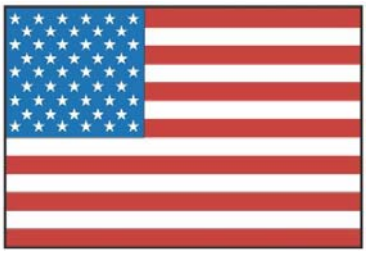
U.S. Department of Transportation
Federal Aviation Administration

AFS-600
Regulatory Support Division

ADVISORY CIRCULAR

43-16A

AVIATION MAINTENANCE ALERTS



ALERT NUMBER 388

NOVEMBER 2010

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U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION
WASHINGTON, DC 20590

AVIATION MAINTENANCE ALERTS

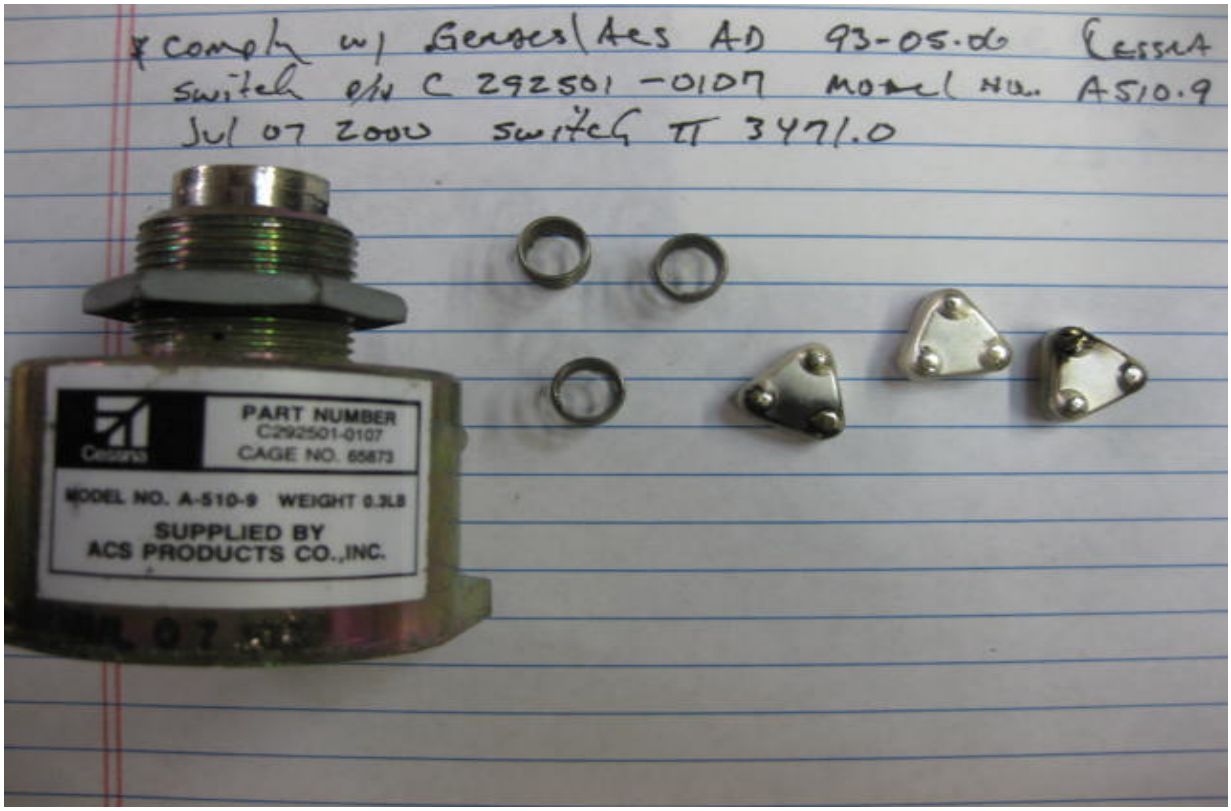
The Aviation Maintenance Alerts provides the aviation community with an economical means to exchange service experiences and to assist the FAA in improving aeronautical product durability, reliability, and safety. We prepare this publication from information operators and maintenance personnel who maintain civil aeronautical products pertaining to significant events or items of interest. At the time we prepared this document, we have not fully evaluated the material. As we identify additional facts such as cause and corrective action, we may publish additional data in subsequent issues of the Alerts. This procedure gives Alerts' readers prompt notice of conditions reported to the FAA Service Difficulty Reporting System (SDRS). We welcome your participation, comments, and suggestions for improvement. Send to: FAA; ATTN: Aviation Data Systems Branch (AFS-620); P.O. Box 25082; Oklahoma City, OK 73125-5029.

(Editor's notes are provided for editorial clarification and enhancement within an article. They will always be recognized as italicized words bordered by parentheses.)

AIRPLANES

Cessna: 172S; Failed Ignition Switch; ATA 7430

A submitter states, "The ACS/Gerdes ignition switch *(on this aircraft)* has never been inspected in accordance with Cessna SEB91-5R1 *(bulletin)* to comply with Airworthiness Directive 93-05-06. Upon disassembly of the switch, the circuit board plate was found to be severely worn, and one contact point was burned. *(This)* contact cup was burned completely through, creating a hole in the contact point. The screw heads holding the body of the switch to the terminal board assembly were painted red—as required by SEB91-5R1 and as described by identification of a factory new switch. However, there was no visible grease on the cups or the circuit board. Discussions with other mechanics and inspectors *(causes)* me to believe this AD is overlooked due in part to mechanics assuming no AD exists for switches manufactured after 1993. The text of the Airworthiness Directive as well as the text in SEB91-5R1 and ACS Service Bulletin SB92-01 do not support this assumption. I have three other aircraft of the same vintage (Cessna 172S) due for inspections in this shop with no documentation of Compliance with this recurring AD."


comply w/ Gerges/Aes AD 93-05-06 Cessna
switch p/n C 292501 -0107 Model No. A510.9
Jul 07 2000 switch TT 3471.0
PART NUMBER
C292501-0107
CAGE NO. 65873
MODEL NO. A-510-9 WEIGHT 0.3LB
SUPPLIED BY
ACS PRODUCTS CO.,INC.

ACS Products Co., Inc.
A-3770
Ignition Switch Service Kit
$46.20

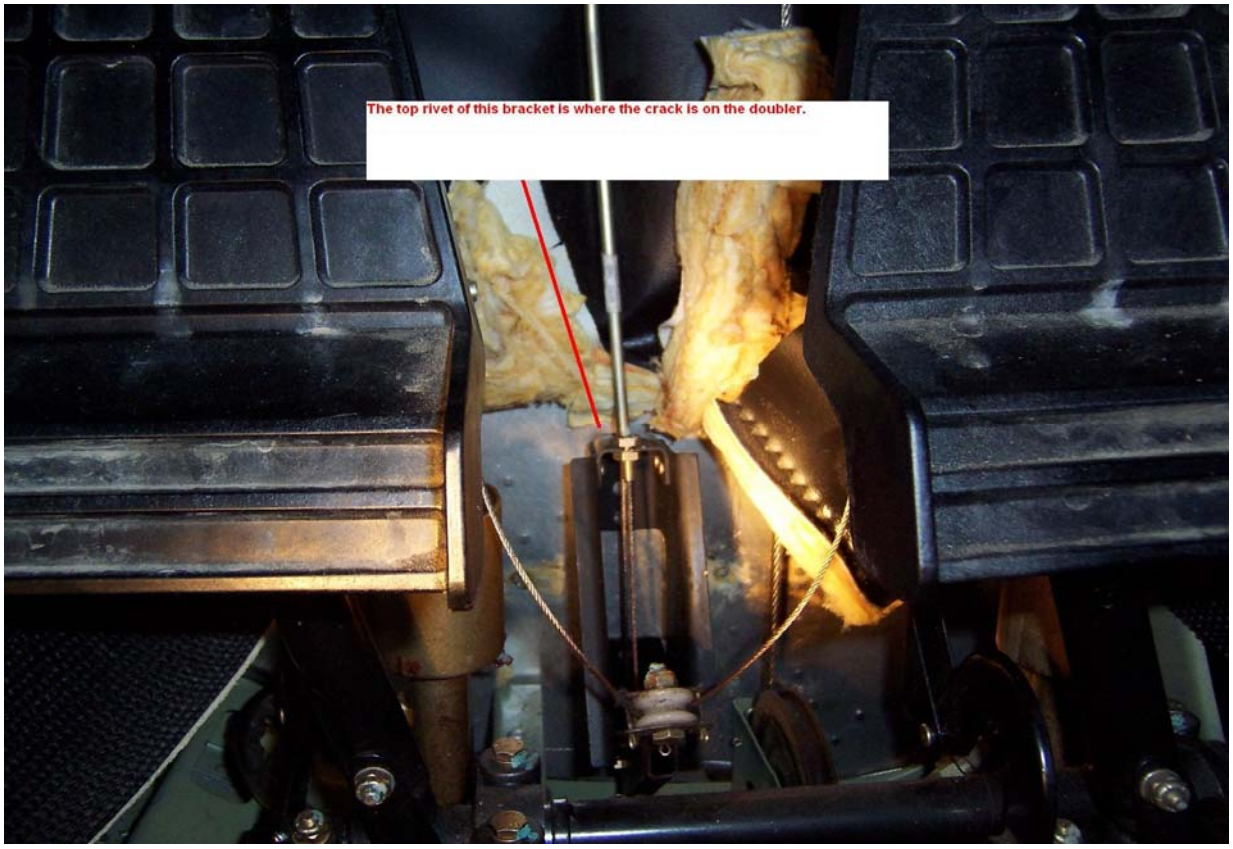
(P/N: C29250107. Slight photographic deformation is due entirely to this editor's manipulation. Great admonition! Thank-you for your very concise effort—Ed.)

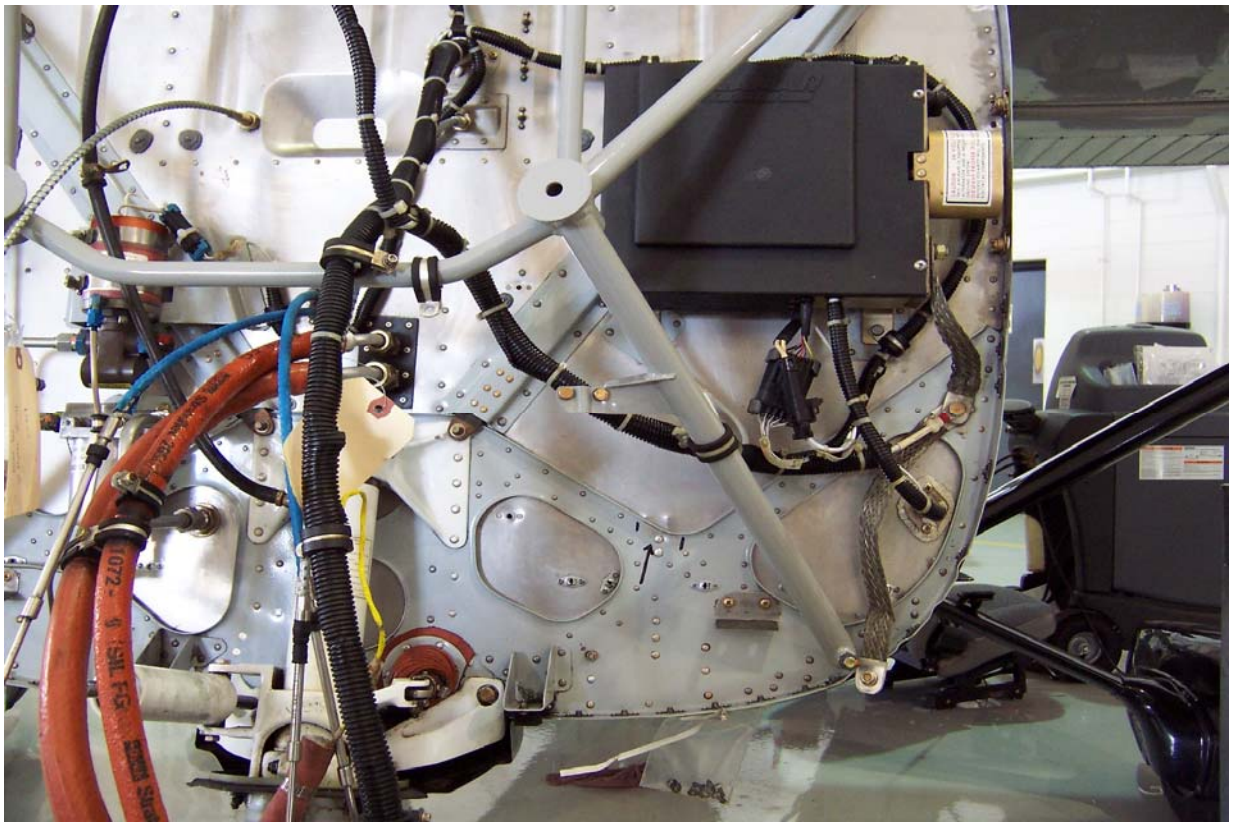
Part Total Time: 3,471 hours

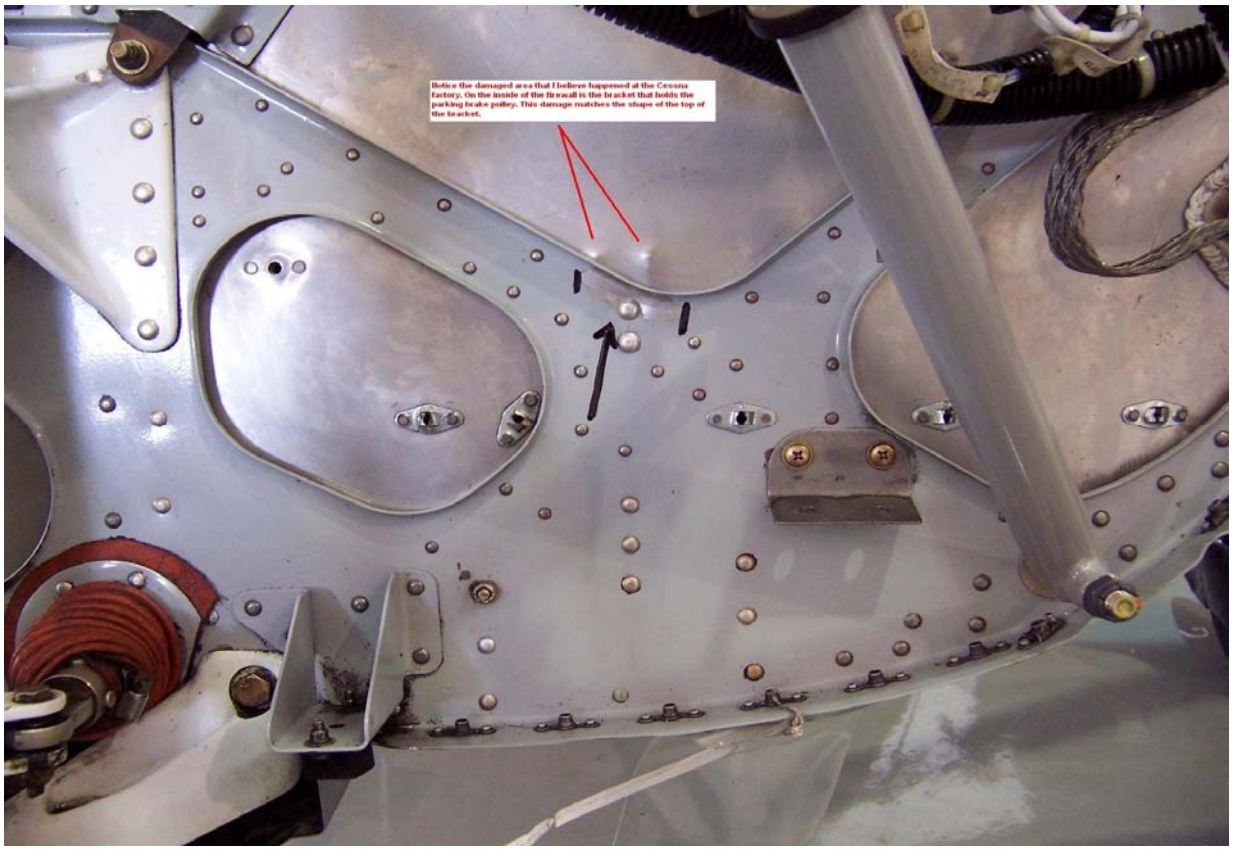
Cessna: 182S; Cracked Firewall Doubler; ATA 5412

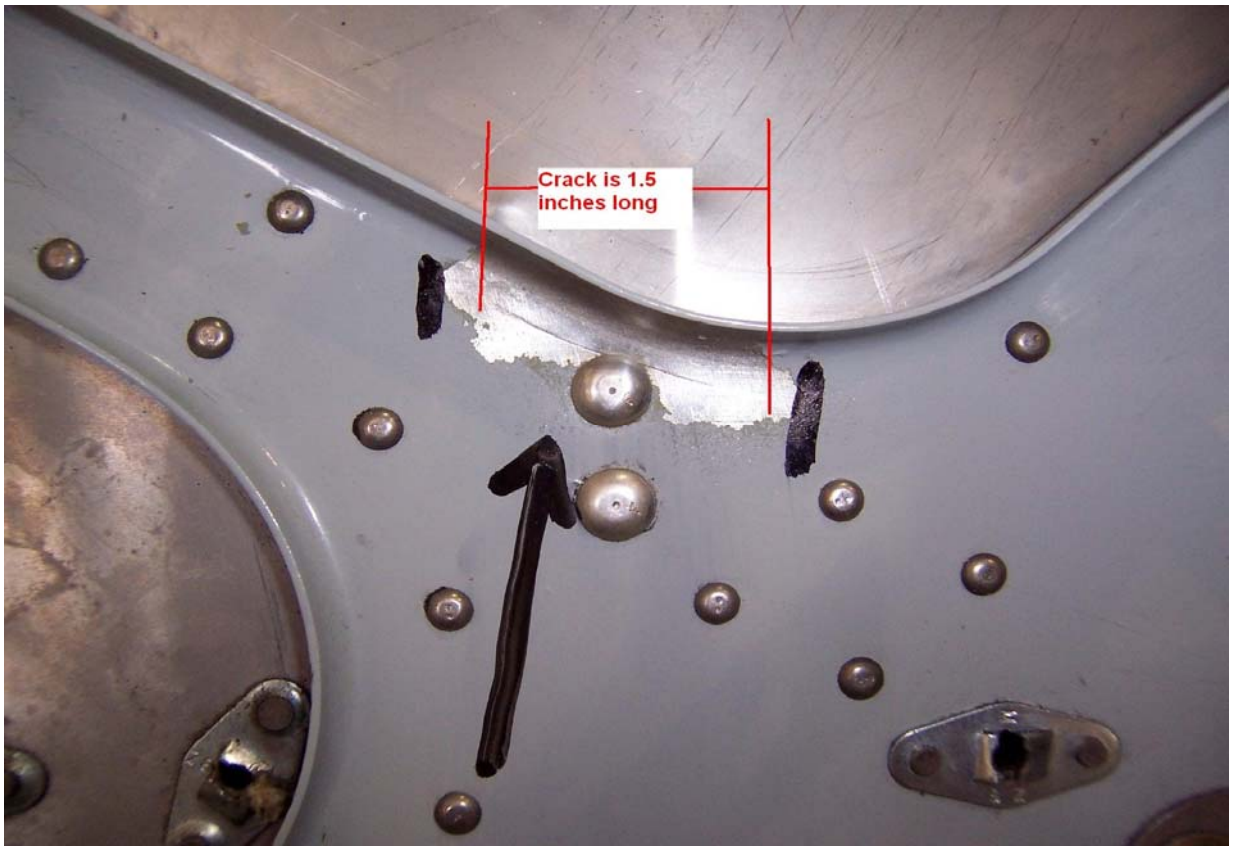
"A 1.25 inch long crack was discovered in the firewall forward doubler (P/N 0753600-24)," says this technician. "The crack location can be found by locating the 'Bracket-Parking Brake Control' aft of the firewall. (See Cessna 182S IPC Revision 19, Chapter 32-32-02; figure 01, item #38; P/N 0713070-20.) Translate this location to the forward side of the firewall. The crack was centered around the top rivet attaching the 'Bracket-Parking Brake Control' to the firewall and firewall doubler.

"When the parking brake handle is pulled, this area of the firewall and firewall doubler flex a little. It is very probable this flexing action has caused this crack in the firewall doubler. Two small dents can be seen in the firewall from the 'Bracket-Parking Brake Control."






Notice the damaged area that I believe happened at the Cessna factory. On the inside of the firewall is the bracket that holds the parking brake pulley. This damage matches the shape of the top of the bracket.



(The SDRS database finds four such doublers. Terrific road-map. Thanks! Ed)

Part Total Time: 3,996 hours

Cessna: 208; Broken Nose Landing Gear Spring; ATA 3222

(The Wichita Aircraft Certification Office provides the following safety admonition. Aerospace Engineer Gary Park narrates the discussion; contact information follows the article.)

The FAA Wichita ACO received a Cessna 208 broken nose landing gear spring (P/N 2643062-3) shown in Photo 1. Installed on the airplane in December 2004, this NLG spring fractured during a landing in Puerto Rico in May 2010. It had nearly 3,000 flight hours. The fracture was analyzed and the following conclusions were identified: (1) Significant corrosion in the area of the fracture origin was present at the outside diameter of the NLG spring with pit depths slightly exceeding 0.02 inches; (2) stress-corrosion cracking was observed to a depth of nearly 0.02 inches, followed by ductile overload.

The schematic in Figure 1 shows the location of the fracture relative to the Support Assembly (P/N 2643099-4). Photo 2 is a magnified view showing the chevron pattern indicating the origin of the fracture at the lower outside diameter of the NLG spring. Photo 3 presents a tilted magnified view showing pitting corrosion along the outside diameter that coincides with the origin of the facture. Photo 4 depicts a longitudinal metallographic cross-section through the origin of the fracture showing the corrosion pitting.

The Corrosion Prevention and Control Inspections found in the Cessna Maintenance Manual (5-30-01 &-02) require reoccurring visual inspections of the NLG for evidence of corrosion. The inspection information from the manual for mild or moderate corrosion (airplanes without TKS anti-ice system) is shown in the Table 1. For severe corrosion (airplanes with TKS anti-ice system), divide the inspection intervals in this table by two.

Figure 1: Location of the fracture relative to the Support Assembly (P/N 2643099-4).

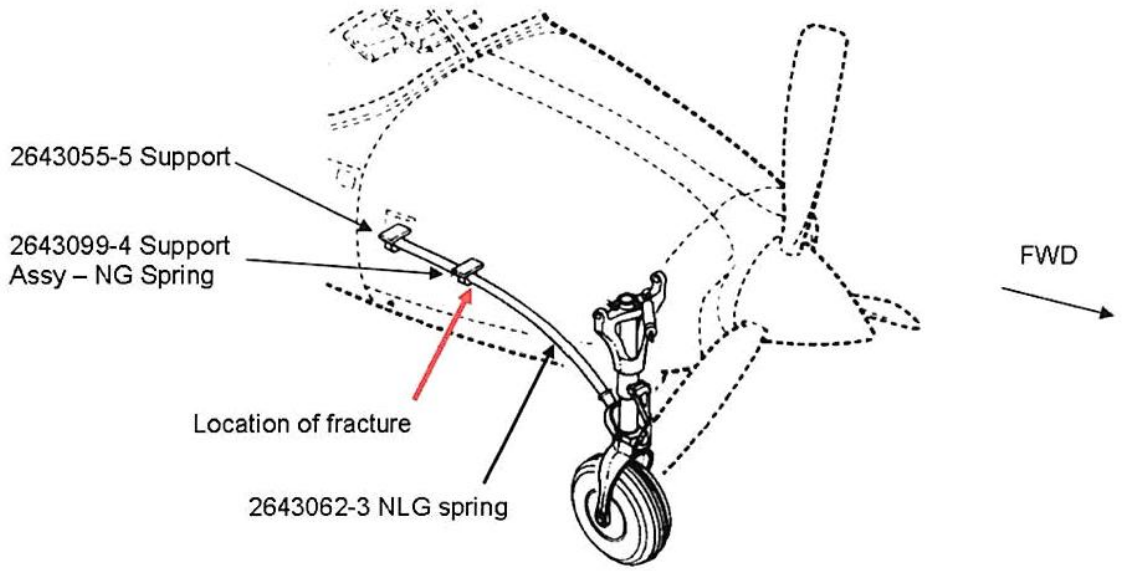


Photo 1: An overall view of the broken NLG spring.

Photo 2: A magnified view of the fracture surface showing the chevron pattern at the origin of the fracture.

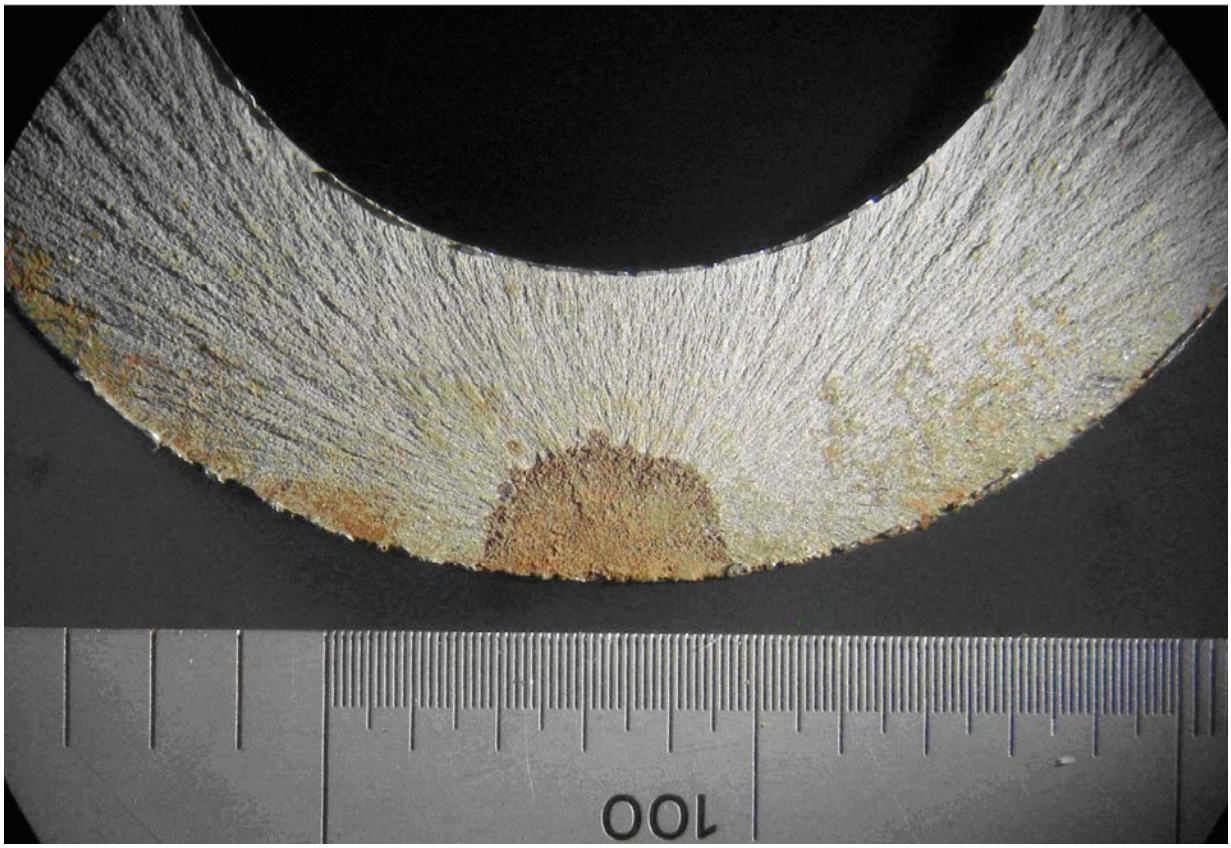


Photo 3: A tilted magnified view of the fracture surface showing pitting corrosion coincident with the area at the origin of the fracture.

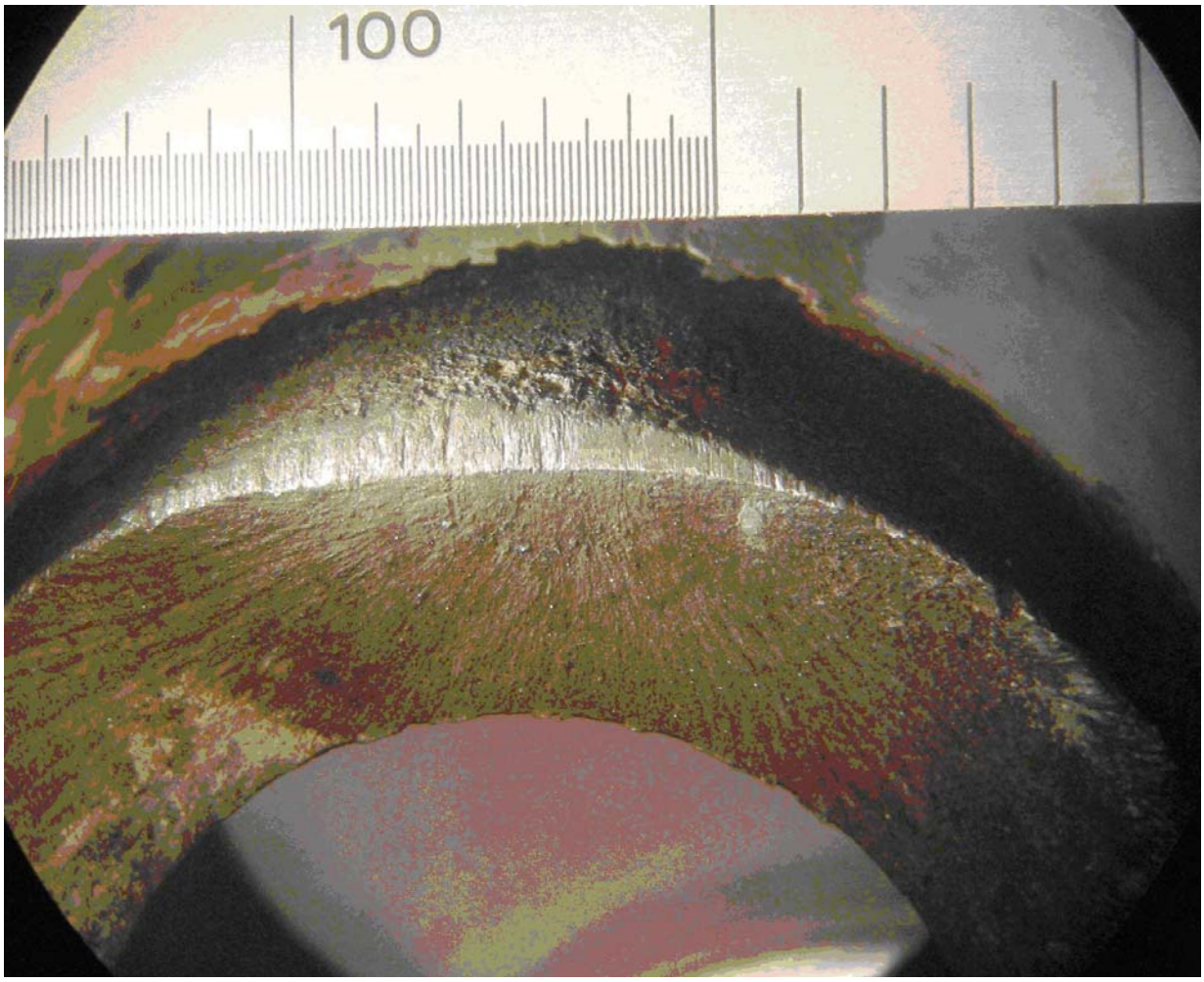


Photo 4: This view depicts a longitudinal metallographic cross-section through the origin of the fracture showing the depth of the corrosion pitting.

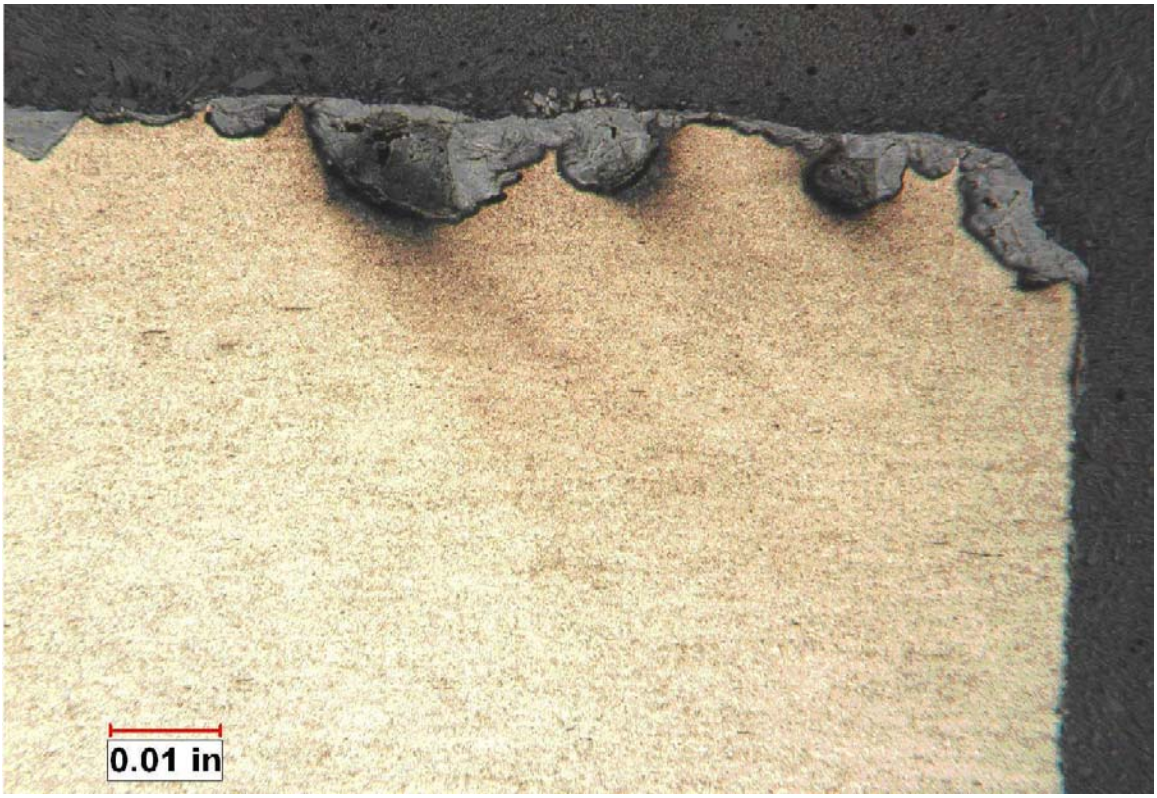


Table 1: This describes Mild or Moderate Corrosion Inspections (airplanes without TKS anti-ice system). For Severe Corrosion (airplanes with TKS anti-ice system), divide the inspection intervals by 2. *(Please use the PDF "zoom" function to view table—Ed.)*

TASK NUMBERS	INTERVAL		ZONE	ACCESS	MAINTENANCE MANUAL REFERENCE	208B CORROSION PREVENTION AND CONTROL PROGRAM TASK DESCRIPTION
	TI (YRS)	RI (YRS)				
C32.701.02E	4	2	701	NOTE	12-21-03 32-00-00 32-20-00	Nose gear spring assembly and support assembly. Make sure you examine these areas: 02.01 Nose Gear Spring Surface. 02.02 Forward and Aft Support. 02.03 Nose Gear Spring Fork and Attach Bolts. **NOTE:** Remove the nose gear fairing to get access. STATION: FS 61.78 Models 208 and 208B
C32.701.02I	4	2	701	NOTE	12-21-03 32-00-00 32-20-00 32-40-00	Nose gear support liner, support inner bore, nose gear spring support attach location, nose gear spring fork lug inner bore. Make sure to examine these areas: 02.01 Nose Gear Support Liner. 02.02 Forward and Aft Support Inner Bore Surface. 02.03 Nose Gear Spring Surface at Forward and Aft Support Attach Location. 02.04 Nose Gear Spring Fork Lug Inner Bore Surface. **NOTE:** Remove the nose gear support from the spring to get access STATION: FS 61.78 Models 208 and 208B

(For further information contact Aerospace Engineer Gary Park; Wichita Aircraft Certification Office, 1801 Airport Road, Room 100; Wichita, Kansas; 67209; phone: 316-946-4123)

Part Total Time: 3,000 hours (approximately)

Cessna: 441; Failed Hydraulic Tube Line; ATA 2910

"Three *(events)* of hydraulic fluid depletion have occurred on three of the Cessna 400 series aircraft that this company operates," says a mechanic. "Two were flap failures *(as in failure to extend)*—and on one the landing gear had to be extended using the emergency system. These failures were caused by a crack (and leak) forming in a 3/8 aluminum alloy hydraulic line at *(various)* bend radii.

"I would like to note: 1) the cracks formed at bends *(just barely meeting)* industry minimum recommended radii for 3/8 inch tubing, 2) these cracks formed at what looks to me as minor tool die marks or stressed areas in the bend radii.

"I do recommend all operators of a 400 series Cessna aircraft have all the hydraulic lines inspected, *(including)* removing the paint at any bend radii on 3/8 inch hydraulic lines—*(inspecting)* for tooling die and stress marks. Any line that appears to be under the minimum bend radius *(standard)* should be replaced." *(No specific part numbers were provided. Three airplanes, three cracks—check. But this airplane has a cracked line...where? Ed.)*

Part Total Time: (unknown)

HELICOPTERS

Eurocopter: AS350; Loose Oil Reservoir Cap; ATA 7261

"The engine oil reservoir cap came off in flight," says this submitter, "resulting in significant oil loss. The helicopter returned to base with no problems encountered. *(At)* issue is Eurocopter's 'unique' retaining mechanism for the oil cap. *(This)* retaining mechanism is easily dislodged, and yet still appears to be locking the cap into place. Unless you are specifically looking at the retaining mechanism during a preflight—and you know what it is suppose to look like when it is in the locked position—it can be easily overlooked. *(I)* recommend Eurocopter devise some type of safety device for their retaining mechanism. Also, this *(item)* should be added to their 'Before First Flight' checklist."

Part Total Time: 747.0 hours

POWERPLANTS

Lycoming: O540; Failed Pushrod Shroud Springs; 8530

A technician states, "Tracing an oil leak, it was discovered the pushrod shroud tube retaining springs (SL14995) had failed on all six cylinders. The part failed by breaking into two or more fragments. This allowed the shroud to unseat from the head and leak oil. All six springs were replaced." *(There are eight similar reports in the SDRS database.)*

Part Total Time: (unknown)

Pratt & Whitney: PW545A; Leaking Garlock Seals; ATA 7261

(The following description references a Cessna 560XL.)

"*(This airplane experienced)* oil loss on both engines, " says the submitter. "The aircraft had been in an 'inactive' flight status' for approximately 18 months. It had been fully maintained—and the engine (and APU) run ups and aircraft taxi checks completed every 30 days. Approved oil had been used since delivery. The aircraft had been prepped for a maintenance flight check prior to being placed back into flight status. Prior to taxiing for departure, a 30 minute ground run was completed and no oil leakage was noted by maintenance. The aircraft departed for its maintenance flight. At 45,000 feet altitude the oil pressure was noted to be dropping on the number one engine. The crew shut it down for precautionary measures and requested an emergency return *(to the airfield)*, landing without incident. While taxiing back *(to base)* the crew noted number two engine oil pressure dropping. They elected to shut down this engine and tow the aircraft back to the hanger." "*(We)* found three Garlock seals on each engine had leaked (hydraulic pump, fuel control unit, and breather)—the breather being the worst—it discharged into the engine exhaust." "The crew mentioned it may be due to inactivity; even though the aircraft had been *(operated)* every 30 days it may not have been enough."

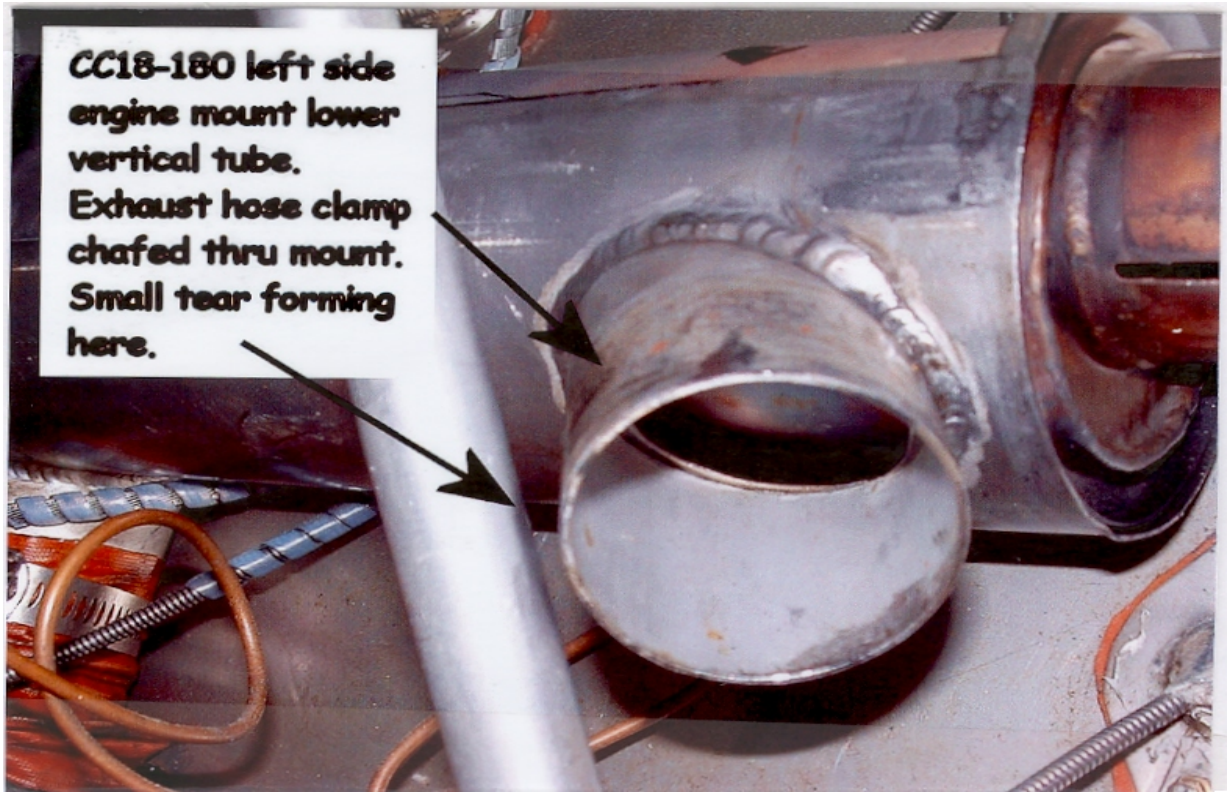
Part Total Time: (unknown)

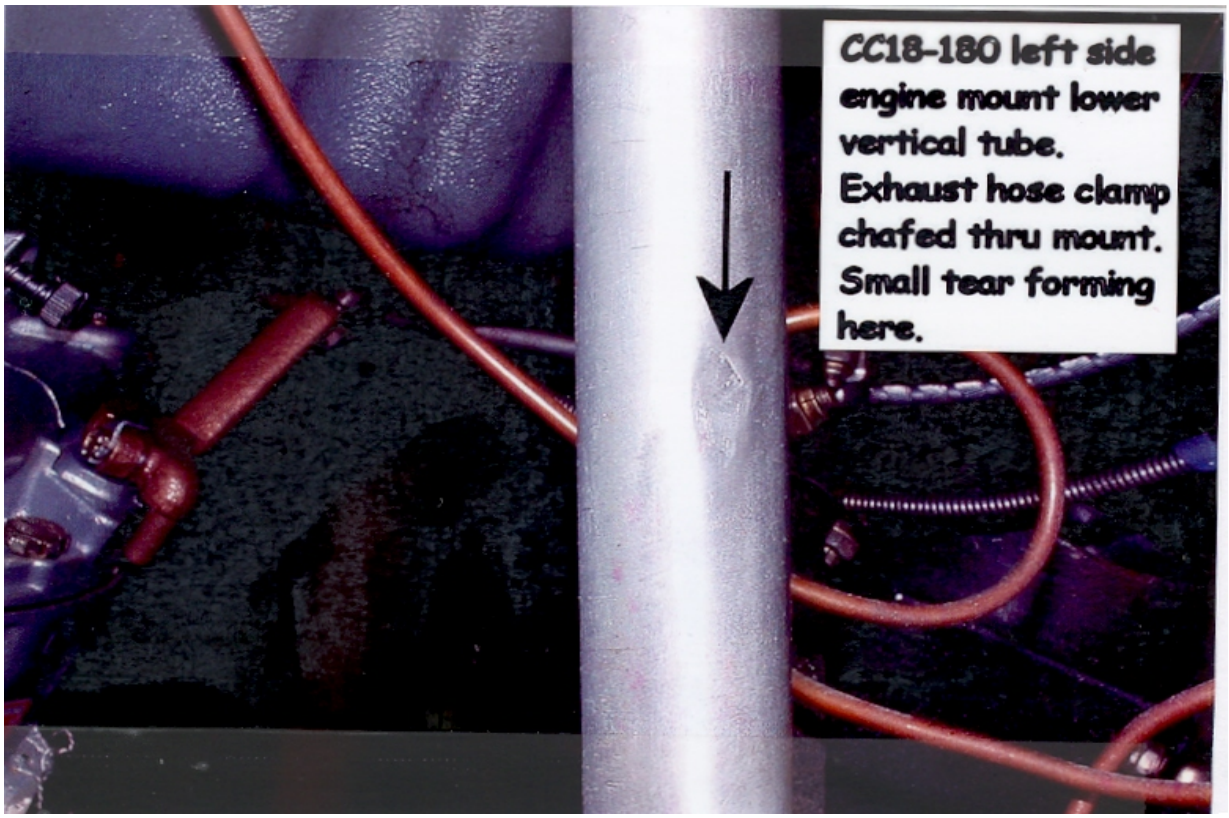
F. Atlee Dodge: Muffler Shroud; Poorly Positioned Shroud; ATA 2140

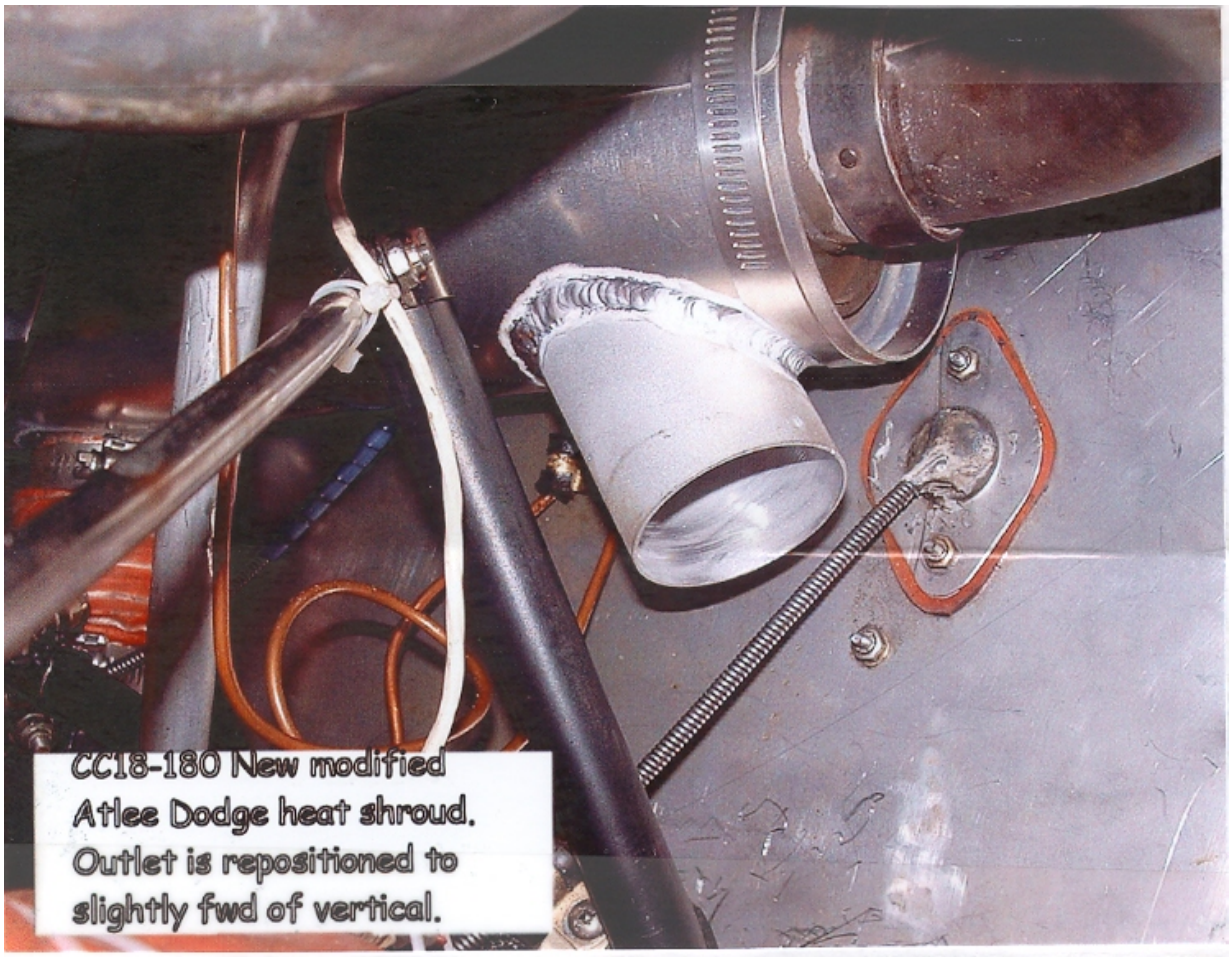
(The following description references a Lycoming O-360-C4P bolted to a Cub Crafter CC18-180).

An aviation inspector says, "I removed the aircraft muffler (Atlee Dodge P/N 3241) to perform the muffler inspection and found the hose clamp on the muffler shroud's left cabin heat inlet port had worn a notch through the engine mount's lower left vertical support tubing (Univait P/N 12351-15). A small crack had formed in the top of the notch in the tubing. There was insufficient clearance between the heat shroud and the engine mount, and the shroud hose clamp would vibrate against the mount when the engine was running. When viewed from the left side of the aircraft the original inlet was clocked at about the 8:00 position. We fabricated a new shroud with the inlet clocked at *(approximately)* the 6:15 position, and now there is ample clearance. Refer to the attached pictures for reference. I would recommend checking all CC18-180's for this issue, and replace the shroud with a modified shroud. This shroud had worn the hole in the *(engine)* mount within 1400 hours total time."

CC18-180 New Atlee Dodge
modified exhaust shroud.
Outlet is now positioned just
fwd of vertical.


CC18-180 left side
engine mount lower
vertical tube.
Exhaust hose clamp
chafed thru mount.
Small tear forming
here.


CC18-180 left side
engine mount lower
vertical tube.
Exhaust hose clamp
chafed thru mount.
Small tear forming
here.



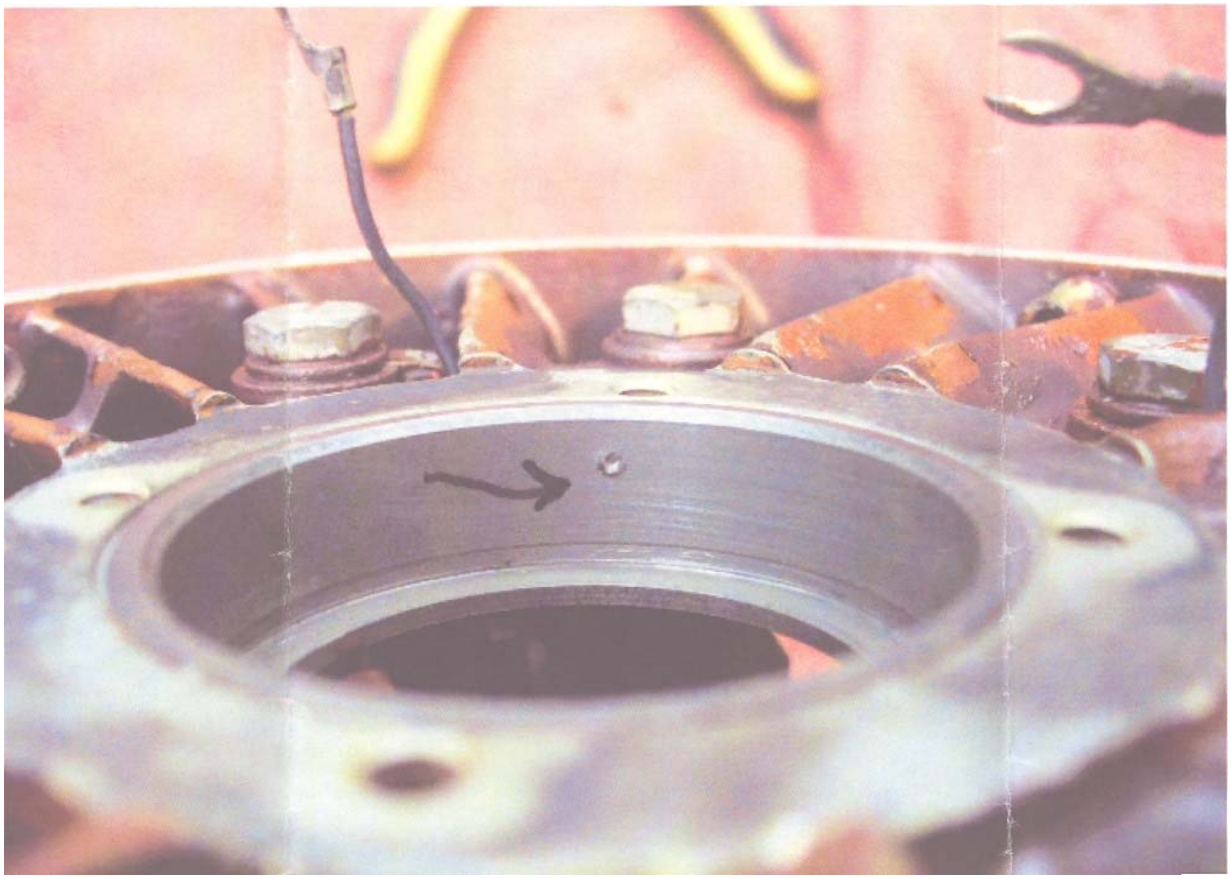
Part Total Time: 1,364.9 hours

ACCESSORIES

Goodrich: Starter/Generator; Improper Assembly; ATA 2435

A repair station technician states, "During disassembly of this starter generator (P/N 23085-025) we received for routine overhaul, three items were noted that are not approved by the Goodrich 23085 Series, Revision 4, 8/12/2003, CMM 24-30-19 *(maintenance manual)*. 1. The stator was coated with Glyptol paint. The CMM states 'The use of Glyptol on either the armature or stator windings is strictly prohibited. Units having Glyptol coating on either of these parts must have these parts replaced prior to returning the units to service.' 2. Glyptol was also found coating the inside of the air-scoop. This is not approved by Goodrich SPD 1002. 3. The Anti-Drive End Bearing Liner had been staked in two places, presumably to hold the bearing in place. This is not an approved practice according to the CMM. The liner must either be replaced or re-plated if the dimensions are not within tolerances.

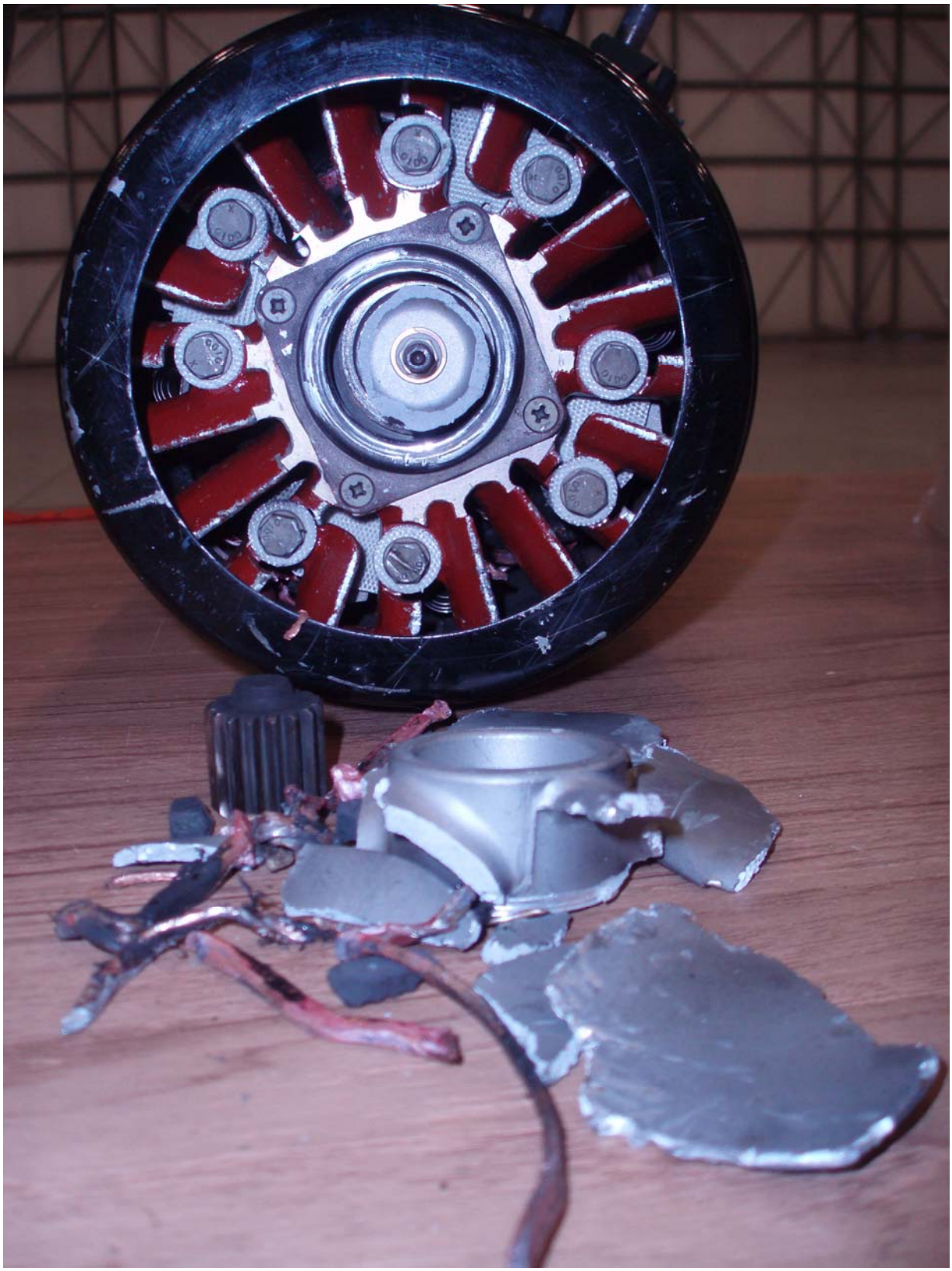
"If the Goodrich CMM had been followed at the previous repair facility, these items would not have been an issue."

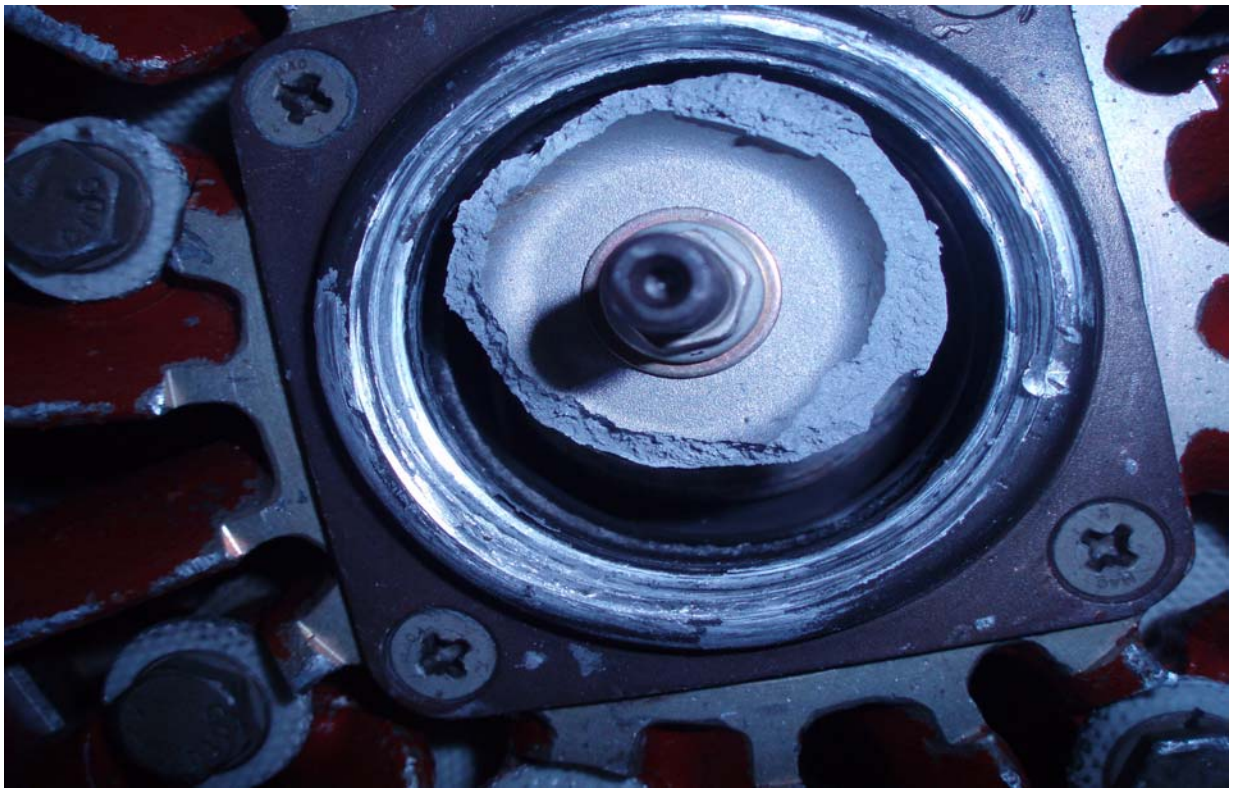


Part Total Time: 990.1 hours

TRW: Starter/Generator; Failed Cooling Fan; ATA 2435

A technician writes, "During cruise flight *(the Hawker 1000 aircraft)* experienced vibration believed to *(originate)* from the engine area. The vibration increased (but did not show on the EVM indicator), followed by a generator number one fail indication with the bus tie closed. The aircraft made an unscheduled landing. Maintenance found the number one *(engine)* starter generator failed: the cooling fan on the generator shattered, and the shaft sheared—with many broken pieces of the unit in the engine cowling *(P/N 23091002)*."





Part Total Time: 904.0 hours

AIR NOTES

INTERNET SERVICE DIFFICULTY REPORTING (iSDR) WEB SITE

The Federal Aviation Administration (FAA) Internet Service Difficulty Reporting (iSDR) web site is the front-end for the Service Difficulty Reporting System (SDRS) database that is maintained by the Aviation Data Systems Branch, AFS-620, in Oklahoma City, Oklahoma. The iSDR web site supports the Flight Standards Service (AFS), Service Difficulty Program by providing the aviation community with a voluntary and electronic means to conveniently submit in-service reports of failures, malfunctions, or defects on aeronautical products. The objective of the Service Difficulty Program is to achieve prompt correction of conditions adversely affecting continued airworthiness of aeronautical products. To accomplish this, Malfunction or Defect Reports (M or Ds) or Service Difficulty Reports (SDRs) as they are commonly called, are collected, converted into a common SDR format, stored, and made available to the appropriate segments of the FAA, the aviation community, and the general public for review and analysis. SDR data is accessible through the “Query SDR data” feature on the iSDR web site at: http://av-info.faa.gov/sdrx/Query.aspx.

In the past, the last two pages of the Alerts contained a paper copy of FAA Form 8010-4, Malfunction or Defect Report. To meet the requirements of *Section 508, this form will no longer be published in the Alerts; however, the form is available on the Internet at: http://forms.faa.gov/forms/faa8010-4.pdf. You can still download and complete the form as you have in the past.

*Section 508 was enacted to eliminate barriers in information technology, to make available new opportunities for people with disabilities, and to encourage development of technologies that will help achieve these goals.

A report should be filed whenever a system, component, or part of an aircraft, powerplant, propeller, or appliance fails to function in a normal or usual manner. In addition, if a system, component, or part of an aircraft, powerplant, propeller, or appliance has a flaw or imperfection, which impairs or may impair its future function, it is considered defective and should be reported under the Service Difficulty Program.

The collection, collation, analysis of data, and the rapid dissemination of mechanical discrepancies, alerts, and trend information to the appropriate segments of the FAA and the aviation community provides an effective and economical method of ensuring future aviation safety.

The FAA analyzes SDR data for safety implications and reviews the data to identify possible trends that may not be apparent regionally or to individual operators. As a result, the FAA may disseminate safety information to a particular section of the aviation community. The FAA also may adopt new regulations or issue airworthiness directives (ADs) to address a specific problem.

The iSDR web site provides an electronic means for the general aviation community to voluntarily submit reports, and may serve as an alternative means for operators and air agencies to comply with the reporting requirements of 14 Title of the Code of Federal Regulations (CFR) Section 121.703, 125.409, 135.415, and 145.221, if accepted by their certificate-holding district office. FAA Aviation Safety Inspectors may also report service difficulty information when they conduct routine aircraft maintenance surveillance as well as accident and incident investigations.

The SDRS database contains records dating back to 1974. At the current time, we are receiving approximately 40,000 records per year. Reports may be submitted to the iSDR web site on active data entry form or submitted hardcopy to the following address.

The SDRS and iSDR web site point of contact is:

Pennie Thompson
Service Difficulty Reporting System, Program Manager
Aviation Data Systems Branch, AFS-620
P.O. Box 25082
Oklahoma City, OK 73125
Telephone: (405) 954-5313
SDRS Program Manager e-mail address: 9-AMC-SDR-ProgMgr@faa.gov

IF YOU WANT TO CONTACT US

We welcome your comments, suggestions, and questions. You may use any of the following means of communication to submit reports concerning aviation-related occurrences.

Editor: Daniel Roller (405) 954-3646
FAX: (405) 954-4570 or (405) 954-4655

E-mail address: Daniel.Roller@faa.gov

Mailing address: FAA, **ATTN: AFS-620 ALERTS**, P.O. Box 25082, Oklahoma City, OK 73125-5029

You can access current and back issues of this publication from the internet at: http://av-info.faa.gov/. Select the General Aviation Airworthiness Alerts heading.

AVIATION SERVICE DIFFICULTY REPORTS

The following are abbreviated reports processed for the previous month, which have been entered into the FAA Service Difficulty Reporting System (SDRS) database. This is not an all-inclusive listing of Service Difficulty Reports. For more information, contact the FAA, Regulatory Support Division, Aviation Data Systems Branch, AFS-620, located in Oklahoma City, Oklahoma. The mailing address is:

FAA
Aviation Data Systems Branch, AFS-620
PO Box 25082
Oklahoma City, OK 73125

To retrieve the complete report, click on the Control Number located in each report. These reports contain raw data that has not been edited. Also, because these reports contain raw data, the pages containing the raw data are not numbered.

If you require further detail please contact AFS-620 at the address above.

Federal Aviation Administration

Service Difficulty Report Data

Sorted by aircraft make and model then engine make and model. This report derives from unverified information submitted by the aviation community without FAA review for accuracy.

Control Number	Aircraft Make	Engine Make	Component Make	Part Name	Part Condition
Difficulty Date	**Aircraft Model**	**Engine Model**	**Component Model**	**Part Number**	**Part Location**
2010FA0001016				STARTER GEN	MISOVERHAULED
9/3/2010				23080050	

(NE2R) DURING DISASSEMBLY OF THIS STARTER GENERATOR FOR AN O/H EVALUATION, IT WAS DISCOVERED THAT THE STATOR HAD BEEN SATURATED WITH "GLYPTOL" WHICH IS "STRICTLY PROHIBITED" BY THE CURRENT 23080 SERIES II CMM. THE CMM STATES THAT STATORS COATED WITH "GLYPTOL" MUST BE REPLACED PRIOR TO RETURNING THE UNIT TO SERVICE. THE ARMATURE BALANCE BANDS WERE CUT TOO DEEPLY IN A NR OF AREAS AND THE ARMATURE BRG JOURNALS MEASURED BELOW THE ALLOWED TOLERANCE BEFORE CUTTING AND CLEANING. BRG LINERS OF THE END BELLS MEASURED LARGER THAN THE ALLOWED TOLERANCE. THE SPUR GEAR HAD SOME CHIPPED TEETH. OUT CUSTOMER STATED THAT THIS WAS A "FAIRLY RECENT" O/H (BY ANOTHER FACILITY) AND QUESTIONED WHY THE ESTIMATED COST OF THE O/H WAS SO HIGH.

2010F00205			WINSLOW	FIRING HEAD	MISROUTED
9/17/2010				3RA11441	LIFE RAFT

LANYARD TO FIRING HEAD WAS PACKED ON INSIDE OF VALISE WITH MOORING LINE ROUTED IMPROPERLY BY (UNAPPROVED VENDOR). LIFE RAFT WOULD NOT HAVE DEPLOYED IF NEEDED. IN ADDITION VALISE WAS NOT PROPERLY LACED, VACUUM BAG THROUGH FITTINGS WERE NOT PROPERLY PLACED, INFLATION HOSES WERE NOT ROUTED PROPERLY AND SEA ANCHOR WAS PACKED ACROSS THE LIFE RAFT FROM ITS TETHER POINT. LIFE RAFT WAS NOT SERVICED IAW CMM CURRENT AT TIME OF SERVICE (MAY 2009). IN ADDITION THE MFG SERVICE WARNING WAS COVERED WITH A LOOK ALIKE STICKER GIVING DIFFERENT INFORMATION.

2010F00213				WHEEL HALF	CRACKED
9/30/2010				26149641	MLG

HUB CRACK FOUND DURING THE REPAIR OF THIS MAIN WHEEL INBD HALF. PN 2614964-1, SN B0832.

2010FA0001139				BOLT	MISMANUFACTURED
10/14/2010				75060	CONNECTING ROD

RECEIVED NEW CONNECTING ROD BOLTS. ON INCOMING INSP FOUND BOLT HEAD TO BE INAPPROPRIATELY MARKED WITH PART NUMBER AND OUTSOURCE MFG. BOLTS ARE STRETCH BOLTS AND HEAD MARKING INTERFERE WITH THE ABILITY TO MEASURE STRETCH AT INSTALLATION.

2010FA0001002		ALLSN		STATOR VANE	BROKEN
9/2/2010		250C20B			ENG COMPRESSOR

UPON REMOVAL OF THE COMPRESSOR CASE FOUND 2 6TH STG STATOR VANES MISSING. THE VANES HAD BROKEN OFF NEAR THE BLADE ROOT, AT APPROX THE LEVEL OF THE COMPRESSOR CASE PLASTIC COATING. THE COMPRESSOR CASE HAD BEEN O/H 366.6 HRS PRIOR.

2010FA0001115		GE		FRAME	DAMAGED
10/13/2010		CF650C2		9137M92G38	TURBINE SECTION

DURING SHOP VISIT, SUBJECT ENGINE EXHIBITED SEVERE TURBINE MID FRAME LINER CLOCKING, DESPITE

SUCCESSFULLY PASSING ON WING INSPECTION APPROX 70 CYCLES PAST. MAINTENANCE ORGANIZATION PERFORMING INSPECTION USED BOROSCOPE, AND REPORTED NIL FINDINGS.

ZI3R20100909	GE	FUEL NOZZLE	LEAKING
7/26/2010	CF680	6980200	ENGINE

(ZI3R) A FUEL SPRAY NOZZLE REMOVED FROM ENGINE DURING A SERVICE CHANGE-OUT OF A NON-RELATED COMPONENT(FUEL FILTER). ONCE COMPONENT REPLACED & SYSTEM TESTED, NOTED FUEL EMITTING FROM A FSN IN AN AREA THAT NORMALLY DOES NOT SEE FUEL. THAT PARTICULAR NOZZLE WAS R & R. THE REMOVED NOZZLE WAS RETURNED TO MFG. THIS OCCURRED ON SEPTEMBER 8, 2009. UPON RECEIPT OF THE NOZZLE, A CAR WAS INITIATED TO DOCUMENT THE RETURNED NOZZLE. THE FSN WAS PLACED ON AN INTERNAL "FLOW TEST AND INVESTIGATION" PROCESS DOCUMENT AND DURING THE PROCESS CHECK WAS CONFIRMED TO LEAK AT A WELD JOINT. DURING NORMAL PRODUCTION AS WELL AS O/H REPAIR, ALL SUCH FSN RECEIVE 100 PERCENT NDT INSP OF THIS PARTICULAR WELD JOINT AND PRESSURE TEST. THE RADIOGRAPHIC IMAGES FOR THE SUSPECT COVER ASSEMBLY, THAT HAD BEEN WELDED TO THE SUPPORT WAS REVIEWED BY OUR FACILITY LEVEL III. THIS REVIEW REVEALED THAT THE IMAGE WAS CHARACTERISTIC OF A WELD MIS-JOINT ON THE FITTING SIDE OF THIS WELD, MEANING THAT THE FITTING END WAS CONSUMED OR FUSED DURING THE WELDING PROCESS TO THE WELD RING AND THE COVER JUST ENOUGH TO PASS PRESSURE TEST AND FPI. UPON DISCOVERING THIS, ALL RADIOGRAPHIC IMAGES OF COVER SUBASSEMBLIES THAT WERE CREATED BETWEEN APRIL 28, 2008 AND MAY 30, 2008 WERE REVIEWED. RESULTS SHOW THERE WERE NO ADDITIONAL MIS-JOINTS SIMILAR TO THE SUBJECT NOZZLE.

2010FA0001117	AEROSP	FUEL CELL	CORRODED
9/22/2010	ATR72212		RT WING

(MTND) CORROSION IN RT FEEDER TANK BY ENGINE JET PUMP MOUNT AREA, FOUND ON INSP CARD ZL-621-01-1 FOR ZONE INSPECTION. THE CORROSION WAS LOCATED UNDER THE JET PUMP BETWEEN RIBS 4 RT AND 5 RT AND BETWEEN STIFFENERS 8 AND 9. POSSIBLE CAUSE WOULD BE WATER CONTAMINATED FUEL. RECOMMENDATIONS WOULD BE TO HAVE REGULAR FUEL TREATMENTS AND CHECKING TANK DRAINS FOR WATER.

2010FA0001118	AEROSP	SKIN	CORRODED
9/22/2010	ATR72212		FUSELAGE

(MTND) CORROSION FOUND UNDER ADF ANTENNA BETWEEN FRAMES 28C AND 28D, FOUND ON 2 YEAR INSPECTION FOR ANTENNA`S AND SKIN UNDERNEATH. ATR SOURCE DOCUMENT 535101-4. REPAIRED IAW ATR 72, SRM 53-51-27. PROBABLE CAUSE DETERIORATED SEALANT AND MOISTURE ENTRAPMENT. TO PREVENT DAMAGE, CREATE A GOOD WATER TIGHT SEAL BETWEEN ANTENNA AND FUSELAGE SKIN.

2010FA0001116	AEROSP	FUEL CELL	CORRODED
9/22/2010	ATR72212		LT WING

(MTVD) CORROSION IN LT FEEDER TANK BY ENGINE JET PUMP MOUNT AREA, FOUND ON INSP CARD ZL-521-02-1 FOR ZONE INSPECTION. THE CORROSION WAS LOCATED UNDER THE JET PUMP BETWEEN RIBS 4LT AND 5LT AND BETWEEN STIFFENERS 8 AND 9. POSSIBLE CAUSE WOULD BE WATER CONTAMINATED FUEL. RECOMMENDATIONS: WOULD BE TO HAVE REGULAR FUEL TREATMENTS AND CHECKING TANK DRAINS FOR WATER.

2010FA0001072	AIRBUS	CFMINT	SPOOL	UNSERVICEABLE
9/20/2010	A319111	CFM565B5P	1558M31G04	HPC ROTOR ASSY

INCOMING FLUORESCENT PENETRANT INSP OF HPC 1-2 SPOOL REVEALED CRACK INDICATIONS IN 2 OF DOVE TAIL POSTS ALONG THE EDGE OF BEDDING MARK. ON 1 OF POST, THE CRACKING EXTENDS ACROSS BOTH THE FWD AND AFT FACES. CRACKING MEASURED AT 1.5 INCHES AND 0.375 INCHES. THE OEM HAS BEEN INFORMED. REF MFG ACKNOWLEDGEMENT GEN M11O 09-06/ CMF56-5B, HPC 1-2 SPOOL- CRACK STG 2 DOVETAIL.

2010FA0001032	AIRBUS	FLOORBEAM	CORRODED
9/20/2010	A320232	D53112090201	FUSELAGE

CORROSION ON CABIN FLOORBEAM FR 16 Y 1292. NO CORROSION REMOVAL LIMITS AVAILABLE IN SRM. FLOORBEAM IS LISTED AS PRIMARY STRUCTURE. REMOVED AND REPLACED FLOORBEAM IAW A320 SRM 51-42-

11.

2010FA0001033	AIRBUS	FLOOR SUPPORT	CORRODED
9/20/2010	A320232	D5347709000	FUSELAGE

CORROSION ON BULK CARGO COMPARTMENT FLOOR SUPPORT PROFILE (SEALING ASSY) FR 63 STR 38RT TO STR 38LT. NO CORROSION REMOVAL LIMITS AVAILABLE IN SRM. SEALING ASSY IS LISTED AS PRIMARY STRUCTURE. R & R SEALING ASSY IAW SRM 51-42-11.

2010FA0001029	AIRBUS	FLOOR SUPPORT	CORRODED
9/20/2010	A320232	D53472192200	FUSELAGE

CORROSION ON CABIN FLOOR SUPPORT FR 68 TO FR 70 Y 765. NO CORROSION REMOVAL LIMITS AVAILABLE IN SRM. BEAM IS LISTED AS PRIMARY STRUCTURE. R & R FLOOR SUPPORT IAW SRM 51-42-11.

2010FA0001039	AIRBUS	SHEAR PLATE	CORRODED
9/20/2010	A320232	D53471124200	FUSELAGE

CORROSION ON CABIN FLOOR SIDE PANEL (SHEAR PLATE) FR 69 - FR 70 -Y1292. NO CORROSION REMOVAL LIMITS AVAILABLE IN SRM. SHEAR PLATE IS LISTED AS PRIMARY STRUCTURE. R & R SHEAR PLATE IAW SRM 51-42-11.

2010FA0001020	AIRBUS	SEAT TRACK	CORRODED
9/20/2010	A320232	D53112090203	FUSELAGE

CORROSION ON CABIN SEAT TRACK FR 20 -Y 1292. NO CORROSION REMOVAL LIMITS AVAILABLE IN SRM. TRACK IS LISTED AS PRIMARY STRUCTURE. R & R TRACK IAW SRM 51-42-11.

2010FA0001021	AIRBUS	FLOORBEAM	CORRODED
9/20/2010	A320232	D53472880200	FUSELAGE

CORROSION ON AFT CABIN FLOORBEAM FR 66 Y 254. NO CORROSION REMOVAL LIMITS AVAILABLE IN SRM. BEAM IS LISTED AS PRIMARY STRUCTURE. R & R FLOORBEAM IAW SRM 51-42-11.

2010FA0001022	AIRBUS	FLOORBEAM	CORRODED
9/20/2010	A320232	D53472192200	FUSELAGE

CORROSION ON AFT CABIN FLOORBEAM FR 66 Y 765. NO CORROSION REMOVAL LIMITS AVAILABLE IN SRM. BEAM IS LISTED AS PRIMARY STRUCTURE. R & R FLOORBEAM IAW SRM 51-42-11.

2010FA0000999	AIRBUS	FLOOR SUPPORT	CORRODED
9/13/2010	A320232	D53470613200	FUSELAGE

CORROSION AROUND ATTACH HOLES ON FLOOR SUPPORT PLATE (FITTING) AT FR 58 STR 38 LT. NO CORROSION REMOVAL LIMITS AVAILABLE IN SRM. FITTING IS LISTED AS PRIMARY STRUCTURE. R & R FITTING IAW SRM 51-42-11.

2010FA0000997	AIRBUS	PROFILE	CORRODED
9/11/2010	A320232	D534704800040000	CARGO BAY

CORROSION ON AFT CARGO COMPARTMENT LT CORNER PROFILE FR 63 TO FR 65, STR 38L. NO CORROSION REMOVAL LIMITS AVAILABLE IN SRM. PROFILE IS LISTED AS PRIMARY STRUCTURE. R & R PROFILE IAW SRM 51-42-11.

2010FA0000998	AIRBUS	STRUCTURE	CORRODED
9/11/2010	A320232	D5397470900000	FUSELAGE

CORROSION ON CROSS SECTION AFT CARGO COMPARTMENT FR 63 LBL 23 TO RBL 23. NO CORROSION REMOVAL LIMITS AVAILABLE IN SRM. SECTION IS LISTED AS PRIMARY STRUCTURE. R & R PROFILE IAW SRM 51-42-11.

2010FA0000941	AIRBUS	FLOOR SUPPORT	CORRODED
9/4/2010	A320232	D5347034000200	FUSELAGE

CORROSION ON AFT CARGO COMPARTMENT FLOOR SUPPORT PROFILE AT BL 0 BETWEEN FR53- 54. NO CORROSION REMOVAL LIMITS AVAILABLE IN SRM. PROFILE IS LISTED AS PRIMARY STRUCTURE. REPLACED PROFILE WITH NEW PART.

2010FA0000942	AIRBUS	FITTING	CRACKED
9/4/2010	A320232	D5347039420600	FLOOR SUPPORT

AFT CARGO COMPARTMENT FLOOR SUPPORT FITTING CRACKED AT FR 54, BL 0. FITTING IS LISTED AS PRIMARY STRUCTURE. REPLACED FITTING WITH NEW PART.

2010FA0000943	AIRBUS	FLOOR SUPPORT	CORRODED
9/4/2010	A320232	D53974684001	CARGO BAY

CORROSION ON AFT CARGO COMPARTMENT FLOOR SUPPORT WEB AT STRINGER 38 RT BETWEEN FR 50 - 51. WEB IS LISTED AS PRIMARY STRUCTURE. NO CORROSION REMOVAL LIMITS AVAILABLE IN SRM. REPLACED WEB WITH NEW PART.

2010FA0000944	AIRBUS	FLOOR SUPPORT	CORRODED
9/4/2010	A320232	D53470479201	CARGO BAY

CORROSION ON AFT CARGO COMPARTMENT FLOOR SUPPORT WEB AT STRINGER 38 RT BETWEEN FR 62 - 63. WEB IS LISTED AS PRIMARY STRUCTURE. NO CORROSION REMOVAL LIMITS AVAILABLE IN SRM. REPLACED WEB WITH NEW PART.

2010FA0000945	AIRBUS	FLOOR SUPPORT	CORRODED
9/4/2010	A320232	D53974684001	CARGO BAY

CORROSION ON AFT CARGO COMPARTMENT FLOOR SUPPORT WEB AT STRINGER 38 RT BETWEEN FR 51 - 52. WEB IS LISTED AS PRIMARY STRUCTURE. NO CORROSION REMOVAL LIMITS AVAILABLE IN SRM. REPLACED WEB WITH NEW PART.

2010FA0001030	AIRBUS	FLOOR SUPPORT	CORRODED
9/20/2010	A320232	D53472188200	FUSELAGE

CORROSION OF AFT CABIN FLOOR SUPPORT BEAM FR 68 TO FR 69 Y1292. NO CORROSION REMOVAL LIMITS AVAILABLE IN SRM. BEAM IS LISTED AS PRIMARY STRUCTURE. R & R BEAM IAW SRM 51-42-11.

2010FA0001024	AIRBUS	FLOOR SUPPORT	CORRODED
9/20/2010	A320232	D53472075000	FUSELAGE

CORROSION ON AFT CABIN FLOOR SUPPORT PROFILE Z, FR 66, Y1732. NO CORROSION REMOVAL LIMITS AVAILABLE IN SRM. PROFILE Z IS LISTED AS PRIMARY STRUCTURE. R & R PROFILE Z IAW SRM 51-42-11.

2010FA0001031	AIRBUS	FLOORBEAM	CORRODED
9/20/2010	A320232	D53112087200	FUSELAGE

CORROSION ON CABIN FLOOR SUPPORT BEAM FR 16 Y254. NO CORROSION REMOVAL LIMITS AVAILABLE IN SRM. BEAM IS LISTED AS PRIMARY STRUCTURE. R & R BEAM IAW SRM 51-42-11.

2010FA0001034	AIRBUS	FLOOR SUPPORT	CORRODED
9/20/2010	A320232	D5347040004	CARGO BAY

CORROSION ON BULK CARGO COMPARTMENT FLOOR SUPPORT PROFILE CORNER FR 63 STR 38LT. NO CORROSION REMOVAL LIMITS AVAILABLE IN SRM. PROFILE CORNER IS LISTED AS PRIMARY STRUCTURE. R & R PROFILE CORNER IAW SRM 51-42-11.

2010FA0001019	AIRBUS	THRESHOLD	CORRODED
9/20/2010	A320232	D53672139200	FUSELAGE

CORROSION ON AFT CARGO COMPARTMENT DOOR CUTOUT THRESHOLD (PLATE) FR 53 TO FR 56 -Y 1292. NO CORROSION REMOVAL LIMITS AVAILABLE IN SRM. PLATE IS LISTED AS PRIMARY STRUCTURE. R & R PLATE IAW SRM 51-42-11.

2010FA0001023	AIRBUS	FLOORBEAM	CORRODED
9/20/2010	A320232	D53472172200	FUSELAGE

CORROSION ON AFT CABIN FLOOR SUPPORT BEAM FR 66 Y 1292. NO CORROSION REMOVAL LIMITS AVAILABLE IN SRM. BEAM IS LISTED AS PRIMARY STRUCTURE. R & R BEAM IAW SRM 51-42-11.

2010FA0001025	AIRBUS	FLOORBEAM	CORRODED
9/20/2010	A320232	D53472193200	CABIN

CORROSION ON AFT CABIN FLOOR SUPPORT BEAM FR 66 -Y 765. NO CORROSION REMOVAL LIMITS AVAILABLE IN SRM. BEAM IS LISTED AS PRIMARY STRUCTURE. R & R BEAM IAW A320 SRM 51-42-11.

2010FA0001026	AIRBUS	FLOORBEAM	CORRODED
9/20/2010	A320232	D53472188200	CABIN

CORROSION ON AFT CABIN FLOOR SUPPORT BEAM FR 68 TO FR 69 -Y 1292. NO CORROSION REMOVAL LIMITS AVAILABLE IN SRM. BEAM IS LISTED AS PRIMARY STRUCTURE. REMOVED AND REPLACED BEAM IAW A320 SRM 51-42-11.

2010FA0001035	AIRBUS	FLOOR SUPPORT	CORRODED
9/20/2010	A320232	D534704800005	CARGO BAY

CORROSION ON BULK CARGO COMPARTMENT FLOOR SUPPORT PROFILE CORNER STR 38RH BETWEEN FR 63 AND FR 65. NO CORROSION REMOVAL LIMITS AVAILABLE IN SRM. PROFILE CORNER IS LISTED AS PRIMARY STRUCTURE. R & R PROFILE CORNER IAW SRM 51-42-11.

2010FA0001036	AIRBUS	FLOOR SUPPORT	CORRODED
9/20/2010	A320232	D53974734000	CARGO BAY

CORROSION ON BULK CARGO COMPARTMENT FLOOR SUPPORT PROFILE CORNER FR 65, STR 38LH TO STR 38RT. NO CORROSION REMOVAL LIMITS AVAILABLE IN SRM. PROFILE CORNER IS LISTED AS PRIMARY STRUCTURE. R & R PROFILE CORNER IAW SRM 51-42-11.

2010FA0001037	AIRBUS	WEB	CORRODED
9/20/2010	A320232	D53112094203	FUSELAGE

CORROSION ON CABIN FLOOR SIDE PANEL (WEB) FR 16 Y1732. NO CORROSION REMOVAL LIMITS AVAILABLE IN SRM. WEB IS LISTED AS PRIMARY STRUCTURE. R & R WEB IAW SRM 51-42-11.

2010FA0001027	AIRBUS	FLOORBEAM	CORRODED
9/20/2010	A320232	D53472192200	FUSELAGE

CORROSION ON AFT CABIN FLOOR SUPPORT BEAM FR 68 TO FR 70 -Y 765. NO CORROSION REMOVAL LIMITS AVAILABLE IN SRM. BEAM IS LISTED AS PRIMARY STRUCTURE. R & R BEAM IAW SRM 51-42-11.

2010FA0001028	AIRBUS	FLOORBEAM	CORRODED
9/20/2010	A320232	D53472195200	CABIN

CORROSION ON AFT CABIN FLOOR SUPPORT BEAM FR 70 -Y 254. NO CORROSION REMOVAL LIMITS AVAILABLE IN SRM. BEAM IS LISTED AS PRIMARY STRUCTURE. R & R BEAM IAW SRM 51-42-11.

2010FA0001038	AIRBUS	SHEAR PLATE	CORRODED
9/20/2010	A320232	D53471124201	FUSELAGE

CORROSION ON CABIN SIDE PANEL (SHEAR PLATE) FR 69 - FR 70 Y1292. NO CORROSION REMOVAL LIMITS AVAILABLE IN SRM. SHEAR PLATE IS LISTED AS PRIMARY STRUCTURE. R & R SHEAR PLATE IAW SRM 51-42-11.

2010FA0001051	AMD	BRAKE DISC	FAILED
9/9/2010	FALCON20	RFS1065	MLG

(RXWY) DEFECT REPORTED AS BRAKE BINDING/ OVERHEATING BRAKE UNIT SN AUG86-2471, REMOVED. BRAKE UNIT SN JUN88-2439 FITTED. FAST TAXI TEST CARRIED OUT . THE BRAKE LOCKED UP, THE WHEEL WAS REMOVED

OVERHEATING WAS AGAIN EVIDENT AND THE ROTATING DISC PN RFS 1065 FELL OUT IN PIECES. BOTH BRAKES WERE O/H USING NEW ROTATING DISCS. THERE HAS BEEN 1 PREVIOUS REPORTED INCIDENT WHEN OVERHEATING WAS REPORTED SN FEB70-83 REFERS, THIS UNIT WAS ALSO BY THIS REPAIR STATION USING ROTATING DISCS PN 1065. ALL THE ROTATING DISCS USED IN THE 3 OFF BRAKES MENTIONED WERE FROM SAME BATCH/ LOT NR 01210. THE ACFT REG AND SN WERE NOT AVAILABLE WHEN THIS REPORT WAS RAISED.

2010FA0001055	AMD		MOUNT	DELAMINATED
9/14/2010	FALCON2000		FGFB252461410A1	TAILCONE

REMOVAL OF THE APU IS REQUIRED FOR COMPLETION OF SB THAT REPLACES THE APU FIREWALL. UPON DISASSEMBLY OF THE APU FROM THE APU SUPPORT TRUSS, FOUND SHOCK MOUNT DELAMINATING. INSPECTING OF THIS AREA WAS DETERIORATE UNTIL THE NEXT INSP INTERVAL FOR THIS PART. THIS IS THE 4TH TIME WE HAVE SEEN THIS ISSUE IN THE PAST 2 WEEKS ON 4 WEEKS ON 4 DIFFERENT SERIES ACFT.

2010FA0001132	AMTR	CONT	SPRING	BROKEN
8/21/2010	DR107	IO360*	DR107	TAIL WHEEL

ON LANDING TAILSPRING BROKE. ACFT GROUND LOOPED CAUSING SUBSTANTIAL DAMAGE TO AIRCRAFT. INVESTIGATION OF BROKEN TAILSPRING REVEALED 2 EXISTING LOW CYCLE FATIGUE FRACTURES AND 1 OVERSTRESS POINT. MFG SUGGESTS REPLACING WITH A BOLT IN REDESIGNED UNIT.

2010FA0001091	BBAVIA	LYC	SPAR	CRACKED
10/8/2010	7GCB	O320*		RT WING

UPON COMPLIANCE WITH AD 2000-25-02 R1 FOUND A LONGITUDINAL CRACK ON THE RT WING REAR SPAR, JUST INBD OF REAR STRUT ATTACH POINT, DUE TO AGE OF SPAR.

UE5R090810	BEECH	PWA	FUEL NOZZLE	CRACKED
9/8/2010	200BEECH	PT6A42	P1105	ENGINE

(UE5R) CRACK FOUND IN P-1105 PMA FUEL NOZZLE SHEATH AT COOLING AIRFLOW PORT. FOUND DURING INSP AT FUEL NOZZLE KIT RE-CERTIFICATION. ALSO FOUND CASTING FLAW IN TOWER OF SHEATH WHICH APPEARS TO GO THROUGH WALL THICKNESS OF TOWER.

2010FA0001119	BEECH	CONT	CONTROLLER	SEPARATED
9/24/2010	58	IO550*	1023780103	RT PROP GOV

DURING TRAINING FLIGHT RT ENGINE WENT TO 2700 RPM. ACFT RETURNED TO BASE WITHOUT INCIDENT. UPON INSP OF RT ENGINE PROPELLER GOVERNOR AND CONTROL CABLE, IT WAS FOUND THAT THE PROPELLER GOVERNOR CONTROL CABLE HAD SEPARATED WHERE THE FACTORY HAD SEDGED THE THREADED END (WHICH HOLDS THE ROD END BEARING) TO THE CABLE. THE SEDGE ON THE CONTROL CABLE IS RATHER SHORT AT .1875. THE NEW SUPERSEDED CABLE PN 102-389010-47 HAS A LONGER SEDGE OF .3750. WE HAVE FOUND OTHER -3 CABLES WITH THE SEDGE END LOOSE. THIS IS THE FIRST CABLE THAT HAS SEPARATED.

2010FA0001106	BEECH	CONT		DISTRIBUTOR BLK	OUT OF POSITION
10/13/2010	58	IO550C	S6RN1225	10391586	MAGNETO

DURING A PREFLIGHT RUN-UP, THE LEFT ENGINE WAS OBSERVED TO ONLY PRODUCE ABOUT 2000 RPM. INSPECTION OF THE LEFT MAGNETO REVEALED THE BRONZE BEARING HAD BECOME LOOSE IN THE DISTRIBUTOR BLOCK ALLOWING THE DISTRIBUTOR GEAR ELECTRODE TO STRIKE AND DAMAGE SEVERAL OF THE DISTRIBUTOR BLOCK ELECTRODES. THIS IS THE THIRD INSTANCE OF A BENDIX 1200 SERIES MAGNETO TO FAIL IN THIS CONDITION AT ABOUT THE SAME TIME OF AROUND 1300 HOURS. THESE MAGNETOS HAVE BEEN INSPECTED IN ACCORDANCE WITH THE 500 HOUR REQUIREMENTS OF THE TCM 1200 SERIES MAINTENANCE MANUAL AT THE REQUIRED INTERVALS. ALL THESE FAILURES HAVE OCCURRED WITHIN A 6 WEEK TIME FRAME. TCM HAS BEEN CONTACTED AND THEY ARE AWARE OF 2 OTHER SIMILAR FAILURES AND THEY ARE PERFORMING AN ANALYTICAL INSPECTION ON THE RETURNED UNITS.

2010FA0001067	BEECH	LYC	MUFFLER	UNSERVICEABLE
9/8/2010	76	O360A1G6D	8295100	ENGINE EXHAUST

BAFFLE PLATE IN LT MUFFLER APPEARED TO BE OUT OF POSITION WHEN INSPECTED BY SHINING A FLASHLIGHT

UP THE TAILPIPE. ON REMOVAL, IT WAS FOUND THAT THE BAFFLE PLATE WAS CRACKED AND WARPING IN A MANNER THAT COULD HAVE CREATED A SIGNIFICANT BLOCKAGE IN THE FLOW OF GASES FROM THE MUFFLER. BY DESIGN, THE BAFFLE PLATE IN THIS MUFFLER (NOT A HEATER/MUFFLER) DOESN`T SEEM TO PERFORM ANY WORTHWHILE FUNCTION AS DOES THE FLAME-TUBES FOUND IN OTHER MUFFLER DESIGNS. IT COULD HOWEVER, PRESENT A SIGNIFICANT HAZARD WHEN CRACKED, WARPED INSIDE THE MUFFLER. RECOMMEND REMOVING THE BAFFLE PLATE IN THIS TYPE OF MUFFLER.

2010FA0001053	BEECH		BOLT	BACKED OUT
8/18/2010	B200			TUBE

(CTUR) DURING THE 1ST PHASE 3, 4 OF THE ACFT, TECH FOUND WASHER AND NUT LAYING ON INTERIOR OF ACFT SKIN, FOUND BOLT FOR RUDDER PUSH PULL TUBE TO TORQUE TUBE BACKED OUT AND SIGNS OF CONTACT TO SURROUNDING STRUCTURE WAS ALSO NOTED.

2010FA0001041	BEECH	PWA	TRANSMITTER	INOPERATIVE
9/13/2010	B200	PT6A42	12281306	FUEL FLOW

TROUBLESHOT INOPERATIVE LT ENGINE FUEL FLOW INDICATION. FOUND ROTATING ELEMENT OF INLINE FUEL FLOW TRANSMITTER LOOSE AND SHIFTED FWD. REMOVED FUEL LINE FROM TRANSMITTER OUTLET AND FOUND ROTATING ELEMENT SNAP RING INSIDE FUEL LINE. REMOVED SNAP RING AND CLEARED FUEL LINE. REMOVED FUEL FLOW TRANSMITTER PN 1/2-2-81-306, SN 511086 AND INSTALLED AN OVERHAULED EXCHANGE UNIT. GROUND OPS CHECKED. NO DEFECTS NOTED.

2010FA0000995	BEECH	CONT	PISTON	BROKEN
6/7/2010	N35	IO470N	AEC648029	ENGINE

1.8 HOURS AND ON SECOND FLIGHT AFTER INSTALLATION OF 6 NEW PISTONS PN AEC648029 WITH 6 REWORKED CYLINDER ASSEMBLIES, THE ENG EXPERIENCED A CATASTROPHIC TOTAL ENG FAILURE, MINUTES AFTER TAKEOFF DEPARTURE FROM AIRPORT. POST INCIDENT INVESTIGATION FOUND NR 2 CONNECTING ROD AND WRIST PIN HAD EJECTED THROUGH TOP OF ENGINE CASE WHILE IN FLIGHT. TEARDOWN OF ENGINE BY REPAIR STATION FOUND NR 2 PISTON BROKEN COMPLETELY IN HALF AT OIL CONTROL RING GROOVE, AND SECTIONS OF THE BROKEN PISTON SKIRT HAD CONTACTED CRANKSHAFT WHILE IN ROTATION. CRANKSHAFT WAS DAMAGED AT COUNTERWEIGHT ATTACH POINT, AND NR 1 AND 2 CYLINDERS AND CONNECTING RODS DAMAGED. REQUEST FOR DETAILED ANALYSIS OF FAILED COMPONENTS SUBMITTED IN SAFETY RECOMMENDATION TO FAA OFFICE OF ACCIDENT INVESTIGATION AND PREVENTION, AVP-420.

2010FA0001065	BELL	ALLSN	COUNTERWEIGHT	LOOSE
7/27/2010	206B	250C20J	206010200133	M/R BLADE

ACFT WAS PERFORMING A TRAINING MISSION WHEN THE MID SPAR MAIN ROTOR BLADE WEIGHT CAME LOOSE. THE ACFT PRECAUTIONARY LANDED WITH NO INJURIES. THE MID SPAR BLADE BLEW OUT THE MAIN ROTOR END CAP. THE END CAP DID NOT COME COMPLETELY OFF BUT WAS TORN LOSE AT THE AFT ATTACHMENT POINT.

2010FA0001001	BOEING		WHEEL HALF	CRACKED
9/16/2010	717200		2614964	MLG

WHEEL HALF CRACKED.

2010F00207	BOEING	HONEYWELL	TIE BOLT	BROKEN
9/16/2010	737800*		2613109	ZONE 700

MULTIPLE BROKEN TIE BOLTS FOUND DURING THE INSPECTION OF WHEEL. WHEEL INSPECTED UPON RECEIPT.

2010F00208	BOEING	HONEYWELL	TIE BOLT	BROKEN
9/16/2010	737800*		2613109	ZONE 700

WHEEL HAD MULTIPLE BROKEN TIE BOLTS ON POSITION 1 OF AIRCRAFT.

2010FA0001000	BOEING	RROYCE	SLIDE	ACTIVATED
9/10/2010	757236	RB211*	D31040204	R2 DOOR

THE R2 DOOR SLIDE WAS DEPLOYED WHEN DOOR WAS OPEN BY THE CREW IN THE ARMED POSITION AND

DEPLOYED. ACFT INSPECTED AND NO DAMAGE FOUND EXCEPT SLIDE DEPLOYED. SERVICEABLE SLIDE INSTALLED AND ACFT RETURNED SERVICE.

2010FA0001062	BOMBDR	RROYCE	TURBINE BLADES	CRACKED
9/28/2010	BD7001A10	BR700710A220		ZONE 400

DURING A ROUTINE BORESCOPE INSPECTION, FOUND (3) STAGE 1 HPT BLADES WITH MISSING MATERIAL ON THE BLADE PLATFORM. ONE OF THE BLADES WITH MISSING PLATFORM MATERIAL ALSO HAS A CRACK ON THE T/E OF THE BLADE. THE DETERMINATION WAS MADE TO REMOVE THE ENGINE AND SEND IT TO THE SHOP FOR REPAIR.

2010FA0001094	CESSNA	LYC	CYLINDER HEAD	CRACKED
10/7/2010	152	O235L2C	ECL011ST	NR 2

(LW5R) 4 CYLINDER ASSEMBLIES WERE INSTALLED AT ENGINE TT OF 5324.4 HRS. CYLINDER NR 2 FAILED COMPRESSION TESTING AT ENGINE TT OF 5757.1 AND A CRACK IN THE CYLINDER HEAD NEAR THE EXHAUST VALVE WAS DISCOVERED. THE CYLINDER HAD 432.7 TIS ON THIS ENGINE. 4 PISTON PINS (PN LW13445) AND 8 PISTON PIN PLUGS (PN SL 11625) WERE INSTALLED AT THE SAME TIME AS THE CYLINDER ASSEMBLIES. AT CYLINDER REMOVAL, 1 PISTON PIN PLUG IN THE NR 2 CYLINDER WAS SIGNIFICANTLY WORN AND SCORING WAS FUND ON THE CYLINDER WALL.

2010FA0001056	CESSNA	LYC	MASTER CYLINDER	CRACKED
9/24/2010	172P	O320*	98820125	BRAKE ASSY

PILOT SQUAWK: LT PILOT SIDE BRAKE MASTER CYLINDER ROD BROKE AT THE THREADS BELOW PEDAL CLEVIS. LOST ALL BRAKING CONTROL ON LT SIDE. LT BRAKE MASTER CYLINDER, PN 9882012-5.

YN8R11227	CESSNA		HOSE	SPLIT
9/3/2010	172S		S14956	FUEL SYSTEM

UPON VISUAL INSP, FOUND FUEL HOSES CRACKED. BATCH NR 062308B, 17 PIECES.

2010FA0001138	CESSNA	LYC	LINE	SEPARATED
9/4/2010	177RG	IO360A1B6	S217840150	HYDRAULIC SYS

LANDING GEAR WOULD NOT EXTEND DUE TO FAILURE OF NOSE GEAR DOWN PRESSURE HYD HOSE ASSY. GEAR HYD HOSE ASSY (ALL) SHOULD BE CHANGED EVERY 10 YRS OR 1000 HRS TIS BETWEEN CHANGES.

2010FA0001063	CESSNA	PWA	CASE	BROKEN
9/4/2010	208B	PT6A114	3011217	PROP REVERSER

PILOT REPORTED TO MX THAT WITH THE THROTTLE LEVER AT THE GATE (FWD SIDE OF GATE) THE ENGINE WAS GOING INTO REVERSE. THE SUBSEQUENT INSP FOUND THE REVERSE ROPE CASING HAD BROKEN AT THE SWIVEL JOINT. THE REVERSE ROPE ITSELF WAS STILL ATTACHED.

2010FA0001112	CESSNA	CONT	HOSE	BROKEN
10/6/2010	340CESSNA	TSIO520NB	MILH6000	AIR/OIL SEPARAT

PILOT NOTICED OIL STREAMING FROM ATHE ENGINE COWLING DURING FLIGHT AND DECIDED TO FEATHER THE ENGINE BEFORE A CATASTROPHIC FAILURE OCCURRED. THE OIL DRAIN HOSE FROM THE AIR/OIL SEPARATOR IN THE WET VACUUM PUMP AND PRESSURIZATION SYSTEM SEPARATED WHICH DRAINS THE EXCESS OIL BACK INTO THE OIL SCAVENGE PUMP. THAT ALLOWED THE ENGINE OIL TO ESCAPE OUT THE BROKEN HOSE INTO THE ENGINE BAY. REPLACED THE HOSE WITH A NEW UNIT AND NO OTHER DISCREPANCIES WERE NOTED.

2010FA0001096	CESSNA	CONT	SHAFT	BROKEN
9/16/2010	414A	TSIO520NB	4067879	TURBOCHARGER

CAUSED LOSS OF ENGINE OIL. OIL LEAKING FROM THE EXHAUST SIDE OF TURBOCHARGER SHAFT AND BURING OIL OUT OF THE EXHAUST PIPE. LET TURBO COOL DOWN SOME BEFORE SHUT DOWN. TURBO HAD EXCESSIVE COAKING SIGNS.

2010FA0001066	CESSNA	PWA	SEAT FRAME	BROKEN

9/10/2010	550	JT15D4	551900948	SEAT ASSY

UPPER SEAT BASE ASSY CRACKED AT CHAIR BACK ATTACH POINTS. STRESS ON CHAIR BACK AND METAL FATIGUE PROBABLE CAUSE. CHAIR WAS REPAIRED IAW PROCEDURE STC STO1042WI AND DWG D-10395.

2010FA0001114	CESSNA		ROLLER	WORN
10/5/2010	560CESSNA		S30495F8	TE FLAPS

THE PN LISTED IN LINE 5 IS A 5000 LANDING REPLACEMENT ITEM AS REQUIRED IN CHAPTER 4 OF THE MM. THESE DEFECTIVE ROLLERS WERE FOUND WHILE PERFORMING OTHER WORK THAT REQUIRED REMOVAL OF 2 FLAPS. UPON REMOVAL OF THE FLAPS FOUND, 3 OF THE 8 ROLLERS TO BE DEFECTIVE AND REQUIRED REPLACEMENT. THESE ROLLERS ARE DIFFICULT TO INSPECT WITHOUT DISASSEMBLY AND THE CURRENT INSPECTION CRITERIA DOES NOT REQUIRE DISASSEMBLY TO COMPLETE THE INSPECTION. DEFECTIVE ROLLERS HAVE BEEN FOUND BEFORE ON OTHER OPERATORS ACFT. THESE ROLLERS CAN FAIL WITH NO EXTERNAL INDICATION, LIMITING THE ROLLERS ABILITY TO TURN AND CAUSING SUBSEQUENT FLAP OPERATIONAL PROBLEMS. THE PREVIOUS LIFE LIMIT WAS 1200 HOURS. THE CURRENT LIFE LIIMIT IS 5000 LANDINGS. ROLLERS HAVE BEEN FOUND IN UNAIRWORTHY CONDITION UNDER BOTH CRITERIA. RECOMMEND REVIEWING LIFE LIMITS AND INSPECTION CRITERIA TO ENSURE FLAP ROLLERS ARE ADEQUATELY INSPECTED AND LIFE LIMITS ARE APPROPRIATE.

2010FA0001092	CESSNA	LYC	BUSHING	DAMAGED
9/17/2010	R182	O540J3C5		MIXTURE CONTROL

REPORT CAME BACK FROM PILOT THAT THEY HAD AN ENGINE FAILURE IN THE PATTERN AT U30. THE ACFT LANDED WITH NO POWER AVAILABLE. PUMPING THE ACFT THROTTLE WOULD KEEP THE ENGINE RUNNING. PROBLEM WAS DETERMINED TO BE CARBURETOR. MFG SERVICE DEPARTMENT WAS CONSULTED AND THEY SENT AN NEW CARBURETOR OUT TO BE INSTALLED BY OUR MX PERSONNEL. INSTALLED NEW CARB, AND RETURNED THE ACFT TO SERVICE. INSPECTING THE CARB, WE FOUND IN THE MIXTURE CONTROL MECHANISM, THERE IS A BRONZE BUSHING THAT IS NOT INTENDED TO MOVE. IT WAS FLOATING (RANDOMLY MOVING BECAUSE OF VIBRATION AND MIXTURE CONTROL ADJUSTMENTS) THEREFORE MISS ALIGNING THE MAIN METERING JET PASSAGE THROUGH THE ADJUSTABLE STAINLESS STEAL MIXTURE ORIFICE CAUSING FUEL STARVATION AND ENGINE STOPPAGE. TO PREVENT FRO HAPPENING AGAN MECHANICALLY FIX (SECURE) THE BRONZE BUSHING IN PLACE.

2010FA0001042	CESSNA	CONT	FLAP SYSTEM	MALFUNCTIONED
9/22/2010	U206G	IO550F		TE FLAPS

DURING A TRAINING FLIGHT, AT ABOUT 2000 FT FLAPS DID NOT RETRACT FROM FULL FLAP EXTENSION DURING RECOVERY FROM AN IMMINENT FULL-FLAP, POWER OFF STALL. SEVERAL UNSUCCESSFUL ATTEMPTS WERE MADE TO RETRACT THE FLAPS, THE FLAP CIRCUIT BREAKER HAD NOT TRIPPED AND THE REAR CARGO DOORS WERE PROPERLY CLOSED. ON TAXI AFTER LANDING FLAPS OPERATED NORMALLY. MX CHECKED THE FLAP SYS AND NO FAULTS WERE FOUND.

2010FA0001068	COLUMB		BRAKE DISC	UNSERVICEABLE
9/30/2010	LC41550FG400		R16403504	MLG

DURING ANNUAL INSP, FOUND BOTH BRAKE DISCS HAVE CRACKS RUNNING ALONG THE RADIUS NEAR THE BASE WHICH RESTS AGAINST THE WHEEL. CRACKS OF SEVERAL INCHES IN LENGTH WERE NOTED AND 1 DISC HAD A PIECE OF MATERIAL MISSING.

2010FA0001017	COLUMB	CONT	CONTROL ROD	WORN
9/17/2010	LC41550FG400	TSIO550C	LB57263401LB5726	TE FLAPS

FLAP ASSEMBLIES/SYS HAS EXCESSIVE PLAY: DURING ANNUAL INSP FOUND FLAP RODS HAD EXCESSIVE PLAY AT FLAP CONTROL RODS. URETHANE INSERTS IN EA FLAP ROD ARE LOOSE. FURTHER INVESTIGATION REVEALS THAT THE HOLES THROUGH THE URETHANE INSERTS ARE ELONGATED. AMM CHAP 27 DOES NOT GIVE ANY WEAR LIMIT OR AUTHORIZED REPAIR IN THE MM, FOR THIS REASON, THE RODS REQUIRED TO BE CHANGED BECAUSE MFG SERVICE CTRS ARE NOT AUTHORIZED TO CHANGE THE URETHANE INSERT THAT IS INSERTED IN THE ROD ASSY AND FASTENED TOGETHER BY 2 BOLTS ON EACH END. THE ROD PN IN THE ACFT ARE PN LB57263401 FOR THE LT WING ROD AND PN LB57263402 FOR THE RT WING FLAP ROD. REF MFG, CHAP 27-00-00, FIG 29, INDEXES 27 & 28.

2010FA0001013	DIAMON			FORK	CRACKED
3/30/2010	DA20C1			2032200800	NLG

(BNGR) NLG FORK CRACKED ON BOTH LT AND RT SIDE.

2010FA0001012	DIAMON	CONT		FORK	CRACKED
8/26/2010	DA20C1	IO240B		2032200800	NLG

(BNGR) NLG FORK CRACKED ON LT SIDE.

2010FA0001014	DIAMON	CONT		FORK	CRACKED
4/7/2010	DA20C1	IO240B		2032200800	NLG

(BNGR) NLG FORK ON BOTH LT AND RT ARMS CRACKED.

2010FA0001049	DIAMON	CONT	GARMIN INTL	DATA CARD	FAILED
9/21/2010	DA20C1	IO240B	G430	IFREP	GPS

GPS IFR DATA CARD FAILED IN FLIGHT. THE G430 USES A DATA CARD REFRESHED BY THE OPERATOR EVERY 28 DAYS. THE GPS UNIT ACCESSES THE CARD CONTINUOUSLY. IF THE CARD IS REMOVED OR FAILS, THE UNIT PROVIDES LAT/LONG ONLY. NO OTHER GPS NAVIGATION FEATURES ARE AVAILABLE TO THE PILOT. THE CARD IN QUESTION HAD BEEN REFRESHED BY THE AUTHOR A WEEK PRIOR, WITH A NORMAL UPDATE SEQUENCE: ERASE CARD, PROGRAM CARD, VERIFY DATA ON CARD. THE PROGRAMMING ROUTINE SUPPLIED BY THE DATA PUBLISHER FINISHED THE PROCESS WITH A "SUCCESS" MESSAGE. THE CARD FAILED IN VMC, NOT ENDANGERING LIFE OR PROPERTY. THE AUTHOR CALLED THE DATA PUBLISHER FOR ASSISTANCE. TECH SUPPORT TOLD HIM "FLASH MEMORY FAILS." THE TECH SUPPORT REPRESENTATIVE SAID THAT WITHOUT THE CARD, NO TROUBLESHOOTING COULD BE ACCOMPLISHED. THE AUTHOR ASKED FOR AN ADDRESS TO SEND THE CARD FOR TROUBLESHOOTING. AFTER ALL, IF THE CARD (OR ANY SIMILAR CARD) WERE TO FAIL IN IMC, IT WOULD POTENTIALLY BE A LIFE-THREATENING SITUATION. TECH SUPPORT REFERRED THE AUTHOR TO CUSTOMER SERVICE WHO PROVIDED AN RMA AND OFFERED A REPLACEMENT CARD AT NO COST. WHEN THE AUTHOR ASKED IF THE CARD WOULD BE DELIVERED TO THE TECH SUPPORT REPRESENTATIVE FOR FAILURE ANALYSIS, HE WAS TOLD, "OH NO, WE RECYCLE ALL THE DEFECTIVE CARDS." "WHEN YOU RETURN THE CARD TO US, WE WILL REPLACE IT FREE OF CHARGE." FROM A COMMERCIAL POINT OF VIEW, THAT'S FINE, BUT IT ALLOWS THE EVIDENCE OF ANY FAILURE, OR ANY PATTERN OF FAILURE TO BE DESTROYED WITHOUT EXAMINATION.

U43R2010AF0000201	DIAMON	LYC		PUMP	FAILED
9/17/2010	DA40	IO360M1A		5100009	ZONE 100

DURING PREFLIGHT CREW ENERGIZED THE ELECTRIC FUEL PUMP TO TEST IT AND THE PUMP FAILED. TOTAL TIME IN SERVICE THAT THIS PUMP HAD, WAS ONLY 191.4 HOURS.

U43R2010AF0000200	DIAMON	LYC		PUMP	FAILED
9/17/2010	DA40	IO360M1A		5100009	ENGINE FUEL

BEFORE STARTING THE ENGINE, CREW TURNED ON THE ELECTRIC FUEL PUMP AND THE CIRCUIT BREAKER TRIPPED. TOTAL TIME ON THIS ELECTRIC FUEL PUMP SINCE NEW, 31 HOURS.

U43R2010AF0000194	DIAMON	LYC		PUMP	FAILED
7/19/2010	DA40	IO360M1A		5100009	FUEL SYS

PRIOR TO THE 4TH FLIGHT OF THE DAY, WHEN THE CREW TURNED ON THE FUEL PUMP TO START THE ENGINE, IT FAILED. THE TECH TESTED THE POWER TO THE PUMP AND DETERMINED THAT THE ACFT WAS PROVIDING 28 VOLTS OF POWER TO THE FUEL PUMP. R2 THE PUMP RETURNED THE AIRPLANE TO SERVICE.

ABXR201009250052	DOUG			CONTROL CABLE	CORRODED
9/25/2010	DC933F			4913810AS20100	THRUST REVERSER

DURING FERRY FLIGHT PREP FOUND CABLE 51C CORRODED FWD OF APB. R & R CABLE 51C IAW AMM.

ABXR201009250040	DOUG	PWA		MOUNT	CORRODED
9/25/2010	DC933F	JT8D9		K22197SA3	NR 1 ENGINE

DURING FERRY FLIGHT FLIGHT, PREP FOUND NR1 PYLON AFT MOUNT RECEIVER RUSTED AND PITTED. R & R NR1 PYLON AFT MOUNT IAW MM.

ABXR201009250041	DOUG	PWA	ISOLATOR	CORRODED
9/25/2010	DC933F	JT8D9	K221975A1	NR 1 ENGINE

DURING FERRY FLIGHT PREP FOUND NR 1 PYLON YOKE LOWER ISOLATION ABSORBER RUSTED AND PITTED. R & R LOWER ISOLATION ABSORBER IAW MM.

ABXR201009250042	DOUG	PWA	ISOLATOR	CORRODED
9/25/2010	DC933F	JT8D9	K22197SA1	NR 1 ENGINE

DURING FERRY FLIGHT PREP FOUND NR1 PYLON UPPER VIBRATION ISOLATOR RUSTED AND PITTED. R & R NR1 PYLON UPPER VIBRATION ISOLATOR IAW MM.

ABXR201009250049	DOUG	PWA	CONTROL CABLE	BROKEN
9/25/2010	DC933F	JT8D9	4913801AS16510	THRUST REVERSER

DURING FERRY FLIGHT PREP FOUND THRUST REVERSER CONTROL CABLE 48C BROKEN. R & R CABLE 48C IAW AMM.

ABXR201009250050	DOUG	PWA	CONTROL CABLE	BROKEN
9/25/2010	DC933F	JT8D9	4916997AS16826	THRUST REVERSER

DURING FERRY FLIGHT PREP FOUND CABLE RUN 52C FOR RT THRUST REVERSER CORRODED AND BROKEN STRANDS. R & R CABLE 52C IAW AMM.

ABXR201009250051	DOUG	PWA	CONTROL CABLE	BROKEN
9/25/2010	DC933F	JT8D9	188352	ENGINE

DURING FERRY FLIGHT PREP FOUND NR 1 ENGINE FWD TELESCOPING BRAIDED CABLE RUSTED, WORN, AND BROKEN STRANDS. R & R NR1 ENGINE FWD TELESCOPING GRAIDED CABLE IAW AMM.

ABXR201009250043	DOUG	PWA	MOUNT	CORRODED
9/25/2010	DC933F	JT8D9	K22197SA3	NR 2 ENGINE

DURING FERRY FLIGHT PREP FOUND NR2 PYLON AFT ENGINE MOUNT CORRODED. R AND R AFT MOUNT ASSY IAW MM.

ABXR201009250044	DOUG	PWA	FITTING	CORRODED
9/25/2010	DC933F	JT8D9	090251653001	ZONE 400

DURING FERRY FLIGHT PREP FOUND NR 2 PYLON FWD LOWER SPLICE FITTING CORRODED. R & R SPLICE FITTING IAW SRM.

ABXR2010092400039	DOUG	PWA	LINK	CORRODED
9/24/2010	DC933F	JT8D9	R181323	NR 1 ENGINE

DURING FERRY FLIGHT, PREP FOUND NR1 PYLON AFT MOUNT UPPER INBD "H" DOG BONE AND OTBD BOLT RUSTY. R & R BOLT AND MOUNT LINK IAW MM.

ABXR201009250046	DOUG	PWA	YOKE	CORRODED
9/25/2010	DC933F	JT8D9	99581612	ZONE 400

DURING FERRY FLIGHT PREP FOUND NR 2 ENGING FWD. YOKE CORRODED. R & R NR 2 ENG FWD YOKE IAW AMM.

ABXR201009250047	DOUG	PWA	PUSH-PULL CABLE	DAMAGED
9/25/2010	DC933F	JT8D9	188351	THROTTLE

DURING FERRY FLIGHT PREP FOUND NR 2 ENGINE THROTTLE DOES NOT MOVE FROM THROTTLE LEVER. R & R NR 2 ENGINE THROTTLE PUSH PULL CABLE IAW MM.

ABXR201009250048	DOUG	PWA	CONTROL CABLE	BROKEN

9/25/2010	DC933F	JT8D9	4913802AS19528	THRUST REVERSER

DURING FERRY FLIGHT PREP FOUND NR 1 T/R SECTOR ON AFT 'P' DOME DOESN'T MOVE WITH T/R HANDLE MOVEMENT. REPLACED CABLE 47C IAW AMM.

ABXR201009250045	DOUG	PWA	FITTING	CORRODED
9/25/2010	DC933F	JT8D9	09251653003	NR 2 PYLON

DURING FERRY FLIGHT PREP FOUND NR 2 PYLON FWD. UPPER SPLICE FITTING CORRODED. R & R NR2 PYLON FWD UPPER SPLICE FITTING IAW AMM.

EE4Y100438	DOUG	SUPPORT FITTING	CRACKED
10/25/2010	DC982	3936668507	FUSELAGE

DURING STRUCTURAL INSPECTION COOPESA REPORTED AT UPPER FUSELAGE PAX CABIN YSTA 598, X 0, Z 0, BEAM SUPPORT FITTING WITH CRACK. (PART WILL BE REPLACED)

EE4Y100439	DOUG	SUPPORT FITTING	CRACKED
10/25/2010	DC982	3936668507	FUSELAGE

DURING STRUCTURAL INSPECTION COOPESA REPORTED AT UPPER FUSELAGE PAX CABIN STA Y294, X 0, Z 0, BEAM SUPPORT FITTING WITH CRACK. (PART WILL BE REPLACED)

EE4Y100440	DOUG	SUPPORT FITTING	CRACKED
10/25/2010	DC982	3936668507	FUSELAGE

DURING STRUCTURAL INSPECTION COOPESA REPORTED AT UPPER FUSELAGE PAX CABIN STA Y1075, X 0, Z 0, SUPPORT FITTING WITH CRACK. (PART WILL BE REPLACED)

2010FA0001099	DOUG	GENERATOR	DAMAGED
9/29/2010	MD9030	28B5278	

(HZ3R) GENERATOR WAS SEPARATED AT THE END BELL AND STATOR. HELICOILS WERE PULLED. THE MAIN DRIVE SHAFT WAS BROKEN. METAL WAS FOUND IN THE FILTER. THE PUMP WAS SEIZED AND PACKED FULL OF DEBRIS. THE PUMP DRIVE SHAFT WAS IN GOOD CONDITION. THE END BELL EXCITER STATOR WAS LOOSE INSIDE THE ENDBELL, AND AN EXCITER BAND FROM THE ROTOR WAS DISLODGED FROM THE ROTOR AND REMOVED FROM THE END BELL. THE ROTOR HAD SEVERE RUB DAMAGE. THE DRIVE END BAND WAS SEPARATED FROM THE ROTOR. THE OPPOSITE MAIN ROTOR BAND HAD ALSO SLIPPED OUT OF PLACE, BUT WAS STILL ATTACHED TO THE ROTOR. SEVERE RUB DAMAGE TO THE STATOR. CAUSE: ELECTRICAL SHORT IN ROTOR CORE. PREVENTATIVE ACTION: PENDING COMPLETION OF ENGINEERING EVALUATION.

2010FA0001098	DOUG	ROTOR	DAMAGED
9/29/2010	MD9030	64315107	PUMP

(HZ3R) PUMP ASSY HAD SEVERE DAMAGES, SUCH AS GEAR BUSHING BROKE AND GEAR SHAFT DISASSEMBLE FROM NORMAL POSITION (STILL MOUNTED IN THE ROTOR) STATOR ASSY - SEVERE DAMAGES FROM ROTOR ASSY END BELL ASSY - LINER HAS BEEN DISINTEGRATED. LINER MOUNTING STRUCTURES ARE COMPLETELY DESTROYED. ROTOR ASSY - EXCITER AND MAIN STATOR SEVERE DAMAGES. PMG AND ROTOR ASSY WAS PUSHED UP WHICH MAY HAVE CAUSED THE UNIT TO SEIZE. OPEN

2010FA0001040	EMB	SHUTTLE VALVE	STICKING
9/17/2010	EMB500	90005154	BRAKE ASSY

ACFT ARRIVED AT DESTINATION AFTER DROPPING OFF PASSENGERS, PILOTS NOTICED THAT THEY HAD LIMITED BRAKING WHILE TAXI OUT FOR DEPARTURE. ACFT RETURNED TO MX BASE AND BRAKE BLEEDING PROCEDURES WAS ACCOMPLISHED IAW MM 32-40-00-870-801-A. ACFT WAS RETURNED TO SERVICE. FOUND SHUTTLE VALVE STICKING.

2010FA0001052	EMB	ACTUATOR	MALFUNCTIONED
9/15/2010	EMB500	6094A000103	RT FLAP

(MV5R) FLIGHT CREW REPORTED STRONG ROLL TENDENCIES TO THE RT WHEN POSITIONING THE FLAPS TO

FLAPS 3 OR FULL. BUT NO ROLL IN POSITION 1 OR 2. A FLAP RIGGING CHECK WAS PERFORMED WITH NO DEFECTS NOTED. THE RT FLAP LINEAR ACTUATOR WAS REPLACED, RIGGED AND THE ACFT WAS TEST FLOWN WITH NO ROLL TENDENCIES REPORTED IN ANY FLAP POSITION. THIS FLAP LINEAR ACTUATOR HAD BEEN PREVIOUSLY REPLACED ON 2/11/2010 TO PERFORM FLAP MOTOR SCREENING IAW SB 6094A0001-27-02 AND HAD BEEN PREVIOUSLY REPLACED ON 5/14/09 DUE TO FLAP SYS FAILURE TO MOVE FLAPS.

2010FA0001095	GULSTM		ATTACH BRACKET	CRACKED
9/27/2010	G1159A		159BM102167B	STA 169

(S6NR) FLIGHT CREW REPORTED MAIN ENTRY DOOR WOULD HANG AT CLOSURE, INVESTIGATED ANOMALY AND DISCOVERED UPPER MAIN ENTRY DOOR ATTACH FITTING CRACKED. CONTACTED MFG STRUCTURAL DEPT AND DIVULGED FINDINGS. AFTER CONVERSATION WITH TECH SUPPORT, WAS INFORMED OF A REPLACEMENT FITTING THAT HAS BEEN MODIFIED TO TAKE THE LOAD OF THE RECIPROCATING ACTION OF THE MAIN ENTRY DOOR ACTUATOR. INSTALLATION OF NEW FITTING AND SUPPORTING CHANNEL PERFORMED BY OUTSIDE VENDOR. PERFORMED ADJUSTMENT/ RIGGING CHECK AND OPERATIONAL TEST OF MAIN ENTRY DOOR TO INCLUDE ACTUATOR WITH NO DISCREPANCIES NOTED.

2010FA0001006	HUGHES	LYC	PIN	WORN
9/17/2010	269C	HIO360D1A	MS203922C47	FUEL CELL STRAP

DURING 200 HR INSP WEAR MARKS WERE FOUND ON THE BOTTOM OF BOTH FUEL TANKS, CAUSED BY ATTACH PIN PN MS20392-2C47 USED ON STRAP ASSY. PN 269A8329-23. DETAILED INSP FOUND WEAR TO BE CAUSED BY INSUFFICIENT PAD MATERIAL INSTALLED ON STRAP ALLOWING CONTACT BETWEEN THE PIN AND THE FUEL TANK SKIN. WEAR DEPTH AT ONE POINT WAS ENOUGH TO REQUIRE REPLACEMENT OF TANK. INSP OF SHIP SN S1940 FOUND SIMILAR WEAR MARKS BEGINNING.

2010FA0001059	HUGHES	LYC	ENGINE	FAILED
9/15/2010	269C1	HO360*		

THE OIL TEMP SPIKED ABOVE RED LINE AS THE HELICOPTER TURNED FINAL. AN IMMEDIATE LANDING WAS MADE. AS THE HELICOPTER TOUCHED DOWN, A LOUD NOISE WAS HEARD FOLLOWED BY SMOKE AND FIRE. THE FIRE WAS QUICKLY EXTINGUISHED. PARTS OF THE ENGINE CRANKCASE, ROD BEARING AND CONNECTING ROD WERE FOUND ON THE RAMP. INVESTIGATION OF THE ENGINE REVEALED A 4 INCH DIAMETER HOLE IN THE CRANKCASE BELOW THE NR 1 CYLINDER AND A 1 INCH HOLE BELOW THE NR 3 CYLINDER.

2010FA0001071	LANCAR	CONT	ADAPTER	DAMAGED
9/27/2010	LC42550FG	IO550N	6420871A5	STARTER

THIS PART WAS ORIDINALLY REPAIRED AT 980 HRS, DUE TO SLIPPING OF GEARS/SPRINGS. NEW STYLE STARTER ALSO INSTALLED AT THIS TIME. APPROX 20-25 HRS LATER, UNIT FAILED AGAIN: ACCORDING TO MFG WHEN THEY RECEIVED THE UNIT AGAIN FOR REPAIR. THE SAME PROBLEM WAS FOUND IN UNIT. IT WAS REPAIRED AGAIN, TO DATE NO FURTHER PROBLEMS. ACCORDING TO INFO FROM SERVICE CTR, THIS HAS BEEN AN ISSUE, ESPECIALLY WITH THESE STARTERS.

2010FA0001007	LEAR	GARRTT	O-RING	DAMAGED
9/3/2010	55LEAR	TFE7313A		SWIVEL FITTING

(QFYR) O-RING PACKING FAILED ON THE LT MLG ACTUATOR SWIVEL FITTING ALLOWING HYDRAULIC FLUID TO LEAK OVERBOARD. THIS O-RING IS AT THE BASE OF THE SWIVEL FITTING. WHERE IT ATTACHES TO THE ACTUATOR. THE ACFT SPOILERS WHEN OPERATED OPENED AND THEN SLAMMED BACK DOWN AND THE LANDING GEAR WAS SLUGGISH TO EXTEND. BOTH ENGINE HYD PUMPS WERE DAMAGED AND WILL HAVE TO BE CHANGED.

2010FA0000996	LET		RIB	CRACKED
9/10/2010	L23			ZONE 500

NR 3 RIB FOUND CRACKED AT UPPER FLANGE LT/RT WING.

2010FA0001060	LKHEED	WRIGHT	REGULATOR VALVE	WORN
9/16/2010	P2V5F	R3350*	HC5520	HYD SYSTEM

(NI6R) ON APPROACH FOR LANDING, THE AIRCREW DISCOVERED THE MAIN HYD SYS WOULD NOT BUILD PRESSURE ABOVE 1,000 PSI. NORMAL IN-FLIGHT OPERATING RANGE IS 1,400 - 1,725 PSI. AN IN-FLIGHT EMERGENCY WAS DECLARED, THE ACFT LANDED SAFELY, AND WAS TOWED FROM THE ACTIVE RUNWAY. DISCREPANCY WAS SUBSEQUENTLY DUPLICATED BY MX AND TROUBLESHOOTING REVEALED THE HYD PRESSURE REGULATOR VALVE WAS CHATTERING AND BYPASSING FLUID INTERNALLY. THE VALVE WAS R & R, PROPERLY ADJUSTED, AND FUNCTIONALLY CHECKED GOOD. DISASSEMBLY OF THE VALVE REVEALED INTERNAL WALL TO BE WORN AND DAMAGED.

2010FA0000964	LKHEED			CONVERTER	FAILED
8/6/2010	S3B			100201021986	AC ELECTICAL SYS

AC FREQUENCY CONVERTER, SUSTAINED AN UNCONTAINED FAILURE WITH NO ELECTRICAL LOAD APPLIED. FIRE BREACHED THE ALUMINUM CASE PRIOR TO ACTIVATION OF THE ACFT CIRCUIT PROTECTION.

2010FA0001090	MAULE	LYC	SLICK	IMPULSE COUPLING	BROKEN
9/22/2010	MX7235	O540*		M3635	MAGNETO

PILOT REPORTED LT MAGNETO FAULTY DURING RUN-UP. INVESTIAGTION REVEALED HOLE IN MAGNETO ADAPTER PLATE, WITH ALUMINUM SHAVINGS IN ENGINE COMPARTMENT. REMOVED ENGINE FROM ACFT, AND REMOVED SUMP AND ACCESSORY CASE. FUND DAMAGED LT MAGNETO DRIVE GEAR, LT CRANKSHAFT IDLER GEAR, AND BROKEN IMPULSE COUPLING. FOUND COUPLING RETAINER NUT FINGER LOOSE WITH COTTER PIN IN PLACE. IMPULSE COUPLING NOT COVERED BY AD 49-04-04 IN THIS APPLICATION. THE 500 HR INSP WAS NOT DONE. RECOMMEND INSP OF IMPULSE COUPLING AT 500 INTERVAL AS RECOMMENDED BY MASTER SERVICE MANUAL.

XOHR2010FA001070	MOONEY	CONT	KELLY	BRUSH BLOCK	LOOSE
9/10/2010	M20K	TSIO360GB			ALTERNATOR

() CHARGING SYS REPORTED AS INTERMITTENT. UPON TROUBLESHOOTING, FOUND BOTH F1 AND F2 POSTS WERE LOOSE ON ALTERNATOR`S BRUSH BLOCK. THE BRUSH BLOCK IS PLASTIC AND THERE IS NO LOCKING DEVICE ON THESE POSTS. ENGINE VIBRATION IS MOST LIKELY THE CAUSE OF THE NUTS LOOSENING ON POSTS. SUGGEST SOME SORT OF POSITIVE LOCK DEVICE BE ADDED TO THIS ASSY.

2010FA0001064	PIPER	LYC		CARBURETOR	MALFUNCTIONED
7/27/2010	PA18A150	O320B2B		ID367832	ENGINE

ENGINE RAN POORLY ON CLIMB FROM BANNER PICK UP - ABOUT 1200 FT AGL ENGINE ONLY PRODUCED 100 RPM WITH BLACK SMOKE COMING FROM EXHAUST STACKS. NR 2D, NR 4 SPARK PLUGS WERE BLACK WITH SOOT. IT WAS DETERMINED THAT THE CARBURETOR WAS NOT FUCTIONING PROPERLY. R/P CARBURETOR WITH MA4SPR-10-3678-32, SER A-109983 KAE 07064. ENGINE HAS RUN FINE SINCE CARBURETOR INSTALLATION.

2010FA0001061	PIPER	LYC		CARBURETOR	FAILED
9/24/2010	PA28161	O320D3G		AV105217	ENGINE

REMOVED CARBURETOR, WAS UNABLE TO PROPERLY LEAN. NO RISE AT ANY RPM. ROUGH AND STUMBLED WHEN REDUCING POWER AND WHEN ADVANCING POWER. HAD CARBURETOR O/H RS NR V1RR580Y. INSTALLED AFTER O/H AND WAS STILL UNABLE TO LEAN AT ANY RPM WITH IDLE MIXTURE SCREW 4 TURNS OUT. STILL ROUGH AND STUMBLED. THIS WAS THE (7TH) CARBURETOR SUPPLIED, THAT FAILED TO WORK PROPERLY. REPLACED WITH A O/H CARBURETOR AND WAS ABLE TO LEAN 25 TO 50 RPM AT ANY THROTTLE SETTTING. WORKED GREAT AND TEST FLIGHT FOUND ABOUT 20 KNOT INCREASE. LIKE A NEW PLANE

2010FA0001047	PIPER	LYC		VENTURI	LEAKING
9/3/2010	PA28161	O320D3G			CARBURETOR

INSTALLED SUPPLIED O/H CARBURETOR ON 7-19-2010. AFTER 80 HOUR OF TIME ON REPLACEMENT CARBURETOR, ENGINE BECAME HARD STARTING AND WAS UNABLE TO ACHEIVE PROPER LEANING AT ANY RPM. ALSO, NOTICED A POWER DROP OR STUMBLE, WHEN REDUCING POWER FROM FULL THROTTLE BACK TO CRUISE. REMOVED AND FOUND LEAK AROUND TOP OF VENTURI. REPLACED WITH A NEW CARBURETOR SUPPLIED BY MFG.

2010FA0001048	PIPER	LYC	CARBURETOR	FAILED
9/3/2010	PA28161	O320D3G	61B26214	ENGINE

INSTALLED A NEW CARBURETOR ON 9-3-2010. AFTER 21 HOURS TIME IN SERVICE WE WERE UNABLE TO ACHEIVE PROPER LEANING AT ANY RPM AND HAD A POWER LOSS OR STUMBLE WHEN REDUCING POWER BACK TO CRUISE RPM. WITH THE ASSISTANCE OF A MFG REPRESENTATIVE, THE ACFT WAS INSPECTED AND WE WERE INSTUCTED TO RETURN CARBURETOR TO BE INSPECTED AND O/H.

2010FA0001043	PIPER	LYC	CARBURETOR	INOPERATIVE
9/22/2010	PA28161	O320D3G	LW1598670	ENGINE

INSTALLED FACTORY O/H ENGINE WITH AN O/H CARBURETOR ON 8-9-2010. AFTER ONLY 4 HOURS OF FLIGHT TIME, INSTRUCTORS NOTIFIED ME THAT THE ENGINE HAD A VERY NOTICEABLE STUMBLE, POWER LOSS WHEN POWER IS REDUCED FROM FULL THROTTLE BACK TO CRUISE RPM. ALSO BECAME HARD TO ACHEIVE PROPER LEANING AT ANY RPM. CARBURETOR WAS REPLACED BY MFG WITH ANOTHER O/H UNIT.

2010FA0001044	PIPER	LYC	CARBURETOR	FAILED
9/22/2010	PA28161	O320D3G	LW1598670	ENGINE

WITH 26 HOURS ON O/H CARBURETOR SUPPLIED BY MFG WE WERE NO LONGER ABLE TO PROPERLY LEAN AT AN RPM. INSPECTED AND FOUND LEAK AT TOP AND BOTTOM OF ACCELERATOR PUMP. TRIED TO ADJUST MIXTURE AND FOUND NO CHANGE IN LEANING. REMOVED AND RETURNED TO REPAIR STATION , I/A/W MFG INSTUCTIONS TO BE O/H AGAIN.

2010FA0001046	PIPER	LYC	CARBURETOR	INOPERATIVE
7/21/2010	PA28161	O320D3G	LW1598670	ENGINE

(V1RR) INSTALLED, SUPPLIED OVERHAULED CARBURETOR ON 7-7-2010. AFTER 33 HOURS ON CARBURETOR IT BECAME HARD STARTING AND UNABLE TO ACHIEVE PROPER LEANING AT ANY RPM. REMOVED AND FOUND HEAVY FUEL LEAK AROUND TOP OF VENTURI. REPLACED IAW WITH ANOTHER CARBURETOR SUPPLIED BY REPAIR STATION.

2010FA0001045	PIPER	LYC	MARVELSCHEBX	ACCELL PUMP	LEAKING
7/7/2010	PA28161	O320D3G	105217		CARBURETOR

(V1RR) INSTALLED FACTORY O/H ENGINE ON 2-25-2010. AFTER 178 HOURS ENGINE BECAME VERY HARD STARTING. SEEMED TO BE FLOODING. REMOVED CARBURETOR AND FOUND LEAK AROUND LOWER PART OF ACCELERATOR PUMP AND FUEL LEAK INTERNAL AROUND TOP OF VENTURI. REPLACED IAW MFG WITH ANOTHER CARBURETOR SUPPLIED BY REPAIR STATION.

2010FA0000993	PIPER	CONT	COVER	BENT
6/14/2010	PA28R201T	TSIO360*	8747702	FUEL STRAINER

DURING THE CLIMB OUT, AT APPROX 4200 AGL, ONE SIDE OF THE WIRE BAIL ON THE FIREWALL MOUNTED GASCOLATOR CAME OUT OF THE FUEL STRAINER COVER. THIS ALLOWED ENGINE DRIVEN PUMP TO SUCK AIR INTO THE SYS WHICH RESULTED IN A LOSS OF FUEL PRESSURE TO THE POINT THE ENGINE FLOW DIVIDER SHUT DOWN THE FUEL FLOW TO THE INJECTORS. ACFT WAS TOTALED DURING THE OFF AIRPORT LANDING IN A CORN FIELD. POST ACCIDENT INSP REVEALED FUEL STRAINER COVER WAS DISTORTED FROM OVER TORQUING THE RETAINING NUT. THE MM DOES NOT SPECIFY A TIGHTENING PROCEDURE OR TORQUE VALUE. THIS IDENTICAL PROBLEM HAS BEEN FOUND ON NUMEROUS OTHER ACFT IN THE PAST. MANY MECHANICS SAFETY WIRE BAIL TO PREVENT THIS FROM OCCURING EVEN THOUGH IT IS NOT CONTAINED IN THE MM.

2010FA0001113	PIPER	LYC	CAPACITOR	FAILED
9/6/2010	PA32300	IO540K1A5	ES10349276	LT MAGNETO

PILOT REPORTED WILD AND ERRATIC READINGS ON THE GRAPHIC ENGINE ANALYZER (EIUBG-16(AND LOUD STATIC IN THE HEADSETS THROUGH THE RADIOS. TROUBLESHOOTING REVEALED THE CAPACITOR IN THE LT MAGNETO HAD FAILED CREATING ARCING AT THE POINTS AND SUBSEQUENT RF NOISE AFFECTING THE UBG-16 AND RADIOS. REPLACEMENT OF THE FAILED CAPACITOR FIXED THE PROBLEM.

2010FA0001093	PIPER		LINK ASSY	CRACKED

8/30/2010	PA421000		75178002	NLG IDLER

(GW1R) DURING ROUTINE INSPECTION, THE NLG IDLER-LINK ASSY. INDICATED CRACKS IN 3 LOCATIONS BY FLOURESCENT PENETRANT INSP (FPI).

2010FA0001136	PIPER	LYC	POWER SUPPLY	DISLODGED
9/9/2010	PA46350P	TIO540*	LSM500200128	FWD ENG FIREWALL

DURING LANDING, OPERATOR COULD NOT REDUCE POWER OF THE ACFT. THE ACFT LANDED WITHOUT INCIDENT. INVESTIGATION REVEALED THAT THE ACFT HAD BEEN MODIFIED IAW STC SA02279AT WITH AN AFTER MARKET HIGH INTENSITY LANDING LIGHT. THE POWER SUPPLY FOR THE LANDING LIGHT WAS MOUNTED ON THE FWD ENGINE FIRE WALL ABOVE AND BEHIND THE FCU. THE POWER SUPPLY WAS SECURED TO THE FIRE WALL IAW THE STC WITH ADHESIVE. THE ADHESIVE MOUNTINGS FAILED, THE POWER SUPPLY FELL FROM THE FIREWALL AND BECAME LODGED IN THE FCU LINKAGE PREVENTING POWER REDUCTION AND FULL ENGINE CONTROL. THE HIGH INTENSITY POWER SUPPLY WAS RELOCATED TO THE ENGINE MOUNT AND SECURED TO AN ALUMINUM PLATE.

2010FA0001018	RAVEN		KNOB	BROKEN
9/20/2010	S57A			ALTIMETER

(BS7R) ON 7 JULY, 2010, ANNUAL INSPECTION, AVIONICS PACKAGE FOUND TO HAVE A BROKEN ALTIMETER SET KNOB & OUT OF CALIBRATION. UNIT RETURNED TO MFG AUTHORIZED INSTRUMENT REPAIR STATION; DEFECTS CORRECTED & INSTRUMENT RETURNED TO SERVICE UNDER WO W1006101. UPON REINSTALLATION, FOUND THE ENVELOPE TEMPERATURE GAGE WOULD NOT FIELD CALIBRATE AND VERTICAL SPEED INDICATOR WOULD NOT STABILIZE. INSTRUMENT RETURNED TO REPAIR STATION ON OR ABOUT 23 AUGUST, 2010 FOR SUPPLEMENTAL CORRECTIVE ACTION. EQUIPMENT AGAIN RETURNED TO SERVICE ON 3 SEPTEMBER, 2010 UNDER WORK ORDER W1008101 & REINSTALLED IN THE ACFT A SECOND TIME. UNIT FOUND TO HAVE IDENTICAL DEFECTS AS PRIOR TO CORRECTIVE ACTION. WHEN NOTIFIED, REPRESENTATIVE OF REPAIR SATATION BECAME INTRACTABLE AND REFUSES TO ADDRESS THE RECURRING DEFECTS IN REPAIR PRACTICES.

E81RJW3033120	RAYTHN	WILINT	OXYGEN MASK	STICKING
9/30/2010	390	FJ442A	17409558	CABIN

(E81R) DURING FUNCTIONAL TEST OF PAX OXYGEN SYS FOLLOWING SCHEDULED SOLENOID SHUTOFF VALVE O/H. NOTED FLOW INDICATORS IN ALL SIX CABIN PAX OXYGEN MASK ASSY'S, STICKING. FOUND OILY TYPE FILM & EVIDENCE OF MOISTURE CONTAMINATION IN AFFECTED MASK ASSY'S. CAUSING FLOW INDICATORS TO STICK. PURGED OXYGEN SYS & REPLACED PAX MASKS IAW MM. SUSPECT MOISTURE INTRODUCED INTO SYS EITHER WHEN LINES WERE DISCONNECTED FOR OXYGEN BOTTLE/REGULATOR ASSY. MX AND LEFT OPEN, OR ACFT SERVICED WITH MOISTURE CONTAMINATED OR INCORRECT TYPE OXYGEN. OILY RESIDUE IN FLOW INDICATORS MAY BE PLASTIC DECOMPOSITION, HIGH AMBIENT TEMP AREAS. RECOMMEND A NOTATION EMPHASIZING CAPPING OXYGEN SYS LINE FITTINGS BE ADDED TO MM PROCEDURES INVOLVING OPERATIONS OPENING THE SYS TO THE AMBIENT ATMOSPHERE. ALSO RECOMMEND A SCHEDULED 6-8 YEAR OXYGEN MASK REPLACEMENT TIME BE ADDED TO THE MM 5-10-00-601, TIME LIMIT REQUIREMENTS.

BKEA 20100919 1	RAYTHN	GARRTT	PROBE	MALFUNCTIONED
9/21/2010	HAWKER800XP	TFE731*	307081612	P2T2

SHORTLY AFTER TAKEOFF, THE NR 2 (RT ENGINE) STARTED SURGING. ACFT RETURNED TO AIRPORT FOR MX. P2T2 PROBE MALFUNCTIONED.

2010FA0001057	ROBSIN	LYC		FUEL STRAINER	SEPARATED
9/16/2010	R22BETAII	O360J2A	MA4SPA	95509	CARBURETOR

THE CARBURETOR FUEL INLET STRAINER IS TO BE REMOVED, INSPECTED AND CLEANED AT EACH 50 HRS. OF ENG OPERATION IAW MM PN 60297-12, CHAPTER 4, ITEM 3, (50-HOUR INSP, (FUEL AND INDUCTION SYS). THIS IS THE FIRST TIME I HAVE DISCOVERED SUCH A DISCREPANCY. FOUND THE SCREEN SEPARATED FROM THE STAINLESS FITTING. NO OTHER DAMAGE OR DISCREPANCIES WERE NOTED. THE ADHESIVE THAT BONDS THE SCREEN TO THE FITTING WAS INTACT AND APPEARED PERFECT, IT HOWEVER WAS NOT ADHERED TO THE STAINLESS FITTING. THE SCREEN HAD NOT SEPARATED FROM THE FITTING COMPLETELY AND WAS THEREFORE STILL PROVIDING FILTERING OF THE FUEL AT THIS POINT. THE CONCERN IS IF THE SCREEN SEPARATES

COMPLETELY THAT THE FUEL WILL NO LONGER BE FILTERED.

2010FA0001054	UNIVAR	CONT	WHEEL	FAILED
8/28/2010	1082	IO360AB	ABI1065000	MLG

CAST SHOULDER THAT HOLDS THE WHEEL BRG RACE FROM MOVING INWARD ON THE AXLE, BROKE OUT, CAUSING THE RACE AND BRG TO TRAVEL INWARD. THE WHEEL WAS NO LONGER HELD CENTERED ON AXLE, AND WHEEL SUBSEQUENTLY HAD EXTREME CAMBER ANGLE. THE EXTREME ANGLE BROKE A PORTION OF THE OUTER SNAP RING GROOVE. THE SUDDEN CHANGE IN CAMBER AND LOSS OF BRG ACTION CAUSE WING TIP TO IMPACT SURFACE. THIS OCCURRED AFTER A COMPLETED LANDING AND ROLL-OUT. ACFT WAS INITIATING A TURN TO POSITION ACFT ON THE GROUND. THE FAILED PORTION OF THE WHEEL APPEARS TO BE .5 THE THICKNESS OF A 40-75D WHEEL.