R44-series & R66, with A/C, Cockpit Camera Installation Kit Instructions

Kit replaces existing air conditioning duct assembly with air conditioning duct assembly containing camera & antenna, on helicopters equipped with air conditioning & factory-installed cockpit camera provisions. KI-271-6A is eligible for installation on R44 II S/N 14412 & subsequent, and Cadet S/N 30071 & subsequent. KI-271-6B is eligible for installation on R66 S/N 1007 and subsequent.

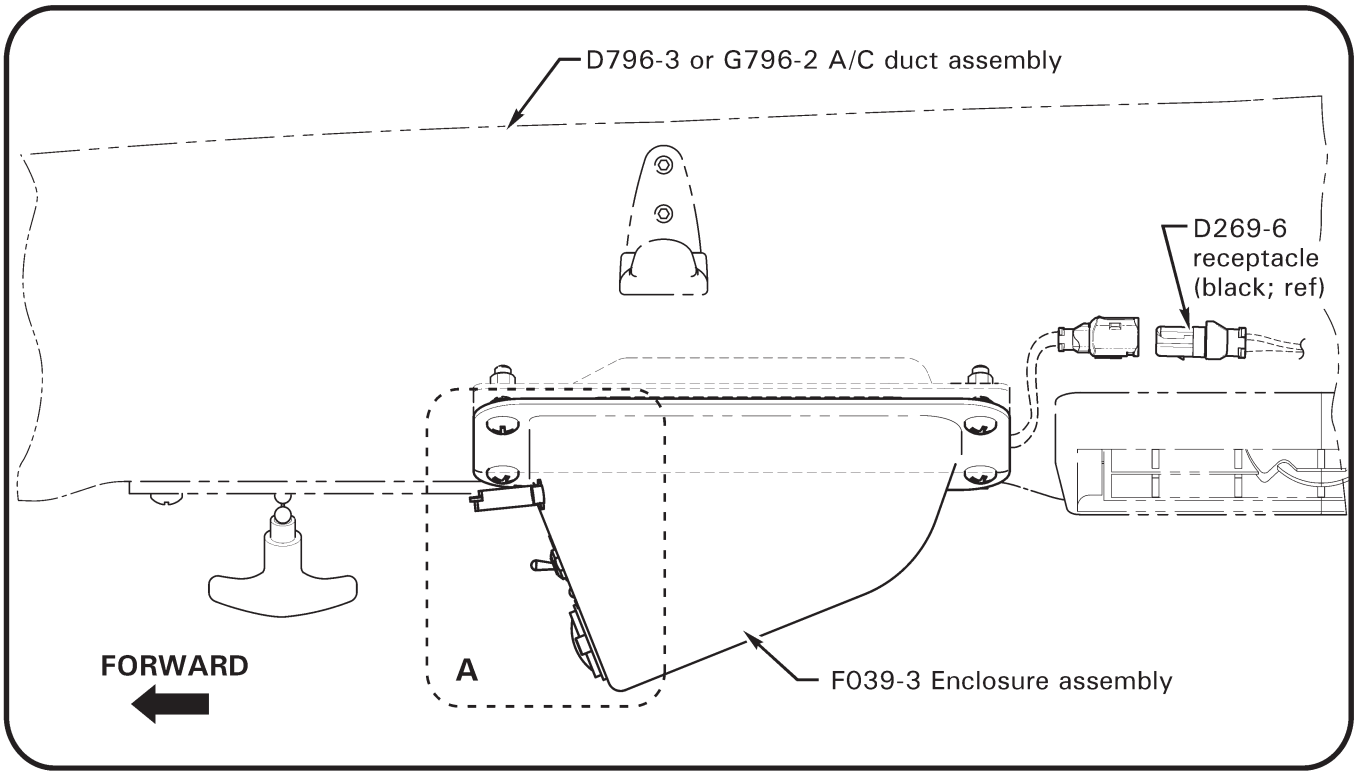
NOTE

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.

ITEM	PART NUMBER	KIT CONTENTS	QTY PER KI-271-6A	QTY PER KI-271-6B
1	KI-271-6Instr.	Kit Instructions	1	1
2	D275-205	Fuse (AGC-5-R)	1	1
3	F040-3A	R44 Cockpit Camera Sub-Assembly Includes: [1] D796-3 A/C Duct Assembly [1] F039-3 Enclosure Assembly [1] F712-4 Cover [4] MS21042L08 Nut [4] MS27039C0809 Screw [4] NAS1149FN816P Washer	1	0
4	F040-3B	R66 Cockpit Camera Sub-Assembly Includes: [1] F039-3 Enclosure Assembly [1] F712-4 Cover [1] G796-2 A/C Duct Assembly [1] MS3367-4-9 Ty-rap [4] MS21042L08 Nut [4] MS27039C0809 Screw [4] NAS1149FN816P Washer	0	1
5	F714-4	Flash Drive Assembly	1	1
6	MS3367-4-9	Ty-rap	1	0

Kit Instructions

1. Ensure battery switch is off.
2. As applicable, refer to R44 Illustrated Parts Catalog (IPC) Figure 21-31 or R66 IPC Figure 21-21. Remove D796 or G796 duct assembly by removing screw immediately aft of rotor brake knob assembly and sliding duct forward. Disconnect map light and air conditioning switch connectors. Thread rotor brake knob through bead-chain slot and remove duct assembly.



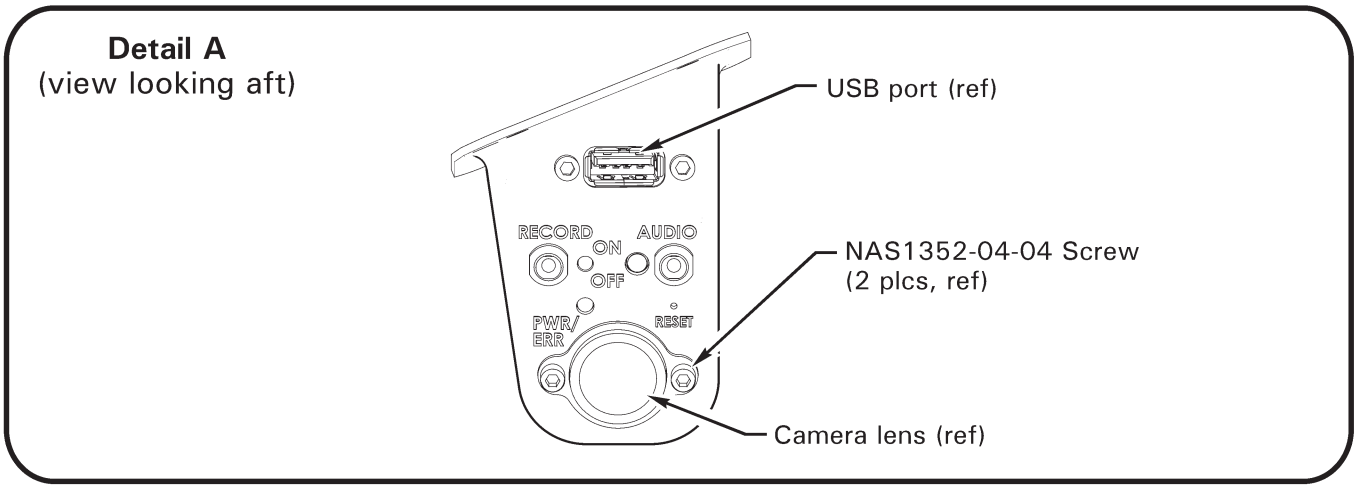


FIGURE 1 Connecting camera to airframe harness
(D796-3 A/C duct assembly shown)

Kit Instructions (continued)

3. Refer to R44 IPC Figure 96-81 or R66 IPC Figure 96-45. If required, carefully connect RV-BATT-LIPO500 Battery connector to RV-10251C Battery Extension Harness.

NOTE
D269-6 receptacle in R66 airframe harness is labeled “CAMERA”.

4. Refer to Figure 1. Locate stowed black D269-6 receptacle in airframe harness. Connect receptacle to camera plug on new D796 or G796 duct assembly. R44 only: secure mated connector to harness using (1) MS3367-4-9 ty-rap. Connect map light and air conditioning switch connectors to new duct assembly. Thread rotor brake knob assembly through bead-chain slot for installation. Install duct by simultaneously hooking forward end onto windshield frame and aft end into evaporator box and sliding aft to align screw hole. Install MS27039C0807 screw.

NOTE
Parenthetic dash numbers, such as (-2690), indicate number marked on wiring.

5. 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.

6. Turn battery switch on and verify proper installation, security, and operation of light and air conditioning switches. Verify proper rotor brake function.

7. Ensure battery and avionics switches are on. Function check camera installation:

   a. Refer to Cockpit Camera Quick Start Guide available at https://robinsonheli.com.

   b. Refer to Figure 1. Insert F714-4 flash drive assembly into USB port of F039-3 enclosure. Toggle helicopter battery switch ON for minimum 30 seconds; video will record automatically. While video is recording, activate & route an audio source (such as ATIS) to copilot headset. Toggle helicopter battery switch OFF.

   c. Transfer flash drive to a computer and view video. If video is level with cockpit, camera lens is properly adjusted. If no audio is heard, check newly connected wiring.

   d. If horizon slants to the right (as shown in Figure 2), adjust angle by loosening two NAS1352-04-04 screws holding lens (see Figure 1) and rotate lens counterclockwise while facing lens; if horizon slants to the left, rotate lens clockwise. Tighten screws. Repeat steps b & c.

Kit Instructions (continued)

8. 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-271-6A Cockpit Camera Installation Kit	+0.24 lb	70.2 in.	+16.71 in.-lb	-1.8 in.	-0.43 in.-lb

For R66 add:

Item	Weight	Long. Arm	Long. Moment	Lat. Arm	Lat. Moment
KI-271-6B Cockpit Camera Installation Kit	+0.24 lb	67.2 in.	+16.0 in.-lb	-1.8 in.	-0.43 in.-lb

9. Make appropriate maintenance record entries.

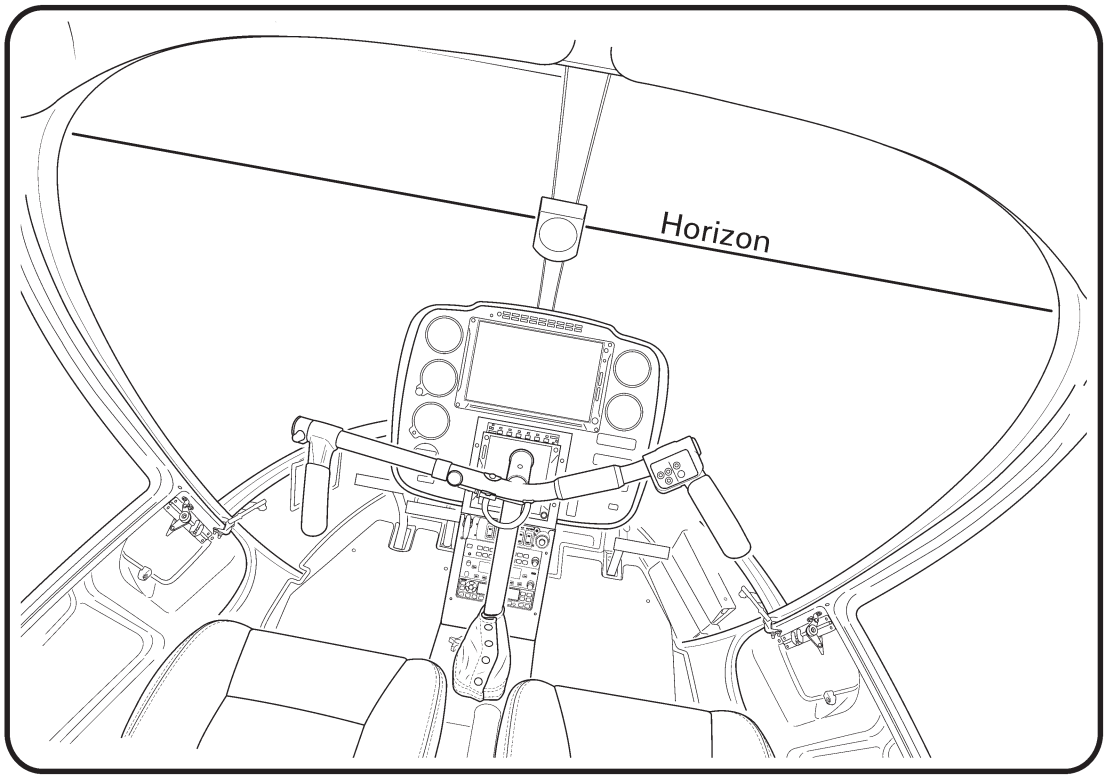


FIGURE 2 Camera view angle
(angle shown requires adjustment)