

Airglas, Inc.

**INSTRUCTIONS FOR CONTINUED AIRWORTHINESS
INCLUDING
INSTALLATION, MAINTENANCE AND SERVICE INSTRUCTIONS**



MANUAL NO. PA-32-105

**PA-32LA 8.00x6 NOSE WHEEL INSTALLATION KIT
For
Piper PA-28 and PA-32 series aircraft
Installed under STC SA281AL**

Cage Code 17564

Airglas Inc.®

REVISION (A)

June 14, 2012

THIS MANUAL INCLUDES INFORMATION PROPRIETARY TO ***Airglas, Inc.*** AND SHALL NOT BE USED TO MANUFACTURE OR REPRODUCE ANY PART OR
ASSEMBLY WITHOUT THE PRIOR WRITTEN PERMISSION OF ***Airglas, Inc.***

Record of Revision

REV LEVEL	REV DATE	BY	EXPLANATION OF REVISION
Original			
A	June 14, 2012	CDB	Added weight and balance data

Airworthiness Limitations

"The Airworthiness Limitations section is FAA approved and specifies maintenance required under Sections 43.16 and 91.403 of the Federal Aviation Regulations unless an alternative program has been FAA approved."

Limitations:

- *Currently there are no components of the PA-32LA Nose Wheel Installation Kit that have a time limited mandatory service interval.*

Distribution of Changes

A new copy of the revised manual or affected pages will be maintained on the ***Airglas, Inc.*** website.

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1.0 Introduction & Description

Introduction: The PA-32LA 8.00x6 nose wheel installation kit dramatically increases the usefulness of the aircraft by allowing it to operate on gravel runways and with caution, some unprepared surfaces.

Description: The PA-32LA 8.00x6 nose wheel installation kit consists of a nose fork, axle tube, axle rod, bearing spacers, cap assemblies (buckets), and attaching hardware.

2.0 Limitations

Limitations:

- **Requires 8.00x 6 tires and tubes. Other sized tires are not approved under this STC.**
- **Maximum tire Pressure = 23 PSIG**

3.0 Initial Installation

Refer to drawing: PA-32, 8.00x6 Nose Wheel Installation Kit, Revision B dated June 12, 2012.

Note: *All hardware in this kit shall be installed and torqued IAW AC 43.13-1B Chapter 7, Par 7-40, Table 7-1 and table 7-2 unless specified otherwise.*

1. Jack up nose of aircraft in accordance with the appropriate Piper service manual.
2. Deflate nose tire.
3. Remove AN365-624 nut and AN960-616 washer from axle rod (Piper P/N 13089-00).
4. Remove the two cap assemblies (Piper P/N 20825-00).
5. Remove the axle tube, wheel and tire, and bearing spacers.
6. Remove tire from wheel. Retain wheel.
7. Remove four (4) AN5 bolts, AN365-524 nuts, and AN960-516 washers holding the original fork onto the strut assembly. Retain hardware.
8. Install the PA-32LA-1 fork using the retained hardware.
9. Install an 8.00x6 4 ply rated tire and 8.00x6 tube on the wheel in accordance with the appropriate Piper service manual. Adjust tire pressure to 23 psig maximum.
10. Install P/N PA32-206L-2 axle tube, PA32-206L-3 bearing spacers, and wheel and tire on the fork.

3.0 Initial Installation-continued

11. Install the PA32-206L-4 axle rod with two PA32-206L-6 cap assemblies, two AN365-624 nuts, two PA32-206L-5 spacers, and four AN960-616 washers. Adjust bearing preload (tighten nuts until wheel spins with heavy drag, then back off until wheel spins freely).
12. Lower nose of aircraft.
13. Revise aircraft weight and balance and equipment list.
14. File FAA form 337.
15. Record installation in aircraft records.
16. Record AD 75-02-03 amendment 39-2066 Not Applicable by installation of Airglas, Inc. PA32LA-1 nose fork kit.

4.0 Removal and Re-installation

Removal:

1. Jack up nose of aircraft in accordance with the appropriate Piper service manual.
2. Deflate nose tire.
3. Remove AN365-624 nut and AN960-616 washers, and spacers (PA32-206L-5) from axle rod (PA32-206L-4).
4. Remove the two cap assemblies (PA32-206L-6).
5. Remove the axle tube, wheel and tire, and bearing spacers (PA32-206L-3).
6. Remove four (4) AN5 bolts, AN365-524 nuts, and AN960-516 washers holding the fork onto the strut assembly.

Installation:

1. Install the PA-32LA-1 fork using the retained hardware.
2. Install an 8.00x6 4 ply rated tire and 8.00x6 tube on the wheel in accordance with the appropriate Piper service manual. Adjust tire pressure to 23 psig maximum.
3. Install P/N PA32-206L-2 axle tube, PA32-206L-3 bearing spacers, and wheel and tire on the fork.
4. Install the PA32-206L-4 axle rod with two PA32-206L-6 cap assemblies, two AN365-624 nuts, two PA32-206L-5 spacers, and four AN960-616 washers. Adjust bearing preload (tighten nuts until wheel spins with heavy drag, then back off until wheel spins freely).
5. Lower nose of aircraft.
6. Record removal and installation in aircraft records.

5.0 Servicing Information

Service tire to 23 PSIG maximum pressure.

6.0 Instructions for Continued Airworthiness

MAINTENANCE OPERATIONAL CHECKS

Daily Preflight Check *

1. **CHECK** – Tire pressure.
2. **CHECK** – Fork for damage.
3. **CHECK** – Attach hardware for security.

* **May be accomplished by appropriately rated pilot.**

INSPECTION CRITERIA

100/Annual (100 hour or Annual inspection interval)

1. **CHECK** – Tire pressure.
2. **CHECK** – Fork and components for corrosion or damage.
3. **CHECK** – Attach hardware for security.
4. **CHECK** – Fork protective coating for integrity.

7.0 AD 75-02-03 amendment 39-2066 Compliance.

The installation of the Airglas PA-32LA 8.00x6 Nose Wheel Installation Kit is compliant with AD75-02-03. Log AD 75-02-03 14 CFR part 39 amendment 39-2066 not applicable to Airglas, Inc. part number PA-32LA-1 nose fork by making an entry in the aircrafts permanent records as follows or a similarly worded statement:

July 4, 20XX

Aircraft total time: 1776 hours

AD 75-02-03 effective date November 26, 1974, 14 CFR part 39 amendment 39-2066 not applicable to Airglas, Inc. part number PA-32LA-1 nose fork.

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8.0 Weight and Balance Data

This installation is 5.0 pounds heavier than the parts it replaces. The C.G. of the installation which includes the tire, tube, and fork, is 0.5 inches aft of the axle centerline.

— END —