

United States Of America
Department of Transportation - Federal Aviation Administration
Supplemental Type Certificate

Number SA02069AK

This Certificate issued to

Airglas, Inc.
P.O. Box 190107
Anchorage, AK 99519-0107

*certifies that the change in the type design for the following product with the limitations and conditions therefor as specified hereon meets the airworthiness requirements of Part * of the * Regulations.*

Original Product Type Certificate Number: * Refer to attached FAA Approved Model List (AML) No. SA02069AK, Revision F dated June 5 2006, or later FAA approved revision, for approved airplane makes and models, corresponding Type Certificate numbers, and applicable airworthiness regulations.

Make:

Model:

Description of Type Design Change: Fabrication and installation of the Airglas, Inc., Landes PA32-206LA Nose Fork equipped with Goodyear 8.50 x 6 tire (see Limitations and Conditions) in accordance with Airglas Master Data List Number PA32-206LA, Revision D, dated May 26, 2006, or later FAA approved revision.

Limitations and Conditions: Airplanes incorporating this design change may be equipped with 6.00-6, 7.00-6, 8.00-6, or Goodyear 8.50 x 6 tires on the nose and main wheels. The nose tire must be the same size as the main tires in all installations.

An FAA approved Supplemental Flight Manual (SAFM) or Airplane Flight Manual (AFMS) Supplement is a required part of this modification. Refer to FAA Approved Model List (AML) No. SA02069AK for the required SAFM/AFMS document applicable to each approved make and model.

Compatibility of this design change with previously approved modifications must be determined by the installer. When utilizing SAFM/AFMS No. AE96-5FM, Revision C, with Cessna models U206F, TU206F, U206G and TU206G, this STC has been found compatible with STC No. SA4366WE. If the holder agrees to permit another person to use this Certificate to alter a product, then the holder shall give that person written evidence of such permission.

14 CFR Part 43 is adequate to ensure continued airworthiness of this modification.

This certificate and the supporting data which is the basis for approval shall remain in effect until surrendered, suspended, revoked or a termination date is otherwise established by the Administrator of the

Date of application: May 05, 1995

Date reissued: May 18, 2000

Date of issuance: January 29, 1997

Date amended: May 18, 2000; September 15, 2000;
November 30, 2001; January 5, 2004;
June 5, 2006



*Federal
Aviation
Administration*

By direction of the Administrator

Gregory J. Holt
(Signature)

Gregory J. Holt
Manager
Anchorage Aircraft Certification Office

(Title)

Airglas, Inc.
P. O. Box 190107
Anchorage, AK 99519

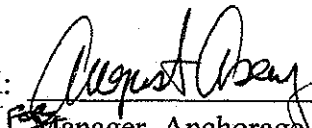
FAA Approved Model List (AML) No. SA02069AK <i>Description of Type Design Change:</i> Installation of Airglas, Inc. P/N PA32-206LA Nose Fork	Revision History	
	Rev Level	Date
	Original	January 29, 1997
	Rev A	May 18, 2000
	Rev B	September 15, 2000
	Rev C	November 30, 2001
	Rev D	June 18, 2002
	Rev E	January 5, 2004
	Rev F	June 5, 2006
Rev G	August 22, 2006	

Make / Model	TCDS	Certification Basis	Installation Instructions	Flight Manual Supplement
Cessna: 150, 150A, 150B, 150C, 150D, 150E, 150F, 150G, 150H, 150J, 150K, A150K, 150L, A150L, 150M, A150M, 152, A152	3A19	CAR 3	AE06-4IRI	AE00-1FM, Rev B, dated May 26, 2006 or later FAA Approved revision
Cessna: 172, 172A, 172B, 172C, 172D, 172E, 172F, 172G, 172H, 172I, 172K, 172L, 172M, 172N, 172P, 172Q, 172R, 172S	3A12	CAR 3	AE06-4IRI	AE00-1FM, Rev B, dated May 26, 2006 or later FAA Approved revision
Cessna: 175, 175A, 175B, 175C,	3A17	CAR 3	AE06-4IRI	AE00-1FM, Rev B, dated May 26, 2006 or later FAA Approved revision
Cessna: 177, 177A, 177B	A13CE	CAR 3	AE06-4IRI	AE00-1FM, Rev B, dated May 26, 2006 or later FAA Approved revision
Cessna: 182, 182A, 182B, 182C, 182D, 182E, 182F, 182G, 182H, 182J, 182K, 182L, 182M, 182N, 182P, 182Q, 182R, 182S, T182	3A13	CAR 3	AE06-4IRI	AE00-1FM, Rev A, dated November 30, 2001 or later FAA Approved Revision.
Cessna: 206, P206, P206A, P206B, P206C, P206D, P206E, U206, U206A, U206B, U206C, U206D, U206E, U206F, U206G, TP206A, TP206B, TP206C, TP206D, TU206A, TU206B, TU206C, TU206D, TU206E, TU206F, TU206G, 206H, T206H,	A4CE	CAR 3	AE96-1IRI	AE96-5FM, Rev. C, dated January 4, 2004, or later FAA Approved Revision

Airglas, Inc.
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FAA Approved Model List (AML) No. SA02069AK	Revision History	
	Rev Level	Date
<i>Description of Type Design Change:</i> Installation of Airglas, Inc. P/N PA32-206LA Nose Fork	Original	January 29, 1997
	Rev A	May 18, 2000
	Rev B	September 15, 2000
	Rev C	November 30, 2001
	Rev D	June 18, 2002
	Rev E	January 5, 2004
	Rev F	June 5, 2006
	Rev G	August 22, 2006

Make / Model	TCDS	Certification Basis	Installation Instructions	Flight Manual Supplement
Cessna: 207, 207A, T207, T207A	A16CE	14 CFR 23	AE00-2IRI	AE00-4FM, Rev. A, dated November 30, 2001 or latter FAA Approved Revision.
Cessna: 210-5 (205), 210-5A (205A)	3A21	CAR 3	AE06-4IRI	AE00-1FM, Rev B, dated May 26, 2006 or later FAA Approved revision

FAA Approved: 
Manager, Anchorage Aircraft Certification Office
Federal Aviation Administration
Anchorage, Alaska

Date: August 22, 2006

Airglas, Inc.
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Phone 907-344-1450
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DOCUMENT AE00-1FM

FAA-APPROVED SUPPLEMENTAL AIRPLANE FLIGHT MANUAL OR AIRPLANE
FLIGHT MANUAL SUPPLEMENT
FOR CESSNA MODELS:

Model Number: _____

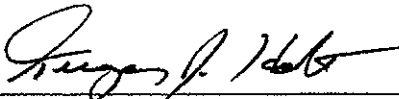
EQUIPPED WITH AN
AIRGLAS PA32-206LA NOSE FORK

Registration Number: _____

Serial Number: _____

This document must be carried in the airplane at all times when the Airglas PA32-206LA Nose Fork Assembly is installed in accordance with Supplemental Type Certificate Number SA02069AK. The information contained in this document supplements or supersedes the information made available to the operator by the manufacturer in the form of clearly stated placards, markings, or manuals as required by CAR 3.777(b), or in the form of an FAA approved Airplane Flight Manual as required by FAR 21.5, only in those areas listed herein. For limitations, procedures, and performance information not contained in this document, consult the basic placards, markings, or manuals, or the basic FAA approved Airplane Flight Manual.

FAA Approved: _____


Manager, Anchorage Aircraft Certification Office
Federal Aviation Administration
Anchorage, Alaska

FAA Approved
DATE: JUN 5 2006

Page 1 of 5

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Airglas, Inc.
 3500 O'Malley Rd
 Anchorage, AK 99516

AFM Supplement for Cessna
150, 152, 172, 175, 177, 182, 205

Ser. # _____
 Reg. # _____

LOG OF REVISIONS

Revision No.	Pages Affected	Description	FAA Approved	Date
Initial Rel.	1 - 5	Original		09-03-00
A	1 - 5	Added other tire sizes		11-30-01
B	1-5	Added 150,152,172,175,177,205	GJH	JUN 5 2006

FAA Approved
 DATE: JUN 5 2006

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SECTION I. General

This aircraft is equipped with an Airglas PA32-206LA Nose Fork. This Nose Fork replaces the previous Nose Fork and allows an 8.50-6 tire to be used (other size tires are acceptable). The Nose Fork is made out of 4130 chromoly steel that is heat treated. The tire inflation pressure is unchanged from the manufacturer's recommendations.

SECTION II. Limitations

1. Nose wheel tire - A tire clearance of at least 1/2 inch from the four (4) bolts on the Nose Fork is required.
2. Tire size on the main gear: The main gear tires must be the same size as the nose gear tire (8.50-6 maximum).

SECTION III. Emergency Procedures

No Change

SECTION IV. Normal Procedures

1. PREFLIGHT INSPECTION
 - A. Nose Fork wheel & tire attaching hardware -- Secure
 - B. Nose Fork block attaching hardware -- Secure
 - C. Nose Fork tire -- Proper Inflation

FAA Approved
DATE: JUN 5 2006

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2. INFLIGHT PROCEDURES

A. Landing: The Nose Fork and 8.50-6 tire increase the length of the nose gear by approximately 4". Pilots should ensure that all landings are accomplished in a nose high attitude similar to the soft field approach attitude.

CAUTION

During landing there is an increased possibility of wheelbarrowing or porpoising during landing. Pilots should ensure that all landings are accomplished in a nose high attitude similar to the soft field approach attitude.

SECTION V. Performance Information

1. Cruise: Cruise speeds are reduced up to 8 mph True Airspeed due to the increased size of the 8.50-6 tires. Pilots should reduce maximum range data by 5%.

SECTION VI. Weight and Balance/Equipment List

1. Aircraft weight and balance records and equipment list have been updated to reflect this installation.

SECTION VII. Systems Descriptions

This airplane is equipped with an Airglas, Inc., PA32-206LA Nose Fork Assembly. The tire inflation pressure is unchanged from the manufacturer's recommendations. The tire and wheel are unchanged and wear indications should follow that specific manufacturer's recommendations.

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150, 152, 172, 175, 177, 182, 205

Ser. # _____
Reg. # _____

SECTION VIII. Handling, Servicing and Maintenance

All handling procedures for this modification are standard. The PA32-206LA Nose Fork Assembly may be serviced and maintained in accordance with Part 43 of the Federal Aviation Regulations (FAR 43). Servicing and maintenance in accordance with FAR 43 is adequate to insure the continued airworthiness of this modification. Information on installing the PA32-206LA Nose Fork Assembly can be found in the Landes Nose Fork Installation Instructions, original issue dated November 5, 1996 or later FAA-approved revision.

FAA Approved
DATE: JUN 5 2006

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AE06-4IRI

LANDES Nose Fork Installation/Removal Instructions

Cessna 150, 152, 172, 175, 177, 182, 205 Series

Page 1 of 3

Original Issue: 09-03-00
Revision A: 11-20-01
Revision B: 05-11-06

Registration Number _____
Aircraft Model _____

WHEEL REMOVAL, LANDES NOSE FORK

1. Weight or tie down tail of aircraft to raise nose wheel off of the ground.
2. Remove axle rod (Part No. PA32-206L-4) using Airglas drawing PA32-206LA as a reference.
3. Use a rod or long punch inserted through one bucket (Part No. PA32-206L-6) to tap the opposite bucket out of the axle. Remove both buckets and pull nose wheel from fork.

NOTE

If speed fairing is installed, it may be necessary to loosen the wheel scraper to remove the wheel.

WHEEL INSTALLATION, LANDES NOSE FORK

1. Install nose wheel in fork and install the two buckets (Part No. PA32-206L-6) using Airglas drawing PA32-206LA as a reference.
2. Install axle rod (Part No. PA32-206L-4) using Airglas drawing PA32-206LA as a reference.
3. Tighten axle rod (Part No. PA32-206L-4) until a slight bearing drag is obvious when the wheel is turned. Back off 1/4 turn so that wheel turns freely.

WEIGHT AND BALANCE/EQUIPMENT LIST

- | | | | |
|----|--|-----------|----------------------------------|
| 1. | PA32-206LA Nose Fork Assembly: | 13.5 lbs | |
| | Cleveland 40-76A Wheel Assembly: | 4.0 lbs | |
| | Nose Tire (use actual weight of tire): | ___ lbs | |
| | Total Weight | ___ lbs @ | C-150 Station. <u>-11.00 in.</u> |
| | | | C-152 Station. <u>-10.80 in.</u> |
| | | | C-172 thru K <u>-7.50 in.</u> |

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LANDES Nose Fork Installation/Removal Instructions

Cessna 150, 152, 172, 175, 177, 182, 205 Series

Page 2 of 3

WEIGHT AND BALANCE/EQUIPMENT LIST

(CONTINUED)

PA32-206LA Nose Fork Assembly:	13.5 lbs
Cleveland 40-76A Wheel Assembly:	4.0 lbs
Nose Tire (use actual weight of tire):	___ lbs
Total Weight	___ lbs @ C-172L thru S <u>-6.80 in.</u>
	C-P172D, R172E,F,G,H,J,K <u>-7.00 in.</u>
	C-175 thru C <u>-7.00 in.</u>
	C-177 thru B <u>-6.80 in.</u>
	C-182 thru S, T182 <u>-7.50 in.</u>
	C-205, 205A <u>-7.50 in.</u>

LANDES Block Installation/Removal Instructions

1. Remove lower nose strut using procedures outlined in the appropriate Cessna Maintenance Manual for that model of aircraft.
2. Remove torque link fitting bolt and fork bolt as required.
Note: Heavy duty and late model combine fork and link fitting.
(See special instruction #1.)
3. Drive fork and link from lower strut tube using hydraulic press. Do not push on base plug, press on tube periphery only.
4. Heat Landes Block with electric heat gun or oven to a maximum of 200° Fahrenheit.
5. Mark strut tube holes with magic marker lines extending upward approximately 2". This will aid in aligning block bolt holes with the holes in strut tube. Some models have a 3/8" hole. (See special instruction #2.)
6. After block temperature has stabilized, quickly slide block onto tube. (Hydraulic press will often be needed to accomplish this operation.) Use magic marker guides to help align the bolt holes. Drive a 5/16" bullet through hole to ensure final alignment while still hot.
7. Assemble strut with new seals using appropriate Cessna Maintenance Manual for the particular aircraft model.

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LANDES Nose Fork Installation/Removal Instructions

Cessna 150, 152, 172, 175, 177, 182, 205 Series

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SPECIAL INSTRUCTIONS:

- #1. On Standard nose struts the lower hole must be removed by cutting approximately 1" off of the lower portion of the tube. Alternately the tube may be replaced with a heavy duty model.
- #2. Some models use a 3/8" hole in the block and tube combined with a bushing. The bushing must be cut and ground to ride flush with the outside diameter of the strut tube. This installation requires the disassembly of the block and tube to replace o-ring seal on base plug.

ALASKA, INC.

4340 Postmark Drive, Anchorage, AK 99502

(907) 248-7070 FAX (907) 248-7771

Mr. Gary Landes
 Airglas Engineering
 Box 190107
 Anchorage, AK 99519

REFERENCE ONLY

January 24, 2002

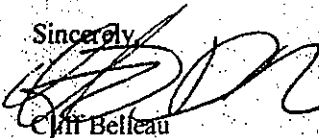
Gary,

In researching the different part numbers for nose wheel barrels we have come up with the following:

MODEL	SERIAL BLOCK	FORK AND BARREL ASSEMBLY P/N	BARREL ONLY P/N	LIST PRICE	YOUR COST
206/207 HD	ALL	1243610-28	1243003-5	\$524	\$497.8
206/207 STD	ALL	SK205-3	1243003-4	\$539	\$431.2
206H STD	ALL	1243610-7	1243003-4	\$539	\$431.2
182 53-62	33000-53007	0594300-206	0543006-6	\$744	\$669.6
182 53-62	53008 AND ON	0543039-201	0543040-2	NLA	
182 62-73 STD	53599-57625	0743600-4	0543006-5	\$379	\$360.05
182 62-73 HD	53599-57625	0743600-201	0743611-3	NLA	
182 62-73 STD	57626-62465	0743621-4	0543006-5	\$379	\$360.05
182 62-73 HD	57626-60825	0743621-201	0743611-3	NLA	
182 74-86	62466 AND ON	0743621-4	0543006-5	\$379	\$360.05
182 96 AND ON	ALL	0743621-4	0543006-5	\$379	\$360.05
172 56-62	2800-47746	0543000-212	0543006-6	\$744	\$669.6
175 56-62	55001-56238	0543000-212	0543006-6	\$744	\$669.6
172	47747-49544	0543039-201	0543040-2	NLA	
175	56239-57119	0543039-201	0543040-2	NLA	
172 63-74 STD	49545-54892	0543039-201	0543040-2	NLA	
172 63-74 STD	54893-63458	0543062-201	0543040-2	NLA	
172 63-74 HD	49545-54892	0543062-200	0543031-2	NLA	
172 63-74 HD	54893-63458	0543062-203	0543040-2	NLA	
172 75-86	63459 AND ON	0543062-201	0543040-2	NLA	
172 96 AND ON	ALL	0543062-201	0543040-2	NLA	

The items marked NLA are no longer available from Cessna, we must purchase the next higher assembly number. Mark is talking to Cessna about making the NLA barrels available for retail sale. We can install your blocks on the barrels for \$35.00 each if you will do it in a quantity of two or more at a time.

Sincerely,



Cliff Belleau

REFERENCE ONLY



Alaska's Cessna Source!

