

R22-series (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 R22 SB-118 (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.

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-298-10Instr.	Kit Instructions	1
2	B340-4	Nut	2
3	B381-4	Extinguisher	1
4	B381-5	Bracket (for B381-4 extinguisher)	1
5	D210-3	Nut	2
6	AN525-10R9	Screw	2
7	AN526C832R6	Screw	2
8	AN970-3	Washer	2
9	NAS1149FN816P	Washer	2

Consumables

Refer to R22 Maintenance Manual (R22 MM) § 23-70 for approved materials list.

- A701-1 Aluminum Tape
- B270-8 Adhesive

Kit Instructions

1. Ensure ignition switch is OFF; remove key. Disconnect battery per R22 MM § 33-10 Part A. If not previously accomplished, remove 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 required.

A. For outboard location (refer to R22 Illustrated Parts Catalog [R22 IPC] Figure 25-15):

- 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. For inboard location (refer to R22 IPC Figure 25-17 and KI-281-1):

- i. Gain access to aft side of A350-1 LH panel by removing A475-2 cross tube cover.
- ii. Remove hardware securing B381-3 bracket, or using a drill stop, drill out rivets securing fabric pocket and strap assemblies; discard bracket or pocket and strap assemblies.
- iii. Clean aft side of A350-1 LH panel around holes and install 0.5-inch strip of A701-1 aluminum tape covering each hole.
- iv. Proceed to step 4.

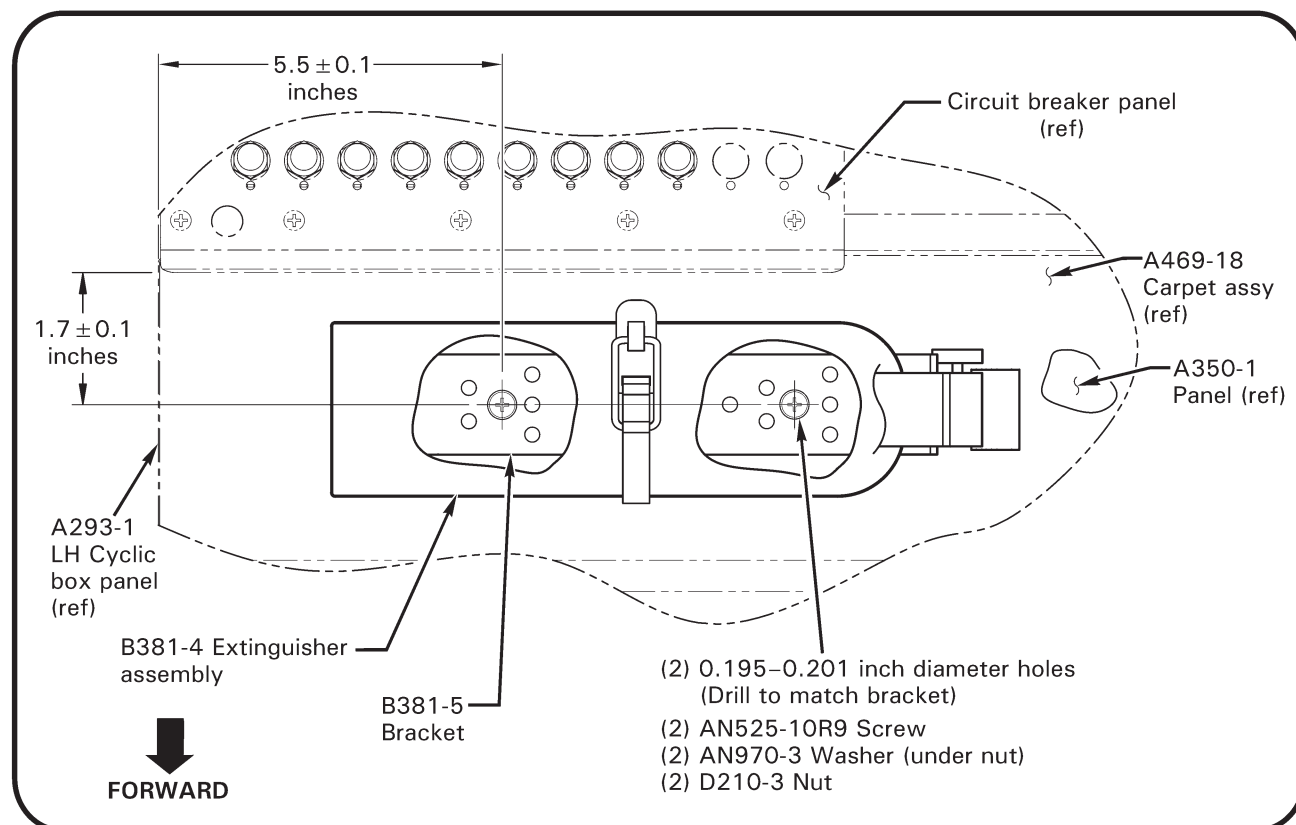


FIGURE 1 B381-5 Bracket Installation
(view looking down)

Kit Instructions (continued)

3. Refer to Figure 1. Gain access to aft side of A350-1 LH panel by removing A475-2 cross tube cover.
4. Open circuit breaker panel. Remove carpet from A350-1 panel as required.
5. Position B381-5 bracket on A350-1 panel as shown and mark mounting hole locations with a permanent marker. Remove bracket. Using a drill stop, drill (2) 0.195 – 0.201 inch diameter holes at marked locations. Deburr holes and clean up debris.
6. Refer to R22 MM § 15-30. Install carpet using B270-8 adhesive. Close and secure circuit breaker panel.
7. Refer to Figure 1. Using a pick or similar tool, pierce carpet at newly drilled holes. Install B381-5 bracket as shown using (2) AN525-10R9 screws, (2) AN970-3 washers, and (2) D210-3 nuts.
8. Install A475-2 cross tube cover.
9. Verify G654-23 decal is installed on extinguisher and log fire extinguisher weight. Install extinguisher and latch bracket.
10. Reconnect battery per R22 MM § 33-10 Part C.
11. 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.

Removal:

(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	51.40 in.	-74.02 in-lb	-17.00 in.	24.48 in-lb
Inboard Inst'l, B381-1 (RT-A400) fire extinguisher & metal bracket assembly	-1.44 lb	63.15 in.	-90.94 in-lb	-5.86 in.	8.44 in-lb
Inboard Inst'l, B381-2 (RT-A600) fire extinguisher & metal bracket assembly	- 1.89 lb	63.13 in.	-119.32 in-lb	-6.56 in.	12.40 in-lb

Kit Instructions (continued)**Removal (continued):**

Item	Weight	Long. Arm	Long. Moment	Lat. Arm	Lat. Moment
Inboard Inst'l, B381-1 (RT-A400) with fabric pocket & strap assemblies	-1.13 lb	63.15 in.	-71.36 in-lb	-2.57 in.	2.90 in-lb
Inboard Inst'l, B381-2 (RT-A600) with fabric pocket & strap assemblies	-1.59 lb	63.13 in.	-100.38 in-lb	-2.57 in.	4.09 in-lb

Installation:

Item	Weight	Long. Arm	Long. Moment	Lat. Arm	Lat. Moment
B381-4 (M-900) fire extinguisher & metal bracket assembly	3.39 lb	63.61 in.	215.64 in-lb	-13.47 in.	-45.68 in-lb

12. Make appropriate maintenance record entries.