



SERVICE BULLETIN

No. 680

Piper Aircraft Corporation

Lock Haven, Pennsylvania, U.S.A.

Modification FAA/DOA EA-1 Approved

April 23, 1980

M

Subject: Ground Clearance Switch Fuse Installation

Models Affected: Serial Numbers Affected:

PA-31T Cheyenne/Cheyenne II
PA-31T1 Cheyenne I

31T-7920001 through 31T-8020048
31T-7904001 through 31T-8004015

NOTE: Only those listed aircraft having an optional Ground Clearance Energy Saver System installed are affected.

Compliance Time: Within the next one hundred (100) hours of operation or at the next scheduled inspection, whichever occurs first.

Purpose:

In its present configuration, accidental short circuiting of the wiring between the battery master contactor and the ground clearance switch could damage the aircraft electrical harness, resulting in smoke in the cabin and possible loss of electrical power. It has been determined that additional circuit protection must be provided in the ground clearance switch circuit.

This Service Release provides instructions for the installation of additional fuse(s) to provide main electrical harness protection.

Instructions:

Refer to attached Sketch/Instruction data.

Material Required:

For each wire:

One (1) HHJ-A Fuseholder (Piper Part No. 461 628)
One (1) AGC-5 Fuse (Piper Part No. 461 623)
As required (5 min.) TY-23M Ty-wraps (Piper Part No. 488 658)

(over)

Availability of Parts:

Your Piper Field Service Facility.

Effectivity Date:

This Service Release is effective upon receipt.

Summary:

Please contact your Piper Field Service Facility to arrange for compliance with the provisions of this service release in accordance with Compliance Time, above. Reimbursement is available for material and for up to one (1) hour labor in accordance with the respective material/labor credit application of your Piper Field Service Facility.

STA. 9 BULKHEAD

MASTER CONTACTOR

BUS BAR COVER (REF.)

COPPER BUS BAR
(REF.)

WIRE RP2X
OR
RP2XA
OR
RED WIRE

EXISTING UNCODED
WIRE
(ON SOME AIRCRAFT)

WIRE L24B

EXISTING 5 AMP
CIRCUIT PROTECTOR

TO BATTERY +

FUSEHOLDER - P/N 461 628 (HHJ-A)
FUSE - P/N 461 623 (AGC - 5)

FUSEHOLDER - P/N 461 628 (HHJ-A)
FUSE - P/N 461 623 (AGC-5)

Service Bulletin No. 680

Page 3 of 4

INSTRUCTIONS

1. Gain access to the aircraft battery compartment.
2. Unplug and remove the aircraft battery.
3. Look inside the empty battery compartment and follow the top (+) battery power wire (P3C) to its connection with the battery master contactor and an inch long copper bus bar. This copper bus bar supplies power to two or three wires. One of these wires (L24B) runs only a few inches to a 5 amp circuit protector and should be left as is. The remaining wire or wires which are connected to this bus bar must be fused as follows:
 - a. Remove ty-raps to allow the above mentioned wire(s) to be separated from the fuselage electrical harness.
 - b. Between three and six inches from the bus bar, cut the wire(s) and splice in a fuseholder (P/N 461 628) on each wire as shown on sketch.
 - c. Install an AGC-5 fuse (P/N 461 623) into each fuseholder. (NOTE: Do not use a larger fuse or a slow-blow fuse).
 - d. Secure new fuseholders to the fuselage electrical harness using ty-raps.
4. Reinstall the aircraft battery. Reconnect the battery connector plug and safety wire in place.
5. Close the aircraft nose and test the GROUND CLEARANCE switch to insure it switches on its internal light, a VHF COMMtransceiver that still transmits and the cockpit speaker amplifier (transmit and listen back).
6. Cycle the BATTERY MASTER switch to switch off the GROUND CLEARANCE switch.
7. Make proper Logbook entry of compliance with this service release.