

**R44-series RFI Filter Replacement Kit Instructions**  
*(To comply with R44 Service Bulletin SB-105)*

**NOTE**

Visit [www.robinsonheli.com](http://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	KIT CONTENTS	QTY
1	KI-273Instr.	Kit Instructions .....	1
2	C003-16	Insulation .....	1
3	LS03-01022	DC Filter .....	1

**Consumables**

Refer to R44 Maintenance Manual (MM) § 1.400 for approved materials list.

B270-8 Adhesive

**Kit Instructions**

1. Turn BATTERY switch OFF. Remove C377-1 LH Cowling Assembly to access vertical firewall. Verify LH aft baggage compartment is empty. Remove C003-16 insulation from firewall per MM § 15.400.

**NOTE**

A helper may be necessary when removing and installing hardware on firewall.

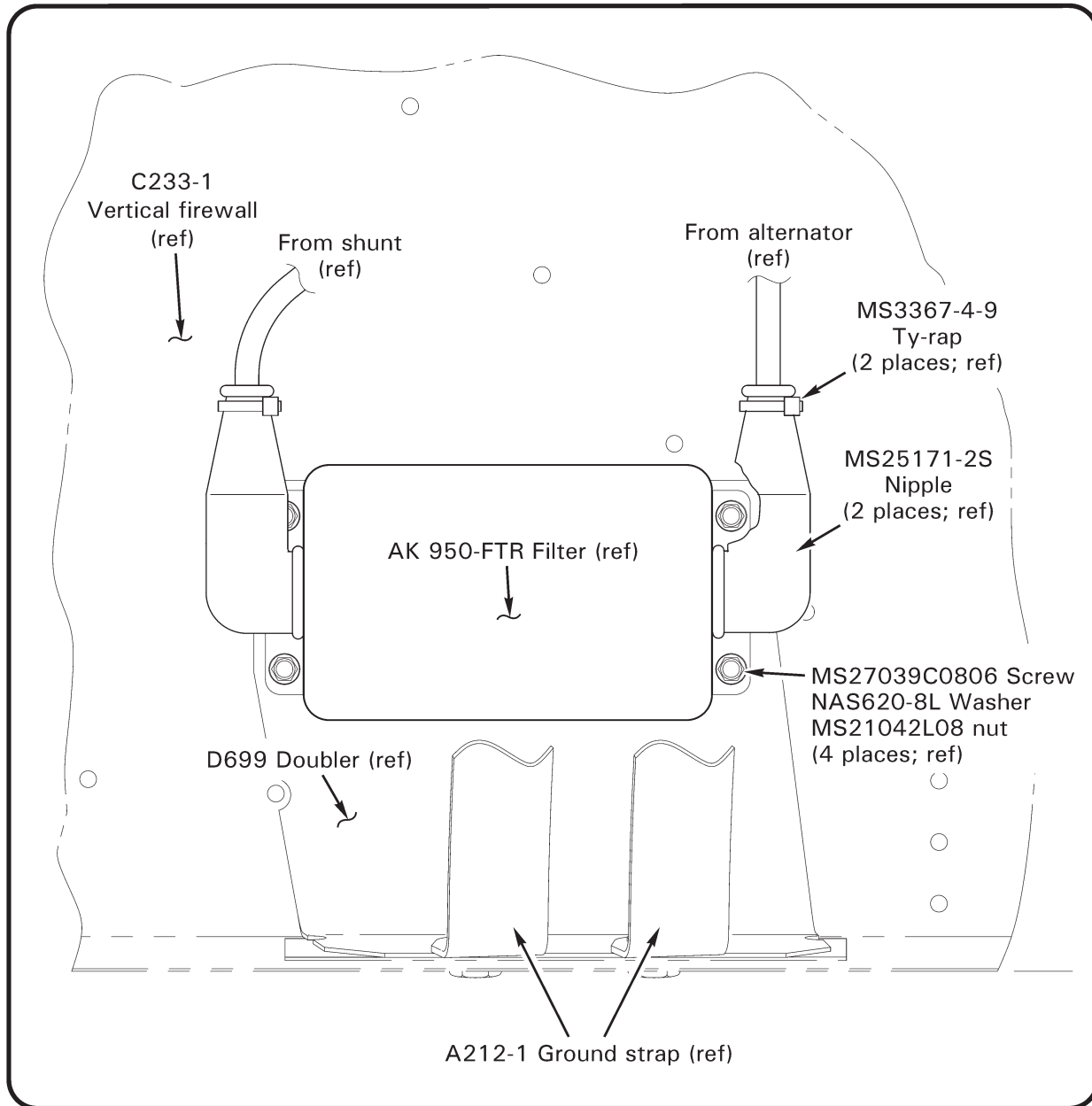
2. Refer to Figure 1. Locate AK 950-FTR filter on lower LH side of firewall. Pull MS25171-2S nipples back to access installation hardware securing cables to filter. Remove and discard hardware from terminals and disconnect cables. Remove and retain hardware securing filter to firewall. Remove and discard filter.

**CAUTION**

Do not loosen base nuts on studs of LS03-01022 DC filter; stud security may be adversely affected.

3. Refer to Figure 2. Using a backup wrench on base nut, torque outer nut on “GND” stud of LS03-01022 DC filter to 25 in.-lb and apply torque stripe per MM Figure 2-1.

**Kit Instructions (continued)**

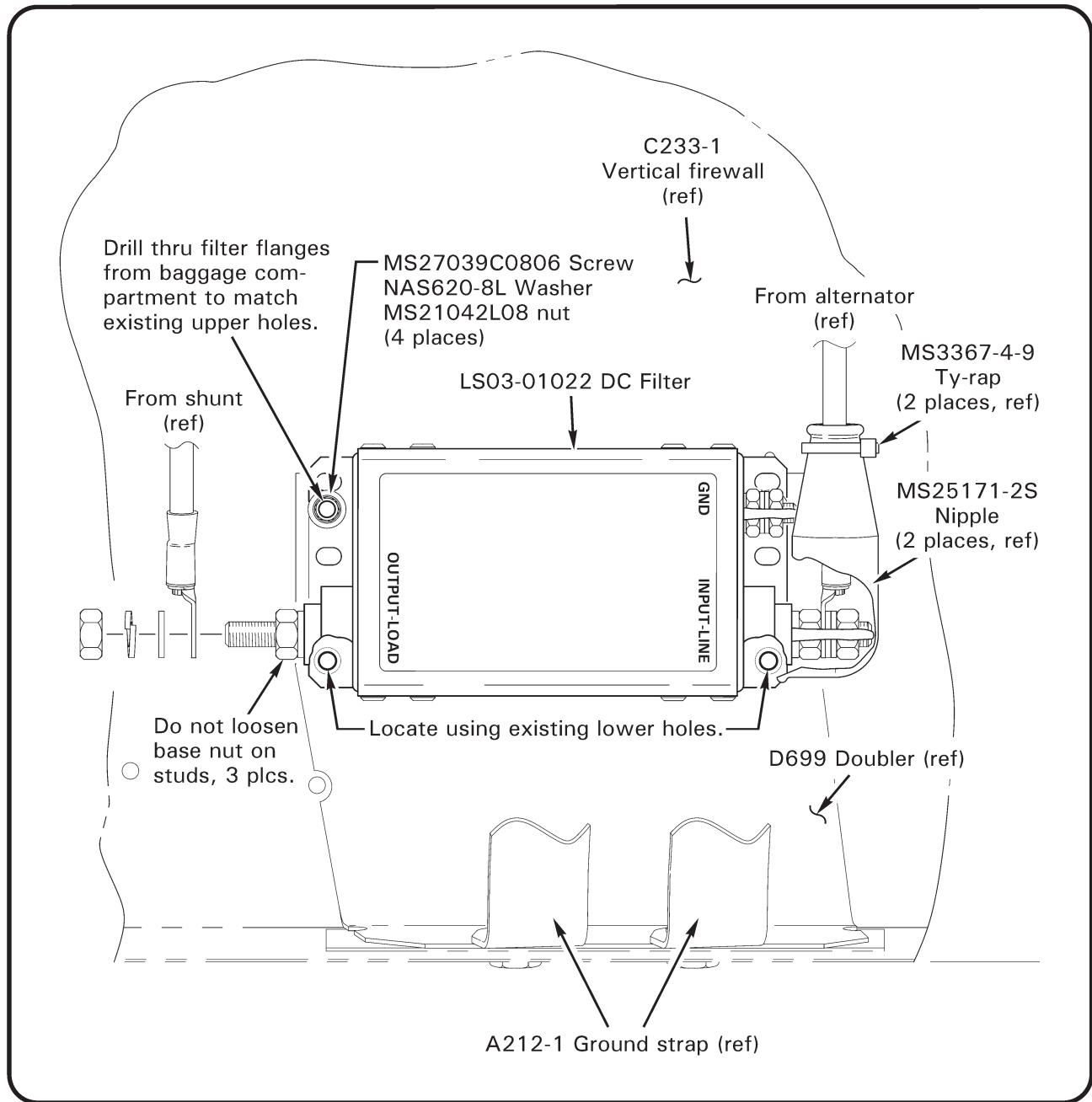


**FIGURE 1 Existing installation**  
(aft side of firewall, view looking forward)

4. Position LS03-01022 DC filter on firewall with lower installation holes of filter flanges aligned with existing lower holes from removed filter. Temporarily secure filter to firewall, 2 places, using retained hardware.
5. From inside LH aft baggage compartment, locate two existing (upper) installation holes (from removed filter) on firewall. Using existing holes as guides, drill (2) 0.169-0.175 inch diameter holes thru filter mounting flanges. Remove and retain hardware securing filter, and remove filter. Deburr holes and clean up debris. Install filter using retained MS27039C0806 screw, NAS620-8L washer, and MS21042L08 nut, four places.

**Kit Instructions (continued)**

- Refer to Figure 2. Remove outer nut, lockwasher, and washer from "OUTPUT-LOAD" stud of filter. Do not loosen base nut; verify by hand base nut is snug. Install cable terminal, washer, lockwasher, and nut onto stud. Using a back-up wrench on base nut to prevent rotation, torque outer nut to 62 in.-lb and apply torque stripe per MM Figure 2-1. Position nipple over stud. Repeat procedure on "INPUT-LINE" stud using cable from shunt.



**FIGURE 2 DC filter installation**  
(view looking forward)

**Kit Instructions (continued)**

7. Install C003-16 insulation on firewall per MM § 15.400.
8. Revise helicopter's Weight and Balance Record in R44 Pilot's Operating Handbook (POH) Section 6 to reflect this installation by incorporating the following data:

**Remove:**

Item	Weight	Long. Arm	Long. Moment	Lat. Arm	Lat. Moment
AK 950-FTR Filter	-1.18 lb	95.0 in.	-112.1 in.-lb	-10.5 in.	12.39 in.-lb

**Install:**

Item	Weight	Long. Arm	Long. Moment	Lat. Arm	Lat. Moment
LS03-01022 DC Filter	+0.77 lb	95.0 in.	+73.2 in.-lb	-10.5 in.	-8.1 in.-lb

9. Make appropriate maintenance record entries.