



TECHNICAL INFORMATION LETTER

TIL N° **T-109-22-001**
 T-109E-22-001
 T-109S-22-001
 T-109SP-22-001
 T-109BA-22-001

DATE: **March 01, 2022**

REV.: /

To: A109 / AW109
 Owners / Operators / Service Centres

SUBJECT: **TGB Oil drain procedure**

Helicopters Affected: AW109SP, A109S, A109S Trekker, A109E, A109K2, A109C,
 A109BA, A109A/All

Dear Customer,

With the present letter Leonardo Helicopters (LH) wishes to provide some clarifications on oil draining procedure of 90-Degree Gearbox, that, if not properly performed, can potentially lead to the inadvertent damage of the chip detector and loss of oil during flight operations.

Each 90-Degree Gearbox is equipped with a drain plug (bleed cap) and chip detector/burner assy.

Current procedures included in relevant section of Air vehicle Maintenance Publication (AMP) or Maintenance Manual (MM) provide instructions on how to perform oil draining procedure of 90-Degree Gearbox by temporarily removing drain plug (bleed cap) or chip detector housing valve.

Information collected from the field revealed an improper draining method not compliant to the instructions included in AMP/MM. In details, with the chip detector housing valve not properly removed a sharp tool was used to depress the valve spring to allow oil drainage. Through this improper procedure, the housing valve may appear to be unaffected and installation of the chip detector probe is still possible without noticing any damage to the housing valve. Nevertheless, with this practice, the cap does not engage properly, thus allowing the possibility of a detachment of the cap and the subsequent loss of oil during flight.

TGB Oil Drain Procedure

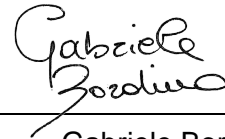
In order to prevent such improper practice, even though the procedure reported into the applicable AMP / MM is still considered correct, LH strongly requires to perform the oil drain procedure of the 90-Degree Gearbox only through the drain plug (bleed cap). LH is evaluating the possibility to add a dedicated decal to inform the Customers / Operators that oil drain from chip detector is forbidden, to be introduced through a dedicated Service Bulletin that will follow.

As additional precautionary measure, in order to prevent any further improper draining, tasks and procedures related to 90-Degree Gearbox oil drain by removing chip detector housing valve will be removed at the next relevant IETP favourable update. Refer to Annex A for the list of tasks and procedures currently under revision.

Furthermore, LH strongly recommends to perform the required Pre-Flight Checks to verify the oil level prior to each flight and, in case of low levels to verify correct maintenance procedures have been performed to avoid damage to the chip detector housing valve, in particular after any oil change.

Should you need any additional information, please do not hesitate to refer to LH Engineering Support Team (engineering.support.lhd@leonardo.com).

Yours Sincerely,



Gabriele Bordino
Head of Product Support Engineering

Annex A

A109S / AW109SP

Procedure to be removed:

- *AMP 0B-A-12-12-05-00A-222A-A - 90-degree gearbox - Drain oil*

A109K2

Procedures to be removed:

- *MM 12-10-24 Depleting procedure (TGB)*
- *MM 12-20-34 Oil replacement (TGB)*

A109K2

Procedures to be removed:

- *MM 12-10-25 Depleting procedure (TGB)*
- *MM 12-20-34 Oil replacement (TGB)*

A109C

Procedure to be removed:

- *MM 12-10-24 Depleting procedure (TGB)*

A109A/AII

Procedure to be removed:

- *MM 12-10-00.5.B (TGB) Oil change procedure*

A109BA

Procedure to be revised:

- *MM 1-13-3-4-2. Oil replacement TGB*

A109E

Procedure to be revised:

- *MM 12-10-27 TGB depleting procedure*