AOPA Title Services

Provided by AIC Title Services, LLC
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Service Difficulty Report

Trend Summary by Model CESSNA 177

ATA Code	System/Component	# of Reports	% of Total Reports
2410	ALTERNATOR-GENERATOR DRIVE SYSTEM	1	3.45%
2710	AILERON CONTROL SYSTEM	3	10.34%
2810	FUEL STORAGE	1	3.45%
2820	FUEL DISTRIBUTION	1	3.45%
2823	FUEL SELECTOR/SHUTOFF VALVE	1	3.45%
5500	EMPENNAGE STRUCTURE	1	3.45%
5751	AILERONS	1	3.45%
6111	PROPELLER BLADE SECTION	1	3.45%
6114	PROPELLER HUB SECTION	5	17.24%
6120	PROPELLER CONTROLLING SYSTEM	1	3.45%
7160	AIR INTAKE	1	3.45%
7261	OIL SYSTEM	1	3.45%
7310	FUEL DISTRIBUTION	1	3.45%
7322	FUEL CONTROL/CARBURETOR	3	10.34%
7414	MAGNETO/DISTRIBUTOR	4	13.79%
7421	SPARK PLUGS/IGNITERS	1	3.45%
7603	POWER LEVER	1	3.45%
8530	ENGINE CYLINDER SECTION	1	3.45%
	Total Number of Report	**29**	

Trend Summary by Series CESSNA

ATA Code	System/Component	# of Reports	% of Total Reports
	Total Number of Report		

Service Difficulty Report

Model Specific Detail

Aircraft manufacturer's name: CESSNA **Aircraft manufacturer's model number:** 177

Air Transport (ATA) code: 2410 ALTERNATOR-GENERATOR DRIVE SYSTEM **Name of part:** ALTERNATOR
Date: 27-APR-01 **Part Number:** DOFF10300J
Details:
ALTERNATOR OVERHAULED, INSTALLED ON AC. FRONT BEARING BALL CAGE BROKE APART AND ALLOWED BALLS TO COLLECT ON ONE SIDE OFBEARING, LOCKING THE ALTERNATOR SHAFT. FAILURE OCCURRED ON 2/10/2001 AFTER 126 HOURS TSOH.

Air Transport (ATA) code: 2710 AILERON CONTROL SYSTEM **Name of part:** BEARING
Date: 30-AUG-04 **Part Number:**
Details:
IN FLIGHT, NOTICED THAT LOSS OF AILERON CONTROL INPUT HAD OCCURRED, AND UPON ADDED FORCE TO CONTROL YOKE, DETERMINED THAT TOTAL SEIZURE OF THE AILERONS HAD OCCURRED. LANDED WITH RUDDER CONTROL ONLY. REMOVED TUBE ASSY FROM FIREWALL AND FOUND SHAFT AND BEARING TO BE SEVERELY WORN, APPARENT NEEDLE BEARING DISLODGING CAUSED INABILITY TO ROTATE YOKE FOR AILERONCONTROL INPUT.

Air Transport (ATA) code: 2710 AILERON CONTROL SYSTEM **Name of part:** CONTROL TUBE
Date: 14-JAN-04 **Part Number:** 176703013
Details:
AILERON CONTROL SHAFT, WHERE IT MOUNTS TO FIREWALL BEARING WAS RUSTED AND GROVED BEYOND LIMITS, REPLACED LT AND RT SHAFTS AND BEARINGS. BEARING PN 0760633-1 END.

Air Transport (ATA) code: 2710 AILERON CONTROL SYSTEM **Name of part:** BEARING
Date: 28-AUG-03 **Part Number:**
Details:
(CAN) SNAPPING NOISE HEARD WHEN AILERON MOVED. BEARING AREAS ON CONTROL TUBES FRONT OF FIREWALL FOUND SEVERELY BRINELLED.

Air Transport (ATA) code: 2810 FUEL STORAGE **Name of part:** NUT
Date: 24-APR-99 **Part Number:**
Details:
SELF-LOCKING NUT ON FUEL CAP LOCKING MECHANISM COULD BE TURNED BY HAND. THE LOOSENING OF THE NUT ALLOWED THE LOCKING MECHANISM TO DISENGAGE FROM SHAFT. THIS ALLOWED THE FUEL CAP TO COME OUT OF TANK OPENING AND ALLOWED FUEL TO BE SIPHONEDOUT OF THE TANK. THIS CAUSED A FUEL EXHAUSTION ACCIDENT.

Air Transport (ATA) code: 2820 FUEL DISTRIBUTION **Name of part:** PUMP
Date: 08-MAR-00 **Part Number:** 154729606
Details:
NEW FUEL PUMP DOES NOT ATTAIN RATED FUEL PRESSURE/FUEL FLOW. THE HIGHEST PRESSURE ATTAINED WAS LESS THAN 2 PSIG AT IDLEAND DROPPED TO NEAR ZERO AS RPM INCREASED. AFTER EXTENSIVE TROUBLESHOOTING OF AIRCRAFT FUEL SYSTEMS, CAME TO THE CONCLUSION THE PUMP MUST BE FAULTY. INSTALLED ANOTHER NEW PUMP AND OPERATIONAL CHECK WAS SATISFACTORY. SUBMITTER SUGGESTED THAT ALL LYCOMING/AC PUMPS OF THIS BATCH (DATE CODE 9606) SHOULD BE CHECKED FOR PROPER OPERATION. (X)

Air Transport (ATA) code: 2823 FUEL SELECTOR/SHUTOFF VALVE **Name of part:** VALVE
Date: 14-FEB-97 **Part Number:**
Details:
DURING ANNUAL INSPECTION IT WAS DETECTED THAT WHEN TESTING OR OPS CHECKING, THE FUEL SELECTOR VALVE TO DETERMINE DETENTOPERATION, MOVEMENT OF THE VALVE CAUSED FUEL TO LEAK OUT THE TOP OF VALVE AROUND THE SHAFT. THIS HAD BEEN IN PROCESS FOR SOME TIME BECAUSE THE BELLY WAS FUEL STAINED ALSO.

Air Transport (ATA) code: 5500 EMPENNAGE STRUCTURE **Name of part:** ARM
Date: 21-APR-03 **Part Number:** 17320345
Details:
WITH GUST LOCK INSTALLED BALANCE ARM LOCKED ON DOWN STOP WHILE A/C WAS TIED DOWN IN GUSTY WIND CONDITIONS.

Air Transport (ATA) code: 5751 AILERONS **Name of part:** HINGE
Date: 23-AUG-95 **Part Number:** 12210897
Details:
DURING A 100-HOUR INSPECTION, BOTH CENTER AILERON HINGES WERE FOUND BENT AND THE LEFT HINGE WAS CRACKED APPROXIMATELY 3INCHES FORWARD OF HINGE BEARING. THERE IS NO OTHER APPARENT DAMAGE TO AILERON, WING, OR INBOARD AND OUTBOARD HINGES (WHICH SEEMS IMPOSSIBLE) AND IT HAS NOT BEEN SUBJECTED TO HIGH WINDS.

Air Transport (ATA) code: 6111 PROPELLER BLADE SECTION **Name of part:** BLADE
Date: 11-APR-97 **Part Number:**
Details:
(CAN) PROPELLER RECEIVED FOR CORROSION INSPECTION. MANY GOUGES AND DENTS WERE FOUND. PROPELLER WAS LAST IN THE SHOP IN 1968. THE PROPELLER WAS OVERHAULED.

Service Difficulty Report

Model Specific Detail

Aircraft manufacturer's name: CESSNA **Aircraft manufacturer's model number:** 177

Air Transport (ATA) code: 6114 PROPELLER HUB SECTION **Name of part:** HUB
Date: 10-OCT-02 **Part Number:** D5044
Details:
RETIRED HUB DUE TO SURFACE CORROSION ON EXTERIOR, HUB NOT PAINTED.

Air Transport (ATA) code: 6114 PROPELLER HUB SECTION **Name of part:** HUB
Date: 25-MAY-00 **Part Number:** D4326C211
Details:
EXTERIOR SURFACE OF HUB CORRODED BEYOND LIMITS.

Air Transport (ATA) code: 6114 PROPELLER HUB SECTION **Name of part:** HUB
Date: 01-JUN-96 **Part Number:** D4326C207
Details:
CORROSION FOUND ON HUB.

Air Transport (ATA) code: 6114 PROPELLER HUB SECTION **Name of part:** HUB
Date: 01-MAR-96 **Part Number:** 220117
Details:
HUB GREASE FITTING HOLE DAMAGED

Air Transport (ATA) code: 6114 PROPELLER HUB SECTION **Name of part:** HUB
Date: 01-JUL-96 **Part Number:** D4326C211
Details:
HUB FOUND CORRODED.

Air Transport (ATA) code: 6120 PROPELLER CONTROLLING SYSTEM **Name of part:** CONTROL CABLE
Date: 28-JUL-97 **Part Number:** 2995060105
Details:
WHILE RELOCATING THIS AIRCRAFT FOLLOWING AN ANNUAL INSPECTION, THE AIRCRAFT WAS TAXIED TO THE RUN-UP AREA FOR A RUN-UP.PILOT NOTICED PROPELLER CONTROL WAS VERY SENSITIVE AND COULD ONLY GET 1,900 RPM MAX FROM THE ENGINE. AFTER SHUTTING DOWN AND REMOVING ENGINE COWLING TO INVESTIGATE, MECHANIC NOTED THE PROPELLER GOVERNOR CABLE WAS CONNECTED TO THE PROPELLER GOVERNOR LEVER IN A HOLE THAT WOULD NOT ALLOW FULL TRAVEL. THE CABLE WAS DISCONNECTED AND RECONNECTED IN THE PROPER HOLE. ENGINE PERFORMED WITHOUT FURTHER TROUBLE. THIS AIRCRAFT HAD BEEN SIGNED OFF WITH A FRESH ANNUAL BY AN APPROPRIATELY RATED IA. THE CABLE WAS DISCONNECTED TO REPLACE THE CONNECTING BOLT. AIRCRAFT TOTAL TIME BEING 1,169.5 HOURS.

Air Transport (ATA) code: 7160 AIR INTAKE **Name of part:** AIR FILTER
Date: 05-OCT-04 **Part Number:** BA5710
Details:
DURING TROUBLESHOOTING FOR EXCESSIVE MAGNETO DROP, FOUND FACE OF AIR FILTER ELEMENT DETERIORATED. THE INSTALLATION IS FOR A BRACKETT FILTER. REMOVED ELEMENT AND FOUND THAT ELEMENT WAS AN UNAPPROVED PART. THE (FILTER) WAS HAND CUT FROM A PIECE OF GREEN FOAM .6250 INCH THICK. IT APPEARS THE FACE OF THE FOAM WAS PAINTED BLACK SO AS TO LOOK LIKE A GENUINE BRACKETT FILTER. HAD THE FILTER DETERIORATED, INGESTION IN THE CARBURETOR COULD HAVE CAUSED A LOSS OF ENGINE POWER WITH POTENTIAL FATAL RESULTS. THIS PRESENTS A SERIOUS SAFETY PROBLEM AND REPRESENTS A LACK OF REGARD FOR SAFETY. NO LOGBOOK ENTRYCOULD BE FOUND FOR RECENT INSTALLATION OF FILTER. ANNUAL INSPECTION WAS SIGNED OFF IN AUGUST OF 2004.

Air Transport (ATA) code: 7261 OIL SYSTEM **Name of part:** CONNECTOR
Date: 09-AUG-05 **Part Number:** 69675
Details:
(CAN) OIL LEAK DISCOVERED. UPON LANDING, THE PILOT NOTICED THAT THERE WAS OIL IN THE WHEEL PAN. THE PILOT CARRIED OUTONE MORE FLIGHT AND THE LEAK WAS REPAIRED AT A FACILITY. VERIFICATION REVEALED THAT THE CONNECTOR ASSEMBLY TO THE HSG COOLER INLET HOSE WAS CRACKED, AND ONCE IT WAS REMOVED, IT EMPTIED ALL ITS OIL. REPLACED THE CONNECTOR (P/N 69675) ANDTHE ANNULAR GASKET (P/N STD 294).

Air Transport (ATA) code: 7310 FUEL DISTRIBUTION **Name of part:** HOSE
Date: 25-OCT-96 **Part Number:** 883410000600094
Details:
NOTICED FUEL STAIN ON STEEL BRAID HOSE. REMOVED AND TESTED. FOUND SEEP HOLE. NOTIFIED SUPPLIER AND SENT FOR FACTORY INSPECTION. (SEEP WAS DETECTABLE WITH SHOP AIR AND SOAPY WATER.)

Air Transport (ATA) code: 7322 FUEL CONTROL/CARBURETOR **Name of part:** CARBURETOR
Date: 28-JUN-05 **Part Number:** 272
Details:
CUSTOMER REPORTS THAT ENGINE QUIT ON FINAL. ON THE GROUND PILOT WITNESSED GAS POURING OUT FROM BOTTOM OF COWL. (K)

Service Difficulty Report

Model Specific Detail

Aircraft manufacturer's name: CESSNA **Aircraft manufacturer's model number:** 177

Air Transport (ATA) code: 7322 FUEL CONTROL/CARBURETOR **Name of part:** CONTROL BOLT
Date: 26-JUN-95 **Part Number:**
Details:
AT ABOUT 700 FEET ALTITUDE AFTER DEPARTURE, ENGINE WENT TO IDLE. AFTER A SUCCESSFUL OFF AIRPORT LANDING WAS MADE, BOLTAND HARDWARE CONNECTING THROTTLE CONTROL TO CARBURETOR WERE FOUND MISSING. INSTALLED NEW BOLT, NUT, SPACER, AND WASHERS. AIRCRAFT TOWED TO A ROAD AND WITH CHP PERMISSION, RETURNED TO AIRPORT. SUBMITTER STATED BOLT AND CASTELLATED NUT HADPROBABLY BEEN OVERTORQUED. MAYBE MANY TIMES IN PAST. SUBMITTER SUGGESTS REPLACING AT OVERHAUL AND DO NOT OVERTORQUE.

Air Transport (ATA) code: 7322 FUEL CONTROL/CARBURETOR **Name of part:** FLOAT BRACKET
Date: 23-JAN-96 **Part Number:** 13662
Details:
ENGINE LOST POWER IN CRUISE FLIGHT. AFTER SAFE LANDING AT NEARBY AIRPORT, REMOVED CARBURETOR AND DISASSEMBLED. FOUNDFLOAT BRACKET BROKEN IN BEND RADIUS ALLOWING EXCESS FUEL TO ENTER CARBURETOR WHEN FLOAT VALVE COULD NOT SEAT. BEND RADIUS OF FLOAT BRACKET APPEARED TO BE 90 DEGREES. SUBMITTER STATED LARGER BEND RADIUS MIGHT PREVENT UNUSUAL STRESSES IN THE METAL REDUCING THE POSSIBILITY OF BREAKAGE.

Air Transport (ATA) code: 7414 MAGNETO/DISTRIBUTOR **Name of part:** GEAR
Date: 05-OCT-04 **Part Number:** 10357586
Details:
LOST POWER ON TAKEOFF. VERIFIED PROBLEM OF LT MAGNETO INOPERATIVE. INSPECTED AND FOUND MAGNETO DISTRIBUTOR GEAR MISSINGSEVERAL TEETH. GEAR WAS LOOSE ON SHAFT WHICH PROBABLY CONTRIBUTED TO BREAKAGE. SUSPECT CAUSE WAS LACK OF PROPER MAINTENANCE OVER LIFE OF MAGNETO. ANNUAL INSPECTION WAS SIGNED OFF IN AUGUST 2004.

Air Transport (ATA) code: 7414 MAGNETO/DISTRIBUTOR **Name of part:** BEARING
Date: 16-NOV-98 **Part Number:** 1081806
Details:
PILOT REPORTED NORMAL MAG CHECK PRIOR TO 10-MINUTE FLIGHT. AFTER LANDING NOTICED OIL DRIPPING FROM COWL. FOUND LT MAGNETO WITH LOWER MOUNTING EAR BROKEN OFF AND MAG PULLED AWAY FROM ACCESSORY CASE. THE MAGNETO CASE WAS GAPPED OPEN AND ONLY 2 SCREWS REMAINED HOLDING IT TOGETHER. REMOVED MOUNTING NUTS AND FOUND A SMALL PIECE BROKEN FROM UPPER MOUNTING EAR.LW12706 ADAPTER BROKEN IN SEVERAL PIECES AND LOWER MOUNTING STUD BENT. MAG DISSASSEMBLY FOUND DRIVE END BEARING DESTROYED, SHAFT BENT, AND DISTRIBUTOR GEAR BROKEN. ELECTROSYSTEMS BELIEVES BEARING FAILURE MAY HAVE BEEN INITIAL CAUSE OF FAILURE. COMPONENT P/N S4LN-2110-51360-37.

Air Transport (ATA) code: 7414 MAGNETO/DISTRIBUTOR **Name of part:** COIL
Date: 05-APR-95 **Part Number:**
Details:
THE MAGNETO COIL CRACKED ITS OUTER CASING. THERE DID NOT SEEM TO BE ANY EVIDENCE OF ABUSE, BUT THE LEFT MAGNETO ON THESAME ENGINE FAILED BY CRACKING ALSO, AND, IT ONLY HAD 180 HOURS TIME IN SERVICE, AN ADDITIONAL MALFUNCTION AND DEFECT REPORT WILL BE FILED FOR IT. SUBMITTER RECOMMENDS ACTUALLY REMOVING COILS FROM THE MAGNETOS DURING ANY 100-HOUR OR ANNUALINSPECTION TO DETECT CRACKS ON THE BOTTOM OF THE COILS.

Air Transport (ATA) code: 7414 MAGNETO/DISTRIBUTOR **Name of part:** COIL
Date: 05-APR-95 **Part Number:**
Details:
THE MAGNETO COIL CRACKED CAUSING MAG TO FAIL. THIS REPORT IS IN CONJUNCTION WITH AN ADDITIONAL REPORT ON THE SAME AIRPLANE AT THE SAME TIME A DUAL MAG FAILURE OCCURRED ON LANDING ROLL OUT. INSPECTIONS ON THE NAGNETOS DO NOT REQUIRE REMOVAL OF COIL TO SATISFY INPSECTION, BUT IT WOULD BE HIGHLY RECOMMENDABLE TO DO SO. SHOP HAS NOW FOUND 4 CRACKED SLICK COILS.

Air Transport (ATA) code: 7421 SPARK PLUGS/IGNITERS **Name of part:** SPARK PLUG
Date: 08-OCT-97 **Part Number:** SR87
Details:
ENGINE RPM DROPPED TO APPROXIMATELY 2,000 RPM ON CLIMB-OUT. GROUND RUN-UP WAS NORMAL BEFORE AND AFTER FLIGHT AND DURINGFIRST 200 FEET OF CLIMB OUT. INSPECTION OF INDUCTION, FUEL AND IGNITION SYSTEMS, REVEALED TWO AUBURN SR-87 AC PLUGS WITH BROKEN INSULATORS ON THE COMBUSTION END. EACH INSULATOR WAS IN TWO PIECES BROKEN LENGTHWISE WITH CENTER ELECTRODE.CAUSE OF BROKEN INSULATORS UNDETERMINED.

Air Transport (ATA) code: 7603 POWER LEVER **Name of part:** CONTROL CABLE
Date: 13-JUL-95 **Part Number:** S122219
Details:
DURING A SCHEDULED INSPECTION, FOUND THROTTLE CABLE BENT AND CRACKED AT THE BEND LOCATED AT THE THREADED END WHERE THE ROD END ATTACHES TO THE CABLE. IT APPEARED WHEN THE THROTTLE HIT ITS STOP, THE THROTTLE CABLE CONTINUED TO BE PUSHED. THE CABLE HAD TO BE REPLACED WHICH IS VERY COSTLY.

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Service Difficulty Report

Model Specific Detail

Aircraft manufacturer's name: CESSNA **Aircraft manufacturer's model number:** 177

Air Transport (ATA) code: 8530 ENGINE CYLINDER SECTION **Name of part:** ROCKER SHAFT
Date: 17-JUL-95 **Part Number:** 60401
Details:
DURING THE CHANGING OF THE PUSHROD HOUSING TUBE SEALS WHICH INVOLVES REMOVING THE ROCKER BOXES, FOUND THE VALVE ROCKER SHAFT ON THE EXHAUST SIDE OF CYLINDER NR 3 CRACKED ABOUT ONE-HALF THE WAY AROUND AND .25 INCH FROM THE END.