



SERVICE BULLETIN

No. 331

Piper Aircraft Corporation

Lock Haven, Pennsylvania, U.S.A.

"FAA DOA EA-1 Approved"

February 5, 1971

Subject: Electric Trim Switch Inspection and Modification

Models and Serial Numbers Affected: All the following aircraft with a pilot's control wheel mounted "rocker" type trim switch:

I. Factory (production) Installations;

<u>Models Affected</u>	<u>Serial Numbers Affected</u>
PA-23-250 (Six Place) and PA-E23-250 (Six Place) Aztec	27-3837, 27-3944 to 27-4467 incl., 27-4469 to 27-4527 incl., 27-4529 to 27-4559 incl., 27-4561 to 27-4567 incl., 27-4569 to 27-4575 incl., 27-4577 to 27-4579 incl., 27-4581, 27-4582, 27-4584 to 27-4592 incl., 27-4594, 27-4596 to 27-4604 incl., and 27-4606.
PA-24-260 Comanche	24-4783, 24-4804 to 24-4953 incl., 24-4955 to 24-4959 incl., 24-4962 and 24-4964.
PA-30 Twin Comanche	30-1717, 30-1745 to 30-2000 incl.
PA-31 and 31-300 Navajo	31-2 to 31-694 incl., 31-696 and 31-697.
PA-31P Navajo	31P-1 to 31P-24 incl., 31P-26 to 31P-29 incl., 31P-31 and 31P-33.
PA-39 Twin Comanche C/R	39-1 to 39-83 incl.

II. Field Installation Kits;

<u>Models Affected</u>	<u>Serial Numbers Affected</u>	<u>Kit No. and Description</u>
PA-23-250 (Six Place)	27-3837, 27-3944 and up.	760 232, Manual Electric Pitch Trim; 760 310, AltiMatic IIIB
PA-24-260 Comanche	24-4783, 24-4804 and up.	760 273, Manual Electric Pitch Trim; 760 326, AltiMatic IIIB

(over)

Model and Serial Numbers Affected: (Continued)

II. (Continued)

<u>Models Affected</u>	<u>Serial Numbers Affected</u>	<u>Kit No. and Description</u>
PA-30 Twin Comanche	30-1717, 30-1745 to 30-2000 incl.	760 273, Manual Electric Pitch Trim; 760 309, AltiMatic IIIB
PA-31 and PA-31-300	31-2 to 31-372 incl. 31-373 and up.	760 237, AltiMatic III 760 311, AltiMatic IIIB
PA-31P Navajo	31P-1 and up.	760 423, AltiMatic IIIB
PA-39 Twin Comanche C/R	39-1 and up.	760 273, Manual Electric Pitch Trim; 760 309, AltiMatic IIIB

Compliance Time:

- I. Prior to each flight, inspect the pilot's control wheel mounted "rocker" type trim switch for proper operation per Instructions No. 1, below;
- II. At the next 100 hour inspection or annual inspection (whichever occurs first), modify the trim switch in accordance with Piper Kit No. 760 505, Electric Trim Switch Modification.

Purpose:

To modify the pilot's control wheel mounted "rocker" type trim switch by replacing the existing neutral return device (silicone rubber pad) with a coil spring (reference sketch on page 4 for a general description).

Instructions:

1. Pre-flight Inspection:
 - a. Move the switch knob fore and aft; the trim tab indicator should move in the appropriate direction.
 - b. When the switch is released at the fore or aft position, the switch should consistently return to the "off" (neutral) position.
 - c. If the switch does not operate as described in b. above, it must be replaced, repaired or modified in accordance with Kit No. 760 505 instructions.
 - d. Should a switch malfunction occur in a location where parts/service facilities are not available, the aircraft can be flown to a service facility in the following temporary configuration:

Prepare a temporary placard (as follows)
-and install in a conspicuous location on instrument panel:

Instructions: (Continued)

(PA-23-250, PA-24, PA-30 & PA-39 models)

"Pull Electric Pitch Trim Circuit Breaker until compliance with Piper Service Bulletin No. 331 has been achieved."

(PA-31 and PA-31P models)

"Pull Electric Pitch Trim Circuit Breaker until compliance with Piper Service Bulletin No. 331 has been achieved. Cowl flap function not affected, but cowl flap indicator is also disabled by this circuit breaker."

2. If the existing trim switch operates properly, the switch should be modified per the material and instructions (contained in Kit No. 760 505, Electric Trim Switch Modification). This may be accomplished as specified in Compliance Time II, above.

Material Required:

One (1) each (per aircraft) Kit 760 505, Electric Trim Switch Modification.

Availability of Parts:

Your Piper Dealer.

Effectivity Date:

This Service Bulletin is effective February 1, 1971.

Summary:

The material for this modification will be provided free of charge by your Piper Dealer providing the Compliance Time period is adhered to.

