



SERVICE LETTER

No.

893A

Piper Aircraft Corporation

Lock Haven, Pennsylvania, U.S.A.

May 21, 1980

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(Service Letter No. 893A supersedes and voids Service Letter No. 893, dated March 20, 1980.)

Subject: Gyro Indicator Relay Replacement

Reason for Revision: Change Serial Numbers Affected.

Models Affected: Serial Numbers Affected:

PA-31T1 Cheyenne I

31T-7804002 through 31T-7804011
31T-7904001 through 31T-7904006
31T-7904008 through 31T-7904011
31T-7904013 through 31T-7904045

Compliance Time: Recommended at the next scheduled inspection.

Purpose:

A revision of the equipment manufacturers' installation instructions indicates that the KFC 250 compass slaving "FREE" mode annunciator relay should have a 12VDC coil, rather than the originally specified 5VDC coil, to prevent premature transfer from fast to slow compass slaving.

This service release provides instructions for inspecting installations on aircraft listed above, and, if necessary modifying them to insure proper compass slaving operation.

Instructions:

1. Unlock and remove the nose cone radio shelf access cover.
2. On the upper or lower radio mounting shelf, locate the relay with a transparent plastic case. (The relay contacts are enclosed but visible through the side of the relay case.) Expect to find only one such relay.
3. If the relay is labeled R10-E6-Y2-S140 5VDC, locate the wires connected to relay solder lugs number 1 and 4 (a 1N4003 or 1N4005 diode is soldered between these two lugs.) One lug is wired to airframe ground. The other lug is at the (cathode) banded end of the diode, and is wired to pin "M" of the KSG 105 remote gyro (which may be located in the nose cone or tail cone. When this connector is unplugged, the pilot's HSI will have no compass information).

(over)

Instructions: (continued)

3. continued

If a half watt, 200 ohm resistor has been cut into this wire, an ohmmeter will measure 200 ohms between the relay and pin "M", and no installation modification is necessary.

4. If this relay is marked R10-E6-Y2-S140 5VDC, and the wire from the diode's (cathode) banded end to the KSG 105 pin "M" reads continuity (close to zero ohms), replace the 5 volt relay with a R10-E6-Y2 S800-12VDC relay (Piper Part No. 584 155). Use a new IN 4005 Diode (Piper Part No. 456 758).
5. Check for proper compass slaving operation.
6. Replace the radio compartment cover.
7. Make appropriate log book entry of compliance with this Service Release.

Material Required (if required by Inspection):

Per aircraft:

1 each	Piper Part Number 584 155	R10-E6-S800-12VDC Relay
1 each	Piper Part Number 456 758	IN4005 Diode

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 make arrangements for compliance with this service release in accordance with Compliance Time, above. Reimbursement is available for material and for up to a total of one (1) hour per aircraft in accordance with the respective material/labor allowance credit application procedure of your Piper Field Service Facility.

This offer is in effect for a period of time not to exceed 180 days from the date of this service release.