Setting of MIN and MAX RPM stop at governors P-853-16 / P-877-16

Background:
In case of governor jam warning or the propeller self-test timeout indication, these fine adjustments of the RPM with the latest software level of AUSTRO Engines will improve the situation. The governor jam warning or the propeller self-test timeout indication is caused by a wrong signal by the combination governor and software.

1 Scope:
This information describes the adjustment of minimum and maximum RPM on the governors P-877-16 and P-853-16; since the governors are comparable and the adjustment process is identical only the RPM adjustment on the P-877-16 governor is shown.

MAX RPM is adjusted from 2680 RPM +10 RPM to 2680 RPM +20 RPM and MIN RPM is adjusted from 2030 RPM to 1980 RPM.

Those adjustments increase the mechanical stop for the propeller rpm from 2300 to 2317, but the software will limit to 2300 rpm.

2 Procedure:

Open the governor by removing the safety wires and disassemble the 4 cover screws.

Open the cover; ensure the foam wire protection stays in place.
**MAX RPM Setting:**

Determination of the MAX RPM screw:
The MAX RPM set screw is a **gold screw, below the plastic cap** and **above the electric pitch change motor**. It is a **hex socket screw** and is countered with a counter nut.

Mark the initial position of the MAX RPM screw and a reference on the governor, using a pen. A MAX RPM adjustment for an increase by +20 RPM is achieved by turning the RPM screw out CCW by approx. 30°, typically 1/12 turn out.

Use tool T-720 or similar to loosen the counter nut. Turn the MAX RPM screw out by approx. 30° CCW. Tighten the counter nut again.

Use tools T-719 and T-720 to correctly adjust the governor RPM and prevent governor jam. See also Service Instruction SI-54.

Mark the final position of the MAX RPM screw on the governor. Use a protractor or angle meter to verify the rotation of the RPM screw by approx. 30° CCW.

Adjustment of the MAX RPM is complete.
MIN RPM settings:
The MIN RPM screw is the second screw with a hex socket on the opposite position from the electric pitch change motor and also is countered with a counter nut.

Mark the initial position of the MIN RPM screw and a reference on the governor, using a pen.

A MIN RPM adjustment from 2030 RPM to 1980 RPM is achieved by turning the RPM screw out CCW by 50°, typically between initial position and 1/8 and 1/4 turn out.

Use tool T-720 or similar to loosen the counter nut.

Turn the MIN RPM screw out by 50° CCW. Tighten the counter nut again.

Use tools T-719 and T-720 to correctly adjust the governor RPM and prevent governor jam. See also Service Instruction SI-54.

Mark the final position of the MIN RPM screw on the governor.

Use a protractor or angle meter to verify the rotation of the RPM screw by 50° CCW.

Adjustment of the MIN RPM is complete.

Ensure the foam wire protection and the o-ring are in place, install the cover again and re-install the 4 cover screws. Use safety wire to secure the cover screws again.

CAUTION:
DO NOT SQUEEZE ANY CABLES DURING THE RE-INSTALLATION OF THE ALUMINUM COVER!