

# SERVICE



# LETTER

Service Letter No. 404

September 16, 1963

**TO:** Distributors, Dealers, Certified Service Centers and Owners

**SUBJECT:** Inspection of Altimatic and Altimatic II Pitch Servo Assembly Chain Adjustment Screw

**MODELS AFFECTED:** PA-23 Apaches, Serials 23-1502 to 23-2046 inclusive  
PA-23-250 Aztecs, Serials 27-1 to 27-504 inclusive  
PA-23-235 Apaches, Serials 27-505 to 27-572 inclusive  
PA-23-250 (6 place) Aztecs, Serials 27-2000 to 27-2388 inclusive  
PA-24 and PA-24 "250" Comanches, Serials 24-2003, 24-2203, 24-2299 to 24-3557 inclusive

**DATE OF COMPLIANCE:** Prior to but not later than next 50 hours of operation

We wish to advise that it is necessary to inspect the chain adjustment screw in the pitch servo assembly in all aircraft equipped with Piper Altimatic or Altimatic II AutoPilots within the serial numbers listed above, and all pitch servo assemblies now in distributor or dealer stock. An inspection is requested to determine if the chain adjustment screw (Mitchell part number 3S60 and/or 3S103) is adequately engaged in the locking insert of the mating nut.

In order to provide a positive lock of the screw, at least one or more threads must protrude through the nut. If this cannot be accomplished without maladjustment of the pitch servo chain tension, (See pitch servo chain adjustment procedure on the following page.) it will be necessary to remove the screw and replace it with a "long-lok" type screw (Mitchell part number 3S275). Standard AN 1/32" thickness washers may be used as required under the head of the screw to prevent driving the screw end against the adjacent sprocket mounting.

To acquire sufficient clearance for removal of the screw in the Apache, Apache 235, Aztec and Aztec (6 place) aircraft, in the event replacement of the screw is required, it will be necessary to:

1. Disconnect the break-away link by snapping the ball out of the connecting link.
2. Remove the mounting bolt from the aft end of the servo and the two bolts holding the clamp at the forward end.
3. Move the servo to obtain adequate clearance.

(over)

**PIPER AIRCRAFT CORPORATION, LOCK HAVEN, PA., U. S. A.**

## CAUTION

Exercise care when removing the mounting bolts and ascertain that the clamps remain in position on the fuselage tubes to insure proper alignment when re-mounting the servo. Complete removal of the servo is not necessary.

## PITCH SERVO CHAIN ADJUSTMENT PROCEDURE

1. Completely disengage the servo.
2. Measuring on the opposite side of the slide bushing or break-away link in the center of the servo, the chain should have approximately 7/16" slack.
3. By turning the adjusting screw clockwise, the chain tension is increased and by turning counter-clockwise, the chain tension is decreased.

See sketch attached to this letter for screw location and chain adjustment details.

The "long-lok" screws will be furnished on a no charge basis. Distributors shall order, as required, from the Service Spares Department.

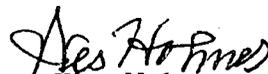
## NOTE TO DISTRIBUTORS

In complying with the above inspection, should it be necessary to replace the chain adjustment screw in the PA-23 Apache, PA-23-250 Aztec, PA-23-235 Apache and the PA-23-250 (6 place) Aztec, a warranty claim may be submitted in the usual manner for one (1) hour of warranty labor.

The replacement of the chain adjustment screw in the Comanche, if required, will not be in excess of 45 minutes, therefore, no warranty labor will be authorized.

Very truly yours,

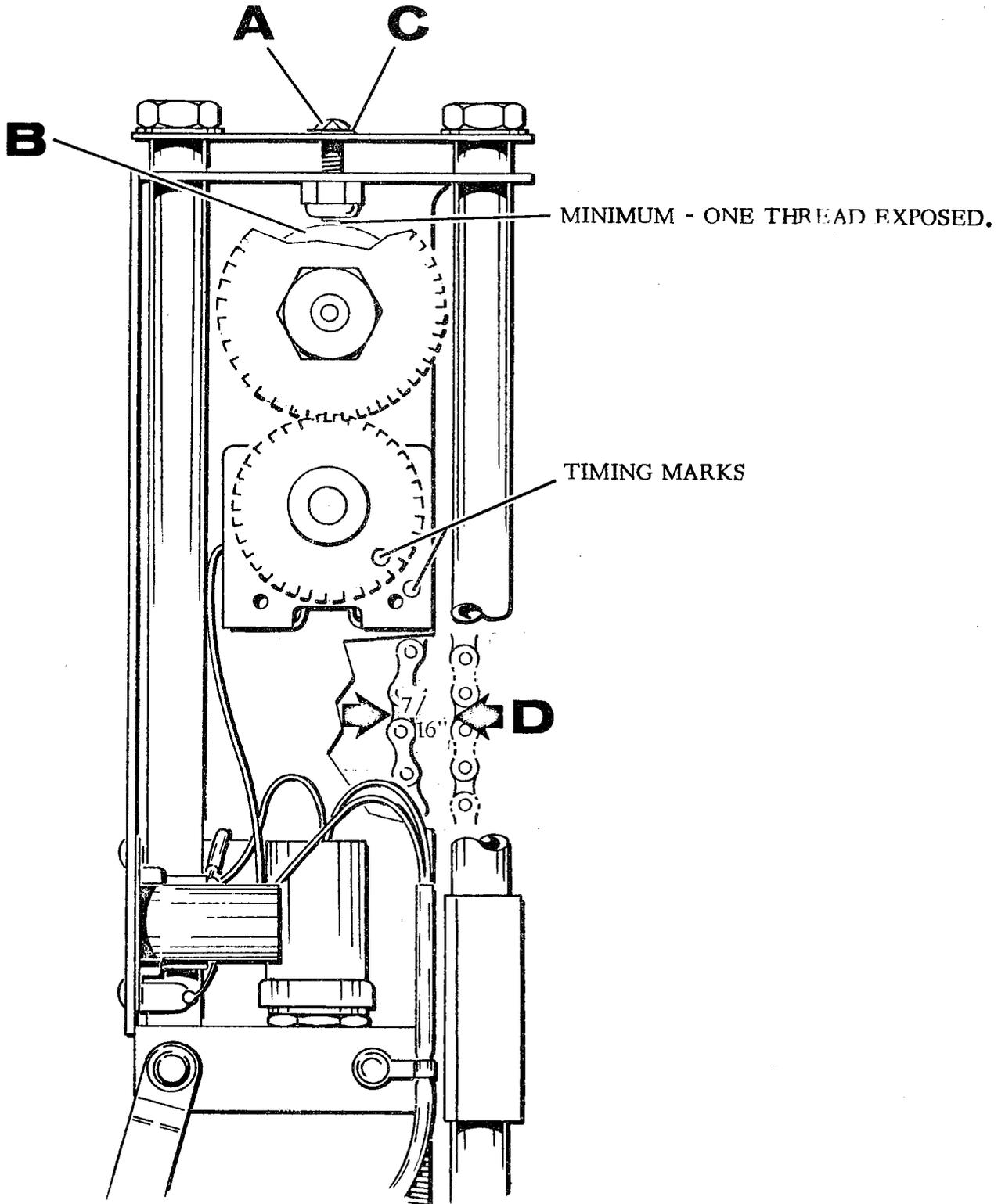
PIPER AIRCRAFT CORPORATION

  
Wes Holmes

Service Manager

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IF LONG-LOK SCREW (A) CONTACTS SPROCKET MOUNTING (B), REMOVE SCREW AND INSTALL PACK WASHERS (C), UNDER HEAD OF SCREW AS REQUIRED TO MAINTAIN CHAIN TENSION OF 7/16" SLACK (D).