

Documentation (Service Bulletin Completion action)

The accomplishment of this Service Bulletin, or the decision of its rejection, must be properly documented, if such procedure is required by the relevant authority

<u>Category Codes</u>	
A – Mandatory	– failure to comply result in a significant reduction of flight safety, injury or death
B – Recommended	– failure to comply may result in reduced safety margin, injury and/or equipment damage
C - Optional	– improves operating behavior, reliability and/or maintainability

Chief Certification Officer	Chief Technical Officer
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Reason and overview of the Service Bulletin (cause of problem if known)

Through further research and lessons learnt in the market, predominantly in cold climate countries, AutoGyro has determined that a different oil thermostat (part no. 48159) calibrated to open at a higher oil temperature of 92°C provides improved oil temperature control.

This SB provides instructions on how to replace the oil thermostat.

Manpower estimates

The task may only be performed by an organization or individual entitled and trained to carry out the specified level of maintenance on AutoGyro aircraft.

Estimated man-hours to complete the task is:

MTO Sport/MTO2017:	0.4 hrs as a stand-alone item
Calidus/Cavalon:	0.6 hrs as a stand-alone item

Compliance

This service bulletin is optional and has no compliance timeline.

Customer Support

There is no customer support associated with this Service Bulletin. There has been no detriment shown to the engine function with the existing thermostat, this new version is simply an improvement.

Tooling required

Standard tools.

Weight and Balance Effects

Weight and balance is not affected.

Manuals affected

POH & AMM AutoGyro is not affected.

Previous Modifications that affect the SB

None

Accomplishment instructions (Action required to implement this bulletin):

All work is to be carried out in accordance with the latest model-relevant AutoGyro Aircraft Maintenance Manual

Instructions

Ensure the wheel brake is applied and the ignition is switch off.

There are slight variations of the thermostat within the market. The illustrations on the next sheet show a thermostat III and IV. The basic build and internal assembly of all variants is comparable and the following instructions apply to all.

1. Remove any engine cowlings required to gain access to the oil thermostat assembly in accordance with the relevant AMM job card 52-00-00 4-1.
2. Turn the propeller to return oil to the oil tank.
3. Place a container under the thermostat assembly to contain any oil spillage during the replacement work.
4. Loosen/disconnect the thermostat hose at the oil tank 'out' connection to prevent syphoning of the oil from the tank.

Thermostat III (and previous thermostat versions, the replacement process is identical)

5. Remove the screws (8) and nuts (9) securing the thermostat housing halves (1) & (3).
6. Separate the housing halves to gain access to the thermostat (4).
7. Remove the thermostat (4) and assemble the replacement item (48159).
8. Ensure the mating faces of the 2 thermostat housing halves are clean and degreased, and re-assemble with bolts (8) and new M5 SI nuts (9) (unless the remaining nylock prevailing torque is considered satisfactory by the engineer responsible) as per the original assembly.

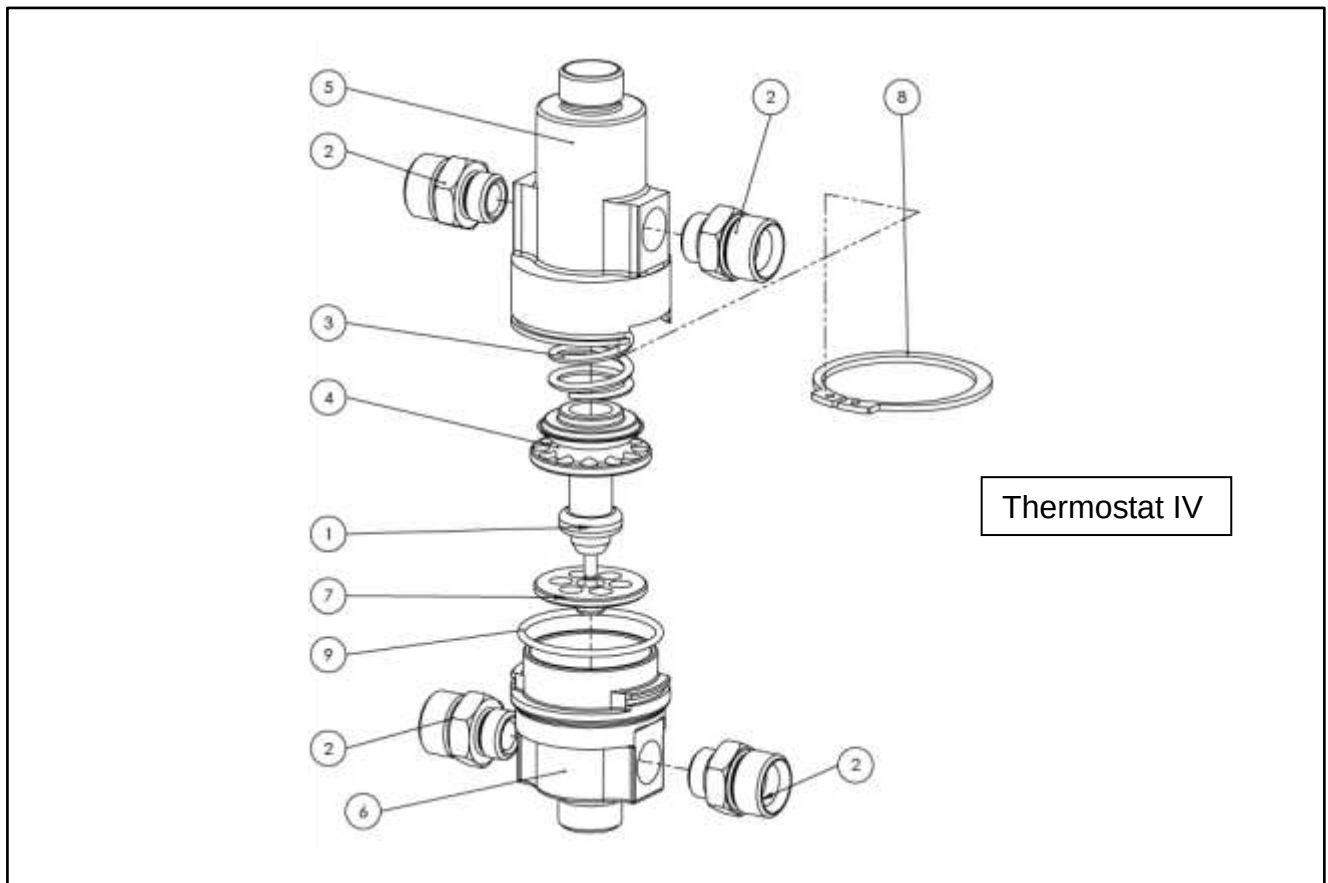
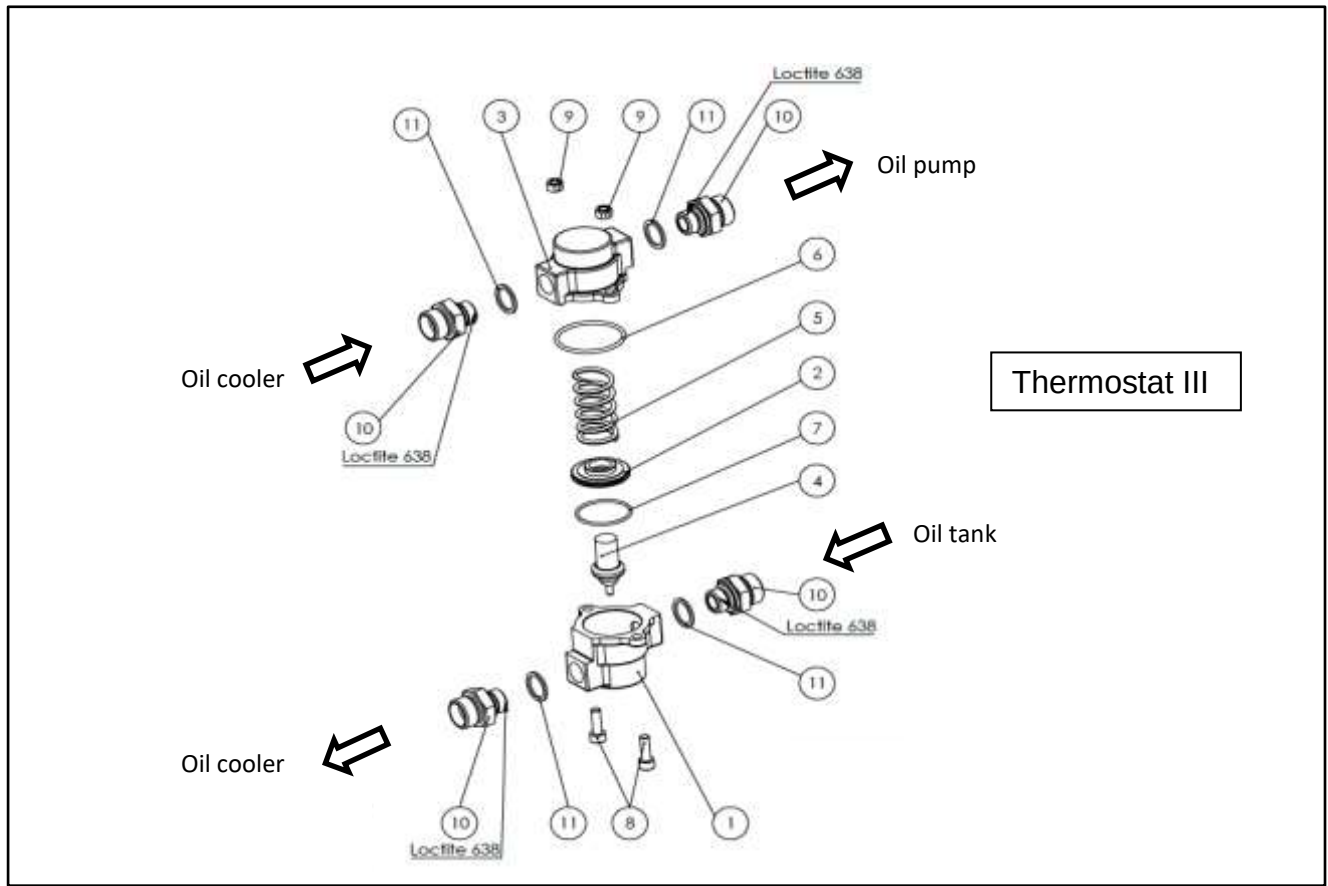
Thermostat IV

9. Remove the circlip (8) (thermostat IV) securing the thermostat housing halves (5) & (6).
10. Separate the housing halves to gain access to the thermostat (1).
11. Remove the thermostat (1) and assemble the replacement item (48159).
12. Ensure the mating faces of the 2 thermostat housing halves are clean and degreased, and re-assemble with circlip (8) as per the original assembly.

Final Steps

13. Refit/tighten the thermostat hose at the oil tank 'out' connection.
14. Carry out an oil system purge in accordance with the relevant Rotax Line Maintenance Manual Chapter 12-20-00. Top up oil if required.
15. Carry out a ground run for leak check of the oil system and functional check of the thermostat.
16. Re-assemble any cowlings removed in part 1.
17. Carry out a loose article and tool check.

Illustrations



Completion of this Service Bulletin must be recorded within the aircraft documentation, in line with the requirements of the country of operation.

Material information (Parts required to be made to implement this service bulletin):

Nil

List of components (with purchasable part numbers)

48159 Thermostat 92 degree
43082 Oil Aeroshell Sport Plus 4 (1 litre)

Interchangeability

Not affected

Parts disposition

- a) Disposal requirements – Normal waste
- b) Environmental hazards of parts containing hazardous materials – Nil
- c) Scrap requirements (e.g. mutilate scrapped items beyond use) – Nil