

KI-229 R66 Camera Hole Installation Kit Instructions

Not compatible with: PA/Siren installation, Aux Fuel Tank provisions/installation, and ENG configuration.

CAUTION

Visit 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	DESCRIPTION	QTY
KIT CONTENTS			
1	KI-229 Instr.	Kit Instructions	1
2	A738-40	Gang Channel	4
3	B526-6	Screw	52
4	G682-13	Decal	2
5	G741-1	Stiffener	1
6	G741-2	Stiffener	1
7	G742-1	Cover	2
8	MS20426AD3-3+	Rivet (Note: "+" in part number indicates 50-qty pack)	1
9	MS20426AD4-4.5+	Rivet (Note: "+" in part number indicates 20-qty pack)	1
10	MS20615-3M2.5+	Rivet (Note: "+" in part number indicates 5-qty pack)	1
11	MS21069L08	Nutplate	12
12	MS21069L08K	Nutplate	8
13	NAS1097AD3-3.5+	Rivet (Note: "+" in part number indicates 50-qty pack)	1
14	NAS1097AD3-4+	Rivet (Note: "+" in part number indicates 50-qty pack)	1
15	NAS9301B-4-01	Rivet	8
16	NAS9301B-4-02	Rivet	6
17	CA3000-1P	Dimple Punch (3/32 inch)	1
18	CA3001-1P	Dimple Die (3/32 inch)	1

Special Tools

- Pneumatic or electric sheet-metal cutting tool

Consumables

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

- Alodine 1122, or Alodine 1201
- Epoxy primer

KI-229 Kit Instructions

1. Open baggage compartment door. Gently peel back floor liner per MM § 25-30 if installed.
2. Refer to Figure 2. If installed, drill out rivets securing G313-1 vent cover to F233-1 firewall and G024-1 floor. Discard cover; clean up debris. Install three MS20615-3M2.5 rivets in firewall to plug holes.

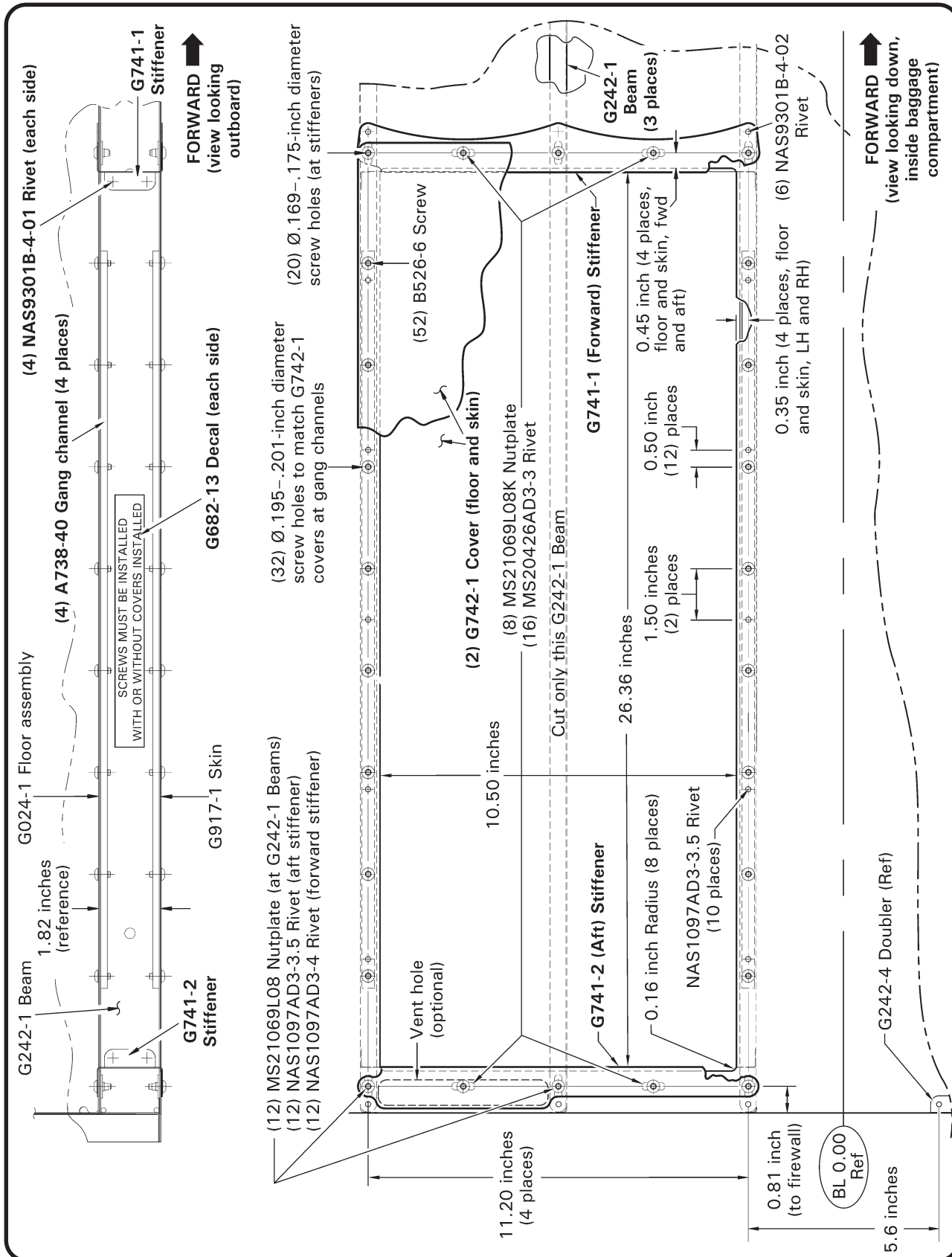


FIGURE 1

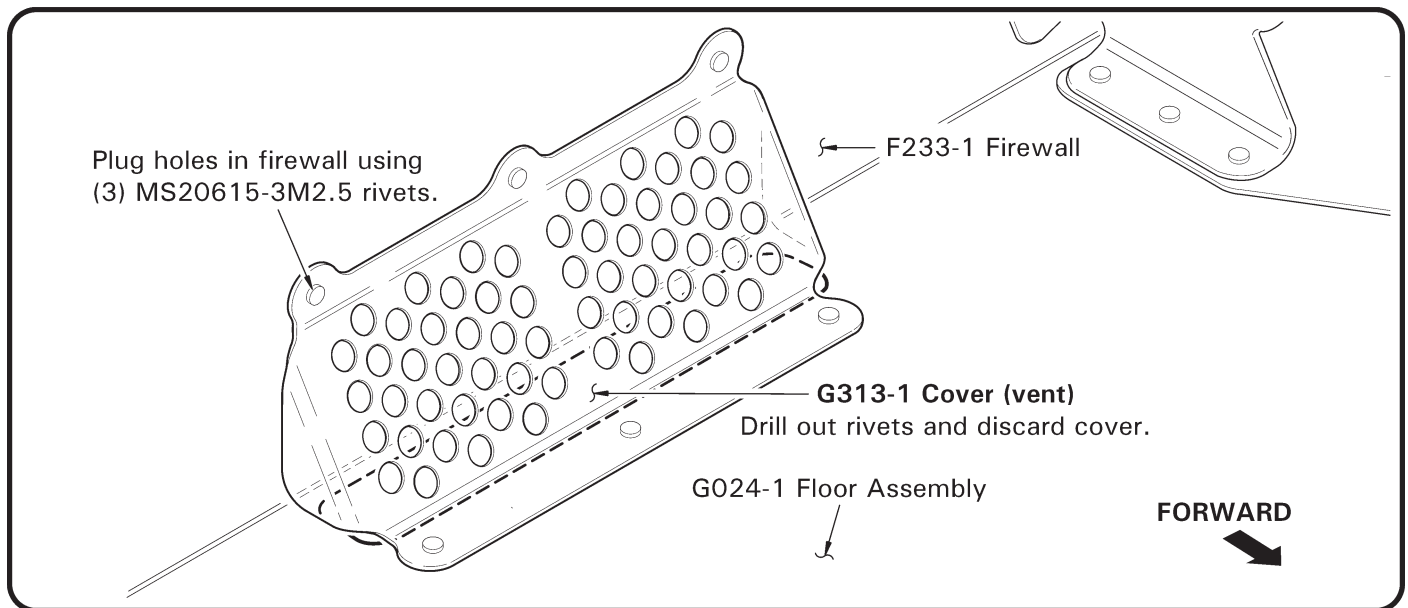


FIGURE 2

KI-229 Kit Instructions (continued)

3. Refer to Figure 1. Lay out hole dimensions on floor. Using a pneumatic or electric cutting tool, cut hole in floor, (one) G242-1 beam, and G917-1 skin, approximately 0.25 inch undersize of layout markings.

CAUTION
Cut only noted G242-1 beam; avoid damaging adjacent beams.

4. Adjust layout markings as required so longitudinal lines are parallel with G242-1 beam edges.
5. Perform final trim; verify hole edges in floor and skin are square to each other. Deburr trimmed edges with 220-grit or finer wet-or-dry aluminum-oxide abrasive paper. Clean up debris. Solvent-clean deburred edges and apply Alodine 1122 or Alodine 1201 in accordance with manufacturer's instructions. Epoxy prime dry edges.
6. Refer to Figure 3. Remove (14) rivets in belly skin where A738-40 gang channels will be installed. Clean up debris.
7. Refer to Figure 1. Use G742-1 cover as an aid to position G741-1 forward stiffener. Using G741-1 forward stiffener as template, match drill (10) 0.127–0.133 inch diameter rivet holes through beams and (10) 0.169–0.175 inch diameter screw holes through floor, skin, and beams. Remove stiffener; clean up debris.
8. Refer to Figure 1. Use G742-1 cover as an aid to position G741-2 aft stiffener. Using G741-2 aft stiffener as template, match drill (4) 0.127–0.133 inch diameter rivet holes through beams and (10) 0.169–0.175 inch diameter screw holes through floor, skin, and beams. Remove stiffener; clean up debris.
9. Using MS21069L08 nutplates as template, match drill (24) 0.097–0.102 inch diameter rivet holes through floor and skin at beam screw holes. Create 0.180–0.200 inch diameter, 100° countersinks. Clean up debris and install (12) MS21069L08 nutplates using NAS1097AD3-3.5 rivets at aft holes and NAS1097AD3-4 rivets at forward holes.
10. Using MS21069L08K nutplates as template, match drill (16) 0.097–0.102 inch diameter rivet holes through floor and skin at screw holes. Deburr holes, clean up debris, dimple holes using punch and die provided, and install (8) MS21069L08K nutplates using MS20426AD3-3 rivets.

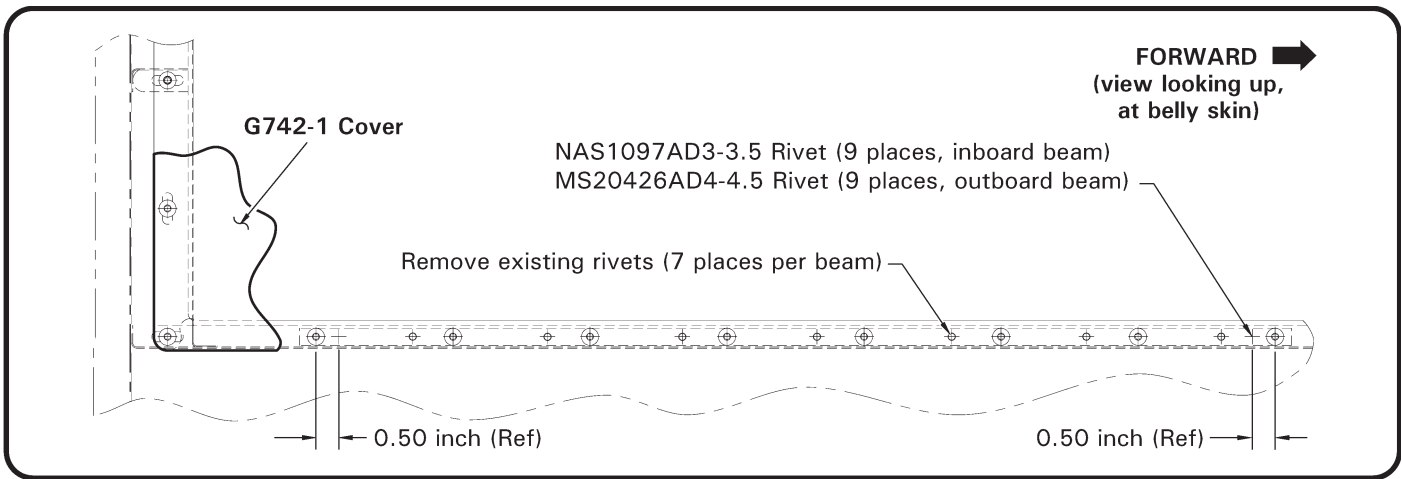


FIGURE 3

KI-229 Kit Instructions (continued)

11. Install G741 stiffeners using eight NAS9301B-4-01 and six NAS9301B-4-02 rivets. Verify security.
12. Refer to Figures 1 & 3. Install G742-1 covers on floor and skin using (20) B526-6 screws in stiffeners holes. Using covers as template, center drill (32) 0.195–0.201 inch diameter screw holes through floor and skin along beams. Remove covers. Lay out (10) 0.097–0.102 inch diameter rivet holes in floor along beams, (9) 0.097–0.102 inch diameter rivet holes in belly skin at inboard beam, and (9) 0.127–0.133 inch diameter rivet holes in belly skin at outboard beam. Drill and deburr holes; clean up debris.
13. Ink mark centerline on mating surface of A738-40 gang channels and install using B526-6 screws. Match drill (19) 0.097–0.102 inch diameter rivet holes and (9) 0.127–0.133 inch diameter rivet holes through gang channels. Create 0.180–0.200 inch diameter, 100° countersinks. Remove gang channels, deburr holes, and clean up debris. Install gang channels using NAS1097AD3-3.5 and MS20426AD4-4.5 rivets.

CAUTION

Verify surfaces are clean and dry before attaching decals. Use a clean cloth wet with acetone or mild soapy water to clean surfaces.

14. Attach two G682-13 decals on beams as shown.
15. If desired, paint (top coat) G742-1 cover to be installed on belly (paint codes are located on inside cover of factory-issued maintenance record). Scuff primed surface with 320-grit abrasive paper (or very fine Scotch-Brite), and wipe down with a lint-free cloth dampened with enamel cleaner. Apply polyurethane enamel in accordance with paint manufacturer’s instructions.
16. Install G742-1 covers using B526-6 screws. Verify security.
17. Trim liner, if desired. Install liner per MM § 25-30. Close baggage compartment door.
18. Revise helicopter’s Weight and Balance Record in Pilot’s Operating Handbook Section 6 to reflect this installation by incorporating the following data:

Change:

Item	Weight	Longitinal Arm	Longitudinal Moment	Lateral Arm	Lateral Moment
Hole Installation	+1.41 lb	+110.2 in.	155.4 in-lb	-8.4 in.	-11.8 in-lb