

REVISION	CHANGE	APPROVED	DATE
1	Published release	JTS	26/11/2025



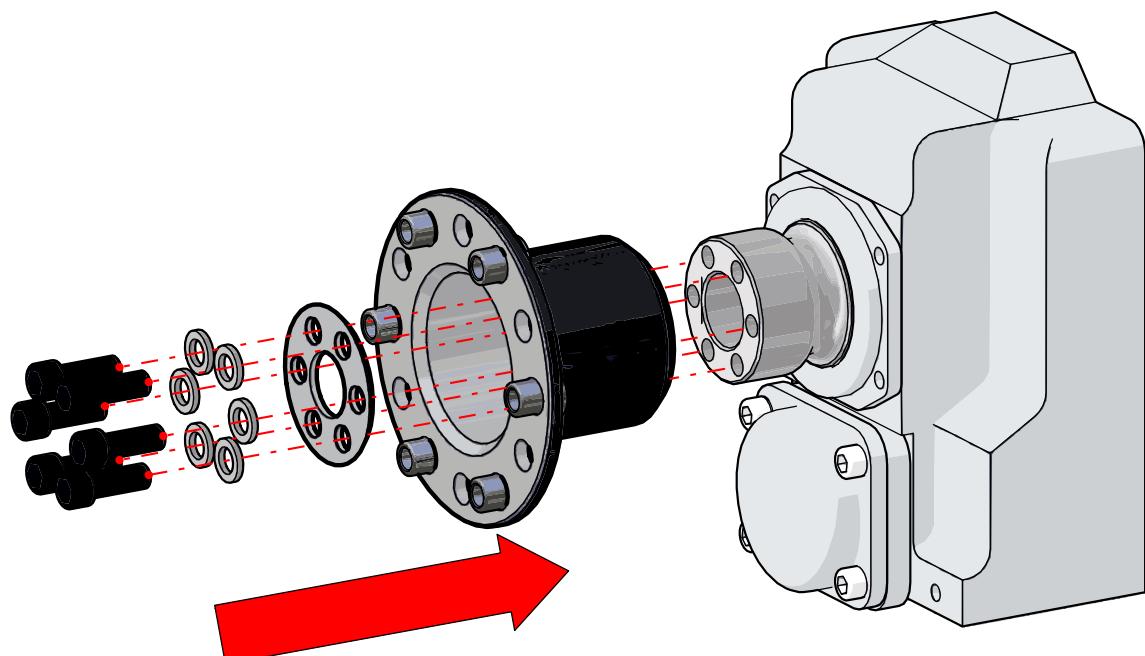
Airmaster Propellers Ltd
20 Haszard Rd, Massey,
Auckland 0614, NZ

Phone: (+64) 9 833 1794
E-mail: support@propellor.com
Web: www.propellor.com

ASI-4-1-1

JABIRU ENGINE FLANGE REPLACEMENT

PROCEDURE



SUBJECT:

Mount Kit Installation

ASSEMBLY NO:

AE-Jxxx

APPLICABILITY:

All propellers used with a Jabiru 2200 or Jabiru 3300 engine.

1. TOPIC

1.1 Introduction

This document covers the recommended procedure for replacing the OEM Jabiru engine flange with the alternative engine flange manufactured by Airmaster.

Airmaster offers two types of replacement flange assemblies for Jabiru 2200 and 3300 engines:

- Standard Jabiru Propeller Flange (*P0209*).
- Extended 50mm (2inch) Jabiru Propeller Flange (*P0210*).

The Airmaster flanges are similar to the OEM Jabiru flanges but provide improved strength. They attach to the engine crankshaft in a similar manner but with the addition of a spacer placed between the cap screws and the flange. This document covers the removal procedure and installation procedure for both types. Installers should follow the steps relevant to their specific setup.

 **Note**

The OEM Jabiru 5100 engine flange does not require replacement for use with an Airmaster propeller.

2. MATERIAL REQUIREMENTS

2.1 Parts

ITEM	QTY	PART NO.	DESCRIPTION	IMAGE
1.	1	AE-Jxxx	Airmaster Jabiru Mount Kit Assembly	

2.2 Tooling

ITEM	QTY	DESCRIPTION	IMAGE
1.	1	Ratchet Wrench (Extended 5/16" Hex Bit)	
2.	1	Torque Wrench (Extended 5/16" Hex Bit) [40-50Nm]	
3.	As required	3/8" UNF Tap	
4.	As required	Compressed Air Supply (Dry)	
5.	As required	Twist Pliers	
6.	As required	Wire Cutter	

2.3 Consumables

ITEM	QTY	DESCRIPTION	IMAGE
1.	As required	Cleaning Agent	

2.	As required	Paper Towels (or similar)	
3.	As required	Loctite 620	
4.	As required	Torque-Seal	
5.	As required	0.032" S.S Lockwire	
6.	As required	Loctite 7471 Primer	

2.4 Paperwork

ITEM	QTY	CODE	DESCRIPTION
1.	1	AE-Jxxx	Airmaster Jabiru Mount Kit Assembly Drawing & BoM

2.5 PPE

ITEM	QTY	DESCRIPTION	IMAGE
1.	As required	Protective Gloves	

3. PROCEDURE

3.1 Remove OEM Jabiru Engine Flange

WARNING

Do not operate the engine while the engine flange is loose or removed from the crankshaft. This can lead to increased vibration and result in extreme engine damage.

PROCEDURE

Step 1 Remove OEM Jabiru Engine Flange

- Remove (6) 3/8" cap screws retaining OEM Jabiru engine flange to crankshaft.
- Remove flange from crankshaft.

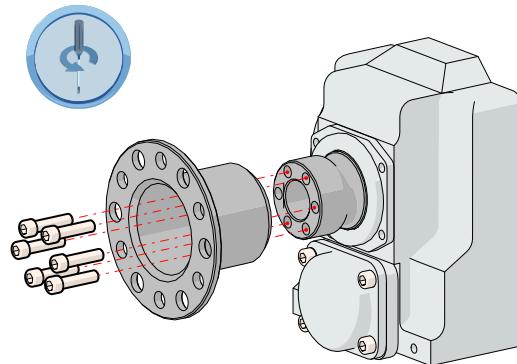
Note

Refer to Jabiru Service Bulletin JSB 022-1: Propeller Flange Attachment for further detail.

Note

The OEM cap screws will be replaced with longer cap screws supplied by Airmaster. Store these screws in a safe place in case needed for future use.

Attention Wrench (extended 5/16" hex bit)



Step 2 Prepare Threaded Holes in Crankshaft

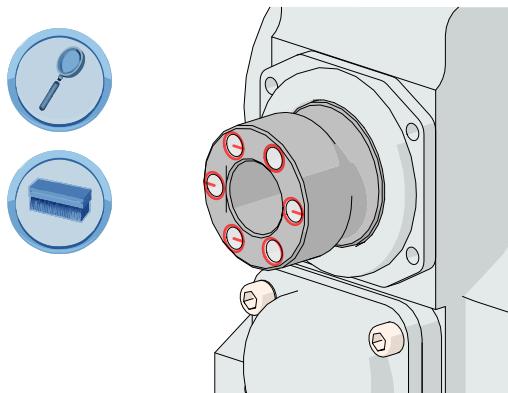
- Carefully clean the threaded holes at the front of the crankshaft using a 3/8" tap to remove residual jointing compound.
- Clean holes with Loctite 7471 and blow out with dry compressed air.
- Clean threads with Loctite 7471 and air dry.

Caution

Take care not to cross thread holes or damage otherwise.

Attention

Loctite 7471, 3/8" UNF tap, Dry compressed air



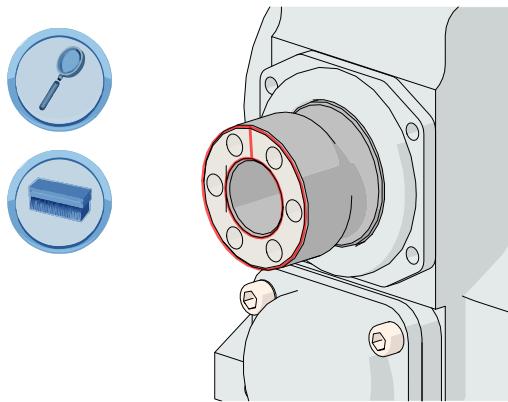
Step 3 Prepare Mounting Face of Crankshaft

- Clean mounting face of crankshaft with non-corrosive cleaning agent to remove any grease, oils or other contaminants and allow to air dry.
- Inspect front face of crankshaft and threaded holes for corrosion or damage (e.g. nicks and burrs).

Caution

Ensure that no paint or debris remains on the front face of the crankshaft as this may lead to misalignment or excessive flange runout.

Attention Cleaning agent, Clean cloth



3.2 Install Standard Jabiru Replacement Flange (As Required)

Note

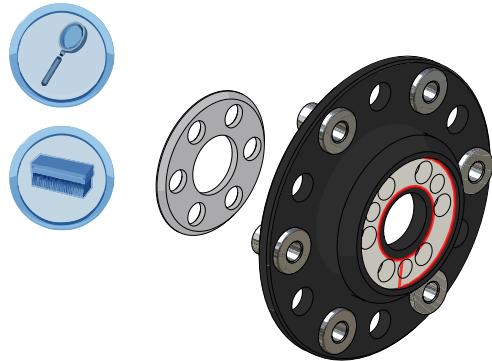
*This task applies for Airmaster mount kit specification **AE-JE0** only, incorporating the standard Jabiru propeller flange (P0209) manufactured by Airmaster.*

PROCEDURE

Step 1 Prepare Replacement Flange

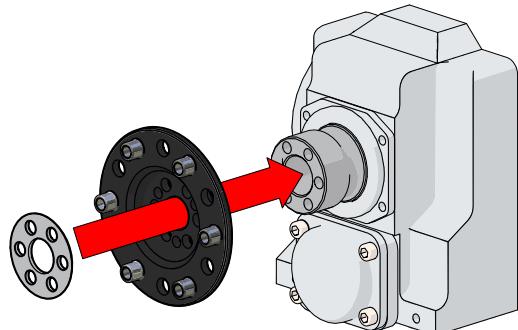
- Inspect Airmaster-supplied flange (P0209) and spacer (P0211) for damage or defect.
- Clean mating face of both parts, ensuring that any debris or contaminants are removed.

Attention Methylated spirits, Paper towels



Step 2 Assemble Flange & Spacer

- Fit flange to engine crankshaft, ensuring it fits square and without obstruction.
- Fit spacer inside recess of flange with the chamfered edge facing the crankshaft.

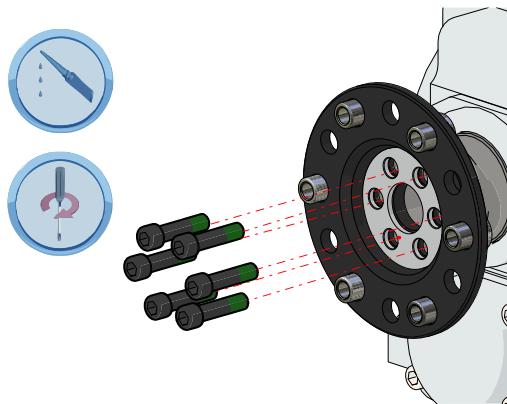


Step 3 Attach Flange & Spacer

- Apply a thin stripe of Loctite 620 to the threads of (6) replacement cap screws (P0212).
- Attach flange to crankshaft with these screws, hand tight.
- Torque cap screws to **45Nm (34ft-lbs)** in increments and in sequence of opposing pairs.

⚠ Caution

*Do not use the OEM cap screws supplied by Jabiru.
Due to the spacer used in the Airmaster design,
longer cap screws are required.*



⚠ Attention

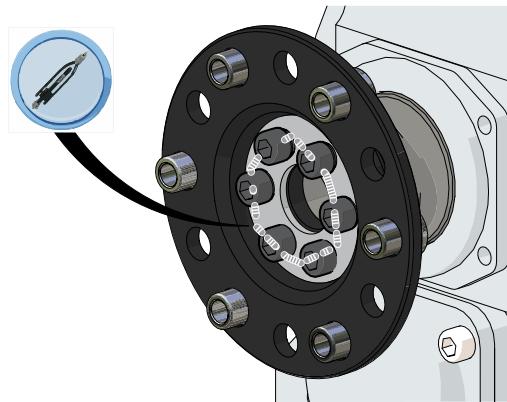
Loctite 620, Torque wrench (extended 5/16" hex bit)

Step 4 Lock-Wire Screws

- Lock-wire cap screws using 0.032" lock-wire.

⚠ Attention

0.032" S.S lock-wire, Twist pliers, Wire cutter



3.3 Install Extended (2in) Jabiru Replacement Flange (As Required)

① Note

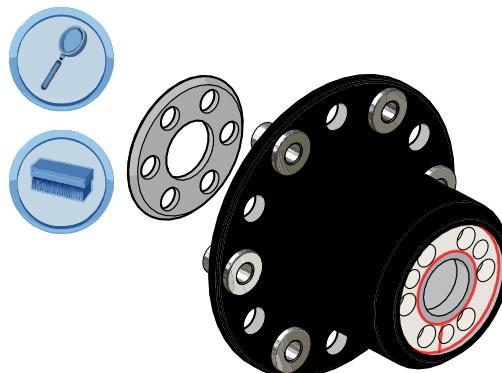
*This task applies for Airmaster mount kit specifications **AE-JE2.0(R_)** incorporating the 2inch extended Jabiru propeller flange (P0210) manufactured by Airmaster.*

PROCEDURE

Step 1 Prepare Replacement Flange

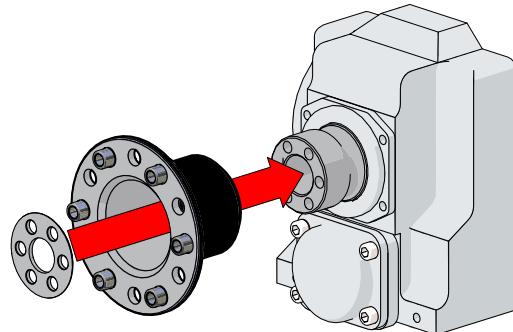
- Inspect Airmaster-supplied flange (P0210) and spacer (P0211) for damage or defect.
- Clean mating face of both parts, ensuring that any debris or contaminants are removed.

① Attention *Methylated spirits, Paper towels*



Step 2 Assemble Flange & Spacer

- Fit flange to engine crankshaft, ensuring it fits square and without obstruction.
- Fit spacer inside recess of flange, with the chamfered edge facing the crankshaft.



Step 3 Attach Flange

- Attach flange to crankshaft with (6) Airmaster-supplied cap screws (P0318) and Nord-Lock® washer pairs (P0311), hand tight.
- Torque cap screws to **50Nm (37ft-lbs)** in increments and in sequence of opposing pairs.

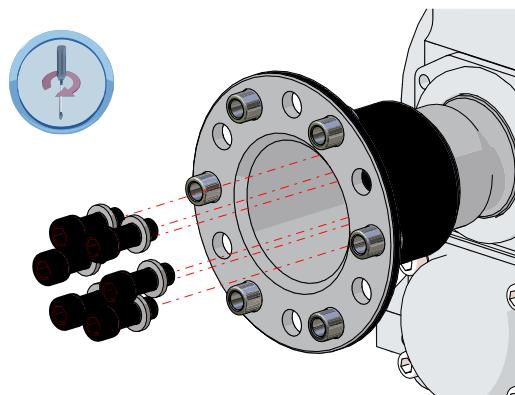
① Note

No jointing compound or lock-wiring is required. Refer to correct use of Nord-Lock® washers.

⚠ Caution

Do not reuse the cap screws supplied by Jabiru. Due to the spacer used in the Airmaster design, longer cap screws are required.

① Attention *Torque wrench (extended 5/16" hex bit)*



3.4 Subsequent Action

Perform the following tasks once this procedure is complete:

- If not yet completed, install Airmaster-supplied drive lugs (P0059-x) into the replacement flange in accordance with procedure **ASI-4-1-3**.
- Prepare the replacement engine flange for propeller installation in accordance with procedure **ASI-4-1-4**, ensuring that engine flange run out is checked to be within acceptable limits.