HUGHES SERVICE INFORMATION NOTICE

FAA APPROVED

SUBJECT: REWORK OR REPLACEMENT - FUEL CELL ASSEMBLIES, PN 369H8101-3/-5 AND 369A8102-3/-5

MODELS AFFECTED: See Page 2

TIME OF COMPLIANCE: After receipt of parts, shall be accomplished within 50 hours of helicopter operation or within 10 days, whichever is sooner.

PREFACE: Part I of this Service Information Notice lists the approved UNIROYAL procedure for rework of the fuel cell assemblies installed on the above affected helicopters, and spares fuel cell assemblies identified with the letter "K" next to the fuel cell Serial Number. Rework of the "K" fuel cell assemblies is designed to prevent possible leakage of fuel from the fuel cell cover area. Parts required for the rework will be provided by UNIROYAL and may be obtained from Hughes, if ordered prior to 15 November 1974.

Part II of this Service Information Notice lists an optional Hughes procedure for replacement of installed fuel cell assemblies with fuel cell assemblies identified by the letter "M" next to the cell Serial Number, or with reworked "K" fuel cell assemblies.

It is noted that "M" fuel cells, or reworked "K" fuel cells with modification letter "A" next to cell cover opening, are not affected by this Notice.

Reference

500 Series - Basic HMI, Issued 1 October 1972; Revision No. 3, 1 January 1974

FORM NO. 9578A HTC AD REV. 11-67

MODELS AFFECTED: (1) Applicable to BOTH left and right fuel cell assemblies installed on the following helicopters:

Model 369HE Helicopter Serial No. 0101E and subsequent
Model 369HM Helicopter Serial No. 0001 thru 0004: 0005M thru 0219M; 0221M thru 0236M; 0240M thru 0243M

Model 369HS Helicopter Serial No. 0001S thru 0484S; 0486S thru 0515S; 0524S; 0526S; 0529S; 0531S thru 0533S

(2) Applicable ONLY to LEFT fuel cell assembly installed on the following helicopters:

Model 369HM Helicopter Serial No. 0220M; 0237M; 0246M
Model 369HS Helicopter Serial No. 0485S; 0528S; 0537S; 0566S

(3) Applicable ONLY to RIGHT fuel cell assembly installed on the following helicopters:

Model 369HS Helicopter Serial No. 0516S; 0525S; 0530S; 0534S; 0567S

(4) All Model 369H Series Helicopters equipped with non-reworked fuel cell assemblies installed prior to date of this Notice as replacement for original fuel cells.

(5) All subject fuel cell assemblies in Spares Inventory having identification letter "K" next to cell Serial Number.

(Fuel cells with a white letter "A" next to cover opening on outside of tank have already been reworked and are NOT affected by this Notice.)

PARTS LIST

When ordering, specify UNIROYAL Repair Kit RK-67 which consists of the following items. Kit will be provided without cost, if ordered prior to 15 November 1974.

Nomenclature	Part No. or Specification	Qty
Sealing Compound - "Proseal"	890 A-1/2 or B-1/2	AR
Pipe Protector	MIL-C-5501/7-F14	36
Ethylene Dichloride (EDC)	MIL-E-10662	AR

PROCEDURE

NOTE

Perform either Part I or Part II of this Notice.

PART I - REWORK OF FUEL CELL ASSEMBLIES

a. Remove left and right access plates in cargo compartment floor.

b. Remove left and/or right fuel cell covers, as applicable, per Basic HMI; removal of tank unit from left fuel cell cover not required.

c. Perform rework of fuel cell(s) in accordance with UNIROYAL Repair Kit R-67 instructions reprinted as part of this Notice.

d. Clean fuel cells, per Basic HMI.

e. Install fuel cell cover(s), per Basic HMI.

f. Pressure test fuel cells, per Basic HMI.

CAUTION

If pressure drop occurs, check all fittings and retest cells. In addition to HMI procedure, apply soap suds around cell covers on outside of cells. If leakage is detected from cell cover area, replace fuel cell assembly, per Part II of this Notice.

g. Stamp or print 1/2-inch high letter "A" in white ink on outside of tank adjacent to cover opening; locate letter "A" approximately 1 to 1-1/2 inches forward of cover opening.

h. Fill the fuel cells.

i. Connect battery and external power; operate fuel pump and make fuel leak check.

j. Inspect fuel cells, cell covers, and associated plumbing for fuel leaks. Repair cause of any leakage as necessary.

k. Check fuel quantity indicator for correct indication.

l. Install left and right access plates in cargo compartment floor.

m. Record rework of 369H8101-3/-5 or 369A8102-3/-5 fuel cell assemblies, together with Serial Number(s) and modification letter "A", per this Notice in Compliance Record of helicopter Log Book.

PART II - REPLACEMENT OF FUEL CELL ASSEMBLIES

NOTE

Special wrench and adapter (369A8100-80902-9 and 369A8100-80902-206) for removing and installing cell interconnect nut may be procured from Hughes, or field fabricated.

a. Remove existing left and/or right fuel cell assemblies, per Basic HMI.

b. Clean replacement fuel cell assembly ("M" fuel cell assembly, or reworked "K" fuel cell assembly with modification letter "A" next to cover) per Basic HMI, prior to installation.

c. Install and pressure test replacement fuel cell assembly, per Basic HMI.

d. Record installation of 369H8101-3/-5 or 369A8102-3/-5 fuel cell assemblies with Serial Numbers (and identification letter "M", or "K" with modification letter "A", as applicable) per this Notice in Compliance Record of helicopter Log Book.

WEIGHT AND BALANCE DATA

Weight and balance not affected.

UNIROYAL

REWORK PROCEDURE HUGHES HELICOPTERS
Fuel Cell Part Numbers 369H8101-3 & -5
and 369A8102-3 & -5

Repair Kit RK-67

NOTE: The sealant is supplied in 1/2 pink kits by volume in 1 pint cans to facilitate mixing.

1. Place a piece of plastic film (approx. 18" x 24") under the access fittings on the bottom of the cell to protect the cell from drips or contamination.

2. Thoroughly wash the bottom interior nut plate of the access door of the tank, including the rubber material, for 1" beyond the periphery of the nut plate. The dome nuts and the I.D. of the fitting should be thoroughly cleaned with the degreasing agent. After cleaning the surface with the Ethylene Dichloride (degreasing agent), allow to air dry for 30 minutes -

   CAUTION: The degreasing operation should take place in an open atmosphere - not in a confined area.

3. Repeat washing same as item #2.

4. Thoroughly mix the two component sealant materials as specified on the containers being absolutely certain it is mixed completely with no streaking of the two parts. Be sure that all the contents of both containers are used.

   NOTE: The working life of the mixed sealant is approximately 30 minutes.

5. Apply a bead of the mixed sealant around the periphery of the nut (O.D.) plate adjacent to the rubber material inside the cell.

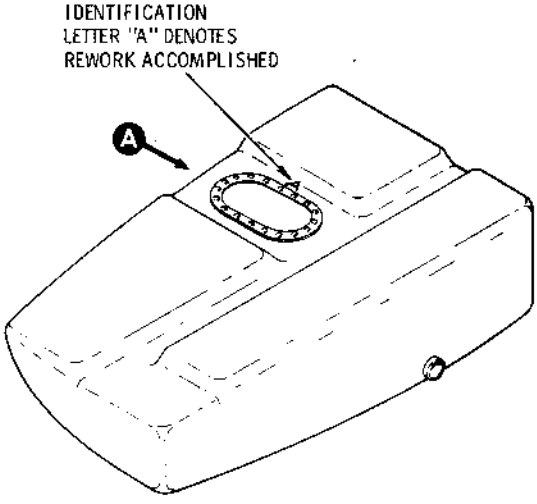
6. Fill the cap plugs full with mixed sealant and apply over each individual dome nut on the inside of the cell exerting pressure to be sure that an adequate quantity of sealant seals against the aluminum ring.

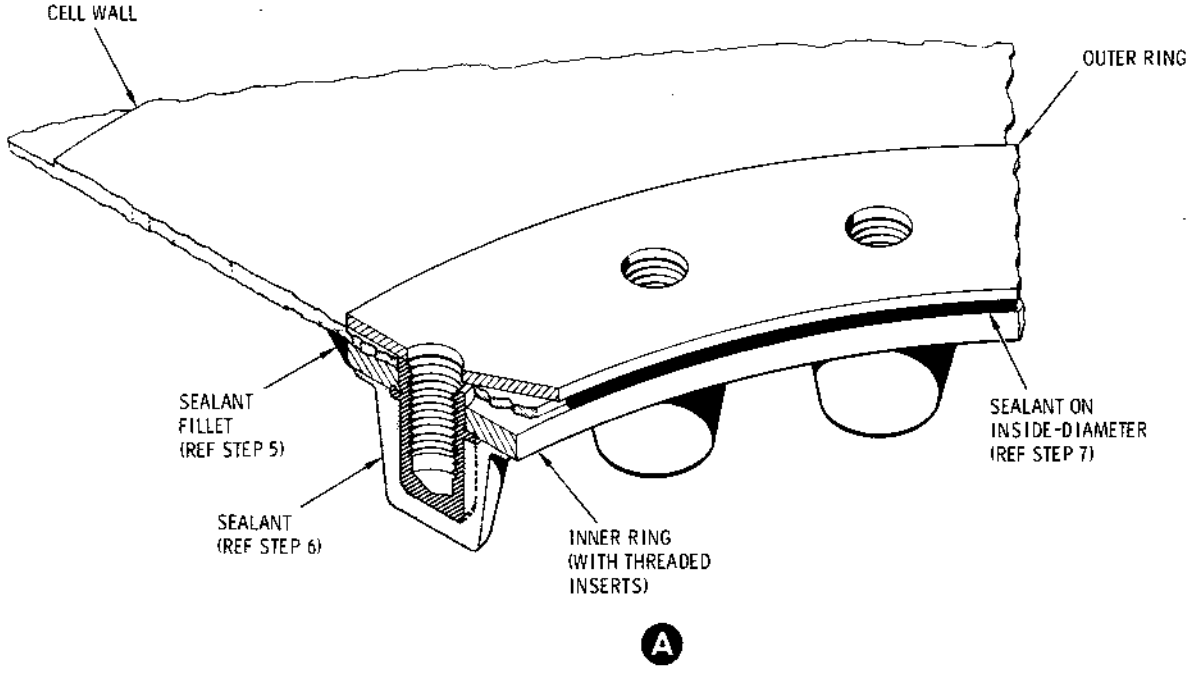
7. Apply a generous bead of the mixed sealant to the exposed inside diameter of the nut plate being sure that the I.D. is completely sealed with no void areas between the metal rings.

   CAUTION: Keep sealant material off the fitting sealing surface.

8. Inspect the areas that have been coated with sealant material for any missed areas and skips and if any exist they should be recoated immediately before the sealant material starts to cure.

9. Allow the sealant to cure a minimum of 20 hours prior to moving the tank or removing the cap plugs. After the 20 hours remove sealant that may have extruded through the air bleed holes in the plastic caps. Gently remove the cap plugs using a pair of pliers. Remove plastic film and inspect interior of cell for contaminants before closing.


IDENTIFICATION
LETTER "A" DENOTES
REWORK ACCOMPLISHED
A


CELL WALL
OUTER RING
SEALANT
FILLET
(REF STEP 5)
SEALANT
(REF STEP 6)
INNER RING
(WITH THREADED
INSERTS)
SEALANT ON
INSIDE-DIAMETER
(REF STEP 7)
A