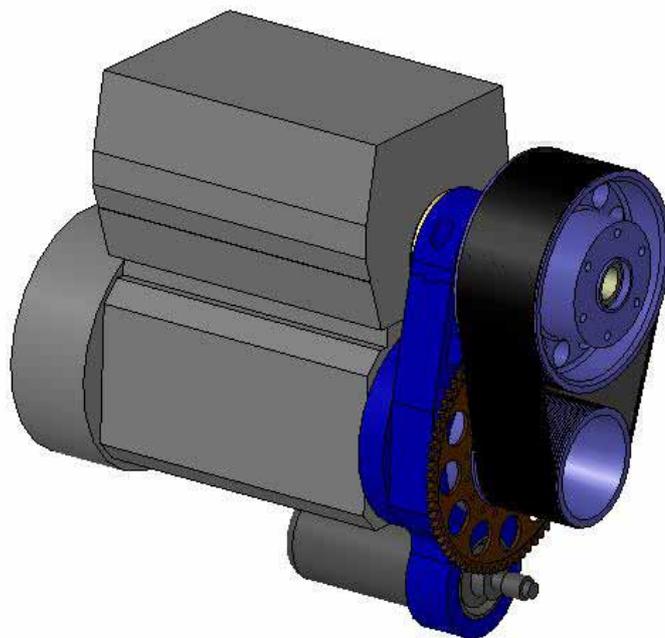


Belt reducer for the engine Rotax 447

MAINTENANCE MANUAL



ŠONKA SERVIS

Konstrukce, vývoj, nástrojárna
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Content

1. Check of the belt tension
2. Stretching of the belt
3. Exchange of the belt
4. Terms for maintenance
5. Specification of the parts
6. List of tools

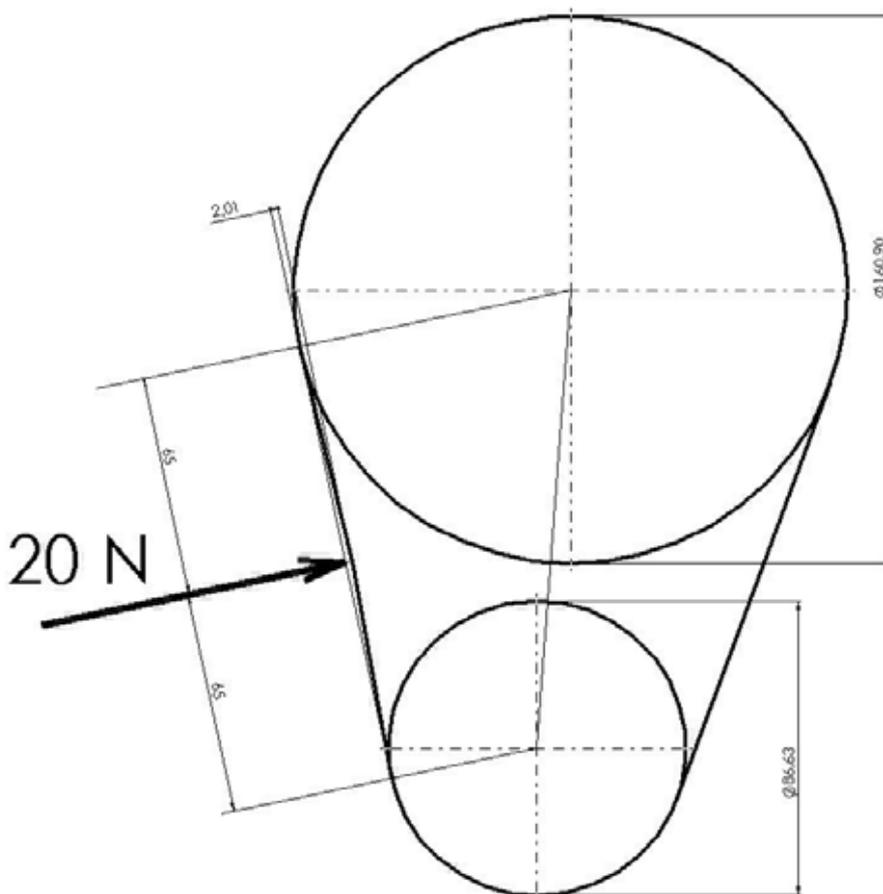
1. Check of the belt tension

Proper tension of the belt is necessary for the transmission of the maximal power of the engine.

If the belt is unstrung, becomes too worn and the transmitted power is lowered. In the case of too much tensioned belt the bearing is overloaded and so its lifetime is lowered.

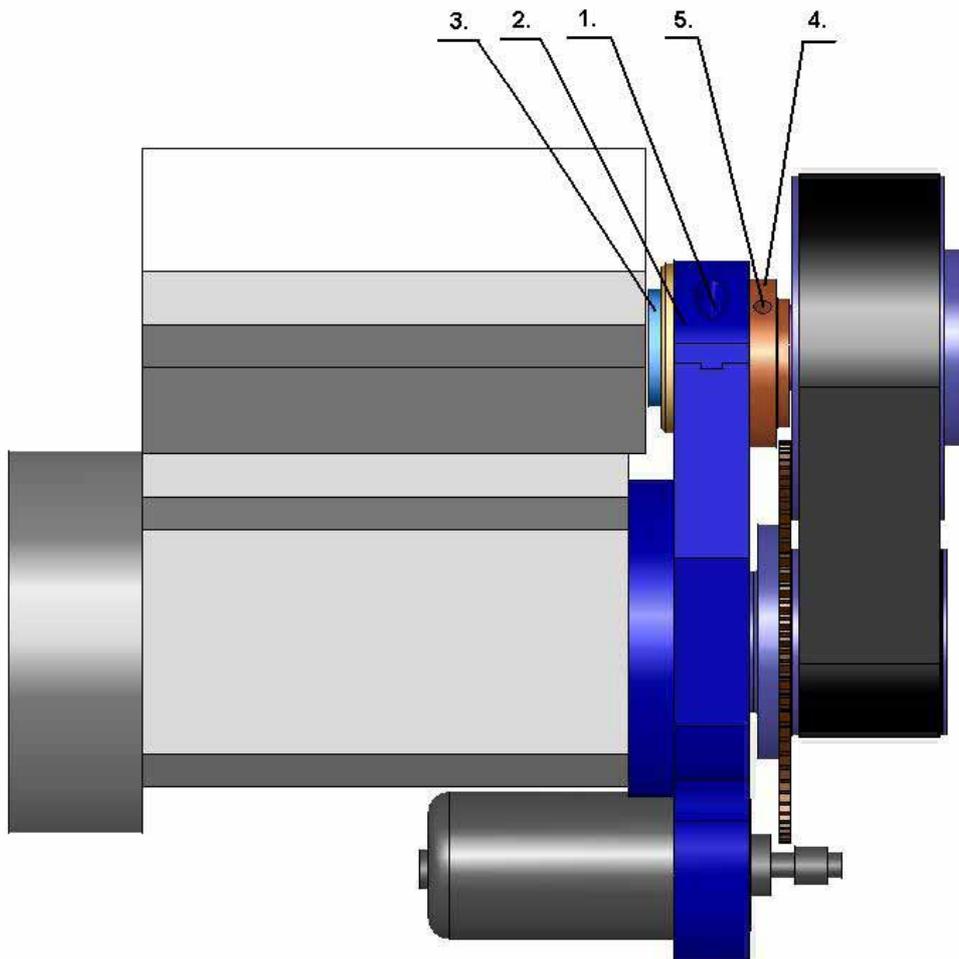
How to adjust the right tension

A static force $F = 20 \text{ N}$ is applied in the belt centerline by means a rod in the half distance between the driving and driven wheel. The correct deflection of the belt is $2 \pm 0,5 \text{ mm}$.



2. Stretching of the belt

Stretching or loosening of the belt is done by means of the bolt **3.** and two imbus bolts M8 **1.** by 180° on the stirrup **2.**, further by turning of the excentre **4.** to the left or to the right. To turn the excentre a stud (2) is inserted into the opening **5.** After the right stretching is achieved the bolts **1.** and **3.** must be tightened and the stud removed.



3. Exchange of the belt

The exchange can be done after the bolts **1.** and **3.** are loosened up. Turn the excentre in order both wheels touch and remove the belt (the propeller must be

removed). Assembly to be done in the opposite sequence. Stretching to be done according to point 1. and 2.

4. Terms for maintenance

Action	Engine hours
Check of the belt tension	Each 150 hours
Exchange of the belt	Each 600 hours
Exchange of the bearings	Each 1200 hours

5. Specification of the parts

	Name	Marking	pc
1.	Belt	POLY-V-Řemen 28 PJ 660	1
2.	Bearing of the main shaft	6011 LLB	1
3.	Bearing of the great wheel	6007.2RSR	2

6. List of tools

- (1) Rod dia 4mm length 80mm
- (2) Segment spanner for dia 55mm
- (3) Stud dia 6mm length 40mm
- (4) Imbus spanner Nr. 6