

DEPARTMENT OF THE ARMY TECHNICAL BULLETIN

WARRANTY PROGRAM

FOR

HELICOPTER, OBSERVATION

OH-58D(AHIP)

HEADQUARTERS, DEPARTMENT OF THE ARMY, WASHINGTON, DC

6 SEPTEMBER 1988

REPORTING OF ERRORS AND RECOMMENDING IMPROVEMENTS

The reporting of errors, omissions, and recommendations for improving this publication is recommended. Reports should be submitted on DA Form 2028 (Recommended Changes to Publications and Blank Forms) and forwarded direct to: Commander, U.S. Army Aviation Systems Command, ATTN: AMSAV-MMD, 4300 Goodfellow Blvd., St. Louis, MO 63120-1798. A reply will be furnished to you.

1. General.

a. This warranty technical bulletin (WTB) is for use by warranty control officers and users activities to provide guidance for management and application of the warranty program for the OH-58D Helicopter and applicable associated subsystems.

b. DA-PAM 738-751, Functional Users Manual for the Army Maintenance Management System-Aviation (TAMMS-A), is used to track hours of operation/flight.

c. The warranty on all secondary components is limited to a one time failure.

d. Check all warranty identification cards for positive item identification.

2. Explanation of Terms. The following explanation of terms peculiar to warranty and contract terminology are used within this WTB.

a. Government Acceptance Date (GAD). The date an item of equipment is accepted into Army inventory by the execution of the acceptance block and signing of a DD Form 250 or approved acceptance document, by an authorized representative of the Government.

b. Aircraft Secondary Component. Any field replaceable, depot repairable, serialized component of an aircraft which is warranted only as a part of a warranted aircraft, in which it is originally installed. Warranty becomes void if lateral transfer is initiated.

c. Fail/Failure. A malfunction or breakage of a warranted item (not due to ordinary usage or wear and tear) or damage to a warranted item which renders it unserviceable by reason of a condition which causes a warranted item to fail to meet any conformance/performance requirement.

d. Primary Component. Any selected field replaceable, depot repairable, serialized, major component which is warranted for the full period specified regardless of where or when installed.

e. Repair . To restore an item to serviceable condition without affecting its warranty (includes replacement, where replacement is necessary to achieve conformance or performance requirements.)

f. Resultant Failure/Damage. Failure suffered directly by a warranted part(s) which is induced/caused primarily by failure of another warranted part(s)/item(s), both/all provided by and warranted by the manufacturer/contractor.

g. Secondary Component. Any field replaceable, depot repairable, serialized subcomponent of a primary component which is warranted only as a subassembly or part of a warranted aircraft or primary component in which-it is originally installed.

h. Spare. A primary component purchased separately as a spare part and/or repair part not installed in an end item (aircraft).

i. WARCO. Warranty Control Office/Officer. Established at the intermediate general support level or equivalent and serves as the intermediary between the troops owning the equipment-and USAAVSCOM.

j. Warranty. A promise or statement of fact from a seller to a purchaser on the nature, usefulness, or condition of the supplies or performance of services to be furnished. The main purpose of a warranty in a government contract is to outline the rights and obligations of the contractor and the government for defective items and/or services.

k. Warranty Claim. Action initiated by the equipment user for authorized warranty repair, replacement or reimbursement from the manufacturer/contractor.

l. Warranty Period. Time interval during which the warranty is in effect. Normally measured as the maximum number of years, months or flight operating hours .

3. Coverages.

a. Helicopter, Observation

(1) Line item number A21633.

(2) Model OH-58D.

(3) NSN 1520-01-125-5476.

(4) FSCM 97499.

(5) Serial numbers 83-24129 thru 83-24144, 85-24690 thru 85-24733, 86-8901 thru 86-8939 and subsequent.

(6) Contracts DAAJ09-83-C-0027, DAAJ09-85-C-A633, DAAJ09-86-C-0500, DAAJ09-86-C-A312 and DAAJ09-87-C-0379.

(7) Coverages.

(a) Warranty coverage begins at the Government acceptance date (GAD) and last for 240 flight hours or 24 months, whichever occurs first, for any primary or secondary component originally installed in the Helicopter, or any spare component covered by the warranty.

(b) Refer to Appendix A for lists of the OH-58D Helicopter primary and secondary components.

b. Engine, Gas Turbine.

(1) Model T703-AD-700.

(2) NSN 2840-01-131-3350.

(3) FSCM 63005, Part No. 23005714.

(4) Contract DAAJ09-85-G-A011, DAAJ09-85-C-A073, DAAJ09-86-C-A372 and DAAJ09-87-C-0912.

(5) Coverage.

(a) Warranty coverage begins at the GAD and lasts for 240 flight hours or 24 months, whichever occurs first, for the primary and secondary components originally installed on the Engine or any spare component covered by the warranty.

(b) Refer to Appendix B for the lists of the T703-AD-700 Engine primary and secondary components.

4. CONTRACTOR RESPONSIBILITY.

a. The contractor, upon preliminary determination of warranty coverage, shall provide all materials, labor, facilities, tools, etc., needed to effect repair and commence to repair/replace such parts, IAW published service/repair procedures, as necessary to achieve specified "return-to-service" requirements.

b. The item(s) determined to be defective, due to defective material or workmanship, shall be repaired or replaced at the option of the contractor at no cost to the government.

c. The contractor's responsibility for coverage of Resultant Failure/Damage shall be limited to repair of the failed warranted "Primary and/or Secondary Components". The contractor shall not be liable for damage done through misuse or abuse by the government or for damage to or induced in other non-warranted parts.

5. GOVERNMENT RESPONSIBILITIES.

a. The contractor must be notified by AVSCOM in writing of any failure of any warranted component within ninety (90) days after discovery of-a failure. In order to receive warranty coverage, the government must deliver the reported warranty item(s) to the authorized repair site within one hundred and eighty (180) days after the discovery of the failure.

b. AVUM or AVIM maintenance will be performed by government personnel IAW published maintenance procedures (TMs, TBs etc.). Such maintenance does not void any coverage under warranty and is at government expense, including parts and labor.

c. Alterations and/or modifications shall not be made unless expressly authorized or directed by the U.S. Army Aviation Systems Command (USAAVSCOM).

d. For all components covered under warranty, the government shall bear all transportation costs and liability for shipments to the designated repair facility.

6. NULLIFICATION. The provisions of the warranties, covered by this publication, shall not apply to any warranted item if failure has been caused by:

a. Improper installation or maintenance.

b. Operation contrary to the TMs (or other written instructions provided to and approved by the government) in such a way as to induce a failure.

c. Repair or alteration by the government in such a way as to induce a failure.

d. Misuse, neglect, or accident.

e. Combat damage.

f. Foreign object damage.

g. Test program damage.

h. Failure caused by Acts of God, the public enemy, subversion, riots, vandalism, sabotage, flood or similar causes, fire or explosion induced by or originating from sources external to the warranted item(s).

7. CLAIM PROCEDURES.

a. Identification of warranted items. Warranted primary components delivered on warranted aircraft or end item (e.g., engine, APU, etc.), or as spares are identified by an affixed decal (Fig. 1), stating that the item is warranted and indicating the expiration date. A DA Form 2408-15, AMSAV-Q overprint 2 (Warranty Identification Card) (WIC) (Fig. 3) accompanies each primary component and is retained in the Aircraft Historical Record Logbook for installed components. Lateral transfer cannibalization of a warranted primary component to another aircraft is acceptable provided the DA Form 2408-15(WIC) accompanies the component. However, secondary components are warranted only as a subassembly or part of a warranted primary component in which they were originally installed.

(1) Lateral transfer (cannibalization) of a serviceable secondary component will void the warranty coverage of that component, and should be avoided if possible, but mission requirements may necessitate lateral transfer.

(2) If there is doubt concerning warranty coverage, questions, or if other assistance concerning the warranty program is required, please contact your local Logistic Assistance Representative (LAR). Special inquiries can be made in writing to: U.S. Army Aviation Systems Command, ATTN: AMSAV-QR, 4300 Goodfellow Boulevard, St. Louis, Missouri 63120-1798, or by calling AUTOVON 693-1771 (Commercial 314 263-1771).

b. Reporting Procedures. When a failure of a warranted item that requires depot maintenance occurs, the reporting unit/maintenance activity will verify that the failed component is a warranted item (ref. para 7a). The maintenance level which determines unserviceability of a warranted item will initiate the warranty claim action.

(1) Tag all warranty claim exhibits with a DA Form 2402 exchange tag (Fig. 2), to allow for ease of warranty item identification. The tag will be overprinted in Red Letters, "Warranty Exhibit".

(2) The maintenance activity initiating the warranty claim will:

(a) Prepare DA Form 2407 (Fig. 4), IAW DA PAM 738-751.

(b) copy 1 - not used, remove and destroy.

(c) copy 2 - forward to:

Commander
 U.S. Army Aviation Systems Command
 ATTN: AMSAV-QR
 4300 Goodfellow Boulevard
 St. Louis, Missouri 63120-1798

(d) Copy 3 and 4 - retain for local use or until receipt of shipping/disposition instructions from (NICP).

(e) copy 5 - ship with the component.

NOTE

Insure that all copies are legible

(3) The Warranty Identification Card (WIC) (Fig. 2) will be removed from the logbook and shipped with any primary component returned for warranty repair. When secondary components are removed the component entry will be lined out on the WIC, where it is listed and the card returned to the aircraft logbook.

(4) A category II (SF 368) Quality Deficiency Report (QDR) shall not be utilized for item(s) covered under warranty. When the warranty period has expired, and the conditions specified in DA PAM 738-751, para 2-13 are applicable, a SF 368 (QDR) will be submitted.

(5) When a defective item meets the criteria for a category I report, as prescribed in DA PAM 738-751, a deficiency report will be submitted IAW para 2-14. A category I report for a warranted item should be followed up with the submission of the DA Form 2407 (warranty claim).

(6) When the warranty period on any aircraft or primary component has expired, the DA Form 2408-15, AMSAV-Q overprint 2 (WICs) will be removed from the logbook and forward to:

Commander
U.S. Army Aviation Systems Command
ATTN: AMSAV-QR
4300 Goodfellow Boulevard
St. Louis, Missouri 63120-1798

8. STORAGE/SHIPMENT/HANDLING .

a. Warranty claim exhibits will be cleaned, preserved, tagged and packaged to prevent damage during handling, storage and shipment. Disposition/shipping instructions from the National Inventory Control Point (NICP) will specify the accountability and transportation information necessary.

b. Disposition of Exhibits.

(1) Use the following instructions for OH-58D (AHIP) warranted components. Send each Honeywell (formerly Sperry) and McDonnell Douglas warranted item directly back to the respective manufacturer for repair. Put in a requisition through normal supply channels for a replacement. Shipping addresses for the manufacturers are:

(a) Honeywell:

Honeywell, Inc.
Defense Avionics Systems Division
Phoenix Support Center
ATTN: BOA DAAJ09-85-G-A047
17431 N. Black Canyon Freeway
Phoenix, AZ 85023

(b) McDonnell Douglas

McDonnell Douglas Astronautics Co.
ATTN: CB759
BOA DAAJ09-85-G-A055
1400 S. Shamrock Avenue
Monrovia, CA 91016-7105

Other warranted items may require direct disposition to the manufacturer as well, if spares are in short supply. For this reason, final disposition of any failed unit should not be made until the maintenance officer has notified a member of the AHIP Materiel Fielding Team (MFT) of the failure and the serial number of the item in question. If a MFT member is not available, call AUTOVON 693-1309 or Commercial (314) 263-1309. Give the serial number of the warranted component and the document number of the requisition for its replacement, to ensure that proper priority is granted by the item manager for its fill.

(2) All direct shipments should be made by prompt traceable means. If special instructions for expedited disposition are not called for, procedures outline in the Automatic Return Items List (ARIL) of the Army Master Data File (AMDF) should be followed for return of failed warranted items. Assure that all required documentation indicating unserviceable status is shipped with the unit.

(3) Make disposition for T703-AD-700 failed unit per the procedures given in the Automatic Return Items List (ARIL) as defined by the Army Master Data File (AMDF), using ARI code "U" and RIC "BR4" (Red River Army Depot). Assure that the Warranty Identification Card and other required documentation are shipped with the unit.

WARRANTY	
NSN	<input style="width: 100%;" type="text"/>
PI IN	<input style="width: 100%;" type="text"/>
MFR	<input style="width: 45%;" type="text"/> SN <input style="width: 45%;" type="text"/>
TM	<input style="width: 100%;" type="text"/>
DATE	<input style="width: 45%;" type="text"/> LIMIT <input style="width: 45%;" type="text"/>
<div style="display: flex; justify-content: space-between; align-items: center;"> <div style="border: 1px solid black; padding: 2px;"> </div> <div style="border-top: 1px dashed black; width: 80%;"></div> <div style="border: 1px solid black; padding: 2px;"> </div> </div>	

Figure 1. Warranty Decal.

U. S. GPO 1986 161-818 EDITION OF MAY 81 IS OBSOLETE WARRANTY EXHIBIT EXCHANGE TAG DA Form 736-750 and 738-751	1 SUPPORT AGENCY (DODAAC) WCLAAP		2 DATE 5246		COPY 1 DA FORM 2402 DEC 86	
	3 ORGANIZATION (DODAAC) WCADAA			4 <input checked="" type="checkbox"/> WARRANTY <input type="checkbox"/> EIP EXHIBIT <input type="checkbox"/> EXCHANGE		
	5 NSN 1615-00-916-2676		6 NOUN NOMENCLATURE GEARBOX			
	7 PD 02		8 PD AUTHENTICATION <i>Cpt. John M. Bales</i>			
	9 END ITEM IDENTIFICATION		10 END ITEM NOUN NOMENCLATURE HELICOPTER			
	10 MODEL OH-58D		11 SERIAL NO 70-15874			
	12 DEFICIENCY OR SYMPTOM CASE CRACKED					
	13 DATE ACCEPTED 5252		14 SIGNATURE <i>John Doe</i>			15 NMCS YES
	16 JON 5-24B		17 INITIALS <i>JMH</i>			
	18 DATE REPAIRED 5262		19 INITIALS <i>ABC</i>			

Figure 2. sample of a Completed D A Form 2402.

APPENDIX A

BHTI COMPONENTS

<u>NOMENCLATURE</u>	<u>FSCM</u>	<u>PART NUMBER</u>	<u>NSN</u>
Hub Assy	97499	406-010-100-113	1615-01-186-4042
Blade Assy	97499	406-015-101-113	1615-01-239-7004
Transmission Assy	97499	406-040-006-113	1680-01-257-1447
T/R Gearbox Assy	97499	406-040-400-107	1615-01-236-9783
Shaft Assy	97499	406-040-500-103	1615-01-164-3902
Drive Shaft Assy	97499	406-040-300-105	1615-01-185-9047
Drive Shaft Assy, INP	97499	406-040-300-103	
Shaft Assy, Segmented	97499	406-040-330-105	1615-01-184-1756
Pump, Fuel	97499	206-062-687-101 (1C64-1)	2915-01-124-5222
Brake, Magnetic	97499	204-001-376-3	1680-00-909-8716
Temperature Sensor	97499	206-070-491-7 (D35D48)	6685-00-160-1297
Pump, Hydraulic	97499	206-076-030-105	4320-01-195-7884
Actuator Assy (Collective)	97499	206-076-031-105	1615-01-216-6000
Rotary Actuator	97499	214-001-347-109	1650-01-189-2989
Voltage Regulator	97499	222-375-060-111 (51522-000)	6110-01-193-4832
Battery, Heated Nickel	97499	406-075-806-101	6140-01-186-8802
Charger	97499	406-075-807-101	6130-01-171-9161
Actuator Assy (Tail Rotor)	97499	406-076-102-103 (41005230-103)	1680-01-173-8193
Actuator Assy (cyclic)	97499	406-076-101-105 (41005210-105)	1680-01-169-9293
ADU	97499	406-077-801-101 (88111800-101)	5821-01-186-8804

NOTE : Refer to TM 11-1520-248-23P and TM 55-1520-248-23P to obtain NSNs for subsequent series dash numbers (later configurations) for the above list of part numbers.

LITTON COMPONENTS

<u>NOMENCLATURE</u>	<u>FSCM</u>	<u>PART NUMBER</u>	<u>NSN</u>
Attitude and Heading Reference System	06481	857105 (406-007-804-101)	5821-01-187-0198
Card Circuit Assy	06481	857125-2	5821-01-186-9228
Card Circuit Assy	06481	857130-3	5821-01-186-9229

NOTE: Refer to TM 11-1520-248-23P to obtain NSNs for any later configurations of above part numbers.

CANADIAN MARCONI COMPONENTS

<u>NOMENCLATURE</u>	<u>FSCM</u>	<u>PART NUMBER</u>	<u>NSN</u>
Indicator, TGT-TRQ	90073	100-601012-003 (406-075-821-107)	6620-01-164-8095
Indicator, RPM	90073	100-601013-002 (406-075-822-105)	6620-01-164-8094
Indicator, Multi-Parameter	90073	100-601014-003 (406-075-820-107)	1680-01-164-8290

NOTE: Refer to TM 55-1520-248-23P to obtain NSNs for any later configurations of above part numbers.

HONEYWELL (FORMERLY SPERRY) COMPONENTS

<u>NOMENCLATURE</u>	<u>FSCM</u>	<u>PART NUMBER</u>	<u>NSN</u>
MCPU	07817	8500088-905 (406-075-810-715A)	1260-01-256-6924
CCA	07817	8500083-903	5999-01-257-4706
CCA	07817	8500092-903	5999-01-256-6948
CCA	07817	8500100-902	5599-01-256-6949
CCA	07817	8500107-901	1260-01-165-6555
CCA	07817	8500179-901	1260-01-165-6557
Housing Blower Assy	07817	8500811-901	1260-01-165-6368
Power Supply	07817	8500727-903	6130-01-266-0759
CCA	07817	8500067-907	5999-01-256-6947
CCA	07817	8500067-908	5999-01-257-4707
Keyboard	07817	8500132-901,-902 (406-075-813-101)	1260-01-165-6372
CCA	07817	8500081-901	1260-01-165-6529
CCA	07817	8500082-901	1260-01-165-6530
Chassis, Elec	07817	8500142-901	1260-01-165-6485
MFD	07817	8001671-902 (406-075-811-101)	1260-01-165-6369
Power Supply, High V	07817	8001673-901	1260-01-165-6412
Power Supply, Focus	07817	8001674-901	1260-01-165-6413

HONEYWELL COMPONENTS CONT'D

<u>NOMENCLATURE</u>	<u>FSCM</u>	<u>PART NUMBER</u>	<u>NSN</u>
CCA	07817	8001710-901	1260-01-165-6559
CCA	07817	8001711-901	1260-01-165-6561
CCA	07817	8001735-902	1260-01-165-6560
Plate Assy, Bezel	07817	8001746-901	1260-01-165-6370
Power Supply, Low V	07817	8001870-901	1260-01-165-64,11
RFD	07817	8500233-901,902 (406-075-812-101)	1260-01-169-8775
Bezel Assy	07817	8500254-901	1260-01-165-6371

NOTE : Refer to TM 9-1427-779-23P to obtain NSNS for any later configurations of above part numbers.

McDONNELL DOUGAS ASTRONAUTICS COMPONENTS

<u>NOMENCLATURE</u>	<u>FSCM</u>	<u>PART NUMBER</u>	<u>NSN</u>
Platform Assy	18355	1D51321-1	1260-01-207-8931
TCU	18355	1D49527-1	1260-01-186-5047
Upper Shroud	18355	1D51094-1	1260-01-165-6351
Gyro Blk Assy	18355	1D49815-1	1260-01-192-8808
GEA	18355	1D49460-1	1260-01-165-6354
TVS	98453	340600	1260-01-167-4624
LRF/0	98453	340900	1260-01-171-2283
OBS	98453	340800	1260-01-165-6353
IEA Housing with MIB	18355	1D49443-501	1260-01-165-6524
CCA, I-MUX Processor	18355	1D51241-1	1260-01-165-6531
CCA, R/D DISCR	18355	1D49448-1	1260-01-165-6532
CCA, Analog	18355	1D49452-1	1260-01-165-6533
CCA, Turret	18355	1D49830-1	5999-01-165-6534
MSP Housing with MIB Less Wire Harness	18355	1D4902-503	5999-01-166-1917
CCA, 711 Processor	18355	1D49613-501	1260-01-166-7873
CCA, 711 Memory	18355	1D49704-501	1260-01-167-1447
CCA, Analog I/O	18355	1D51234-1	1260-01-165-6539
CCA, 1553 Mux Bus	18355	1D51237-1	1260-01-165-6538
CCA, Serial I/O	18355	1D49632-501	1260-01-165-6540
CCA, Timing and Parallel	18355	1D51231-1	1260-01-165-6537
CCA, VTS Autofocus	98453	340431	5999-01-167-1451
CCA, VTS Microprocessor	98453	340436	1260-01-167-7535
CCA, VTS Vector	98453	340441	1260-01-167-1452
Generator			
CCA, Video Encoder, Bldg	98453	340451	1260-01-167-1450
CCA, VTS Memory	98453	340936	5999-01-167-1453

McDONNELL DOUGLAS ASTRONAUTICS COMPONENTS CONT'D

<u>NOMENCLATURE</u>	<u>FSCM</u>	<u>PART NUMBER</u>	<u>NSN</u>
CCA, VTS Video Encoder Analog	98453	340932	1260-01-167-1448
CCA, VTS I/O SYNC	98453	340496	5999-01-168-0181
CCA, VTS Video Processor	98453	340456	5999-01-167-1449
MSP Fan	82877	341JH	
MCPS Housing with MIB	18355	1D49401-503	6130-01-166-2063
CCA, Gear Drive Motor Module	18355	1D49254-1	1260-01-165-6541
CCA, Power Converter	18355	1D50693-1	1260-01-165-6355
CCA, Control Module	18355	1D49805-1	1260-01-165-6543
CCA, Bite Logic Module	18355	1D51244-1	1260-01-165-6544
CCA, 28 VDC Filter SW'G Assy	18355	1D49717-1	1260-01-165-6545
CCA, Secondary Output Module	18355	1D50778-507	1260-01-165-6356
CCA, Secondary Output Module	18355	1D50778-509	1260-01-165-6357
CCA, Secondary Output Module	18355	1D50778-511	1260-01-165-6358
CCA, Secondary Output Module	18355	1D50778-513	5999-01-165-6359
CCA, Dr Motor Ampl, Module	18355	1D49738-1	1260-01-165-6546
CCA, Bite Mux	18355	1D49745-1	1260-01-165-6547
CCA, Current Feedback	18355	1D49752-1	1260-01-165-6548
CCA, Control Pwr Ample	18355	1D49795-1	1260-01-165-6549
CCA, Switching Module	18355	1D49304-1	1260-01-165-6550
CCA, Current Monitor	18355	1D49553-1	1260-01-165-6551
CCA, Gear Motor Dr Bite	18355	1D49793-501	1260-01-165-6360
CCA, Three Phase Filter	18355	1D49565-1	1260-01-165-6542
CCA, Bite Logic Module	18355	1D49724-1	1260-01-165-6544
MCPS Fan	82877	341JH	

NOTE : Refer TM 9-1240-778-23P to obtain NSNS for any later configuration of above part numbers.

APPENDIX B

T703-AD-700 ENGINE PRIMARY COMPONENTS

<u>NOMENCLATURE</u>	<u>FSCM</u>	<u>PART NUMBER</u>	<u>NSN</u>
Turbo Shaft Engine	73342	23005714	2840-01-131-3350
Digital Control Unit Assy	73342	23030755	2995-01-196-8474
Fuel Control Assy	73342	23033919	2840-01-166-7834

T703-AD-700 ENGINE SECONDARY COMPONENTS

<u>NOMENCLATURE</u>	<u>FSCM</u>	<u>PART NUMBER</u>	<u>NSN</u>
Filter Assy, Fuel	73342	23003143	4330-01-197-6547
Pickup Assy, N2 RPM	73342	23007500	2925-01-196-6309
Valve Assy, Solenoid	73342	23007827	4810-01-196-6309
Harness Assy, Electrical	73342	23009850	2925-01-229-2562
Pump Assy, Fuel	73342	6896810	2915-01-228-5468
Injector Assy, Fuel	73342	6899080	4820-01-197-6558
Valve Assy, Air	73342	6899080	4820-01-195-7788
Combustion Liner Assy	63005	6899081	

NOTE : Refer to TM 55-2840-256-23P to obtain NSNs for subsequent series dash numbers (later configurations) for the above list of part numbers.

By Order of the Secretary of the Army:

Official:

CARL E. VUONO
General, United States Army
Chief of Staff

R. L. DILWORTH
Brigadier General, United States Army
The Adjutant General

DISTRIBUTION:

To be distributed in accordance with DA Form 12-31, AVUM and AVIM Maintenance requirements for OH-58D Helicopter, Observation.

RECOMMENDED CHANGES TO EQUIPMENT TECHNICAL PUBLICATIONS



THEN... JOT DOWN THE DOPE ABOUT IT ON THIS FORM. CAREFULLY TEAR IT OUT, FOLD IT AND DROP IT IN THE MAIL!

SOMETHING WRONG WITH THIS PUBLICATION?

FROM: (PRINT YOUR UNIT'S COMPLETE ADDRESS)

PFC JOHN DOE
COA, 3d ENGINEER BN
FT. LEONARD WOOD, MO 63108

DATE SENT

PUBLICATION NUMBER
TB 55-1520-248-23

PUBLICATION DATE
6 Sep 1988

PUBLICATION TITLE
Warranty Program for Helicopter,
Observation OH-58D(AHIP)

BE EXACT... PIN-POINT WHERE IT IS

PAGE NO	PARA-GRAPH	FIGURE NO	TABLE NO
6	2-1 a		
B1		4-3	
125	line 20		

IN THIS SPACE TELL WHAT IS WRONG AND WHAT SHOULD BE DONE ABOUT IT:

In line 6 of paragraph 2-1a the manual states the engine has 6 cylinders. The engine on my set only has 4 cylinders. Change the manual to show 4 cylinders.

Callout 16 on figure 4-3 is pointing at a bolt. In key to figure 4-3, item 16 is called a shim - Please correct one or the other.

I ordered a gasket, item 19 on figure B-16 by NSN 2 910-05-762-3001. I got a gasket but it doesn't fit. Supply says I got what I ordered, so the NSN is wrong. Please give me a good NSN

PRINTED NAME, GRADE OR TITLE, AND TELEPHONE NUMBER

JOHN DOE, PFC (268) 317-7111

SIGN HERE

JOHN DOE

DA FORM 1 JUL 79 2028-2

PREVIOUS EDITIONS ARE OBSOLETE.
DRSTS-M Overprint 1, 1 Nov 80

P.S.-IF YOUR OUTFIT WANTS TO KNOW ABOUT YOUR RECOMMENDATION MAKE A CARBON COPY OF THIS AND GIVE IT TO YOUR HEADQUARTERS.

TEAR ALONG PERFORATED LINE

FILL IN YOUR
UNIT'S ADDRESS

FOLD BACK

DEPARTMENT OF THE ARMY

OFFICIAL BUSINESS
PENALTY FOR PRIVATE USE \$300

POSTAGE AND FEES PAID
DEPARTMENT OF THE ARMY
DOD 314



TEAR ALONG PERFORATED LINE

COMMANDER
U S ARMY AVIATION SYSTEMS COMMAND
ATTN: AMSAV-MMD
4300 GOODFELLOW BOULEVARD
ST. LOUIS, MO 63120-1798

FILL IN YOUR
UNIT'S ADDRESS

FOLD BACK

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The Metric System and Equivalents

Liner Measure

1 centimeter = 10 millimeters = .39 inch
 1 decimeter = 10 centimeters = 3.94 inches
 1 meter = 10 decimeters = 39.37 inches
 1 dekameter = 10 meters = 32.8 feet
 1 hectometer = 10 dekameters = 328.08 feet
 1 kilometer = 10 hectometers = 3,280.8 feet

Weights

1 centigram = 10 milligrams = .15 grain
 1 decigram = 10 centigrams = 1.54 grains
 1 gram = 10 decigram = .035 ounce
 1 dekagram = 10 grams = .35 ounce
 1 hectogram = 10 dekagrams = 3.52 ounces
 1 kilogram = 10 hectograms = 2.2 pounds
 1 quintal = 100 kilograms = 220.46 pounds
 1 metric ton = 10 quintals = 1.1 short tons

Liquid Measure

1 centiliter = 10 milliliters = .34 fl. ounce
 1 deciliter = 10 centiliters = 3.38 fl. ounces
 1 liter = 10 deciliters = 33.81 fl. ounces
 1 dekaliter = 10 liters = 2.64 gallons
 1 hectoliter = 10 dekaliters = 26.42 gallons
 1 kiloliter = 10 hectoliters = 264.18 gallons

Square Measure

1 sq. centimeter = 100 sq. millimeters = .155 sq. inch
 1 sq. decimeter = 100 sq. centimeters = 15.5 sq. inches
 1 sq. meter (centare) = 100 sq. decimeters = 10.76 sq. feet
 1 sq. dekameter (are) = 100 sq. meters = 1,076.4 sq. feet
 1 sq. hectometer (hectare) = 100 sq. dekameters = 2.47 acres
 1 sq. kilometer = 100 sq. hectometers = .386 sq. mile

Cubic Measure

1 cu. centimeter = 1000 cu. millimeters = .06 cu. inch
 1 cu. decimeter = 1000 cu. centimeters = 61.02 cu. inches
 1 cu. meter = 1000 cu. decimeters = 35.31 cu. feet

Approximate Conversion Factors

To Change	To	Multiply by	To change	To	Multiply by
inches	centimeters	2.540	ounce-inches	newton-meters	.007062
feet	meters	.305	centimeter	inches	.384
yards	meters	.914	meters	feet	3.260
miles	kilometers	1.608	meters	yards	1.084
square inches	square centimeters	6.451	kilometers	miles	.621
square feet	square meters	.093	square centimeters	square inches	.155
square yards	square meters	.836	square meters	square feet	10.764
square miles	square kilometers	2.590	square meters	square yards	1.196
acres	square hectometers	.405	square kilometers	square miles	.386
cubic feet	cubic meters	.028	square hectometers	acres	2.471
cubic yards	cubic meters	.765	cubic meters	cubic feet	35.315
fluid ounces	milliliters	29.573	cubic meters	cubic yards	1.308
pints	liters	.473	milliliters	fluid ounces	.034
quarts	liters	.946	liters	pints	2.113
gallons	liters	3.785	liters	quarts	1.057
ounces	grams	28.349	liters	gallons	.264
pounds	kilograms	.454	grams	ounces	.035
short tons	metric tons	.907	kilograms	pounds	2.205
pound-feet	newton-meters	1.356	kilograms	short tons	1.102
pound-inches	newton-meters	.11296	metric tone		

Temperature (Exact)

°F Fahrenheit temperature 5/9 (after subtracting 32) Celsius temperature °C

