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DN-184  
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NN-005

# SERVICE BULLETIN

DATE: 10 MARCH 1994

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## FOUR-WAY TRIM SWITCH REPLACEMENT PROGRAM

### 1. PLANNING INFORMATION:

#### A. Aircraft Affected:

All MD Helicopters, Inc. (MDHI) 369/500 Series helicopters with Guardian Electric A218-100646-03 four-way trim switches installed in the cyclic grip.

#### B. Assembly/Components Affected by this Notice:

A218-100646-03 prior to Rev. "D", four-way trim switches and A218-966714-02 and 369D27133-501 grip assemblies.

#### C. Reason:

MDHI has received and investigated reports from operators in the field that some four-way cyclic trim switches were sticking during operation. This condition could cause an uncommanded directional travel in the cyclic control system which can be overcome by the pilot. The forces will increase by approximately 30 pounds in this direction, therefore creating an increase in pilot workload. However, the helicopter will still respond normally to all inputs by the pilot. Therefore, MDHI is requiring operators to replace those affected switches with switches that have been upgraded to a Rev. "D" configuration.

#### D. Description:

Procedures in this notice require operators to replace affected four-way trim switches with switches that have been upgraded by Guardian to a Rev. "D" configuration. Upgraded A218-100646-03 switches can be readily identified by the green colored epoxy added to the four tabs at the bottom of the switch and Rev. "D" stamped on the bottom of the mounting bracket of the switch (see Figure 1).



Procedures described in this Notice are the only approved means of compliance to the requirements of this Notice. Operators who elect to make their own modifications of the trim switch, should assure that they comply with FAA requirements regarding parts and aircraft modifications. Any unapproved means of compliance to the requirements of this Notice will result in the voiding of any helicopter warranties by MDHS.

#### E. Approval:

The design engineering aspects of this notice have been shown to comply with the applicable Federal Aviation Regulations and are FAA approved.

#### F. Manpower:

One and a half man-hours will be required to remove and replace each cyclic trim switch.

#### G. Time of Compliance:

The requirements of this notice shall be complied within the next 100 hours of helicopter operation or one year, whichever occurs first.

#### H. Interchangeability:

See Compliance Record section of this notice.

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## I. Material/Part Availability:

REPLACEMENT PARTS/SUPPLIES			
Nomenclature	Part No.	Qty.	Source
Four-way Trim Switch	A218-100646-03 (Rev. "D")	1	MDHI Warranty and Repair (No Charge)

MATERIAL	
Nomenclature/Specification	Source
Sealing compound (MIL-S-7502)	Product Research 5454 San Fernando Rd. Glendale, CA 91209
Solder, tin alloy, rosin core (QQ-S-571) (Composition SN60WPR2)	Commercial
Strap, tie (MS3367-*~*) (size optional)	Thomas Betts Los Angeles, CA

## J. Warranty Policy:

MDHI will provide, free of charge, A218-100646-03 Rev. "D" switches to replace A218-100646-03 switches (previous to Rev. "D"). If the work is performed at a MDHI Approved Service Center, MDHI will allow 1.5 hours labor per each switch that has to be replaced. This policy is contingent upon MDHI receiving the affected switches within 30 days of receipt of the new -03 Rev. "D" switch. Failure to return the affected switch will result in a billing at full list price and no labor allowance.

Affected switches shall be returned to MDHI Warranty and Repair Department.

## K. Tooling:

Soldering iron or gun.

## L. Weight and Balance:

N/A

## M. Electrical Load Data:

N/A

## N. Other Publications Affected:

N/A

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## 2. ACCOMPLISHMENT INSTRUCTIONS:

- (1). Remove affected A218-100646-03 switches per instructions contained in the Handbook of Maintenance Instructions (CSP-HMI-2).
- (2). Install an A218-100646-03, marked with Rev. "D" on its mounting bracket, per instructions contained in the Handbook of Maintenance Instructions (CSP-HMI-2). **NOTE:** A218-100646-03 switches marked with Rev. "D" will also have green epoxy over the four tabs at the base of the switch (see Figure 1).

## 3. IDENTIFICATION:

N/A

## 4. DISPOSITION OF PARTS REMOVED:

Operators must return all affected switches to MDHI in order to receive credit for replacement switches and labor allowance credit. Return all affected parts to MDHI Warranty and Repair Department. **NOTE:** Affected operators can receive replacement switches prior to returning the affected switches.

## 5. COMPLIANCE RECORD:

Record compliance of this Service Information Notice in the compliance record section of the helicopter Log Book.

**NOTE:** If cyclic controls are subsequently removed from the aircraft they should be identified as complying with the requirements of this notice. When installing new/different controls, verify that those cyclic controls have complied with the requirements of this notice or are not affected by the requirements of this notice.

## 6. POINTS OF CONTACT:

For further assistance, contact your local MDHI Field Service Representative (refer to the latest revision of the MD500 Customer Support handbook for address and telephone numbers) or contact the Field Service Department at MDHI, Mesa, Arizona. Telephone: 1-800-388-3378 or (602) 891-6343. For Commercial Warranty and Repair issues, contact the MDHI Warranty and Repair Department at (602) 891-8565.

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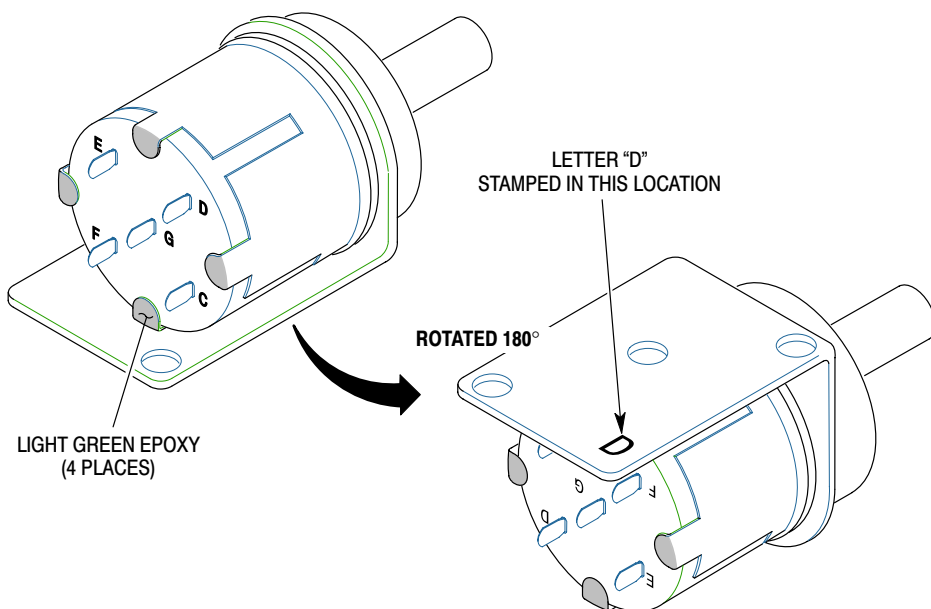
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**Figure 1.**

**Figure 1. Four-way Trim Switch.**

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