

# SERVICE BULLETIN

## PRIORITY 1 - SAFETY

**Service Bulletin No. / Date:** SB TMG 601-1008 P1, Initial Issue / January 20, 2016

**Subject:** Turbocharger hose replacement

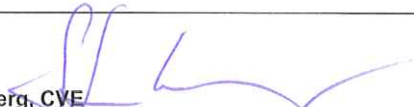

**Type affected:** All Cessna C172 (Reims F172) with TAE 125-02-99 and TAE 125-02-114

**Models affected:** A/C with TAE 125-02 engine and installed V22 turbocharger

**Classification:** Category P1 – SAFETY

**Time of Compliance:** With the next maintenance inspection, not later than the 900h inspection.

**Reason:** Possible failure of the hose during flight and consequent partial loss of power

<b>Checked</b> M. Steinberg, CYE 	<b>Approved</b> M. Heinrich, Office of Airworthiness 
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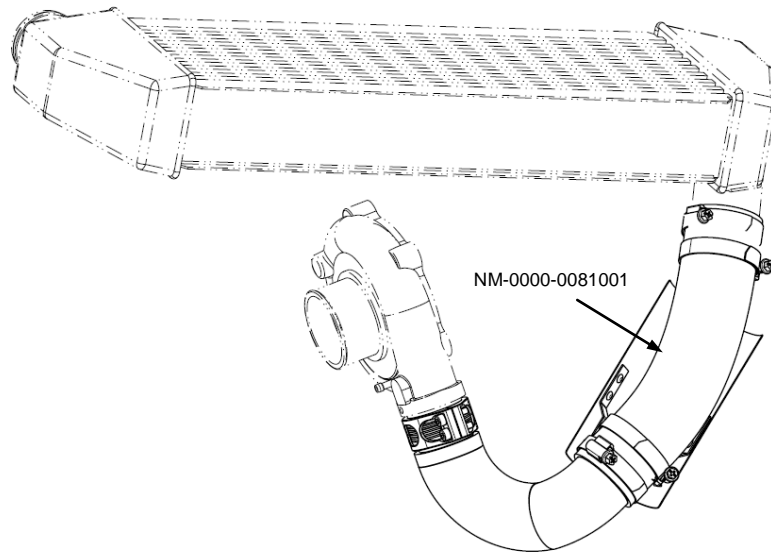


**Action:** Due to field failures the turbocharger hose NM-0000-0081001 should be replaced by an improved version at a maximum lifetime of 900 flight hours.

**Correction:**

**1. Check the installed turbocharger hose:**

- Check if hose NM-0000-0081001 is installed.
- ◆ Note: NM-0000-0081001 is a blue hose.
- If installed, check the TSN of NM-0000-0081001 and replace the hose i.a.w. the following criteria:
  - TSN < 900 flight hours → not later than the 900h inspection
  - TSN > 900 flight hours → with the next maintenance inspection



**2. Remove the turbocharger hose:**

- Make sure that the engine is cold before starting work.
- Loosen the four hose clamps attached to NM-0000-0081001.
- If necessary, remove the turbocharger clamp i.a.w. the TMG C172 Supplement AMM.
- Remove the turbocharger hose incl. hose clamps and heat protection sheet.
- CAUTION: When opening the turbocharger system, pay special attention to prevent contamination.

**3. Installation of the turbocharger hose (NK-0000-0009701)**

Parts:

Item	Part Number	Description 1	Description 2	Qty.
1	40-7520-S0003 01	Conversion set		1
1.1	NK-0000-00097 01	Air hose	Vena SIL HT/NMX, Ø50, red	1
1.2	NM-0000-00170 01	Hose clamp	ABA 50-65x12-W1	4

◆ **Note:** If not already done, also carry out the SB TMG 601-1006, Turbocharger Clamp.

- If removed, install the turbo pipe and fix via turbocharger clamp. Align the turbo pipe to the intercooler port and secure the turbocharger clamp.
- Shorten the air hose (item 1.1) as required.
- Attach the air hose to the turbocharger pipe and to the intercooler port.
- Secure the hose with two hose clamps (item 1.2) on each side. Fasten also the heat protection sheet.

▲ **WARNING:** It is not permitted to reuse the original hose clamps.

- Align the heat protection sheet toward the exhaust manifold.
- Check if the turbocharger clamp can be moved easily.

◆ **Note:** Tension at the turbocharger clamp or misalignment of piping can lead to deformation or damage.

**4. Engine Test Run:**

- Perform an engine test run in accordance with OM 02-02.

**Remarks:** NK-0000-0009701 shows better temperature resistance than NM-0000-0081001. Hence, the likelihood of a failure of the hose, which can result in partial loss of engine power, is reduced.

**Approval:** The technical information contained in this document has been approved under the authority of EASA Design Organisation Approval No. EASA.21J.010.