



SERVICE BULLETIN

No. 681

Piper Aircraft Corporation

Lock Haven, Pennsylvania, U.S.A.

FAA/DOA-S01 Approved

April 24, 1980 S/M

Subject:

Boom Microphone Isolation Relay

Models Affected:

PA-28-161	Warrior II
PA-28-181	Archer II
PA-28-201T	Turbo Dakota
PA-28-236	Dakota
PA-28R-201	Arrow III
PA-28RT-201	Arrow IV
PA-28R-201T	Turbo Arrow III
PA-28RT-201T	Turbo Arrow IV
PA-32-260	Six
PA-32-300	Six 300
PA-32-301	Saratoga
PA-32-301T	Turbo Saratoga
PA-32R-300	Lance
PA-32RT-300	Lance II
PA-32RT-300T	Turbo Lance II
PA-32R-301	Saratoga SP
PA-32R-301T	Turbo Saratoga SP
PA-34-200T	Seneca II
PA-44-180	Seminole

Serial Numbers Affected:

28-7816001	through	28-8016289
28-7890001	through	28-8090266
28-7921001	through	28-7921091
28-7911001	through	28-8011096
28R-7837001	through	28R-7837317
28R-7918001	through	28R-8018049
28R-7803001	through	28R-7803373
28R-7931001	through	28R-8031074
32-7800001	through	32-7800008
32-7840001	through	32-7940290
32-8006001	through	32-8006015
32-8024001	through	32-8024007
32-7880001	through	32-7880068
32R-7885001	through	32R-7985105
32R-7787001, 32R-7887002	through	32R-7987126
32R-8013001	through	32R-8013071
32R-8029001	through	32R-8029068
34-7870001	through	34-8070150
44-7995001	through	44-8095020

- NOTE:
1. Of the aircraft listed above, only those with factory installed control wheel push-to-talk switches are affected.
 2. Collins Transceiver equipped aircraft are not affected.

Compliance Time:

Part I Within the next ten (10) hours of operation, if two-way radio communications is required, until Part II of this Service Release is accomplished.

Part II At the next regularly scheduled inspection event but not to exceed the next 100 hours of operation

(over)

Purpose:

The possibility exists when radio transmission is made on aircraft equipped with optional boom microphone using the hand or a boom microphone that the transmitter will remain in the transmit mode when the push-to-talk switch is released. When this happens all radio reception in the range of the transmitter is disrupted. This also prevents any further use of the aircraft receivers and the system must be turned off immediately.

This Service Release provides instructions and illustrations to accomplish a modification to the audio system to prevent this condition.

Part ICompliance Time:

Within the next ten (10) hours of operation, if two-way radio communications is required, until Part II of this Service Release is accomplished.

Instructions:

1. Locate the audio adapter connector in the main radio harness behind the radio stack. This is the interconnect for individual radios to the audio selector panel.
2. Locate the muting relay plug in the connector. It is a three (3) pin plug containing wires ASP-1, ASP-2, and ASP-3, and is positioned at one end of the adapter connector.
3. Disconnect the muting relay plug and attach securely to the harness.
4. Conduct complete operational check of all radios and make proper log book entry of compliance with Part I of this Service Release.

Part IICompliance Time:

At the next regularly scheduled inspection event but not to exceed the next 100 hours of operation.

Instructions:

Gain access to the radio speaker.

1. On PA-32-260, PA-32-300, PA-32-301, PA-32-301T, PA-32R-300, PA-32RT-300, PA-32RT-300T, PA-32R-301, PA-32R-301T and PA-34-200T model aircraft, remove four (4) screws from the speaker grille ring.
2. On all other affected models, lower the overhead dome panel by removing screws as necessary.

3. Locate the muting relay mounted on the speaker grill or speaker and the 22 mfd capacitor soldered to the relay.

IMPORTANT: When removing capacitor, note polarity marked on shell and install diode relative to this polarity as shown in sketch 1.

4. Using proper soldering techniques:
 - A. Remove the capacitor, and on King and Narco avionics systems, install diode 1N2071A (Piper Part Number 456-703).
 - B. Diode is not required on Bendix avionics systems.
5. If Part 1 was previously accomplished, reconnect the muting relay plug and conduct radio check for proper operation.

6. Reinstall speaker or overhead dome panel.

NOTE: Make certain when reinstalling overhead dome panel, that the overhead lights ground wire is properly connected.

7. Make proper log book entry of compliance with Part II of this Service Release.

Material Required:

One (1) each diode 1N2071A (Piper Part Number 456-703) and 1.6 inches of Protective Sleeving, Piper Part Number 180-500, per affected aircraft.

Availability of Parts:

Your Piper Field Service Facility or diode (1N2071A) may be procured locally.

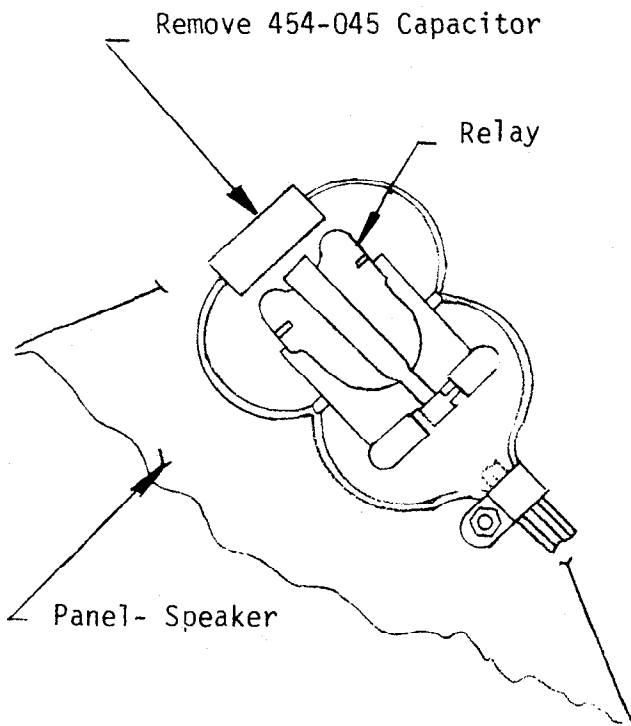
Effectivity Date:

This Service Release is effective upon receipt.

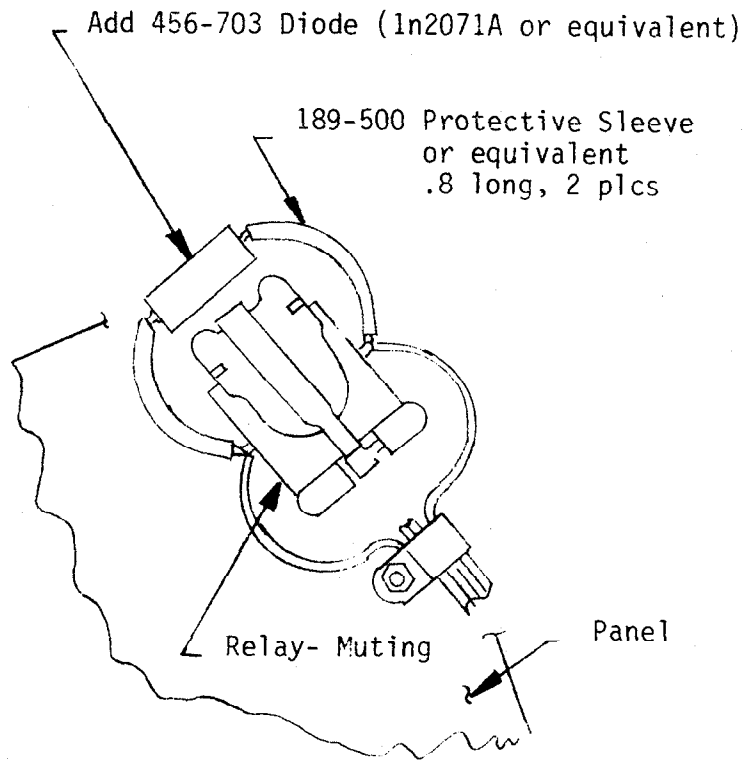
Summary:

Please contact your Piper Field Service Facility to make arrangements for compliance with the provisions of this Service Bulletin in accordance with Compliance Times, indicated.

(over)



ALL AFFECTED AIRCRAFT



KING/NARCO RADIO INSTALLATION

