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SERVICE BULLETIN

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Service Bulletin No. 2018-03

MANDATORY

SUBJECT: Throttle position sensor

MODELS AFFECTED: all 4-cylinder engines UL260 / UL350 with single ECU.
UL350IHPS engines are **not** subject to this service bulletin
All dual ECU engines are **not** subject to this service bulletin
All 6 cylinder engines are **not** subject to this service bulletin

AFFECTED SERIAL NUMBER: all 4-cylinder engines with serial number below **SN184101**

TIME OF COMPLIANCE: before next flight

ENCOUNTERED PROBLEM :

We have noticed early wear of the throttle position sensor (TPS) in aircraft where the throttle cable was not installed in accordance with the official ULPower installation manuals .

When a throttle cable is installed in a straight line from the throttle lever to the fire wall , or when the lever is controlled by a push/pull (or similar) system, engine vibrations create a non-stop movement of the TPS's brushes on the copper lane, resulting in an early wear of the TPS. This may lead to an incorrect signal to the ECU and a possible engine stoppage in flight.



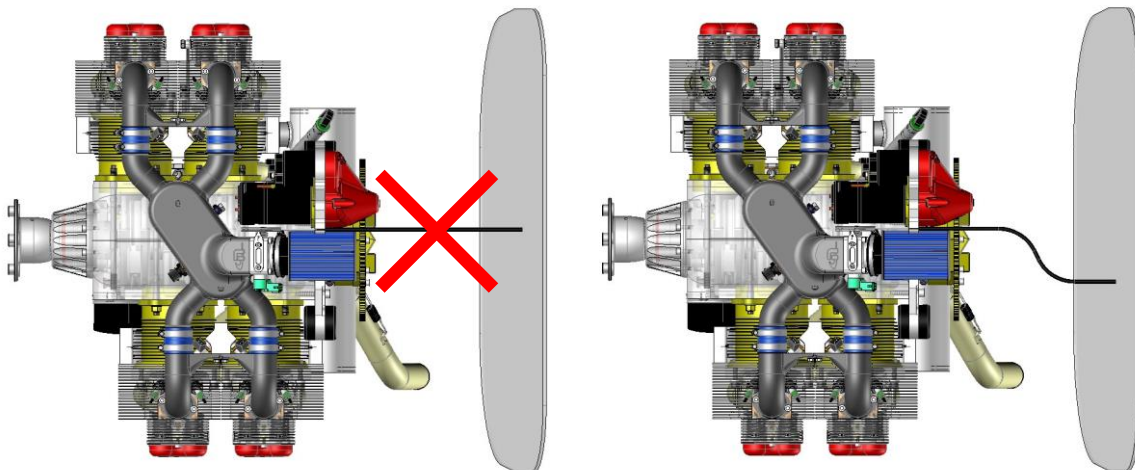
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REQUIRED ACTIONS:

- 1) Check if your throttle cable is installed in accordance with the official ULPower installation manuals

The installation manuals can be downloaded from our website,
<http://www.ulpower.com>.

For your convenience we have copied part of the related info from the installation manual below



INCORRECT

CORRECT

If your throttle cable is installed the correct way, no further action is required

If your throttle cable is installed incorrectly, please follow the instructions below



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2) Install the throttle cable according to the manuals and replace the throttle body +TPS

A correctly installed throttle cable will help to neutralize engine/propeller vibrations.

As the throttle body and throttle position sensor are calibrated at factory, it is not possible to change the TPS only in the field.

Required parts : SUE060500 (276 EUR excl. VAT and shipping costs)

Replacement procedure: see Illustrated parts catalogue :

- Disconnect the TPS from the wiring loom.
- remove 4 bolts F0105035 – part number 32 . NOTE: Some sealing silicone was applied during assembly; if the throttle body cannot be easily removed, tap carefully with a rubber hammer until the throttle body comes loose.
- Install the new throttle body by applying some sealing silicone (Elring n°030.790) and torque the 4 bolts to 6 Nm
- Connect TPS to the wiring loom connector.
- Carry out appropriate engine tests for your installation.

3) If installation of the throttle cable in accordance with the manuals is not possible (or not desired), please follow the procedure below

If you have an engine with serial number lower than 184301, your current throttle position TPS is a mechanical one. A hall type TPS that can cope better with vibrations is now available.

However, an ECU update and an extra connection cable are required to switch from a mechanical TPS to a hall type TPS.

Required parts : SUE060510 throttle body assembly (421,90 EUR) + updated ECU (150 EUR) + E060502 reduction cable (58.88 EUR) All prices are excl. VAT and shipping costs



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How to proceed ?

Carefully remove your ECU and send in for software change and order the ULPower Hall sensor throttle assembly (SUE060510).

PLEASE APPLY A SMALL STICKER TO THE BACK OF YOUR ECU WITH YOUR NAME /ENGINE SERIAL NUMBER AND ENGINE TYPE . Contact your local dealer for more info on the ship-to address.

Replacement procedure: see Illustrated parts catalogue for part numbers

- Remove the ECU and send back to factory.

Upon receipt of new throttle body and updated ECU...

- Disconnect the TPS from the wiring loom.
- remove 4 bolts F0105035 – part number 32 . NOTE: Some sealing silicone was applied during assembly; if the throttle body cannot be easily removed, tap carefully with a rubber hammer until the throttle body comes loose.
- Install the new throttle body by applying some sealing silicone (Elring n°030.790) and torque the 4 bolts to 6 Nm
- Connect TPS to the wiring loom connector
- Re-Install the ECU
- Carry out appropriate engine tests for your installation.



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