

## TEMPORARY REVISION

### OM-TR-MDC-E4-436

## Turbocharger operation

This Temporary Revision OM-TR-MDC-E4-436 is approved in conjunction with the Design Change Advisory MDC-E4-436 and is valid in conjunction with the latest revision of the Operation Manual (OM) until this Temporary Revision has been incorporated into the OM.

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

The technical information contained in this document has been approved under the authority of DOA ref. EASA.21J.0399.

Doc. Nr.	Affected Section(s)	Affected Page(s)
E4.01.02	4.1.3, 4.1.6	4-2a, 4-3a

### **Instruction:**

- Print this document on yellow paper (single-sided)
- Insert this cover page as the first page of the OM
- Insert the other pages of this Temporary Revision adjacent to or in front of the corresponding OM pages

## 4. Operating Instructions

### 4.1 Engine Start Procedure

#### 4.1.3 Warm Up

*This section is amended to read:*

1. Oil Pressure – “CHECKED” (refer to chapter 2.5.6.1 and 2.5.7.1 Oil)
2. rpm (Propeller) – “CHECKED” 710 +/- 30 rpm
3. Idle – 30 seconds
4. Thereafter power as required, max. 50 % load until Oil temperature >50 °C (> 120°F) and Coolant temperature >60 °C (> 140 °F) and Gearbox Oil temperature >35 °C (> 95 °F).



At low oil temperature high oil pressure may occur which could lead to an oil pressure warning. In this case reduce power setting until the caution disappears and conduct the warm up with this reduced setting.



At low gearbox oil temperature it may occur that the ECU-Self Test is not performed successfully. In this case warm up the engine and retry the ECU-Self Test at higher gearbox temperatures.



Engine operation without sufficient warm up can lead to turbocharger damage, loss of power and engine failure.

#### 4.1.6 Engine OFF

*This section is amended to read:*

The engine has to run for minimum 1 minute at maximum 10% of full load, before shut down.



After turning the engine master OFF, wait until 20 sec. before turning the battery master OFF unless otherwise defined in the aircraft flight manual. This ensures that engine and flight data can be written to non-volatile memory before removing power.



Without a sufficient cooling period prior to engine shutdown the engine can suffer turbocharger damage, loss of power and engine failure.