



SB-T-05

SERVICE BULLETIN No. 05

to all distributors, owners

Change of Drivetrain belt check period

MANDATORY - BEFORE NEXT FLIGHT

Please pay attention to the following safety definitions used in this service bulletin:

WARNING! Disregarding the following instruction leads to severe deterioration of flight safety and hazardous situations, including such resulting in serious injury and loss of life.

CAUTION! Disregarding the following instruction leads to serious deterioration of flight safety, may cause serious damage to the aircraft and suspend warranty.

Aircraft affected: all Taurus aircraft

Distributors are to translate this service bulletin into their native language and forward it to all concerned owners in your area immediately.

Please see following page(s) for further details.

Change of Drivetrain belt check period

Reason

There was a case where the engine drive belt on the Taurus propulsion unit was ruptured. As a material deficiency of the belt itself is suspected, we are imposing a visual check of the engine belt drive system every ten (10) hours of engine operation. As it is impossible for us to check all the Taurus aircraft in operation we are issuing this Service Bulletin to assure safe flying of all Taurus aircraft.

Required actions

Before next flight, and then after every 10 hours of engine operation, it is necessary to check the condition of the engine drive belt according to the service letter no. T-01-2009, which is attached to this SB.

Associated flying procedures

The current Flight Manual and Maintenance manual already describes the Emergency procedures, however none are directly applicable to the case the drive belt brakes in flight. The issue is that it would be impossible to retract the engine as the propeller would be wind-milling freely. This would yield a much reduced glide ratio, which is in the order of 10:1.

In case the drive belt brakes in flight you will recognize this by:

- 1) Loud bang in the engine compartment
- 2) Engine RPM increase violently!
- 3) Complete power loss from the propeller and the propeller is windmilling freely.

Proceed as follows:

- 1) Switch off the ignition immediately
- 2) Ensure a proper airspeed (85-90 km/h; 45-50 kts) – more speed will only make the sink rate worse!
- 3) Do not attempt to retract the engine as this would be impossible
- 4) Continue to carry out the emergency landing as per the Flight Manual and Maintenance Manual.

CAUTION! Be aware that the glide with the engine out is greatly reduced and is on the order of 24:1. A windmilling propeller will decrease the glide ratio further to approximately 10:1. It is recommended that you plan your flight so that you can always reach landable terrain in case of an engine failure.

Associated Flight and Maintenance Manual changes

The next revision of the Flight Manual and Maintenance manual, Revision 2, will include the above Emergency procedure as well as the change of engine drive belt check (maintenance) period.

Distributors

As a distributor you are to advise each concerned owner about this topic.

As a distributor you need to make sure the relevant changes are made to the local translation of the Flight and Maintenance manual that you are in charge of.

Pipistrel d.o.o. Ajdovscina
Leon Breclj, Head of Service

THIS IS THE END OF THE SERVICE BULLETIN.



Service Letter T-01-2009

Inspecting the propeller belt for wear

The first thing you need to do when inspecting the drivetrain belt for wear is get access to it. Therefore begin by cutting the safety wires, unscrewing the propeller's fixation bolts and removing the propeller.



- Continue by removing all of the screws that line the propulsion system's housing and removing the front cover.



• Now begin inspecting the areas around the drivetrain belt and the belt itself. The following is a list of signs which indicate drivetrain belt wear:

1. Marks of the drivetrain belt rubbing against the propulsion systems housing.



2. An increase in the amount of rubber filings or particles in the housing near the belt roller guides



3. Worn out or damaged teeth on the drivetrain belt.
4. Any traces of overheated drivetrain belt (i.e. burn marks on the belt or on the housing's inner wall.)
5. Any sort of cracks in the belt (there should be absolutely NO cracks)
6. Any sort of pulley damage, which may be causing belt damage.

- We highly recommend checking the belt roller guides, that they are rotating freely and without freeplay on the axles.

- Furthermore, be sure to check that the upper propeller pulley is also rotating freely and without freeplay on the axle.

If you don't find any of the above-mentioned signs or traces of drivetrain belt wear, you can remount the housing and propeller following the same steps you followed when you disassembled them. Just be sure to tighten the propeller bolts to 18 Nm and secure them with safety wire.

If you found any of the signs of drivetrain belt wear mentioned above or anything else which seems abnormal, please contact leon.b@pipistrel.si and he will assist you further.