R44-series & R66 Cockpit Camera Installation Kit Instructions

Eligible for installation on R44 S/N 2625 & subsequent, R44 II S/N 14412 & subsequent, Cadet S/N 30071 & subsequent, and R66 S/N 1007 & subsequent, without (optional) air conditioning. Installs cockpit camera & antenna on helicopters equipped with factory-installed cockpit camera provisions.

NOTE

Visit <u>www.robinsonheli.com</u> 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.

NOTE

Kit requires separating headliner from roof, which may result in damage to headliner. Kit does not contain a replacement headliner.

ITEM	PART NUMBER	KIT CONTENTS	QTY
1	KI-271-2Instr.	Kit Instructions	1
2	D275-205	Fuse (AGC-5-R)	1
3	F039-2	Enclosure Assembly – Cockpit Camera	1
4	F714-2	Antenna Assembly (GPS)	1
5	F714-4	Flash Drive Assembly	1
6	AN526C832R6	Screw	1
7	MS21042L08	Nut	1
8	MS35206-232	Screw	1
9	NAS1149FN816P+	Washer (Note: "+" in part number indicates 20-qty pack)	1

Consumables

Refer to R44 Maintenance Manual (MM) § 1.400 or R66 MM § 20-70 for approved materials list.

• B270-8 Adhesive

Kit Instructions

- 1. Ensure battery switch is off.
- 2. Refer to Figure 1. Remove and discard MS35206-228 screw installed at D118-1 bracket assembly. Remove and retain MS27039C0806 screws securing C039 cover to C710-3 spacers. Lower cover and disconnect spotlight switch from airframe harness. Remove cover and spacers; retain spacers.
- 3. Refer to Figure 1, Detail B. Layout dimension on exterior roof for drilling new hole as shown, using straight edge to maintain lateral alignment with existing holes. Using a drill stop, drill (1) .169–.175 inch diameter hole. Clean up debris. Install AN526C832R6 screw in new hole.
- Refer to Figure 1, Detail A. Carefully remove headliner from roof to access threads of middle AN526C832R6 screw. Secure screw to roof using (1) NAS1149FN816P washer and (1) MS21042L08 nut.

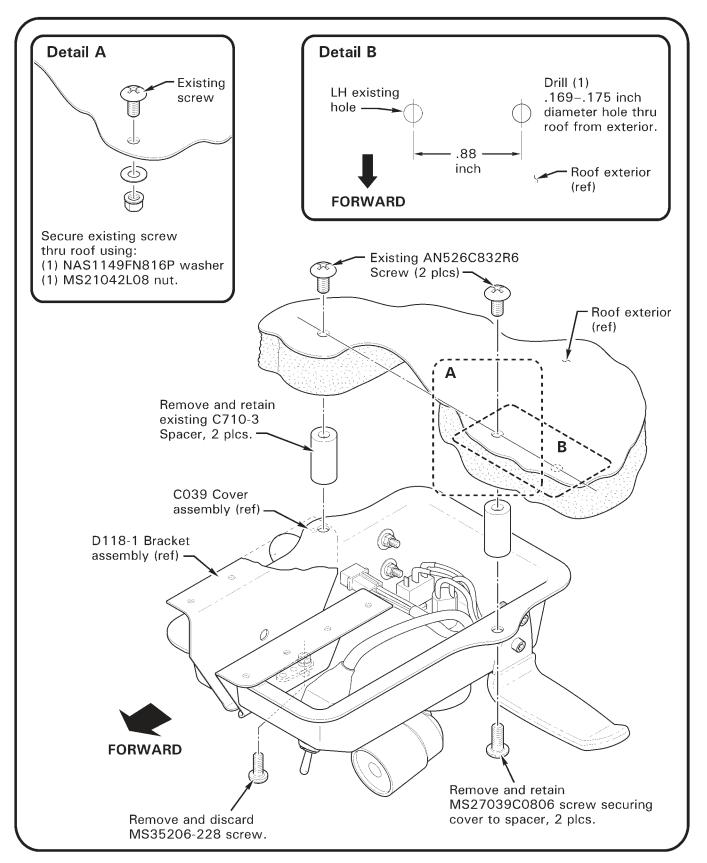


FIGURE 1 Existing C039 cover assembly installation

Kit Instructions (continued)

NOTE

D269-6 receptacle in R66 airframe harness is labeled "CAMERA".

- 5. Refer to Figure 2. Locate stowed black D269-6 receptacle in airframe harness and connect to enclosure assembly black plug. Connect 2-pin spotlight connector. Connect F714-2 antenna assembly to fitting in F039-2 enclosure assembly. Temporarily install enclosure assembly using retained C710-3 spacers & retained MS27039C0806 screws. Position antenna with metal side down and route wire forward as shown, carefully removing headliner as required.
- 6. Refer to Figure 2. Locate antenna as shown; remove backing from tape and press in place. Remove and retain C710-3 spacers & MS27039C0806 screws.
- 7. Apply B270-8 adhesive to both headliner & roof and press to secure.
- 8. Install F039-2 enclosure assembly using (2) C710-3 spacers and (2) MS27039C0806 screws. Secure enclosure to D118-1 bracket assembly using (1) MS35206-232 screw.
- 9. Ensure battery switch is off. Open circuit breaker panel. Install D275-205 fuse in fuse holder with wires (-3078) & (-3079) attached. Close and secure circuit breaker panel.
- 10. Revise helicopter's Weight and Balance Record in Pilot's Operating Handbook (POH) Section 6 to reflect this installation by incorporating the following data:

For R44 add:

Item	Weight	Long. Arm	Long. Moment	Lat. Arm	Lat. Moment
KI-271-2 Cockpit Camera Installation Kit	+0.30 lb	73.1 in.	+21.93 inlb	-0.05 in.	-0.02 inlb

For R66 add:

Item	Weight	Long. Arm	Long. Moment	Lat. Arm	Lat. Moment
KI-271-2 Cockpit Camera Installation Kit	+0.30 lb	69.9 in.	+21.97 inlb	-0.05 in.	-0.02 inlb

11. Make appropriate maintenance record entries.

Check and adjust camera view angle as follows:

- 12. Refer to Figure 2. Insert F714-4 flash drive assembly to USB port of F039-2 enclosure. Record a short video. Transfer flash drive to a computer and view video. If video is level with cockpit, camera lens is properly adjusted.
- 13. If horizon slants to the right (as shown in Figure 3), adjust angle by loosening two NAS1352-04-04 screws holding lens (see Figure 2) and rotate lens counter clockwise while facing lens; if horizon slants to the left, rotate lens clockwise. Tighten screws. Repeat step 12.

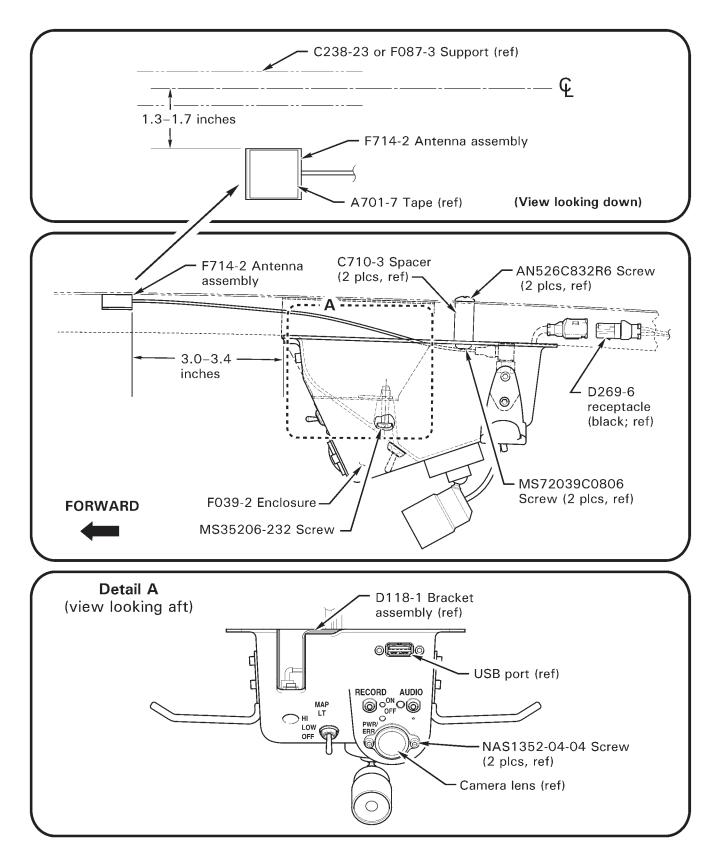


FIGURE 2 Camera enclosure and antenna installation

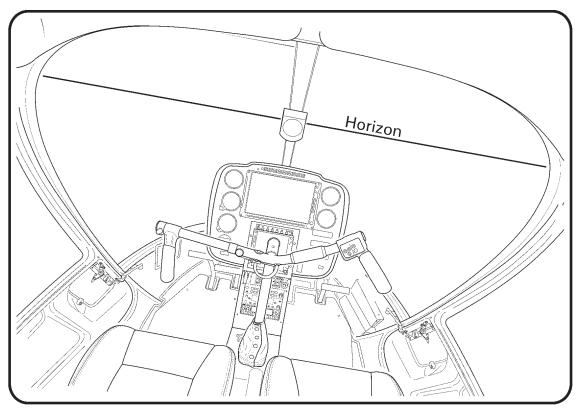


FIGURE 3 Camera view angle (angle shown requires adjustment)