

# SERVICE

Accessory Kit No. AK-118A Supersedes AK-118

DATE:

December 18, 1974

TITLE:

Climb Propeller Accessory Kit

(For Use With McCauley Propeller 1A105/SCM7153 or

1A105/SCM7154)

MODELS AFFECTED:

All Model AA-1 and AA-1A, and AA1B-0001 thru AA1B-0379

WEIGHT AND BALANCE CHANGE:

Weight Increase:

Negligible

Arm:

Negligible

#### Parts List

Quantity	Part Number	Description
2	AN960-416	Washer
1	804039-502	Plate Assembly
2	QS100M36S	Clamp-Hose
1	804039-4	Hose
4	1601-0410	Rivet (Avdel)
1	804039-3	Cover Plate
1	804039-503	Shroud Assembly

## Description of Installation

- 1. Installation of a supplementary engine cooling kit (oil screen shroud assembly and related hardware.)
- When replacing the standard 7157 propeller with the approved 7153 or 7154 climb propeller, it is essential that the supplementary cooling kit be fitted to the aircraft before flight with the climb propeller, when newly fitted or repitched.
- 3. Estimated time to accomplish this installation is two (2) man hours.

## Installation Instructions

- 1. Remove top cowl, existing blast tube assembly and grommet from the left rear baffle plate. Also remove thermistor from oil screen housing and blast tube bracket assembly from the threaded end of the thermistor. Discard blast tube, grommet and bracket assembly.
- 2. Open 1.12 dia. hole in left rear baffle plate to 2.040 2.050 diameter. This will allow fitting of the 804039-502 plate assembly. When plate assembly is in position, match drill (4) .136/.139 dia. holes through and rivet in position using 1601-0410 rivets. (Use "pop" rivet tool, United Shoe Machinery, P/N PRG410 or equivalent.)

NOTE: Revision "A" incorporates Model AA-1A and AA1B-0001 thru AA1B-0379.

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- 3. Remove the top and bottom two (2) screws which secure the screen housing to the engine accessory case. Fit shroud assembly (804039-503) over the screen housing, ensuring that the existing washers are below the housing feet. Add the two kit washers (AN960-416) above mount feet and the existing spring washers. Replace screws to the correct torque value (50/70 in. lbs.). See inset on figure 1.
- 4. Place threaded end of thermistor through hole in cover plate (804039-3). Slip existing seal washer over thread and push cover plate into shroud assembly. Screw thermistor into screen housing and retorque (140/160 in. lbs.). Reattach oil temperature gauge wire to thermistor.
- 5. Assemble hose and two clamps so that the hose has a good twist-free run between the new 804039-502 plate assembly and the hose fitting on the shroud. Tighten the hose clamps and check that the existing baffle plates and seal strips are free of aluminium chips, clean and laying so as to provide good air seals.
- 6. Reinstall cowl.
- 7. Ground check static rpm. (Limit 2250 to 2400)

#### CAUTION

Installation of a new or repitched climb propeller (7153 or 7154) should include examination of the mounting face and bushings for galling or metal pick-up.

Special attention should be paid to attaching bolts for thread damage, necking and scoring. If suspected, replace with new bolts and torque to 280/320 in. 1bs. (Indexing of the propeller may be at 11 o'clock with no. 1 cylinder on compression to assist hand pull through when needed, or at 7 o'clock as fitted at the factory.) Ensure secure wire locking of attaching bolts.

### Propeller Repitching Instructions

Propellers that are to be repitched in the field should be pitched as follows to insure proper static rpm:

- 1. Propellers with the letter "G" preceeding the propeller serial number should be pitched to 54" pitch diameter.
- 2. Propellers without the letter "G" preceeding the propeller serial number should be pitched to 53" pitch diameter.
- 3. All propeller repitching should be accomplished by an appropriately rated repair station.

