MD Helicopters, LLC

MD500C (369H) Series
Service Letters Package

This package contains a complete set of all
Service Letters issued through:

13 January 2023

The documents are presented in the order shown in
CSP–369H–INDEX.

MODEL 369H (500C) HELICOPTER
SERVICE LETTER INDEX

NOTE

As Service Information Letters are re–issued, they will be identified as Service Letters with the helicopter model designation as the prefix.

Service Letters are are not mandatory and do not provide maintenance instructions.

369H SL369H– OR HL–	SUBJECT	Date
3.1	Bendix Avionics Equipment Repair and Service	05 Nov1973
6.1	Special Wrenches for Field Replacement of Main Rotor Pitch Bearing Studs	03 May 1971
11	Tail Rotor Swash — Cold Weather Operation	12 Oct 1971
14	Inspection of Nickel–Cadmium Batteries – FAA Airworthiness Directive Note 72–21–5	17 Dec 1971
15	Breeze BL–16600–11 Hoist Winch Assembly	10 Jan 1972
16	Allison Model 250 Engine — Sales and Service	07 Feb 1972
17	Approved Fuel for Allison Model 250 Series Engine	14 Feb 1972
18	New Cargo Hook Plate	01 May 1972
19	Identification Plates — PN 369A5351 Overrunning Clutch Housing and PN 369A54350–11 Overrunning Clutch Sub–assembly	22 May 1972
21.2	Installation of Surplus Military Parts or Salvaged Used Parts on Model 500 Helicopters	10 Feb 1984
26.1	Special Tools for Installation of Tail Rotor Control Rod Grommets PN WSI–B–12AS	22 Jun 1973
30	Replacement of Boom Fairing Assemble on First Production Helicopter, SN 0001 thru 0100	12 Jul 1973
31	Ordering Information — Pilot's Door Assembly PN 369A2002 or 369H2025; Passenger Door Assembly PN 369H2032 or 369H2038	12 Jul 1973
32.1	Metal Tail Rotor Blades — Replacement for Fiberglass Tail Rotor Blade	05 Nov 1976
34	Discussion of Hughes Serial Numbering Method	31 May 1974
36	Inflatable Floats — Service, Maintenance and Repair Facilities	05 Aug 1974
37	Extreme Turbine Outlet Temperature Effects on Turbines	28 Aug 1974
38	Modification Kit Availability — Torquemeter Bleed Valve PN M50043 and Static Pressure Tube Bleed Valve PN M50439	05 May 1975
39.3	Main Transmission PN 369A5100–709 Upgraded Transmission — Factory Availability for Overhaul	26 Jul 1976
40	Interchangeability of Tabbed Main Rotor Blades (PN 369A1100–501) With Untabbed Main Rotor Blades (PN 369A1100–501)	21 Jul 1975
42	Recharging of Inflation Bottles for Emergency Floats	07 Nov 1975
44	Allison Model 250–C20 Series Engine — Installation of New High Pressure Fuel Filter Assembly	10 Aug 1976
46	Periodic Inspection of Particle Separator Kit Installation; Removal of Outlet Screen During Cold Weather	24 Dec 1976
47	Improved Engine Air Filter Assembly for Particle Separator Filter Kit	24 Dec 1976
53	Replacement of PN 369A1613–3 — Metal Tail Rotor Blade Assemblies	22 Jul 1977
55	Utilization of Engine Air Particle Separator and Engine Compressor Water Wash Kits	14 Feb 1978

369H SL369H– OR HL–	SUBJECT	Date
58	(INSCO) Instrument Specialties Co. Inc., Authorized Repair Stations and Official Sales and Service Facilities	22 May 1978
61	Particle Separator Installation and Inspection and Possible Removal of Circular Filter Screens	08 Sep 1978
64	Operation and Maintenance Guidelines for Model 250 Series Engine Fuel System	01 Aug 1979
67	New Seal Requirement for Overhaul of PN 369H6340 and 369H92131 Landing Gear Damper Assemblies	26 May 1980
70	Compliance With FAA Airworthiness Directive and Hughes Mandatory (RED) Border Service Information Notices	30 Sep 1980
72	Substitution of Wet Spline Drive Starter–Generator for Existing Dry Spline Drive Starter–Generator	13 Mar 1981
75	Tail Rotor Driveshaft Flexible Coupling PN 369A5501 and 369H92564 Treatment With Molykote Metal Protector	21 Aug 1981
76	New Protective Boots for Main Rotor Hub and Tail Rotor Assemblies	01 Sep 1981
78	Field Replacement of '0' Ring for PN 369A8321 Oil Tank Filler Cap	02 Nov 1981
80	New PN 369D28237 Cushion for Tailpipe Hanger Assembly Designed for Longer Wear	01 Feb 1982
84	Ground Testing – Engine Automatic Re–ignition and Engine Anti–Ice Fuel Filter System	22 Nov 1982
85	Prevention of Water Leakage Through Canopy Geon Strips	10 Jan 1983
86	Handling and Shipping Gyros	01 Feb 1983
87	New Attitude Gyro and Support Assembly	25 Feb 1983
88	Surplus or Bogus 369D21100 Series Main Rotor Blades	10 Feb 1984
89	Unauthorized Tail Rotor Teeter Bearings	16 May 1984
91	Major Installations and Alterations to Your Hughes Helicopter	12 Nov 1984
93	Explanation of MDHC Parts Serialization	15 Sep 1985
94	Main Rotor Hub Overhaul Authorization	17 Mar 1986
97	Re–lubrication of Bearings in Storage	06 Apr 1987
98	External Scavenge Oil Filter System	01 May 1987
99	Unauthorized Distribution of Main Rotor Hub Overhaul Manual	15 Jun 1987
100	Illustrated Parts Breakdown of Ground Handling Wheel Assemblies (PN 369D26 10)	19 Feb 1988
102	Addition of Identification Decal on Aircraft Exterior (Compliance to FAR 45.11 [D])	06 May 1988
104	Additional Inspection Requirements of the Breeze–Eastern Rescue Hoist System	18 May 1988
105	Chafe Wrapping of Stainless Steel Tube Assemblies and Allison Commercial Service Letter CSL 145, CSL 1140 and CSL 3092, Dated May 1, 1988	26 May 1988
108.2	Facet Scavenge Oil Filter Kit, PN 1741050 (369H Series, 369D and 369E) and PN 1741300 (369F/FF)	21 Nov 1990
110	Validity of Spectrum Oil Analysis Program (S.O.A.P.)	15 Jan 1989
113R3	Customer Request for Original Aircraft Records	10 Nov 2004
116	Availability of Wire Strike Protection System (Trademark WSPS) on all MDHC 369 Series Helicopters	15 Sep 1989

369H SL369H– OR HL–	SUBJECT	Date
119	Compliance to (Breeze–Eastern) Customer Service Bulletin CSB–120 (Warning Plate for Cargo Hooks)	15 Dec 1989
120	Availability of Skid Mounted Light Assembly Shims	01 May 1991
121	Observation of Main Rotor Hub Hoisting Eye Bolts	27 Sep 1991
122	Main Rotor Hub Balancing	11 Oct 1991
124.3	Maintenance and Operation Requirements for Safe Operation of Surplus 369A (OH–6A) Series Helicopters	10 Nov 2004
125	Main Rotor Blade Inspection Program	27 Jan 1993
126	Antenna Location and Flight Maneuver Caution	22 Mar 1993
128	Compensation for Complying With Tail Rotor Blade Abrasion Strip Notice	10 May 1995
129	Increased Time Between Overhaul Period on OH–6A Main Rotor Hubs and 369A5400–700 Tail Rotor Transmission Utilization	25 Aug 1995
131	Service Letter/Notice/Bulletin Designation	13 Feb 1998
132R1	MD Helicopters Model 369/500N/600N Torque Event/Retirement Index Number Explanation	15 May 2001
133	Transfer of Ownership of the Light Helicopter Line	19 Feb 1999
134	Required Inspections and Critical Inspection Areas	16 Aug 1999
135	Availability of Federal Aviation Administration Airworthiness Directives Affecting MD Helicopters	23 May 2000
136R1	Availability of Federal Aviation Administration Supplemental Type Certificates for MD Helicopters	26 Jun 2000
137	New Standard Warranty Statement	02 Mar 2001
138	Repair and Overhaul of 4–Bladed Main Rotor Hubs	26 Feb 2002
139	Availability of MDHI Publications in Electronic Format	17 Sep 2003
140	Helicopter Operation in Volcanic Ash Atmosphere	06 May 2010
142	Kamatics Shaft and Coupling Overhaul/Exchange Program Announcement	22 Dec 2010
143	Technical Publications Price Increase	22 Dec 2010
144	Engine Power Out Warning Control Unit — Filter Installation	20 Jul 2011
145	Bendix King by Honeywell KRA 405B Radio Altimeter	14 Oct 2011
146	Technical Publications On–Line Ordering System	08 Jul 2013
147	Procedures for Service and Operations Reports	09 Aug 2013
148	Inspection of the Tail Rotor Stop	12 Aug 2014
149	Inspection of the Engine Exhaust Pipe Support Fitting	27 Oct 2015
150	Transfer of All Technical Publications into MyMD.aeroTM	31 Mar 2017
151	Addition of a Software Configuration List to the Rotorcraft Log Book	15 May 2018
152	How to Clean and Disinfect the Helicopter	15 Apr 2020
153	Use of Engine Fuel Biocides	26 May 2020
154	Garmin GPS and TAWS Alerts Service Advisory	09 Oct 2020

369H SL369H– OR HL–	SUBJECT	Date
155	Prevention of Cracks in the Anti–Torque Bracket Assemblies	26 Mar 2021
156	MD Helicopters Name Change	06 Oct 2022
157	Instructions for the Droop Stop Follower Assembly	13 Jan 2023
158	Instruction for the Pilot's Interconnecting Cyclic Pitch Torque Tube Assembly	13 Jan 2023

LETTER HL-3.1
DATE 5 November 1973
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MCDONNELL DOUGLAS HELICOPTER COMPANY

SERVICE INFORMATION LETTER

•Supersedes Hughes Service Information Letter HL-3, Dated 21 September 1970

TO — All owners and operators of Hughes Helicopters

SUBJECT BENDIX AVIONICS EQUIPMENT REPAIR & SERVICE

MODELS AFFECTED All Hughes 500 Model 369H Series Helicopters

As an aid for repair and service of avionics equipment installed on your Hughes 500 helicopter, we are providing the attached list of Bendix Avionics Service Centers (BASC) and Bendix Regional Offices, both domestic and international.

It is to be noted that any authorized local Bendix dealer will assist you where possible, or help direct you to the nearest BASC facility which can resolve your specific avionics problem. The manufacturer feels that utilization of these Bendix support facilities can vastly improve the time involved for service and repair of your avionics equipment.

Edward Koch, Manager
Customer Service Department
Hughes Helicopters
division of Summa Corporation

Product Support Department

FORM 55788

MCDONNELL DOUGLAS HELICOPTER COMPANY

BENDIX AVIONICS DIVISION OFFICES

UNITED STATES

Bendix Avionics Division
2100 N. W. 62nd Street
Fort Lauderdale, Florida 33310
Telephone: 305 776-4100

Bendix Avionics Division
3303 East Harry Street
Wichita, Kansas 67218
Telephone: 316 684-0177

Bendix Avionics Division
117 E. Providencia Avenue
Burbank, California 91503
Telephone: 213 843-4600

Bendix Avionics Division
509 East Cliff Street
Euless, Texas 76039
Telephone: 817 267-3641

UNITED STATES

Bendix Avionics Division
Hulman Building
Dayton, Ohio 45402
Telephone: 513 224-9214

Bendix Avionics Division
E. Joppa Road
Towson, Maryland 21204
Telephone: 301 823-2200

INTERNATIONAL

Bendix International
1633 Broadway
New York, New York 10019
Telephone: 212 262-8000

CANADA

Aviation Electric Limited
P. O. Box 2140
Montreal 379, Quebec, Canada
Telephone: 514 744-2811

BENDIX INTERNATIONAL REGIONAL OFFICES

Australia

Mr. E. F. Coate
Bendix International
66 Dudley Street
West Melbourne
Victoria - 3003, Australia
Telephone: 30-3311

Brazil

Mr. G. A. Acosta
Bendix Sao Paulo
Congonhas Aeroporto
Caixa Postal-18940
04615 - Sao Paulo, Brazil
Telephone: 61-3278

England

Mr. Peter Hills, Managing Director
Bendix Limited
66 Grosvenor Street
London W.1, England
Telephone: 01-629-0385/6/7

Germany

Mr. J. M. Shirey
Bendix International Service Corp.
Bockenheimer Landstr. 51-53
Frankfurt/Main, Germany
Telephone: 0611/717131

Greece

Mr. M. Nomicos, Regional Manager
87 Naxou Street
Athens - 806, Greece
Telephone: 802-5167

Japan

Mr. R. Oline
Bendix Japan. Ltd.
Room 1201 Time & Life Building
3-6, 2-Chome Ohtemachi
Chiyoda-Ku, Tokyo, Japan
Telephone: 270-9721/2/3/4

BENDIX AVIONICS SERVICE CENTERS (BASC)

UNITED STATES

Alabama

Barr Aircraft Radio Service, Inc.
Muscle Shoals, Ala. 35660
Telephone: 205 383-4515

Dixie Air, Inc.
Tuscaloosa, Ala. 35401
Telephone: 205 345-4100

Monroeville Avionics Center
Monroeville, Ala. 36460
Telephone: 205 743-2998

Montgomery Aviation Corp.
Montgomery, Ala. 36101
Telephone: 205 288-7334

Napier Radio, Inc.
Dothan, Ala. 36301
Telephone: 205 794-7012

Bill Woods Beechcraft, Inc.
Birmingham, Ala. 35212
Telephone: 205 592-0321

Alaska

Aerotronics of Alaska, Inc.
Anchorage, Alaska 99502
Telephone: 907 279-3913

Aircraft Radio Service
Anchorage, Alaska 99510
Telephone: 907 272-7332

Aviation Electronics, Inc.
Anchorage, Alaska 99501
Telephone: 907 274-3113

Avionics Service Company
Anchorage, Alaska 99510
Telephone: 907 272-1816

Alaska

Era Avionics
Anchorage, Alaska
Telephone: 907 272-5422

Navcom Avionics
Fairbanks, Alaska
Telephone: 907 479-2058

Arizona

Cutter Aviation, Inc.
Phoenix, Ariz. 85034
Telephone: 602 273-1237

Hamilton Aircraft Company, Inc.
Tucson, Ariz. 85706
Telephone: 602 294-3483

Sawyer Avionics
Phoenix, Ariz. 85034
Telephone: 602 275-5400

Tucson Beechcraft
Tucson, Ariz. 85706
Telephone: 602 889-6315

Arkansas

Hiegel Aviation, Inc.
Little Rock, Ark. 72203
Telephone: 501 375-9891

Little Rock Airmotive, Inc.
Little Rock, Ark. 72203
Telephone: 501 372-5254

California

Aero Equipment Co., Inc.
Van Nuys, Cal. 91406
Telephone: 213 782-8119

BENDIX AVIONICS SERVICE CENTERS (BASC)

UNITED STATES

California

Aerospace Avionics
Oakland, Cal. 94614
Telephone: 415 562-0838

Airadio Company, Inc.
Santa Ana, Cal. 92707
Telephone: 714 546-3325

Airesearch Aviation Company
Los Angeles, Cal. 90045
Telephone: 213 646-2770

Airmartronics
Salinas, Cal. 93901
Telephone: 408 424-1150

Aviasco, Inc.
Napa, Cal. 94558
Telephone: 707 252-3528

Aviation Services Division
Los Angeles, Cal. 90045
Telephone: 213 649-0700 or 647-5050

Avionic Enterprises
Chula Vista, Cal. 92011
Telephone: 714 420-2444

Avionics West
Santa Maria, Cal. 93454
Telephone: 805 925-6708

Bates Aviation, Inc.
Hawthorne, Cal. 90250
Telephone: 213 675-4405

Beechcraft West
Van Nuys, Cal. 91406
Telephone: 213 786-1410

California

Butler Aviation Int'l, Inc.
San Francisco, Cal. 94128
Telephone: 415 583-8307

California Air Radio
Upland, Cal. 91786
Telephone: 714 624-1465

Capitol Sky Park, Inc.
Sacramento, Cal. 95822
Telephone: 916 421-5574

Continental Avionics, Inc.
Santa Ana, Cal. 92707
Telephone: 714 979-1731 or 1732

Corporate Airmotive, Inc.
San Jose, Cal. 95110
Telephone: 408 297-1467

Del Monte Aviation
Monterey, Cal. 93940
Telephone: 408 373-1511

Denair Aviation, Inc.
Fresno, Cal. 93706
Telephone: 209 237-4164

Ede's Avionics Center
Palm Springs, Cal. 92262
Telephone: 714 327-6811

Fiesta Air Center
Long Beach, Cal. 90808
Telephone: 213 420-1438

Fresno Avionics, Inc.
Fresno, Cal. 93727
Telephone: 209 251-9189

BENDIX AVIONICS SERVICE CENTERS (BASC)

UNITED STATES

California

Gibbs Service Center, Inc.
San Diego, Cal. 92123
Telephone: 714 277-3311

Golden West Skyways
Van Nuys, Cal. 91406
Telephone: 213 786-8021

Great Western Aircraft Radio Co.
Long Beach, Cal. 90806
Telephone: 213 426-5541

IFR Avionics
Van Nuys, Cal. 91406
Telephone: 213 782-4810

Jimsair Aviation Services
San Diego, Cal. 92101
Telephone: 714 298-7704

E. J. Lansberg, Inc.
Sylmar, Cal. 91342
Telephone: 213 367-2993

Peninsula Aviation Company
Torrance, Cal. 90505
Telephone: 213 326-5050

R & B Airtronics, Inc.
Oxnard, Cal. 93030
Telephone: 805 486-6279

Qualitron Aero, Inc.
Burbank, Cal. 91502
Telephone: 213 877-0031

Santa Barbara Avionics, Inc.
Goleta, Cal. 93017
Telephone: 805 964-6919

California

Shell Avionics
San Carlos, Cal. 94070
Telephone: 415 593-2115

Silverado Avionics
Napa, Cal. 94558
Telephone: 707 255-5588

Western Avionics, Inc.
Oakland, Cal. 94614
Telephone: 415 635-3950

Tower Avionics Center
Oakland, Cal. 94614
Telephone: 415 635-3500

Western Commander, Inc.
Van Nuys, Cal. 91406
Telephone: 213 988-2800

Colorado

Aircraft Radio & Accessory Co., Inc.
Denver, Colo. 80207
Telephone: 303 398-3717

Connecticut

Airkaman, Inc.
Windsor Locks, Conn. 06096
Telephone: 203 246-5466

Oxford Avionics, Inc.
Oxford, Conn. 06483
Telephone: 203 264-6572

BENDIX AVIONICS SERVICE CENTERS (BASC)

UNITED STATES

Delaware

Summit Aviation
Middletown, Del. 19709
Telephone: 302 737-7300

Atlantic Aviation Corporation
Wilmington, Del. 19899
Telephone: 302 322-2211

Florida

Aero Comm Systems, Inc.
St. Petersburg, Fla. 33732
Telephone: 813 531-6464

Aero Marine Associates
St. Petersburg, Fla. 33701
Telephone: 813 895-2022

Aero Systems Avionic Service Div.
Miami, Fla. 33166
Telephone: 305 871-1300

Air Parts & Supply Company
Miami, Fla. 33156
Telephone: 305 235-5401

Airborne Avionics Service Corp.
Ft. Lauderdale, Fla. 33315
Telephone: 305 524-3735

Airport Radio Services
Miami, Fla. 33148
Telephone: 305 887-8141

Avionics Sales & Maintenance, Inc.
Miami, Fla. 33148
Telephone: 305 871-1844

L. D. Bragg Aviation Electronics
Jacksonville, Fla. 32211
Telephone: 904 725-0477

Florida

Cape Kennedy Com. & Electronics
Titusville, Fla. 32780
Telephone: 305 267-8172

Cavico-Alamo Aircraft Sales
Ft. Lauderdale, Fla. 33315
Telephone: 305 522-3783

Central Florida Avionics
Orlando, Fla. 32814
Telephone: 305 894-9963

Chambreau Industries
Hialeah, Fla. 33010
Telephone: 305 885-1771

Charter Air Center
Gainesville, Fla. 32601
Telephone: 904 373-7551

Consumer Electronics, Inc.
Sanford, Fla. 32771
Telephone: 305 645-3900 or 323-0200

Dolphin Aviation, Inc.
Sarasota, Fla. 33580
Telephone: 813 355-2902

Dumor Avionics, Inc.
Opa Locka, Fla. 33054
Telephone: 305 685-3586

Fickling Avionics
Miami, Fla. 33156
Telephone: 305 233-7830

Hangar One, Inc.
Orlando, Fla. 32814
Telephone: 305 894-9611

BENDIX AVIONICS SERVICE CENTERS (BASC)

UNITED STATES

Florida

Jones Aviation Services, Inc.
Sarasota, Fla. 33578
Telephone: 813 355-8100

L & B Electronics, Inc.
Ft. Lauderdale, Fla. 33315
Telephone: 305 524-2178

Maurice F. Martins Enterprises
Opa Locka, Fla.
Telephone: 305 688-8051

Melard
Miami, Fla. 33156
Telephone: 305 661-3331

New World Equip. & Supply Corp.
Miami, Fla. 33148
Telephone: 305 822-2378

Pacific Aviation Corp.
Hialeah, Fla. 33010
Telephone: 305 888-6872

Palm Beach Avionics
West Palm Beach, Fla. 33406
Telephone: 305 686-2789

Peninsular Aircraft Radio, Inc.
Miami, Fla.
Telephone: 305 888-6713

Red Aircraft Sales, Inc.
Ft. Lauderdale, Fla. 33315
Telephone: 305 525-0211

Skytel Avionics, Inc.
Ft. Lauderdale, Fla. 33310
Telephone: 305 776-1081

Florida

Sowell Aviation Company
Panama City, Fla. 32401
Telephone: 904 785-4325

Sun Aviation
Vero Beach, Fla. 32960
Telephone: 305 562-9257

Sunny South Aircraft Service, Inc.
Ft. Lauderdale, Fla. 33315
Telephone: 305 524-5501

Tampa Air Electronics
Tampa, Fla. 33615
Telephone: 813 879-3713

Tilford Radio Service
West Palm Beach, Fla. 33406
Telephone: 305 683-4121

Transnation Trading, Inc.
Miami Springs, Fla. 33166
Telephone: 305 887-0713

United Aerospace Corporation
Miami, Fla. 33166
Telephone: 305 885-9869

Volusia Aviation Service, Inc.
Daytona Beach, Fla. 32014
Telephone: 904 252-2565

Georgia

Aircomm Engineering, Inc.
Griffin, Ga. 30223
Telephone: 404 227-1442

Airtronics South, Inc.
Atlanta, Ga. 30336
Telephone: 404 691-7708

BENDIX AVIONICS SERVICE CENTERS (BASC)

UNITED STATES

Georgia

Black's Custom Avionics
Peachtree City, Ga. 30269
Telephone: 404 461-7333

Central Radio
Kennesaw, Ga. 30144
Telephone: 404 427-7512

Commander Air Service
Albany, Ga. 31702
Telephone: 912 883-1440

Electric Craftsman Company
Macon, Ga. 31201
Telephone: 912 781-9940

Epps Air Service, Inc.
Chamblee, Ga. 30341
Telephone: 404 458-9851

Fountain City Aviation
Columbus, Ga. 31904
Telephone: 404 323-8321 or 8322

Hangar One, Inc.
Atlanta, Ga. 30320
Telephone: 404 768-1000

Hasty's Aero Comm. Inc.
Tifton, Ga. 31794
Telephone: 912 382-3913

Hill Aircraft & Leasing Corp.
Atlanta, Ga. 30336
Telephone: 404 691-3330

Milner Aviation Electronics
Dalton, Ga. 30720
Telephone: 404 278-4094

Georgia

Overland Aviation Avionics
Athens, Ga. 30601
Telephone: 404 549-8104

Peachtree Air Service, Inc.
Atlanta, Ga. 30341
Telephone: 404 457-6318

The Radio Place
Gainesville, Ga. 30501
Telephone: 404 532-1563

Savannah Air Service
Savannah, Ga. 31405
Telephone: 912 234-5339

Southern Aero Radio
Atlanta, Ga. 30336
Telephone: 404 691-5699

Hawaii

Air Service Corporation
Honolulu, Hawaii 96819
Telephone: 808 841-5056

Illinois

Capitol Aviation, Inc.
Springfield, Ill. 62705
Telephone: 217 544-3431

Elgin Airport Corporation
Elgin, Ill. 60120
Telephone: 312 741-6510

Hartzog Aviation, Inc.
Rockford, Ill. 61109
Telephone: 815 968-0491

BENDIX AVIONICS SERVICE CENTERS (BASC)

UNITED STATES

Illinois

Joliet Avionics, Inc.
Joliet, Ill. 60435
Telephone: 815 725-1635

Radio Ranch, Inc.
Polo, Ill. 61064
Telephone: 815 946-2818

Walston Aviation, Inc.
East Alton, Ill. 62024
Telephone 618 259-3230

Indiana

Baer Field Avionics
Ft. Wayne, Ind. 46809
Telephone: 219 747-9168

Collins Avionics
Evansville, Ind. 47711
Telephone: 812 425-2603

Fort Wayne Air Service, Inc.
Ft. Wayne, Ind. 46809
Telephone: 219 747-6015

Kerns Aircraft Electronics, Inc.
Indianapolis, Ind. 46241
Telephone: 317 244-9561

Kerns Aircraft Electronics, Inc.
South Bend, Ind. 46628
Telepnone: 219 232-7965

Muncie Aviation Corporation
Muncie, Ind. 47305
Telephone: 317 289-7141

P & H Electronics
West Lafayette, Ind. 47907
Telephone: 317 743-3828

Indiana

Sky Harbor, Inc.
Indianapolis, Ind. 46224
Telephone: 317 293-4515

Iowa

Des Moines Flying Service
Des Moines, Iowa
Telephone: 515 285-4221

Electronic Applications Co., Inc
Burlington, Iowa 52601
Telephone: 319 752-2435

Graham Airmotive
Sioux City, Iowa
Telephone: 712 277-4365

Niederhauser Airways, Inc.
Waterloo, Iowa 50705
Telephone: 319 234-1783

Wathan Flying Service
Cedar Rapids, Iowa 52406
Telephone: 319 366-1891

Kansas

Aircraft Radio Service
Augusta, Kansas 67010
Telephone: 316 733-0735

K. C. Piper Sales, Inc.
Olathe, Kan. 66061
Telephone: 913 782-0530

Kings Avionics, Inc.
Olathe, Kan.
Telephone: 316 782-0744

BENDIX AVIONICS SERVICE CENTERS (BASC)

UNITED STATES

Kansas

Lightstone Aviation, Inc.
Coffeeville, Kan. 67337
Telephone: 316 251-4310

Meisenger Beechcraft, Inc.
Topeka, Kan. 66616
Telephone: 913 235-6256

United Beechcraft, Inc.
Wichita, Kan. 67201
Telephone: 316 942-3261

Yingling Aircraft, Inc.
Wichita, Kan. 67201
Telephone: 316 943-3246

Louisiana

Aircraft Radio Service, Inc.
New Iberia, La. 70560
Telephone: 318 364-2552

Fleeman Flying Service
Monroe, La. 71205
Telephone: 318 387-0226

Pan Air Corporation
New Orleans, La. 70126
Telephone: 504 245-1140

Maine

Heart of Maine Aviation, Inc.
Waterville, Maine 04901
Telephone: 207 872-7250

Northeast Airmotive, Inc.
Portland, Maire 04102
Telephone: 207 774-6318

Maryland

Aerotronic Services, Inc.
Gaithersburg, Md. 20760
Telephone: 301 948-9105

Air Exec. Inc.
Ocean City, Md. 21842
Telephone: 301 289-5212

Aviation & Marine Electronics
Severna Park, Md. 21146
Telephone: 301 647-0644

Basic Avionics Corporation
Frederick, Md. 21701
Telephone: 703 273-9284

Butler Aviation Int'l, Inc.
Baltimore, Md. 21240
Telephone: 301 766-4000

Friendship Flying Service
Glen Burnie, Md. 21061
Telephone: 301 761-5903

Henson Aviation, Inc.
Hagerstown, Md. 21740
Telephone: 301 733-5200

Hunt Avionics
Bowie Md. 20715
Telephone: 301 464-0127

Massachusetts

Aero-Marine Radio Corp.
Beverly, Mass. 01915
Telephone: 617 774-2636

BENDIX AVIONICS SERVICE CENTERS (BASC)

UNITED STATES

Massachusetts

J. Griffin Avionics Company
Hyannis, Mass. 02601
Telephone: 617 771-2638

Jenney Flight Engineering, Inc.
Bedford, Mass. 01730
Telephone: 617 274-0010

E. W. Wiggins Airways, Inc.
Norwood, Mass. 02062
Telephone: 617 762-5690

Michigan

Aerodynamics, Inc.
Pontiac, Mich. 48056
Telephone: 313 674-0441

Air-Flite & Serv-A-Plane
Freeland, Mich. 48623
Telephone: 517 695-9561

Centurion Flight Center, Inc.
Grand Rapids, Mich. 49508
Telephone: 616 949-5410

G. B. DuPont Co., Inc.
Lapeer, Mich. 48446
Telephone: 313 664-6966

Fontana Aviation, Inc.
Iron Mountain, Mich. 49801
Telephone: 906 774-5520

Kal-Aero, Inc.
Kalamazoo, Mich. 49002
Telephone: 616 343-2548

Northern Air Services
Grand Rapids, Mich. 49508
Telephone: 616 949-5000

Minnesota

American Aviation Company
Eden Praire, Minn. 55343
Telephone: 612 941-4440

Northern Airmotive, Inc.
Minneapolis, Minn. 55450
Telephone: 612 726-5700

Mississippi

Miller-Wills Aviation, Inc.
Jackson, Miss. 39205
Telephone: 601 939-9366

Missouri

Cape Central Airways, Inc.
Cape Girardeau, Mo. 63701
Telephone: 314 335-6631

Executive Beechcraft, Inc.
Kansas City, Mo. 64116
Telephone: 816 842-8484

Higginsville Avionics Lab, Inc.
Higginsville, Mo. 64037
Telephone: 816 584-3222

Midcoast Aviation Services, Inc.
St. Louis, Mo. 63145
Telephone: 314 426-7060

Ozark Aircraft Radio Co., Inc.
Chesterfield, Mo. 63017
Telephone: 314 532-3855

Montana

Aerotronics, Inc.
Billings, Mon 59101
Telephone: 406 259-5006

BENDIX AVIONICS SERVICE CENTERS (BASC)

UNITED STATES

Montana

Montana Piper Distributor
Billings, Mon. 59103
Telephone: 406 252-6355

Nebraska

Airkaman of Omaha
Omaha, Neb. 68119
Telephone: 402 422-6789

Duncan Aviation, Inc.
Lincoln, Neb. 68501
Telephone: 402 432-8657

Lincoln Avionics, Inc.
Lincoln, Neb. 68524
Telephone: 402 475-7621

Sky Harbor Aviation
Omaha, Neb. 68119
Telephone: 402 422-6676

Nevada

Hughes Helicopters
Las Vegas, Nev. 89109
Telephone: 702 736-7071

New Hampshire

Stead Avionics Co., Inc.
Manchester, N. H. 03103
Telephone: 603 669-4360

New Jersey

Butler Aviation - Newark, Inc.
Newark, N. J. 07114
Telephone: 201 961-2659

New Jersey

C & W Electronics, Inc.
Caldwell, N. J. 07005
Telephone: 201 227-5750

Chatham Aviation, Inc.
Morristown, N. J. 07960
Telephone: 201 539-8500

J. W. S. Electronics, Inc.
Toms River, N. J. 08753
Telephone: 201 244-6111

Kroelinger Flying Service
Vineland, N. J. 08360
Telephone: 609 692-9652

Monmouth Airlines
Farmingdale, N. J.
Telephone: 201 681-3500

Ram-Roc Avionics
Teterboro, N. J.
Telephone: 201 288-5777

Raritan Valley Electronics
Manville, N. J. 08835
Telephone: 201 722-5307

Teterboro Aircraft Service
Teterboro, N. J. 07608
Telephone: 201 288-1880

New Mexico

Cutter Flying Service
Albuquerque, New Mex. 87103
Telephone: 505 247-3791

El Paso Aero, Inc.
Albuquerque, New Mex. 87111
Telephone: 505 898-7676

BENDIX AVIONICS SERVICE CENTERS (BASC)

UNITED STATES

New Mexico

New Mexico Avionics, Inc.
Albuquerque, New Mex. 87114
Telephone: 505 898-4330

New York

Aircraft Electronics, Inc.
White Plains, N. Y. 10604
Telephone: 914 949-5375

Aircraft Radio Nav-Aid Service
Deer Park, L. I., N. Y. 11729
Telephone: 516 667-0645

Empire Aero Services, Inc.
Skaneateles, N. Y. 13152
Telephone: 315 685-3441

West Gate Aviation, Inc.
Schenectady, N. Y. 12302
Telephone: 518 399-9136

North Carolina

Atlantic Aero, Inc.
Greensboro, N. C. 27410
Telephone: 919 668-0411

Cannon Aviation Co., Inc.
Hickory, N. C. 28601
Telephone: 704 322-6044

Gastonia Avionics, Inc.
Gastonia, N. C. 28052
Telephone: 704 864-7852

Greensboro-High Point Air Serv., Inc.
Greensboro, N. C. 27410
Telephone: 919 668-0481

North Carolina

Piedmont Aviation, Inc.
Winston-Salem, N. C. 27102
Telephone: 919 767-5491

Powell Avionics
Fayetteville, N. C.
Telephone: 919 484-0236

Raleigh-Durham Aviation
Morrisville, N. C. 27560
Telephone: 919 782-3232

Thurston Aviation, Inc.
Charlotte, N. C. 28208
Telephone: 704 394-4331

Woodall Avionics Co., Inc.
Durham, N. C. 27704
Telephone: 919 682-1420

North Dakota

Dakota Radio
Devils Lake, N. D. 58301
Telephone: 201 662-4040

Ohio

American Airmotive, Inc.
Columbus, Ohio 43228
Telephone: 614 878-7262

Capital Aircraft Electronics, Inc.
Columbus, Ohio 43219
Telephone: 614 237-4271

Central Airtronics, Inc.
Cincinnati, Ohio 45226
Telephone: 503 648-7424

BENDIX AVIONICS SERVICE CENTERS (BASC)

UNITED STATES

Oregon

Flightcraft, Inc.
Portland, Ore. 97218
Telephone: 503 288-5951

Hillsboro Aviation
Hillsboro, Oregon 97123
Telephone: 503 648-6631

Skyways, Inc.
Troutdale, Ore. 97060
Telephone: 503 665-1181

Pennsylvania

The Butler Aviation Company
Butler, Pa. 16001
Telephone: 412 586-2500

Lancaster Aviation, Inc.
Lititz, Pa. 17543
Telephone: 717 569-5341

Vector Avionics, Inc.
New Cumberland, Pa. 17070
Telephone: 717 774-2574

South Carolina

Eagle Aviation
West Columbia, S. C. 29169
Telephone: 803 794-8555

Hawthorne Aviation
Charleston, S. C.
Telephone: 803 774-2581

Orr's Aero Mechanix, Inc.
Spartanburg, S. C. 29301
Telephone: 803 585-1674

South Carolina

Stevens Aviation, Inc.
Greer, S. C. 29651
Telephone: 803 877-6451

TBA (Thermal Belt Air Ser., Inc.)
Greenville, S. C. 29606
Telephone: 803 242-3333

South Dakota

Satnan Avionics
Sioux Falls, S. D. 57104
Telephone: 605 399-1019

Tennessee

Aero Electronics, Inc.
Memphis, Tenn. 38118
Telephone: 901 396-0624

Chattanooga Avionics
Chattanooga, Tenn. 37421
Telephone: 615 894-1346

Robbins Airborne
Memphis, Tenn. 38130
Telephone: 901 398-2377

Sexton Aviation Electronics, Inc.
Maryville, Tenn. 37801
Telephone: 615 573-7151

Southeastern Beechcraft, Inc.
Knoxville, Tenn. 37901
Telephone: 615 577-4461

BENDIX AVIONICS SERVICE CENTERS (BASC)

UNITED STATES

Texas

Abilene Aero, Inc.
Abilene, Texas 79604
Telephone: 915 677-2601

Aero Communications, Inc.
Lubbock, Texas 79401
Telephone: 806 765-6446

Air Carrier Electronics
Fort Worth, Texas 76101
Telephone: 817 626-2462

Aircom
New Braunfels, Texas 78201
Telephone: 512 625-6972

Aircraft Instruments & Avionics, Inc.
Corpus Christi, Texas 78405
Telephone: 512 883-2877

Associated Radio Company
Dallas, Texas 75220
Telephone: 214 350-4111

Avionics Associates
El Paso, Texas 79995
Telephone: 915 779-2831

Benson Electronics
Houston, Texas 77017
Telephone: 713 645-9317

Continental Radio Co.
Houston, Texas 77017
Telephone: 713 544-1386

Executive Aircraft Service, Inc.
Dallas, Texas 75209
Telephone: 214 357-9314

Texas

Flite Electronics, Inc.
Addison, Texas 75001
Telephone: 214 239-3791

Gen-Aero, Inc.
San Antonio, Texas
Telephone: 512 824-2313 or 2316

Grand Prairie Avionics, Inc.
Grand Prairie, Texas 75050
Telephone: 214 263-2064

Houston Metro Airlines
Houston, Texas 77058
Telephone: 713 488-2900

Jetronics, Inc.
Houston, Texas 77017
Telephone: 713 641-0303

Woody Lesikar Aircraft Sales & Ser., Inc.
Houston, Texas 77079
Telephone: 713 492-2130

Matthews Electronics, Inc.
San Antonio, Texas 78216
Telephone: 512 826-2811, 7611, or 0307

Modern Aero Sales, Inc.
Dallas, Texas 75232
Telephone: 214 331-8363

Morgan Air Radio Service
Sugarland, Texas 77478
Telephone: 713 222-6951

Qualitron Aero, Inc.
Fort Worth, Texas 76125
Telephone: 817 267-2481

BENDIX AVIONICS SERVICE CENTERS (BASC)

UNITED STATES

Texas

Qualitron Aero, Inc.
Houston, Texas 77060
Telephone: 713 443-3550

Ragsdale Aviation
Austin, Texas 78760
Telephone: 512 926-7600

Redbird Electronics
Dallas, Texas 75232
Telephone: 214 337-8958

Riteway Radio, Inc.
Waco, Texas 76708
Telephone: 817 756-6301

Southwest Air Rangers of El Paso, Inc.
El Paso, Texas 79925
Telephone: 915 772-3291

Tex Sun Beechcraft, Inc.
Dallas, Texas 75234
Telephone: 214 239-1301

Tradewind Airport Corporation
Amarillo, Texas 79105
Telephone: 806 376-5205

Ward International Aircraft Services, Inc.
Fort Worth, Texas 76105
Telephone: 817 624-7236

Utah

Aircraft Radio & Accessory, Inc.
Salt Lake City, Utah 84116
Telephone: 801 328-8686

Interwest Aviation
Ogden, Utah 84403
Telephone: 801 399-1123

Virginia

Aero Industries
Sandston, Va. 23150
Telephone: 703 222-7211

Ram Aviation, Inc.
Newport News, Va. 23602
Telephone: 703 877-6401

Virginia Avionics, Inc.
Sandston, Va. 23150
Telephone: 703 222-7251

Washington

Aircraft Radio Services, Inc.
Everett, Wash. 98204
Telephone: 206 353-4242

Northwest Avionics Co.
Renton, Wash. 98055
Telephone: 206 226-6530

Olympia Nav-Com
Olympia, Wash. 98501
Telephone: 206 357-3134

Red Carpet Flying Service
Walla Walla, Wash. 99362
Telephone: 509 JA5-9140

Tower Avionics Center
Seattle, Wash. 98108
Telephone: 206 763-8530

Washington Aircraft
Seattle, Wash. 98108
Telephone: 206 762-7621

BENDIX AVIONICS SERVICE CENTERS (BASC)

UNITED STATES

West Virginia

General Aviation Service, Inc.
Charleston, West Va. 25311
Telephone: 304 344-4801

Wisconsin

Executive Air Piper Sales, Inc.
Green Bay, Wis. 54303
Telephone: 414 499-4545

Halverson Avionics, Inc.
Madison, Wis. 53704
Telephone: 608 244-4140

K-C Aviation, Inc.
Appleton, Wis. 54911
Telephone: 414 739-0324 or 0325

Kenosha Aviation Service Inc.
Kenosha, Wis. 53140
Telephone: 414 658-2025

Wisconsin

Mitchell Aero, Inc.
Milwaukee, Wis. 53207
Telephone: 414 747-5100

Viking Aviation, Inc.
LaCrosse, Wis. 54601
Telephone: 608 782-1120

Wyoming

Western Aerotronics
Cheyenne, Wyoming 82001
Telephone: 307 638-6765

Puerto Rico

Prinair (Puerto Rico Int'l Airl., Inc.)
Isla Verde, Puerto Rico
Telephone: 809 791-0404

HUGHES SERVICE INFORMATION LETTER

LETTER NO. HL-6.1*
DATE May 3, 1971
PAGE 1 OF 2

*Supersedes Service Information Letter No. HL-6 Dated March 5, 1971

TO—All owners and operators of Hughes Helicopters

SUBJECT: SPECIAL WRENCHES FOR FIELD REPLACEMENT OF MAIN ROTOR PITCH BEARING STUDS

MODELS AFFECTED:
369H Helicopter Serial Nos. 0001H thru 0005H
369HS Helicopter Serial Nos. 0001S thru 0300S
369HE Helicopter Serial Nos. 0101E thru 0215E
369HM Helicopter Serial Nos. 0001 thru 0004; 0005M thru 0200M; 0204M

Reference

500 Series - Basic Handbook of Maintenance Instructions, Revised 1 May 1970

Hughes Service Information Notice No. HN-21.1, dated November 4, 1970

Special wrenches are now available to permit replacement of pitch bearing studs in the field without disassembly of the main rotor hub, thus eliminating the need for returning the hub to HTC-AD.

A 369A9825 stud wrench is used to remove and install the pitch bearing studs, in conjunction with a 369A9826 stud nut holding wrench which engages and holds the stud attach nuts.

Due to the tolerance build-ups in forging and casting of individual main rotor hubs, insertion of the 369A9826 stud nut holding wrench may not be possible with some hubs. If the holding wrench cannot be inserted properly to engage the stud attach nuts, the hub assembly must be returned to HTC-AD for stud replacement.

It is emphasized that disassemble of the main rotor hub should not be attempted in the field. To disassemble the hub, tension on the retention straps must be released.

(▌) Denotes portions of text added or revised.

Preloading of the straps for hub reassembly requires special equipment available only at HTC-AD overhaul facilities.

All main rotor hubs returned to HTC-AD for stud replacement or for overhaul will be updated to the new 369A1200-501 configuration which incorporates holding brackets to restrain the stud attach nuts. Stud replacement for the -501 hub configuration does not require use of the stud nut holding wrench.

Unit prices for the special wrenches and for pitch bearing studs are as follows:

Nomenclature	Part Number	Unit Price
Wrench, stud - pitch bearing, main rotor	369A9825	$10.12
Wrench, stud nut - pitch bearing, main rotor	369A9826	15.12
Stud - pitch bearing, main rotor	369A1248	26.57

Edward Koch

Edward Koch, Manager
Customer Service Department
Hughes Tool Company

HUGHES
SERVICE INFORMATION
LETTER

LETTER NO. HL-11
DATE Oct. 12, 1971
PAGE 1 OF 2

TO—All owners and operators of Hughes Helicopters

SUBJECT: TAIL ROTOR SWASHPLATE - COLD WEATHER OPERATION

MODELS AFFECTED: All 369H Series Helicopters with P/N 369A1800 Series Tail Rotor Pitch Control Assembly Installed

Reference

500 Series - Basic Handbook of Maintenance Instructions, Revised 1 June 1971

It has been found that at extreme low temperatures, the Nylasint liners of the tail rotor swashplate may contract on the gearbox output shaft and thus cause tightening or binding of the tail rotor controls.

It is recommended that the controls not be forced, if this tightness condition exists. Instead, run up the helicopter until the control system is warmed sufficiently to free itself.

There is an optional Winterization Kit P/N 369H90127 available for helicopters operated at sub-zero temperatures. The -501 configuration of this kit includes a P/N 369H1800 Tail Rotor Pitch Control Assembly incorporating a swashplate with oilite bronze liners, to eliminate the possibility of seizure on the gearbox shaft splines.

Complete information for the Winterization Kit is provided in Hughes Service Information Notice No. HN-26.1.

Edward Koch

Edward Koch, Manager
Customer Service Department
Hughes Tool Company

HUGHES SERVICE INFORMATION LETTER

LETTER NO. HL-14
DATE 17 Dec 1971

TO—All owners and operators of Hughes Helicopters

SUBJECT: INSPECTION OF NICKEL-CADMIUM BATTERIES - FAA AIRWORTHINESS DIRECTIVE NOTE 71-21-5

MODELS AFFECTED: All 369H Series Helicopters Equipped With Ni-Cad Batteries Containing Polystyrene Cell Cases

Reference

500 Series - Basic Handbook of Maintenance Instructions, Revised 1 June 1971

Your attention is directed to the FAA Airworthiness Directive Note 71-21-5 reprinted as part of this Service Information Letter. The AD lists inspection requirements for nickel-cadmium batteries containing polystyrene cell cases. The polystyrene cases can be identified by their clear or slightly yellow plastic appearance.

It is noted that Marathon (Sonotone) nickel-cadmium batteries manufactured in 1969 or later contain nylon cell cases and are not affected by the AD. Otherwise, compliance is required as indicated. Nickel-cadmium batteries installed on 369H Series helicopters are rated at 13-ampere-hour.

Edward Koch

Edward Koch, Manager
Customer Service Department
Hughes Tool Company

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

NICKEL-CADMIUM BATTERY

Airworthiness Directive

(Volume I & II)

71-21-5 Nickel-Cadmium Battery. Amdt. 39-1302. Applies to all turbine engine powered aircraft having a primary electrical system that includes a nickel-cadmium battery containing any polystyrene cell cases that is capable of being used to start the aircraft's engine or APU, except those aircraft that have the charging rate of such a battery automatically controlled as a function of battery temperature and except Learjet Models 23, 24, and 25 airplanes.

Compliance is required as indicated.

(a) Visually inspect each battery, including the cell links and cell tops, for evidence of heat damage within the next 10 hours' time in service after the effective date of this AD unless already accomplished within the last 10 hours' time in service, and thereafter —

(1) For any battery rated at 33 or less amp-hours, at least once each day after the effective date of this AD that the battery is used for an engine or APU start or an attempted start, or at intervals not to exceed 10 engine starts or attempted starts, 14 APU starts or attempted starts, or a combination of 12 engine and APU starts or attempted starts, using the battery for power, whichever occurs sooner, until paragraph (e) is complied with.

(2) For any battery rated at 34 or more amp-hours, at least once each week that the battery is used for an engine or APU start or attempted start, until paragraph (e) is complied with.

(b) If any battery is found to have evidence of heat damage during an inspection required by paragraph (a), before further flight replace the battery with an equivalent serviceable battery.

(c) For any battery rated at 33 or less amp-hours, within the next 500 hours' time in service after the effective date of this AD, or before April 15, 1972, whichever occurs sooner, comply with paragraph (e).

(d) For any battery rated at 34 or more amp-hours, within the next 1,500 hours' time in service after the effective date of this AD, or before April 15, 1972, whichever occurs sooner, comply with paragraph (e).

(e) Comply with at least one of the following:

(1) Replace each cell having a polystyrene cell case with an equivalent cell having a nylon case; or

(2) Replace any battery containing any polystyrene cell case with a battery containing all nylon cell cases that is approved by the Chief, Engineering and Manufacturing Branch of an FAA Region (or in the case of the Western Region, the Chief, Aircraft Engineering Division); or

(3) Install a battery temperature sensing and overtemperature warning system and provide an operating procedure for disconnecting batteries from the charging source in the event of a battery over-temperature warning that are approved by the Chief, Engineering and Manufacturing Branch of an FAA Region (or in the case of the Western Region, the Chief, Aircraft Engineering Division); or

(4) Install a battery charging rate control system that automatically controls the battery charging rate as a function of battery temperature that is approved by the Chief, Engineering and Manufacturing Branch of an FAA Region (or in the case of the Western Region, the Chief, Aircraft Engineering Division).

(f) Upon request of an operator, the Chief, Engineering and Manufacturing Branch of an FAA Region (or in the case of the Western Region, the Chief, Aircraft Engineering Division) may increase the number of engine or APU starts or attempted starts that an operator may make between the inspections specified in paragraph (a)(1) that are required on the basis of the number of engine or APU starts or attempted starts, if the request contains substantiating data, based on

the operator's battery maintenance program and engine and APU starting procedures, which justifies an increase for the operator.

NOTE: Polystyrene cell cases can be identified by their clear or slightly yellow plastic appearance. Marathon (Sonotone) batteries manufactured prior to 1969 (Type CA20, CA20H, and CA21H) contained polystyrene cell cases. Marathon batteries manufactured in 1969 or later and those manufactured by others contain nylon cells which can be identified by their milky white or bluish appearance. Any battery rebuilt since new may contain a mixture of polystyrene and nylon cells.

This amendment is effective upon publication in the Federal Register as to all persons except those persons to whom it was made effective immediately upon receipt of the airmail letter dated September 1, 1971.

HUGHES SERVICE INFORMATION LETTER

LETTER NO. HL-15
DATE 10 Jan 1972

TO—All owners and operators of Hughes Helicopters

SUBJECT: BREEZE BL-16600-11 HOIST WINCH ASSEMBLY

MODELS AFFECTED: All 369H Series Helicopters with P/N 369H90070 Hoist System Installed

Reference

500 Series - Basic Handbook of Maintenance Instructions, Revised 1 December 1971
500 Series - HMI Appendix A, Revised 1 December 1971

We have been informed that a number of Breeze BL-16600-11 hoist winch assemblies were shipped (as part of the 369H90070 Hoist System Installation) with a vendor tag attached, calling for a periodic lubrication of the rubber pad on top of the hoist with Dow Corning silicone fluid (DC-200).

It has been found that excessive amounts of this fluid will cause the rubber boot on the full-in microswitch to swell and deteriorate. The switch is actuated by the rubber pad on the bumper.

The use of the lubricant should therefore be discontinued and the tag calling for the lubrication should be removed.

Edward Koch

Edward Koch, Manager
Customer Service Department
Hughes Tool Company

FORM NO. 95788 HTC-AD REV. 11-67

HUGHES SERVICE INFORMATION LETTER

LETTER NO. HL-16
DATE 7 Feb 1972

TO—All owners and operators of Hughes Helicopters

SUBJECT: **ALLISON MODEL 250 ENGINE - SALES AND SERVICE**

MODELS AFFECTED: **All 500 Model 369H Series Helicopters**

The attached list includes a worldwide network of Detroit Diesel Allison Division distributors, district and area offices providing complete sales and service support for the Model 250 engine.

Communications or correspondence regarding sales or service of the Model 250 engine shall be directed to your nearest Allison distributor or area office, or to your Hughes dealer.

Edward Koch, Manager
Customer Service Department
Hughes Tool Company

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

ALLISON DISTRIBUTORS

Prime Distributors	Territory	
Aeromaritime, Inc. 1156 Fifteenth Street N.W. Suite 401-07 Washington, D.C. 20005 TWX: 710-822-1108	Aden Protectorate Afghanistan Cyprus Greece Iran Iraq Israel Jordan Kuwait Lebanon Malta Qatar Saudi Arabia	Sultanate of Oman Syria Trucial Oman Turkey W. Pakistan Yemen All countries comprising Africa, exclusive of the territory served by Astra Aircraft Corp. as listed on Page 3.
Hants & Sussex Aviation, Ltd. The City Airport Portsmouth, Hants, England Telex: 86343	Austria Belgium Denmark Eire England Finland France (incl. Corsica and Monaco) The Fed. Rep. of Germany (incl. West Berlin) Gibralter Greenland Iceland	Liechtenstein Luxembourg Netherlands Norway Northern Ireland Portugal Scotland Spain Sweden Switzerland Wales Yugoslavia

Prime Distributors	Territory	
Hawker de Havilland Australia Pty., Ltd. P.O. Box 78 Lidcombe, New South Wales 2141 AUSTRALIA	Australia Brunei Burma Cambodia Ceylon Cook Islands E. Pakistan (Bangladesh) Eastern Samoa Ellice Islands Fiji Islands Gilbert Islands Hong Kong India Indonesia Japan South Korea Laos Malaysia Nepal New Caledonia New Guinea	New Hebrides Islands New Zealand North Borneo Okinawa Papua Phoenix Islands Philippines Portuguese Timor Sabah Sarawak Singapore Society Islands South Vietnam Solomon Islands Taiwan Thailand Tonga Island Tuamotu Islands Tubuai Islands Wallis Island Western Samoa
Standard Aero Engines Ltd. Winnipeg International Airport Winnipeg 21, Manitoba CANADA	All the provinces of Canada	
Astra Aircraft Corporation Pty., Ltd. P.O. Box 31074 Braamfontein, Johannesburg REPUBLIC OF SOUTH AFRICA	Angola Botswana Lesotho Malawi Mozambique	Rep. of S. Africa Rhodesia Southwest Africa Swaziland Zambia
Aviation Power Supply, Inc. 3111 Kenwood Street Burbank, California 91503	Alaska Arizona California Hawaii Idaho	Nevada Oregon Utah Washington
	The countries of Mexico, Guatemala, British Honduras, Honduras, El Salvador, Nicaragua, Costa Rica, and Panama.	

Prime Distributors	Territory	
Airwork Corporation Municipal Airport Millville, New Jersey 08332	Alabama Connecticut Delaware District of Columbia Florida Georgia Illinois Indiana Kentucky Maine Maryland Massachusetts Michigan Mississippi The area comprising the islands in the Caribbean Sea, except Cuba.	New Hampshire New Jersey New York North Carolina Ohio Pennsylvania Rhode Island South Carolina Tennessee Vermont Virginia West Virginia Wisconsin
Southwest Airmotive Love Field Dallas, Texas 75209	Arkansas Colorado Iowa Kansas Louisiana Minnesota Missouri Montana	Nebraska New Mexico North Dakota Oklahoma Texas South Dakota Wyoming All countries comprising South America
Elicotteri Meridionali S. p. A. Frosinone, Italy	Italy Sicily Sardinia	

District and Zone Offices

ATLANTA DISTRICT OFFICE
P. O. Box 1060
Marietta, Georgia 30060

Supv. Serv: R. S. Wickham

Telephone: A/C (404) 427-4086

DAYTON ZONE OFFICE
333 West First Street
Suite 312
Dayton, Ohio 45402

Manager: A. A. Adams
Serv. Rep: R. J. Helm
Telephone: A/C (513) 445-5025
GM Dial Network 8 or 88 + 543-5025

GRAND PRAIRIE AREA OFFICE
Midway National Bank Bldg - Room 310
530 S. Carrier Boulevard
Grand Prairie, Texas 75050

Supv. Serv: J. A. Brown

Telephone: A/C (214) 264-3447

LOS ANGELES ZONE OFFICE
Union Bank Plaza - Suite 510
15233 Ventura Boulevard
Sherman Oaks, California 91403

Manager: R. L. Coffey
Serv. Mgr: H. W. Korte

Telephone: A/C (213) 981-7300

OKLAHOMA CITY ZONE OFFICE
217 E. Atkinson Plaza Room 200
Midwest City, Oklahoma 73110

Manager: R. E. Lowry
Supv. Parts & Contracts: R. E. Bass
Supv. Serv: M. H. Gossett
Telephone: A/C (405) 732-4541

SAN ANTONIO AREA OFFICE
221 Billy Mitchell Road
San Antonio, Texas 78226

Serv. Rep: R. A. Hoover

Telephone: A/C (512) 434-6381

WASHINGTON ZONE OFFICE
1660 L Street, N.W., Room 808
Washington, D. C. 20036

Manager: R. P. Klein
Supv. Serv: D. A. Anderson
Telephone: A/C (202) 659-5080
GM Dial Network 8 or 88 + 447-5080

HUGHES SERVICE INFORMATION LETTER

TO—All owners and operators of Hughes Helicopters

SUBJECT: APPROVED FUELS FOR ALLISON MODEL 250 SERIES ENGINE

MODELS AFFECTED: All 500 Model 369H Series Helicopters

Reference

Allison Division, General Motors Corp., Model 250-C18/C18A Specification No. C731-B and Hughes Helicopter Owners/Flight Manual

In addition to MIL-T-5624 grade JP-4 fuel, the FAA has approved unrestricted use of grade JP-5 fuel in the Model 250 Series engine. Fuels conforming to ASTM1622-64T, Type A or A1 (commercial kerosene) and MIL-F-46005 are also approved without restrictions. For emergency fuel, aviation gasoline MIL-G-5572 is approved for a maximum of six (6) hours of operation during one overhaul period. When operating at 40°F or less, fuel must meet the anti-icing capability of JP-4, MIL-T-5624 (USA). Refer to Sections I and V of the Owners/Flight Manual and to the referenced Allison publications.

Fuel Specification

Primary	MIL-T-5624 Grade JP-4 or ASTM D1655 Jet B MIL-T-5624 Grade JP-5 or ASTM D1655 Jet A or A1 MIL-F-46005, Type I
Emergency	(6 Hours Maximum) Aviation Gasoline MIL-G-5572 (All grades in overhaul period)

CAUTION

MIL-G-5572 fuel containing Tri-cresyl-phosphate additives shall not be used.

FORM NO. 95798 HTC-AD REV. 11-67

STORAGE AND HANDLING OF JET FUELS

General – Due to the sensitivity of jet aircraft engines and fuel systems to microscopic quantities of water, dirt, solid materials and other contaminants, the utmost care should be exercised in the storage and handling of jet fuels. Certain procedures and precautions should be observed when handling flammable jet fuels to ensure delivery of uncontaminated fuels to the aircraft with a minimum of hazard to personnel or equipment.

This bulletin emphasizes recommended practices for the safe handling and storage of the following jet fuels approved for use in all Hughes 369H Series Helicopters:

Jet A (JP-5) – A high flash point distillate of the kerosene type with a -40°F freezing point.

Jet A1 (JP-5) – A kerosene type fuel similar to Jet A but having special low temperature characteristics with a freezing point of -58°F.

Jet B (JP-4) – A relatively wide boiling range volatile distillate having a -60°F freezing point.

Handling - Jet Fuel – The following principles are recommended for jet fuel handling and small tank or drum storage facilities.

Product Cleanliness – Every effort should be made to obtain maximum quality and cleanliness of fuel. If possible, the use of compact filters-separators or monitors between skid mounted tanks or drums and the aircraft is recommended. The drum, pump, nozzle, filter and aircraft should be electrically bonded for filtering and fueling operations.

Settling – It takes about five times as long or longer to settle particles of rust, dirt or other solids out of jet fuel as is required to settle out of aviation gasoline. Contact with free water should be avoided. If water or solid particles have contaminated fuel, it is necessary to provide adequate settling time to separate dirt and water from the fuel. This applies particularly when handling and storing jet fuel in small drums.

Sampling and Testing – Before fueling the aircraft, drums should be tested for water by the use of litmus paper or water - detecting paste. Any water found in the drums should be removed. A sample of fuel should also be drawn into a clean, dry, round, clear glass bottle and checked visually for clearness (no sediment or emulsion) and brightness (no cloud or haze). Visible water

can be distinguished by cloudiness, droplets, emulsion or a separate layer. Swirl the bottle to create a vortex in the liquid. Any contaminants present will collect beneath the vortex. Fuel which does not pass these tests should not be delivered to the aircraft.

Fueling Practices – For flammable liquid to burn, it must first be vaporized, mixed with air in the proper proportions and the mixture raised to its ignition temperature. The fuel vapor-air mixture above the surface of Jet B in storage is nearly always in the explosive range, therefore, extreme care must be taken to prevent ignition of this mixture by static electricity or other sources. Equally combustible mixtures can also be produced by mixing gasoline or Jet B with Jet A fuels. Always fuel and defuel in open air, never inside a hangar. Always wait until the engine has stopped and all electrical equipment is shut down.

a. Do not use splash filling.
b. Do not agitate with air, steam, gas or mechanical mixers.
c. Avoid introduction of outside air with product being pumped into fuel tank.
d. Always ground aircraft and fueler before fuel tank cap is removed.
e. Maintain ground throughout the fueling operation.
f. Fuel handlers should not carry matches, lighters or spark-producing devices during fueling operations.

Drum Storage – Fuel drums should be kept sealed and stored on their sides. If drums are stored upright, the expansion and contracting of the fuel and air within the drum due to temperature changes will draw in water which may be standing on the drum heads.

FIRE PREVENTION

Fuel Spillage – In case of jet fuel spills, the first safety precaution is to prevent all smoking, open flames or ignition from engines, motors, electrical outlets or switches in the immediate area. Also, keep moving cars and trucks at a safe distance from the spill area. A leak in a fuel hose can emit a highly explosive mist, with combustion proceeding at a rapid rate. Constant inspection and maintenance of fuel hose lines is recommended.

Removal of small fuel spills (5 to 10 gallons) can be accomplished by using commercial drying absorbent materials. Material absorbed with fuel should then be burned or disposed of in a safe area. Bigger spills may be disposed of by blanketing with foam when possible, then washing area with copious quantities of water. Fuel should not be washed into public sanitary or storm sewer systems.

Clothing on which fuel has been spilled should be changed at once because of the fire hazard. Skin should be washed immediately with soap and water to prevent skin irritation and blisters.

Electrical Storms – Fueling operations should not be conducted during severe lightning and electrical storms.

Fire Fighting – Fire fighting and explosion prevention methods used by the industry for other petroleum products will also apply to jet fuels. "No Smoking" restrictions should be strictly enforced wherever jet fuel is handled. Fire extinguishers should be immediately available, preferably upwind of aircraft being serviced.

Grounding – Always ground aircraft and fueler before fuel tank cap is removed and maintain ground throughout fueling operations. Grounding will avoid problems which may arise from stray currents or deficiencies in the aircraft or fueler electrical system.

NOTE

Additional information on jet fuel handling and storage may be obtained by writing for API Bulletin 1503, December 1965, Fifth Edition, "The Storage and Handling of Jet Fuels at Airports" and API Bulletin 1501, November 1965, Fourth Edition, "The Filtration of and Water Removal from Aviation Fuels" - issued by Aviation Technical Service Committee, Division of Marketing, American Petroleum Institute, 1271 Avenue of the Americas, New York, New York. Also, "Aircraft Fueling Up to Date" prepared by the Flight Safety Foundation, 468 Park Avenue South, New York, New York.

Edward Koch, Manager
Customer Service Department
Hughes Tool Company

HUGHES SERVICE INFORMATION LETTER

LETTER NO. HL-18
DATE 1 MAY 1972

TO—All owners and operators of Hughes Helicopters

SUBJECT: NEW CARGO HOOK ATTACH PLATE

MODELS AFFECTED: All 369HS, HM and HE Helicopters with P/N 369H90065 Series Cargo Hook Kit Installed

Reference

500 Series - Basic Handbook of Maintenance Instructions, Revised 1 December 1971
500 Series - HMI Appendix A, Revised 1 December 1971

Our vendor, Norco, has advised us that they have an improved cargo hook attach plate to secure the cargo hook to the center beam of the fuselage. This improved plate has been manufactured out of stainless steel and will be provided by HTC on a no-charge basis if ordered within ninety days from the date of this letter. No special instructions are required for replacing the plate.

On all future hooks delivered, the new stainless steel plate will be installed in place of the former aluminum part. It is requested that those customers operating with cargo hooks installed order replacement part for cargo hooks purchased through HTC, listing serial number of hook and date of purchase. Address all correspondence to:

Mr. W. F. Tucker, Supervisor
Commercial Part Sales Department
Hughes Tool Company
Centinela and Teale Streets
Culver City, California 90230

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

These parts should be installed as soon as possible after they are received from HTC.

Edward F. Koch, Manager
Customer Service Department
Hughes Tool Company

HUGHES
SERVICE INFORMATION
LETTER

TO—All owners and operators of Hughes Helicopters

SUBJECT: IDENTIFICATION PLATES - 369A5351 OVERRUNNING CLUTCH HOUSING AND 369A5350-11 OVERRUNNING CLUTCH SUBASSEMBLY

MODELS AFFECTED: 369H Helicopter Serial No. 0001H thru 0005H
369HS Helicopter Serial No. 0001S thru 0289S
369HE Helicopter Serial No. 0101E thru 0215 E
369HM Helicopter Serial No. 0001 thru 0004;
0005M thru 0213M

Reference

500 Series - Basic HMI, Issued 1 Dec 71, Revision No. 1, 10 May 72
500 Series - HMI Appendix C, Revised 1 Sep 71; Interim Revision (HIR-33) 1 Mar 72

The new 369A5350-603 Overrunning Clutch Assembly incorporates a separable 369A5350-11 subassembly to facilitate replacement of the clutch without removal of the engine. The -603 clutch configuration is identified by the assembly part number inscribed on an ID plate attached to the clutch housing. The -11 subassembly is identified by the subassembly part number and by a serial number inscribed on an ID plate attached to the forward end of the replaceable unit.

A situation can exist whereby the part number on the clutch housing ID plate can be in error, if a -11 subassembly is installed and the assembly part number on the housing ID plate is not upgraded to reflect the new -603 clutch configuration.

FORM NO. 95788 HTC-AD REV. 11-67

It is recommended that when a -11 subassembly is installed in an existing 369A5350 or 369A5350-601 clutch assembly, the clutch assembly part number on the clutch housing ID plate be changed to the new 369A5350-603 configuration. At the same time, obliterate any reference to serial number or lubrication specification on the existing housing ID plate. This change can be accomplished on a one-time basis at the next removal of the engine. When the new -11 subassembly is installed, make appropriate entries in the helicopter Log Book to reflect (1) the new 369A5350-603 overrunning clutch configuration, and (2) the part number and serial number of the new -11 subassembly.

It is noted that the 369A5350-11 clutch subassembly shall be overhauled at 1200 hours of helicopter operation.

Edward Koch

Edward F. Koch
Customer Service Department
Hughes Tool Company

HUGHES SERVICE INFORMATION LETTER

*Supersedes Service Information Letter No. HL-21.1, dated 11 January 1982.

TO—All owners and operators of Hughes Helicopters

SUBJECT: INSTALLATION OF SURPLUS MILITARY PARTS, SALVAGED OR USED PARTS ON MODEL 500 HELICOPTERS

MODELS AFFECTED: All 500 Model 369H, 369HE, 369HM and 369HS, Series Helicopters

REFERENCE

Model 500 Basic HMI (CSP-H-2), Reissued 15 September 1981

Model 500 Illustrated Parts Catalog (IPC), Reissue No. 8, 1 September 1980

Model 500 Illustrated Kit Catalog (IKC), Reissue No. 2, 1 September 1978

HHI Service and Procedures Manual, Publication No. CSP-A-1, Reissued 15 May 1983.

FAA Advisory Circular, AC No. 20-62C, dated 8/26/76

Field reports indicate that the use of surplus military, salvaged and/or used parts have been contributing factors for incidents involving Hughes Model 500 helicopters.

Hughes Helicopters, Inc. strongly emphasizes that surplus military parts are not approved by HHI for use on Model 500 helicopters. Also, surplus items are not eligible for overhaul or repair by the Hughes Factory Repair Station, nor are they acceptable for the Hughes Exchange Program.

It is to be noted that any owner or operator who installs a surplus military part, a salvaged or a used part purchased from other than HHI or its authorized sources, does so at his own risk. HHI disclaims responsibility as the part may not have been made under HHI control and/or may not be in an airworthy condition. Moreover, any existing warranty applicable to the helicopter involved becomes null and void.

(|) Denotes portion of text added or revised.

Customer Service Department

Hughes Helicopters, Inc. Culver City, California 90230

Hughes Helicopters, Inc.

It is highly probable that the physical condition and/or finite life of such parts will be marginal or unacceptable for operational use. Therefore, if it is necessary to buy any used component, be sure to check the source of purchase and obtain all historical records regarding the finite life and service usage of the part, and make a thorough inspection as to airworthiness of the part before installation on the helicopter. Following installation of an acceptable used part, transfer all records to the appropriate helicopter log.

Prior to purchasing any part or component exchange item from a source other than HHI, remember the following, as stated in FAA Advisory Circular No. AC 20-62C: "In accordance with Federal Aviation Regulations, certification of materials, parts, and appliances for return to service, for use on an aircraft, is the responsibility of the person or agency who signs the approval. The owner/operator ... is responsible for the continued airworthiness of the aircraft."

All new spare parts procured from HHI include a warranty (1000 hours of service or one year, whichever occurs first) that starts the date the part is sold by an authorized Hughes Service Center or Distributor. As stated above, this warranty becomes null and void, if any surplus military item, used part or salvaged part purchased from other than HHI is installed on the helicopter.

If you have any question as to whether a component or assembly is acceptable for installation on your helicopter, contact your Hughes Service Center or Distributor, or call HHI Commercial Part Sales.

Edward Koch, Manager
Customer Service Department
Hughes Helicopters, Incorporated

LETTER NO HL-26.1*
DATE June 22, 1973
PAGE 1 OF 2

MCDONNELL DOUGLAS HELICOPTER COMPANY
SERVICE INFORMATION LETTER

*Supersedes Service Letter No. HL-26, dated 19 Feb 1973

TO—All owners and operators of Hughes Helicopters

SUBJECT: SPECIAL TOOL FOR INSTALLATION OF TAIL ROTOR CONTROL ROD GROMMETS, PN WSI-B-12AS

MODELS AFFECTED: All Model 369H Series Helicopters

Reference

500 Series - Basic HMI, Issued 1 October 1972; Revision No. 1, 1 April 1973
500 Series - HMI Appendix D, Structural Repair Manual, Issued 1 September 1971

A special tool is now available to facilitate installation of the WSI-B-12AS grommets used in the tail rotor control rod passage on 369HS helicopter Serial No. 0371S and subsequent, and 369HM helicopter Serial No. 0223M and subsequent. These new grommets are located six places on the tail rotor control rod support brackets, the damper support bracket, and the boom fairing rings.

It is noted that the WSI-B-12AS grommets may be utilized as a replacement for existing 369A3509 grommets on earlier Model 369HS and 369HM helicopters, and on Model 369H and 369HE helicopters. However, 369A3513-3 doublers must be installed on the support brackets and boom fairing rings of these helicopters, in order to accommodate the new type grommets. For

(|) Denotes portions of text added or revised.

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MCDONNELL DOUGLAS HELICOPTER COMPANY

further information, contact your Service Center or Field Service Representative.

The special grommet installation tool (specify Part No. WSI-HT-12AS) may be procured by contacting:

Western Sky Industries
21300 Cloud Way
Hayward, California 94545
Attention: Mr. George Cleese
Phone: (415) 783-0600

The price of this special tool is approximately $7.80 when ordered singly; discount prices are available for multiple quantities.

Edward Koch, Manager
Customer Service Department
Hughes Helicopters
division of Summa Corporation

McDonnell Douglas Helicopter Company

SERVICE INFORMATION LETTER

LETTER NO HL-30
DATE 12 JULY 1973

TO—All owners and operators of Hughes Helicopters

SUBJECT: REPLACEMENT OF BOOM FAIRING ASSEMBLY ON FIRST PRODUCTION HELICOPTERS, SN 0001 THRU 0100

MODELS AFFECTED: 369H Helicopter Serial No. 0001 thru 0005
369HS Helicopters Serial No. 0001S thru 0100S
369HM Helicopter Serial No. 0001 thru 0004;
0005M thru 0100M

Reference

500 Series - Basic HMI, Issued 1 October 1972; Revision No. 2, 1 July 1973
500 Series - HMI Appendix D, Issued 1 September 1971

Due to the difference in design of the mast support structure used on the above affected first production helicopters, it is necessary, when installing a replacement boom fairing assembly, to modify and lengthen the 369H3017 upper longerons to permit attachment at the mast support structure.

The method for extending the 369H3017 upper longerons with added sections of 369A3011 longerons is illustrated on page 2 of this letter. As shown, the bulb section of the 369H3017 longeron is removed, and a 0.060-inch radius applied to the added section of the 369A3011 longeron, so that the two pieces will nest together. Also, a section of existing 369A3011 longeron with the bulb section removed is used as a shim at the forward end of the extended 369A3011 longeron, to ensure a proper fit when riveted to the mast support structure. No additional rivets are added to the side of the longerons. The rivet spacing on the top of the longerons at the shim area is increased.

It is noted that modification of the 369H3017 upper longerons is not required when installing a replacement boom fairing assembly on later model helicopters, SN 0101 and subsequent. If further information is required, contact your Hughes Service Center or Field Service Representative.

Edward Koch, Manager
Customer Service Department
Hughes Helicopters
division of Summa Corporation

Product Support Department

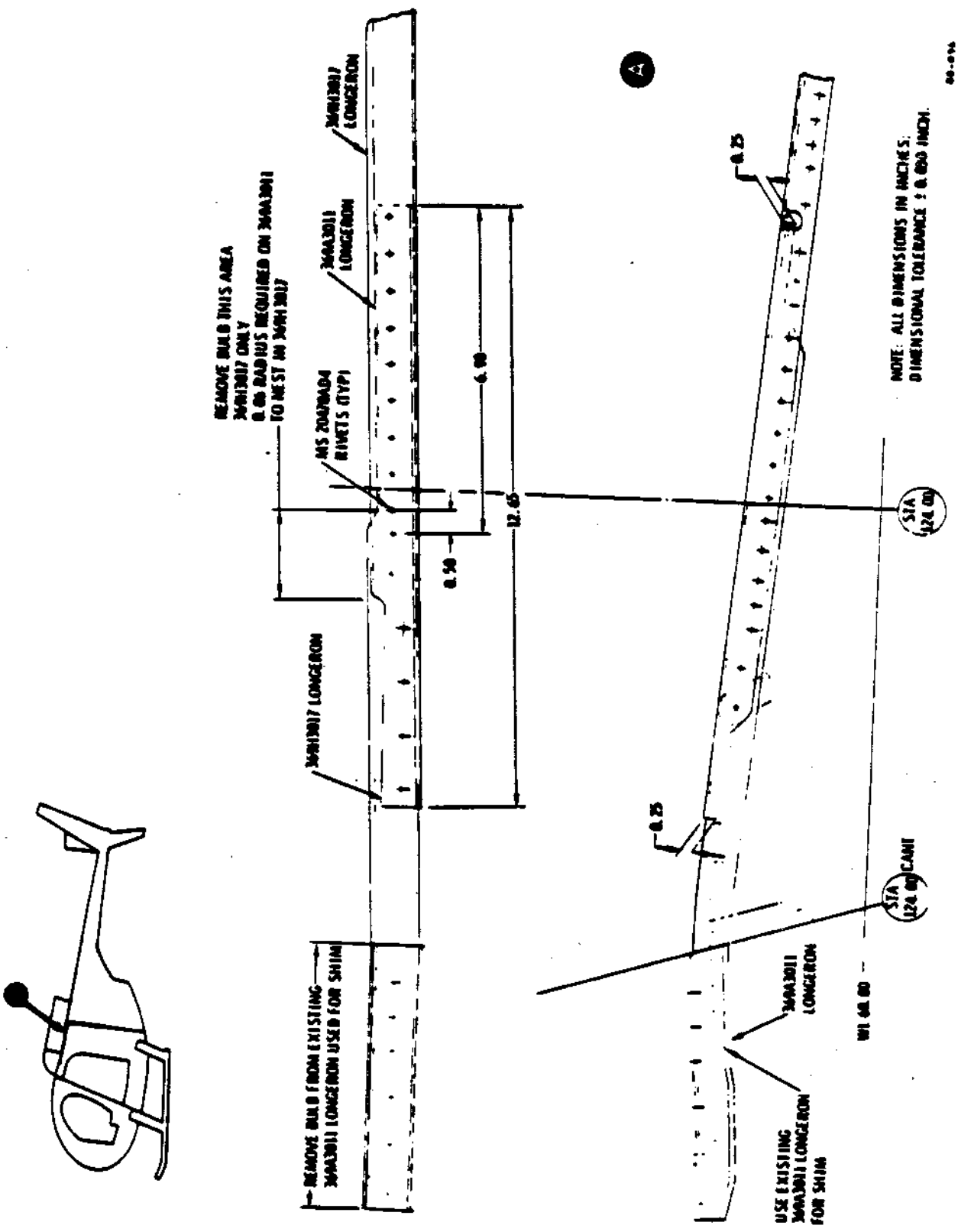

Figure 1. Modification and Replacement of Boom Fairing Assembly

McDonnell Douglas Helicopter Company

SERVICE INFORMATION LETTER

LETTER NO. HL-31
DATE 12 July 1973

TO—All owners and operators of Hughes Helicopters

SUBJECT: ORDERING INFORMATION – PILOT DOOR ASSEMBLY, PN 369A2002 OR 369H2025; PASSENGER/CARGO DOOR ASSEMBLY, PN 369H2032 OR 369H2038

MODELS AFFECTED: All Model 369HE, 369HS, and 369HM Helicopters

Reference

500 Series - Basic HMI, Issued 1 October 1972; Revision No. 2, 1 July 1973
500 Series - HMI Configuration Supplement S/E, Revised 1 December 1971
500 Series - Illustrated Parts Catalog, Reissue No. 5, 1 August 1972

All of the components comprising a complete pilot or passenger/cargo door, as listed in the Illustrated Parts Catalog, may not be required when procuring a replacement door assembly. In order to effect cost savings to owners and operators, the subject spares door assemblies are therefore provided as noted in Table 1 of Page 2 on this letter.

When ordering, check with your Service Center or Hughes Helicopter Parts Sales Department. They can help you to determine the spares items required, and thus enable you to obtain a replacement door assembly at the least possible cost.

Edward Koch, Manager
Customer Service Department
Hughes Helicopters
division of Summa Corporation

Product Support Department

Table 1. Ordering Information - Pilot, Passenger and Cargo Door Assemblies

Nomenclature	Part Number	Usable On		Hinges and Hardware	Exterior Handle and Hardware	Snap Vents	Door Seals	Latch Cover and Hardware
		Helicopter Model	Serial Number					
Pilot Door	369A2002-505 -506	369HS 369HM	0001S thru 0002S 0001 thru 0004; 0005M thru 0100M	X	X	X	X	
	-507 -508	369HE 369HS	0101E thru 0200E 0101S thru 0200S	X	X	X	X	
Pilot Door	369H2025-1 -2	369HE 369HS 369HM	0201E and subq 0201S and subq 0201M and subq		X			X (Loose)
Cargo Door	369H2032-503 -504	369HS 369HM	0001S thru 0002S 0001 thru 0004; 0005M thru 0100M	X	X	X	X	
	-505 -506	369HE 369HS	0101E thru 0200E 0101S thru 0200S	X	X	X	X	
Passenger Door	369H2038-1 -2	369HE 369HS	0201E and subq 0201S and subq		X			X (Loose)
	-701 -2	369HM	0201M and subq		X			X (Loose)

X = Items included with Door Assembly.

NOTE: Door locks and hardware are not included with any of the above listed door assemblies.

HUGHES SERVICE INFORMATION LETTER

*Supersedes Service Information Letter No. HL-32 dated 27 August 1973

TO—All owners and operators of Hughes Helicopters

SUBJECT: METAL TAIL ROTOR BLADES - REPLACEMENT FOR FIBERGLASS TAIL ROTOR BLADES

MODELS AFFECTED: All 500 Model 369H Series Helicopters equipped with 369A1600 Series Fiberglass Bladed Tail Rotor Assemblies

Reference

500 Series - Basic HMI, Issued 1 Oct 1972; Revision No. 5, 15 Jun 1975
500 Series - HMI Appendix A, Issued 1 Oct 1972; Revision No. 4, 15 Dec 1974
500 Series - HNI Appendix B, Issued 1 Oct 1972; Revision No. 6, 1 Aug 1976
Hughes Service Information Notice No. HN-52.1, dated 9 Apr 1973
Hughes Service Information Notice No. HN-86, dated 28 Apr 1973

The 369A1710 series fiberglass tail rotor blade assemblies will no longer be procurable when present stock is depleted. When the service life expires on presently installed fiberglass blade assemblies, they are to be replaced with metal tail rotor blade assemblies.

Instructions for replacement of tail rotor blade assemblies are provided in the above referenced maintenance handbooks. The change to the metal bladed tail rotor assembly requires installation of a 369A5518-501 tail rotor drive shaft, if not presently installed, as specified in the above referenced Hughes Notice No. HN-86. Also, a modification to the tail rotor control linkage by the addition of a bungee spring is required. Procedures for initial installation of the bungee spring are provided in the referenced Hughes Notice No. HN-52.1. A new 369A9931-5 tail rotor rigging tool is necessary when metal blades are used.

It is to be noted that incorporation of the metal tail rotor blade upgrades the tail rotor sub-assembly to the 369A1620-11 configuration, and the tail rotor assembly to the 369A1620-501 configuration. Changes in the helicopter Log Book must therefore be made to reflect the new overhaul interval (TBO) and limited life schedules applicable to the metal tail rotor and blade assemblies.

Most of the components of the existing fiberglass bladed tail rotor assembly may be used when converting to the metal bladed configuration. The parts listed on Page 3 of this Letter includes only the components required for conversion of the fiberglass blade assemblies to the metal blade configuration. A 369H90005-7 Tail Rotor

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Conversion Kit is also available in event replacement of the complete fiberglass tail rotor subassembly with a new metal bladed tail rotor subassembly is desired.

For further information, contact your Service Center or Hughes Parts Sales Department.

Edward Koch, Manager
Customer Service Department
Hughes Helicopters

(▌) Denotes portion of text added or revised

PARTS LIST for Conversion from Fiberglass to Metal Tail Rotor Blade Assemblies

Nomenclature	Part No.	Replaces	Qty	Mfr
Metal Tail Rotor Blade Components				
Blade Assembly	369A1613-3	369A1710-9/11	2	Hughes
Weight Assembly	369A1622-3	New	2	Hughes
Weight Assembly	369A1622-5	New	2	Hughes
Washer	369A1623	MS20002C6	2	Hughes
Washer	AN960PD416L	New	2	Commercial
Serial No. Plate	HS1537-1	369A4007-9	1	Hughes
Washer	HS306-227L	New	AR	Hughes
Washer	HS306-332L	New	2	Hughes
Bushing	HS610SP6244R375X675	HS610SP6244R375X375	2	Hughes
Nut	MS17826-4	AN320-4	2	Commercial
Nut	MS21043-4	NAS1291C4M	2	Commercial
Bolt	MS21250-06032	NAS626-22	2	Commercial
Pin, Cotter	MS24665-151	MS24665-151	3	Commercial
Bungee Spring Components				
Spring	369A7521	New	1	Hughes
Fitting	369A7522	New	1	Hughes
Bearing	369A7951-51	New	1	Hughes
Eyebolt	AN42B-C3A	New	2	Commercial
Washer	AN960-10L	New	3	Commercial
Washer	HS1551S290	HS1551-275	1	Hughes
Nut	MS21042-3	New	2	Commercial
Rigging Tool, Tail Rotor	369A9931-5	369A9931	1	Hughes
*Shaft Assembly, Tail Rotor Drive	369A5518-501	369A5518	1	Hughes
**Pitch Control Assembly, Tail Rotor	369H1800	369A1800-5/-7	1	Hughes
***Flight Manual Supplement	369H90005-7	New	1	Hughes

*As required; refer to Hughes Notice HN-86

**Optional

***The 369H90005-7 Rotorcraft Flight Manual Supplement is to be considered a part of the Owners/Flight Manual and carried in the helicopter when conversion to the metal bladed rotor assembly is accomplished.

HUGHES SERVICE INFORMATION LETTER

TO—All owners and operators of Hughes Helicopters

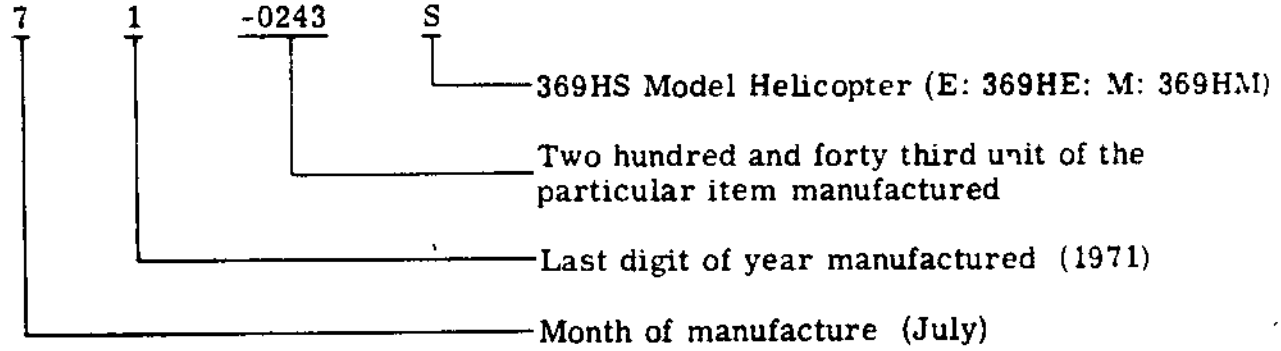
SUBJECT: DISCUSSION OF HUGHES SERIAL NUMBERING METHOD

MODELS AFFECTED: All 369 Series Helicopters

Reference

369H Series Handbook of Maintenance Instructions
369H Series Illustrated Parts Catalog

This Letter has been prepared to provide Owners and Operators of Hughes helicopters, complete information on the serial numbering method used to identify individual helicopters and certain assemblies and parts. We will deal primarily with helicopter identification since the majority of questions are directed to this area. Helicopters are identified by a combination of three sets of numbers followed by a suffix letter, the first 2 or 3 digits indicate the date of manufacture. The last four digits as noted below, define the sequence of manufacture. The suffix letter denotes the aircraft model.



Please note that it is possible for two different model aircraft to have the same serial numbers; in that case, the aircraft model designation is the deciding factor. When identifying assemblies and component parts additional prefix and suffix identifiers are sometimes used.

In the case of the Handbook of Maintenance Instructions, the Illustrated Parts Catalog and Service Information Notices and Letters, the last four digits of the serial number in conjunction with the aircraft model are used for specific aircraft or blocks of aircraft. From a practical sense it would be impractical at best if not impossible to include the month and year designators in service literature.

If you are in doubt at any time as to whether a service document is applicable to your aircraft, please feel free to contact the Service Department for clarification.

Edward Koch

Edward Koch, Manager
Customer Service Department
Hughes Helicopters

HUGHES SERVICE INFORMATION LETTER

TO—All owners and operators of Hughes Helicopters

SUBJECT: INFLATABLE FLOATS - SERVICE, MAINTENANCE AND REPAIR FACILITIES

MODELS AFFECTED: All 500 Model 369H Series Helicopters equipped with Inflatable Flotation Gear

Reference

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

The Air Cruiser service centers and Garrett Corporation engineering and sales offices listed in this letter are part of a worldwide network of service support and repair facilities available to help extend the useful and economic life of inflatable flotation gear installed on your Model 500 helicopter.

The service centers are FAA approved repair stations fully equipped to handle all maintenance and repair problems from minor patching to complete internal coating of floats. In addition, Air Cruiser service engineers and Garrett Corporation field service representatives can provide direct contact and assistance whenever and wherever needed.

If you have a problem or question regarding inflatable flotation gear installed on your helicopter, contact the Air Cruiser service center or Garrett engineering and sales office nearest you.

Edward Koch

Edward Koch, Manager
Customer Service Department
Hughes Helicopters

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Air Cruisers Company - Service Centers

United States

Belmar, New Jersey - P.O. Box 180, Belmar, NJ 07719 (at Monmouth County Airport) - Phone: (201) 681-3527
Los Angeles, California - 9851 Sepulveda Boulevard, Los Angeles, CA 90009 (at Los Angeles International Airport) - Phone: (213) 776-1010, ext 566 - Telex: 674490

Europe

Paris, France (Service Europeen de Revetements, Materiel de Securite Sauvetage) - 10 Rue Henri-Pinson, 91200 Athis Mons, Le Bourget, France (at Aeroport du Bourget) - Phone: 904-42-29 - Telex: SASER No. 60920

The Garrett Corporation - Engineering and Sales Offices

United States

Chicago, Illinois - 5544 St. Charles Road (P.O. Box 717), Berkeley, IL 60162 - Phone: (312) 921-7015
Dayton, Ohio - 333 West 1st Street, Dayton, OH 45402 - Phone: (513) 224-0728
Detroit, Michigan - Suite 402, Northland Towers West, 15565 Northland Drive, Southfield, MI 48075 - Phone: (313) 353-3460
Forth Worth, Texas - Room 285, University Plaza Building, 100 North University Drive, Forth Worth, TX 76107 - Phone: (817) 335-4626
Hampton, Virginia - Suite 303, 1120 Mercury Boulevard, Hampton, VA 23366 - Phone: (703) 838-0020
Houston, Texas - 1200 First City National Bank Building, 1111 Fannin Street, Houston, TX 77002 - Phone: (713) 228-4480
Houston, Texas - 1275 Space Park, Houston, TX 77058 - Phone: (713) 591-4451
Los Angeles, California - 9851 Sepulveda Boulevard, Los Angeles, CA 90009 - Phone) (213) 670-0131
Marietta, Georgia - 1190 Hayes Industrial Drive (P.O. Box 6397), Marietta, GA 30060 - Phone: (404) 422-8210
New York, New York - Suite 4S-04, 1 Huntington Quadrangle, Huntington Station, New York, NY 11746 - Phone: (516) 694-7878
Oklahoma City, Oklahoma - Universe Building, 6401 Tinker Diagonal, Midwest City, OK 73110 - Phone: (405) 737-3461
Phoenix, Arizona - 402 South 36th Street, Phoenix, AZ 85034 - Phone: (602) 267-3011
Peoria, Illinois - 200 N.E. Adams Street, Peoria, IL 61602 - Phone: (309) 676-2371
San Diego, California - 5555 Mildred Street, San Diego, CA 92110 - Phone: (714) 295-4119
Seattle, Washington - Suite 200, Building 2, Benaroya Business Park, 300 120th Avenue N.E. (P.O. Box 10), Bellevue, WA 98005 - Phone: (206) 454-4941
St. Louis, Missouri - 4531 North Lindbergh (P.O. Box 218), Bridgeton, MO 63042 - Phone: (314) 731-0983
Washington, D.C. - 515-519 Cafritz Building, 1625 Eye Street N.W., Washington DC 20006 - Phone: (202) 393-0573
Wichita, Kansas - 7062 East Lincoln (P.O. Box 18188), Wichita, KS 67218 - Phone: (316) 682-5518

Canada

Ottawa, Ontario (Garrett Manufacturing, Ltd) - 151 Slater Street, Ottawa 4, ON - Phone: (813) 236-0441
Rexdale, Ontario (Garrett Manufacturing, Ltd) - 255 Attwell Drive, Rexdale 605, ON - Phone: (416) 677-1410

International

Berkshire, England (Garrett-AiResearch Ltd) - Berkshire House, Maidenhead, Berkshire, England - Phones: 28022, 23, and 24 - Cable: Via Garrettair Geneva
Geneva, Switzerland (Garrett International S.A.) - Rue des Pierres-du-Niton 17, 1207 Geneva, Switzerland - Phone: 35-73-50 - Cable: Garrettair Geneva
Khiyaban, Jordan (Garrett International S.A.) - c/o Iran-Kaveh Producing & Industrial Company, Avenue Ghazvin (P.O. Box 12-1527), Khiyaban, Jordan - Phone: 892062 - Telex: No. 2387
Kyoto, Japan (Garrett (Japan) Ltd) - 708 Furuhashi Building Annex, 5 Mibu Bojo-Oho Nakakyo-Ku, Kyoto, 604, Japan - Phones: (075) 801-7067 and 1689
Lancashire, England (Garrett AiResearch Ltd, Turbocharger Division) - East Pimbo, Skelmersdale, Lancashire, England
Los Angeles, California, U.S.A. (The Garrett Corporation) - 9851 Sepulveda Boulevard, Los Angeles, CA 90009, U.S.A. Phone: (213) 776-1010, ext. 1294 - Cable: Garrettair Los Angeles
Melbourne, Australia (Garrett International S.A.) - 26-32 Fraser Street, Airport West W6, Melbourne, Victoria 3042, Australia - Phone: 338-3189 - Cable: SIERRA 31517
Melbourne, Australia (Normalair-Garrett Mfg. Pty Ltd) - 45 King Street, Airport West (P.O. Box 131), Melbourne, Niddrie Victoria 3042, Australia - Phone: 338-3222 - Cable: Sierra Melbourne
Munich, West Germany (Garrett GmbH) - 8000 Munich 23, Freiheit 12, West Germany - Phone: 34-70-18 - Cable: Via Garrettair Geneva
Munich, West Germany (Airsupply International GmbH) - 8000 Munich 23, Freiheit 12, West Germany - Phone: (0811) 39-40-63
New York, New York, U.S.A. (Airsupply International) - Suite 4S-04, 1 Huntington Quadrangel, Huntington Station, New York, NY 11746, U.S.A. - Phone: (212) 291-8885
Saint-Cloud, France (Garrett International S.A.) - 18 Rue Gounod, 92 Saint-Cloud, France - Phone: 602-21-15 - Cable: Via Garrettair Geneva
Somerset, England (Normalair-Garrett Ltd) - Yeovil, Somerset, England - Phone: Yeovil 5222 (Cole 0935)
Stockholm, Sweden (Garrett International S.A.) - Artillerigatan 14, 11451 Stockholm, Sweden - Phone: 63-80-09 - Cable: Garrettair Stockholm

McDonnell Douglas Helicopter Company

SERVICE INFORMATION LETTER

LETTER NO HL-37
DATE 28 August 1974
PAGE 1 OF 1

TO—All owners and operators of Hughes Helicopters

SUBJECT: EXTREME TURBINE OUTLET TEMPERATURE EFFECTS ON TURBINES

MODELS AFFECTED: All 369H Series Helicopters equipped with 250-C20 Engine

Reference

Allison-Div of GM; Commercial Service Letter CSL-1023 Rev. No. 3, dated 6/12/74.
Federal Aviation Agency Airworthiness Directive (AD) 74-14-03.
500 Series - Basic HMI, Issued 1 October 1972; Revision No. 3, 1 January 1974.
500 Series - HMI Appx A, Issued 1 October 1972; Revision No. 3, 1 August 1974.

Hughes directs your attention to the referenced CSL and AD.

Excessive TOT readings have been experienced during engine shut down with the twist grip in the "fuel off" position with resultant damage to the turbines. The problem has been traced to leakage of fuel into the combustion chamber. The referenced documents provide the data to correct the problem.

Section II of the Basic HMI and Section 12 of the HMI Appendix A provides information for rigging and other maintenance of the engine controls. Strict adherence to the procedures in the manual in conjunction with the Allison and FAA data will aid in preventing problems traceable to the engine fuel controls system.

Edward Koch, Manager
Customer Service Department
Hughes Helicopters

Product Support Department

LETTER NO. HL-38
DATE 5/5/75
PAGE 1 OF 1

HUGHES SERVICE INFORMATION LETTER

TO—All owners and operators of Hughes Helicopters

SUBJECT: MODIFICATION KIT AVAILABILITY – TORQUEMETER BLEED VALVE PART NO. M50043 AND STATIC PRESSURE TUBE BLEED VALVE PART NO. M50439

MODELS AFFECTED: 369HE 0101E THROUGH 0215E
369HM 0101M THROUGH 0269M
369HS 0101S THROUGH 0700S

This Service Information Letter is to advise owners and operators of the availability of the subject modification kits.

The bleeding of the lines of all entrapped air in some instances can be a time consuming and inconvenient task.

Installation of the Drain Valves can eliminate many of the problems associated with instrument bleeding.

The kits may be procured by placing an order with your Service Center, Sales Company or Distributor.

Edward Koch, Manager
Customer Service Department
Hughes Helicopters

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

McDonnell Douglas Helicopter Company

SERVICE INFORMATION LETTER

LETTER NO. HL-39.3*
DATE 26 July 1976
PAGE 1 OF 2

*Supersedes Service Information Letter HL-39.2, dated 6 June 1975

TO—All owners and operators of Hughes Helicopters

SUBJECT: MAIN TRANSMISSION PART NO. 369A5100-709 UPGRADED TRANSMISSION - FACTORY AVAILABILITY FOR OVERHAUL

MODELS AFFECTED: 369HS Helicopter Serial No. 0101S and subsequent
369HM Helicopter Serial No. 0101M and subsequent
369HE Helicopter Serial No. 0101E and subsequent

Reference

Service Information Notice No. HN-56, dated 6 March 1973
Service Information Notice No. HN-61, dated 31 July 1973

Main transmission Part No. 369A5100-705 or -705M, and 369A5100-707 or -707M currently being overhauled at Hughes are brought to the new 369A5100-709 version which features new design improvements for gear lubrication and retention of bearings.

The new -709 version transmission also provides the following product improvements incorporated in the -705M and -707M versions, which eliminate inspection requirements called out in the referenced Service Information Notices HN-56 and HN-61:

a. The ring gear carrier is upgraded from a 369A5158 to a 369A5158-7.

b. The ring gear, part number 369A5110-3, -5, -7 or -11, is upgraded to a 369A5110-9 or -15.

c. The 369H5104 ring gear bolt spacer is added.

d. The 16 each 369A5174 bolts (5/16 inch diameter) are replaced by 32 each 369H5105 bolts (3/8 inch diameter).

The drilling and tapping required to upgrade the ring gear and carrier cannot be accomplished without factory tooling.

(▌) Denotes portion of text added or revised.

Product Support Department

The upgraded -709 transmission is completely interchangeable with any 369A5100-705 or -705M, or 369A5100-707 or -707M transmission and is usable as noted on Model 369HS, 369HM and 369HE helicopters.

Edward Koch, Manager
Customer Service Department
Hughes Helicopters

(▌) Denotes portion of text added or revised.

LETTER NO. HL-40
DATE 21 July 1975
PAGE 1 OF 1

HUGHES SERVICE INFORMATION LETTER

TO—All owners and operators of Hughes Helicopters

SUBJECT: INTERCHANGEABILITY OF TABBED MAIN ROTOR BLADES (PN 369A1100-501) WITH UNTABBED MAIN ROTOR BLADES (PN 369A1100-501)

MODELS AFFECTED: All 369H Series Helicopters

Reference

500 Series - Basic HMI Issued 1 October 1972; Revision No. 4, 15 December 1974

Main Rotor Blades Serial No. W671 and subsequent delivered after 1 April 1975 will have the inboard tab removed.

Tests conducted at Hughes show no effects on tracking or weight and balance with untabbed blades.

In lieu of the above, no part number change has been made to differentiate between tabbed and untabbed blades. Tabbed and untabbed blades are 100 percent interchangeable individually or in sets.

Edward Koch

Edward Koch, Manager
Customer Service Department
Hughes Helicopters
Division of Summa Corporation

McDonnell Douglas Helicopter Company

SERVICE INFORMATION LETTER

LETTER NO. HL-42
DATE 7 November 1975
PAGE 1 OF 2

TO—All owners and operators of Hughes Helicopters

SUBJECT: RECHARGING OF INFLATION BOTTLES FOR EMERGENCY FLOATS

MODELS AFFECTED: All 500 Model 369H Series Helicopters equipped with Emergency Floats

Reference

369 Series - HMI Appendix A, Issued 1 October 1972; Revision No. 4, 15 Dec 1974

It has come to our attention that some owners and operators have experienced difficulty in getting inflation bottles recharged after actuating the emergency floats installed on Model 500 helicopters. Due to a misunderstanding of federal regulations, some companies that perform recharging services have been reluctant to refill the inflation bottles.

The U. S. Department of Transportation has determined that it is permissible to recharge the high pressure cylinders used to inflate the floats. These cylinders are not transported in commerce for resale or considered as articles of freight or baggage, thus refilling the bottles is in compliance with applicable federal regulations.

The pressure vessel used to inflate the emergency floats has been designed and tested by its manufacturer, TAVCO, Inc., to meet the pressure requirements of MIL-R-8573. This specification is the military specification used to design light weight air bottles for aircraft applications. This inflation bottle has a working pressure of 3500 psig, a proof pressure of 5800 psig, and a burst pressure of 7875 psig (actual qualification burst pressure was 8350 psig). It is capable of cycling in excess of 10,000 cycles from 0 to 3500 psig.

As an alternative to employing a commercial recharging service, you may find it more convenient and/or economical to build your own charging unit, using a small, high pressure compressor; or to acquire a commercially available compressor system for on-site recharging of the nitrogen bottles. The Haskel Engineering and Supply Company of Burbank, California, for example, offers a portable compressor system for 'bootstrap' charging of onboard high pressure bottles for float inflation.

When recharging the emergency float cylinders with nitrogen or compressed air, refer to the instructions provided in the above referenced HMI Appendix A.

Edward Koch

Edward Koch, Manager
Customer Service Department
Hughes Helicopters

LETTER NO. HL-44
DATE 10 August 1976
PAGE 1 OF 1

HUGHES SERVICE INFORMATION LETTER

TO—All owners and operators of Hughes Helicopters

SUBJECT: ALLISON MODEL 250-C20 SERIES ENGINE - INSTALLATION OF NEW HIGH PRESSURE FUEL FILTER ASSEMBLY

MODELS AFFECTED: All Hughes 500 Model 369H Series Helicopters equipped with Allison Model 250-C20 Series Engine

Reference

Detroit Diesel Allison Commercial Engine Bulletin 250-C20/C20B CEB-1092, dated 24 June 1976

Detroit Diesel Allison Commercial Engine Bulletin 250-C20/C20B CEB-1095, dated 24 June 1976

The above referenced Allison Bulletins, CEB-1092 and CEB-1095, describe a new high pressure filtration system designed to provide effective protection from contaminants or fine debris in the 250-C20 series engine fuel control system. Incorporating a reuseable 5-micron filter element, the high pressure filter is installed between the fuel pump outlet and fuel control inlet ports. All fuel supplied to the control and governor, including fuel bypassed from the control back to the pump, must pass through it for refiltration.

The new high pressure filtration system is recommended by Detroit Diesel Allison and may be installed without removing the engine from the helicopter. The filter assembly mounting bracket is designed to fit on the helicopter governor control idler support bracket.

For full information, contact your DDA dealer or distributor, or DDA sales or service representative.

Edward Koch, Manager
Customer Service Department
Hughes Helicopters

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

LETTER NO. HL-46
DATE 24 Dec 1976
PAGE 1 OF 1

HUGHES SERVICE INFORMATION LETTER

TO—All owners and operators of Hughes Helicopters

SUBJECT: PERIODIC INSPECTION OF PARTICLE SEPARATOR KIT INSTALLATION; REMOVAL OF OUTLET SCREEN DURING COLD WEATHER OPERATIONS

MODELS AFFECTED: All 500 Model 369H Series Helicopters equipped with PN 369H90148 Engine Air Particle Separator Filter Installation Kit

Reference

Hughes Form 1038, "100-Hour Inspection Check Sheet," Revised April 1975
500 Series – Basic HMI, Issued 1 October 1972; Revision No. 6, 1 November 1976
500 Series – HMI Appendix A, Issued 1 October 1972; Revision No. 4, 15 Dec 1975
500 Series – HMI Appendix B, Issued 1 October 1972; Revision No. 6, 1 August 1976

Removal of the particle separator filter assembly when performing the 100-hour inspection, as specified on the Hughes Form 1038, "100-Hour Inspection Check Sheet," will no longer be required. The form will be revised at the next printing to reflect a visual check only of the particle separator filter assembly at this inspection interval.

It is to be noted that physical removal of the filter assembly is required during the Annual or 300-Hour Periodic Inspection of the particle separator, as specified in the HMI Appendix B.

Field reports indicate that when operating in cold climates, there may be a tendency of ice forming on the 369A8407 outlet screen and affecting the operation of the particle separator. It is recommended that this screen, located between the particle separator outlet duct and the inboard side of the engine air inlet aft fairing, be removed during the winter season. With the screen removed, a daily inspection is to be made for foreign objects in the outlet duct, between the opening in the fairing and the particle separator injector tubes.

Edward Koch, Manager
Customer Service Department
Hughes Helicopters

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

LETTER NO. HL-47
DATE 24 Dec 1976
PAGE 1 OF 1

HUGHES SERVICE INFORMATION LETTER

TO—All owners and operators of Hughes Helicopters

SUBJECT: IMPROVED ENGINE AIR FILTER ASSEMBLY FOR PARTICLE SEPARATOR FILTER KIT

MODELS AFFECTED: All 500 Model 369H Series Helicopters equipped with PN 369H90148 Basic and -501 Particle Separator Filter Kit

Reference

500 Series – Basic HMI, Issued 1 October 1972; Revision No. 6, 1 November 1976
500 Series – HMI Appendix A, Issued 1 October 1972; Revision No. 4, 15 Dec 1974
Hughes Service Information Notice No. HN-96 dated 10 May 1976
Installation Instructions – Engine Air Particle Separator Filter Installation Kit, PN 369H90148 Basic or -501, Revised 15 May 1976

A new 369H90152-3 engine air filter assembly for the particle separator kit is now available. The new -3 filter configuration incorporates outlet tubes designed with locking collars to provide positive attachment to the filter housing, thus eliminating the need for the 369A90157 aft screen assembly specified in the above referenced Hughes Notice No. HN-96 and Particle Separator Kit Installation Instructions.

Edward Koch

Edward Koch, Manager
Customer Service Department
Hughes Helicopters

FORM NO 95788 HTC-AO REV 11-67

HUGHES SERVICE INFORMATION LETTER

TO—All owners and operators of Hughes Helicopters

SUBJECT: REPLACEMENT OF PN 369A1613-3 METAL TAIL ROTOR BLADE ASSEMBLIES

MODELS AFFECTED: The following helicopters equipped with PN 369A1613-3 Metal Tail Rotor Blade Assemblies:

369HS Helicopter Serial No. 0001S thru 0878S
369HM Helicopter Serial No. 0001 thru 0004;
0005M thru 0304M
369HE Helicopter Serial No. 0201E thru 0215E

Reference

500 Series - Basic HMI, Issued 1 October 1972; Revision No. 7, 15 December 1976
Hughes Service Information Notice No. HN-83, dated 15 April 1975
FAA Airworthiness Directive AD 75-10-04, Amendment 39-2196, effective 12 May 1975

The 369A1613-3 metal tail rotor blade assembly will no longer be manufactured by Hughes Helicopters after the present stock is depleted. A new 369A1613-501 metal tail rotor blade assembly will be provided as replacement. The -501 blade assembly has a modified root fitting designed with a flat surface for bolt clamp up, using special shoulder bushings and crush washers at both sides of attachment.

The new 369A1613-501 metal tail rotor blade assembly is not subject to the inspection requirements specified by the above referenced Hughes Notice No. HN-83 and FAA AD 75-10-04; and may not be intermixed with the -3 blade assembly.

It is to be noted that when the new -501 blade assemblies are installed, a new 369A1706-501 tension torsion strap assembly must also be used to accommodate the modified blade root fitting design.

When ordering replacement blades for existing 369A1613-3 metal tail rotor blade assemblies, specify the following components: 369A1613-501 tail rotor blade assembly (2 each), 369A1706-501 tension torsion strap assembly (one each), 369H5308 shoulder bushing (4 each), 369H5309 crush washer (4 each), MS21250-06040 bolt (2 each), and FN22M624 nut (2 each). Current list price for all of the above specified components is $2591.38.

For upgrading existing fiberglass tail rotor blade installations to the metal blade configuration, specify conversion kit PN 369H90005-9 which includes the new 369A1613-501 blades and compatible components specified above.

Installation of the new 369A1613-501 tail rotor blades upgrades existing 369A1620-13 tail rotor subassembly installations to the new 369A1620-17 configuration.

For further information, contact your Service Center or Hughes Helicopters Customer Service Parts Sales Department.

Edward Koch

Edward Koch, Manager
Customer Service Department
Hughes Helicopters

LETTER NO. HL-55

DATE 14 February 1978

HUGHES SERVICE INFORMATION LETTER

TO—All owners and operators of Hughes Helicopters

SUBJECT: UTILIZATION OF ENGINE AIR PARTICLE SEPARATOR AND ENGINE COMPRESSOR WATER WASH KITS

MODELS AFFECTED: All 500 Model 369H, 369HS, 369HM and 369HE Helicopters

Reference

500 Series - Basic HMI Issued 1 Oct 1972; Revision No. 7, 15 Dec 1976
500 Series - HMI Appendix A, Issued 1 Apr 1976; Revision No. 1, 1 Aug 1976
FAA Approved Rotorcraft Flight Manual for applicable 369H, 369HS, 369HM or 369HE Helicopter
Supplement to Approved Rotorcraft Flight Manual, Engine Air Particle Separator Kit, PN 369H90148 and 369H90148-501
Hughes Service Information Notice No. HN-107.1, dated 23 Jan 1978
Detroit Diesel Allison Commercial Service Letter 250-C18 CSL-69; 250-C20 CSL-1020

The PN 369A90148 Basic and -501 engine air particle separator kit is available as optional equipment to filter and scavenge the engine intake air of contaminants (dirt, dust, debris, etc) which can be detrimental to the operation and life of the helicopter engine.

Field reports indicate that on helicopters equipped with the particle separator, some pilots are not turning on the SCAV-AIR switch to obtain maximum filtration. This switch should be turned off during engine start up, and on during take off and landing. Based on atmospheric conditions at cruise altitudes over 500 feet, the particle separator may be deactivated at the discretion of the pilot, by turning off the SCAV-AIR switch during cruise flight. The loss in power at TOT limiting conditions is approximately 5 horsepower or 33 pounds in hover performance.

Operating procedures and performance data for helicopters equipped with the particle separator are provided in the above referenced Supplement to the Rotorcraft Flight Manual.

FORM NO. 85738 HTC-AD REV. 11-67

Hughes Helicopters

When the helicopter is used for agricultural spraying, or operated in an atmosphere containing corrosive chemicals or salt water air, smoke, fumes, etc, it is recommended that owners and operators perform a daily water wash of the engine to clean corrosive deposits from the compressor blades. A PN 369H92537 engine compressor water wash kit is available for this purpose. Initial installation instructions are provided in Hughes Notice No. HN-107.1. Wash procedures, flow requirements, etc. are provided in the referenced DDA Commercial Service Letter CSL-69; CSL-1020.

Installation and proper use of the engine air particle separator and engine compressor water wash kits will help ensure optimum performance and improve service life of the engine.

Edward Koch

Edward Koch, Manager
Customer Service Department
Hughes Helicopters

SERVICE LETTER

DATE: 22 MAY 1978

(INSCO) INSTRUMENT, SPECIALTIES CO. INC. ––AUTHORIZED REPAIR STATIONS AND OFFICIAL SALES AND SERVICE FACILITIES

TO: All owners and operators of Hughes Helicopters

MODELS AFFECTED:

All 500 Model 369H Series Helicopters

REFERENCE:

500 Series – Basic HMI, Issued 1 October 1972; Revision No. 7, 15 October 1976.

The Instrument Specialties Co. Inc. authorized repair stations listed in this letter are fully equipped to handle maintenance and repair problems for the Insco instruments (TOT indicator, torque pressure indicator, etc) installed on your Model 500 helicopter. The official Insco sales and service facilities listed can also provide direct contact and assistance whenever and wherever needed.

It is to be noted that hermetically sealed Insco instruments must be evacuated and protected by trained personnel. If the indicator is unsealed by any facility other than an Insco–approved repair station, the vendor warranty is automatically voided.

Hughes Helicopters feels that utilization of these support facilities listed can improve the time involved for service and repair of the Insco instruments installed on your helicopter.

Edward Koch, Manager,
Customer Service Department
Hughes Helicopters, Inc.
Product Support Department

SERVICE LETTER

INSCO AUTHORIZED REPAIR STATIONS

USA – EASTERN

Consolidated Instrument Co. Inc.
Teterboro Airport
Teterboro, New Jersey

Durham Aircraft Service
56–15 Northern Boulevard
Woodside, New York 11377

Hermetic Aircraft Instrument Corporation
2OO Marine Street
Farmingdale, New York 11735

NASCO International Inc.
P.O. Box 48–515
Miami, Florida 33148

Olmstead Instrument Co.
28 Fourth Street
Harrisburg International Airport
Middletown, Pennsylvania 17507

USA – CENTRAL

Aircraft Instrument and Development, Inc.
317 East Lewis
Wichita, Kansas 67202

Beacon Instrument Service Inc.
Detroit City Airport Bay 9
Detroit, Michigan 482l3

Castleberry Instruments and Avionics
Tims Airpark
817 Dessau Road
Rt. 3
Austin, Texas 78753

SERVICE LETTER

Gem Instrument and Manufacturing Co.
331 North Briarly
Suite 325
Irving, Texas 75061

Vernon G. Gillette
Meacham Field
Fort Worth, Texas

MASCO Instrument Co.
2822 Century
Dallas, Texas

Mitsui and Co. (USA) Inc.
5000 One Shell Plaza
Houston, Texas

USA – WESTERN

Air Asia Co., Ltd.
P.O. Box 3957
No. Hollywood, California 91609

Air Stream Instrument Labs, Inc.
3605 East Spring Street
Long Beach, California 90806

Airtronics
1650 East 18th Street
Unit X
Tucson, Arizona 85719

Alaskan Aircraft Equipment Supply, Inc.
4707 Spenard Drive
Anchorage, Alaska

American Instruments, Inc.
6860 Perimeter Road
Boeing Field
Seattle, Washington 98108

SERVICE LETTER

Ansett Industries of Australia
10881 Latuna Canyon Road
Sun Valley, California 91352

Astro Air Enterprises
P.O. Box 2335, Airport Station
Oakland, California 94614

Bemm Aircraft Instrument Service, Inc.
Stapleton International Airport
Denver, Colorado 80207

Bill Johnson Instrument Inc.
7705 Woodley Avenue
Van Nuys, California 91406

Paine Field Instruments
Paine Field
Everett, Washington 98204

Scott Instrument Co.
3734 W. Slauson Avenue
Los Angeles, California 90043

Thompson Instrument and Avionics
AMF Box 22190
Salt Lake City, Utah 84122

AUSTRALIA

A.E.O.S. Ltd.
29 Norman Street
Peakhurst N. S. W.
Australia

Aircraft Instrument Service Pty. Ltd.
69 Caroline Crescent
Georges Hall, 2198
Sydney, N. S. W.
Australia

SERVICE LETTER

BRAZIL

O.L.D.I.
Av. Dr. Alberto Benedetti
No. 12l
Santo Andre – S.P. Brazil

CANADA– EASTERN

Aviation Electric Ltd.
P.O. Box 2140
Montreal, Quebec, Canada

J.H..McKinnon Ltd.
3120 Sartelon Street
Montreal, P.O. Canada

CANADA– WESTERN

Airborne Precision Instruments, Ltd.
Field Aviation Hanger
International Airport
Calgary, Alberta, Canada

Aviation Electric Pacific Ltd.
482 Hoffar Street
International Airport South
Vancouver, B.C. Canada

ENGLAND

Aeronautical and Commercial Instrumentation Ltd.
143A London Road
Apsley, NR. Hemel Hempstead, Herts
HP3 9SQ

Aviation Activities OVHL Services Ltd.
Willow Lane
Mitcham, Surrey, England

Aviation Engineering and Maintenance Co.
Haine Industrial Estate
Ramsgate, Kent, England

SERVICE LETTER

British Airways Helicopters Ltd.
Gatwick Airport South
Horley, Surrey, England

C. S. E. Aircraft Service Ltd.
Oxford Airport
Kidlington, Oxford, England

Field Aircraft Services Ltd.
12 Imperial Way
Croydon Airport
Croydon, England

FINLAND

Instrumentointi Oy
Sarankulmankatu 20
SF–33900, Tampere, Finland

MOZAMBIQUE

D.E.T.A.
P.O. Box 2060
Lourenco Marques
Mozambique

SOUTH AFRICA

Dart Aircraft Components (Pry) Ltd.
P.O. Rand Airport
Germiston 1419 R. S. A.

SWEDEN

Osterman's Aero AB
S161 10 Stockholm, Bromms 10
Sweden

SWITZERLAND

Air Maintenance S.A.
B.P. 110
1215 Geneve 15 Aeroport
Geneve, Switzerland

SERVICE LETTER

OFFICIAL SALES AND SERVICE FACILITIES
FOR INSCO PRODUCTS

USA

West Coast:

A. Biederman
1045 Air Way
Glendale, Calif. 91201

Central:

INSCO, Inc.
1111 Stanley Drive
Euless, Texas 76039

East Coast:

Barfield Instruments Corporation
4101 N.W. 29 Street
Miami, Florida 33142

Canada

Western Region:

Pacific Avionics
Vancouver International Airport
Vancouver, B.C.

Eastern Region:

Wright Instruments Ltd.
2762 Slough St.
Mississauga, Ontario

Greece

Nicos Gr. Drettas
12 Messogion Ave. and 2,
Farantaton Str.
Athens, 610, Greece

Singapore

Heli-Orient (PTE) Ltd.
Jalan Kayu Post Office Box No. 17
Singapore 28
(East Camp, Seletar Airfield)

SERVICE LETTER

India

Indian Avitronics
Flat No. 1
10 Hailey Road
New Delhi
India 110001

West Germany

Motorflug GMBH
Flughafen
7570 Badeb-Baden
West Germany

South America

Brazil

Arthur G. Hirsch LTDA
Rua Rafael Iorio, 67-CJ. 709
CX. Postal 18666
Sao Paulo - SP - Brasil

Bolivia

Mr. Peter Koechlin Von Stein
Aero Andes LTDA
Edificio Litoral
Piso 11
Calle Colon 150
La Paz, Bolivia

Chile

Mr. Albert Le Blanc
Valport LTDA
Bandera 75-OFS. 106-108
Santiago, De Chile

Columbia

James Leaver, Sr.
Aero Mercantil LTDA
Apt. Aereo 6781
Bogota, Columbia

Peru

Mr. Pedro Larranaga
Aero Comercial Peruana S. A.
Las Magnolias 791
Oficina 702 -703
San Isidro, Lima, Peru

SERVICE LETTER

· Venezuela

Taven SRL
Aeropuerto International
Maiquetia, Venezuela

Egypt

Mr. Kamel Abdel Fattar
#30 Abbel Rahin Sabry
Dokki, Cairo, Egypt

SERVICE LETTER

DATE: 08 SEPTEMBER 1978

PARTICLE SEPARATOR INSTALLATION AND INSPECTION AND POSSIBLE REMOVAL OF CIRCULAR FILTER SCREENS

TO: All owners and operators of Hughes Helicopters

MODELS AFFECTED:

500 Model 369H Series Helicopters equipped with PN– 369H90148 or 369H90148–501 Particle Separator Kit

REFERENCE:

500 Series – Basic HMI, Issued 1 Oct 1972; Revision No. 7, 15 Dec 1976

500 Series – HMI Appendix A, Issued 1 Oct 1972; Revision No. 4, 15 Dec 1974

Field reports indicate that the circular, fine mesh screens which snap on the forward end of the particle separator filter have become worn, broken or lost in service.

If inspection reveals that one or more of these 80 plastic screens are damaged or broken, they can be removed and need not be replaced. Operation of the engine air filter system is permissible, with or without the plastic screens installed.

It is to be noted that early configuration particle separator filters did not incorporate these fine meshed screens.

Edward Koch, Manager,
Customer Service Department
Hughes Helicopters, Inc.
Product Support Department

SERVICE LETTER

DATE: 01 AUGUST 1979

OPERATION AND MAINTENANCE GUIDELINES FOR MODEL 250 SERIES ENGINE FUEL SYSTEM

TO: All owners and operators of Hughes Helicopters

MODELS AFFECTED:

All 500 Model 369H Series Helicopters

REFERENCE:

Detroit Diesel Allison Commercial Service Letter CSL–1080, dated 11 May 1979

500 Series – Basic HMI, Issued 1 October 1972; Revision No. 7, 15 December 1976

The attached Allison Commercial Service Letter CSL–1080 lists basic guidelines for maintenance and operation of the Model 250 Series engine fuel system.

It is recommended that these guidelines be used by owners and operators of Hughes Model 500 helicopters to help preclude engine fuel problems and ensure reliable fuel system service.

Edward Koch, Manager,
Customer Service Department
Hughes Helicopters, Inc.
Product Support Department

COMMERCIAL SERVICE LETTER

Detroit Diesel Allison Division of General Motors Corporation
Indianapolis, Indiana 46206

May 11, 1979
FAA-DER Approved

SUBJECT: Model 250 Fuel System - Operational and Maintenance Guidelines

The purpose of this CSL is to provide a summary of operational and maintenance guidelines for the Model 250 engine fuel system. It is advisable that both pilots and maintenance personnel utilize this information to best prevent problems such as flameouts and power losses from occurring and to provide reliable fuel system service. Some of the information in this CSL is NEW. Please read it completely.

1. The engine demands clean, dry fuel. Refer to FAA Advisory Circular No. 00-34, "Aircraft Ground Handling and Servicing", paragraph 8, "Aircraft Fueling" for important tips on fuel handling.

2. The aircraft fuel tanks and related system must be clean. Maintain and clean the fuel tanks and lines according to the instructions in the airframe maintenance manual. Drain the fuel tank sump daily in accordance with the aircraft flight manual.

3. All fuel lines must be properly torqued. It is possible to have a leak in a fuel line, anywhere from the tank to the outlet of the engine fuel nozzle, which will "suck" air but won't leak fuel. A slug of air to the fuel nozzle may cause a flameout.

4. If the aircraft flight manual requires flight with the boost pumps "on", then they must be "on". This will not only ensure a proper head of pressure to the engine pump, but will reduce the probability of "sucking" air thru a tiny fuel line leak.

5. The uncovering of a fuel boost pump or the fuel inlet fitting in the tank, due to a low fuel level and/or flight manuever, can result in a slug of air entering the engine fuel system.

COMMERCIAL SERVICE LETTER

MODEL 250 FUEL SYSTEM-OPERATIONAL AND MAINTENANCE GUIDELINES

6. All pneumatic lines, double check valves, and accumulators must be properly torqued with special care to avoid any twists that may develop cracks later on. A leak in the pneumatic section can cause erratic operation, power loss, or a flameout.

7. If the aircraft has an engine fuel filter differential pressure warning system, it must be checked periodically for proper operation. Depressing the caution light in the cockpit in most installations only confirms that the light bulb is functional, hence, a functional check of the total system is necessary. Refer to the aircraft maintenance manual for instructions.

8. The engine fuel pump filter (low pressure) is not cleanable. Current instructions in the engine maintenance manual require that this filter be replaced only when the engine fuel filter differential pressure warning system indicates filter contamination. If the aircraft is not equipped with a fuel filter differential pressure warning system the filter must be replaced every 300 hours unless operating experience demonstrates that lower time increments are advisable. DDA NOW RECOMMENDS THAT THE LOW PRESSURE FUEL FILTER BE REPLACED EVERY 300 HOURS (regardless of whether the aircraft has a differential pressure warning system) or whenever the warning system is activated, whichever comes first.

CAUTION: Some operators have inadvertently installed the old ten micron low pressure fuel filter (P/N AN6235-3A) in place of the recommended five micron filter (P/N 6895177). This is a critical item, especially for those engines utilizing CECO fuel systems. Please inspect your engine and spare stock to ensure the correct filter is installed. The ten micron filter is identifiable by its brown paper element, whereas the five micron element contains a wire mesh surrounding a white element.

9. The engine fuel pump will not pump fuel with a sheared spline. Certain Sundstrand pumps require periodic backlash checks or visual inspections for spline wear. Refer to the engine operation and maintenance manual for instructions.

10. If the low pressure fuel filter has bypassed, the CECO control and governor should be flushed per DDA CSL-1034 and CSL-1035.

COMMERCIAL SERVICE LETTER

MODEL 250 FUEL SYSTEM-OPERATIONAL AND MAINTENANCE GUIDELINES

11. DDA CEB-1095 recommends installation of a high pressure fuel filter assembly if the engine is equipped with a CECO system. If you have the CECO system and don't have the high pressure fuel filter, please get one.

12. The high pressure fuel filter has done a tremendous job in reducing the number of incidents resulting from contaminated CECO controls and governors. Now that the filter has been in service for several years, it is evident that additional maintenance is necessary. DDA NOW RECOMMENDS THAT THE HIGH PRESSURE FUEL FILTER ELEMENT BE REPLACED WITH A NEW OR THOROUGHLY CLEAN ELEMENT AND THAT THE BY-PASS VALVE BE INSPECTED FOR WEAR EVERY 100 HOURS. See the 14 November 1978 revision to the C20 Operation and Maintenance Manual for by-pass valve assembly wear inspection.

13. Recent information provided to DDA revealed that ultrasonic cleaning of high pressure filter may not provide the best removal of imbedded contaminates. Therefore, the following procedure is recommended as a primary and/or additional method.

    a. Fill the inside of the filter with a clean liquid bio-degradable, undiluted, dishwashing detergent, such as Joy, Ivory, Palmolive, Dove, Dawn, Dermassage, Amway L.O.C., etc. Immerse into a container of undiluted detergent.

    b. Let the detergent soak for a minimum of 5 minutes. Then remove from container.

    c. Apply filtered shop air to the inside of the filter thru the opening in the end cap, forcing detergent out via convolution/pleats. Repeat application of detergent and water flush.

    d. Run hot clean water into the inside of the filter thru the hole, until the water runs clear of soap bubbles and contaminates. The more effort expended will result in a cleaner filter element.

    e. Remove excess moisture.

COMMERCIAL SERVICE LETTER

MODEL 250 FUEL SYSTEM-OPERATIONAL AND MAINTENANCE GUIDELINES

14. Quick check for Filter Element cleanliness.
CAUTION: Be aware of the potential fire hazard when using the below procedure.

    a. Fill a flat bottom container with fuel or Stoddard solvent, at approximately room temperature, to 1 3/4 ± 1/16 inch deep. This is a level which will cover the convolutions/ pleats; but does not reach the center opening with the element standing upright-open end on top.

    b. Throughly wet the filter element media with fuel or Stoddard solvent to reduce surface tension. This can be accomplished by forcing the liquid through the element utilizing a 3/8 inch outside diameter tube in the element opening and forcing fuel thru.

    Pour out any liquid from the inside and immerse the element in the above container.

    Determine the time it takes for the fluid to rise inside the element to the level of the surrounding liquid.

    If cleaned sufficiently, the element should fill within 5 seconds.

    Repeat cleaning procedures if necessary. If unable to meet the 5 second limit, replace the element with one that meets the 5 second limit.

15. The pneumatic (air) circuit of the Bendix System will accumulate dirt during normal operation. The Troubleshooting section of the C20 Operation and Maintenance Manual currently lists troubles that can be corrected by cleaning the Bendix air circuit. The manual also provides instructions for proper cleaning. DDA NOW RECOMMENDS THAT THE BENDIX AIR CIRCUITS BE CLEANED EVERY 300 HOURS.

COMMERCIAL SERVICE LETTER

MODEL 250 FUEL SYSTEM-OPERATIONAL A ND MAINTENANCE GUIDELINES

16. The DDA Operation and Maintenance Manual recommends a postflight deceleration check of the Bendix system. DDA CSL-1047 recommends a daily deceleration check for the CECO system. These deceleration checks are a good method to uncover impending problems. DDA RECOMMENDS THAT A POSTFLIGHT DECELERATION CHECK BE CONDUCTED ON BOTH THE BENDIX AND CECO SYSTEMS.

17. Rigging to the fuel control and governor is very important. Don't overlook the aircraft and engine manual requirements. Wear in the linkages can sneak up on you and cause a flameout.

18. Go over the above list again. If there is something you don't understand, please ask questions. The reliable operation of your engine is your responsibility.

L. O. Davidson
Service Manager
Gas Turbine Engines

NJB/bw

SERVICE LETTER

NEW SEAL REQUIREMENT FOR OVERHAUL OF PN 369H6340 AND 369H92131 LANDING GEAR DAMPER ASSEMBLIES

TO: All owners and operators of Hughes Helicopters

MODELS AFFECTED:

All 500 Model 369H Series Helicopters

REFERENCE

500 Series – Basic HMI, Issued 1 October 1972; Revision No. 7, 15 December 1976

500 Series – HMI Appendix C, Component Overhaul, Issued 1 April 1976; Revision No.1, 1 August 1976

36914 Series – Illustrated Parts Catalog (IPC), Reissue No. 7, 15 January 1976

369H Series – Illustrated Kit Catalog (IKC), Reissue No. 2, 1 September 1978

A new PN 369D26304 piston seal is now to be installed as replacement for the existing PN 12501312 or A–2046 seals during reassembly and overhaul of the subject poppet type landing gear damper assemblies for Model 369H Series helicopters.

Use the attached errata sheets to incorporate the replacement 369D26304 seal in the Appendix C Component Overhaul parts list for damper overhaul, and in the Illustrated Parts Catalog and Illustrated Kit Catalog for 369H6340 and 369H92131 landing gear damper assemblies.

Edward Koch, Manager,
Customer Service Department
Hughes Helicopters, Inc.
Product Support Department

ERRATA SHEET

FOR

MODEL 369 SERIES ILLUSTRATED PARTS CATALOG

Reissue No. 7, 15 January 1976

Page 317, Figure 94 Landing Gear Damper 369H6340

Item 23:

DELETE:	12501312	Seal
	12501312	Seal
ADD:	369D26304	Seal
	369D26304	Seal

ERRATA SHEET

FOR

500 SERIES HMI APPENDIX C

COMPONENT OVERHAUL MANUAL

Revision No. 1; 1 August 1976

Part VII Landing Gear Damper (369H6340, 369H92131, 369H92800, 369H92801)

Section 1, Page 1-3

Table 1-3. Damper overhaul kit parts list

DELETE:	A2046	Seal	21
ADD:	369D26304	Seal	21

ERRATA SHEET

FOR

MODEL 369H SERIES

ILLUSTRATED OPTIONAL ACCESSORIES

AND

MODIFICATION KIT CATALOG (IKC)

Volume II, Reissue No. 2, 1 September 1978

Page 234, Figure 74 Extended Landing Gear Damper Assembly 369H92131

Item 20:

DELETE:	A2046	Seal
ADD:	369D26304	Seal

SERVICE LETTER

COMPLIANCE WITH FAA AIRWORTHINESS DIRECTIVES AND HUGHES MANDATORY (RED BORDER) SERVICE INFORMATION NOTICES

MODELS AFFECTED:

All 500C Model 369H Series Helicopters maintained by Hughes Service Center or Distributor

REFERENCE:

Hughes Helicopters / Hughes Service Center and Distributor Policy Agreement

Applicable Model 369H Series Helicopter Log Book Compliance Record

A new policy covering compliance with FAA Airworthiness Directives and mandatory (red border) Hughes Service Information Notices is now in effect for all Model 369H Series Helicopters maintained by authorized Hughes Service Centers and Distributors.

In the future, the above 369H helicopters must have a record of compliance with all applicable Hughes Service Information Notices (red border), and all applicable FAA (or equivalent government agency) AD notes, before releasing the helicopters for flight.

If non–compliance is noted in the helicopter Log Book Compliance Record, the Hughes Service Center or Distributor must notify the owner/operator in writing. If the owner/operator declines to comply, the Service Center or Distributor must receive such a declaration in writing, and the written declination kept on file by the Service Center or Distributor.

It is to be noted that Hughes Commercial Service Publications Department distributes Model 369H Notices and Letters to all Hughes Service Centers and Distributors. However, it is the responsibility of the Service Center and Distributor to obtain and maintain an active FAA file (or equivalent foreign government documents) including AD's applicable to the 369H Series helicopter.

DATE: 30 SEPTEMBER 1980

SERVICE LETTER

The above policy changes will be included in a forthcoming amendment to the Hughes Helicopters Hughes Service Center and Distributor policy agreement.

Edward Koch, Manager,
Customer Service Department
Hughes Helicopters, Inc.
Product Support Department

SERVICE LETTER

DATE: 13 MARCH 1981

SUBSTITUTION OF WET SPLINE DRIVE STARTER–GENERATOR FOR EXISTING DRY SPLINE DRIVE STARTER–GENERATOR

TO: All owner and operators of Hughes Helicopters

MODELS EFFECTED:

All 500C Model 369H Series Helicopters

A modification kit is available for substituting wet spline drive for existing dry spline drive, if desired, during engine–gearbox repair or major overhaul. The wet spline drive will reduce wear and associated replacement costs for both gearbox and starter–generator drive splines. Contact your local Allison Distributor for further information.

Edward Koch, Manager,
Customer Service Department
Hughes Helicopters, Inc.
Product Support Department

SERVICE LETTER

DATE: 21 AUGUST 1981

TAIL ROTOR DRIVE SHAFT FLEXIBLE COUPLINGS, PN 369A5501 AND 369H92564 – TREATMENT WITH MOLYKOTE METAL PROTECTOR

TO: All owners and operators of Hughes Helicopters

MODELS AFFECTED:

All 500 Model 369H Series Helicopters

REFERENCE:

500 Series – Basic HMI, Issued 15 June 1975; Revision No. 8, 1 December 1980

Whenever the subject Bendix couplings are washed with a solvent or detergent, a light coating of Molykote Metal Protector should be applied to the coupling before reinstallation on the helicopter.

Molykote Metal Protector is available in 16 ounce aerosol cans and in 15 – gallon drums (liquid form), from Dow Corning Corporation, Midland, Michigan.. Apply Molykote from an aerosol can to the interior and. exterior of the coupling diaphragm packs. Spray or dip the coupling flange in Molykote; remove any excess liquid by gently blowing with compressed air.

When applying Molykote Metal Protector, it is important that the work area be well ventilated and maintenance personnel follow all safety precautions on the container label. Cure time for the Molykote coating is 8 hours at room temperature and 15 minutes at 65° C.

It is to be noted that couplings should not be immersed in fluids or cleaners such as magnetic particle, fluorescent penetrant, visible dye, etc. Any application of corrosion protective fluids should also be done very sparingly.

The information given in this Letter will be incorporated in the next scheduled revision to the above referenced Basic HMI.

Edward Koch, Manager,
Customer Service Department
Hughes Helicopters, Inc.
Product Support Department

SERVICE LETTER

DATE: 01 SEPTEMBER 1981

NEW PROTECTIVE BOOTS FOR MAIN ROTOR HUB AND TAIL ROTOR ASSEMBLIES

TO: All owners and operators of Hughes Helicopters

MODELS AFFECTED:

All 500 Model 369H Series Helicopters

REFERENCE:

Model 500 Series Basic HMI, Reissued 15 June 1975; Revision No. 8, 1 December 1980

New protective boots designed for extra stiffness and longer wear are now available as replacement for the existing flexible upper boot on the main rotor hub and inboard boot on the tail rotor assembly. Made of neoprene impregnated nylon fabric for greater rigidity and toughness, the new PN 369D21011 upper boot must be lockwired in place when installed on the main rotor hub assembly. This safety wire requirement also applies to the new 369D21811 non–rotating inboard boot when installed on the tail rotor assembly.

The new boots are to be secured at each end with a double wrap of MS20995C32 safety wire, drawn snug and twisted together per standard safety wire techniques.

When ordering, specify the new 369D21811 boot as replacement for existing 369A1811 or 369H1804 non–rotating inboard boot; and the new 369D21011 boot as replacement for existing 369A1006 or 369H1001 upper boot on the main rotor hub.

Edward Koch, Manager
Customer Service Department
Hughes Helicopters, Inc.

SERVICE LETTER

DATE: 02 NOVEMBER 1981

FIELD REPLACEMENT OF ’0’ RING FOR PN 369A8321 OIL TANK FILLER CAP

TO: All owners and operators of Hughes Helicopters

MODELS AFFECTED:

All 500 Model 369H Series Helicopters

REFERENCE:

500 Model 369H Series Basic HMI, Reissued 15 June 1975; Revision No. 8, 1 December 1980

There were several reports from operators that on occasion the oil tank filler cap would stick and was thus hard to remove. An investigation revealed that the oil cap ’ 0 ’ ring caused the cap to stick.

An improved ’ 0 ’ ring (Parker PN 2–223, N304–75) is now available for field installation as replacement, if desired, for the existing ’ 0 ’ ring, to minimize any cap removal problems. The new ’ 0 ’ ring is a special Parker Lube treated ring and is available only through Hughes Helicopters, Inc.

For further information, contact your authorized HHI Service Center or Distributor, or HHI Parts Sales Department.

Edward Koch, Manager
Customer Service Department
Hughes Helicopters, inc.

SERVICE LETTER

NEW PN 369D28237 CUSHION FOR TAILPIPE HANGER ASSEMBLY DESIGNED FOR LONGER WEAR

TO: All owners and operators of Hughes Helicopters

MODELS AFFECTED:

All 500 Model 369H Series Helicopters

REFERENCE

Model 500 Basic HMI,

Reissued 15 September 1981

A new PN 369D28237 tailpipe hanger cushion made of silicone rubber material to provide longer wear is now available for installation on all 500 Model helicopters.

A component of the new PN 369A8236–9 and –11 tailpipe hanger assemblies, the PN 369D28237 cushions may be ordered as replacement, when required, for existing inconel mesh pads or tabbed wire cushions used on early PN 369A8236–5 and –7 tailpipe hanger assemblies. Installation of the new rubber cushions upgrades early –5 and –7 hanger assemblies to the new PN 369A8236–9 and –11 configurations.

Instructions for replacement of the tailpipe hanger cushions are provided in Section 15 of the Basic HMI–Volume I. Install the new PN 369D28237 cushions by bonding to the PN 369A8233 saddles and PN 369A8234–1 and –2 clips with GE High–Temp Instant Gasket RTV 106 (Red) or equivalent compound. Also inject gasket compound into cavity in area around the spring attach points.

When ordering replacement cushions, specify the new PN 369D28237 silicone rubber cushions. When ordering tailpipe hanger assemblies, specify the new PN 369A8236–9 and – 11 assemblies.

Edward Koch, Manager
Customer Service Department
Hughes Helicopters, Incorporated

SERVICE LETTER

DATE: 22 NOVEMBER 1982

GROUND TESTING – ENGINE AUTOMATIC RE–IGNITION AND ENGINE ANTI–ICE FUEL FILTER SYSTEMS

TO: All owners and operators of Hughes Helicopters

MODELS AFFECTED:

All 500 Model 369HE, 369HM and 369HS Series helicopters with Engine Automatic Re–ignition and/or Engine Anti–Ice Fuel Filter System (s) Installed

When ground testing the Engine Automatic Re–ignition System or Engine Anti–Ice Fuel Filter System using helicopter battery power, the automatic re–ignition system RE–IGN indicator or the anti–ice fuel filter system FUEL FILTER caution indicator may not light if the battery used is not fully charged.

The RE–IGN indicator and the anti–ice FUEL FILTER caution indicator lights are activated by solenoid switches which require 23.8 vdc, minimum, to assure operation. If the helicopter 28 volt battery bus does not supply at least 23.8 vdc during ground testing of either system, the RE–IGN indicator or the FUEL FILTER caution indicator, as applicable, may not light. Other components of the systems are not affected by the low voltage.

To assure valid ground testing of the Engine Automatic. Re–ignition System, or the Engine Anti–Ice Fuel Filter System, ensure that the battery is fully charged, or use an approved auxiliary power unit.

Ground testing procedures for the Engine Automatic Re–ignition System and the Engine Anti–Ice Fuel Filter System are contained in the FAA Approved Owners Manual Supplements applicable to the affected systems.

Edward Koch, Manager
Customer Service Department
Hughes Helicopters, Inc.

SERVICE LETTER

DATE: 10 JANUARY 1983

PREVENTION OF WATER LEAKAGE THROUGH CANOPY GEON STRIPS

TO: All owners end operators of Hughes Helicopters

MODELS AFFECTED: All 500 Model 369HE, 369HM and 369HS Series helicopters.

REFERENCE:

Model 500. Basic HMI (CSP-H-2), Reissued 15 September 1981. Model 500 HMI Appendix D, Issued 1 October 1973.

Should water leakage through the geon strips of the forward canopy occur, seal all faying surfaces of the geon strip(s) where the leakage occurs with PR1221 sealant (Product Research, Glendale, CA). Remove any existing sealant bead in the area of the leak using a plastic or other non-metallic scraper which will not scratch the canopy glass. Apply a 0.06-inch bead of sealant (refer to manufacturers instructions) along faying surfaces in the affected area.

When replacement of components mating with the geon strips and removal of the canopy glass is required, apply a 0.010-to 0.020-inch coating of PR1221 sealant to all faying surfaces of the geon strip and to the adjoining components prior to reinstallation. Carefully align and join mating surfaces with as few movements as possible. Do not reposition or shift the faying surfaces once they are joined. Install any attaching. hardware necessary during the working life of the sealant (refer to manufacturers instructions). Remove any sealant squeeze-out in excess of 0.125-inch using a non-metallic spatula or scraper.

The information given in this Service Information Letter is to be considered as a part of the HMI, and will be incorporated in the next scheduled revision to the above referenced manuals.

Edward Koch, Manager,
Customer Service Department
Hughes Helicopters, Inc.
Product Support Department

REFERENCE SHEET
SERVICE INFORMATION NOTICES AND LETTERS

ACTION REFERENCE: When installing or repairing forward canopy windows refer to Service Information Letter No. HL–85.

HMI REFERENCE : Insert this sheet in 500 Series – HMI, Appendix D, Section 2, Page 2–45.

This reference sheet shall be kept as a part of the manual until the data is incorporated at the next revision to 500 Series –HMI Appendix D. (See Service Information Summary, HMI Appendix D, page i.)

SERVICE LETTER

HANDLING AND SHIPPING GYROS

TO: All owners end operators of Hughes Helicopters

MODELS AFFECTED:

All 500 Model 369HE, 369HM and 369HS Series Helicopters equipped with Rate Gyros, Vertical Gyros, Directional Gyros or Attitude Gyros.

Gyros, whether rate gyros, vertical gyros, directional gyros or attitude gyros, are the most delicate instruments in your helicopter. The gimbal bearings in gyros are designed to operate with very little friction, and as a result are very fragile. The bearings are easily damaged if the gyro is mishandled, and repairs are very expensive.

Guidelines for the proper handling and shipping of gyros are attached to this letter. If followed, they will help you eliminate gyro bearing damage caused by mishandling and the expensive repairs that result from such damage.

Edward Koch, Manager,
Customer Service Department
Hughes Helicopters, Inc.
Product Support Department

GYRO HANDLING AND SHIPPING GUIDELINES

CAUTION: Handle a gyro as if it were an egg. The gyro transmitter operates in a gimbal, which allows it to swing in any direction. Some gyros are caged, which means a locking device is installed to prevent the gyro transmitter from swinging during ground handling or shipment. If caging is provided, ensure the gyro is caged before and during all ground handling of the gyro, or a helicopter with the gyro installed.

SHIPPING AND TRANSPORTING GYROS

(1). Always transport or ship a gyro in its original container, with the dunnage used by the manufacturer. If the original container and dunnage is not available, use substitutes approved by or supplied by the gyro manufacturer. Extensive damage to gyro bearings frequently occur when a gyro is shipped or transported improperly packed. Shipping in other than approved containers can void the manufacturers warranty.

(2). Outer shipping containers for gyros are clearly marked THIS SIDE UP. Placing a container with a gyro inside in any position other than the position indicated on the container can cause the gyro to be damaged.

(3). Do not remove the gyro from its shipping container until it is beside the helicopter for installation, or the work bench for testing. When it is necessary to see the gyro at any other time, open the top of the container and remove the dunnage. Before moving the gyro, replace the dunnage and reseal the container.

(4). When moving the gyro locally, use a foam padded cart with large rubber wheels, not small casters. If a truck is used, the truck must have pneumatic tires, and the container. must be positioned where it will not be bounced or jarred during movement of the truck.

(5). Do not drop, kick, toss, bump or tumble a container housing a gyro.

(6). When it is necessary to ship a gyro, use air shipment.

(7). Retain all gyro shipping containers and dunnage for reuse.

GYRO HANDLING

(1). When installing a gyro, place the container housing the gyro as near as possible to the point of installation. If applicable, remove the gyro to be replaced and gently place it next to the shipping container. Remove the new gyro from the shipping container and install it in the helicopter. If applicable, properly pack the removed gyro in the shipping container for transport to the shop, etc.

GYRO HANDLING (CONT)

(2). Where practical, do not ground handle a helicopter in which an installed gyro has been energized, for 20 minutes after power has been removed from the gyro.

(3). Do not move a gyro if the gyro rotor is running. Allow a 20 minute run down after power is removed.

(4). Do not rotate or tumble the gyro during handling.

(5). When removing or installing a gyro, remember, it is to be treated like an egg. Do not bump it, drop it, strike it, tumble it or jolt it.

(6). Be extremely careful when setting a gyro on a fixture, bench, table or any surface. Dropping one end of a gyro 3/4–inch is equivalent to a 20g impact for the gyro. A 2–1/2 inch drop can ruin the gimbal bearings.

SERVICE LETTER

NEW ATTITUDE GYRO INDICATOR AND SUPPORT ASSEMBLY

TO--All owners and operators of Hughes Helicopters

MODELS AFFECTED:

All model 369HS Helicopters equipped with optional 369H90038-503 Attitude Gyro Indicator Kit.

REFERENCE:

500 Model 369H Series Basic HMI, Appendix A, Publication No. CSP-H-3, Issued 1 October 1972, Revision No. 4, 15 December 1974.

Attitude Gyro Indicator (P/N 369H92831) is no longer available from the vendor, R.C. Allen. When the existing stock of R.C. Allen indicators is exhausted, Attitude Gyro Indicator (P/N 369H92831-3) manufactured by Aviation Instrument Manufacturing, Inc. (AIM) will be supplied. The AIM indicator is longer than the R.C. Allen indicator and uses the 369H6455-51 Support Assembly. The 369H6455-51 Support Assembly is to be installed using the same type rivets and the same rivet pattern used for the 369H6455-11 Support Assembly. Connector P506 must be modified when replacing an R.C. Allen indicator with the AIM indicator by removing the blue wire attached to pin D of the connector and reattaching it to pin A.

When ordering a replacement for Attitude Gyro Indicator (P/N 369H92831), order P/N 369H92831–3, Attitude Gyro Indicator and P/N 369H6455–51, Support Assembly.

Edward Koch, Manager,
Customer Service Department
Hughes Helicopters, Inc.
Product Support Department

SERVICE LETTER

*Include a copy of this Letter in the Notice/Letter file for each affected model.

TO: All owners and operators of Hughes Helicopters

SURPLUS OR BOGUS 369D21100 SERIES MAIN ROTOR BLADES

MODELS AFFECTED: All Model 369D, 369E, 369F, 369H, 369HE, 369HM and 369HS Series Helicopters.

Hughes Helicopters has recently obtained five bogus main rotor blades which had been sold to a 369D owner/operator as 369D21100 blades. The blades were in fact, surplus military blades (PN 369A1100 Series) designed for the OH-6A and sold by HHI to the U. S. Army in 1967/8. The identification plate and markings on the blades had been altered to reflect the 369D21100 blade configuration. When these blades were examined by Hughes, there were no records with them to indicate total time in service. Such blades are not designed for use with 369D helicopters and must not be used under any circumstances.

It is possible that more of these bogus main rotor blades have been sold. These blades have probably exceeded their FAA assigned service life. If used, they could fail, causing an accident in which personal injury could occur. In addition, use of these blades could void insurance claims.

Any main rotor blade acquired from other than a Hughes authorized Service Center or Distributor must be considered suspect, and should be checked closely to determine if it is an authentic 369D21100 Series blade, of if it is an altered 369A1100 Series main rotor blade designed for use on OH-6A and Hughes 369H Series helicopters. Because the 369D blade required improved structural design to accommodate increased loads at higher airspeeds, the following checks can be made to determine if a suspect blade is an authentic 369D blade, or an altered 369A Series blade:

(1). The coin tap test can be used to identify the number of ribs in the blade. Carefully tap along the length of the blade, from the tip end, using a heavy coin, e.g., U. S. quarter, half dollar, or equivalent. Note the number of ribs in the blade by the difference in sound. The 369D blade has 20 ribs, 1.5 inches apart, beginning 1.5 inches from the blade tip. The 369A Series blade has only four ribs, three inches apart, beginning three inches from the blade tip. (See figure 1.)

(2). The bogus 369D blades have a painted over, flush plug installed to fill a 0. 218 – 0.224 inch diameter hole required in all 369A1100 Series blades. (See figure l.) There is no such hole or plug in 369D blades

SERVICE LETTER

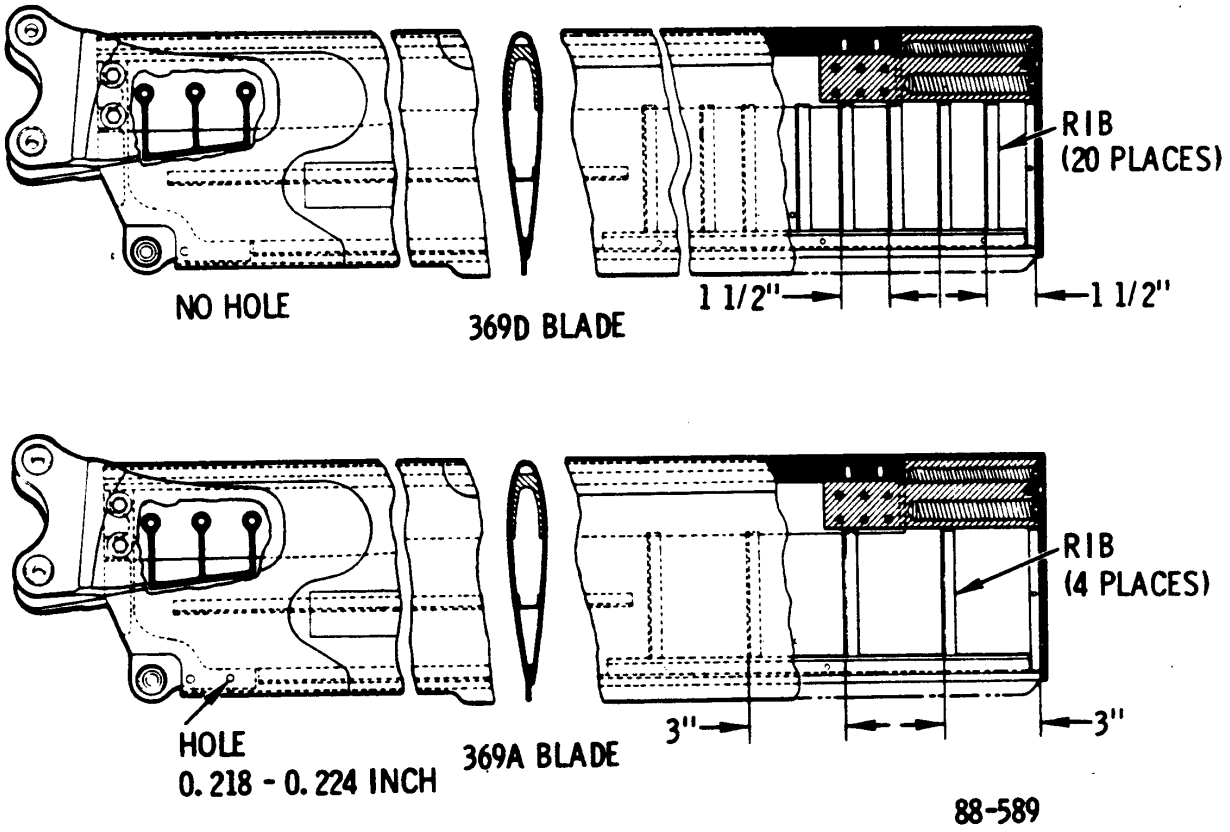


Figure 1. Bogus 369D Main Rotor Blade Identification

Any main rotor blade found that has been altered or suspected of having been altered, should be removed from service or spares inventory immediately. Contact Hughes Customer Service Department, or your Hughes Service Center if any such blades are found, or if you have any questions concerning this matter.

We have also received information concerning a PN 369A1200-501 main rotor hub, serial No. 3425, that we suspect does not meet our quality standards. Owner/operators who have had the main rotor hub replaced within the last six months should ascertain whether this particular hub is installed. When purchasing a main rotor hub from other than a Hughes approved source, be aware that bogus hubs are being marketed. If you find that the suspect hub, serial No. 3425, has been installed on your helicopter, or if anyone attempts to sell you a main rotor hub you suspect is not authentic, please notify Hughes Customer Service Department immediately.

Edward Koch, Manager,
Customer Service Department
Hughes Helicopters, Inc.

HL-89
DL- 58
EL-9

SERVICE LETTER

DATE: 16 MAY 1984

*Include a copy of this Letter in the Notice/Letter file for each affected model.

TO: All owners and operators of Hughes Helicopters

UNAUTHORIZED TAIL ROTOR TEETER BEARINGS.

MODELS AFFECTED: All 369D, 369E, 369H, 369HE, 369HM and 369HS Series helicopters.

During the period 1981 through 1983, New Hampshire Ball Bearings, Inc., manufactured and sold tail rotor teeter bearings marked with Hughes PN 369A1726 and 369A1727 to JEPCO, 10919 N. W. Third Place, Belleview, Washington, and AHEPSCO, 216 West Florence, Inglewood, California. These bearings were not subjected to Hughes inspection and quality control, and their use is not authorized on any Hughes Helicopter. Since these bearings cannot be shown to meet FAA quality control requirements, their use violates Federal Aviation Regulations, and can result in warranty or insurance claims being rejected.

There is no way to visually differentiate between the unauthorized and authorized parts; therefore, all 369A1726 and 369A1727 tail rotor teeter bearing inner/outer races purchased from other than a Hughes authorized distributor or service center should be removed from service immediately and replaced with Hughes authorized 369A1726 and 369A1727 bearings from Hughes authorized sources. All such parts should be removed from spares inventory.

If you have any questions concerning this matter, please contact your Hughes Service Center or Distributor.

Edward Koch, Manager,
Customer Service Department
Hughes Helicopters, Inc.

SERVICE LETTER

HL-91
DL- 59
EL-10
FL-2

DATE: 12 NOVEMBER 1984

TO: All owners and operators of Hughes Helicopters

MAJOR INSTALLATIONS AND ALTERATIONS TO YOUR HUGHES HELICOPTERS

MODELS AFFECTED: All Hughes Model 369D, 369E, 369F, 369H, 369HE, 369HM and 369HS Series helicopters.

Hughes Helicopters, Inc., recommends that extreme care be used when selecting a facility to make major structural repairs, install major systems or components, or make any alteration to your Hughes Helicopter. The facility selected should use only parts, materials and procedures authorized by Hughes for accomplishment of the task.

Major structural repair, system or component installation, and helicopter alteration can change the structural load paths of the helicopter. The application of greater loads to structural components, not designed or tested for such loads, can reduce the fatigue life of those components. Any such repair, installation, or alteration that changes the structural load paths which were determined during testing and certification of the original helicopter design revokes the FAA certification of that helicopter. Recertification requires sufficient stress and fatigue analysis/testing to determine if the certificated service and fatigue life of the helicopter has been affected. Additionally, modification of a basic system which is part of the original design, should not be made without conducting a failure mode and effect analysis.

Hughes Helicopters, Inc., will not accept responsibility or liability for any Hughes Helicopter on which work beyond the scope authorized by Hughes maintenance instructions has been performed. These instructions are not intended for the purpose of major structural modifications or rebuilding of helicopters. If you have any questions concerning major repairs, installation or alterations to your Hughes Helicopter, contact your Hughes Service Center or Distributor.

Edward Koch, Manager,
Customer Service Department
Hughes Helicopters, Inc.

SERVICE LETTER

HL-93
DL-61
EL-12
FL-5

DATE: 15 SEPTEMBER 1985

TO: All owners and operators of Hughes Helicopters

EXPLANATION OF PARTS SERIALIZATION

MODELS AFFECTED: All Model 500H, 500D, 500E, 530F and 530F Plus Helicopters.

The following is a brief explanation of the part serialization system used at Hughes Helicopters, Inc. All parts are assigned a basic part number. The basic part number of an assembly or component may be further identified by a serial number. In most cases, the serial number consists of a four digit number. Serialization of each basic part number starts with 0001 and progresses through numerical and alphanumerical combinations as follows:

0001–9999

A001–Y999

AA01–YY99

AAA0–YYY9

To further explain, identical part numbers with serial numbers 0001 through 9999 were manufactured prior to serial numbers A001 through Y999. Identical part numbers with serial numbers A001–Y999 were manufactured prior to serial numbers AA01–YY99, etc. It should be noted that the alphabetic characters I, O, Q, X and Z are not used for regular production parts.

Edward Koch, Manager,
Product Support Technical
Hughes Helicopters, Inc.

SERVICE LETTER

HL-94
DL-64
EL-14
FL-6

DATE: 17 MARCH 1986

TO: All owners and operators of MDHC Helicopters.

UNAUTHORIZED OVERHAUL OF MAIN ROTOR HUB ASSEMBLIES

MODELS AFFECTED: All 369H, 369HE, 369HM, 369HS, 369A, 369D, 369E, 369F and 369FF Model Helicopters.

McDonnell Douglas Helicopter Company (MDHC) has learned that some operators of MDHC helicopters have had main rotor hub assemblies (lead lag links, strap pack assemblies, blade root fittings, etc.) overhauled at repair facilities outside of MDHC or MDHC Approved overhaul Licensees. MDHC does not recommend or approve overhaul of the main rotor hub assemblies outside of MDHC or Approved overhaul Licensees. Such practice may jeopardize the safety of the helicopter and the eligibility of the part to be qualified for MDHC's major component exchange program.

Edward Koch, Manager,
Product Support Technical
Hughes Helicopters, Inc.

SERVICE LETTER

HL-97
DL-67
EL-18
FL-8

DATE: 6 APRIL 1987

TO: All owners and operators of McDonnell Douglas Helicopter Company helicopters and MDHC Approved Service Centers.

RE–LUBRICATION OF BEARINGS IN STORAGE

MDHC re–lubricates all pre–lubricated bearings (lubricated by manufacturer) after four years of shelf life (storage) or prior to installation into a helicopter. Owners, operators and service centers should also comply with this requirement of relubricating any pre–lubricated bearing which has been in storage more than four years since date of manufacture or before installing the bearing into a helicopter. Spares inventories should be checked periodically to ensure the above re–lubricating requirement is complied with. Re–lubrication shall be performed in accordance with the applicable portions of the Handbook of Maintenance Instructions.

Cary Brown, Manager
Product Support Department
McDonnell Douglas
Helicopter Company

SERVICE LETTER

HL-98
DL-68
EL-19
FL-9

DATE: 1 MAY 1987

TO: ALL OWNERS AND OPERATORS OF MCDONNELL DOUGLAS HELICOPTER COMPANY (MDHC) 369 SERIES HELICOPTERS.

EXTERNAL SCAVENGE OIL FILTER SYSTEM

The Allison Gas Turbine Commercial Service Letters referenced below outline the benefits of the use of an approved scavenge oil filter. MDHC has been informed that Allison plans to make this type of filter mandatory on new applications and we strongly endorse the addition of any approved external scavenge oil filter system to existing 369 Series helicopters.

The oil scavenge filter kit and vendor listed below have been approved by Supplemental Type Certificate to be installed on all 369A, 369HE, 369HM, 369HS, 369D and 369E Series helicopters. A Supplemental Type Certificate is currently in the approval cycle at the Federal Aviation Administration and should be approved to be installed on all 369F/FF Series helicopters by the Fall of 1987.

Kit Number 1741050
Facet Enterprises, Inc.
8439 Triad Drive
Greensboro, N.C. 27409
Tele: (919)668-4444

Cary Brown, Manager
Product Support Department
McDonnell Douglas
Helicopter Company

REFERENCES

Allison Publication CSL-128 (250-C18 Series Engines)
Allison Publication CSL-1118/CSL-1093 (250-C20 Series Engines)
Allison Publication CSL-3061 (250-C30 Series Engines)

SERVICE LETTER

HL-99
DL-70
EL-21
FL-11

DATE: 15 JUNE 1987

TO: All owners and operators of McDonnell Douglas Helicopter Company (MDHC) 369 Series helicopters.

UNAUTHORIZED DISTRIBUTION OF MAIN ROTOR HUB OVERHAUL MANUAL.

MDHC has learned that an unauthorized copy of Publication No. CSP–O73IL, Main Rotor Hub (P/N 369D21200–711) overhaul procedures may have been inadvertently delivered to some owners and operators of MDHC helicopters.

This manual is not approved for general usage and should be destroyed. MDHC does not approve overhaul of the main rotor hub assemblies outside of MDHC or MDHC Approved Overhaul Licensees.

Cary Brown, Manager,
Product Support Department
McDonnell Douglas

SERVICE LETTER

TO: All owners and operators of McDonnell Douglas Helicopter Company (MDHC) 369 Series helicopters, including the 369A (OH-6A) Series helicopter.

ILLUSTRATED PARTS BREAKDOWN OF GROUND HANDLING WHEEL ASSEMBLY (PN 369D2610)

MDHC has received requests from operators in the field to provide them with a parts breakdown of ground handling wheel assembly which will enable them to procure individual items when needed. Unless otherwise noted, all items shown in the attached parts breakdown are available from:

AER-BEA CO. INC.
1925 Doreen Ave.
South El Monte, CA. 91733

Tele: (818)443-1757

Cary Brown, Manager
Product Support Department
McDonnell Douglas
Helicopter Company

SERVICE LETTER

PARTS LIST

Item/Nomenclature	Part No.	Qty.	Source
2 Spring	AB2472–2	2	Aer–Bea Co., Inc.
3 Base	AB2472–3	1	*
5 Cotter Pin	AB2472–5	4	*
6 Bearing	AB2472–6	4	*
7 Tire	AB2472–7	2	*
8 Tube	AB2472–8	2	*
9 Fork	AB2472–9	1	*
10 Washer	AB2472–10	4	*
11 Axle	AB2472–11	2	*
12 Pivot Pin	AB2472–12	1	*
14 Snap Ring	AB2472–14	2	*
15 Roll Pin	AB2472–15	1	*
16 Roll Pin	AB2472–16	2	*
17 Retainer	AB2472–17	1	*
18 Roll Pin	AB2472–18	1	*
19 Ball Lock Pin with Lanyard 1	AB2472–19	1	*
22 Lock	AB2472–22	1	*
24 Washer	AB2472–24	A/R	*
25 Hub	AB2472–25	2	*
26 Inner Wheel	AB2472–26	2	*
27 Outer Wheel	AB2472–27	2	*

* Aer–Bea Co., Inc.

SERVICE LETTER

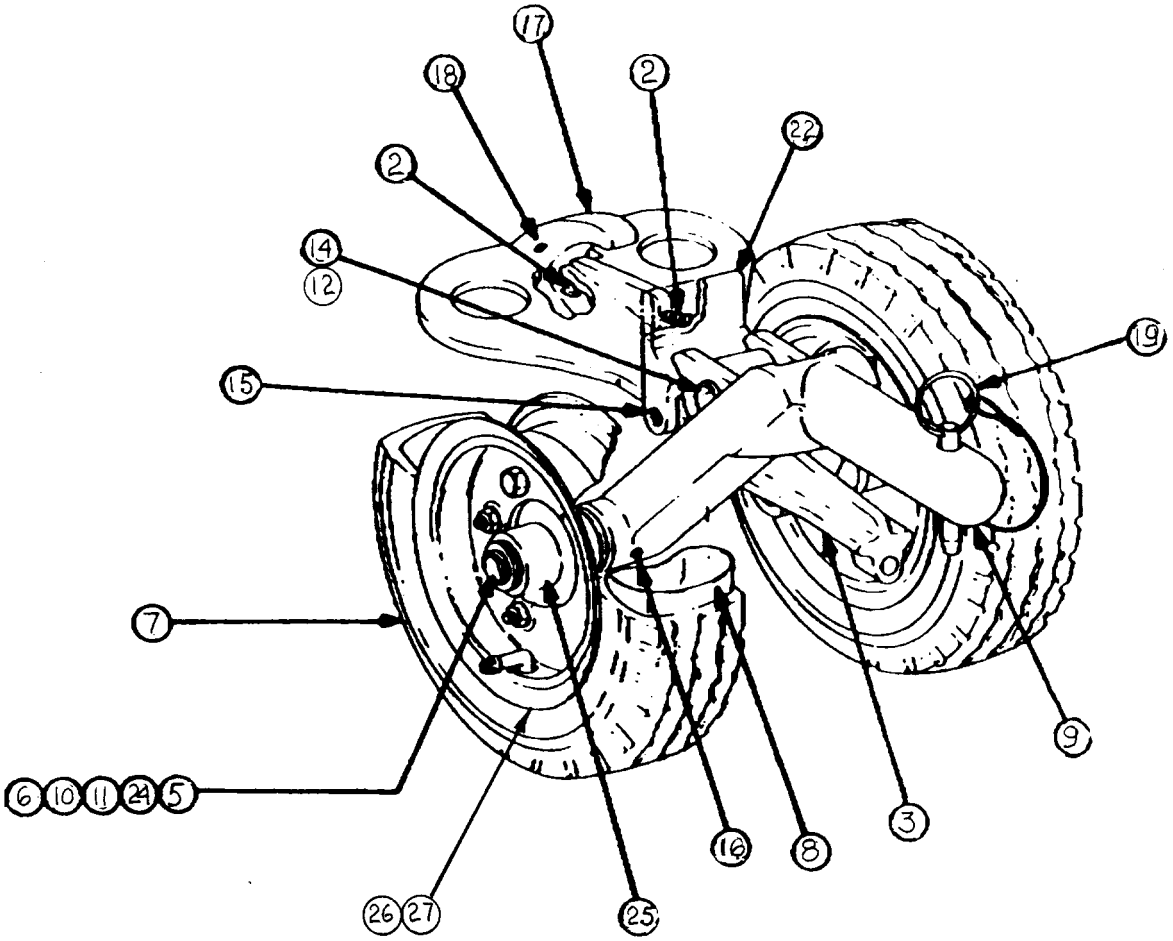


Figure 1. Ground Handling Wheel Assembly

SERVICE LETTER

TO: All owners and operators of McDonnell Douglas Helicopter Company (MDHC) 369 Series helicopters that are registered in the United States.

ADDITION OF IDENTIFICATION DECAL ON AIRCRAFT EXTERIOR (COMPLIANCE TO FAR 45.11 [D])

The FAA has imposed a requirement for all U.S. registered aircraft to have identification information displayed on the exterior surfaces of the aircraft. This Service Information Letter provides instructions for ordering and installing a new identification decal on the exterior of the aircraft in order to comply with this new regulation.

MDHC will provide an identification decal to registered owners of MDHC helicopters at no cost on a one-time basis for a limited period of time. Orders must be placed prior to September 1, 1988 to receive parts at no charge. All orders must include the specific helicopter model and serial number as shown on the existing data plate together with the current U.S. registration number along with the name and address of the registered owner. Orders must also reference this Service Information Letter. Orders may be telexed, telecopied or mailed to:

McDonnell Douglas Helicopter Company
Light Helicopter Center
5000 E. McDowell Rd. Bldg. LH1/G25
Mesa, Arizona 85205

ATTN: Les Ottem

Telex: 98-1557 Answer back: MD HC SERVICE MESA
Datafax: (602)891-6782
Telephone: (602)891-8515

MATERIAL	
Nomenclature	**Source**
Sealant (per PR1436G, PR1422G or commercially equivalent)	Commercial

SERVICE LETTER

Procedure

a. Ensure surface is clean and dry prior to installation of decal.

b. Install decal in location shown on Figure 1 attached.

c. Apply a bead of sealant around the faying surfaces of the decal.

d. Use the attached form when ordering exterior identification decals.

SERVICE LETTER

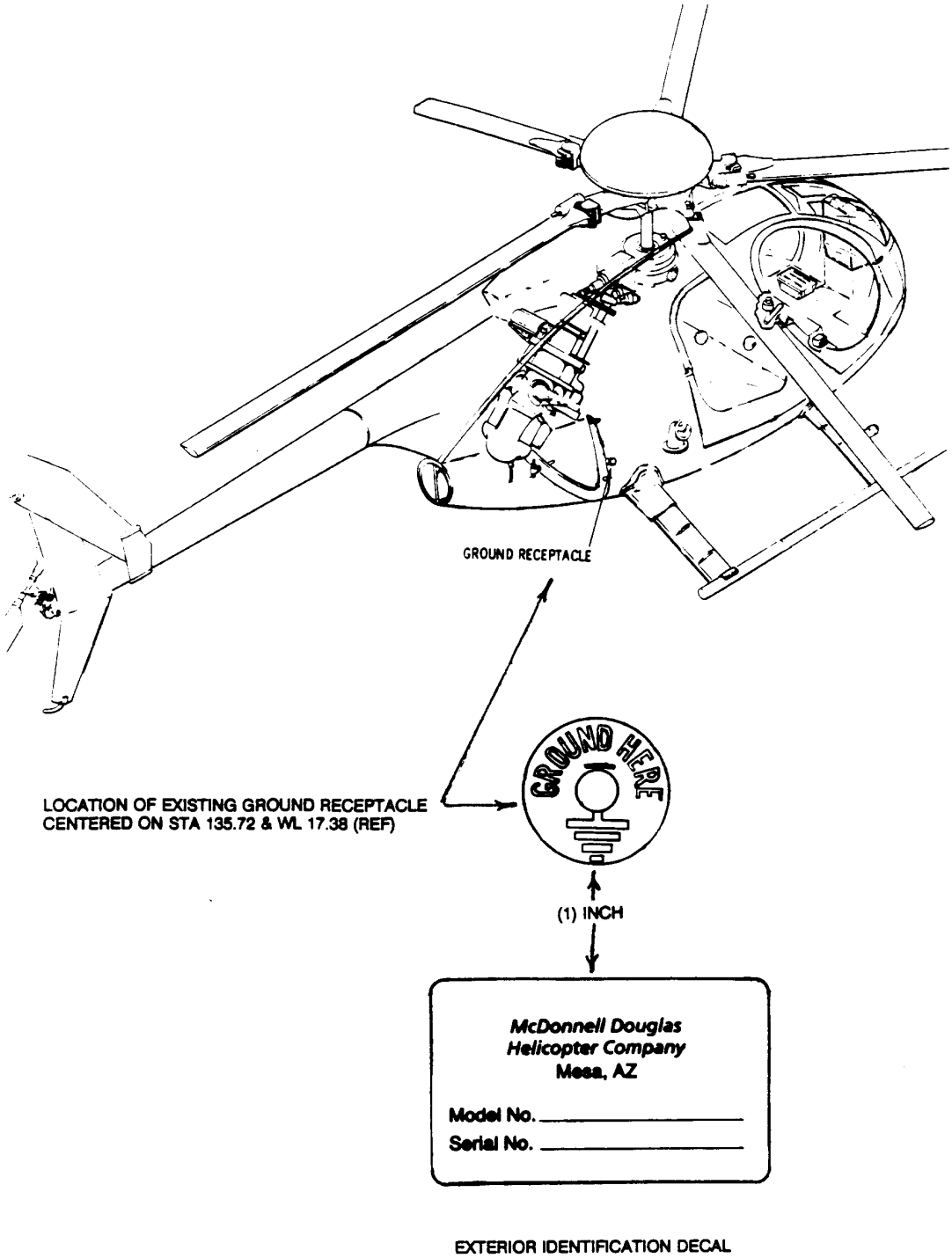


Figure 1. Location of Exterior Helicopter Identification Decal

SERVICE LETTER

USE THIS PAGE TO ORDER IDENTIFICATION DECALS

ONE (1) EACH PER AIRCRAFT

SHIP TO: _____

_____

_____

_____

A quantity of each is required for the following United States registered aircraft. MDHC helicopter model, MDHC helicopter Serial Number and current U.S. registration number are required for each decal issued. Orders will not be accepted or honored unless information is complete.

MODEL	MDHC S/N	CURENT U.S. REGISTRAION NO.

NAME _____

TITLE _____

SERVICE LETTER

TO: All Owners and Operators of McDonnell Douglas Helicopter Company (MDHC) 369H Series helicopters, including the 369A (OH-6A) Series helicopter, and 369D Series helicopters that have passenger/cargo hoists installed.

ADDITIONAL INSPECTION REQUIREMENTS OF THE BREEZE–EASTERN RESCUE HOIST SYSTEM

Breeze-Eastern, a division of TransTechnology Corporation, has issued a Customer Advisory Bulletin (CAB-100-30) which outlines a procedure to significantly improve the reliability of the rescue hoist system and, more importantly, further limit the possibility of personnel safety hazard.

Owners and operators can obtain copies of the Bulletin referenced below at 700 Liberty Avenue, Union, New Jersey, 07083.

TELEPHONE: (201) 686-4000
TELEX (TWX): 138212

REFERENCE

CAB-100-30, Customer Advisory Bulletin, Breeze-Eastern Corp.

SERVICE LETTER

HL-105
DL-80
EL-30
FL-22

DATE: 26 MAY 1988

TO: ALL OWNERS AND OPERATORS OF MCDONNELL DOUGLAS HELICOPTER COMPANY (MDHC) 369 SERIES HELICOPTERS.

CHAFE WRAPPING OF STAINLESS STEEL TUBE ASSEMBLIES AND ALLISON COMMERCIAL SERVICE LETTER CSL 145, CSL 1140 AND CSL 3092, DATED MAY 1, 1988.

It has been determined that wrapping stainless steel tube assemblies with chloride based materials (such as neoprene tubing and fiberglass tape) can result in premature tube failure. The referenced CSL's provide instruction to property mount and maintain the mounting hardware in the area of the engine compartment. MDHC urges owners and operators to obtain copies of the referenced CSL's and adhere to the instructions provided by Allison. Copies of the referenced CSL's can be obtained from Allison at the following address:

Allison Gas Turbine Division
Genereal Motors Corporation
P.O. Box 420
Indianapolis, Indiana 46206-0420

Telephone: (317)230-2725
Telex: 6876067 Ans Back: 250PROD
Datafax: (317)242-0968

REFERENCE

CSL 145* (250-C18 Series engines)
CSL 1140* (250-C20 Series engines)
CSL 3092* (250-C30 Series engines)

* Dated May 1, 1988.

SERVICE LETTER

HL-108.2*
DL-82.2*
EL-33.2*
FL-40

DATE: 21 NOVEMBER 1990

* Supersedes Service Information Letters HL-108.1, DL-82.1 and EL-33.1, dated 25 July 1990.

TO: ALL OWNERS AND OPERATORS OF MCDONNELL DOUGLAS HELICOPTER COMPANY (MDHC) 369
Series helicopters.

FACET SCAVENGE OIL FILTER KITS, P/N 1741050 (369H SERIES, 369D AND 369E) AND P/N 1741300 (369F/FF)

The Filter Products Division of Facet Enterprises, Inc. has recently been granted a STC by the FAA for a scavenge oil filter kit for the 369F/FF series helicopter. Scavenge oil filter kits were developed for other models in 1988. Those operators that are currently using the Facet scavenge oil filter Kit must change the filter element per the following Facet Service Bulletin (ref. Serial No. 041888). Installation of the retrofit kit removes the 100-hour element change restriction.

NOTE: The Facet scavenge oil filter Kit is required equipment in the Allison 250-C20R/2 engine installation.

Additional Facet Service Bulletins involving the scavenge oil filter kit are as follows:

NOTE: The following Facet bulletins should be accomplished concurrently with Facet bulletin No. 041888, if not already accomplished.

No. 020689, dated 5 February 1989
Subject: Incorrect installation of
Facet scavenge oil filters.

No. 090589, dated 5 September 1989
Subject: Facet filter assembly
functional check tool PN 171145.

John Reagan, Manager,
MD500 Customer Support,
McDonnell Douglas

Serial No. 041888
April 18, 1988
GLP
Page 1 of 1

Facet
Filter Products Division
Facet Enterprises, Inc.
8439 Triad Drive
Greensboro, N.C. 27409
(919) 668-4444

SERVICE BULLETIN

Date: April 18, 1988

Subject: Facet Scavenge Oil Filter Kit, P/N 1741050

Models Affected: McDonnell Douglas (Hughes) 500 Series

Because of a potential for exceeding the engine's Scavenge pressure limits, operators with Facet Scavenge Oil Filter Kit 1741050 installed must change filter element, P/N 038088-08, if the filter goes into a bypass condition or at 100-hour intervals instead of every 200 hours.

Filter Products Division is in the process of obtaining approvals for a retrofit kit for operators flying with Kit 1741050. This kit, P/N 1741050-02, will include only those items needed to stay in the pressure limits and will also satisfy the mandatory filter requirements for the C20R engine.

Installation of the retrofit kit removes the 100-hour element change restriction. Retrofit kits and pricing will be available from our distributor network July, 1988. Filter Products Division strongly recommends this update be accomplished upon availability of retrofit kits.

Serial No.: 020689
February 6, 1989
KGN

SERVICE BULLETIN

Date: February 6, 1989

Subject: Incorrect Installation of Facet Scavenge Oil Filters

P/N 1740001-01

P/N 1740001-03

Models Affected:

Kits	Aircraft
1741010-01	Bell 206A & B
1741020-01	Bell 206L
1741030-01	Bell 206L-1
1741140	Bell 206L-3
1741040-01	Bell 206B-III
1741050-01	McDonnell Douglas 500
1741070	MBB BO105
1741080	Sikorsky S76A
1741090	G.A.F. Nomad
1741150	AS355 Twinstar
1741260	Agusta A109A
1741270	Agusta A109A-II

Facet Enterprises, Inc. has learned of an instance where Facet filter assembly 1740001-03 was installed incorrectly on a helicopter. The 10-micron filter was installed in reverse with the engine oil out line connected to the filter outlet port (marked "OUT") instead of the filter inlet port (marked "IN").

Such an incorrect installation could cause carbon accumulation on the outlet strainer, with no possiblity of bypass. With this reverse oil flow, the bypass valve will not open and the red bypass indicator will not function.

An incorrectly installed filter could lead to excessive back pressure in the scavenge system, causing damage to scavenge pumps, oil tanks, and other related components.

We, therefore, urge all operators of aircraft equipped with Facet scavenge oil filters to verify the correct installation of the filter assembly in accordance with the proper Facet Installation and Service Manual. If an incorrect installation is discovered, we suggest a thorough investigation of the oil tank for signs of distortion which would indicate extreme back pressure has developed during operation.

NOTE: This Service Bulletin does not apply to Facet scavenge kits with 10-micron filter assembly 037738-04 or 3-micron filter assembly 1742500.

Facet
Filter Products Division
8439 Triad Drive
Greensboro, NC 27409
(919) 668-4444
FAX: (919) 668-4452

Serial No.: 090589
September 5, 1989
KGN

SERVICE BULLETIN

Considering the fact that the first Facet/Ni-Cad filter was installed in 1976, some filters have been in service over 13 years. We are providing this Facet filter test tool to give the operator a simple way of ensuring the impending bypass indicator is still functioning properly.

Date: September 5, 1989

Subject: Facet Filter Assembly Functional Check Tool

P/N 1741145

Purpose: Provides simple check of operation of filter bypass indicator.

Applicability: Used on the following Facet Filter Assemblies:
037738-04
1740001-01
1740001-03
1740001-05

Aircraft	Facet Kit
Soloy Hiller UH12 E, D	1741000
Bell 206 A & B	1741010
	1741010-01
Bell 206L	1741020
	1741020-01
Bell 206L-1	1740130
	1741030-01
Bell 206B-III	1741040
	1741040-01
Bell 206L-3	1741140
McDonnell Douglas 500	1741050
	1741050-01
Soloy Bell 47	1741060
MBB BO105	1741070
Sikorsky S76A	1741080
G.A.F. Nomad	1741090
AS355 Twinstar	1741150
Agusta A109A	1741260
Agusta A109AII	1741270

Instructions for Use

Note: Do not attempt to adjust or replace indicator.

At next scheduled filter element change after receipt of tool and each subsequent 800-hour interval:

1. Remove safety wire from filter bowl, unscrew bowl, remove and discard installed filter element.
2. Install tool P/N 1741145, reinstall bowl (do not safety wire at this time), leave cowling locked open or removed for visual access to filter assembly.
3. Start engine, operate at ground idle until normal operating temperatures are reached and filter bypass indicator button extends (approximately 10 minutes). Bypass indicator must reach 100 degrees plus or minus 15 degrees Fahrenheit to operate.
4. If bypass indicator fails to extend, shut down the engine, wait 3 minutes, then repeat Step 3 while oil is still warm.
5. Secure engine, remove bowl and tool, install new seal kit and filter element, reinstall and safety wire bowl, reset indicator, drain and reservice engine oil system.
6. If bypass indicator fails to extend or will not reset, contact Facet Enterprises, Inc. Do not attempt to adjust or replace indicator.

Facet
Filter Products Division
8439 Triad Drive
Greensboro, NC 27409
(919) 668-4444
FAX: (919) 668-4452

SERVICE LETTER

HL-110
DL-84
EL-35
FL-28

DATE: 15 JANUARY 1989

TO: ALL OWNERS AND OPERATORS OF MCDONNELL DOUGLAS HELICOPTER COMPANY (MDHC) 369 SERIES HELICOPTERS.

VALIDITY OF SPECTRUM OIL ANALYSIS PROGRAM (S.O.A.P.)

MDHC does not have a recognized S.O.A.P. involving the main rotor or tail rotor transmissions. As limitations have not been established involving a S.O.A.P., MDHC does not recommend removing from service any main rotor or tail rotor transmissions due to the results of such a program. Serviceable limits for the main rotor and tail rotor transmissions can be found in the applicable HMI Vol. I and Component Overhaul Manuals. All applicable HMI Vol. II manuals state that when any filters or oil are changed due to illumination of chip detector lights, chips in the associated oil can not measure larger than .025 inches in any direction.

Cary Brown, Manager
Product Support Department
McDonnell Douglas
Helicopter Company

SERVICE LETTER

HL-113.1*
DL-87.1*
EL-38.1*
FL-31.1*

DATE: 15 SEPTEMBER 1989

*Supercedes Service Information Notices HL–113, DL–87, EL–38 and FL–31, dated 10 July 1989.

TO: ALL OWNERS AND OPERATORS OF MCDONNELL DOUGLAS HELICOPTER COMPANY (MDHC) 369 SERIES HELICOPTERS.

CUSTOMER REQUESTS FOR ORIGINAL AIRCRAFT RECORDS

The MDHC Light Helicopter Field Service Department has been contacted by many customers over the years requesting copies of original aircraft records. In general, these requests are to replace a document which has been lost or destroyed. Until this year, MDHC provided this service a~ no charge. However due to the extensive time required to locate and duplicate these records, it is now necessary for MDHC to charge a nominal fee of $250.00 (U.S.funds) for the retrieval and reproduction of these documents. Requests for helicopter records must De made in writing and sent to the MDHC Light Helicopter Field Service Department (refer to address listed below). If the records are available, copies will be sent C.O.D. to the requestor.

Address records requests to:

McDonnell Douglas Helicopter Company
5000 E. McDowell Road LH3/G35
Mesa, Arizona 85205

ATTN: Field Service Supervisor

Phone: 1–800–445–1516
TELEX: 98–1557

Answer Back: MD HC SERV MESA

Datafax: (602)891–6782
TMS: LBHHD

Cary Brown, Manager,
Product Support Department
McDonnell Douglas
Helicopter Company

SERVICE LETTER

HL-116
DL-91
EL-42
FL-35

DATE: 15 SEPTEMBER 1989

TO: ALL OWNERS AND OPERATORS OF MCDONNELL DOUGLAS HELICOPTER COMPANY 369 SERIES HELICOPTERS.

AVAILABILITY OF WIRE STRIKE PROTECTION SYSTEM (TRADEMARK WSPS) ON ALL MDHC 369 SERIES HELICOPTERS

Aeronautical Accessories, Inc., of Bristol, Tennessee, has made available for installation on all 369 Series aircraft a wire strike protection system. The WSPS kit consists of three major components: a roof–mounted deflector/cutter, a windshield mounted protector/cutter and a belly–mounted deflector/cutter.

The WSPS is certified under Supplemental Type Certificate (STC) by the Federal Aviation Administration. No restrictions or flight manual revisions are necessary according to the STC. There are no changes in the flight characteristics or handling qualities of the aircraft.

The WSPS is designed to offer a proven measure of protecting against horizontally strung mechanical, electric and communication cables. The system consists of two deflector cutters and a windshield protector/cutter. The wedge type cutters are designed to provide the required mechanical advantage to handle the most commonly used electrical and telephone cable. As an integral part of the cutters, sawtoothed deflectors are provided to guide the cables into the cuffing wedges while inflicting damage to the cable.

Fabricated of a special high tensile steel selected to handle multi–strand mechanical and electrical cable, the WSPS kit comes complete with hardware and instructions necessary for installation of the kit. There are no moving parts and the system is maintenance free. For further information contact:

Aeronautical Accessories, Inc.,
P.O. Box 3689
Bristol, TN 37625–3889
(615)538–5151 or 800–251–7094
TELEX: 55–3446, Datafax: (615)538–8469

Cary Brown, Manager,
Product Support Department
Helicopter Company
McDonnell Douglas

SERVICE LETTER

HL-119
DL-94
EL-45
FL-38

DATE: 15 DECEMBER 1989

TO: ALL OWNERS AND OPERATORS OF MCDONNELL DOUGLAS HELICOPTER COMPANY (MDHC) 369 SERIES HELICOPTERS EQUIPPED WITH CARGO HOOK INSTALLATIONS.

COMPLIANCE TO BREEZE–EASTERN CUSTOMER SERVICE BULLETIN CSB–120 (WARNING PLATE FOR CARGO HOOKS)

Breeze–Eastern, a division of TransTechnology Corporation, has informed MDHC that they have issued a Customer Service Bulletin requiring Beeze–Eastern cargo hook operators to affix a warning plate to those affected cargo hooks. Instructions as to where and how to affix the warning plate (Breeze–Eastern Part No. 13830–1) are included in CSB–120, dated 01 May 1989. Breeze–Eastern request operators to provide them with the Part No. and Serial No. of their cargo hook and they will send a copy of the CSB and a warning plate directly to the operator. Breeze–Eastern is providing the warning plate to cargo hook operators free of charge.

Send cargo hook Part No. and Serial No. along with operators name and address to:

Breeze–Eastern
700 Liberty Avenue
Union, New Jersey 07083

Phone: (201)686–4000
Datafax (201)686–9292

Cary Brown, Manager,
Product Support Department
McDonnell Douglas
Helicopter Company

SERVICE LETTER

HL-120
DL-96
EL-47
FL-41

DATE: 1 MAY 1991

TO: ALL OWNERS AND OPERATORS OF MCDONNELL DOUGLAS HELICOPTER COMPANY (MDHC) 369 SERIES HELICOPTERS EQUIPPED WITH SHOCK-MOUNTED SKID TUBE POSITION LIGHT ASSEMBLIES (P/N 369H92041-35/-36).

AVAILABILITY OF IMPROVED SPACERS TO BE USED ON THE SHOCK–MOUNTED SKID TUBE POSITION LIGHT ASSEMBLIES

MDHC has received reports that some Lord shock mounts on the skid-mounted position light assemblies have been tearing in service. MDHC has improved the design with a change in mounting hardware and mounting procedures. The following parts list and procedure provides operators with instructions to modify their light assemblies to the improved configuration.

PARTS LIST			
Nomenclature	Part No.	Qty.	Source
Spacer	369H92041–45	2	MDHC or field fabricate
Spacer	369H92041–47	2	MDHC or field fabricate
Spacer	369H92041–49	2	MDHC or field fabricate
Screw	MS51957–32	2	MDHC or Commercial
Screw	MS51957–33	2	MDHC or Commercial
Screw	MS51957–124	2	MDHC or Commercial
Sealant	RTV–731	A/R	Commercial

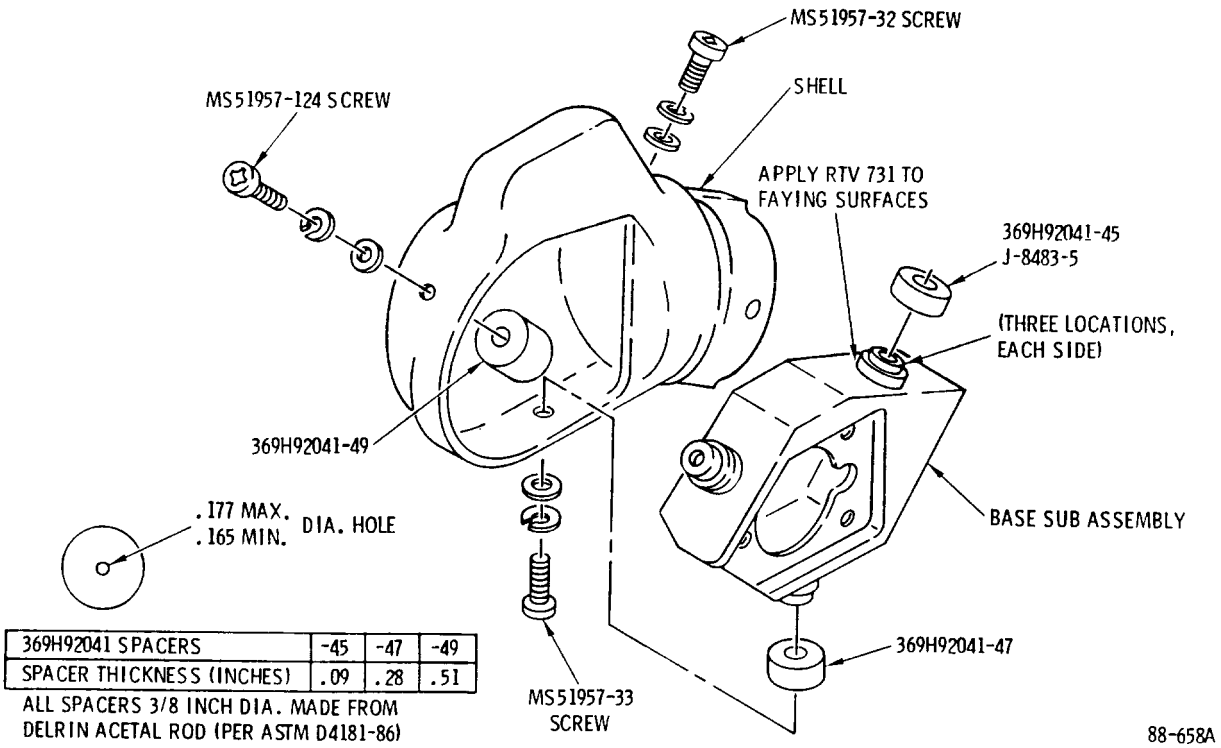
a. Remove the left and right hand base sub-assemblies by removing (3) screws and associated hardware (each side). Discard existing spacers and mounting screws.

b. Bond the three J-8483-5 isolator mounts to their respective base sub-assemblies using RTV 731

c. Reinstall base sub-assemblies using the spacers and screws called Out in Figure I and the above parts list. Offer associated hardware is shown in Figure 1 and called out in the applicable illustrated parts catalogs.

The resultant alteration to affected models as described by procedures in this Notice has been shown to comply with Federal Aviation Regulations and is FAA Approved.

SERVICE LETTER



369H92041 SPACERS	-45	-47	-49
SPACER THICKNESS (INCHES)	.09	.28	.51

ALL SPACERS 3/8 INCH DIA. MADE FROM DELRIN ACETAL ROD (PER ASTM D4181-86)

Figure 1. Skid Tube Position Light Assembly

SERVICE LETTER

DATE: 27 SEPTEMBER 1991

TO: All owners and operators of McDonnell Douglas Helicopter Company (MDHC) 369H Series helicopters, including the 369A (OH-6A) series helicopter.

OBSERVATION OF 369A1010(BSC) AND –3 MAIN ROTOR HUB HOISTING EYE BOLTS

MDHC has received a report from the field indicating that a 369A1010 main rotor hub hoisting eye bolt fractured. The bolt is one of four used to hoist the main rotor hub or helicopter and one of eight bolts used for transmitting engine torque to the main rotor hub.

Any operator experiencing an eye bolt fracture for unknown cause should remove and replace it. Also, MDHC is requesting that operators report any such experience to the MDHC Field Service Department.

John Reagan, Manager
MD500 Customer Support Dept.
McDonnell Douglas
Helicopter Company
Product Support Department

SERVICE LETTER

HL- 122
DL-97
EL-48
FL-42

DATE: 11 OCTOBER 1991

TO: ALL OWNERS AND OPERATORS OF MCDONNELL DOUGLAS HELICOPTER COMPANY 369 SERIES HELICOPTERS.

MAIN ROTOR HUB BALANCING

All new, overhauled or repaired main rotor hubs are not balanced at the factory unless requested by the customer to do so. These main rotor hubs must be balanced at the time of installation onto a helicopter per the requirements of CSP–HMI–2, Sections 18–10–00 and 62–20–00.

If you have any questions regarding balancing of the main rotor hub, contact your local MDHC Field Service Representative or the Warranty and Repair Department at (602)891–8565.

MD500 Customer Support Dept.
McDonnell Douglas
Helicopter Company
Product Support Department

SERVICE LETTER

*Supercedes Service Information Letters HL–124.2, DL–100.2, EL–51.2 and FL–45.1, dated 25 January 1993.

TO: ALL OWNERS AND OPERATORS OF MD HELICOPTERS, INC. (MDHI) MODEL 369/369A (YOH–6A/OH–6A) HELICOPTERS.

MAINTENANCE AND OPERATION REQUIREMENTS FOR SAFE OPERATION OF SURPLUS 369A (OH–6A) SERIES HELICOPTERS

REFERENCES:

Federal Aviation Regulations (Parts 21, 39, 43 and 91)
Type Certificate Data Sheet H3WE (latest issue)
U.S. Army Technical Manual, TM55–1520–214–10 (Operator's Manual)
U.S. Army Technical Manual, TM55–1520–214–23 (Maintenance Manual)
U.S. Army Technical Manual, TM55–1520–214–23P (Illustrated Parts Manual including Depot Maintenance Repair Parts and Special Tools)
Applicable U.S. Army *Safety of Flight Messages*
Applicable FAA Airworthiness Directives

Newport Aeronautical Sales
Web: www.newportaero.com
Phone: 949–574–4100

ISSUE: In the 1960s, Hughes Tool Company (former H3WE Type Certificate holder) initiated the design of the Model 369/369A (YOH–6A/OH–6A) helicopters. On June 30, 1964, the Model 369 was approved as a normal category helicopter. The model 369A was approved August 24, 1966.

NOTE: MD Helicopters does not support operators who are attempting to obtain a FAA Model 369A Standard Airworthiness Certificate for surplus military OH–6A helicopters. Therefore, requests for FAA Form 8130–2 (formerly FAA Form 970) will not be processed.

OH–6A helicopters were owned by the U.S. Army and are being operated as Public Service Aircraft. These helicopters were maintained in accordance with the then applicable U.S. Army maintenance and inspection programs. As such, ***these helicopters were not required to be operated or maintained in accordance with FAA Regulations*** regarding certificated aircraft.

WARNING **Failure to comply with established FAA Regulations, Airworthiness Directives, mandatory retirement, overhaul life limits and proper inspection and maintenance procedures may lead to loss of control of the helicopter and subsequent injury, death and/or property damage.**

SERVICE LETTER

If you are the current owner or operator of an OH-6A helicopter, or plan to acquire one, you must operate and maintain your helicopter as either a Public Service Aircraft (for other government agencies) or a civil aircraft with an FAA Certificate of Airworthiness. MDHI recommends a Restricted Certificate of Airworthiness since surplus military OH-6A Helicopters cannot meet the current FAA requirements for a model 369A Standard Airworthiness Certificate. Civil aircraft must be maintained and operated in accordance with applicable 14 CFR Federal Aviation Regulations (FAR) and the H3WE Type Certificate Data Sheet.

MDHI strongly recommends that any surplus military OH-6A aircraft used as Public Service Aircraft be operated and maintained in accordance with the applicable U.S. Army Technical Manuals:
TM 55-1520-214-10 Operator's Manual, TM 55-1520-214-23 Organizational Maintenance Manual and TM 55-1520-214-23P Illustrated Parts Manual. Additionally, owners and operators should ensure that all applicable FAA Airworthiness Directives, Manufacturer's mandatory Service Information Notices and U.S. Army Safety of Flight Messages have been complied with.

MDHI does not sell or distribute U.S. Army technical manuals. FAA Airworthiness Directives are available on MDHI and FAA web sites.

It is further recommended that owners/operators contact a MDHI authorized Service Center or the MDHI Field Service Department with any questions or problems that may arise.

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) 346-6387. DATAFAX: (480) 346-6813.

SERVICE LETTER

TO: ALL OWNERS AND OPERATORS OF MCDONNELL DOUGLAS HELICOPTER COMPANY (MDHC) 369 SERIES HELICOPTERS.

MAIN ROTOR BLADE INSPECTION PROGRAM

The purpose of this Service Information Letter is to assure that all reissues of currently applicable Service Information Notices and all cancellations of existing Service Information Letters required to implement this change are clearly explained and justified.

MDHC is implementing a revised main rotor blade root fitting inspection procedure which will enhance the capability of operators to detect cracked main rotor blade root fittings by visual inspection. This revised procedure allows elimination of the mandatory requirement to inspect 369D21100-515 and 369D21102-501 main rotor blades every 25 hours in accordance with PART I of DN-183.1, EN-75.1 and FN-62.1.

The service information package that accompanies this Service Information Letter includes the following:

1. Service Information Notice, DN-183.2, EN-75.2 and FN-62.2 which supersedes DN-183.1, EN-75.1 and FN-62.1. This revision cancels the requirement of PART I to remove affected main rotor blades every 25 hours and inspect the main rotor blade root fittings. The revised Notice still requires that the affected main rotor blades be removed and returned to MDHC for rework to a new configuration in accordance with PART II.

2. Service Information Notice, HN-211.4, DN-51.6, EN-42.4 and FN-31.4 which supercedes HN-211.3, DN-51.5, EN-42.3 and FN-31.3. This revision requires a one-time removal inspection of the affected main rotor blades within the next 25 hours to inspect the root fittings and add a slippage mark to the root fittings to enhance the visual inspection procedure. The requirement to inspect the root fittings and lead-lag links on the aircraft every 25 hours and to remove the blades to inspect the root fittings and lead-lag links every 100 hours remains in affect after installation of the paint stripe.

3. Service Information Letter Cancellation Notification: SIL's HL-114.1, DL-89.1, EL-40.1 and FL-33.1 are canceled.

SERVICE LETTER

Issuance of Service Information Notices, DN-183.2, EN-75.2 and FN-62.2 to eliminate the 25 hour removal inspection requirement is justified by the enhanced inspection procedure incorporated by compliance with Service Information Notices HN-211.4, DN-51.6, EN-75.4 and FN-31.4.

The revised inspection also reminds operators of actions that must be taken if they experience a sudden onset or increased level of main rotor vibration. Historically, there has been an immediate onset of main rotor vibration after a single root fitting lug failure.

John Reagan, Dept. Manager,
Commercial Customer Support
McDonnell Douglas
Helicopter Company

SERVICE LETTER

TO: ALL OWNERS, OPERATORS AND PILOTS OF MCDONNELL DOUGLAS HELICOPTER COMPANY (MDHC) 369 SERIES HELICOPTERS THAT HAVE ANTENNAS INSTALLED ON THE UPPER SURFACE AREAS OF THE AFT BOOM FAIRING.

ANTENNA LOCATION AND FLIGHT MANEUVER CAUTION

RECOMMENDED HELICOPTER REWORK

MDHC has received information from operators indicating that antennas (e.g., LORAN antennas) installed on the upper surface of the aft boom fairing have been struck by the main rotor blades during practice touchdown autorotations. MDHC strongly recommends that operators who have installed antennas on the upper surfaces of the aft boom fairing relocate those installations to a position where contact between any rotating component and an antenna will not be possible. Figure 1 shows an acceptable location for such installations.

PILOT NOTIFICATION

Pilots flying MD500 series helicopters with antennas located on the upper surface of the aft boom fairing are cautioned that under certain operational maneuvers, such as practice touchdown autorotations, main rotor blades may contact the antenna. This contact occurs when the blades flap to an extreme downward position while, at the same time, the antenna moves to its most upward position.

NOTE: If a pilot suspects that contact has occurred between the main rotor blades and the antenna during any flight maneuver they must land as soon as possible and check the blades for damage. Further flight is prohibited if damage has exceeded HMI limits. Contact your local MDHC Field Service Representative if you have any doubt as to damage limits.

John Reagan, Dept. Manager,
Commercial Customer Support
McDonnell Douglas
Helicopter Company

SERVICE LETTER

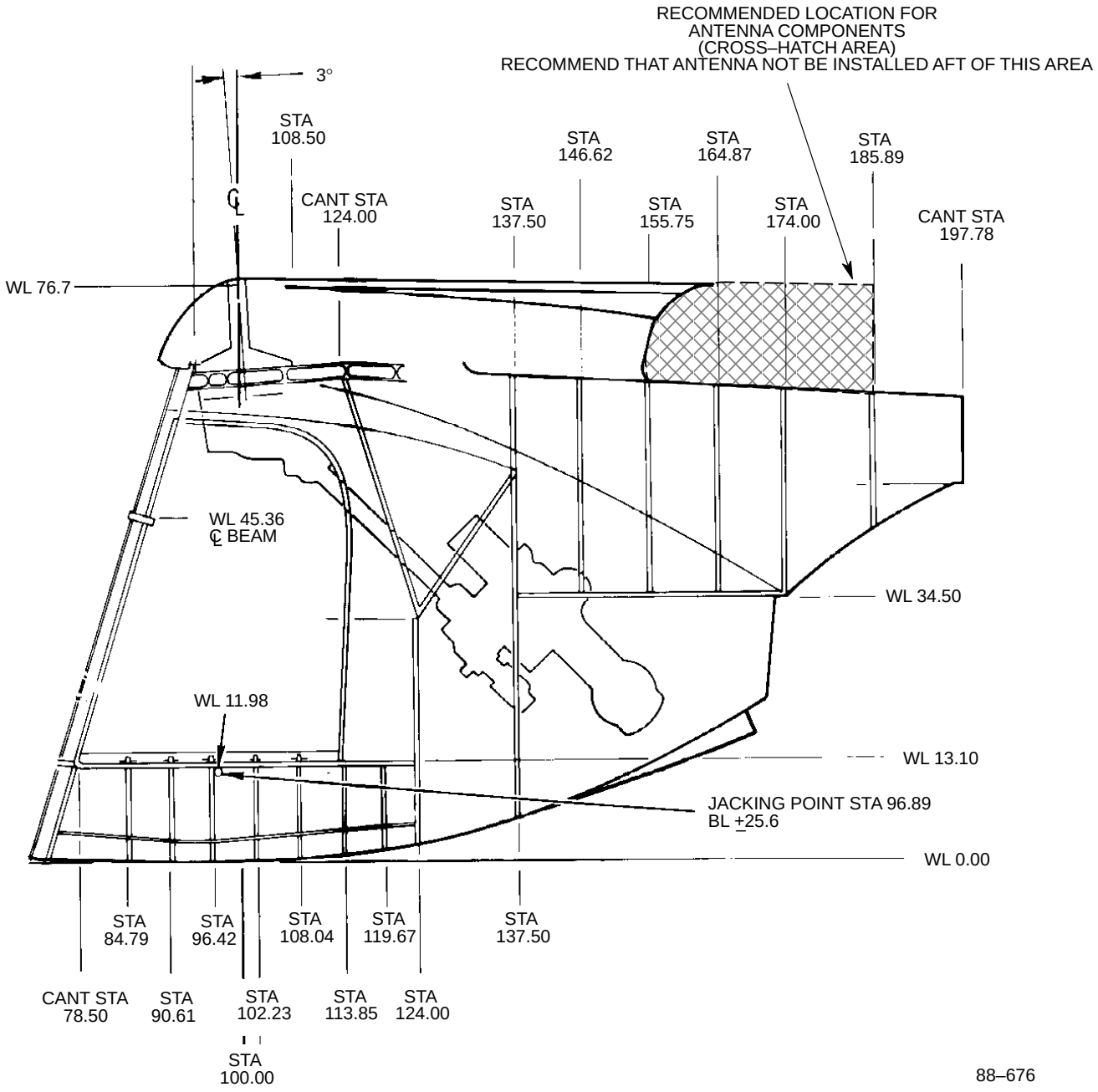


Figure 1. Recommended Antenna Location

HL-128
DL-105
EL-57
FL-50

SERVICE LETTER

DATE: 10 MAY 1995

TO: ALL OWNERS AND OPERATORS OF MCDONNELL DOUGLAS HELICOPTER SYSTEMS 369H, 369D, 369E AND 369F/FF HELICOPTERS.

TAIL ROTOR ABRASION STRIP WARRANTY POLICY/COMPENSATION.

MODELS AFFECTED: All Model 369H, 369HE, 369HM, 369HS, 369D, 369E and 369F/FF Series Helicopters.

MDHS has issued the following warranty policy/compensation regarding operator's requirement to comply with Service Information Notices HN-238, DN-187, EN-80 and FN-66, dated 26 October 1994.

Warranty Policy/Compensation for compliance to PART II of the Service Information Notices listed above.

If blades are still within the warranty period, MDHS will assume the cost to replace the abrasion strips, whether or not debonding has occurred, at an Authorized MDHS blade repair facility.

If debonding of an abrasion strip occurs on a blade that is outside of the normal warranty period, MDHS will pay a portion of the cost for replacement of the abrasion strip(s) on the entire set of blades for that aircraft. The costs to be covered by MDHS will be prorated based on hours on the blades. Contact the MDHS Commercial Warranty Repair Administrator for determination of coverage.

If blades are outside the warranty period and abrasion strips are replaced, even though no debonding has occurred, the cost of the abrasion strip replacement will be at the operator's expense.

John Reagan, Dept. Manager
Commercial Customer Support
McDonnell Douglas
Helicopter Systems

SERVICE LETTER

DATE: 25 AUGUST 1995

TO: ALL OWNERS AND OPERATORS OF MCDONNELL DOUGLAS HELICOPTER SYSTEMS (MDHS) 369A (OH-6A) SERIES HELICOPTERS.

INCREASED OVERHAUL PERIOD ON OH–6A MAIN ROTOR HUBS AND 369A5400–701 TAIL ROTOR TRANSMISSION UTILIZATION

The main rotor hub installed on the OH-6A is a 369A1200 and the hub on the commercial model 369H is a 369H1200. The U.S. Army established a Time Between Overhaul (TBO) of 1200 hours for the 369A1200 main rotor hub while MDHS has established a TBO of 2650 hours for the commercial models.

The two hub assemblies are the same except for part numbers. Both utilize common components and the lowest life limited component is the strap pack assembly (369A1210) at 2774 hours. The strap pack assemblies are replaced after two overhaul periods (2400 hrs.) on the OH-6A hubs and one overhaul period (2650 hrs.) on commercial hubs.

Since the hubs are identical and equipped with the same components, the TBO time has been increased to 2650 hours for the following hubs: 369A1200-617, 369A1200-621 and 369A1200-619. These main rotor hubs can not be used on 369H series helicopters.

Additionally, the 369A5400-701 tail rotor transmission assembly, equipped with improved bearings, can now be used on 369A (OH-6A) series helicopters. MDHS has established a TBO for the 369A5400-701 of 3000 hours.

John Reagan, Dept. Manager,
Commercial Customer Support Dept.:,
McDonnell Douglas Helicopter Systems

SERVICE LETTER

SERVICE NOTICE, LETTER AND BULLETIN DESIGNATIONS

Light Helicopter Division Technical Publications has restructured service information documents in anticipation of document electronic access and transmittal. The service document letterhead has changed to reflect the current document designation. Blue Border Service Information Notices (optional compliance) will be replaced by Technical Bulletin letterhead and Red Border Service Information Notices (mandatory compliance) will be replaced by Service Bulletin letterhead.

Document identification by the compliance requirements must be used and not the paper or border color; since, color information in a document can not be verified with local printing capabilities using black and white fax, dot matrix or laser printers for service documents transmitted electronically.

Older documents have been scanned and in some cases the format rearranged to match the current format; however the document technical content has remained the same.

Individual divider tabs are available for Service Bulletins, Technical Bulletins and Service Letters and will be mailed with this letter and can also be ordered separately.

1. SERVICE INFORMATION DOCUMENT DESIGNATION

Service Bulletins are service documents containing technical procedures, generally affect aircraft safety or performance, requires urgent attention by the operator, requires mandatory compliance and/or requires a record of accomplishment, and are issued for;

- special inspections/checks required to maintain the aircraft and/or components in safe operating condition (such as; special inspections/checks to detect a flaw or manufacturing error which could be one–time or performed until corrective action can be taken).
- reduction of existing life limits or establishment of first time life limits for components.
- providing instructions and authority for inspection, repair, alteration, and/or rework of the helicopter and/or its components.
- providing instructions and authority for retrofit of the helicopter or its components by modifying existing and/or incorporating new components.

Technical Bulletins are service documents containing technical procedures, not safety related, no compliance requirement (completed at owner/operator option), requires a record of accomplishment only when instructed, and are issued for;

- providing instructions and authority for inspection, repair, alteration, and/or rework of the helicopter and/or its components.
- providing instructions and authority for retrofit of the helicopter or its components by modifying existing and/or incorporating new components.

Service Letters are information documents which do not have a compliance requirement and are issued for;

- discussing field problems and highlight information already or scheduled to be incorporated in existing documentation.
- notifying operators of interchangeable or future spare part numbers of equipment which have no effect on aircraft safety, performance, maintainability and reliability.
- providing preliminary information of an impending Service Bulletin or Technical Bulletin.
- notifying operators of available or forthcoming modifications.
- notifying operators of changes in material finishes, protective coatings, etc.

SERVICE LETTER

2. SERVICE INFORMATION NUMBERING EXPLANATION

The existing document numbering will remain as originally published to ensure traceability and verification of compliance; however, as the document is superseded by either a revision/reissue, its numbering will change to conform with current service document numbering. Service document numbering and type designation, during revision/reissue, will be based on the information designation criteria defined on the previous page.

NOTE: The document designation (SB, TB, SL) and the helicopter model designation are currently being used in the numbering prefix.

SERVICE BULLETIN / SERVICE INFORMATION NOTICE

HELICOPTER MODEL DESIGNATION	SERVICE DOCUMENT	
FAA	New SB	Old SIN
369A (OH–6A)	SB369H–	HN–
369H/HE/HM/HS	SB369H–	HN–
369D	SB369D–	DN–
369E	SB369E–	EN–
369F/FF	SB369F–	FN–
500N	SB500N–	NN–
600N	SB600N–	N/A

TECHNICAL BULLETIN / SERVICE INFORMATION NOTICE

HELICOPTER MODEL DESIGNATION	SERVICE DOCUMENT	
FAA	New SB	Old SIN
369A (OH–6A)	TB369H–	HN–
369H/HE/HM/HS	TB369H–	HN–
369D	TB369D–	DN–
369E	TB369E–	EN–
369F/FF	TB369F–	FN–
500N	TB500N–	NN–
600N	TB600N–	N/A

SERVICE LETTER / SERVICE INFORMATION LETTER

HELICOPTER MODEL DESIGNATION	SERVICE DOCUMENT	
FAA	New SL	Old SIL
369A (OH–6A)	SL369H–	HL–
369H/HE/HM/HS	SL369H–	HL–
369D	SL369D–	DL–
369E	SL369E–	EL–
369F/FF	SL369F–	FL–
500N	SL500N–	NL–
600N	SL600N–	N/A

SERVICE LETTER

* Supersedes Service Letters SL369H–132, SL369D–111, SL369E–063, SL369F–056, SL500N–008, SL600N–005, dated 11 January 1999.

MD HELICOPTERS MODEL 369/500N/600N TORQUE EVENT/RETIREMENT INDEX NUMBER EXPLANATION

MD Helicopters, Inc. (MDHI) is currently establishing a new approach to tracking certain retirement lives and inspection intervals of various helicopter components. This is being implemented to ensure safe operation of the helicopter within the widest range of helicopter usage.

Components are assigned retirement lives based on flight test, fatigue test and field experience. This life is based on a flight spectrum that is representative of maneuvers a particular model helicopter is expected to see. A flight spectrum defines flight maneuvers and a percentage of time performing these maneuvers. Each maneuver produces different loads. The number of times these loads are applied has a cumulative effect on component lives.

The MDHI flight spectrum is FAA approved and represents our knowledge of helicopter usage. This spectrum is conservative in its representation. However, helicopter usage has changed since we first established our helicopter spectrum. Some operators have reported exceeding the estimated average amount of high stress maneuvers in our flight spectrum. This can result in reduced service life or early failure of components. Because of this, MDHI reevaluated the manner of establishing limited lives which currently considers only Time In Service (TIS).

Flight and fatigue testing have determined that a “Torque Event” (TE) accelerates fatigue damage on certain components. A Torque Event is defined as the transition to a hover from forward flight or any external lift operation. For this definition of TE, forward flight is considered to be flight at any airspeed in any direction after attaining transitional lift. A flight that has a takeoff and a landing is one (1) TE. Hover taxi with no external lift will typically result in no TE’s. For sling operators, each load will count as two (2) TE (pick–up and drop–off). For example, if an operator takes off and moves six (6) sling loads then lands, this would total twelve (12) Torque Events (thirteen (13) if the helicopter drops off the last load and then flies to another landing area). An external lift can either be on the cargo hook, external hoist or in external baskets. An autorotation from forward flight to a landing or a hover is one (1) TE. In order to account for a greater number of Torque Events than what was represented in our original FAA approved flight spectrum, we are asking owners and operators to record the number of Torque Events that their helicopters experience. The number of Torque Events should be entered into the helicopter Log Book. For each flight, the pilot should maintain a count of TE’s performed. At the end of each day, the number of TE’s should be added to the accumulated number of TE’s in the helicopter log or equivalent record.

SERVICE LETTER

Components affected by TE's will no longer have retirement lives or inspection intervals based solely on TIS. Components that are effected by Torque Events will have an inspection interval based on TE or be assigned a maximum Retirement Index Number (RIN). This RIN corresponds to the maximum allowed fatigue damage resulting from Torque Events and accumulated flight hours. The RIN is an adjustment factor times flight hours plus another adjustment factor times TE, or RIN = (Adjustment factor one x flight hours) + (Adjustment factor two x TE). For example, if factor one = 160 and adjustment factor two = 24 and flight hours equal 1,190 hours with 12,800 TE, RIN = (160 x 1,190) + (24 x 12,800) = 497,600 RIN. The RIN system accounts for flight hours and TEs and results in equal conservatism being applied to all operators. A new component will begin with an accumulated RIN of zero that will be increased as TEs and TIS occur. The operator will record the number of TEs, TIS and increase the number of RIN's accordingly. When the maximum number of hours or the maximum number of RIN is reached (whichever occurs first), the component will be removed from service.

For components that have inspections intervals based on TE, the inspection interval will occur at a set TE interval.

Refer to the latest revision of CSP–HMI–2 or CSP–H–4, Section 04–00–00, Table 1 Airworthiness Limitations Component Mandatory Replacement Schedule for component life limits, retirement index number formulas and inspection interval requirements.

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) 346–6387. DATAFAX: (480) 346–6813.

SERVICE LETTER

TRANSFER OF OWNERSHIP OF LIGHT HELICOPTER LINE

In February of 1998, McDonnell Douglas Helicopter Company (MDHC), an indirect subsidiary of The Boeing Company, announced they were going to sell the commercial helicopter manufacturing business. During the ensuing months, MDHC received and evaluated several offers from other companys interested in purchasing our commercial helicopter product lines. In January 1999, MDHC and MD Helicopters Inc., (MDHI) an indirect subsidiary of RDM Holding, Inc., signed an agreement on an asset purchase of Boeing's MD500, MD600N® and MD Explorer® series of light helicopter product lines.

MD Helicopters Inc., has stated that it will initially operate from existing Boeing facilities at Mesa, Arizona. MDHC will continue to provide technical and engineering support under contract to MD Helicopters.

Current MDHC employees will remain in their current positions in support of the light helicopter program for up to 120 days. Following that period, MDHC will be under an agreement to provide various support (parts and technical) for two years, followed by an additional three years of technical support on an as needed basis. With the transition period, followed by the support agreements, we fully expect production, spares support, field support and technical publications efforts will be uninterrupted.

In regards to certification and production issues, both H3WE (MD369/500N/600N series) and H19NM (MD900) Type Certificates (TC's) have been transferred to MDHI. This sales contract action requires MDHC to terminate the use of Production Certificate No. 410, which was in continuous use since the 1960's. MDHI intends to make application for their own PC, however that process could take upwards of six months. Therefore, MDHI has licensed back the rights of the TC's to MDHC who has already received a new Production Certificate No. 714NM. Please be aware that this new Production Certificate Number (714NM) will be evident on various documents to include sales orders and helicopter airframe data plates in the near future as newly manufactured parts and helicopters are built and delivered. Components, parts and helicopters manufactured before February 19, 1999 are identified by the old PC number (410) and should be considered totally acceptable.

MD Helicopters can be contacted at (602)891–8014, FAX (602)891–8018. MD Helicopters can also be located on the Internet at www.mdhelicopters.com.

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.

SERVICE LETTER

REQUIRED INSPECTIONS AND CRITICAL INSPECTION AREAS

This Service Letter is issued to advise o ners operators o the importance o per orming the published inspections and checks at the designated intervals. It is also to advise o ners operators o critical areas o the main rotor blade and lead lag links or helicopters hich average more than six Tor ue Events (TE) per hour. Service Letter 369H 132, 369D 111, 369E 063, 369F 056, 500N 008, 600N 005, dated 11 January 1999, or later revision explains Tor ue Event Retirement Index Number and recommends recording Tor ue Events on all helicopters.

O ners operators should revie and per orm all the re uired inspections and checks at the re uired intervals published in the Air orthiness Limitations Section, Continued Air orthiness Section, Service In ormation Notices Service ulletins, Air orthiness Directives and Rotorcra t Flight Manual. The inspections checks and intervals are critical or sa e light and continued air orthiness.

MD Helicopters Inc. (MDHI) ishes to emphasi e the critical areas o the main rotor blade and lead lag links or helicopters that average more than six Tor ue Events per hour (Re er to Figure 1). These areas are already included in the pilot pre light and maintenance inspections, but become more critical or helicopters hich average more than six Tor ue Events per hour.

For urther assistance, contact your local MDHI Field Service Representative (re er to the latest revision o the *"At Your Service"* handbook or address and telephone numbers) or contact the Field Service Department at MDHI, Mesa, Ari ona. Telephone 1 800 388 3378 or (602) 891 6342. DATAFAX: (602) 891 6782.

SERVICE LETTER

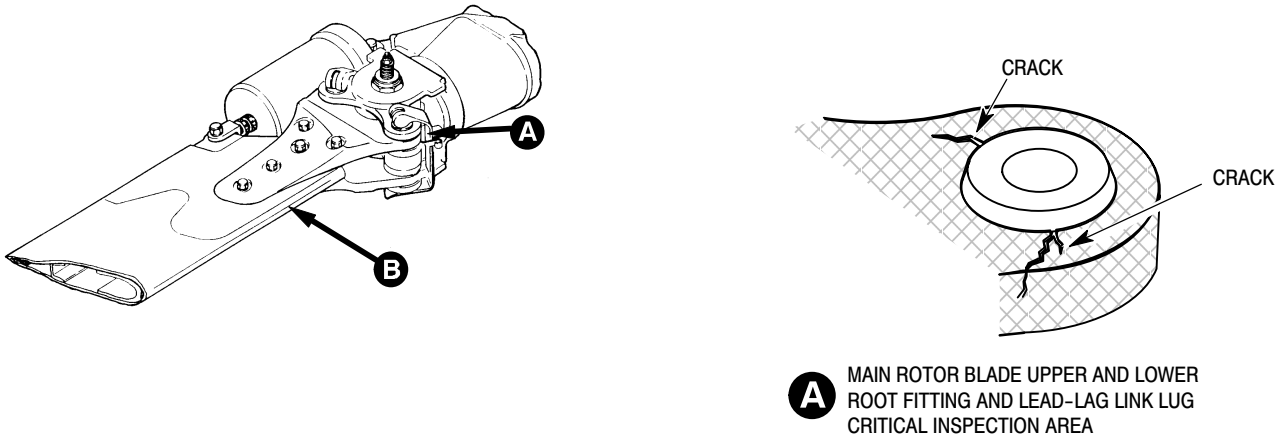


Figure 1. Main Rotor Blade and Lead-Lag Link Critical Areas

SERVICE LETTER

* Supersedes and cancels Service Information Letters HL-71.12, DL-30.12, EL-8.6 and FL-25.4, dated 07 April 1995.

AVAILABILITY OF FEDERAL AVIATION ADMINISTRATION AIRWORTHINESS DIRECTIVES AFFECTING MD HELICOPTERS

TO: ALL OWNERS AND OPERATORS OF MD HELICOPTERS.

Federal Aviation Administration Airworthiness Directives affecting MD helicopters can be viewed and printed from the Internet at: "http://av-info.faa.gov/".

If Internet access is not available, owners and operators can contact the Federal Aviation Administration for information on obtaining paper or microfiche copies at the following address.

U.S. Department of Transportation
Federal Aviation Administration
Regulatory Support Division
Airworthiness Program Branch, AFS-610
P.O. Box 26460
Oklahoma City, OK 73125-0460
FAX 405-954-4104

SERVICE LETTER

* Supersedes Service Information Letters SL369H-136, SL369D-115, SL369E-067, SL369F-060, SL500N-012, and SL600N-009, dated 05 June 2000. Revision 1 is issued to correct the Internet address.

AVAILABILITY OF FEDERAL AVIATION ADMINISTRATION SUPPLEMENTAL TYPE CERTIFICATES FOR MD HELICOPTERS

TO: ALL OWNERS AND OPERATORS OF MD HELICOPTERS.

A listing of Federal Aviation Administration Supplemental Type Certificates for MD Helicopters can be viewed and printed from the Internet at: "http://www.faa.gov/avr/air/stc/stc/default.htm".

If Internet access is not available, owners and operators can contact the Federal Aviation Administration for information on obtaining paper or microfiche copies at the following address.

U.S. Department of Transportation
Federal Aviation Administration
Regulatory Support Division
Airworthiness Program Branch, AFS-610
P.O. Box 26460
Oklahoma City, OK 73125-0460
FAX 405-954-4104

The listing provides a summary of FAA Supplemental Type Certificates (STC) for optional kit items applicable to MD helicopters. Contact the STC holder to obtain a copy of a particular STC.

SERVICE LETTER

* Supersedes Service Letters DL–69, EL–20 and FL–10, dated 27 May 1987, DL–88.1, EL–39.1 and FL–32.1, dated 15 September 1989, and NL–002, dated 1 June 1994.

TO: ALL OWNERS AND OPERATORS OF MD HELICOPTERS.

SUBJECT: NEW STANDARD WARRANTY STATEMENT

The purpose of this letter is to inform all owners and operators of the new standard helicopter warranty of 2 years or 2,000 hours, prorated and a spare parts warranty of 12 months or 1,000 hours of operation. This warranty applies to new helicopters and parts and does not supercede or replace existing warranties. The new warranty is fully described in the revised Warranty & Exchange Program Information pamphlet (CSP–A–2), dated 1 November 2000, or later. Other changes included in the Warranty & Exchange Program Information pamphlet include:

Addition of the 600N Component Exchange Program.

Comprehensive Proration Schedule.

Improved Labor Allowance Chart.

Updated contact information.

SERVICE LETTER

TO: All owners and operators of OH-6A/369H Series Helicopters operating with 4-Bladed Main Rotor Hubs (P/N 369A1200-501, -503, -617, -619, -621 and 369H1200-501).

MD Helicopters, Inc. (MDHI) has recently entered into a licensing agreement with Rolls-Royce Gear Systems (RRGS) of Park City, Utah. Per the license agreement, RRGS is approved by MDHI to perform all repairs and overhauls for the 4-Bladed Main Rotor (M/R) Hub previously performed by MDHI.

For business reasons, MDHI will no longer perform the above services, nor will MDHI provide spare parts that are unique to the 4-Bladed M/R Hub. MDHI will continue to be the exclusive provider for repair/overhaul of 5 and 6-Bladed M/R Hubs. RRGS is approved by MDHI to go vendor-direct to procure unique repair parts for the 4-Bladed M/R Hub. RRGS will procure 4-Bladed M/R Hub parts that are common with 5 and 6-Bladed M/R Hubs from MDHI. Customers requiring 4-Bladed M/R Hub repair/overhaul work or detailed spare parts unique to the 4-Bladed M/R Hub should contact RRGS directly at the below listed contact number. RRGS will not sell parts previously restricted by MDHI, i.e. strap packs, hub assemblies, abrasion strips, etc. MDHI will continue to provide parts that are common with current production 5 and 6-Bladed M/R Hubs.

MDHI, as part of the license agreement, will maintain quality and engineering surveillance of RRGS for the above work. RRGS assumes total warranty responsibility for their activities associated with the 4-Bladed M/R Hub.

MDHI will complete current work-in-progress for the 4-Bladed M/R Hubs already submitted to MDHI for repair/overhaul.

This transfer of responsibilities becomes effective: 01 February 2002.

Point of Contact: Rolls-Royce Gear Systems

Rolls-Royce Field Office
Attn: Edward Head
15542 Eliot
Huntington Beach, CA 92647
Tele: (714) 799-1749
Fax: (714) 897-9200

or

Rolls-Royce Gear Systems
Attn: Tim Jackson
6125 Silver Creek Drive
P.O. Box 680910
Park City, Utah, 84068-2770
Tele: (435) 647-2816
Fax: (435) 647-2770

SERVICE LETTER

AVAILABILITY OF MDHI PUBLICATIONS IN ELECTRONIC FORMAT

MD Helicopters, Inc. has received numerous requests for electronic technical manuals. In an effort to provide owners and operators with the most up-to-date information, MDHI is pleased to announce that Technical Manuals and Rotorcraft Flight Manuals for all MDHI model helicopters are available electronically on the MDHI website http//www.mdhelicopters.com. In addition, and in order to promote safety and reduce incidents, MDHI will provide e-mail notification of Service Bulletins and changes to Technical Manuals or Rotorcraft Flight Manuals. To register and obtain a password for this service go to http//www.mdhelicopters.com/pubs/etmhome.htm. There is no charge to register for either the e-mail notification service or access to the on-line electronic format Technical and Rotorcraft Flight Manuals.

MDHI plans to continue offering manuals in conventional print formats. Printed versions, which include updates, can be obtained by contacting the MDHI Publications Order Desk. Subscription service fees apply for conventional printed manuals.

On-line availability of MDHI helicopters Technical Manuals gives maintenance personnel timely access to up-to-date information which can be printed locally as needed. The on-line publications are in Adobe® Acrobat® PDF format with embedded hyper-links, but retain the look of the original paper manuals content. The move to on-line document distribution eliminates the administrative task in updating publications. The electronic update notification service will notify registered users via e-mail of new or revised MDHI Technical Manuals, Rotorcraft Flight Manuals, Service Bulletins, Service Letters, Technical Bulletins and applicable FAA Airworthiness Directives.

Other publications currently available at the MD Helicopters, Inc. website are: Service Bulletins, Service Letters, Technical Bulletins, FAA Airworthiness Directives, Overhaul Manuals, Illustrated Parts Catalogs, Part Price Lists, Publication Indexes, Publication Order Forms, Logbook Forms, Service & Operations Reports, Publication Change Requests, Rotorcraft Technical Descriptions, Marketing Brochures, Warranty & Exchange Book, Training Center Brochure, Service Center Listing, Distributor Listing and Contact numbers for Customer Support, Customer Training and Marketing personnel.

CD-ROM Electronic Technical Manuals (ETM) for MDHI model helicopters are also available from two companies, Aircraft Technical Publishers (ATP) and Avantext. Both companies develop, market, sell and support their own versions of a CD-ROM ETM. If CD-ROM subscriptions are required, they must be purchased directly from these companies.

Aircraft Technical Publishers (ATP)	Avantext
Aircraft Technical Publishers (ATP) 101 South Hill Drive Brisbane, CA 94005-9966 To order by phone, please call: 800-227-4610 (US & Canada) 415-330-9500 (Worldwide) For more information or for ordering online: http://www.atp.com	Avantext, Inc 340 Morgantown Road Reading, PA 19611 To order by phone, please call: 800-998-8857 (US & Canada) 610-796-2383 (Worldwide) For more information or for ordering online: http://www.avantext.com

SERVICE LETTER

HELICOPTER OPERATION IN VOLCANIC ASH ATMOSPHERE

Helicopter operation in volcanic ash conditions can decrease engine performance and affect operation of the helicopter. This depends on the type and concentration of airborne particles which could increase the possibility of navigation system failures, partial power loss, engine flame out or pilot instrument malfunction. Air travel in such conditions can also reduce visibility and increase the chance of erosion of helicopter parts.

MDHI recommends owner/operators avoid flight in areas of volcanic ash contamination.

Helicopter operation conducted in a contamination zone must be treated as flight operations in a sandy or contaminated atmospheric environment and specific maintenance requirements must be applied. The use of Mylar tape as noted in the references below is an option to reduce erosion damage. Engines operated in this environment can ingest increased foreign material. Refer to the engine manufacturer for detailed information regarding engine operation and maintenance in volcanic ash atmosphere.

MDHI recommends owner/operators hanger helicopters wherever possible.

Helicopters that are left outside should be covered to avoid any accumulation or penetration of particles and corrosive debris. Helicopters exposed to volcanic ash should be brush cleaned, have the crevices vacuumed, and be fresh water washed as if operated in salt water, sand, and dust environments. Owners/Operators should contact MDHI field service if unusual findings or unusual helicopter damage or reduced performance occurs during flight.

Reference:

CSP–HMI–2 Section 62–10–00, and 64–10–00.

TB900–006R1 Main Rotor Hub Pitchcase Abrasion Tape.

TB900–007R1 Main Rotor Blade Root End Abrasion Tape.

CSP–SPM Section 20–40–00 Corrosion Control Maintenance Practices.

CSP–A–3 Corrosion Control Manual.

Pratt & Whitney Service Representative. http://www.pw.utc.com/About+Us/Contact+Us

Rolls–Royce Service Representative. Toll–free (North America) +1–888–255–4766 or E–mail: model250custsupp@rolls–royce.com

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TECHNICAL PUBLICATIONS PRICE INCREASE

MD Helicopters, Inc. has held its technical publications pricing firm since 2007. Current costs require us to increase the price of these publications allowing us to continue our publications improvement efforts to provide you with the most current and accurate manuals possible for maintenance, operation and modification of your MD helicopters.

The increase will be effective 1 July 2010. You can purchase a new subscription or renew/extend an existing subscription at the current price if your order is place before 30 June 2010. A web site link is provided below to the publications order price list/ order form available on our web site.

Reference: http://www.mdhelicopters.com/v2/pub_orders.php

		Current Price	New Price
Rotorcraft Flight Manual	New Purchase (with 2 year Revision Service)	$140.00	$185.00
	New Purchase (with 5 year Revision Service)	$300.00	$390.00
	2 year Revision Service	$100.00	$130.00
	5 year Revision Service	$220.00	$290.00
	One Time Purchase (no Revision Service)	$110.00	$150.00
Rotorcraft Maintenance Manual Set	New Purchase (with 2 year Revision Service)	$1,200.00	$1,560.00
	New Purchase (with 5 year Revision Service)	$2,300.00	$2,990.00
	2 year Revision Service	$800.00	$1,040.00
	5 year Revision Service	$1,500.00	$1,950.00
	One Time Purchase (no Revision Service)	$850.00	$1,110.00
Service Bulletins, Technical Bulletins and Service Letters.	New Purchase (with 2 year Revision Service)	$150.00	$200.00
	New Purchase (with 5 year Revision Service)	$250.00	$330.00
	2 year Revision Service	$100.00	$130.00
	5 year Revision Service	$200.00	$260.00
	One Time Purchase (no Revision Service)	$100.00	$130.00

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SERVICE LETTER

KAMATICS SHAFT AND COUPLING OVERHAUL/EXCHANGE PROGRAM ANNOUNCEMENT

MODELS AFFECTED: MD Helicopters, Inc. (MDHI) all Model 369H, Model 369HE, Model 369HM, Model 369HS, Model 369D, Model 369E, Model 369FF, Model 500N and Model 600N Helicopters and all spares inventory.

MDHI, in cooperation with Kamatics Corporation (Kamatics), has determined that all dash numbers of the 369D25515 and 500N5215 interconnect shafts and 369D25501 tail rotor driveshaft couplings should be returned for scheduled disassembly and overhaul, since only exterior inspections are authorized by the MDHI Helicopter Maintenance Instructions (HMI) and Kamatics. The new overhaul program is being implemented because the parts are key components of the aircraft drive train with no life limits and, for continued safety, should be fully inspected at regular intervals. There have been no reports of any issues with hardware in the field or instances of the existing inspections being inadequate.

Because there are numerous shafts and couplings that have been in operation for longer than the intended overhaul period and the existing components have not been tracked, they will be returned based on the component serial number that was assigned by Kamatics at the time of manufacture. A Service Bulletin with details of the interconnect shafts and tail rotor driveshaft couplings tracking requirements and time of compliance will be issued in the near future.

To be eligible for the program, the interconnect shafts and tail rotor driveshaft couplings must be serviceable before return to MDHI for overhaul/exchange. Any shaft or coupling removed for "After Main Rotor Drive System Sudden Stoppage – Level 2, conditional inspection requirements" (ref. CSP–H–4, 05–50–00, Table 1, or CSP–HMI–2, 05–50–00, Table 1) is not eligible for overhaul or exchange.

Overhaul pricing through 2011 will be $11,458 for shafts and $7,225 couplings.
Overhaul pricing through 2012 will be $11,920 for shafts and $7,515 couplings.

Once the components are returned to MDHI for overhaul/exchange, this program establishes an inspection and overhaul cycle for the interconnect shafts and tail rotor driveshaft couplings.

Details of the overhaul time of compliance requirements will be released concurrent with this Service Letter in these maintenance manuals:

CSP–H–4, Periodic Inspections, Overhaul and Retirement Schedule and Weight and Balance Procedure (Basic HMI Appendix B)

CSP–HMI–2, Basic Handbook of Maintenance Instructions – Servicing and Maintenance

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TECHNICAL PUBLICATIONS PRICE INCREASE

Current costs require MDHI to increase the price of our technical publications allowing us to continue our publications improvement efforts to provide you with the most current and accurate manuals possible for maintenance, operation and modification of your MD helicopters.

The increase will be effective 1 February 2011. You can purchase a new subscription or renew/extend an existing subscription at the current price if your order is placed by 31 January 2011. A web site link is provided below to the publications price list/ order form available on the MDHI web site.

Reference: http://www.mdhelicopters.com/v2/pub_orders.php

		Current Price	New Price
Rotorcraft Flight Manual	New Purchase (with 2 year Revision Service)	$185.00	$205.00
	New Purchase (with 5 year Revision Service)	$390.00	$430.00
	2 year Revision Service	$130.00	$145.00
	5 year Revision Service	$290.00	$320.00
	One Time Purchase (no Revision Service)	$150.00	$165.00
Rotorcraft Maintenance Manual Set	New Purchase (with 2 year Revision Service)	$1,560.00	$1,750.00
	New Purchase (with 5 year Revision Service)	$2,990.00	$3,300.00
	2 year Revision Service	$1,040.00	$1,150.00
	5 year Revision Service	$1,950.00	$2,150.00
	One Time Purchase (no Revision Service)	$1,110.00	$1,250.00
Service Bulletins, Technical Bulletins and Service Letters.	New Purchase (with 2 year Revision Service)	$200.00	$220.00
	New Purchase (with 5 year Revision Service)	$330.00	$365.00
	2 year Revision Service	$130.00	$145.00
	5 year Revision Service	$260.00	$290.00
	One Time Purchase (no Revision Service)	$130.00	$145.00

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SERVICE LETTER

ENGINE POWER OUT WARNING CONTROL UNIT – FILTER INSTALLATION

MODELS AFFECTED: MD Helicopters, Inc. (MDHI) Model 369H/S serial number 0626 and subs), Model 369D, Model 369E, Model 369F/FF and Model 500N.

MDHI has seen incorrect Engine Power Out Warning Control Unit (EPO) output signals caused by high levels of Electro-Magnetic Interference (EMI). Correct engine power out warning indications are given by the EPO during normal EMI conditions.

This service letter is issued to tell owners and operators of a method to prevent the EPO from giving incorrect output signals caused by high EMI conditions.

MDHI has no technical objection to the following installation for any of the helicopter models listed that experience incorrect warning output signals caused by high EMI conditions.

Install a Quell EMI Filter, P/N 14-18.19, as follows:

(1). Follow the manufacturer's installation instructions to make sure the filter is oriented correctly in the EPO electrical receptacle.

(2). Align the holes in the filter with the EPO electrical receptacle pins.

(3). Put the filter into the EPO electrical receptacle.

(4). Connect and fully seat the P19 connector to seat the filter in the EPO electrical receptacle.

(5). Do the EPO Warning Control Unit Operational Check (Ref. CSP–HMI–3, 95–30–00, Adjustment/Test, para 6).

The Quell EMI Filter, P/N 14-18.19, can be purchased directly from:

Quell Corporation
5639-B Jefferson NE
Albuquerque, New Mexico 87109
(505) 243-1423.

Make a dated entry in the Rotorcraft Log Book to show the Quell EMI Filter, P/N 14-18.19 is installed in the Engine Power Out Warning Control Unit in accordance with MDHI Service Letter SL369X/500N–XXX.

For further assistance, contact the Field Service Department at MDHI, Mesa Arizona. Telephone 1–800–388–3378 or (480) 346–6387. DATAFAX: (480) 346–6813.

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SERVICE LETTER

TECHNICAL PUBLICATIONS ON–LINE ORDERING SYSTEM

MDHI has activated an on–line technical publications ordering system that allows internet-based purchasing of MD Helicopters product-line Technical Publications. All technical publications, manuals, logbooks, service bulletins, service letters, binders, tabs and subscription/revision services are now on-line procurable. Purchasers can order and pay for technical publications via credit card, wire transfer or purchase order directly from the MDHI website.

The original Pubs Order Form hotlink and manual order forms are no longer available.

Technical publications can now be directly ordered, printed and shipped to the end user without manual interaction from MD Helicopters personnel.

The technical publications ordering system is located on the MD Helicopters internet website and accessed through the Pub Orders – Online Ordering hotlinks.

Reference: http://www.mdhelicopters.com/v2/pub_orders.php

To use the new system, you will need to create a new User account. Click the **REGISTER** link on the left–hand side of the page to continue.

Complete the registration to create your personal account. Some features of the new technical publications ordering system include:

- Regional Print Centers to reduce shipping costs
- Automated revision renewal notifications
- A **HELP** tab at the top of the page that includes step–by–step instructions and a frequently asked questions section

If you are still having problems registering or placing an order, there is a **CONTACT US** tab located in the upper right hand corner.

SERVICE LETTER

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PROCEDURES FOR SERVICE AND OPERATIONS REPORTS

The MD Helicopters, Inc. (MDHI) Service and Operations Report (SOR) procedures will be improved and simplified. Please complete the on–line SOR form and send it (ref. MDHI Form CF–7.57 SOR, latest revision) to the MDHI SOR email at SOR@mdhelicopters.com. Follow the service and operations instructions (ref. CF–7.57SOR FI (latest revision) Instructions) to improve the time for an accurate and quick response. This process improvement will:

- Improve report status
- Reduce confusion
- Improve document flow and visibility
- Improve final actions
- Improve turnaround time to satisfy customer need

A complete form will immediately start the SOR procedure, while an incomplete form will slow and delay acceptance of forms and parts sent to MDHI for replacement, overhaul, or repair. The correct procedures for SOR submittal are:

(1). **SOR Procedure for Components Sent to MDHI:**

(a). Complete the SOR form (CF–7.57 SOR, latest revision).

NOTE: Make sure all information is put in, as an incomplete form will only delay the procedure.

(b). Send the completed SOR form to:

SOR@mdhelicopters.com (Preferred)
or
MD Helicopters, Inc.
Warranty and Repair
5456 E. McDowell Rd.
Mesa, AZ 85215
FAX: 480–324–1956

(c). After the SOR form is returned with Block 32 reviewed and completed, attach a copy to the component to be sent to MDHI.

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(2). **SOR Procedures for All Other Situations With No Components Sent to MDHI:**

(a). Complete the SOR form (CF–7.57 SOR, latest revision).

NOTE: Make sure all information is put in, as an incomplete form will only delay the procedure.

(b). Send the completed SOR form to:

SOR@mdhelicopters.com (Preferred)
or
MD Helicopters, Inc.
Warranty and Repair
5456 E. McDowell Rd.
Mesa, AZ 85215
FAX: 480–324–1956

The SOR form and instructions can be found at:

http://www.mdhelicopters.com/v2/warranty.php

For further assistance, contact the Field Service Department at MDHI, Mesa, Arizona. Telephone 1–800–388–3378 or (480) 346–6387. DATAFAX: (480) 346–6813.

SERVICE LETTER

MD HELICOPTERS OWNERSHIP CHANGE

MODELS AFFECTED: All MD Helicopter Models

As part of the sale of the assets from MD Helicopters, Inc. to MD Helicopters, LLC, this Service Letter is issued to inform owners and operators of MD Helicopters that the name of the new owner is MD Helicopters, Limited Liability Corporation (MD Helicopters, LLC).

MD Helicopters, LLC will continue to operate at its current location at 4555 East McDowell Road, Mesa, Arizona 85215. Production, field support, technical publications, and spares support will be uninterrupted. Both the H3WE (single–engine or 369 / 500N / 600N Series) and H19NM (twin–engine or MD900) Type Certificates (TCs) have been transferred to MD Helicopters, LLC effective 5 August 2022.

For assistance or questions, speak to your Field Service Representative or go to https://www.mdhelicopters.com/contact.html.

MD HELICOPTERS™

SERVICE LETTER

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INSTRUCTIONS FOR THE DROOP STOP FOLLOWER ASSEMBLY

MODELS AFFECTED: All 369H, 369D, 369E, 369F/FF, 500N, and 600N helicopters

Owners and operators are advised that a failed cotter pin was found during a routine pre–flight inspection. The roller shaft had moved out and was visible from the bottom of the droop stop assembly but the cotter pin was also visible. After disassembly the cotter pin was found to have worn down until it separated into two halves, there was wear on the matching surface of the roller shaft, and the journal bearing had a gouge. There was also an unknown lubricant on the follower assembly (there is no lubricant applied during installation). Additional instructions will be added to the Removal and Installation, and Inspection and Check procedures by reissues for CSP–H–2 (Reissue 1), CSP–H–4 (Reissue 6), and a temporary revision for CSP–HMI–2 (TR22–004).

For assistance or questions, speak to your Field Service Representative or:

- Go to https://www.mdhelicopters.com/contact.html for Field Service.
- Complete a Service and Operation Report (SOR) at https://www.mymd.aero/dashboard (select the **SUPPORT** dropdown menu, and then select **New SOR**).
- Put an entry in your https://www.mymd.aero/ account.
- Mail a copy or e–mail a scanned copy to your Field Service Representative.

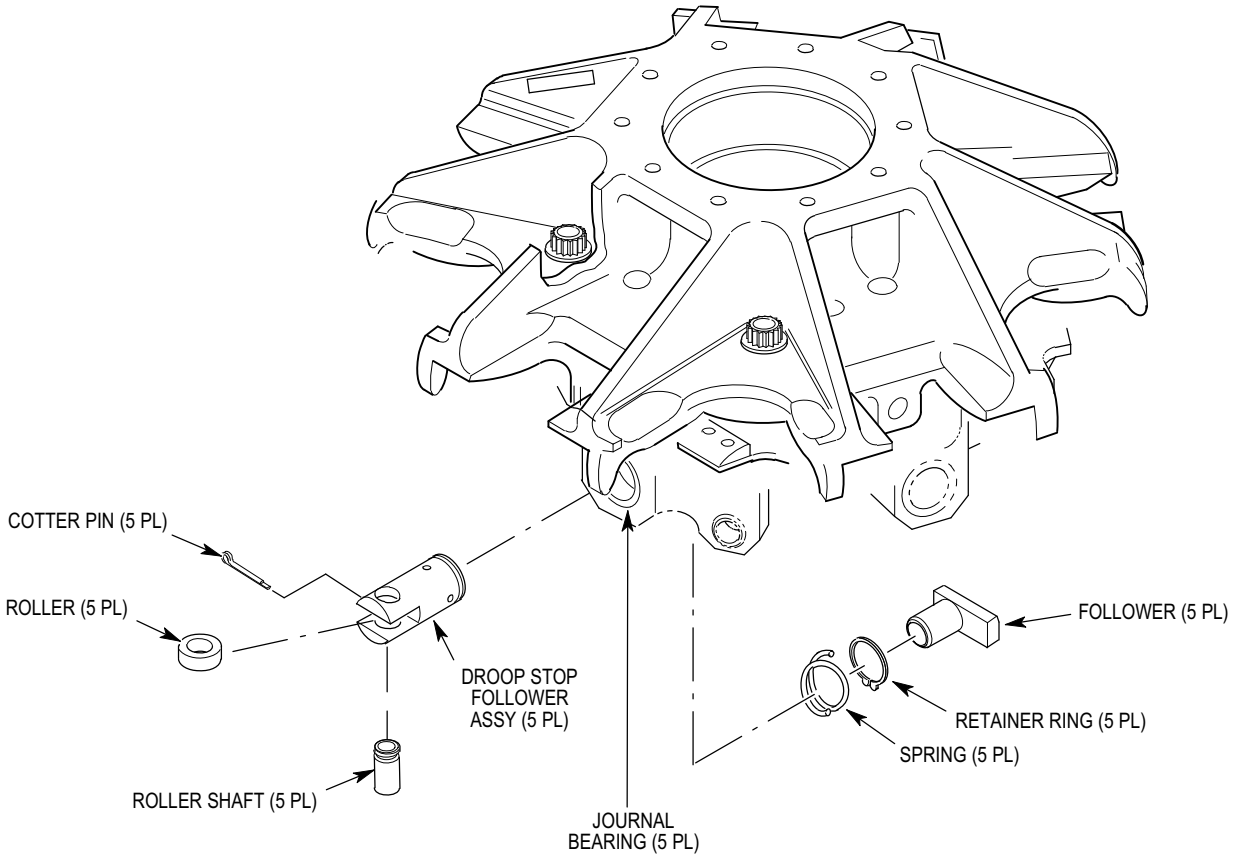


Figure 1. Droop Stop Follower Assembly

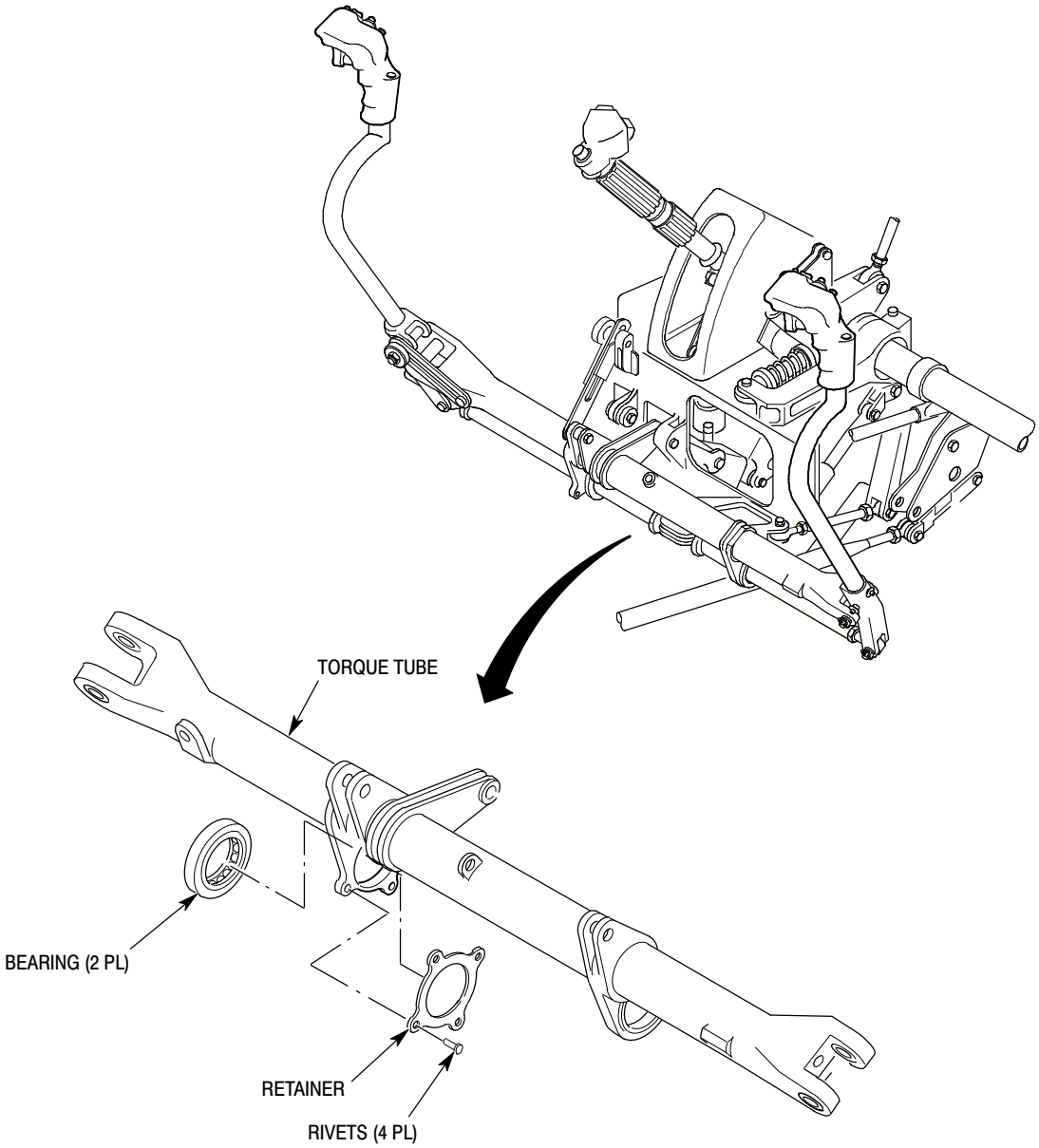
INSTRUCTIONS FOR THE PILOT'S INTERCONNECTING CYCLIC PITCH TORQUE TUBE ASSEMBLY

MODELS AFFECTED: All 369H, 369D, 369E, 369F/FF, 500N, and 600N helicopters

Owners and operators are advised that early this year a 369E crop duster had the bearings freeze or tighten in the cyclic pitch torque tube which caused the torque tube to fracture. The bearings had seized due to corrosion and dried grease. Do a freedom of movement check of the torque tube and bearings in helicopters with over 3000 hours. Disconnect the one–way lock and loosen the longitudinal (forward/aft) cyclic friction knob to make sure there is freedom of movement. If there is binding or ratcheting, do an inspection of the torque tube bearings for corrosion, material degradation, and freedom of movement in the bearings. Inspections for corrosion, material degradation, and freedom of movement will be added to the Inspection and Check section by reissues for CSP–H–2 (Reissue 1), CSP–H–4 (Reissue 6), and a temporary revision for CSP–HMI–2 (TR22–004).

For assistance or questions, speak to your Field Service Representative or:

- Go to https://www.mdhelicopters.com/contact.html for Field Service.
- Complete a Service and Operation Report (SOR) at https://www.mymd.aero/dashboard (select the **SUPPORT** dropdown menu, and then select **New SOR**).
- Put an entry in your https://www.mymd.aero/ account.
- Mail a copy or e–mail a scanned copy to your Field Service Representative.



SL369H158-001

Figure 1. Inspection of the Pilot's Interconnecting Cyclic Pitch Torque Tube Assembly