

*McDonnell Douglas*  
*Helicopter Company*  
**SERVICE INFORMATION NOTICE**

NOTICE NO. HN-71  
DATE 5 August 1974  
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**SUBJECT:** NOISE FILTER INSTALLATION - MODIFICATION KIT NO. M50039

**MODELS AFFECTED:** The following helicopters equipped with King KR-85 Automatic Direction Finder (ADF) Installation, PN 369H90067; in conjunction with Humphrey Attitude Gyro Indicator Kit, PN 369H90041 and/or Directional Gyro Indicator Kit, PN 369H90042:

369HE Helicopter Serial No. 0101E thru 0215E  
369HS Helicopter Serial No. 0001S thru 0410S  
369HM Helicopter Serial No. 0030M and subq

**TIME OF COMPLIANCE:** At owners and operators discretion

**PREFACE:** The information given in this Service Information Notice lists a procedure for installation of a noise filter kit on helicopters equipped with automatic direction finder (ADF) in conjunction with attitude and/or directional gyro indicators. The purpose of the noise filter is to prevent signals from the gyro(s) from interfering with audio signals to the ADF receiver.

**Reference**

- 500 Series - Basic HMI, Issued 1 October 1972; Revision No. 3, 1 January 1974
- 500 Series - HMI Appendix A, Issued 1 October 1972; Revision No. 2, 1 January 1974
- 500 Series - HMI Appendix D, Issued 1 October 1973

Product Support Department

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**PARTS LIST**

<u>Nomenclature</u>	<u>Part Number</u>	<u>Qty</u>	<u>Mfr</u>
Filter	369H6461	1	Hughes
Decal	369H6615-155	1	Hughes
Decal	369H6615-161	1	Hughes
Harness Assembly	369H90041-21	1	Hughes
Harness Assembly	369H90042-41	1	Hughes
Spacer	369H90067-39	2	Hughes
Strap	MS17821-1-9	5	Commercial
Rivet	MS20470A4	5	Commercial
Nut	MS21042-3	2	Commercial
Nut	MS21083C08	1	Commercial
Insulation	MS21266-1	5	Commercial
Lug	MS25036-101	6	Commercial
Lug	MS25036-103	3	Commercial
Lug	MS25036-149	1	Commercial
Nut	MS25082-1	3	Commercial
Washer, Lock	MS35338-41	3	Commercial
Washer	MS35338-42L	1	Commercial
Washer	AN960-6L	6	Commercial
Washer	AN960C6L	5	Commercial
Washer	AN960C8L	3	Commercial
Washer	AN960PD10L	2	Commercial
Nut	NAS671-8	1	Commercial
Screw	NAS1096-2-10	1	Commercial
Solder Sleeve	D121	2	Rayclad
Base	TC112	5	Thomas & Betts
Wire, AWG 20	MIL-W-5086 Type II	7 ft	Commercial
Wire, AWG 22	MIL-W-5086 Type II	3 ft	Commercial

**TOOLS AND EQUIPMENT**

Gun, rivet  
 Drill bit - 0.125/0.130 inch diameter  
 Drill bit - 0.168/0.175 inch diameter  
 Drill bit - 0.198/0.204 inch diameter

### PROCEDURE

- a. Check that all electrical power is OFF.

#### NOTE

Removal of lower RH windshield assembly is recommended to prevent damage during installation of filter. (Refer to HMI Appendix D.)

- b. Remove access panels on instrument console lower support structure to assist installation of filter. (Refer to Basic HMI.)
- c. Remove terminal board TB-103, if presently installed on lower support structure.
- d. Drill two 0.198/0.204 inch diameter holes in lower support structure at dimensions shown in Figure 1; install 369H6461 filter with two 369H90067-39 spacers and attach hardware as shown.
- e. Install 369H6615-155 decal (FL100) at approximate location shown.

#### NOTE

Route new wiring as directly as possible with suitable existing wiring and secure with tie straps. Later model helicopters may have new 369H90041-21 and/or 369H90042-41 wiring harnesses already installed.

As required, gain access to remote directional gyro by removing left foot support fairing in passenger/cargo compartment.

- f. For helicopters equipped with directional gyro indicator, remove existing basic wiring/harnesses and install new 369H90042-41 harness.
- g. For helicopters equipped with attitude gyro indicator, remove existing basic wiring/harness and install new 369H90041-21 harness.
- h. If E26 ground stud is not presently installed, drill 0.168/0.175 inch diameter hole in lower support structure; clean structure surface to bare metal and install stud as shown. Install identifying 369H6615-151 decal adjacent to E26 stud.
- i. Make wire connections to filter and to E26 stud per modification wiring diagram in Figure 1. (Also refer to HMI Appendix A for existing wiring diagram.)
  1. Gyro wire No. F501Q22 Red and F501P22 Red connect to "LOAD" terminal.

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2. Wire No. F501A20 connects to "LINE" terminal.
  3. Gyro wire No. F501Q22 Blue and F501P22 Blue connect to "GND" terminal.
  4. Wire No. F501R20N connects to TB6 ground.
  5. Shield jumpers connect to E26 stud.
- j. Perform continuity and functional checks of ADF and gyro wiring and electrical systems.
- k. Reinstall access panels.
- l. Replace lower RH windshield assembly.

#### WEIGHT AND BALANCE DATA

Weight and balance not affected.

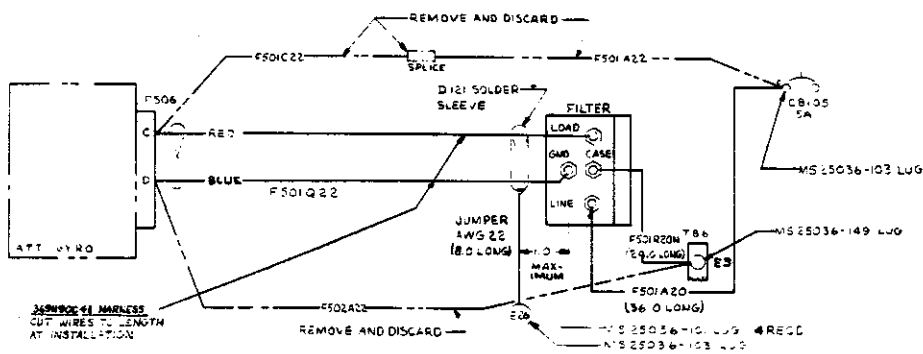
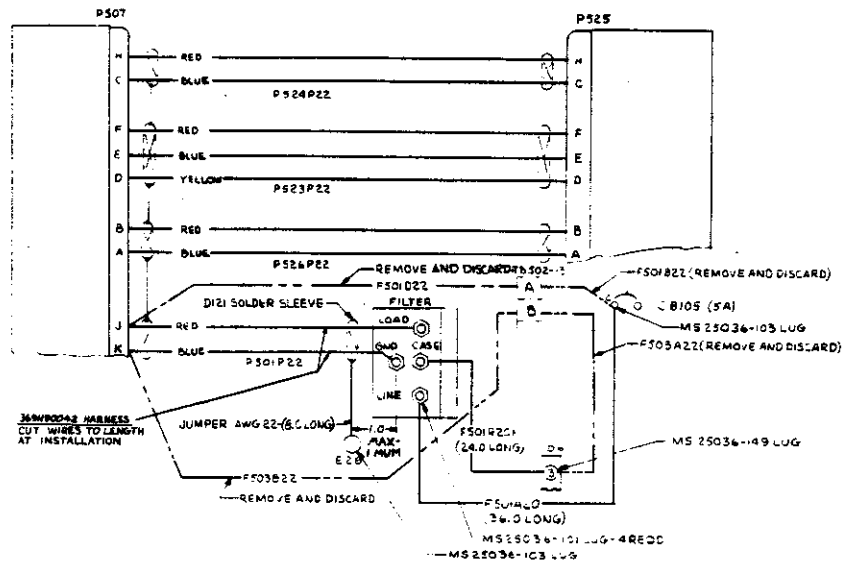


Figure 1. Modification - ADF Noise Filter Installation, PN M50039  
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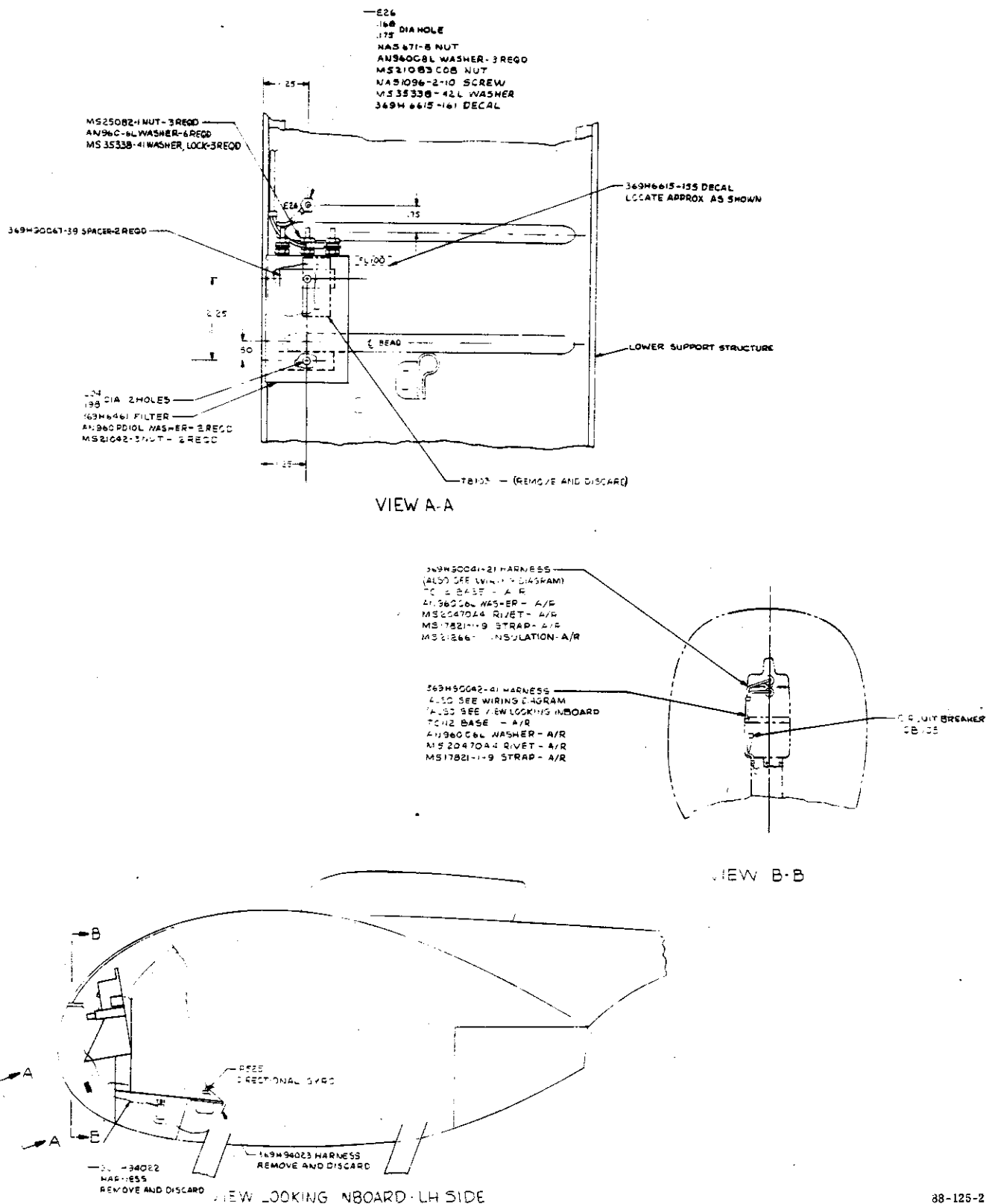


Figure 1. Modification - ADF Noise Filter Installation, PN M50039  
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