



HN-193
DN-126
EN-014

SERVICE BULLETIN

DATE: 10 APRIL 1984
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*Include a copy of this Notice in the Notice file for each affected model.
(NOTE: This Service Bulletin includes the 10 April 1998 Errata sheet)

FUEL SHUT-OFF VALVE CONTROL CABLE (PN 369A8137-503 AND -603) PULL TEST

1. PLANNING INFORMATION

A. MODELS AFFECTED:

All 369D, 369E, 369H, 369HE, 369HM and 369HS Series Helicopters as follows:

1. Having subject cable installed, marked, "Jairen Inc. 16722 PN 110262-15N", with date of "5/81" or later, if the swage is less than 0.50 inch in length.
2. Cables marked as described in 1. above, in spares inventory.

NOTE: Affected cables having the swaged end of the cable housing painted green have been inspected and do not require reinspection per this Notice.

B. PREFACE:

This Service Information Notice gives procedures for a one time design load pull test of affected PN 369A8137-503 and -603 Fuel Shut-Off Control Cable assemblies.

Part I gives procedures for testing PN 369A8137-503 assemblies used on 500D versions of the Model 369D helicopter, 369E, 369H, 369HE and 369HS Series helicopters.

Part II gives procedures for testing PN 369A8137-603 assemblies used on 500MD versions of the model 369D helicopter and 369HM Series helicopters.

C. TIME OF COMPLIANCE:

Shall be accomplished within the next 100 hours of helicopter operation from the date of this Notice for all installed affected parts. Shall be accomplished prior to installing any affected parts from spares inventory.

D. FAA APPROVAL:

The resultant test of the fuel shut-off valve control cable as described by the procedures given in this Notice has been shown to comply with Federal Aviation Regulations and is FAA Approved.

E. WEIGHT AND BALANCE:

Weight and balance not affected

F. REFERENCE:

369D HMI Vol. 1 (CSP-D-2), Reissued 15 January 1982; Revision No. 3, 15 August 1983.
369E Supplement to HMI Vol. 1 (CSP-E-2), Issued 30 November 1983.
Model 500 Basic HMI (CSP-H-2), Reissued 15 September 1981.
Basic HMI Configuration Supplement HM (CSP-H-2B), Reissued 15 March 1975
Hughes Service Information Notice No. DN-122, dated 29 July 1983.
Hughes Service Information Notice No. EN-9, dated 29 July 1983.
Hughes Service Information Notice No. HN-189, dated 29 July 1983.

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PART I. PULL TEST PN369A8137-503 FUEL SHUT-OFF VALVE CONTROL CABLE

TOOLS AND EQUIPMENT	
Nomenclature	Source
**Fish Scale (75 pounds capacity or greater)	Commercial

**Since space in aircraft is limited, use scale which achieves a 50 Pound load with minimum travel.

MATERIAL	
Nomenclature	Source
Duct tape (2 inches wide X 12 inches long)	Commercial
Safety wire (0.032 inch diameter X 14 inches long)	Commercial
Paint, Green lacquer	Commercial
***Washer, Steel (0.265 inch inner diameter X 0.063 inch thick)	Commercial

***Washer, may be standard or locally fabricated from 0.063 inch steel stock (any type).

PROCEDURE

- Remove left instrument panel fairing (section 17, HMI Vol 1 or Basic HMI).
- Remove clamp attaching fuel shut-off cable to bracket on canopy, or to back of instrument panel support structure (369E only). (See Figure 1.)
- Back retaining nut completely off threaded portion of control cable at back of instrument panel (Figure 1).
- Wrap approximately 12 inches of two inch wide duct tape around cable casing, approximately 0.05 inch behind instrument panel or swage, whichever is further from front of instrument panel, as shown in Figure 1.
- Attach one end of safety wire (0.032 inch diameter x 12 inches long) just behind control cable flange, at front of instrument panel.
- Attach free end of safety wire to fish scale.
- Notch 0.265 inch inner diameter x 0.063 inch thick washer as shown in Figure 1; place washer over cable between duct tape and rear of instrument panel as shown.

WARNING

Cable may separate suddenly during pull test. Personal injury can occur should the cable separate if person applying pull test is not securely braced.

- While securely braced in the left helicopter seat, slowly apply 50 pound pull on the safety wire and cable assembly. Do not exceed 50 pound test load.

NOTE: If cable casing pulls out of swage, replace cable assembly (Section 12, HMI Vol 1 or Basic HMI); return failed cable to HHI, Attn: Warranty and Repair Administration, with a completed warranty form.

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- i. Visually inspect swage joint for evidence of partial separation. If partial separation is evident, replace cable assembly (Section 12, HMI Vol 1 or Basic HMI); return damaged cable to HHI. (Refer to above Note.)
- j. If cable shows no evidence of separation at swage, paint swaged end of cable housing using green lacquer.
- k. Remove safety wire and scale from cable assembly.
- l. Remove washer and duct tape from cable at rear of instrument panel.
- m. Reinstall retaining nut on threaded portion of control cable at back of instrument panel.
- n. Reinstall clamp which attaches fuel shut-off valve cable to bracket on canopy or instrument panel support structure.
- o. Reinstall left instrument panel fairing (Section 17, HMI Vol 1 or Basic HMI).

NOTE: Part I of Hughes Service Notice DN-122, EN-9 or HN-189 must be reaccomplished if the fuel shut-off valve has not been overhauled per Part II of the applicable Notice.

- p. Inspect fuel shut-off valve per Part I of Hughes Notice No. DN-122, EN-9 or HN-189, if required.
- q. Record compliance with Part I of this Notice in Compliance Record of helicopter Log Book.

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PART II. PULL TEST FOR PN 369A8137-603 FUEL SHUT-OFF VALVE CONTROL CABLE

TOOLS AND EQUIPMENT	
Nomenclature	Source
+Fish Scale (75 pounds capacity or greater)	Commercial

+Since space in aircraft is limited, use scale which achieves a 50 pound load with minimum travel.

MATERIAL	
Nomenclature	Source
Duct tape (2 inches wide X 12 inches long)	Commercial
Safety wire (0.032 inch diameter X 14 inches long)	Commercial
Steel sheet (0.188 inch or equivalent)	Commercial
Paint, Green lacquer	Commercial

PROCEDURE

- Fabricate retaining tool from 0.188 inch thick or equivalent steel sheet as shown in Figure 2.
- Remove cover from right side of horizontal console (Section 17, HMI Vol 1 or Basic HMI Configuration Supplement HM).
- Back securing nut completely off threaded portion of cable (Figure 2).
- Wrap 12 inch strip of two inch wide duct tape around cable housing, with top of tape two inches above helicopter floor as shown in Figure 2.
- Secure one end of safety wire just behind flange of control cable assembly on horizontal console (Figure 2).
- Secure free end of safety wire to fish scale.
- Place slotted end of retaining tool, fabricated in Step a., on cable at top of duct tape: stand on tool to secure tool against helicopter floor. (See Figure 2.)

WARNING

Cable may separate suddenly during pull test. Personal injury can occur if person conducting test is not well balanced and prepared for the possible separation.

- While stably positioned over horizontal console, slowly apply 50 pound load to cable. Do not exceed 50 pound test load.

NOTE: If cable casing pulls out of swage, install new cable assembly (Section 12, Basic HMI Configuration Supplement HM or HMI Vol 1); return failed cable to HHI, Attn: Warranty and Repair Administration, with a completed warranty form.

- Visually inspect swage joint for evidence of partial separation. If partial separation is evident, replace with new cable assembly (Section 12, HMI Vol 1 or Basic HMI Configuration Supplement HM); return damaged cable assembly to HHI. (Refer to the above Note.)

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j. If cable shows no evidence of separation, paint swaged end of cable housing with green lacquer.

k. Remove safety wire and scale.

l. Remove retaining tool and duct tape.

m. Reinstall retaining nut on threaded portion of control cable at underside of horizontal console.

n. Reinstall right side horizontal console cover (Section 17, HMI Vol 1 or Basic HMI Configuration Supplement HM).

NOTE: Part I of Hughes Service Notice DN-122, EN-9 or HN-189 must be reaccomplished if the fuel shut-off valve has not been overhauled per Part II of the applicable Notice.

o. Inspect fuel shut-off valve per Part I of Hughes Notice No. DN-122, EN-9 or HN-189, if required.

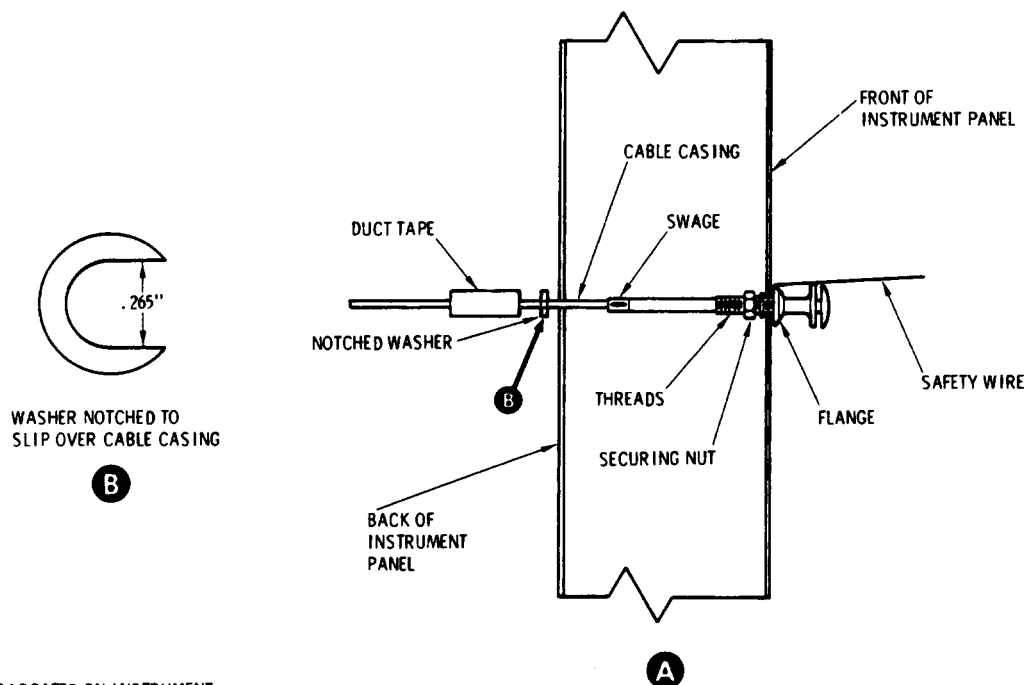
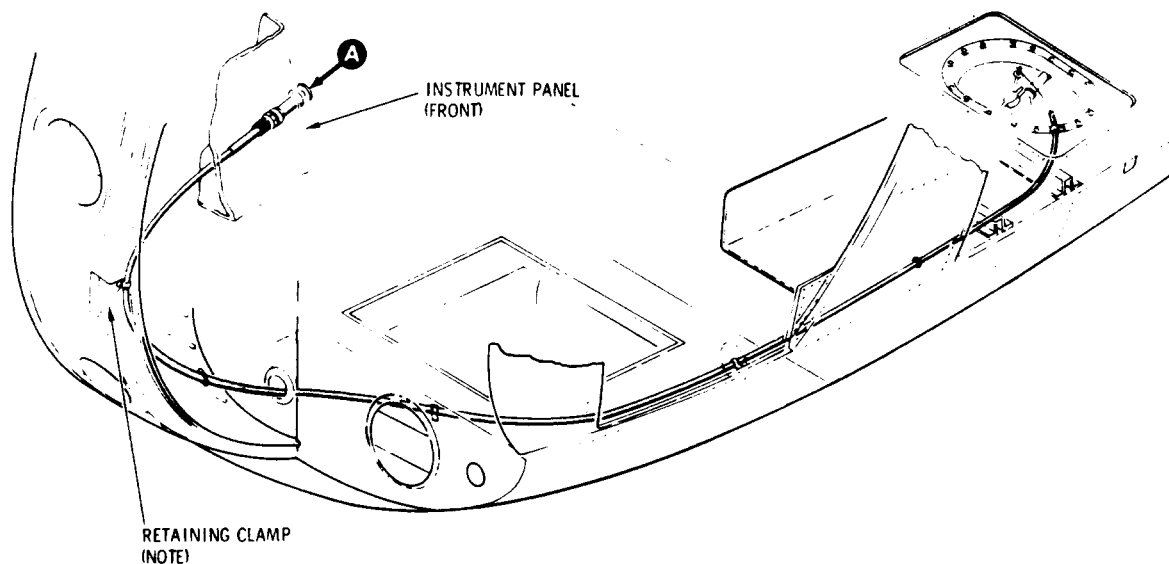
p. Record compliance with Part II of this Notice in Compliance Record of helicopter Log Book.

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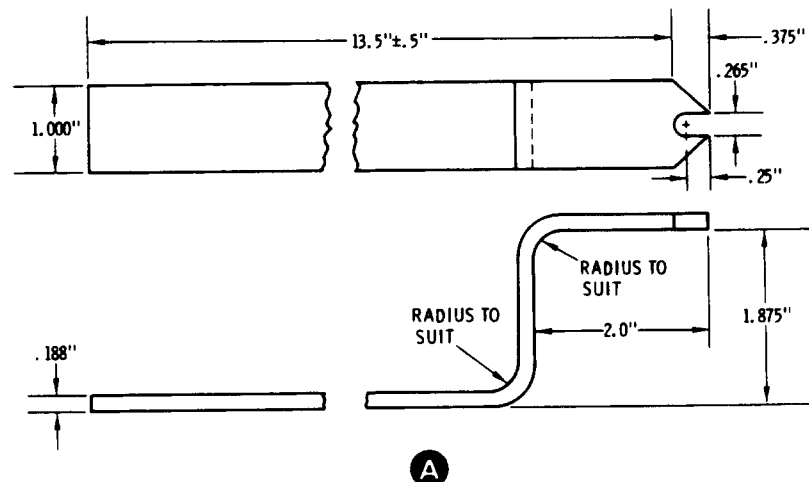
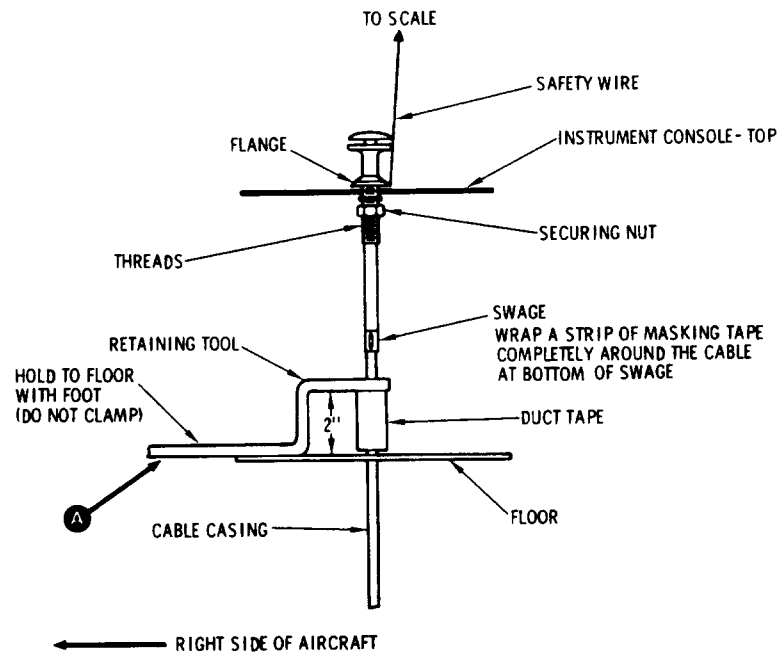
Figure 1. Pull Test PN 369A8137-503 Fuel Shut-Off Control Cable

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NOTE:
FABRICATE FROM .188" STEEL SHEET
OR EQUIVALENT.

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Figure 2. Pull Test PN 369A8137-603 Fuel Shut-Off Valve Control Cable

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