# **Instructions for Continued Airworthiness**

### In Accordance With

**Supplemental Type Certificate No: SA03608AT** 

# **Cessna 182P and Cessna 182Q Maximum Gross Takeoff Weight Increase**

TROLLTUNE CORPORATION		
Instructions for Continued Airworthiness  1972 – 1980 Cessna 182P - Q	Document No. ED5004-SW	
Revision: I/R	Date: 17 April 2008	
Approved by:	Date:	

Approval – Trolltune Corporation ICA Document No. ED5004-SW-A2006-051-1,

Rev: I/R - Dated 04/17/2008 "ICA Approval"

Structural ICA Maintenance & Airworthiness limits have been reviewed and are approved herein by the Atlanta ACO for Project Number SP9458AT-A.

FAR Part 23 Operational requirements were

Approved by the AEG 4/21/2008,

Ronald G. Wissing

05/14/2008

Atlanta ACO – Aerospace Engineer

ACE-117A Airframe Branch

#### **REVISION HISTORY**

#### **AND LIST OF AFFECTED PAGES**

NOTE: Any revisions to this document will be made immediately available at <a href="www.trolltune.com/ICA">www.trolltune.com/ICA</a>. All STC owners / operators of record will be notified that a revision is available via their currently on-file E-mail address. Paper copies will be furnished to the owner / operator or their designated FAA authorized repair station, A&P, or AI upon request. It is the responsibility of the person(s) performing inspections and / or maintenance to ensure that this document is current prior to performing any work. Any issued revisions will be simultaneously sent to FAA for review, comment and approval.

Page	Rev	Effective Date	Description of Change
All	I/R	17 April 2008	Initial release

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#### 1. INTRODUCTORY INFORMATION

These Instructions for Continued Airworthiness (ICA) have been developed to meet the regulatory requirements of 14 CFR Part 23, Appendix G, and those found in 14 CFR Part 21, § 21.50. This document addresses and defines continuous airworthiness maintenance requirements for certain Cessna 182P and 182Q model airplanes when Trolltune Corporation Supplemental Type Certificate (STC) SA03608AT has been incorporated.

This STC allows a 150 pound increase to the existing Maximum Gross Takeoff Weight (MGTOW), from 2950 to 3100 pounds. There is no change to the Maximum Landing Weight (MLW) of 2950 pounds.

There are no parts added, nor are any modifications made, to the airplanes. New flight manual supplements are provided with the STC describing performance changes at the increased weights. With the exception of the inspection requirements detailed in Section 3 below (which apply ONLY in the case of a hard landing or an overweight emergency landing), there is no change to the existing Cessna maintenance documents.

Trolltune's STC may be incorporated in these specific Cessna airplanes:

- 1972 model year Cessna 182P, serial nos. 18260826 through 18261425
- 1973 model year Cessna 182P, serial nos. 18261426 through 18261528
- 1973 model year Cessna 182P, serial nos. 18261529 through 18262465
- 1974 model year Cessna 182P, serial nos. 18262466 through 18263475
- 1975 model year Cessna 182P, serial nos. 18263476 through 18264295 (except 18263479, plus 675)
- 1976 model year Cessna 182P, serial nos. 18264296 through 18265175
- 1977 model year Cessna 182Q, serial nos. 18265176 through 18265965
- 1978 model year Cessna 182Q, serial nos. 18265966 through 18266590 (plus 18263479)
- 1979 model year Cessna 182Q, serial nos. 18266591 through 18267300
- 1980 model year Cessna 182Q, serial nos. 18267301 through 18267715 (except 18267302)

#### 2. AIRWORTHINESS LIMITATIONS

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

NOTE: There are no additional airworthiness limitations as a result of this alteration.

#### 2.1 MANDATORY REPLACEMENT TIMES

None (does not apply).

#### 2.2 STRUCTURAL INSPECTION INTERVAL

After any overweight landing.

#### 2.3 STRUCTURAL INSPECTION PROCEDURE

See Section 3 below.

#### 3. Inspection Procedures

Any hard landing, and in particular, any emergency overweight landing (above 2950 lbs.) may result in main landing gear and / or wheel misalignment. If an overweight landing has occurred, proceed as follows prior to further flight:

- A. Perform a main wheel alignment inspection in accordance with the following Cessna documents:
  - 1. For Cessna 182P airplanes, Service Manual D2006-3-13, paragraph 5-19 and Figure 5-5.
  - 2. For Cessna 182Q airplanes, Service Manual D2068-3-13, paragraph 5-29 and Figure 5-5.
- B. If toe-in and camber are found acceptable, return the aircraft to service.
- C. If toe-in and camber are found not acceptable, realign the wheels per the Cessna procedure.
- D. If acceptable wheel alignment cannot be achieved by use of shims as described in the Service Manual, this may indicate that the main gear spring-strut has been deformed or the attaching bulkhead is out of alignment. Repair or replace components per the Service Manual as required.
- E. If main landing gear repairs were required, the following inspections found in Cessna Publication D5133-13, "Model 100 Series, Continued Airworthiness Program Manual" are suggested:
  - 1. Fuselage Strut Area Inspection 53-10-01, page 3-37 (or latest revision).
  - 2. Wing Strut and End Fitting Inspection 57-10-02, page 3-81 (or latest revision).
  - 3. Wing Fuselage Attach Fittings Inspection 57-10-03, page 3-83 (or latest revision).
  - 4. Record the date of overweight landing occurrence, inspections performed, and any repairs made in the airframe maintenance logbook.

1	NOTHING FOLLOWS
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