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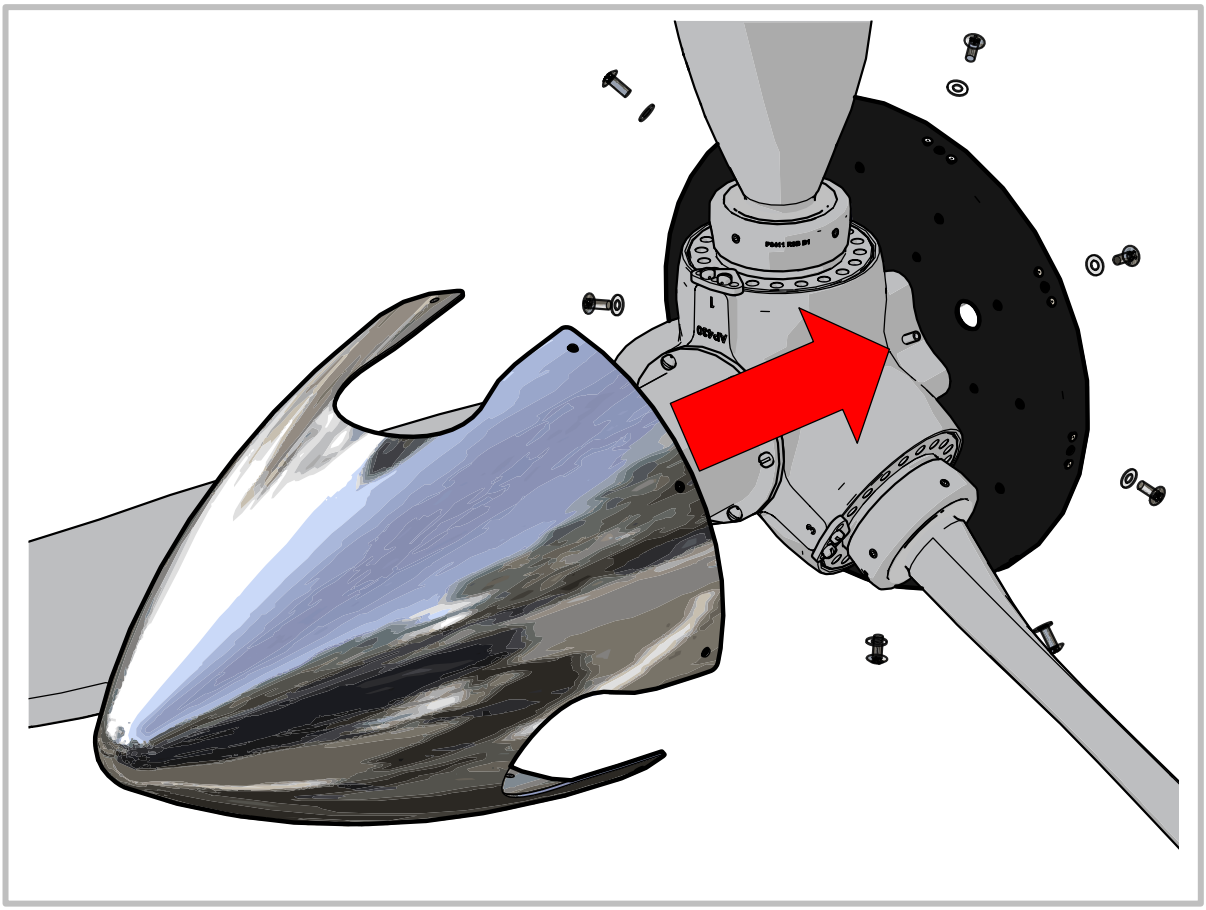
ASI-4-7-1

SPINNER CONE INSTALLATION

PROCEDURE



SUBJECT:	
Spinner Installation	
ASSEMBLY NO:	**APPLICABILITY:**
AS-xxx	All propeller models

1. TOPIC

1.1 Introduction

This document covers the procedure for installing an Airmaster spinner cone. Before final attachment, installers must verify the spinner is properly fitted, as adjustment of the front support may be required.

1.2 Spinner Cone Fitting Requirements

Generally, new propellers are supplied with the front support pre-fitted for the spinner cone at the factory. However, installers should verify spinner cone fitting during initial installation of the propeller and at periodic inspection intervals, or whenever any of the spinner assembly components are replaced. Failing to fit the spinner cone properly may lead to crack propagation.

The spinner cone is deemed properly fitted when its mounting holes align concentrically with the corresponding holes in the spinner backplate, and any free play or 'slop' in the spinner cone is just eliminated. If these conditions are not met, the spinner front support must be adjusted in accordance with procedure ***ASI-4-7-2*** then rechecked.

1.3 Prerequisites

Complete the following tasks before proceeding:

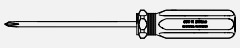
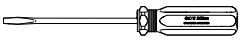
- Mount hub to engine flange in accordance with the applicable installation procedure.
- Install blades in accordance with procedure ***ASI-4-6***.

2. MATERIAL REQUIREMENTS

2.1 Parts

ITEM	QTY	PART NO.	DESCRIPTION	IMAGE
1.	1	AS-xxx	Airmaster Spinner Assembly	

2.2 Tooling

ITEM	QTY	DESCRIPTION	IMAGE
1.	1	PH2 Screwdriver	
2.	1	Flathead Screwdriver	
3.	1	Torque Screwdriver (PH2) [1.2Nm]	

2.3 Paperwork

ITEM	QTY	CODE	DESCRIPTION
1.	1	AS-xxx	Spinner Assembly Drawing & BoM

3. PROCEDURE

WARNING *Ensure that aircraft power is turned off throughout this procedure.*

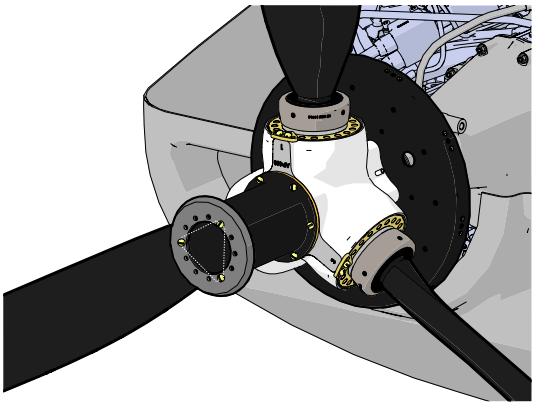
Caution
Polished spinner cones are easily marked. A soft cloth or gloves are recommended when handling spinner cones with this type of finish.

3.1 Check Spinner Cone Fitting

PROCEDURE

Step 1 Preparation

- Mount propeller hub to engine flange and install blade assemblies.

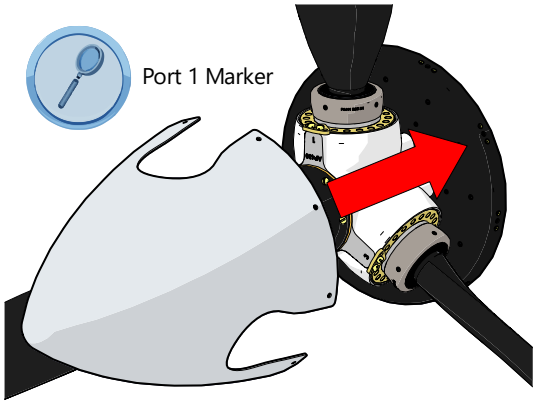


Step 2 Loosely Fit Spinner Cone

- Fit spinner cone over hub and seat it onto the lip of the spinner backplate (without fasteners).
- Ensure that nose of spinner cone is sitting against the front support.

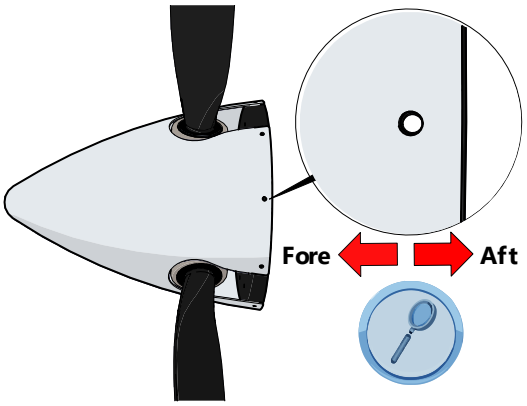
Note
The correct spinner cone orientation is indicated by a "1" marked inside the spinner cone. This marker denotes alignment with port 1 of the hub.

Caution *Support the spinner cone at all times.*



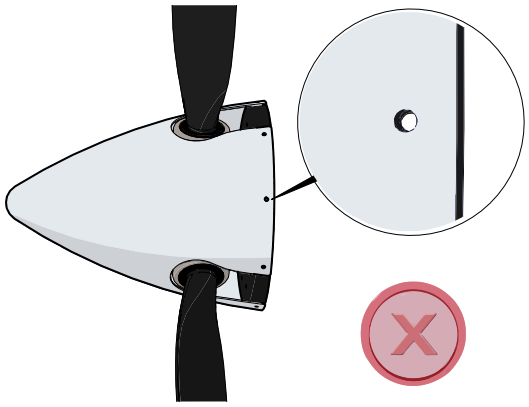
Step 3 Check Spinner Cone Fitting

- Check mounting holes of spinner cone align concentrically with corresponding holes in spinner backplate.
- Check all spinner fasteners can wind into backplate square without side-loading.
- Check rear edge of spinner cone aligns with rear edge of spinner backplate.
- Wiggle spinner cone to check it feels snug.



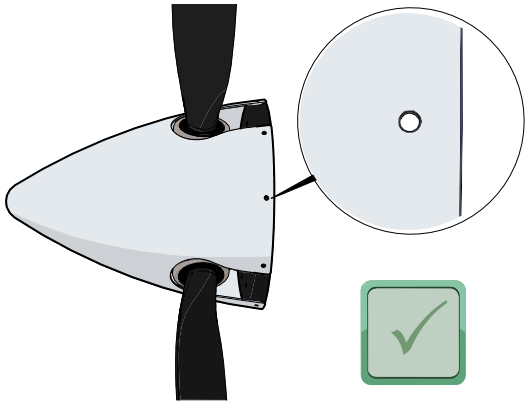
Step 4 If Spinner Cone Fits Incorrectly

- Determine whether spinner cone must be adjusted in the fore or aft direction to correct alignment of mounting holes.
- Make necessary front support adjustments in accordance with procedure ***ASI-4-7-2***.



Step 5 If Spinner Cone Fits Correctly

- Check (3) front support screws are lock-wired before proceeding to next step.



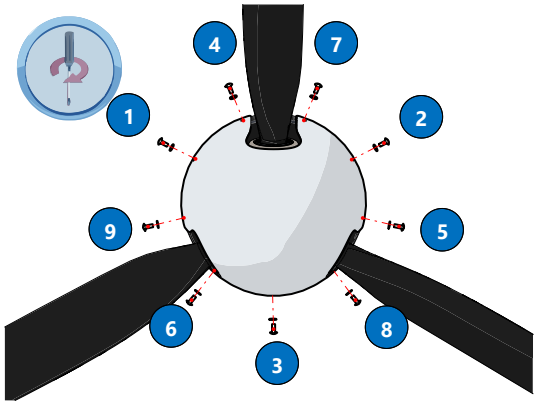
3.2 Install Spinner Cone

> *Note*
> *Perform this task once the spinner cone is properly fitted, and the front support is locked.*

PROCEDURE

Step 1 Attach Spinner Cone

- Attach spinner cone to backplate with truss-head screws (*P0150*) and fibre washers (*P0175*) **hand tight**, starting with the central screws located between each blade cut-out.
- Torque screws to **1.2Nm (0.9ft-lbs)** in sequence of opposing pairs.



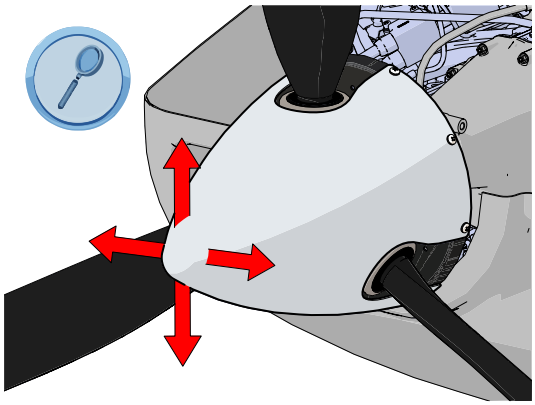
> *Note*
> *The correct spinner cone orientation is indicated by a "1" marked inside the spinner cone. This marker denotes alignment with port 1 of the hub.*

> *Attention* *Torque screwdriver (PH2)*

Step 2 Check Snug Fit

- Gently wiggle the nose of the spinner cone to check it feels snug and secure.

> *Note*
> *The spinner cone should not feel loose or have excess play. A small amount of deflection is acceptable due to the thin construction of its walls.*



3.3 Subsequent Action

During subsequent set-up and initial testing of the propeller, perform the following checks:

- With the engine off, operate the propeller in manual over-ride mode and cycle the propeller through the entire pitch traverse range. Ensure that blades do not contact the spinner cone at any pitch position.
- With the engine running, visually check the spinner cone appears to run true as the propeller rotates.