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NO

CDRAMCOM REDSTONE ARSENAL AL//AMSAM-SF-A//

AIG 8881

AIG 9004

AIG 9042

AIG 8708

AIG 7515

AIG 7471

AIG 12124

DCM APMO OZARK AL//DCMDE-AOA//

CDRCBDCOM ABERDEEN PROVING GROUND MD//AMSCB-OPA//

CDRUSAGAPG ABERDEEN PROVING GROUND MD//STEAP-PF-V//

RAYTHEON RANGE SYSTEMS ENGINEERING KWAJALEIN ME//PAT2//

CDR WHITE SANDS MISSILE RANGE NM//STWMS-WRS-AA-MQA//

CDRDPG DUGWAY UT//STEDP-AVB//

USDOCO LANDSOUTHEAST IIMIR TU//AV//

DCMC BELL HELICOPTER FORT WORTH TX//DCMDW-BKD//

WALLOPS FLIGHT FACILITY NASA WALLOPS ISLAND VA//

CODE 831.2 AIRCRAFT QA//

INFO TSM ATK HEL FT RUCKER AL//ATEQ-TSM-A//

HQAFSPC PETERSON AFB CO//LGM/SEP//

ROBERT BROCK, SAFETY ENGINEER MINIMIZE CONSIDERED
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*ODDS Syst
UH-1-98-ASAM-01*

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NO

AMEMBASSY PORT LOUIS

SAO KUALA LUMPUR MY

AMEMBASSY KATHMANDU NP//POL-MIL//

UNCLAS PART 1 OF 2

SUBJECT - AVIATION SAFETY ACTION MESSAGE, MAINTENANCE MANDATORY,
RCS CSGLD-1860(R1), ALL UH-1 AND AH-1 SERIES AIRCRAFT, OIL DEBRIS
DETECTION SYSTEM (ODDS) CLEAN UP MESSAGE (UH-1-98-ASAM-01 AND
AH-1-98-ASAM-01) (TB 1-1520-243-20-25).

NOTE - THIS IS AN AVIATION SAFETY ACTION MESSAGE ISSUED IAW AR 95-1,
CHAPTER 6, 1 SEP 97. THIS MESSAGE HAS NOT BEEN TRANSMITTED TO UNITS
SUBORDINATE TO ADDRESSEES. ADDRESSEES SHOULD IMMEDIATELY RETRANSMIT
THIS MESSAGE TO ALL SUBORDINATE UNITS, ACTIVITIES OR ELEMENTS
AFFECTED OR CONCERNED. THE RETRANSMITTAL SHALL REFERENCE THE
MESSAGE. ACTION ADDRESSES WILL IMMEDIATELY VERIFY THIS TRANSMISSION
TO CDR, ANCOM, ATTN: AMSAM-SF-A (SOF COMPLIANCE OFFICER).

1. PRIORITY CLASSIFICATION -

1A. AIRCRAFT IN USE - UPON RECEIPT OF THIS MESSAGE THE
CONDITION STATUS SYMBOL OF THE CITED AIRCRAFT SHALL BE CHANGED TO
A RED HORIZONTAL DASH //-.//. THE RED HORIZONTAL DASH //-// MAY
BE CLEARED WHEN THE INSPECTION OF PARA 8 BELOW IS COMPLETED. THE

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4A. SINCE THE ODDS WAS FIELDDED, SEVERAL PROBLEMS HAVE SURFACED WITH THE INSTALLATION, OPERATION, AND MANUAL REFERENCES. EXPERIENCE WITH THE ODDS PROVIDED PRACTICAL INFORMATION WHICH NEEDS TO BE DISSEMINATED TO ODDS USERS. THIS ASAM ADDRESSES THE FOLLOWING TOPICS:

4A(1) ATCOM PROVIDED MAINTENANCE PROCEDURES FOR ODDS EQUIPPED AIRCRAFT VIA UH-1-95-ASAM-03 (TB 1-1520-243-20-23). REFERENCE 13B REQUIRES FURTHER UPDATE TO INCLUDE ALL OF THE ESSENTIAL INFORMATION OF UH-1-95-ASAM-03 (TB 1-1520-243-20-23) AND THIS MESSAGE. THE PROCEDURES USED TO TROUBLESHOOT THE ODDS SYSTEM, WHEN AN ENGINE OR TRANSMISSION CHIP SEGMENT LIGHT ILLUMINATES OR WHEN DEBRIS IS FOUND ON THE PRE-ODDS CHIP DETECTORS, HAVE BEEN MODIFIED.

4A(2) UNITS SHALL CONDUCT OIL SAMPLING OF THE ENGINE AND MAIN TRANSMISSION EVERY TWENTY FIVE FLIGHT HOURS. THIS INTERVAL SAMPLING WILL ALLOW MORE ACCURATE TRENDING CAPABILITY OF COMPONENT FAILURES THAN IS POSSIBLE WITH CURRENT PROCEDURES. SAMPLING DATA WILL BE USED TO ESTABLISH A BASELINE DATABASE FOR ODDS-EQUIPPED COMPONENTS, AND WILL PROVIDE A BASIS FOR FURTHER IMPROVEMENTS IN THE OIL ANALYSIS PROCESS (SUCH AS INCREASING SAMPLING INTERVALS, OR

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DEVELOPING IMPROVED OIL ANALYSIS TECHNIQUES). SAMPLING ALSO ALLOWS PHYSICAL PROPERTY TESTING USING NEW OIL LAB ANALYSIS TECHNIQUES. REPLACEMENT OF LUBRICANT WILL BE BASED ON TESTING, THEREFORE THE OIL CHANGE INTERVAL FOR THE TRANSMISSION AND ENGINE IS ELIMINATED.

4A(3) ATCOM HAS RECEIVED REPORTS OF IMPROPERLY SEATED V-BAND CLAMPS USED TO SECURE TRANSMISSION AND ENGINE OIL FILTER ASSEMBLY. AS THE OIL SYSTEM PRESSURIZES, THE FILTER BOWL CAN LEAK OR BECOME TOTALLY DISENGAGED FROM THE ASSEMBLY HOUSING.

4A(4) THE PUBLISHED INSTALLATION TORQUE OF THE ODDS CHIP DETECTOR VALVE ON THE 42 DEGREE AND 90 DEGREE GEARBOXES (45-55 INCH POUNDS) IS INCORRECT. THE CORRECT TORQUE VALUE SHOULD BE 90-110 INCH POUNDS.

4A(5) (UH-1 ONLY) ATCOM HAS RECEIVED REPORTS THAT THE WIRE FOR THE ENGINE CHIP DETECTOR, LOCATED ON THE FIREWALL MOUNTED LUBRICLONE FILTER ASSEMBLY, WAS ROUTED IN SUCH A WAY AS TO EXPOSE IT TO DAMAGE FROM ROUTINE MAINTENANCE. THE WIRE SHOULD BE ROUTED AND SECURED IN AN AREA THAT IS PROTECTED FROM INCIDENTAL DAMAGE.

4A(6) THE POWER MODULE PROVIDES THE VOLTAGE TO THE CHIP DETECTORS FOR FUSE BURN OFF. SOME POWER MODULES WERE INSTALLED

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WITH REVERSE ELECTRICAL POLARITY (POSITIVE AND NEGATIVE REVERSED). THE POWER MODULE WILL NOT FUNCTION WHEN INSTALLED WITH REVERSE POLARITY BECAUSE THE CAPACITORS BURN OUT IMMEDIATELY. FREQUENT CHIP LIGHTS MAY OCCUR IF THE POWER MODULE IS NOT FUNCTIONING PROPERLY. CURRENT MAINTENANCE DOES NOT REQUIRE REGULAR INSPECTION OF THE POWER MODULE UNLESS REQUIRED BY TROUBLESHOOTING PROCEDURES. THE TM WILL BE CHANGED TO ADD AN INSPECTION FOR CORRECT POLARITY OF THE POWER MODULE CONNECTIONS FOR FUTURE POWER MODULE REPLACEMENTS. ANOTHER PROBLEM REPORTED WITH THE POWER MODULE IS LEAKING CAPACITORS IN THE POWER MODULES WHICH CAUSE CORROSION INSIDE THE POWER MODULE AND LEAD TO FAILURE OF THE MODULE. LEAKING CAPACITORS CAN ONLY BE FOUND BY REMOVING THE COVER TO THE POWER MODULE. THE ODDS MANUFACTURER CAN REPLACE LEAKING CAPACITORS WITH MORE RELIABLE CAPACITORS WITHOUT REQUIRING TOTAL REPLACEMENT OF THE POWER MODULE.

4A(7) ATCOM RECEIVED REPORTS OF CHIP DETECTORS FOR BOTH THE ENGINE AND TRANSMISSION HAVING CHIPS WITH NO CORRESPONDING CHIP SEGMENT LIGHT. THIS ASAM ESTABLISHES A CONTINUITY INSPECTION OF THE CHIP DETECTOR CIRCUIT AT EACH PHASE TO RESOLVE THIS ISSUE. THE PHASE MANUALS WILL BE CHANGED TO REFLECT THIS INSPECTION.

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4A(8) (UH-1 ONLY) TM 55-1520-210-23P-1, SHOWS A 90 DEGREE FITTING AND A QUICK DISCONNECT FITTING ASSEMBLY AT THE ENGINE DECK ON THE OIL HOSE ASSEMBLY LEADING FROM THE FIREWALL MOUNTED LUBRICLONE FILTER ASSEMBLY. SOME ODS EQUIPPED AIRCRAFT HAVE THE 90 DEGREE FITTING INSTALLED AND SOME DO NOT. IN EITHER CASE, A SOLID 45 DEGREE BULKHEAD FITTING SHALL BE INSTALLED TO REPLACE THE ENGINE DECK QUICK DISCONNECT FITTING AND THE 90 DEGREE FITTING, IF IT IS INSTALLED.

4A(9) IMPLEMENT A RECURRING INSPECTION OF THE PRE-ODDS MAIN TRANSMISSION AND ENGINE ACCESSORY GEAR BOX (AGB) CHIP DETECTORS ON ODS EQUIPPED UH-1 HELICOPTERS AND THE ENGINE AGB CHIP DETECTOR ON AH-1 HELICOPTERS.

4A(10) CLARIFY MAINTENANCE REQUIREMENTS RELATED TO REPEATED CHIP SEGMENT LIGHT ILLUMINATION ON NEWLY OVERHAULED COMPONENTS.

4A(11) THE ODS CHIP DETECTORS USED ON THE ENGINE LUBRICLONE, THE 42 DEGREE GEARBOX, AND THE 90 DEGREE GEARBOX ARE SECURED BY SLOTS IN THE CHIP DETECTOR HOUSING AND PINS IN THE BASE. LEAKAGE IN THIS AREA MAY BE CAUSED BY WORN SLOTS AND LOOSE PINS. A RECURRING INSPECTION OF THESE ITEMS IS REQUIRED.

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4B. FOR MANPOWER/DOWNTIME AND FUNDING IMPACTS SEE PARA 12.

4C. THE PURPOSE OF THIS MESSAGE IS TO CORRECT DEFICIENCIES ASSOCIATED WITH THE ODDS INSTALLATION AND PROVIDE MAINTENANCE INFORMATION AND REQUIREMENTS FOR THE ODDS.

5. END ITEMS TO BE INSPECTED - ALL UH-1 AND AH-1 SERIES AIRCRAFT EQUIPPED WITH ODDS (REFERENCE 13D AND 13J). UH-1 NOT EQUIPPED WITH ODDS ARE NOT AFFECTED BY THIS MESSAGE.

6. ASSEMBLY COMPONENTS TO BE INSPECTED -

NOMENCLATURE	PART NO.	NSN
6A. UH-1 OIL DEBRIS DETECTION SYSTEM		
ENGINE ASSEMBLY	1-000-060-22	2840-00-134-4803
TRANSMISSION ASSY	204-040-016-5	1615-00-183-0834
42 DEGREE GEARBOX	204-040-003-37	1615-00-918-2676
90 DEGREE GEARBOX	204-040-012-13	1615-00-918-2677

6B. AH-1 OIL DEBRIS DETECTION SYSTEM

ENGINE ASSEMBLY	1-000-060-23	2840-00-621-1860
TRANSMISSION ASSY	212-040-001-39	1615-01-014-6006
42 DEGREE GEARBOX	212-040-003-23	1615-01-015-0584
90 DEGREE GEARBOX	212-040-004-9	1615-01-008-7748

7. PARTS TO BE INSPECTED -

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NOMENCLATURE	PART NO.	NSN
WIRE (UH-1 ONLY)	#W16A18	N/A
WIRE (UH-1 ONLY)	#W18B20	N/A
WIRE (UH-1 ONLY)	#W18C18	N/A
WIRE (UH-1 ONLY)	#W19A20	N/A
45 DEGREE FITTING (UH-1 ONLY)	AN837-12D	4730-00-194-1081
CHIP DETECTOR (UH-1 ONLY)	1B845	2995-01-336-8929
BOOY (UH-1 ONLY)	600609	4730-01-326-1388
POWER MODULE (UH-1 & AH-1)	E1131C	1615-01-330-5148
CHIP DETECTOR (UH-1 & AH-1)	1B833	1650-01-322-6652

8. INSPECTION PROCEDURES -

NOTE

PROCEDURES APPLICABLE TO A SPECIFIC MDS

WILL HAVE PARAGRAPH TITLES IDENTIFIED

(UH-1 ONLY) OR (AH-1 ONLY). UNMARKED

PARAGRAPHS ARE APPLICABLE TO BOTH AIRCRAFT.

PARAGRAPHS 8E, 8F, 8H, AND 8I(3) APPLY ONLY

TO UH-1 AIRCRAFT.

8A. CHIP LIGHT ILLUMINATION AND/OR DEBRIS EVALUATION

PROCEDURES - SEE PARAGRAPH 9A.

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8B. OIL SAMPLING AND OIL CHANGE INTERVAL - SEE PARAGRAPH 9B.

8C. V-BAND COUPLING - SEE PARAGRAPH 9C.

8D. CHIP DETECTOR TORQUE VALUE - SEE PARAGRAPH 9D.

8E. (UH-1 ONLY) ENGINE CHIP DETECTOR WIRE -

8E(1) GAIN ACCESS TO WIRE NUMBER W16A18, WHICH IS CONNECTED TO THE CHIP DETECTOR FOR THE FIREWALL MOUNTED LUBRICLONE FILTER ASSEMBLY. THIS IS THE WIRE THAT RUNS FROM THE CHIP DETECTOR ON THE OIL SEPARATOR (LUBRICLONE), ALONG THE FIRE WALL JOINING THE WIRE BUNDLE ABOVE AND INBOARD OF THE OIL FILTER ASSEMBLY.

8E(2) AS IT LEADS FROM THE CHIP DETECTOR, THIS WIRE SHOULD BE ROUTED IN THE SPACE BETWEEN THE FIREWALL AND THE FIREWALL MOUNTED LUBRICLONE/FILTER ASSEMBLY, SECURE WITH LOOP CLAMPS, AND SECURE TO THE WIRE BUNDLE WITH NYLON ZIP TIES. IT SHOULD NOT LOOP AROUND AFT OF THE FILTER ASSEMBLY OR SAG BELOW THE FILTER ASSEMBLY. IF THE WIRE IS NOT PROPERLY ROUTED AND SECURED, FOLLOW CORRECTION PROCEDURE OF PARAGRAPH 9E.

8F. (UH-1 ONLY) POWER MODULE -

8F(1) GAIN ACCESS TO THE POWER MODULE.

8F(2) DISCONNECT THE POWER MODULE CONNECTOR, M83723/86R-

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1212N, FROM THE POWER MODULE.

8F(3) ENERGIZE BATTERY OR APPLY EXTERNAL DC POWER.

8F(4) OBTAIN A DIGITAL VOLTMETER OR SIMILAR DEVICE AND SET IT TO A MINIMUM OF 35 VDC. CONNECT THE NEGATIVE (BLACK) TERMINAL OF A DIGITAL VOLTMETER OR SIMILAR DEVICE TO PIN 2 (CORRESPONDING TO WIRE NUMBER TDC102A20N). CONNECT THE POSITIVE LEAD OF THE DIGITAL VOLTMETER OR SIMILAR DEVICE TO PIN 1 (CORRESPONDING TO WIRE NUMBER TDC101A20).

8F(5) ENERGIZE THE ODOG CIRCUIT BREAKER IN THE OVERHEAD DC CIRCUIT BREAKER PANEL. THE VOLTMETER SHOULD READ A POSITIVE POLARITY OF APPROXIMATELY 28 VOLTS. IF THE POLARITY IS REVERSED, PROCEED WITH CORRECTIVE ACTIONS OF PARAGRAPH 9F. IF THE POLARITY IS CORRECT, DE-ENERGIZE THE CIRCUIT AND CONTINUE WITH THE POWER MODULE INSPECTION.

NOTE

TO ENSURE PROPER RE-ASSEMBLY, MARK POSITION OF COVER ON MOUNTING BASE WITH A GREASE PENCIL PRIOR TO REMOVING COVER.

8F(6) REMOVE MOUNTING BOLTS (ITEM 147, FIGURE 226, TM55-1520-210-23F-2) IN CABIN CEILING.

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NOTE

DO NOT COMPLETELY REMOVE THE POWER MODULE
COVER RETAINING SCREWS. THEY ARE DESIGNED
TO BE RETAINED IN THE BASE FOR RE-ASSEMBLY.

SF(7) LOOSEN THE FOUR LARGE PHILLIPS SCREWS (DO NOT
REMOVE THE SMALL SCREWS) LOCATED ON BACK OF POWER MODULE JUST
ENOUGH TO ALLOW THE COVER TO BE REMOVED.

NOTE

CAPACITORS IN OLD POWER MODULES WILL HAVE
A SILVER AND/OR DARK GRAY COLOR CAPACITOR.
THE REPAIRED POWER MODULES (WITH THE "R"
SUFFIX) WILL HAVE SILVER OR BLUE TINTED
CAPACITORS. ANY DISCOLORATION OF CAPACITORS
REQUIRES TROUBLESHOOTING.

SF(8) VISUALLY INSPECT CAPACITORS FOR EVIDENCE OF LEAKAGE.
WHITE POWDERY DEPOSITS AND CORROSION ON THE INSIDE OF THE COVER OR
ON CAPACITOR LEADS IS EVIDENCE OF LEAKAGE.

SF(9) IF LEAKAGE IS EVIDENT, CORRECT IAW PARAGRAPH 9F.

SF(10) IF NO LEAKAGE IS FOUND, CAREFULLY REPLACE COVER,
REINSTALL POWER MODULE, AND REINSTALL ELECTRICAL CONNECTOR MAKING

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NO

SURE POLARITY IS CORRECT IAW PARA SF(4).

8G. CHIP DETECTOR/DEBRIS MONITOR CONTINUITY CHECK -

NOTE

IF THE CHIP DETECTOR OR DEBRIS MONITOR IS COVERED WITH DEBRIS AND THE CORRESPONDING SEGMENT LIGHT DOES NOT ILLUMINATE, CALL THE TECHNICAL POC BEFORE CONTINUING WITH THIS INSPECTION.

8G(1) REMOVE ALL CHIP DETECTORS (42 DEGREE GEARBOX, 90 DEGREE GEARBOX, ENGINE LUBRICLONE DEBRIS MONITOR, AND TRANSMISSION DEBRIS MONITOR) FOR INSPECTION.

8G(2) INSPECT CHIP DETECTOR AND DEBRIS MONITOR FOR DEBRIS. EVALUATE DEBRIS IAW APPROPRIATE DEBRIS CLASSIFICATION CHART AND PARA 9A.

8G(3) PERFORM A CONTINUITY CHECK.

8G(3)(A) CLEAN ALL DEBRIS AND OIL FROM THE CHIP DETECTOR AND/OR DEBRIS MONITOR. ENERGIZE BATTERY OR APPLY EXTERNAL POWER. TURN ON THE CAUTION PANEL. PULL CIRCUIT BREAKER TO TURN THE ODDS POWER MODULE OFF. ENERGIZE THE CAUTION PANEL TEST SWITCH TO VERIFY OPERATION. REPLACE CAUTION PANEL OR

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SEGMENT LIGHT IF NECESSARY. WITH TEST SWITCH OFF, OBSERVE THE STATUS OF THE CORRESPONDING SEGMENT LIGHT (ENGINE CHIP DET OR XMSN CHIP DETECTOR). IF THE CORRESPONDING SEGMENT LIGHT IS ILLUMINATED, CALL THE TECHNICAL POC IN PARA 16A. IF THE CORRESPONDING LIGHT IS NOT ILLUMINATED, PROCEED TO NEXT STEP.

8G(3)(B) PUSH THE CIRCUIT BREAKER IN. APPLY A SHORT ACROSS THE CHIP DETECTOR/DEBRIS MONITOR TO FORCE ILLUMINATION OF THE LIGHT. IF THE LIGHT ILLUMINATES, THEN THE WIRING TO THE CAUTION PANEL IS FUNCTIONAL.

8G(3)(C) IF THE SEGMENT LIGHT DOES NOT ILLUMINATE AFTER SHORTING THE CHIP DETECTOR/DEBRIS MONITOR, THE WIRING OR THE CHIP DETECTOR IS NOT FUNCTIONAL AND REQUIRES TROUBLESHOOTING.

8H. (UH-1 ONLY) 90 DEGREE ENGINE DECK FITTING - SEE PARAGRAPH 9H.

NOTE

IF A 45 DEGREE BULKHEAD FITTING (AN837-12D) IS NOT AVAILABLE, THE AIRCRAFT STATUS SYMBOL SHALL REMAIN A RED HORIZONTAL DASH UNTIL A FITTING IS AVAILABLE AND THE CORRECTIVE ACTION IS ACCOMPLISHED IAW PARAGRAPH 9D.

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81. CHIP DETECTOR VISUAL AND RESISTANCE CHECK -

NOTE:

THIS INSPECTION PERTAINS ONLY TO THE PRE-ODDS
UH-1 AND AH-1 ENGINE AGB AND THE UH-1 MAIN
TRANSMISSION SUMP CHIP DETECTORS. DO NOT
REMOVE THE ODDS TRANSMISSION DEBRIS MONITOR
OR ENGINE LUBRICLONE CHIP DETECTORS FOR THIS
INSPECTION.

NOTE:

A LARGE AMOUNT OF DEBRIS (SMALL PARTICLES,
FUZZ, ETC.) MAY BE PRESENT THE FIRST TIME
THE OLD CHIP DETECTOR IS INSPECTED. THE
AMOUNT OF DEBRIS PRESENT WILL DEPEND ON THE
LENGTH OF TIME THE COMPONENT HAS BEEN IN
OPERATION SINCE THE CHIP DETECTOR WAS LAST
REMOVED. INITIALLY, INSPECT FOR LARGE
PARTICLES ONLY. DETERMINATION OF PARTICLE
SIZE IS A SUBJECTIVE DECISION WHICH CAN BE
AIDED BY USE OF THE DEBRIS CLASSIFICATION
CHARTS IN THE APPROPRIATE TM. IF NO LARGE

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NO

PARTICLES ARE PRESENT, WIPE THE DEBRIS FROM
THE CHIP DETECTOR AND INSTALL. IF LARGE
PARTICLES ARE PRESENT OR IF YOU HAVE QUESTIONS
CONCERNING THE SIZE OF THE PARTICLES, CONTACT
THE TECHNICAL POC.

8I(1) FOR THE INITIAL INSPECTION, REMOVE THE PRE-ODDS
CHIP DETECTOR IN THE TRANSMISSION SUMP AND IN THE ENGINE AGB, AS
APPLICABLE. INSPECT FOR DEBRIS.

8I(2) IF ANY LARGE PARTICLES ARE FOUND, CONTACT THE
TECHNICAL POC IN PARA 16A. IF NO DEBRIS IS FOUND, REINSTALL THE
CHIP DETECTORS.

8I(3) (UH-1 ONLY) FOR SUBSEQUENT TRANSMISSION SUMP
CHIP DETECTOR INSPECTIONS, REMOVE THE CHIP DETECTOR AND INSPECT
FOR DEBRIS. ANALYZE THE DEBRIS IAW THE APPROPRIATE TM
CLASSIFICATION CHART AND PARAGRAPH 9A. IF NO DEBRIS IS FOUND,
REINSTALL THE CHIP DETECTOR.

8I(4) FOR THE INITIAL INSPECTION, CHECK THE RESISTANCE
OF THE ENGINE AGB CHIP DETECTOR IAW REFERENCE 13E, TASK 5-9. IF
RESISTANCE IS LESS THAN 400,000 OHMS, REPLACE THE CHIP DETECTOR.

8I(5) FOR SUBSEQUENT ENGINE AGB CHIP DETECTOR

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INSPECTION, CHECK THE RESISTANCE OF THE CHIP DETECTOR IAW REFERENCE 13E, TASK 5-9. IF RESISTANCE IS LESS THAN 400,000 OHMS REMOVE THE CHIP DETECTOR AND INSPECT FOR DEBRIS. ANALYSE DEBRIS IAW THE APPROPRIATE TM DEBRIS CLASSIFICATION CHART AND PARA 9A. IF RESISTANCE IS GREATER THAN 400,000 OHMS, THE CHIP DETECTOR DOES NOT NEED TO BE REMOVED. THE INSPECTION IS COMPLETE.

8J. REPETITIVE CHIP LIGHT ILLUMINATIONS - WEAR IN PARTICLES AND DEBRIS FROM THE MANUFACTURING PROCESS OF NEWLY OVERHAULED ASSEMBLIES CAN CAUSE REPETITIVE (THREE OR MORE) CHIP LIGHT INDICATIONS UNTIL THE PARTICLES AND DEBRIS IS FLUSHED FROM THE SYSTEM. IF REPETITIVE CHIP LIGHT INDICATIONS OCCUR AFTER THE INSTALLATION OF NEWLY OVERHAULED COMPONENTS, PERFORM THE CORRECTION PROCEDURES OF PARAGRAPH 9J.

8K. (UH-1 ONLY) CHIP DETECTOR WEAR -

8K(1) GAIN ACCESS TO THE ENGINE CHIP DETECTOR ON THE LUBRICLONE, THE 90 DEGREE GEARBOX CHIP DETECTOR, AND THE 42 DEGREE GEARBOX CHIP DETECTOR.

8K(2) REMOVE THE CHIP DETECTOR (ITEM 3, FIGURE 98C, TM 55-1520-210-23P-1), AND THE PROBES (ITEM 5C, FIGURE 181, AND ITEM 3D, FIGURE 184).

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8K(3) INSPECT THE THREE MOUNTING GROOVES FOR WEAR AT THE DETENT. USING A CALIPER, OR SIMILAR MEASURING DEVICE, MEASURE THE WALL THICKNESS AT THE BOTTOM OF THE DETENT. THE MINIMUM WALL THICKNESS SHOULD BE 0.030 INCH.

8K(4) IF THE WALL THICKNESS OF THE DETENT IS LESS THAN 0.030 INCH, PROCEED WITH THE CORRECTION OF PARAGRAPH 9K.

8K(5) CHECK THE 3 PINS LOCATED IN THE CHIP DETECTOR BODY (ITEM 5, FIG 98C), AND BOTH OF THE CHIP DETECTOR VALVES (ITEM 5B, FIGURE 181, AND ITEM 3C, FIGURE 184) FOR SECURITY.

8K(6) IF THE PINS ARE LOOSE, PROCEED WITH THE CORRECTION OF PARAGRAPH 9K.

9. CORRECTION PROCEDURES -

NOTE

A FLICKERING OR INTERMITTENT CHIP LIGHT MAY RESULT WHEN THE CHIP DETECTOR BURN OFF FEATURE IS ACTIVATED BY THE PRESENCE OF DEBRIS ON THE CHIP DETECTOR GAP. WHEN DEBRIS BRIDGES THE GAP, A SMALL CHARGE IS RELEASED IN AN ATTEMPT TO CLEAR THE GAP OF ANY INSIGNIFICANT-SIZED PARTICLES. IN SOME

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NO

INSTANCES SEVERAL BURN-OFF EVENTS OCCUR BEFORE THE GAP IS CLEARED. THESE MULTIPLE EVENTS MAY CAUSE THE CHIP LIGHT TO FLICKER. IF THE GAP IS SUCCESSFULLY CLEARED OF DEBRIS, THE LIGHT WILL REMAIN OFF. IF FLICKERING OCCURS BUT THE CHIP LIGHT REMAINS OFF, NO FURTHER ACTION IS REQUIRED.

9A. CHIP LIGHT ILLUMINATION AND/OR DEBRIS EVALUATION PROCEDURES. THE FOLLOWING CHANGES APPLY TO THE PROCEDURES USED IN THE EVENT OF A CHIP DETECTOR SEGMENT LIGHT ILLUMINATION, OR WHEN CHIPS ARE FOUND ON THE PRE-ODDS TRANSMISSION SUMP AND ENGINE AGB CHIP DETECTORS ON ODDS EQUIPPED AIRCRAFT. THE PROCEDURES OUTLINED IN REFERENCE 13B SHOULD BE APPENDED WITH THESE CHANGES.

9A(1) ELIMINATE THE REQUIREMENT TO DISCARD THE OIL COOLER WHEN DEBRIS IS FOUND.

NOTE

ALTHOUGH DEBRIS ON A CHIP DETECTOR MAY BE PRESENT IN SUFFICIENT QUANTITIES TO BRIDGE THE CHIP DETECTOR GAP AND CAUSE A CHIP LIGHT, THERE MAY NOT BE SUFFICIENT DEBRIS TO PROVIDE ELECTRICAL CONTINUITY. THE CONTINUITY CHECK

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NO

(PARAGRAPH 8G) IS THE AUTHORIZED METHOD FOR DETERMINING IF THE CHIP DETECTOR IS FUNCTIONING PROPERLY.

NOTE

DOCUMENT THE FINDINGS ON DA FORM 2408-20, BLOCK 7 (AMOUNT OF DEBRIS (LIGHT OR MEDIUM) AND TYPE OF DEBRIS) USING DESCRIPTION ON OIL DEBRIS CLASSIFICATION CHART.

9A(2) (UE-1 ONLY) WHEN EVALUATING TRANSMISSION DEBRIS, REMOVE THE PRE-ODDS CHIP DETECTOR IN THE TRANSMISSION SUMP, TRANSMISSION DEBRIS MONITOR AND SCREEN, AND OIL FILTER TO INSPECT FOR DEBRIS.

9A(3) WHEN EVALUATING ENGINE DEBRIS, REMOVE THE ENGINE CYCLONIC DEBRIS MONITOR, BOTH ENGINE FILTERS (ENGINE MOUNTED FILTER AND AIRFRAME MOUNTED 3 MICRON FILTER), AND OIL STRAINERS TO INSPECT FOR DEBRIS. REMOVE THE PRE-ODDS ENGINE AGB CHIP DETECTOR ONLY IF REQUIRED AFTER PERFORMING THE RESISTANCE CHECK IAW PARA 8I(4). SEE PARAGRAPH 9A(7) FOR PROCEDURES AT REMOTE SITES.

9A(4) FOR 42 DEGREE AND 90 DEGREE GEARBOX CHIP SEGMENT LIGHT ILLUMINATION - REMOVE THE CHIP DETECTOR TO INSPECT FOR DEBRIS.

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NO

DRAIN THE OIL FROM THE 42 DEGREE OR 90 DEGREE GEARBOX THROUGH CLEAN CHEESECLOTH TO RECOVER DEBRIS.

9A(5) CONDUCT DEBRIS ANALYSIS IAW THE APPROPRIATE TM CRITERIA ON ALL DEBRIS FOUND, REGARDLESS OF THE SOURCE (E.G. DEBRIS FROM CHIP DETECTOR, FILTER, SCREEN, ETC.)

9A(6) IF DEBRIS EXCEEDS ANY OF THE LIMITS IN THE APPROPRIATE TM OIL DEBRIS CLASSIFICATION CHART, REPLACE THE COMPONENT. IF THE DEBRIS DOES NOT EXCEED THESE LIMITS, PERFORM A SERVICEABILITY CHECK TO DETERMINE IF CONTINUED OPERATION OF THE COMPONENT IS LIKELY TO RESULT IN CONTINUED DEBRIS GENERATION. SERVICEABILITY CHECKS FOR THE 42 DEGREE AND 90 DEGREE GEARBOXES AND FOR ODDS EQUIPPED MAIN TRANSMISSIONS AND ENGINES SHOULD BE PERFORMED AS FOLLOWS:

9A(6)(A) ELIMINATE THE REQUIREMENT TO CHANGE THE ENGINE OR MAIN TRANSMISSION OIL BEFORE PERFORMING THE SERVICEABILITY CHECK.

9A(6)(B) THE OIL IN THE 42 DEGREE AND 90 DEGREE GEARBOXES SHALL BE DRAINED AND REPLACED.

9A(6)(C) CHECK FILTER FOR BYPASS, IF APPLICABLE.

9A(6)(D) CLEAN AND REINSTALL ALL SCREENS, CHIP

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DETECTORS, AND DEBRIS MONITORS AFTER DEBRIS HAS BEEN COLLECTED.
SERVICE COMPONENTS IF REQUIRED.

9A(6)(E) START AND OPERATE THE ENGINE AT FLIGHT
IDLE UNTIL COMPONENT OIL TEMPERATURES STABILISE.

9A(6)(F) HOVER THE AIRCRAFT FOR 30 MINUTES. SEE
PARAGRAPH 9A(7) FOR PROCEDURES AT REMOTE SITES.

9A(6)(G) IF THE CHIP SEGMENT LIGHT ILLUMINATES
DURING THE HOVER CHECK, REPLACE THE COMPONENT.

9A(6)(H) IF NO CHIP LIGHT INDICATIONS OCCUR,
REMOVE ALL FILTERS, SCREENS, CHIP DETECTORS, AND DEBRIS MONITORS
TO INSPECT FOR DEBRIS.

9A(6)(I) IF THE AMOUNT OF DEBRIS FOUND AFTER THE
HOVER CHECK IS NOTICEABLY LESS THAN THE ORIGINAL AMOUNT OF DEBRIS,
AND NO CHIP LIGHT OCCURS, RETURN THE AIRCRAFT TO SERVICE.

9A(6)(J) IF THE AMOUNT OF DEBRIS AFTER THE HOVER
CHECK IS THE SAME OR INCREASES, REPLACE THE COMPONENT.

9A(7) SHOULD THE ILLUMINATION OF A CHIP SEGMENT LIGHT
RESULT IN A PRECAUTIONARY LANDING AT A REMOTE SITE, PERFORM A
SERVICEABILITY CHECK IAW PARAGRAPH 9A(6) TO CLEAR THE AIRCRAFT
FOR A ONE TIME FLIGHT TO BASE. REDUCE THE HOVER TIME OF PARAGRAPH

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NO

9A(6)(F) TO TEN MINUTES. SAFETY WIRE REMOVED FOR THE INSPECTION AT THE REMOTE SITE NEED NOT BE REINSTALLED FOR THE ONE TIME FLIGHT. INSTALL SAFETY WIRE UPON ARRIVAL AT BASE. IF ANY MAINTENANCE REQUIREMENT OF PARAGRAPH 9A(6) CANNOT READILY BE ACCOMPLISHED AT THE REMOTE SITE, REMOVE ONLY THE DEBRIS MONITORS AND/OR CHIP DETECTORS. CONDUCT A COMPLETE SERVICEABILITY CHECK IAW PARAGRAPH 9A(6) UPON RETURN TO BASE.

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NO

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AMEMBASSY KATEMANDU NP//POL-MIL//

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9B. OIL SAMPLING AND OIL CHANGE INTERVAL -

9B(1) OIL SAMPLING IS REQUIRED FOR ODDS EQUIPPED MAIN TRANSMISSION AND ENGINES AT A 25 FLIGHT HOUR INTERVAL. SAMPLING SHALL BE ACCOMPLISHED IAW REFERENCE 13F USING THE SAME LOCATION AND TECHNIQUES AS FOR NON-ODDS COMPONENTS. UNITS SHALL INDICATE, IN THE REMARKS SECTION OF DO FORM 2026, THAT THE COMPONENT HAS ODDS INSTALLED.

9B(2) ELIMINATE THE SCHEDULED OIL CHANGE INTERVALS FOR THE MAIN TRANSMISSION OR ENGINE OIL. OIL CHANGES SHOULD ONLY BE ACCOMPLISHED WHEN REQUIRED AS THE RESULT OF OTHER MAINTENANCE ACTIONS. INITIATE OIL SAMPLING OF THE ENGINE AND MAIN TRANSMISSION EVERY 25 FLIGHT HOURS. WHEN LABORATORY RESULTS INDICATE COMPONENT REMOVAL, CONTACT THE TECHNICAL POC LISTED IN PARAGRAPH 16A PRIOR TO REMOVING COMPONENT.

9C. V-BAND CLAMP - REFERENCE 13B WILL BE CHANGED TO ADD THE FOLLOWING CAUTION DIRECTLY BEFORE THE INSTALLATION PROCEDURES OF

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NO

THE V-BAND CLAMPS FOR THE ENGINE AND TRANSMISSION OIL FILTER
ASSEMBLIES:

CAUTION

ENSURE THAT THE V-BAND COUPLING IS PROPERLY
SEATED FOR THE FULL CIRCUMFERENCE OF THE FILTER
BOWL AND FILTER HEAD FLANGE. THE V-BAND COUPLING
SHOULD NOT APPEAR COCKED. IMPROPERLY INSTALLED
CLAMPS WILL RESULT IN DAMAGE TO THE FILTER HEAD,
FILTER BOWL, COUPLING, AND WILL CAUSE LEAKS.

9D. CHIP DETECTOR TORQUE VALUE -

9D(1) GAIN ACCESS TO 42 DEGREE AND 90 DEGREE GEARBOX ODDS
CHIP DETECTORS.

9D(2) DISCONNECT CONNECTOR AND WIRE AND REMOVE LOCKWIRE.

9D(3) TORQUE CHIP DETECTOR VALVE TO 90-110 INCH POUNDS.

9D(4) INSTALL NEW LOCKWIRE. RECONNECT CONNECTOR AND WIRE.

9E. (UH-1 ONLY) ENGINE CHIP DETECTOR WIRE -

9E(1) LOCATE CHIP DETECTOR WIRE W16A18 IN THE SPACE
BETWEEN THE FIREWALL AND THE OIL SEPARATOR LUBRICLONE FILTER
ASSEMBLY. DEPENDING ON ITS CURRENT ROUTING, IT MAY BE NECESSARY
TO TEMPORARILY DISCONNECT THE CONNECTOR AT THE CHIP DETECTOR AND

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NO

LOOSEN OR REMOVE THE LOOP CLAMPS, IF INSTALLED.

9E(2) THE CHIP DETECTOR WIRE MAY NEED TO BE SHORTENED AFTER IT IS RELOCATED. EXCESS WIRE COULD BE DAMAGED DURING MAINTENANCE.

9E(3) RECONNECT THE CONNECTOR AT THE CHIP DETECTOR AND INSTALL OR REINSTALL THE APPROPRIATE SIZE LOOP CLAMPS. SECURE THE CHIP DETECTOR WIRE TO THE WIRE BUNDLE USING NYLON ZIP TIES, IF NOT ALREADY INSTALLED.

9F. (UH-1 ONLY) POWER MODULE -

NOTE

REMOVE AND REPAIR OR REPLACE THE POWER MODULE IF FOUND INOPERABLE. THE AIRCRAFT SHALL BE REPORTED AS FULLY MISSION CAPABLE UNTIL THE POWER MODULE IS REPLACED OR REPAIRED. THE CAUTION PANEL CHIP DETECTOR SEGMENT LIGHTS MAY DISPLAY FREQUENT CHIP LIGHTS DUE TO FUZZ ON THE CHIP DETECTORS DURING THIS PERIOD.

9F(1) IF THE INSPECTION RESULTS SHOW THAT THE POLARITY TO THE POWER MODULE IS REVERSED OR, THAT THE CAPACITORS HAVE LEAKED, REPLACE THE CURRENT POWER MODULE WITH A SERVICEABLE POWER

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NO

MODULE IAW THE PROCEDURE DESCRIBED IN PARA 9F(4) AND REINSTALL.

9F(2) ENSURE THE CORRECT WIRE NUMBERS ARE INSERTED INTO THE CORRECT CONNECTOR PIN NUMBERS. CHECK THE WIRING FROM THE CONNECTOR TO THE CIRCUIT BREAKER PANEL AND TB2. THE PROPER CONNECTIONS ARE AS FOLLOWS:

WIRE NO.	ODDS CONNECTOR PIN NO.	CONNECTED TO
TDC101A20	1	ODDS CIRCUIT BREAKER
TDC102A20W	2	TB2

CORRECT WIRING CONFIGURATION DISCREPANCIES AS NECESSARY.

9F(3) RECONNECT CONNECTOR TO NEW POWER MODULE.

9F(4) REPLACE POWER MODULE IAW THE FOLLOWING PROCEDURE:

9F(4)(A) CALL MR. MIKE TIERNEY AT TEDECO 610/583-9400, EXTENSION 349.

9F(4)(B) COORDINATE SHIPMENT, REPAIR, AND RETURN DIRECTLY WITH TEDECO.

9F(4)(C) TOTAL COST OF SHIPMENT AND REPAIR IS \$725.00. THE UNIT IS RESPONSIBLE FOR THE COST OF SHIPMENT AND REPAIR.

9F(4)(D) AFTER REPAIR, THE POWER MODULE PART NUMBER WILL BE ANNOTATED WITH AN "R" SUFFIX TO IDENTIFY THAT NEW CAPACITORS WERE INSTALLED.

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MODULE IAW THE PROCEDURE DESCRIBED IN PARA 9F(4) AND REINSTALL.

9F(2) ENSURE THE CORRECT WIRE NUMBERS ARE INSERTED INTO THE CORRECT CONNECTOR PIN NUMBERS. CHECK THE WIRING FROM THE CONNECTOR TO THE CIRCUIT BREAKER PANEL AND TS2. THE PROPER CONNECTIONS ARE AS FOLLOWS:

WIRE NO.	ODDS CONNECTOR PIN NO.	CONNECTED TO
TDC101A20	1	ODDS CIRCUIT BREAKER
TDC102A20W	2	TS2

CORRECT WIRING CONFIGURATION DISCREPANCIES AS NECESSARY.

9F(3) RECONNECT CONNECTOR TO NEW POWER MODULE.

9F(4) REPLACE POWER MODULE IAW THE FOLLOWING PROCEDURE:

9F(4)(A) CALL MR. MIKE TIERNEY AT TEDECO 610/583-9400, EXTENSION 349.

9F(4)(B) COORDINATE SHIPMENT, REPAIR, AND RETURN DIRECTLY WITH TEDECO.

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NO

9G. CHIP DETECTOR/DEBRIS MONITOR CONTINUITY CHECK -
TROUBLESHOOT CHIP DETECTOR/DEBRIS MONITOR CIRCUIT IF REQUIRED BY
THE INSPECTION OF PARAGRAPH 8G. AFTER INITIAL COMPLIANCE WITH
THIS ASAM, PERFORM THE CONTINUITY CHECK AT EACH PHASE INSPECTION.

9H. (UH-1 ONLY) 90 DEGREE ENGINE DECK FITTING - THE ITEM
AND FIGURE NUMBERS LISTED IN THE FOLLOWING PARAGRAPHS REFER TO TM
55-1520-210-23P-1.

NOTE

OIL LINES WHICH HAVE BEEN INSTALLED, EXPOSED
TO HEAT AND STRESS FOR ANY LENGTH OF TIME, MAY
TAKE A NATURAL SET. IT MAY BE DIFFICULT TO
BEND THE HOSE FOR PROPER ALIGNMENT. CAP LINES
WHEN DISCONNECTED TO PREVENT CONTAMINATION.

9H(1) GAIN ACCESS TO LEFT SIDE OF ENGINE.

9H(2) LOCATE OIL LINE (P/N 2E2517) RUNNING FROM FIREWALL
MOUNTED LUBRICLONE FILTER ASSEMBLY TO THE QUICK DISCONNECT FITTING
AT THE ENGINE DECK.

9H(3) DRAIN OIL FROM THE OIL LINE (P/N 2E2517, ITEM 172B,
FIGURE 98, TM 55-1520-210-23P-1) BY LOOSENING THE B-NUT AT THE OIL
FILTER ASSEMBLY AND REMOVING THE OIL LINE (ITEM 32, FIGURE 122) ON

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NO

THE UNDERSIDE OF THE ENGINE DECK AT THE BULKHEAD QUICK DISCONNECT FITTING TO PREVENT SPILLAGE DURING REPLACEMENT. IF NEEDED, REPLENISH OIL RESERVOIR AFTER PROCEDURE IS COMPLETED.

9H(4) REMOVE STAND-OFFS (MADE UP OF ITEMS 172C, 172D, 172E, 172V, AND 218). DISCONNECT THE OIL LINE (P/N 2E2517) FROM THE BULKHEAD QUICK DISCONNECT FITTING (P/N 205-063-602-5, ITEM 168) AT THE ENGINE DECK. REMOVE AND DISCARD ANY 90 DEGREE FITTINGS (P/N AN939D12, ITEM 170) IF INSTALLED BETWEEN THE OIL LINE AND THE QUICK DISCONNECT.

9H(5) REMOVE AND DISCARD THE BULKHEAD QUICK DISCONNECT FITTING.

9H(6) USING EXISTING NUT AND WASHER, INSTALL 45 DEGREE BULKHEAD FITTING (P/N AN837-12D) AT THE ENGINE DECK. DO NOT TIGHTEN NUT. THE FITTING SHOULD BE FREE TO ROTATE FOR FINAL ALIGNMENT.

9H(7) TO ALLOW FOR PROPER POSITIONING OF THE OIL LINE (ITEM 172B, FIGURE 98), LOOSEN THE 45 DEGREE FITTING (P/N AN837-12D, ITEM 172Q) AT THE FIREWALL MOUNTED LUBRICLONE FILTER ASSEMBLY SO THAT IT IS FREE TO ROTATE.

9H(8) CONNECT OIL LINE (ITEM 172B) TO THE ENGINE DECK 45 DEGREE BULKHEAD FITTING. ADJUST THE 45 DEGREE FITTINGS TO

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NO

POSITION THE HOSE IN SUCH A WAY TO PREVENT TWISTING OR KINKS.
MAKE SURE THAT THE HOSE IS CLEAR OF ALL OBSTRUCTIONS (E.G. THE
ENGINE MOUNT TUBE, THROTTLE LINKAGE, ETC.)

9H(9) REINSTALL STAND OFFS (MADE UP OF ITEMS 172C, 172D,
172E, 172V, AND 218) IF NEEDED.

9H(10) TIGHTEN ALL HOSE CONNECTIONS AND FITTINGS TO
PROPER TORQUE VALUES. ATTACH OIL LINE (ITEM 32, FIGURE 122)
BENEATH ENGINE DECK TO THE BULKHEAD FITTING AND TORQUE. IF
NEEDED, REPLENISH OIL RESERVOIR AFTER PROCEDURE IS COMPLETE.

9H(11) TM 55-1520-210-23P-1 WILL BE CHANGED TO DELETE
ALL REFERENCE TO ITEMS 167, 168, 169, 170, AND 171 IN FIGURE 98 AND
REPLACED WITH ELBOW 45 DEGREE, ITEM 172Q. ITEM 25 IN FIGURE 122
BE DELETED AND REPLACED WITH ELBOW 45 DEGREE (SAME AS ITEM 172Q IN
FIGURE 98.)

9I. CHIP DETECTOR VISUAL AND RESISTANCE CHECK - REPLACE
COMPONENTS IF REQUIRED DUE TO THE RESULTS OF THE PARA 8I
INSPECTION. ENSURE THE NEW CHIP DETECTOR RESISTANCE IS GREATER
THAN 400,000 OHMS. AFTER INITIAL COMPLIANCE WITH THIS ASAM
PERFORM THIS INSPECTION EVERY 25 FLIGHT HOURS ONLY ON HELICOPTERS
EQUIPPED WITH THE ODDS.

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NO

9J. REPETITIVE CHIP LIGHT ILLUMINATIONS - IF CHIP LIGHTS OCCUR AFTER INSTALLATION OF NEWLY OVERHAULED ASSEMBLIES PERFORM THE FOLLOWING PROCEDURE:

9J(1) MONITOR THE AMOUNT OF DEBRIS FOUND ON THE CHIP DETECTOR.

9J(2) IF THE AMOUNT OF DEBRIS INCREASES OR THE CAUSE OF THE DEBRIS IS UNCLEAR, CONTACT THE TECHNICAL POC IN PARA 16A FOR ASSISTANCE.

9J(3) IF THE AMOUNT OF DEBRIS DECREASES, WHICH INDICATES THAT WEAR IN PARTICLES AND DEBRIS FROM THE OVERHAUL PROCESS IS DIMINISHING, THE ASSEMBLY MAY BE LEFT IN SERVICE.

9J(4) PERFORM A DRAIN AND FLUSH OF THE LUBRICATION SYSTEM FOR THE AFFECTED ASSEMBLY IAW APPROPRIATE TM PROCEDURES.

9J(5) IF THE ENGINE LUBRICATION SYSTEM IS DRAINED AND FLUSHED, DRAINING OF THE LUBRICLONE IS REQUIRED.

NOTE

REMOVAL OF THE ENTIRE DRAIN VALVE IS REQUIRED TO REMOVE ALL RESIDUAL SLUDGE IN THE BOTTOM OF THE LUBRICLONE.

9J(5)(A) REMOVE THE LOCKWIRE SECURING THE DRAIN

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VALVE (ITEM 9, FIGURE 98C, TM55-1520-210-23P-1; ITEM 9, FIGURE 53D, TM 55-1520-236-23P-1).

9J(5)(B) USE A SMALL CONTAINER TO CATCH THE OIL, REMOVE THE ENTIRE DRAIN VALVE FROM THE LUBRICLONE ASSEMBLY. THIS WILL DRAIN THE ASSEMBLY.

9J(5)(C) INSTALL DRAIN VALVE. TORQUE DRAIN VALVE TO 16-20 INCH POUNDS. INSTALL LOCKWIRE.

9K. (UH-1 ONLY) CHIP DETECTOR WEAR -

9K(1) REPLACE ANY CHIP DETECTOR, CHIP DETECTOR BODY, CHIP DETECTOR PROBE, OR CHIP DETECTOR VALVE WHICH FAILS THE INSPECTION OF PARAGRAPH 8K.

9K(2) REPEAT THIS INSPECTION AT EACH PHASE INSPECTION.

10. SUPPLY/PARTS AND DISPOSITION -

10A. PARTS REQUIRED - ITEMS CITED IN PARAGRAPHS 6 AND 7 MAY BE REQUIRED TO REPLACE DEFECTIVE ITEMS.

10B. REQUISITIONING INSTRUCTIONS - REQUISITION REPLACEMENT PARTS USING NORMAL SUPPLY PROCEDURES.

10C. BULK AND CONSUMABLE MATERIALS - N/A.

10D. DISPOSITION -

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10D(1) IF ODS CHIP DETECTORS ARE FOUND DEFECTIVE
CALL THE LOGISTICS POC IN PARA 16B.

10D(2) DISPOSE OF OTHER REMOVED PARTS/COMPONENTS
USING NORMAL SUPPLY PROCEDURES. A QDR IS NOT REQUIRED.

10E. DISPOSITION OF HAZARDOUS MATERIAL - IAW ENVIRONMENTAL
PROTECTIVE AGENCY DIRECTIVES AS IMPLEMENTED BY YOUR SERVICING
ENVIRONMENTAL COORDINATOR (AR 200-1).

11. SPECIAL TOOLS AND FIXTURES REQUIRED - AS REQUIRED.

12. APPLICATION -

12A. CATEGORY OF MAINTENANCE - AVUM. AIRCRAFT DOWNTIME
WILL BE CHARGED TO AVUM.

12B. ESTIMATED TIME REQUIRED -

12B(1) MAXIMUM TOTAL OF 8 MAN-HOURS USING 1 PERSON.

12B(2) TOTAL OF 8 HOURS DOWNTIME FOR ONE END ITEM.

12C. ESTIMATED COST IMPACT TO THE FIELD - N/A.

12D. TB/MNOS TO BE APPLIED PRIOR TO OR CONCURRENTLY WITH
THIS INSPECTION - TB 1-1520-243-20-23.

12E. PUBLICATIONS WHICH REQUIRE CHANGE AS A RESULT OF THIS
INSPECTION - THE FOLLOWING PUBLICATIONS WILL BE CHANGED TO
REFLECT THIS MESSAGE. A COPY OF THIS MESSAGE SHALL BE INSERTED

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NO

IN THE APPROPRIATE TM AS AUTHORITY TO IMPLEMENT THE CHANGE UNTIL
THE PRINTED CHANGE IS RECEIVED.

12X(1) TM 55-1520-210-23P SERIES.

12X(2) TM 55-1520-210-23 SERIES.

12X(3) TM 55-1520-210-PM.

12X(4) TM 55-1520-236-23P SERIES.

12X(5) TM 55-1520-236-23 SERIES.

12X(6) TM 55-1520-244-PM.

13. REFERENCES -

13A. TM 55-1520-210-23P SERIES.

13B. TM 55-1520-210-23-1.

13C. TM 55-1520-210-PM.

13D. MWO 1-1520-242-50-2.

13E. TM 55-2840-229-23-1.

13F. TB 43-0106.

13G. TM 55-1520-236-23P SERIES.

13H. TM 55-1520-236-23 SERIES.

13I. TM 55-1520-244-PM.

13J. MWO 1-1520-236-50-30.

13K. TB 1-1520-243-20-23.

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