

Cessna Main Gear Fairings

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APPLICABLE MODELS

150 Series, 170 Series, 172 Series, 175 Series, 177 Series, 180 Series, 182 Series,
185 Series, 205 Series, 206 Series, 207 Series.

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Rev.	Date	Effect
A	5-4-2001	Re-write. Changed part numbers. Added maintenance manual.

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Section 1.0

Introduction

STOP! Read Complete Installation Manual Before Any Work is Performed on Aircraft.

Note: Please review this installation manual carefully. This manual is intended to be used in conjunction with the appropriate Cessna service / parts manual for the specific aircraft the installation is being performed on. Due to extensive variations in airframes and aircraft models, some part numbers may vary from the ones shown in this manual. Please contact us with any questions.

All recommendations set forth in AC-43-13 should be complied with during the installation of this kit. Main Gear Fairings must be installed as a pair but do not require the installation of the nose gear fairing or body fairings.

Section 2.0

Main Gear Fairing Installation

2.1 Preparation

Review the aircraft before installation and note the following conditions:

- a. On some early model aircraft with the spring type gear legs, the brake calipers are on the rear side of the axle instead of the front. These must be reversed to the front. It is also beneficial to have the brake lines run down the *rear* of the gear leg. This can be accomplished by attaching Cessna P/N S-1511-1 brake line molding to rear of gear leg per appropriate technique. The step may have to be removed or modified to do this.
- b. Examine the existing wheel pant plate / support assembly (fig. 1, index C8). Due to variations from the manufacturer, some early plate / support assemblies may not fit the newer style wheel pants. Cessna P/N 1241114-1 and 1241114-2 are necessary for this installation. Oversize models with 8.00 X 6 tires should use Cessna P/N 124166-1 and 124166-2. On spring gear models confirm that the wheel alignment shims are located between the plate / support assembly and the gear leg.
- c. Due to variations in airframes and age of aircraft you may find gear legs and / or tires that vary from one aircraft to another. The brake fairings in the kit were designed to be slightly oversize so that adjustment is possible. Some trimming may be required. To optimize aerodynamic benefit checking toe in and alignment of tires is recommended.

2.2 Installation

Install gear fairing kit per the appropriate Cessna Service manual for your aircraft. Some trimming of brake fairings where they meet the gear leg may be necessary for proper fit. To aid proper fit leave all screws loose until final assembly. Also check brake fairing alignment with gear leg. Some adjustment may be made at this time to facilitate proper fit.

2.3 Final assembly

Tighten all screws and check for wheel pant and clearance around tire opening. Trim opening around tire to at least .75" front and rear, and .50" along sides. Function test brakes for operation, if brake caliper is hitting a brake fairing, re-shim as necessary. Make sure all screws and attachments are tight. Check for any areas of possible abrasion between the fairings and aircraft. Also confirm there is no abrasion between fairing hardware and tire.

2.4 Weight and balance / Paperwork

Weight of new fairings with brake covers and hardware **(6.00 X 6 Tires)** – 12.2 lbs.
Weight of new fairings with brake covers and hardware **(8.00 X 6 Tires)** – 15.2 lbs.
Minus weight of fairings removed – XX.XX lbs.
Arm – per appropriate service manual

Complete FAA Form 337 and logbook entry. Place copy of this manual including maintenance manual page with aircraft records for future service.

Section 3.0

Parts List

Knots 2U, Ltd. Main Gear Fairing Parts List

Cessna Models:

150 series, 152 series, 170A,B, 172 series, 175 series, 177 series, 180 series, 182series, 185 series, 205 series, 206 series, 207 series.
Excludes retractable models

Part Number	Description	Units Per Assy.	Usable on Code
07707-50	MAIN WHEEL FAIRING ASSEMBLY – RIGHT	1	A
07707-51	MAIN WHEEL FAIRING ASSEMBLY – LEFT	1	A
07707-52	MAIN WHEEL FAIRING ASSEMBLY – RIGHT	1	B
07707-53	MAIN WHEEL FAIRING ASSEMBLY – LEFT	1	B
07707-54	MAIN WHEEL FAIRING ASSEMBLY – RIGHT	1	C
07707-55	MAIN WHEEL FAIRING ASSEMBLY – LEFT	1	C
07707-56	MAIN WHEEL FAIRING ASSEMBLY – RIGHT HEAVY DUTY (8.00 X 6 TIRES)	1	A
07707-57	MAIN WHEEL FAIRING ASSEMBLY – LEFT HEAVY DUTY (8.00 X 6 TIRES)	1	A
07707-58	MAIN WHEEL FAIRING ASSEMBLY – RIGHT HEAVY DUTY (8.00 X 6 TIRES)	1	B
07707-59	MAIN WHEEL FAIRING ASSEMBLY – LEFT HEAVY DUTY (8.00 X 6 TIRES)	1	B
07707-60	MAIN WHEEL FAIRING ASSEMBLY – RIGHT HEAVY DUTY (8.00 X 6 TIRES)	1	C
07707-61	MAIN WHEEL FAIRING ASSEMBLY – LEFT HEAVY DUTY (8.00 X 6 TIRES)	1	C

- A 150, 150A, 150B, 150C, 150D, 150E, 150F, 150G, 150H, 150J, 150K, A150K, 150L, 172, 172A, 172B, 172C, 172D, 172E, 172F, 172G, 172H, 172I, 172K, 175, 175A, 175B, 175C, P172D, R172K, 180, 180A, 180B, 180C, 180D, 180E, 180F, 180G, 180H, 180J, 180K, 182, 182A, 182B, 182C, 182D, 182E, 182F, 182G, 182H, 182K, 182L, 182M, 182N, 185, 185A, 185B, 185C, 185D, 185E, A185E, A185F, 206, P206, P206A, P206B, P206C, P206D, P206E, U206, U206A, U206B, U206C, U206D, U206E, U206F, U206G, TP206A, TP206B, TP206C, TP206D, TP206E, TU206A, TU206B, TU206C, TU206D, TU206E, TU206F, TU206G, 206H, T206H, 210-5, 210-5A.
- B 177, 177A, 177B, 182P, 182Q, 182R, T182, 182S, 207, T207, 207A, T207A.
- C 150L, A150L, 150M, A150M, 152, A152, R172K, 172L, 172M, 172N, 172P, 172Q, 172R.

Section 4.0

Knots 2U, Ltd. Main Gear Fairing Maintenance Manual

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- Part A. Inspection
Pre-flight ----- Inspect attachment and condition of all fairings.
- 100 hour and annual ----- Inspect attachment and condition of all fairings. Inspect condition of all fasteners for wear or looseness. Inspect brake lines / fittings to ensure there is no abrasion with the brake fairing.
- Part B. Maintenance
If excessive wear or looseness of fasteners is found, replace fastener. If abrasion is occurring with the brake lines or gear legs, appropriate action should be taken. Brake fairing may be trimmed to provide clearance with any parts.
- Part C. Cracking or Defects
If any crack is found that exceeds one inch in length, or if a crack runs from an attachment hole or edge of the fairing, remove the part and repair the crack in accordance with FAR 43.13-1A Chapter 2.