

SUPPLEMENT 3

TO THE AIRPLANE FLIGHT MANUAL (AFM)

DA42 L360

WINTERIZATION KIT

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This Flight Manual Supplement 3 has been verified by the Transport Canada Civil Aviation (TCCA) Authority as primary certification authority in accordance with the valid certification procedures and is approved.





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CHAPTER 9

SUPPLEMENT 3

WINTERIZATION KIT

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1. GENERAL

This aircraft supplement (Supplement 3) supplies the information necessary for the efficient operation of the DA42 L360 airplane when the optional Winter Kit (P/N C61-7116-128-001) is installed.

The Winter Kit consists of two oil cooler inlet baffles, with a placard on each baffle. The baffles are attached to the lower cowling of each engine, at the inlet of the oil cooler scoop, with two winged 1/4-turn fasteners.

At take-off, with outside air temperatures at or below 0°C (32°F) it is recommended to use the oil cooler inlet baffles (Winter Kit). At take-off, with outside air temperatures above 10°C (50°F) the Winter Kit must be removed. These temperature ranges have been established by test to prevent the engine from overheating during a prolonged climb.

The Winter Kit can be installed or removed as required.

The installation of the optional Winter Kit on the modified lower cowlings of the aircraft engines is defined by Service Bulletin D42L-79-01.

The information contained within this Supplement 3 is to be used in conjunction with the complete AFM (Document # D42L-AFM-002)

This Supplement 3 is a permanent part of this Manual and must remain in this Manual as long as the optional Winterization Kit is installed.





2. OPERATING LIMITATIONS

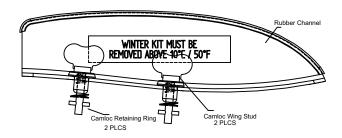
The maximum outside air temperature that you are permitted at takeoff with the Winter Kit installed is 10°C (50°F).

With an outside air temperature at or below 0°C (32°F) it is recommended to use the Winter Kit.

The following placard must be installed on the Winter Kit baffles:

WINTER KIT MUST BE REMOVED ABOVE 10°C / 50°F

Winter Kit Baffle Placard



Placement of Placard on the Baffle

3. <u>EMERGENCY PROCEDURES</u>

There is no change to the airplane emergency procedures when the Winter Kit is installed.





4A. NORMAL OPERATING PROCEDURES

4A.6 CHECKLIST FOR NORMAL OPERATING PROCEDURES

4A.6.1 PRE-FLIGHT INSPECTION

- (b) Walk-around check, visual inspection
 - (2) Left engine nacelle:
 - (K) Check security of the Winter Kit assembly.

NOTE

It is recommended to use the Winter Kit if the outside air temperature is at or below 0°C (32°F). The Winter Kit must be removed if the temperature is above 10°C (50°F).

- (9) Right engine nacelle:
 - (E) Check security of the Winter Kit assembly.

NOTE

It is recommended to use the Winter Kit if the outside air temperature is at or below 0°C (32°F). The Winter Kit must be removed if the temperature is above 10°C (50°F).

WARNING

THE EXHAUST CAN CAUSE BURNS WHEN HOT.

- (F) Exhaustvisual inspection
- (G) Air inlets (4x) and outlet......check clear



WARNING

DO NOT TURN THE PROPELLER BY HAND. SERIOUS PERSONAL INJURY COULD RESULT.

(H)	Propeller	visual inspection
(I)	Spinner & attachment screws	visual inspection
(J)	Fuel gascolator	drain a fuel sample to check for the absence of water and sediment
(K)	Crank case venting pipe	check for blockage
(L)	Cabin air inlet NACA duct	check clear (located at the right inboard wing)

4B. ABNORMAL OPERATING PROCEDURES

There is no change to the airplane abnormal operating procedures when the Winter Kit is installed.

5. PERFORMANCE

There is no change to the airplane performance when the Winter Kit is installed.

6. MASS AND BALANCE / EQUIPMENT LIST

There is no change to the airplane mass and balance when the Winter Kit is installed.





7. <u>DESCRIPTON OF THE AIRPLANE AND SYSTEMS</u>

7.10 **POWERPLANT**

7.10.1 WINTER KIT

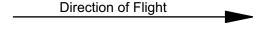
Winter Kit:

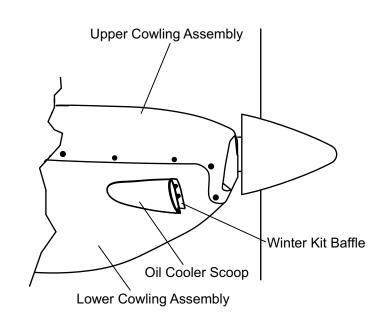
The Winter Kit consists of:

- A baffle installed in the inlet of the oil cooler scoop on the lower cowling of each engine, and
- A placard located on each of the baffles.

The baffle reduces the flow of cooling air through the oil cooler scoop, thereby increasing the oil temperature of the engine.

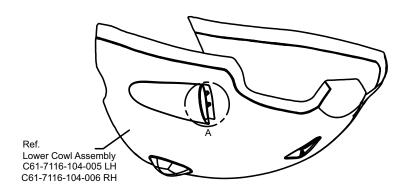
At lower temperatures (at or below 0°C (32°F)) the baffles should be installed.

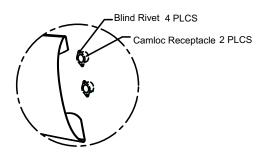




Engine Cowlings



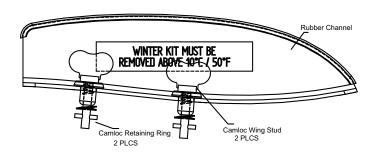




DETAIL A - Baffle not shown for clarity.

Winter Kit Installation C61-7116-130-001 LH (Shown) C61-7116-130-002 RH (Same)

Winter Kit Installation



Baffle for the Oil Cooler Inlet



8. <u>AIRPLANE HANDLING, CARE AND MAINTENANCE</u>

The Winter Kit baffles are removed by unfastening two 1/4-turn fasteners on each baffle. Store the baffles in the baggage compartment when not in use.

