

## TEMPORARY REVISION TR 09-02 Starting Engine

This Temporary Revision TR 09-02 is approved and is valid in conjunction with the latest revision of the DA20-C1 Airplane Flight Manual until this temporary revision has been incorporated into the Airplane Flight Manual.

The limitations and information contained herein either supplement or, in the case of conflict, override those in the Airplane Flight Manual.

Doc. No.	Section	Affected Pages
DA202-C1, Rev. 24	Section 4	Pages 10 - 12

### Instruction

- Print this document on white paper (single-sided).
- Copy on yellow paper (single-sided) at a reduced size of 72% to get the correct size for the AFM.
- Cut the paper to 6" by 8.5" and punch the holes on the left side of each page.
- Insert this cover page as the first page of the AFM.
- Insert the other pages of this Temporary Revision in front of the corresponding AFM pages.

Doc # DA202-C1 TR 09-02	June 30, 2009	Cover Page DOT Approved
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**RECORD OF REVISIONS (continued)**

Rev. No	Affected Pages	Approved	
		Date	Name
TR-1	0-10, 2-5	October 2, 2007	W. Jupp Chief, Flight Test For Director, Aircraft Certification Transport Canada
Rev 22	0-4, 0-5, 0-6, 0-10, 2-4, 2-7, 2-17, 4-14, 4-20, 5-20, S4-4, S4-12, S4-13	November 2, 2007	W. Jupp Chief, Flight Test for Director, Aircraft Certification Transport Canada
Rev 23	0-4, 0-6, 0-10, 0-11, 2-1, 2-4, 2-7, 2-8, 2-9, 2-10, 2-11, 2-12, 2-13, 2-14, 2-15, 2-16, 2-17, 2-18, 2-19, 4-14, 4-20, S4-1, S4-4, S4-5, S4-6, S4-7, S4-8, S4-9, S4-10, S4-11, S4-12, S4-13, S4-14, S4-15, S4-16	December 11, 2007	W. Jupp Chief, Flight Test for Director, Aircraft Certification Transport Canada
TR 08-01	0-10, 2-19, 4-5, 6-13, 6-14, 6-15, 6-16	25 August 2008	R. Walker A/Chief, Flight Test for Director, Aircraft Certification Transport Canada
Rev 24	All	30 April 2009	R. Walker A/Chief, Flight Test for Director, Aircraft Certification Transport Canada
TR 09-02	4-10, 4-11, 4-12	30 June 2009	

  
**A/Chief, Flight Test**  
**for Director, National Aircraft**  
**Certification**  
**TRANSPORT CANADA**  
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### 4.4.3. Starting Engine

#### A. Starting Engine Cold

#### NOTE

It is recommended that the engine be preheated if it has been cold soaked for 2 hours or more at temperatures of  $-4^{\circ}$  C ( $25^{\circ}$  F) or less.

- |    |                |           |
|----|----------------|-----------|
| 1. | Throttle       | IDLE      |
| 2. | Mixture        | FULL RICH |
| 3. | Toe Brakes     | hold      |
| 4. | Propeller Area | clear     |

#### WARNING

ENSURE THAT PROPELLER AREA IS CLEAR!

#### CAUTION

DO NOT ENGAGE STARTER IF PROPELLER IS MOVING.  
SERIOUS ENGINE DAMAGE MAY RESULT.

#### NOTE

Steps 5, 6, 7, 8, 9, and 10 are to be performed without delay between steps.

#### NOTE

Colder ambient temperatures require longer priming.

- |     |                       |  |
|-----|-----------------------|--|
| 5.  | Fuel Pump             | ON   |
| 6.  | Fuel Prime            | ON   |
| 7.  | Throttle              | FULL for prime (prime for 5 – 10 seconds minimum before starting)  |
| 8.  | Throttle              | Full IDLE to 1/4 inch OPEN as required)  |
| 9.  | Ignition Switch       | START, hold until engine starts or for 10 seconds maximum (if engine does not start, release ignition key, then push throttle to full power for 3 seconds minimum for more priming, then repeat from Step 8) |
| 10. | Starter Warning Light | illuminated while ignition is in START position  |

**NOTE**

Activate starter for maximum of 30 seconds only, followed by a cooling period of 3-5 minutes.

- 11. Throttle 800 to 1000 RPM

**CAUTION**

DO NOT OPERATE ENGINE ABOVE 1000 RPM UNTIL AN OIL TEMPERATURE INDICATION IS REGISTERED.

- 12. Fuel Prime OFF
- 13. Engine Instruments check

**NOTE**

Excessive priming can result in a flooded engine. To clear a flooded engine, turn off fuel pump and fuel prime, open throttle 1/2 - 1 inch and engage starter. The engine should start for a short period and then stop. Excess fuel has now been cleared and engine start from item 1 can be performed.

**CAUTION**

IF OIL PRESSURE IS BELOW 10 PSI, SHUT DOWN ENGINE IMMEDIATELY (MAXIMUM 30 SECONDS DELAY).

**NOTE**

Oil Pressure may advance above the green arc until Oil Temp. reaches normal operating temperatures.

Regulate warm up RPM to maintain pressure below 100 psi limit. At ambient temperatures below 32° F (0° C) DO NOT apply full power if oil pressure is above 70 psi.

- 14. Starter Warning Light check OFF

**B. Starting Engine Warm**

- 1. Throttle IDLE
- 2. Mixture FULL RICH
- 3. Toe Brakes hold
- 4. Propeller Area clear

**WARNING**

Ensure that propeller area is clear!

<b>CAUTION</b>
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DO NOT ENGAGE STARTER IF THE PROPELLER IS MOVING.  
SERIOUS DAMAGE CAN RESULT.

<b>NOTE</b>
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Steps 5, 6, 7, 8, 9, and 10 are to be performed without delay between steps.

- |     |                       |   |
|-----|-----------------------|---|
| 5.  | Fuel Pump             | ON  |
| 6.  | Fuel Prime            | ON  |
| 7.  | Throttle              | Full for prime, 1 to 3 seconds before starting  |
| 8.  | Throttle              | 1/2 – 1 inch OPEN (approximately)   |
| 9.  | Ignition Switch       | START, hold until engine starts or for 10 seconds maximum (repeat from Step 7 if engine does not start) |
| 10. | Starter Warning Light | illuminated while ignition is in START position   |

<b>NOTE</b>
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Activate starter for maximum of 30 seconds only, followed by a cooling period of 3-5 minutes.

- |     |                    |                 |
|-----|--------------------|-----------------|
| 11. | Throttle           | 800 to 1000 RPM |
| 12. | Fuel Prime         | OFF             |
| 13. | Engine Instruments | check           |

<b>NOTE</b>
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Excessive priming can result in a flooded engine. To clear a flooded engine, turn off fuel pump and fuel prime, open throttle 1/2 - 1 inch and engage starter. The engine should start for a short period and then stop. Excess fuel has now been cleared and engine start from item 1 can be performed.