

TECHNICAL BULLETIN

Bell Helicopter

A Textron Company

No. 407-08-81

Date JAN 08, 2008

Page 1 of 4

DATE
REV

MODEL AFFECTED: 407

SUBJECT: CONTACT ENHANCER STABILANT 22,
INTRODUCTION OF.

HELICOPTERS AFFECTED: All

COMPLIANCE: At Customer's Option

DESCRIPTION:

Moisture contamination of the electrical connectors has been found to be the cause of electrical discrepancies. It has also been found to cause corrosion and premature wear of the contacts. Most of these problems are reported on aircraft that operate in high relative humidity environments.

This bulletin introduces the use of contact enhancer Stabilant 22, which will be added between the mating surfaces of the connectors. Bell Helicopter is approving the use of this contact enhancer on connectors that are outside of cabin area only: top deck and transmission area, under belly and tailboom area. This will help the fleet reducing downtime due to moisture related problems of the airframe.

The procedure to apply the contact enhancer described in this technical bulletin will be incorporated in the future revision of the BHT-ELEC-SPM Electrical Standard Practice Manual.

APPROVAL:

The engineering design aspects of this bulletin are Transport Canada Civil Aviation (TCCA) approved.

MANPOWER:

Approximately 2.0 man-hours are required to complete this bulletin. Man-hours are based on hands-on time, and may vary with personnel and facilities available.

WARRANTY:

There is no warranty credit applicable for parts or labor associated with this Bulletin.

MATERIALS:

Required Material:

None required.

Consumable Material:

The following material is required to accomplish this bulletin, however this material is considered consumable (bench stock) material and may not require ordering depending on the operators consumable material stock levels. This material may be obtained through your Bell Helicopter Textron Supply Center.

<u>Part Number</u>	<u>Nomenclature</u>	<u>Quantity</u>	<u>Reference</u>
TT-I735 ISOPROPYL	Isopropyl Alcohol 99%	A/R	C-385
CCCC0046	Cotton Cheese Cloth	A/R	C-486
Stabilant 22	Contact Enhancer	15ML	C-052

SPECIAL TOOLS:

None required

WEIGHT AND BALANCE:

Not affected

ELECTRICAL LOAD DATA:

Not affected

REFERENCES:

BHT-ELEC-SPM Electrical Standard Practice Manual
407-MM-10 Maintenance Manual

PUBLICATIONS AFFECTED:

BHT-ELEC-SPM Electrical Standard Practice Manual

ACCOMPLISHMENT INSTRUCTIONS:

-NOTE-

Contact Enhancer Stabilant 22 (C-052) to be installed on connectors that are outside of cabin area only: top deck and transmission area, under belly and tailboom area (internal and external).

1. Disconnect connectors.
2. Clean the contacts of connectors and receptacles using Isopropyl Alcohol (C-385).

CAUTION

Do not use steel, brass or copper brushes to clean contacts, pins and sockets.

3. Use a nylon bristle or other non-metallic brush to apply the cleaner to the contacts.

WARNING

When using air pressure, wear appropriate safety equipment.

4. Dry the connectors and receptacles using filtered compressed air (15-20 psi).
5. Use a magnifying glass and a strong light source to examine the contacts for any foreign material, corrosion, and loose or damaged contacts.
 - i. If foreign material is found, repeat step 2.

- ii. Replace corroded, loose, or damaged contacts (Refer to BHT-ELEC-SPM).
6. To ease application, if Stabilant 22 (C-052) is too thick, dilute using 99% Isopropyl Alcohol (C-385) and thoroughly mix. Mixing ratio is 15ML Stabilant 22 (C-052) to 1.0-1.5 ML Isopropyl Alcohol.

CAUTION

Do not apply an excessive amount of contact enhancer. Only a few drops per connector are required. If the internal section of the connector is overfilled with Stabilant 22 (C-052), hydraulic damage to the contacts may result when connectors are mated.

7. Use a nylon bristle or other non-metallic brush to apply a light coating of contact enhancer Stabilant 22 (C-052) to internal sections and contacts (male pins) of the connectors/receptacles. Do not put any to the socket side (female pins) of the mating connector.
8. If required, remove excess of Stabilant 22 (C-052) with a lint-free cleaning cloth (C-486) dampened with Isopropyl Alcohol (C-385). Allow half an hour for the alcohol to dissipate before mating connector and receptacle.
9. Mate connector and receptacle sections.
10. Ensure connectors are fully engaged, tight and secured.
11. Perform all applicable system functional checks as described in the applicable chapters of the Maintenance Manuals.
12. Make an entry in the helicopter records to indicate that this bulletin has been accomplished.