

SOUTH AFRICAN



**CIVIL AVIATION
AUTHORITY**

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ENGINEERING DEPARTMENT

AIRWORTHINESS DIRECTIVES

AIRWORTHINESS DIRECTIVES

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AERO

RSA AD B1 (MS 100)

Applicable to: Aero 45

Ensure that modification No DCA/105, installation of hydraulic brake system, is embodied.

Reference: Mod. No DCA/105

Compliance: Immediate with effect from 1959-09-30.

AUSTER

RSA AD No 79-161

Applicable to: All Auster models.

A water drain cock is required to be fitted to the sump of each fuel tank. Application in accordance with the procedures prescribed in Aeronautical Information Circular 61.6 for approval of the installation is to be obtained from the Commissioner before accomplishment.

Reference: J10/2/3912

Compliance: To be accomplished by 1980-03-01

BEECH

RSA AD No 88-2

Applicable to: All model Beechcraft 90 and 100 series aircraft that have tubes fitted to tubeless tyres.

To prevent possible accidents, hazardous conditions and possible occupant injury, within the next 25 hours time-in-service or 10 landings whichever occurs first, accomplish the following:

- (a) Wheel hubs are to be inspected around all bolt holes, bearings and mating surfaces by an appropriately licensed aircraft maintenance organisation for cracks by means other than the red dye penetrate method. It is recommended that the eddy current method be used.
- (b) The manufacturer has made no provision or prior approval has been obtained from the Commissioner for the installation of tubes to tubeless tyres. All tubes shall be removed from the tubeless tyres as this configuration could be disguising the existence of a cracked wheel.

Reference: J15/12/220 Vol 1 (enclosure 52)

Compliance: As indicated. Effective date 1988-01-29

BELLANCA AIRCRAFT CORPORATION

RSA AD No. B15 (MS 34)

Applicable: All Aeronca Model 7AC and 11AC, all serial numbers.

Inspect fuselage structure at all major welded clusters in the cabin area for condition of the welding and for cracks in and adjacent to the welds. Pay particular attention to areas in the vicinity of main wing, engine mounting and undercarriage attachment points. The rudder pedals must also be inspected for cracks in and adjacent to the welds at their attachment points to the torque tubes.

Reference: J15/9/35

Compliance: During Mandatory Periodic Inspection with effect from 1963-01-01.

CESSNA

RSA AD No 88-92

Applicable: All Cessna models 150, 152 & 172 series aeroplanes.

To preclude gasket failure which could result in gasket material ingestion into the induction system.

- (a) Prior to further flight, remove the air filter and inspect the gasket of FM air filters P/N 3294510-0201 and 3294510-0301 that must be fitted with a one-piece gasket.
- (b) Filters fitted with a one-piece gasket may be returned to service and where filters fitted with a four-piece gasket, these gaskets must be replaced with a one-piece gasket.
- (c) One piece gasket can be obtained from FM filters from the local agents.
- (d) An equivalent method of compliance with this AD if used, must first be approved by the Commissioner before fitment.

Reference : J44/350

Compliance: Required prior to further flight.
Effective date 1988-10-24

CESSNA

RSA AD NO 82-82

Applicable to: Cessna models 310P and 310R S/N's 0001 thru 2101, 340 S/N 0001 thru 0555, 340A S/N 0001 and on, 401 S/N 0001 thru 0322, 401A S/N 0001 thru 0132, 401B S/N 0001 thru 0221, 402 S/N 0001 thru 0322, 402 A S/N 0001 thru 0129, 402 B S/N 0001 thru 1348, 402 C S/N 0001 and on, 404 S/N 0001 and on, 411 S/N 0001 thru 0250, 411A S/N 0251 thru 0300, 414 S/N 0001 thru 0965, 414 A S/N 0001 and on, 421 S/N 0001 thru 0200, 421 A S/N 0001 thru 0158, 421 B S/N 0001 thru 0970, 421 C S/N 0001 and on, 425 S/N 0001 and on, aeroplanes.

To prevent possible nose gear steering failures associated with the breaking of the bell-crank assembly steering part no 5042010-1, carry out the following inspection:

- (a) At the next Mandatory Periodic Inspection on aircraft with 500-hours or more time in service after the effective date of this AD, carry out a dye penetrate inspection on the bell-crank assembly steering part no 5042010-1 for any signs of cracks.
- (b) At each subsequent period of 500-hours time in service after this inspection has been carried out, re-inspect the effected bell-crank as required in paragraph (a) of this AD.
- (c) The Commissioner is to be informed immediately if any cracks are found using the defect report form.

Reference: J15/10/115 serial 35.

Compliance: As indicated. Effective date 1982-08-31

HUGHES

RSA AD No. 82-73

Applicable: All Hughes models 269 series helicopters.

To prevent possible failure of the clutch actuator pulley bracket and resultant loss of the clutch engagement, inspect the pulley P/N 269A5472 for cracks through the bottom attachment hole at the next Mandatory Periodic Inspection.

All brackets found cracked are to be replaced with a serviceable pulley bracket, before further flight.

Cracked brackets found are to be reported to the Commissioner using the defect report form.

Reference: J15/10/6 serial 22

Compliance: As indicated effective date 1982-05-30

MESSERSCHMITT - BÖLKOW BLOHM

RSA AD No. 90-1

Applicable to: All models MBB 105 series helicopters.

To preclude the possible partial or complete loss of engine power it is required that, prior to further flight, the engine fuel filter drainage valve P/N 101-228-1 must be replaced with a draining valve P/N 5530 or an alternator type which is acceptable to the Commissioner.

1. When drainage valve P/N 5530 is installed it is required that it is removed at every Mandatory Periodic Inspection, cleaned, inspected for serviceability and the "O" ring seal replaced with a new serviceable item.

Reference: J15/12/85

Compliance: Effective date 1990-01-19

1. The effective date of this amendment is 1990-01-23.

MOONEY

RSA AD No 83-137

Applicable to all Model M20J aeroplanes:

The flexible fuel pressure hose between the fuel control unit and fuel pressure transducer can become hard and brittle causing eventual fuel leakage due to its close proximity to the exhaust segments. To prevent this accomplish the following:

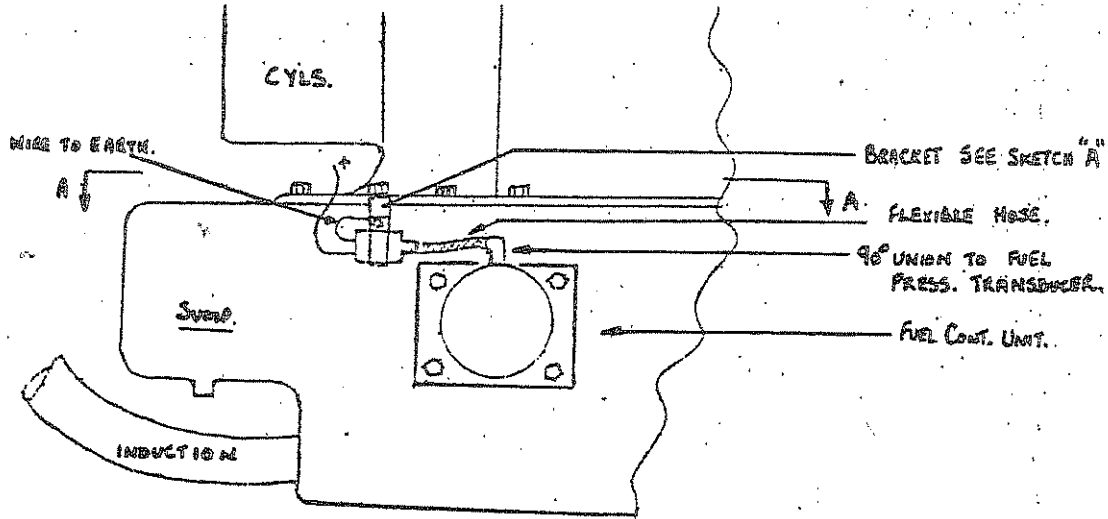
- (a) During the next Mandatory Period Inspection (unless already accomplished).
 - (i) Remove engine cowls, disconnect flexible fuel pressure hose from fuel control unit and fuel pressure transducer. Disconnect fuel pressure transducer electrical wiring.
 - (ii) Remove fuel pressure transducer from existing location (clamped to no. 3 cylinder induction pipe) and retain clamp and attaching hardware.
 - (iii) Manufacture bracket from 4130 steel to dimensions shown on sketch A, minimum thickness of 0, 060 and fit bracket to new position below no 1 cylinder utilizing existing sump attach bolt as indicated in sketch.
 - (iv) Attach fuel pressure transducer to steel bracket with existing fuel pressure transducer clamp using AN 3-7A bolt, AN 960-10 washer and AN 363-1032 nut.
 - (v) Manufacture new flexible hose, total length 11 cm, measured from outside ends of hose fitting nuts.
 - (vi) Original hose may be utilized and shortened, provided the hose is serviceable, by removing hose end fitting, which attaches to fuel pressure transducer, shortening hose to correct length and re-fitting hose end fitting.
 - (vii) Pressure check hose assemble after re-manufacturing or shortening process. Fit hose to fuel pressure transducer and fuel control unit ensuring correct installation. Torque hose fitting ends nuts in accordance with the Maintenance Manual.
 - (viii) Re-connect wiring as per original installation ensuring wiring is clear of exhaust manifolds and secured in position with tyraps.
 - (ix) Pressure check installation and fuel pressure gauge for correct displacement.
 - (x) Replaced engine cowls and secure all fasteners.
 - (xi) Record compliance in relevant logbook before returning aircraft to service.

Reference: J15/10/124

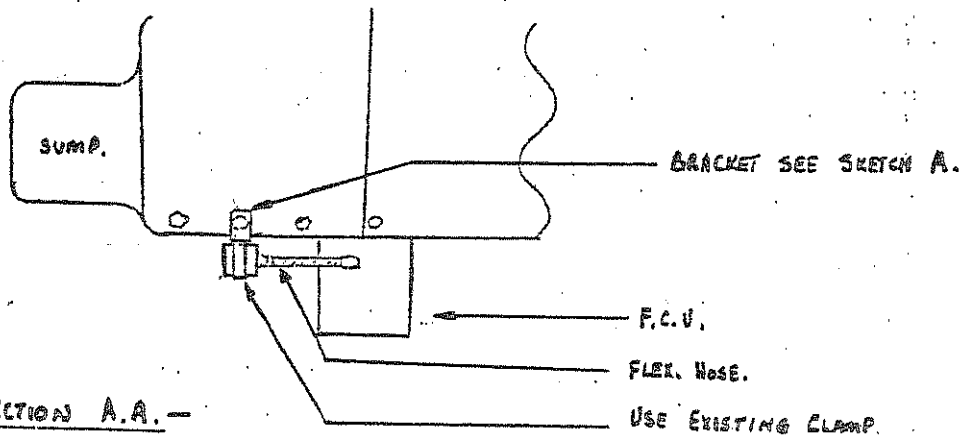
Compliance: At next Mandatory Periodic Inspection. Effective date 1983-11-30

Note: Drawing referring to sketches are enclosed. (See page 7).

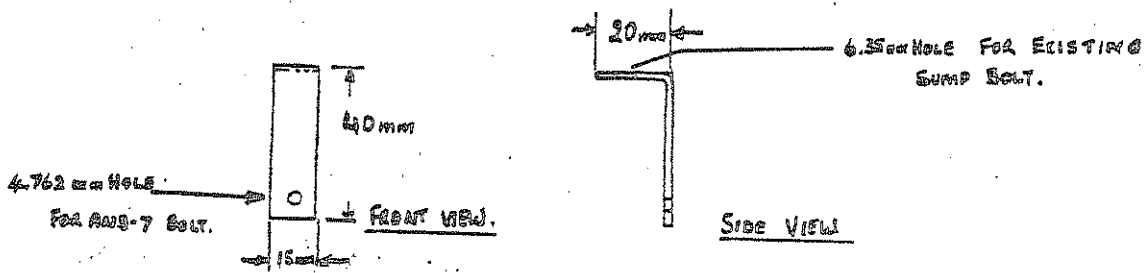
FUEL PRESSURE LINE MODIFICATION — DRAWING N° FM 07 —



— FRONT ELEVATION. —



— SECTION A.A. —



— SKETCH A —

MATERIALS: 4130 STEEL
1.524 mm THICKNESS.



PLAN

MORANE SAULNIER

RSA AD 80-95

Applicable to: All Rallye 235 series, 150 series and MS 893E aircraft.

1. It has been found that the fuel tank sealant separates from the inside of the tanks and blocks the exit filters causing eventual engine failure. Within the next 100-hours of time in service, after the effective date of this AD, remove all sealing compound from the inside of the fuel tanks and clean out thoroughly before returning the aircraft to service.

Reference: J15/10/162

Compliance: As indicated. Effective date 1980-06-30

1. The effective date of this amendment is 1980-07-31.

RSA AD 81-140

1. Applicable to: All Rallye 235 series aircraft.

- (a) To prevent possible failure of nose wheel undercarriage strut due to cracks, within the next 50-hours time in service or 6 months, whichever occurs first and at every 500-hours time in service thereafter, after the effective date of this AD, inspect the nose wheel undercarriage strut for cracks in the area where the side stays attach to the main strut.
- (b) If cracks are found the subject strut must be replaced and the Commissioner notified within 48-hours thereafter.
- (c) If no cracks are found, additional gussets are to be welded onto the side stay attachment area. All such modifications are to be approved by the Commissioner.
- (d) Make an appropriate maintenance record entry quoting modification approval.

Reference: File J15/12/162 serial (J10/2/4196)

Compliance: Required as indicated.

Effective date 1981-09-30.

RSA AD 88-114

Applicable to: All Morane Saulnier MS 880B, MS 885, MS 893E, 150T, 150ST and 235E series aircraft.

- (a) Inspect the nose wheel axle P/N 880-42-0-041-0 for cracks. This inspection is to be carried out immediately on aircraft with 1 000 hours or more total flying time and at the next Mandatory Periodic Inspection for aircraft with 600-hours or more total flying time if the above-mentioned axle has not been replaced.
- (b) The area to be inspected is the radius between the thrust surface and the inner bearing surface.
- (c) If cracks are found a defect report form is to be completed and forwarded to the Commissioner and the defective part shall be replaced with an airworthy part before further flight.
- (d) If no cracks are found, the radius should be polished and the part reinstalled and is to be further inspected at every Mandatory Periodic Inspection.

Reference: J15/12/162

Compliance: Effective date 1988-11-30

PIPER

RSA AD No 83-37

Applicable to: All Piper model PA-24 and PA-30 series aircraft fitted with landing gear switch part no 487 865.

To prevent "UP" selection on release of guard assembly part no 23210-02.

Within the next 10-hours in service or at the next scheduled inspection, whichever occurs first, remove guard assembly part no 23210-02 if aircraft is fitted with landing gear switch part no. 487 865.

Reference : J10/2/475

Compliance: As indicated effective date 1983-03-31.

RSA AD No 86-135

Applicable to: All Piper models PA-28, PA-32, PA-34 and PA-44 series aircraft older than 10 years.

To detect and correct excessive corrosion between the aft spar and the steel attachment plate.

Several instances of severe internal corrosion at the aft spar and steel attached plate corrosion on the above models have been found.

Remove the left and right hand flaps. De-rivet the inboard stiffeners behind the aft spar. Remove the attached bolt and de-rivet the steel attached plate. The wings need not be removed for this inspection.

Where corrosion is evident corrective action must be taken.

Reference : J15/10/160 Vol 2

Compliance: Unless already accomplished, within 30-days after the effective date of this AD, but not to exceed the next Mandatory Periodic Inspection. Effective date 1986-11-28.

RSA AD No 80-176

Applicable: All Piper models PA-28, PA-32, PA-34 and PA-44 series aircraft.

To detect and correct excessive corrosion on flaps, with open hinges.

Several instances of severe internal flap corrosion on the above models have been found.

The flap hinge brackets are secured to the flap main spar and nose ribs by rivets. The bucked heads of these rivets should be inspected with the aid of a torch for corrosion. If any corrosion is evident, the effected flap is to be removed from the aircraft and the leading edge de-rivet for further internal inspection.

Where corrosion is evident, corrective action must be taken.

Reference : J15/12/160 Vol 2

Compliance: Unless already accomplished, within 30 days after the effective date of this AD, but not exceeding the next Mandatory Periodic Inspection and to be repeated at each Mandatory Periodic Inspection thereafter. Effective date 1980-10-31.

RSA AD No 81-141

Applicable to: All Piper model PA-31 series aircraft.

To prevent the possible failure of aileron front spars due to cracks around anchor nuts for inboard and outboard attachment hinges.

- (a) Within the next 100-hours time in service or 12-months, whichever occurs first and at every 500-hours time-in-service thereafter, commencing from the effective date of this AD, remove both ailerons from the aircraft and check for cracks around anchor nuts attaching inboard and outboard hinges to aileron from spar.
- (b) If cracks are found, the subject spar must be replaced or it may be repaired. All repair schemes are to be approved by the Commissioner.
- (c) The removal and re-installation and balancing of ailerons, if applicable, must be done in accordance with the applicable maintenance manual for the subject aircraft.
- (d) If spar cracks are found, notify the Commissioner within 48-hours thereafter.
- (e) Make an appropriate maintenance record entry.

Reference: J15/10/197 serial 14.

Compliance: Required as indicated. Effective date 1981-09-30

RSA AD No 82-4

Applicable to: All Piper model PA-31 series aircraft:

- (a) To prevent the possible failure of rudder spar due to cracks around anchor nuts of upper and lower attachment hinges.
- (b) Within the next 100 hours time in service or 12 months, whichever occurs first and at every 500 hours time in service thereafter, commencing from the effective date of this AD, remove rudder from the aircraft and check for cracks around anchor nuts attaching upper and lower hinges to rudder spar.
- (c) If cracks are found the subject spar must be replaced or it may be repaired. All repair schemes are to be approved by the Commissioner.
- (d) The removal and reinstallation and balancing of rudder, if applicable, must be done in accordance with the maintenance manual for the subject aircraft.
- (e) If cracks in spars are found, notify the Commissioner within 48 hours thereafter.
- (f) Make an appropriate maintenance record entry.

Reference: File J15/10/197 serial 21.

Compliance: Required as indicated. Effective date 1982-01-29

RSA AD No 86-63

Applicable to: All Piper model PA-36 series aircraft.

In a recent accident, the engine of the above-mentioned aircraft became separated from the fuselage during flight due to failure of the welded engine mount attachment cluster. In order to prevent a recurrence to the requirements of RSA AD No 79-97 (FAA AD 79-12-09) (Piper SB no 615) have been expanded to make it applicable to all Piper PA-36 series aircraft, irrespective of serial number or whether Piper Kit no 763877 has been installed in service from the effective date of this AD.

The Commissioner is to be advised of the outcome of the inspection.

Reference: J15/12/267

Compliance: As indicated, unless already accomplished effective date 1986-02-27.

RSA AD No 86-64

Applicable to: All Piper model PA-36-300 and PA 36-375 aircraft, S/N 36-776001 thru 36-8160023 and 36-7802001 thru 36-8302025

To prevent possible engine mount separation from the fuselage, accomplish the following:

- (a) The requirements of Piper Service Bulletin no 828 dated 7 April 1986, or later approved revisions, shall be complied with immediately within the times specified in the SB.
- (b) In addition to the above it is required that a dye penetrant check be carried out on the forward and aft engine mount attachment point which necessitates removal of the firewall. Should any cracks be found, notify the Commissioner thereof so that a suitable repair scheme may be approved.

Reference: J15/12/267

Compliance: As indicated, unless already accomplished effective date 1986-04-23.

PRATT AND WHITNEY CANADA

1. A AD No 78-157

Applicable to: All Pratt & Whitney model PT6A series engines with magnetic chip detector Part no 3027254 installed.

As a result of failures of magnetic chip detectors Part no 3027254, accomplish the following:

- (a) At intervals not to exceed 100 hours flying time from the last inspection the magnetic chip detector must be checked for continuity between the electrical pins and magnets. This check is to be repeated at every 100 hours inspections.
- (b) Pratt & Whitney Aircraft of Canada Limited Service Bulletin No 1217, dated November 29, 1974, or later approved revision, required that a magnetic chip detector Part No 3027254 be installed in the reduction gearbox oil drain of PT6 series engines. This chip detector is to alert flight crewmembers of impending engine failure.
- (c) Beechcraft King Air 200 Communique No 9 dated October 5, 1976, or later approved revision, indicated how gearbox chip detector installations on PT6 series engines should be carried out.

Due to the nature of its design (two piece) an excessive torque applied to the chip detector cannon plug can cause slight rotation of the body extension. This rotation can cause deformation and breakage of the internal wires giving a false chip detector indication. A finger-tight installation torque is sufficient for the chip detector cannon plug. Apply witness marks, such as torque paint, to the chip detector shell, below the cannon plug threads and onto the shell body to indicate any rotation. If rotation is indicated the unit should be rechecked for continuity.

Reference: DCA J28/10/17

Compliance: As indicated. Effective date 1978-09-11

CHRISTEN INDUSTRIES

RSA AD No 94-2

AVIAT (formerly Christen Industries Inc. and Pitts Aviation Enterprises Inc.)

Applicability: All models of Pitts S-1S, S-1T, S-2, S-2A, S-2B, S-2S aircraft, certificated in any category fitted with an alternate air supply.

In order to prevent a possible loss of engine power during take-off and flight, the following is required to be observed:

1. For all operations with full engine power the alternate air supply must not be selected. Only in an emergency such as a blockage of the ram air inlet should alternate air be selected.
2. As a precautionary measure all operators of Pitts Special models with air filters fitted to the alternate air supply shall remove the filter element and replace with metal screen before further operation.
3. At every MPI the ducting and operating mechanism of the alternate air supply should be inspected for free and proper operation.

This AD was issued on 1994-11-04 which is also the compliance date.

Compliance: Required as indicated.

Reference: J15/12/114

CESSNA

RSA AD No 95-01

Compliance: Mandatory

Title: Electrically driven hydraulic landing gear pumps.

Applicability: All Cessna 100, 200 and T303 series aircraft with retractable landing gear.

Reason: Field reports have been received of the landing gear hydraulic pump electric motors failing due to excessive operation of the pump.

Description: Insufficient hydraulic fluid in the reservoir to complete the up down cycle causing the pump to run continuously until it either overheats and burns out or trips the circuit breaker. When the voltage from the main supply to the motor is low for whatever reason the motor will not turn fast enough to produce the required pressure to complete the up or down cycle of the landing gear and therefore the shut-off pressure switch will not be activated to turn off the pump as it should.

A hydraulic pump motor "ON" annunciator lamp must be installed to alert the pilot when the condition described above exists. (Landing gear in transit light).

Accomplishment instructions:

Refer attached wiring diagrams example, placard example and recommended parts list.

1. Install an amber warning light on the instrument panel in the cockpit where it is easily visible to the pilot.
2. Wire the warning light mentioned in 1 above into the aircraft wiring between the relay and the landing gear drive motor as indicated in Figure 2 below and install a 2 amp fuse holder and a fuse close to the pick-off point to protect the wiring.
3. Placard the newly fitted amber light with placard wording as indicated by Figure 1.

Manuals:

1. A copy of this AD shall be inserted in the flight operations manuals as an appendix and the index of the manual updated accordingly. (Refer to RSA AD No 95-01 revision dated 21 June 1995).
2. Aircraft wiring diagram manual shall be updated to reflect the additional wiring and copy placed in the aircraft logbook.
3. Include the following inspection instruction in the 100-hour inspection:
"Check the landing gear motor operation "light press to test" function and gear up gear down operation."

Weight and Balance: Negligible

Parts list:

1. Light assembly Part No MS 25041-4 or equivalent with a "press to test" function.
2. Number 22-gauge wire of the appropriate length to carry out the modification without unnecessary splicing.
3. Placard.
4. Fuse holder and 2 Amp fuse.

Placard Example:

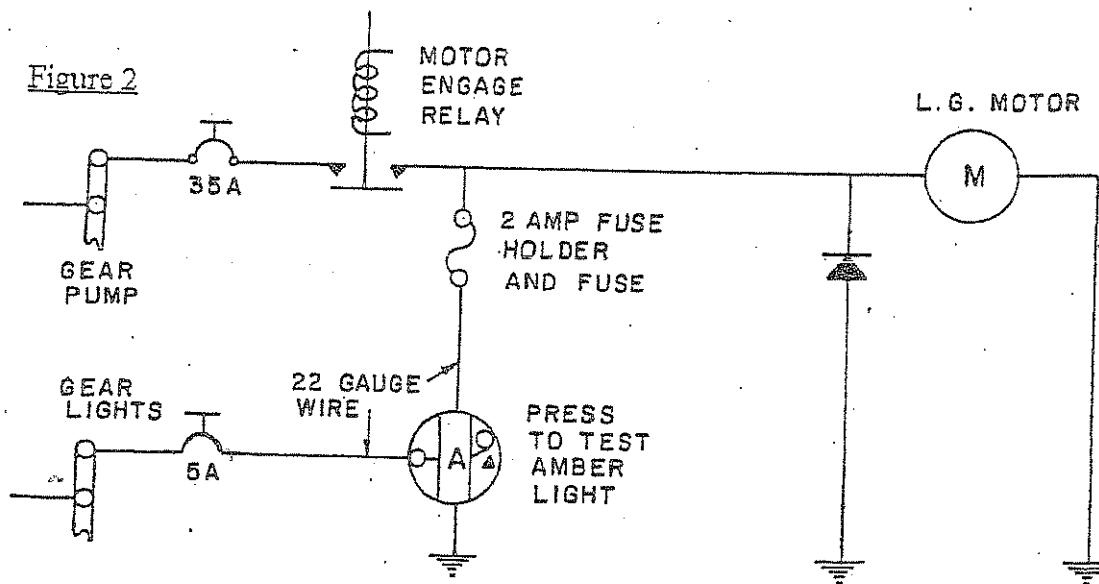
Gear Motor Operation



Figure 1

If light stays on after landing gear operation or comes on during flight pull landing gear circuit breaker and refer to the flight operations manual for emergency gear operation.

Wiring Diagram Example:



Reference: J15/12/239

Compliance details: Not later than the next Mandatory Period Inspection. An equivalent means of compliance with this AD may be used if approved by the Commissioner.

This issue revises all previous issues 1995-06-21.

BEECH

RSA AD No 94-1

Applicable to: All Beech model 200 series aircraft.

Within the next five (5) hours of flight time or seven days, whichever occurs first, inspection of the huckbolts securing the upper and lower engine mount attach fittings to the structure are to be inspected for movement. Access to the lower fittings can be gained through the aft nacelle access panel. The upper fittings can be inspected through the circular access panels using a boroscope or dental mirror. In extreme cases with the weight of the engine and propeller supported, the huckbolts can be freely rotated. Inspection of the side panel doubler for cracks shall also be carried out. Please advise this Department as soon as possible of any findings.

If fasteners are sheared or missing, repairs are to be effected prior to further flight. Loose fasteners are to be removed and reamed to the next oversize or replaced with NAS bolts. Contact your Beech agent with respect to repairs in both cases.

Reference: J15/10/279

Compliance: As indicated. Effective 1994-02-14

GENERAL

AD 97-02

Reference: J15/10/79

Compliance: At the next Mandatory Periodic Inspection (MPI) if not already accomplished, or when the aircraft attains the ages specified in paragraph 2.1 of this AD.

Accomplishment instructions:

1. Method of Inspection

1.1 To obviate costly opening up and subsequent repair procedures the following approved methods of NDT inspection may be employed where feasible:

- (a) RT X-ray
- (b) MT Magnetic particle
- (c) ET Eddy current
- (d) UT Ultrasonic

Frequency of Inspections

2.1 The appropriate NDT method of inspection is to be performed at twenty-five years from date of manufacture on aircraft in the normal categories and in the case of cropspraying aircraft at a maximum of ten years from date of manufacture.

2.2 In the event of no corrosion or cracks being found during the initial inspection, the inspection must be repeated after every five-year period.

2.3 Where minor corrosion is found on the initial inspection, the RT inspection shall be repeated every two years or as directed by the approved testing agency.

3. Areas to be inspected

3.1 All areas of inspection called for by the manufacturers in their Service Bulletins or other publications.

3.2 All areas concealed by fabric, ceconite coverings, sheetmetal or composites.

3.3 Lapjoints of riveted structures.

3.4 Wing spars.

3.5 All castings and forgings.

3.6 Door frames, rudderposts, ailerons, flaps and their attachment points, liftstruts and built-up parts and products.

3.7 Lower longeron and welded clusters.

3.8 Rear fuselage of a tailwheel type aircraft.

3.9 Any other areas where corrosion may be expected / suspected.

4. Action to be taken:

4.1 Should cracks or corrosion be detected, the necessary corrective action shall be taken and the area airworthiness inspector notified.

4.2 The maintenance done must be recorded and certified in the appropriate logbook and a copy of the testing organisation's report affixed therein.

5. Documentation and preservation of records:

- 5.1 Job cards are to reflect test parameters used for respective ET, UT and MT inspections and shall be kept on file for a period of five years.
- 5.2 RT film shall be kept by the inspecting company for future reference and for at least five years.
- 5.3 RT film shall display the aircraft registration and serial numbers, date and indications of positions inspected.

6. The test report shall contain the following information:

- 6.1 Aircraft type registration markings
- 6.2 Aircraft serial number
- 6.3 Date of inspection
- 6.4 AD number
- 6.5 List of positions tested and findings
- 6.6 Indication of the test type used and defects found
- 6.7 Indication of the type of corrosion, if found.

7. This AD no 97-02 supersedes AD 93-111, 96-02 and MAN Cessna no 016.

8. Effective date: Issued 15 July 1997.
1. Revised 25 February 1998

RSA AD No 97-02 (Supersedes AD 93-111, 96-02 and MAN Cessna no 016).

EQUIPMENT: FLIGHT DATA RECORDERS

RSA AD No 98-02

Reference: J29/3/13

Compliance: Applicable to all aircraft equipped with engraving metal foil flight data recorders.

Reasons: 1. The Commissioner acting in terms of Chapter 6, sub-paragraph 6.3.1.3 of ICAO Document, Annex 6, ruled that no South African registered aircraft may be operated with the above-mentioned flight data recorders installed as from 1 July 1998 in terms of South African Civil Aviation Authority Regulation 91.04.11.

A permit to operate aircraft to an approved facility where the necessary re-installation of the afore-mentioned recorders can be undertaken will be issued on request.

2. An alternate means of compliance may be submitted for consideration and possible approval by the Commissioner.

Effective date: This AD becomes effective on December 1, 1998 and supersedes AD 98-02 issued March 11, 1998.

KTT Vaughan

021 934 0967

SWEARINGEN

RSA AD No 83-152

Applicable to: All model SA 226-AT and SA 226-TC aeroplanes.

To reduce the possibility of a fire in the outer double skin cavity of the left-hand wheel well nacelle, accomplish the following:

- (a) Within the next 25-hours time-in-service or ten days, whichever is the lesser period after the effective date of this AD.
 - (i) Remove the screws securing the voltage regulator access panel and withdraw the voltage regulator, complete with associated wiring.
 - (ii) Inspect wire terminals and wiring to cannon plug and from terminal board through into the double skin cavity for security, chafing, foreign matter impregnation, anti-chafing strips for condition and generally for any unsatisfactory conditions.
 - (iii) Inspect hydraulic tubing, with hydraulic pressure "ON", for security leaks, chafing, evidence of fatigue, distortion or crimping at or adjacent to formed bends and for any other unsatisfactory indications.
 - (iv) If no unsatisfactory conditions are noted, re-install the access panel complete with voltage regulator, terminal board and associated wiring, exercising care to ensure that routing of wires is satisfactory, by checking through the access hole situated adjacent to the hydraulic shut-off valve on the inner wall of the double skin cavity of the wheel-well nacelle and through the hinged panel on the outer wall at the hydraulic reservoir filling point.
 - (v) In particular ensure that the loom from the terminal board and the wires to the hydraulic shut-off valve have not "folded back" into the space between the base of the access panel box structure on which the voltage regulator is mounted and the hydraulic tube Pt/No 27-81006-313, from the hydraulic reservoir to the hydraulic shut-off valve.
 - (vi) Advise this Department, on a defect report form of any irregularities found during compliance with paragraphs 2 and 3 of this AD.
- (b) Aeroplanes may be flown in accordance with paragraph 1.10(1)(ii) of ANR 1976, as amended, to a location where this AD may be accomplished.

Reference: J15/10/242

Compliance: As indicated, unless already accomplished. Effective date 1983-12-31.

SOCIETE NATIONALE INDUSTRIELLE AEROSPATIALE

RSA AD 83-92

Applicable to: All Model AS355 helicopters

Inspection of horizontal stabilizer 355-A-13-0520-0101 is mandatory due to the horizontal stabilizer rupture in service.

- (a) (i) Within 10 flight hours after the effective date of this AD unless already accomplished, remove horizontal stabilizer and check visually for cracks over the whole external periphery of the profile surface with a chordwise strip of the 50 mm on either side of each RH or LH attachment holes.
- (ii) If cracks are found, replace horizontal stabilizer unit. If no cracks are found measure the bores of the stabilizer's attachment holes. Stabilizers with no cracks are considered serviceable if the diameter is smaller than 8.5 mm. However, a bush has to be fitted – within the next 25 hours of operation if diameter is found to be between 8.1 mm and 8.5 mm, and within the next 50 hours of operation, if diameter is found to be between 8.04 and 8.1 mm.

Note: Workcard no 55.10.10.771 describes procedures to be followed.
However, in paragraph 1.4, instead of 2 it should read 8 H8.

Note: Fitting of the bushes does not relieve the helicopter from complying with all other measures appearing in the AD.

- (b) (i) every 10 flight-hours hereafter, without horizontal stabilizer removed, visually check visible part of area mentioned in paragraph (a)(i) above. If cracks are found, replace stabilizer unit.
- (ii) Check for play at tail boom stabilizer unit junction. If play is found or if in doubt, carry out all measures defined in paragraph (a) above.
- (iii) Measures defined in paragraph (a) above, have to be carried out again at periods not exceeding 300 flight hours.

Reference: J15/12/108 (Enclosure 29).

Compliance: As indicated. Effective date 1983-06-08.

REVISED 96-03-30

REFERENCE: J15/10/130

TITLE: Corrosion of Cessna aircraft mainspar caps on certain single engine models.

APPLICABILITY: Cessna 120, 140, 150 – 175 series aircraft.

COMPLIANCE: Mandatory on all applicable models. To be repeated every 10 years after initial compliance.

ACCOMPLISHMENT INSTRUCTIONS:

Note: Normally wings need not to be removed for this inspection.

1. Remove fuel tank as per the aircraft maintenance manual.
2. De-riquet the top leading edge skin as well as the aft spar top skin in the area of the fuel tank recess and inspect for possible corrosion.
3. Should corrosion be evident / detected, the necessary corrective action should be taken. (This might entail removal of wings).
4. Replace all parts removed after corrosion preventive measures have been taken, re-assemble parts in accordance with the manufacturer's instructions.
5. Certify the work carried out in the appropriate logbook.

COMPLIANCE TIME-SCALE:

Not later than the next mandatory periodic inspection.
Effective date 1996-03-30

