Extinguisher Conversion Kit Instructions

Kit provides instructions to replace (Halon) B381-1 or -2 fire extinguisher assembly and strap & pocket assembly or metal bracket, with (Halotron BrX) B381-4 (vendor p/n M-900) fire extinguisher assembly and B381-5 bracket. If helicopter is equipped with a fire extinguisher mounted forward of co-pilot tail rotor control pedals, perform R44 SB-107 (current revision). Alternatively, kit may be used to install a new (Halotron BrX) B381-4 fire extinguisher assembly in helicopters not previously equipped with a fire extinguisher assembly. Kit is not eligible for installation on Police- or ENG-configured helicopters, or helicopters equipped with floor-mounted pilot-side FM X'CVR or IC-M330 X'VCR installations.

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 Support if parts are missing or damaged.

NOTE

Installation of this kit requires removal of adhered carpet, which may result in damage to carpet material. Additionally, this conversion will leave existing holes in carpet exposed. This kit does not include replacement interior components.

ITEM	PART NUMBER	KIT CONTENTS	QTY
1	KI-298-20Instr.	Kit Instructions	1
2	B340-4	Nut	2
3	B340-8	Nut	2
4	B381-4	Extinguisher	1
5	B381-5	Bracket (for B381-4 extinguisher)	1
6	AN525-10R7	Screw	2
7	AN526C832R6	Screw	2
8	NAS1149FN816P	Washer	2
9	NAS1149F0332P	Washer	2

Consumables

Refer to R66 Maintenance Manual (R66 MM) § 20-70 or R44 Maintenance Manual (R44 MM) § 23-70 for approved materials list.

- B270-8 Adhesive

Kit Instructions

1. Ensure ignition switch is OFF; remove key. If equipped with lead-acid battery, disconnect battery per R44 MM § 37-11 Part A or R66 MM § 96-11 Part A. If equipped with lithium-ion battery, disconnect battery per R44 MM § 37-12 Part B or R66 MM § 96-12 Part B. If not previously accomplished, remove existing fire extinguisher from strap and pocket assembly, or metal bracket.

Kit Instructions (continued)

2. For helicopters equipped with (Halon) B381-1 or -2 fire extinguishers only: Perform **A** or **B** below, as applicable:
 - A. Outboard location (refer to R66 Illustrated Parts Catalog [R66 IPC] Figure 25-21 or R44 Illustrated Parts Catalog [R44 IPC] Figure 25-37)
 - i. Remove hardware securing B381-3 bracket and discard bracket. With screw heads outboard, install (2) AN526C832R6 screws, (2) NAS1149FN816P washers, and (2) B340-4 nuts.
 - ii. Proceed to step 3.
 - B. Inboard location (refer to R44 IPC Figure 25-39)
 - i. **Metal bracket removal:**
 - a. Open circuit breaker panel.
 - b. Remove hardware securing B381-3 bracket and discard bracket. Existing holes may be left empty.
 - c. Verify circuit breaker enclosure is free of debris. Close and secure circuit breaker panel.
 - d. Proceed to step 3.
 - ii. **Fabric pocket and strap removal:**
 - a. Open circuit breaker panel. Hinge copilot seat forward to gain access to aft side of fire extinguisher mounting location. Protect wiring as required and ensure storage compartment is clear before drilling.
 - b. Using a drill stop, drill out rivets securing fabric pocket and strap assembly. Remove and discard fabric pocket and strap.
 - c. Verify circuit breaker enclosure and storage compartment are free of debris. Close and secure circuit breaker panel and hinge copilot seat closed.
 - d. Proceed to step 3.
3. Refer to Figure 1. Remove carpet as required.

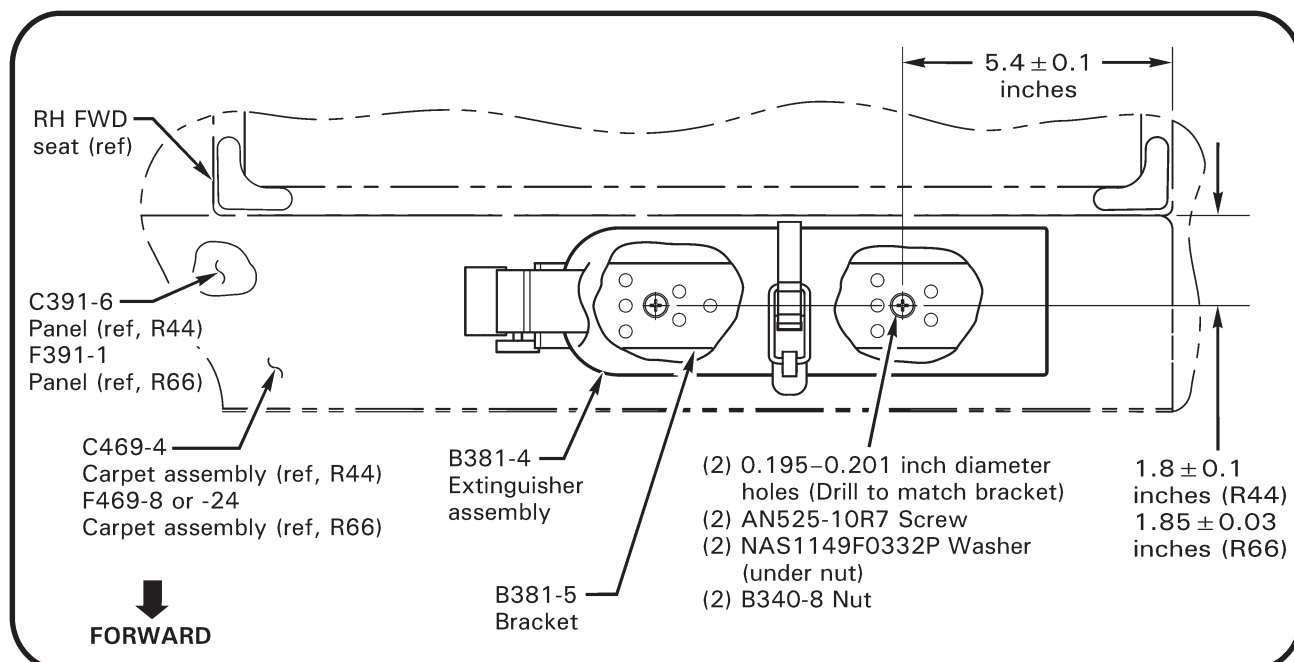
Kit Instructions (continued)

FIGURE 1 B381-5 Bracket Installation
(view looking down)

4. Position B381-5 bracket on panel as shown and mark mounting hole locations with a permanent marker. Remove bracket. Using drill stop, drill (2) 0.195 – 0.201 inch diameter holes at marked locations. Protect wiring as required. Deburr holes and clean up debris.

NOTE

RH forward seat may be removed to allow additional work space; removal of seat is at installer's discretion.

5. Refer to R66 MM § 25-30 or R44 MM § 15.300. Install carpet using B270-8 adhesive. Hinge pilot seat forward to gain access to aft side of (R66) F391-1 RH panel or (R44) C391-6 RH panel.
6. Using a pick or similar tool, pierce carpet at newly drilled holes. Install B381-5 bracket using (2) AN525-10R7 screws, (2) NAS1149F0332P washers, and (2) B340-8 nuts.
7. Verify G654-23 decal is installed on extinguisher and log fire extinguisher weight. Install extinguisher and latch bracket.
8. If equipped with lead-acid battery, reconnect battery per R44 MM § 37-11 Part B or R66 MM § 96-11 Part B. If equipped with lithium-ion battery, reconnect battery per R44 MM § 37-12 Part C or R66 MM § 96-12 Part C.
9. Revise helicopter's Weight and Balance Record in Pilot's Operating Handbook (POH) Section 6 to reflect this installation by incorporating the following data, as applicable.

Kit Instructions (continued)
Removal:
For R66:

Item	Weight	Long. Arm	Long. Moment	Lat. Arm	Lat. Moment
Outboard Inst'l, B381-1 (RT-A400) fire extinguisher & metal bracket assembly	-1.44 lb	22.50 in.	-32.40 in-lb	-21.54 in.	31.02 in-lb

For R44-series:
(select appropriate fire extinguisher & location)

Item	Weight	Long. Arm	Long. Moment	Lat. Arm	Lat. Moment
Outboard Inst'l, B381-1 (RT-A400) fire extinguisher & metal bracket assembly	-1.44 lb	23.50 in.	-33.84 in-lb	-20.00 in.	28.80 in-lb
Inboard Inst'l, B381-1 (RT-A400) fire extinguisher & metal bracket assembly	-1.44 lb	34.11 in.	-49.12 in-lb	-9.06 in.	13.05 in-lb
Inboard Inst'l, B381-2 (RT-A600) fire extinguisher & metal bracket assembly	-1.89 lb	34.10 in.	-64.45 in-lb	-6.67 in.	12.61 in-lb

Item	Weight	Long. Arm	Long. Moment	Lat. Arm	Lat. Moment
Horizontal Inboard Inst'l, B381-1 (RT-A400) with fabric pocket & strap assemblies	-1.13 lb	34.11 in.	-38.54 in-lb	-6.67 in.	7.54 in-lb
Horizontal Inboard Inst'l, B381-2 (RT-A600) with fabric pocket & strap assemblies	-1.59 lb	34.10 in.	-54.22 in-lb	-6.67 in.	10.61 in-lb
Vertical Inboard Inst'l, B381-1 (RT-A400) with fabric pocket & strap assemblies	-1.13 lb	34.11 in.	-38.54 in-lb	-2.57 in.	2.90 in-lb
Vertical Inboard Inst'l, B381-2 (RT-A600) with fabric pocket & strap assemblies	-1.59 lb	34.10 in.	-54.22 in-lb	-2.57 in.	4.09 in-lb

Installation:**For R66:**

Item	Weight	Long. Arm	Long. Moment	Lat. Arm	Lat. Moment
B381-4 (M-900) fire extinguisher & metal bracket assembly	3.38 lb	37.32 in.	126.14 in-lb	11.16 in.	37.72 in-lb

For R44-series:

Item	Weight	Long. Arm	Long. Moment	Lat. Arm	Lat. Moment
B381-4 (M-900) fire extinguisher & metal bracket assembly	3.38 lb	37.73 in.	127.53 in-lb	11.15 in.	37.69 in-lb

10. Make appropriate maintenance record entries.