



SERVICE *No. 924* BULLETIN

Piper Aircraft Corporation
Vero Beach, Florida, U S A

* PIPER CONSIDERS *
* COMPLIANCE MANDATORY *

Date September 13, 1989 S

(Service Bulletin No. 924 supersedes and voids Service Letter No. 392 dated January 17, 1963)

SUBJECT: Shimmy Dampener Replacement

MODELS AFFECTED: SERIAL NUMBERS AFFECTED:

PA-22-125/135/150/160 Tri-Pacer 22-1 through 22-7642
PA-22-108 Colt 22-8000 through 22-9848

COMPLIANCE TIME: Aircraft equipped with Shimmy Dampener, Piper Part Number 13086-00: Within the next twenty-five (25) hours of time in service or at the next regularly scheduled maintenance event, whichever occurs first.

Aircraft equipped with Shimmy Dampener, Piper Part Numbers 21701-02 or 21701-04: Within the next one hundred (100) hours of time in service or at the next regularly scheduled maintenance event, whichever occurs first.

PURPOSE: It is possible that through improper installation or by the lack of maintenance and lubrication that the shimmy dampener may bind or become unserviceable. Should this occur, especially on aircraft equipped with the early model shimmy dampeners, the possibility exists that during a maximum left turn the shimmy dampener shaft may jam or bend, causing loss of nose wheel steering. This condition could possibly lead to partial or total loss of rudder control.

This Service Bulletin recommends the shimmy dampener currently installed in the affected model aircraft be replaced by a new Shimmy Dampener, Piper Part Number 21701-06, and provides instructions for continuing maintenance at regular intervals.

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

INSTRUCTIONS:

1. Remove cowlings as necessary to gain access to nose wheel shimmy dampener. Refer to applicable Owners Manual or Parts Catalog.
2. Shimmy Dampeners with Piper Part Number 13086-00, as identified on Sketch A (attached), should be removed, discarded and replaced by Piper Part Number 21701-06.

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INSTRUCTIONS: (Cont.)

3. If the shimmy dampeners with Piper Part Numbers 21701-02 and 21701-04, Sketch B (attached), are inspected and determined to be serviceable and airworthy and the instructions below are complied with, those shimmy dampeners may be returned to service.
4. Determine that nose wheel travel is 20 degrees left and right of center.
5. Determine that the shimmy dampener rotates freely on the axis of its attachment bolt throughout its full travel, especially as it approaches the limits of nose wheel travel.
6. Determine that the attachment of the shimmy dampener rod end to the nose wheel steering arm is free to accept angular travel in either direction.
7. Should any stiffness, restrictions, or other maladies be noticed, correct by replacing parts and adjusting as necessary until proper fit and function is obtained.
8. A regular maintenance routine of inspection, cleaning, and lubrication should be performed at each one hundred (100) hours of operation or at any inspection event. Lubricate shimmy dampener rod end and pivot point using general purpose low temperature oil (MIL-L-7870 or equivalent). Wipe shimmy dampener shaft using a clean cloth saturated with MIL-H-5606 hydraulic fluid.
9. Upon completion reinstall cowling as necessary.
10. Make logbook entry of compliance with this Service Bulletin.

MATERIAL REQUIRED: One (1) each Shimmy Dampener, Piper Part Number 21701-06, per aircraft.

AVAILABILITY OF PARTS: Your Piper Field Service Facility.

EFFECTIVITY DATE: This Service Bulletin is effective upon receipt.

SUMMARY: There is no Factory participation applicable to this Service Bulletin.

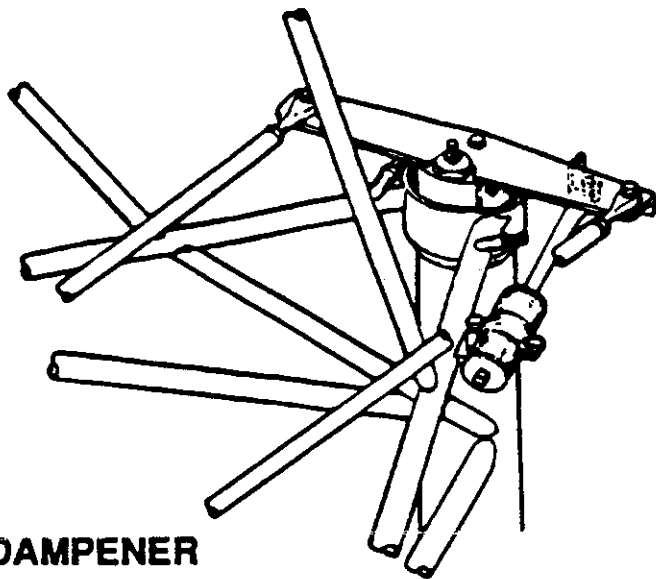
Special pricing is in effect for the Shimmy Dampener Assembly, Piper Part Number 21701-06, for 180 days from the effective date of this Service Bulletin.

Please contact your Factory Piper Field Service Facility to make arrangements for compliance with this Service Bulletin in accordance with the Compliance Time indicated.

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.

Corrections/Changes should be directed to:

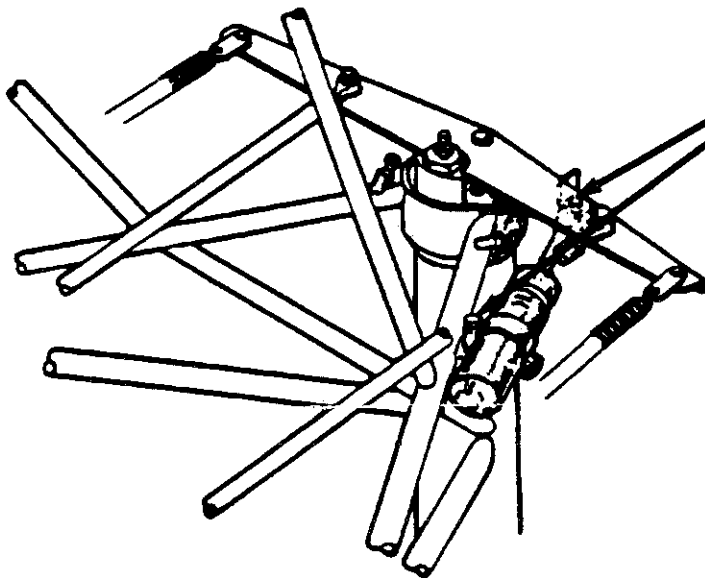
Piper Aircraft Corporation
Attn: Customer Services
P.O. Box 1328
Vero Beach, Florida 32961-1328



**SHIMMY DAMPENER
(EARLY MODEL)
TRI-PACER - PART NO. 13086-00
(IDENTIFICATION)**

SKETCH "A"

**CHECK FOR
FREEDOM OF
ANGULAR TRAVEL**



**SHIMMY DAMPENER
(LATER MODEL)
TRI-PACER - PART NO. 21701-02
COLT - PART NO. 21701-04
(IDENTIFICATION)**

SKETCH "B"