

### Piper Aircraft Corporation

2629 Piper Drive Vero Beach, Florida, U.S.A. 32965

## SERVICE No. 865 BULLETIN

# PIPER CONSIDERS COMPLIANCE MANDATORY

DATE: SEPTEMBER 1, 1993

S/M

Service Bulletin 965 supersedes and voids Service Letter No. 597, dated December 15, 1971.

#### SUBJECT:

Inspection of Flap Lever and Bolt.

#### **MODELS AFFECTED:**

PA-28-140 Cherokee PA-28-150/160/180 Cherokee PA-28-151 Warrior PA-28-161 Warrior II

PA-28-161 Cadet PA-28-181 Archer II

PA-28-235 Cherokee PA-28-236 Dakota

FA-28-201T Turbo Dakota PA-28R-180 Arrow PA-28R-200 Arrow/Arrow II PA-28R-201 Arrow III

PA-28R-201T Turbo Arrow III

PA-28RT-201 Arrow IV PA-28RT-201T Turbo Arrow IV

PA-32-260 Cherokee Six
PA-32-300 Cherokee 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-34-200 Seneca
PA-34-200T Seneca II
PA-34-220T Seneca III
PA-44-180 Seminole

PA-44-180T Turbo Seminole

#### **SERIAL NUMBERS AFFECTED:**

28-20000 through 28-7725290 28-1 through 28-7505259 & 28-E13 28-7415001 through 28-7715314 28-7716001 through 28-8616057, and 2816001 through 2816102 2841001 through 2841346 28-7690001 through 28-8690062, 2890001 through 2890169 28-10001 through 28-7710089 & 28-E11 28-7911001 through 28-8611008, 2811001 through 2811034 28-7921001 through 28-7921095, 28R-30001 through 28R-7130013 28R-35001 through 28R-7635462 28R-7737001 through 28R-7837319, 2837001 through 2837059 28R-7703001 through 28R-7803374 and 2803001 through 2803012 28R-7918001 through 28R-8218026, 28R-7931001 through 28R-8631005 2831001 through 2831038 32-1 through 32-7800008 32-40000 through 32-7940290 32-8006001 through 32-8406020, 32-8024001 through 32-8424002 32R-7680001 through 32R-7880068 32R-7885001 through 32R-7985105 32R-7887001 through 32R-7987126 32R-8013001 through 32R-8413024 32R-8029001 through 32R-8429028 34-7250001 through 34-7450220 34-7570001 through 34-8170092 34-8133001 through 34-8233088 44-7995001 through 44-8195026, 4495001 through 4495013 44-8107001 through 44-8107066

> (OVER) ATA: 2750

**COMPLIANCE TIME:** 

At the next regularly scheduled inspection event, but not to exceed the next one-hundred (100) hours of operation.

APPROVAL:

The technical contents of this Service Bulletin have been approved by the F.A.A..

purpose:

Field reports indicate that despite the inspection requirements called for in Piper's Inspection Reports and the Service Manuals, aircraft utilizing manual flap levers are experiencing worn bolts and elongated holes at the cable attach point. In addition, some aircraft may have a flap lever bolt installed that is marginal in length. This condition, left uncorrected, could result in the inability to lower the flaps or, should the retaining bolt break or come free while the flaps are selected down, a sudden retraction of the flaps will occur with resultant loss of lift.

This Service Bulletin requires a one time inspection to determine the condition of the effected flap lever assembly. It provides instruction for the installation of a bushing and longer bolt if necessary, to preclude the above mentioned condition and to provide increased serviceability.

#### **INSTRUCTIONS:**

- 1. Gain access to the flap lever assembly. Remove interior mouldings and carpet as necessary. Remove seats as required.
- 2. Refer to the sketch and instructions applicable to your model aircraft on page 3. Inspect associated hardware and replace as necessary. (Washer P/N 407-564, Nut P/N 404-392 & Pin P/N 424-051.)
- 3. Enlarge flap lever to cable mounting hole to .316" and install Bushing Piper P/N 63900-174. Refer to Sketch A on page 4 for details. Should this hole be larger than .316 the flap lever must be replaced. Refer to the applicable parts catalog for the part number.
- 4. Upon re-installation, check flap cable tensions and check chain and sprocket installation and security per the applicable Maintenance Manual.
- 5. Re-install articles removed in step one.
- 6. Make an appropriate logbook entry of compliance with this Service Bulletin.

MATERIAL REQUIRED: One (1) each Bushing, Piper Part Number 63900-174, per aircraft and if required by inspection (1) each Bolt, Piper Part Number 400-673 (AN23-11), per aircraft.

**AVAILABILITY OF PARTS:** 

Your Piper Field Service Facility.

**EFFECTIVE DATE:** 

This Service Bulletin is effective upon receipt.

<u>SUMMARY:</u> Any applicable Factory Participation will remain in effect for a period of time not to exceed 180 days from the date of this Service Bulletin.

Please contact your Factory Authorized Piper Service Facility to make arrangements for compliance with this Service Bulletin in accordance with the Compliance Time indicated and to obtain information concerning any applicable factory participation.

NOTE:

If you are no longer in possession of this aircraft, please forward this information to the present Owner/Operator and notify the factory of address/ownership corrections. Changes should include aircraft model, serial number, current owner's name and address.

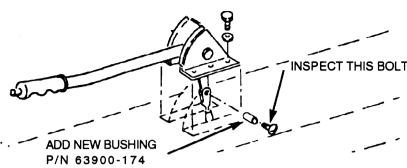
Correction/changes should be directed to:

PIPER AIRCRAFT CORPORATION ATTN: Customer Service 2926 Piper Drive Vero Beach, FL 32960

INSPECT THIS BOLT

#### PA -28 MODELS WITH STAB, TRIM CRANK (OVERHEAD).

- 1. Remove royalite flap handle cover..
- Remove flap handle mounting bracket attachment bolts and raise handle and bracket assembly to allow access to the flap control cable attachment bolt.
- Remove and inspect cable attachment bolt for possible wear. If an AN23-10 bolt is installed or if wear is detected, replace existing bolt with a new Clevis Bolt (AN23-11) Piper Part Number 400-673.
- Re-install hardware utilizing the new bushing Part No. 63900-174. Refer to Sketch A for hole enlargement.



#### PA -28 MODELS WITH STAB, TRIM WHEEL.

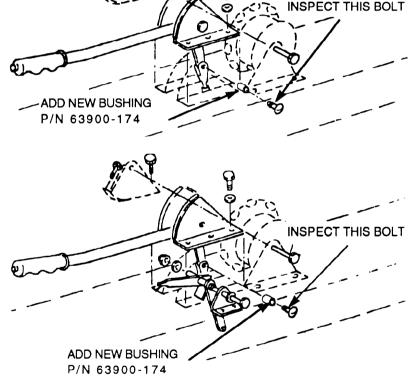
- 1. Remove royalite flap handle cover...
- Loosen trim wheel attach bolt, remove trim wheel attach bracket bolts and remove bracket from top of tunnel.
- Remove flap handle mounting bracket attach bolts and raise handle and bracket assy, to allow access to the control cable attach bolt
- Remove and inspect cable attachment bolt for possible wear. If an AN23-10 bolt is installed or if wear is detected, replace existing bolt with a new Clevis Bolt (AN23-11) Piper Part Number 400-673.
- Re-install hardware utilizing the new bushing Part No. 63900-174. Refer to Sketch A for hole enlargement.

#### PA -28R AND PA-32R MODELS

- Remove royalite cover from flap handle, trim wheel and emergency gear lever.
- Loosen trim wheel attach bolt, remove trim wheel attach bracket bolts and remove bracket from top of tunnel..
- 3. Remove the pivot bolt thru the emergency gear lever and the flap handle mounting bracket.
- Remove flap handle mounting bracket attach bolts and raise handle and bracket assy, to allow access to the control cable attach bolt
- Remove and inspect cable attachment bolt for possible wear. If an AN23-10 bolt is installed or if wear is detected, replace existing bolt with a new Clevis Bolt (AN23-11) Piper Part Number 400-673.
- Re-install hardware utilizing the new bushing Part No. 63900-174. Refer to Sketch A for hole enlargement.

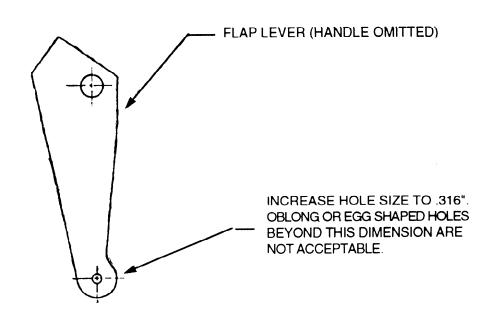
#### PA 32, PA-34 AND PA-44 MODELS

- Remove royalite flap handle and trim wheel cover..
   These covers may vary between the different 32 & 34 models.
- Remove flap handle mounting bracket attachment bolts and raise handle and bracket assembly to allow access to the flap control cable attachment bolt.
- Remove and inspect cable attachment bolt for possible wear. If an AN23-10 bolt is installed or if wear is detected, replace existing bolt with a new Clevis Bolt (AN23-11) Piper Part Number 400-673.
- 4. Re-install hardware utilizing the new bushing Part No. 63900-174. Refer to Sketch A for hole enlargement.



ADD NEW BUSHING

P/N 63900-174



SKETCH A