



SERVICE BULLETIN

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INSPECTION/REIDENTIFICATION/SERIALIZATION OF CYCLIC CONTROL STICK SOCKETS AND LEFT HAND COMMAND (CO-PILOT) CYCLIC TUBE

* Supersedes SB600N-021, dated 09 November 1998. This Service Bulletin is being revised to include additional aircraft effectivities.

1. PLANNING INFORMATION

A. Aircraft Affected:

All McDonnell Douglas Helicopter Systems (MDHS) MD600N helicopters, serial numbers RN003 thru RN051.

B. Assembly/Components Affected By This Notice:

Pilot and Co-Pilot Cyclic Control Stick Assemblies (P/N 369D24285-505, 369D24285-507, 369D24286-BSC, and 369D24286-509); Pilot and Co-Pilot Sockets (P/N 369A7141 and 369A7802) and Co-Pilot Cyclic Tube (P/N 369D27132-501) Refer Table I for assembly configurations.

C. Reason:

To inspect all MD600N pilot and co-pilot cyclic control stick assemblies for cracks in the area of the socket housings. To add serial numbers to all socket housings and left hand command co-pilot cyclic tube assemblies. Failure to comply with the requirements of this Bulletin may result in total loss of cyclic control of the helicopter.

D. Description:

PART I - Provides operators with instructions to initially remove the cyclic control sticks from the helicopter, remove the paint in the area of the seven (7) tube attach rivets (or quick disconnect pin holes on the co-pilot's stick) and perform an inspection of that area using a bright light and a 10X magnifying glass. **PART I** also provides instructions to apply serial numbers and new part numbers to all socket housings. Additionally, operators will add serial numbers and new part numbers to the left hand command co-pilot cyclic tubes.

PART II - Provides operators with instructions to perform subsequent inspections of the same areas for cracks using a bright light and a 10X magnifying glass at each subsequent eight (8) hours of helicopter operation. **PART II** does not necessitate removal of the cyclic control stick from the helicopter.

E. Time of Compliance:

PART I - Prior to next flight (one-time only), for aircraft with 100 hours or greater of helicopter operation.

PART II - At each subsequent eight (8) hours of helicopter operation.

F. FAA Approval:

The technical design aspects of this Bulletin are FAA Approved.

G. Manpower:

PART I - 2.5 man-hours.

PART II - 0.5 man-hours.

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H. Interchangeability:

None

I. Material/Part Availability:

Contact MDHS Warranty and Repair Dept.

REPLACEMENT PARTS/SUPPLIES (See Notes below)			
Nomenclature	Part No.	Qty.	Source
Cyclic Control Stick Assembly, Pilot (left hand command)	369D24285B905	A/R	MDHS
Cyclic Control Stick Assembly, Pilot (right hand command)	369D24285B907	A/R	MDHS
Cyclic Control Stick Assembly, Co-Pilot (right hand command)	369D24286B909	A/R	MDHS
Cyclic Control Stick Assembly, Co-Pilot (left hand command)	369D24286B913	A/R	MDHS
Paint Remover, Epoxy Alkaline Type (MIL-R-81294) NOTE: The specified type of paint remover is the <i>only</i> paint remover allowed when accomplishing this Service Bulletin.	B&B 1617 B&B 1567C	A/R	B&B Chemical Co., Inc. 875 W. 20th St. Hialeah, FL 33010
	Turco 5469 Turco 5981	A/R	Turco Products Industrial Division of Pennwalt Corp. 24600 S. Main St. Carson, CA 90744
	Eldorado PR-3444 Eldorado PR-3500 Eldorado PR-3505	A/R	Eldorado Chemical Co., Inc. P.O. Box 32101 San Antonio, TX 78216

NOTE: These are the part numbers that should be used when ordering replacement parts. These assemblies consist of the cyclic stick and socket only and will require your grip and harness to complete the assembly. The replacement parts listed above are life-limited assemblies (1000 hours).

J. Warranty Policy:

MDHS will provide replacement parts and a labor credit, not to exceed 2.5 hours.

K. Tooling:

N/A

L. Weight and Balance:

N/A

M. Electrical Load Data:

N/A

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N. Other Publications Affected:

Handbook of Maintenance Instructions (CSP-HMI-2)

2. POINTS OF CONTACT

For further assistance, contact your local MDHI Field Service Representative (refer to the latest revision of the "At Your Service" handbook for address and telephone numbers) or contact the Field Service Department at MDHI, Mesa, Arizona. Telephone 1-800-388-3378 or (480) 891-6342. DATAFAX: (480) 891-6782.

3. ACCOMPLISHMENT INSTRUCTIONS

Refer to Figures 1 and 2.

A. PART I - INITIAL REMOVAL/INSPECTION/REIDENTIFICATION OF CYCLIC STICK ASSEMBLY FOR AIRCRAFT WITH 100 HOURS OR GREATER OF HELICOPTER OPERATION

(1). Inspect sockets.

(a). Remove cyclic control stick assemblies from the helicopter per instructions in the Handbook of Maintenance Instructions, Section 67-10-00.



Use only those paint removers listed above (per MIL-R-81294). Other paint removers may cause damage to the magnesium part.

(b). Using an acceptable paint remover and the manufacturer's instructions, remove paint on the lower end of the cyclic control stick assembly in the area of the seven (7) tube attach rivets (pilot side) and quick disconnect pin holes (co-pilot side) shown in Figures 1 and 2.

(c). Rinse area where paint remover has been applied with water.

(d). Using a bright light and a 10X magnifying glass, inspect the rivet area for cracks extending radially from the rivets and along the fillet surfaces (or quick disconnect pin holes on the co-pilot's stick), as shown in Figures 1 and 2. No cracks are allowed.

NOTE: Cyclic control stick assemblies that show any indications of cracking, corrosion or have reached 1000 hours of service life must be replaced with a serviceable part.

(2). Re Identify parts per Table I.

(a). For cyclic stick assemblies that do not show cracks apply new part numbers to the sockets (Ref. Table I, Fig. 1 and Fig. 2) and serial numbers (Ref. Table III) using ink stamp permanent paint (MIL-M-43719). Apply the serial number in an area/location that will be the most visible when the part/assembly is installed. Record serial number in the Installed Component Record section of the helicopter Log Book.

(b). Apply serial numbers (Ref. Table II) to the left hand command co-pilot's cyclic tubes using ink stamp permanent paint (MIL-M-43719). Apply the serial number in an area/location that will be the most visible when the part/assembly is installed.

(c). Apply part number 369D27132-503 (Ref. Table I) to the cyclic tube. Record serial number and new part number in the Installed Component Record section of the helicopter Log Book.

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- (3). Install serviceable cyclic control stick assemblies per the Handbook of Maintenance Instructions, Section 67-10-00.
- (4). Record compliance to **PART I** of this Service Bulletin in the Compliance Record section of the helicopter Log Book. As necessary, fill out the attached Compliance Record form and FAX the completed form back to MDHS.

B. PART II - 8 HOUR INSPECTION OF CYCLIC CONTROL STICK ASSEMBLY

Refer to Figures 1 and 2.

- (1). As necessary remove cover to gain access to the bottom area of the cyclic control stick assembly.
- (2). Using a bright light and a 10X magnifying glass, inspect the rivet area for cracks extending radially from the rivets and along the fillet surfaces (or quick disconnect pin holes on co-pilot's stick), as shown in Figures 1 and 2. No cracks are allowed.

NOTE: Cyclic control stick assemblies that show any indications of cracking, corrosion or have reached 1000 hours of service life must be replaced.

- (3). Record compliance to **PART II** of this Service Bulletin in the Compliance Record section of the helicopter Log Book.

C. Disposition of Parts Removed

Return to MDHS

TABLE I: CONFIGURATION MODIFICATIONS

ASSEMBLY		ACTION	NEW PART NO.	NEW SERIAL NO.
369D24285-505, Stick Assembly - Cyclic Control, Pilot		Reidentify per Part I	369D24285-905	N/A
Tube Assembly	369D27132-503	N/A	N/A	N/A
Socket	369A7141	Inspect and reidentify per Part I	369A7141-5	Ref. Table III
369D24285-507, Stick Assembly - Cyclic Control, Pilot		Reidentify per Part I	369D24285-907	N/A
Tube Assembly	369D27132-503	N/A	N/A	N/A
Socket	369A7141	Inspect and reidentify per Part I	369A7141-5	Ref. Table III
369D24286-BSC, Stick Assembly - Cyclic Control, Co-Pilot		Reidentify per Part I	369D24286-913	N/A
Tube Assembly	369D27132-501	Reidentify per Part I	369D27132-503	Ref. Table II
Socket	369A7802	Inspect and reidentify per Part I	369A7802-3	Ref. Table III

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369D24286-509, Stick Assembly - Cyclic Control, Co-Pilot		Reidentify per Part I	369D24286-909	N/A
Tube Assembly	369D27132-503	N/A	N/A	N/A
Socket	369A7802	Inspect and reidentify per Part I	369A7802-3	Ref. Table III

TABLE II: LEFT HAND COMMAND (CO-PILOT) CYCLIC TUBE (P/N 369D27132-503) SERIAL NUMBERS

AIRCRAFT SER. NO.	TUBE ASSY SER. NO.	AIRCRAFT SER. NO.	TUBE ASSY SER. NO.
RN003	009999-0101	RN028	009999-0126
RN004	009999-0102	RN029	009999-0127
RN005	009999-0103	RN030	009999-0128
RN006	009999-0104	RN031	009999-0129
RN007	009999-0105	RN032	009999-0130
RN008	009999-0106	RN033	009999-0131
RN009	009999-0107	RN034	009999-0132
RN010	009999-0108	RN035	009999-0133
RN011	009999-0109	RN036	009999-0134
RN012	009999-0110	RN037	009999-0135
RN013	009999-0111	RN038	009999-0136
RN014	009999-0112	RN039	009999-0137
RN015	009999-0113	RN040	009999-0138
RN016	009999-0114	RN041	009999-0139
RN017	009999-0115	RN042	009999-0140
RN018	009999-0116	RN043	009999-0141
RN019	009999-0117	RN044	009999-0142
RN020	009999-0118	RN045	009999-0143
RN021	009999-0119	RN046	009999-0144
RN022	009999-0120	RN047	009999-0145
RN023	009999-0121	RN048	009999-0146
RN024	009999-0122	RN049	009999-0147
RN025	009999-0123	RN050	009999-0148
RN026	009999-0124	RN051	009999-0149
RN027	009999-0125		

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TABLE III: SOCKET (369A7141-5 & 369A7802-3) SERIAL NUMBERS

AIRCRAFT SER. NO.	SOCKET ASSY SER. NO. (Note)	AIRCRAFT SER. NO.	SOCKET ASSY SER. NO. (Note)
RN003	009999-0003		
RN004	009999-0004	RN028	009999-0028
RN005	009999-0005	RN029	009999-0029
RN006	009999-0006	RN030	009999-0030
RN007	009999-0007	RN031	009999-0031
RN008	009999-0008	RN032	009999-0032
RN009	009999-0009	RN033	009999-0033
RN010	009999-0010	RN034	009999-0034
RN011	009999-0011	RN035	009999-0035
RN012	009999-0012	RN036	009999-0036
RN013	009999-0013	RN037	009999-0037
RN014	009999-0014	RN038	009999-0038
RN015	009999-0015	RN039	009999-0039
RN016	009999-0016	RN040	009999-0040
RN017	009999-0017	RN041	009999-0041
RN018	009999-0018	RN042	009999-0042
RN019	009999-0019	RN043	009999-0043
RN020	009999-0020	RN044	009999-0044
RN021	009999-0021	RN045	009999-0045
RN022	009999-0022	RN046	009999-0046
RN023	009999-0023	RN047	009999-0047
RN024	009999-0024	RN048	009999-0048
RN025	009999-0025	RN049	009999-0049
RN026	009999-0026	RN050	009999-0050
RN027	009999-0027	RN051	009999-0051

NOTE: Locate your rotorcraft serial number. In the column to the right of your serial number is a serial number (009999-XXXX). Apply this serial number to both the 369A7141-5 & 369A7802-3 sockets as applicable.

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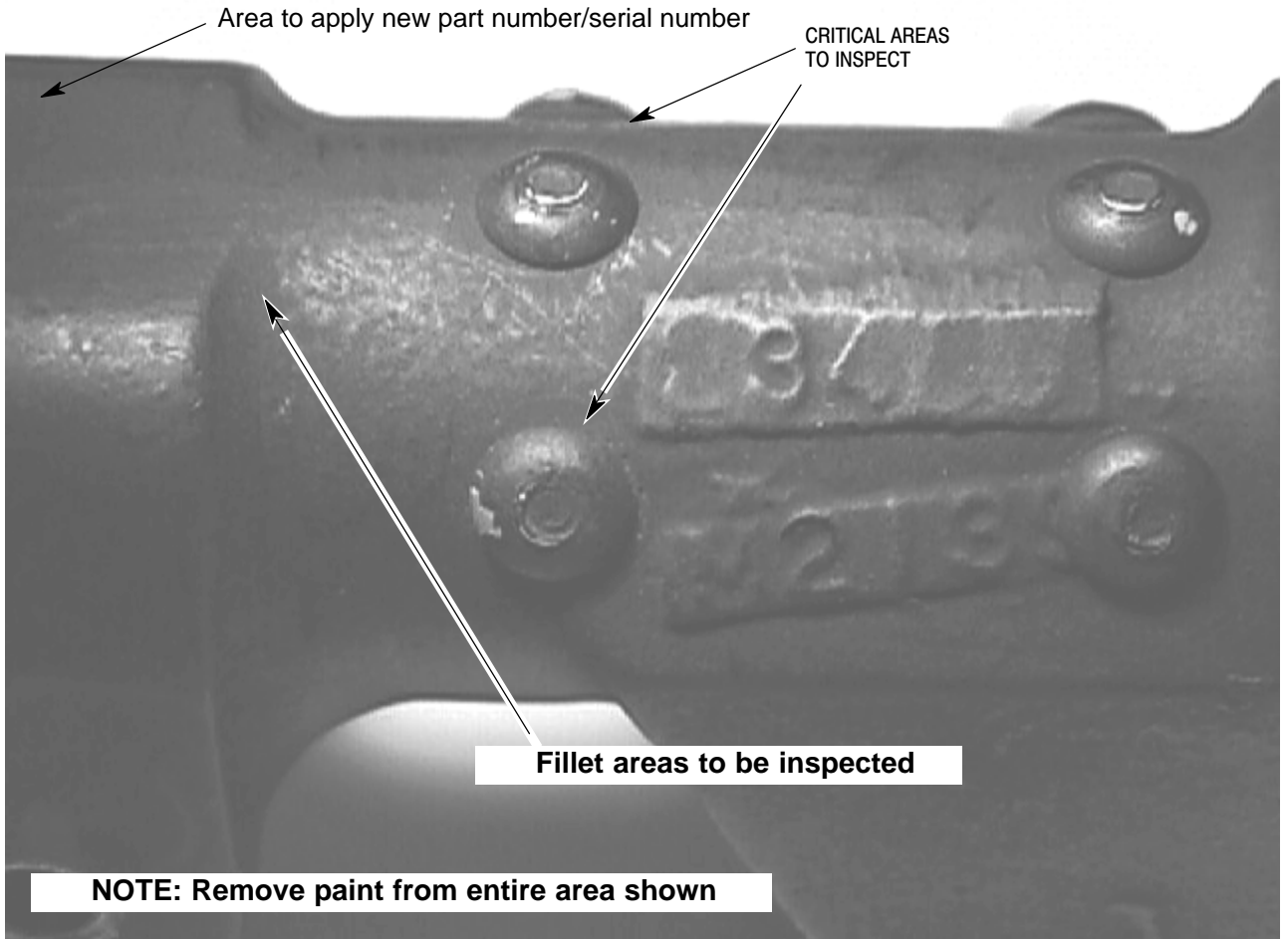


Figure 1. Cyclic Control Stick Inspection (Pilot)

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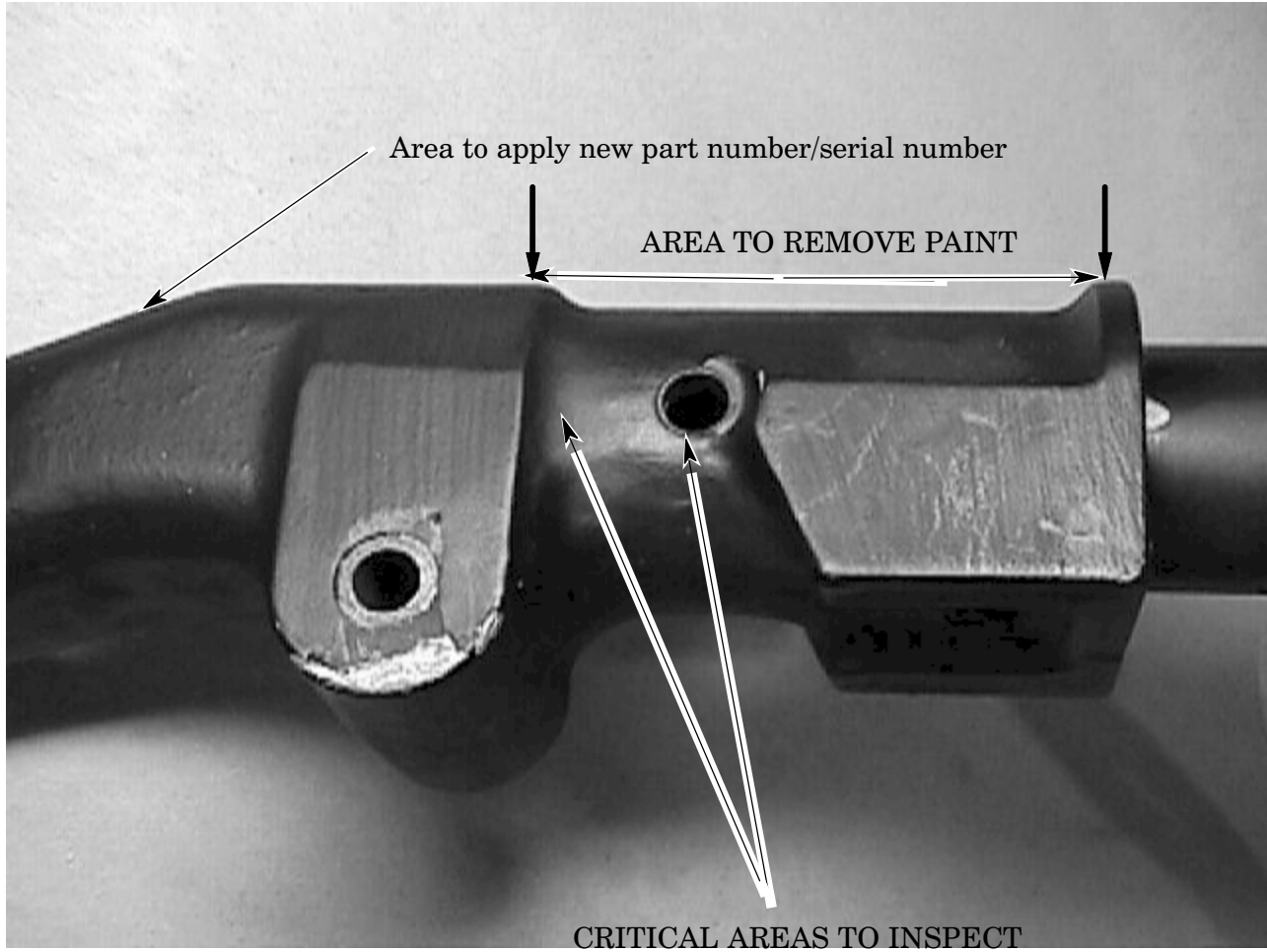


Figure 2. Cyclic Control Stick Assembly Inspection (Co-Pilot)

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SERVICE BULLETIN COMPLIANCE RECORD FORM

NAME:

A/C SERIAL NUMBER:

DATE OF COMPLIANCE:

PARTS REQUIRED FOR COMPLIANCE TO SERVICE BULLETIN:

FAX COMPLETED FORM TO (602)891-6782

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