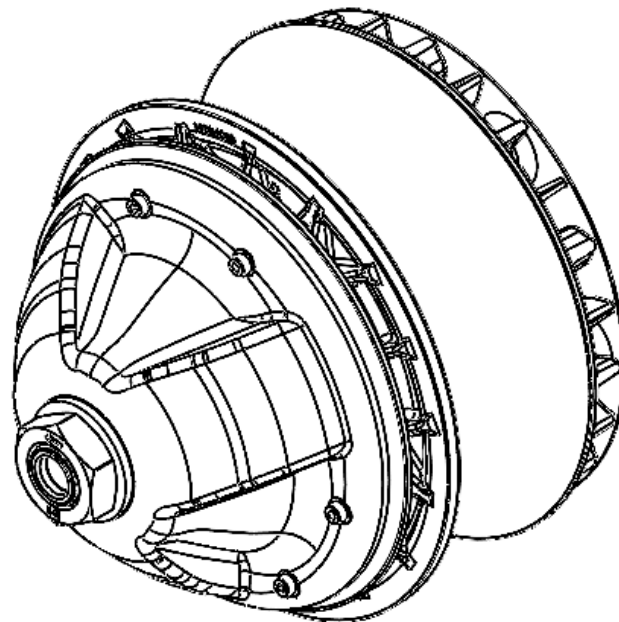




INSTALLATION AND MAINTENANCE GUIDE FOR A CONTINUOUSLY VARIABLE DRIVER PULLEY POWERBLOC 50 (04)



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IMPORTANT NOTICE

Only qualified personnel should perform maintenance and repair operations on this continuously variable pulley.



Means there is a risk of serious injuries if the instructions are not followed as described.



Means that, when performing this step, there is a risk of damaging a part or may cause components malfunction.

CVTech shall not be liable for any damage or injury resulting from misunderstanding of the text, improper use of the transmission system, or improper use of the recommended tools.

It is very important to always use the indicated tightening torque.

MAINTENANCE FREQUENCY



This continuously variable pulley does not require any lubrication. It is designed to work without any lubricant. Given this, certain rules of cleanliness must be applied when handling the system to avoid having any lubricants come into contact with its components.



To increase the life of the continuously variable pulley, it is strongly recommended that you respect the following recommendations:

- Perform maintenance according to the table below
- Replacing the worn parts will ensure correct operation and will prevent any warranty from being excluded from the continuously variable pulley.

Description	Maintenance interval	
	Every 5 000 Km or 250 h	Every 10 000 Km or 500 h
Drive pulley	Visual inspection	Disassemble and Clean
Fixed sheave	Visual inspection	Clean
Sliding sheave	Visual inspection	Clean
Assembly of centrifugal weights	Visual inspection	Replacement recommended

NECESSARY HANDLING TOOLS

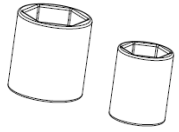


Figure 1

Appropriate socket for fixation bolt and 36 mm socket for the pulley nut

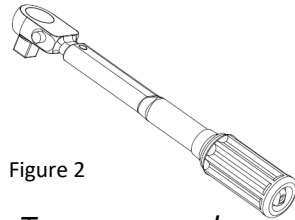


Figure 2

Torque wrench

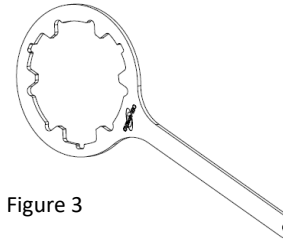


Figure 3

**Retaining tool
(0155-1018)*

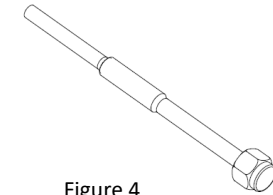


Figure 4

**Puller*

Refer to owner's manual for part number

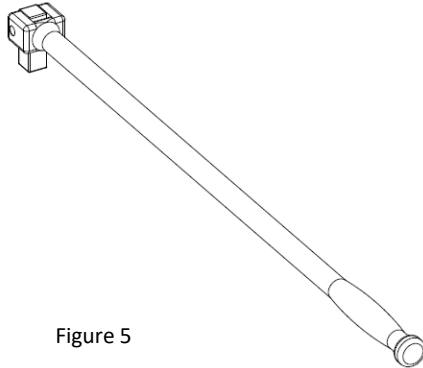


Figure 5

Breaker bar

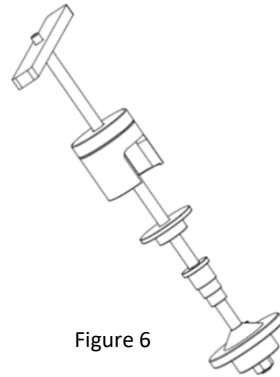


Figure 6

**Pulley disassembly tool
(5055-0002)*

** Tool available from CVTech*



Important: Using impact tools is not recommended.

PULLEY INSTALLATION ON THE VEHICLE

Drive pulley installation

Assemble the drive pulley onto the engine shaft by passing it inside the belt first.



It is extremely important not to apply grease or lubricant on the cone of the engine shaft.

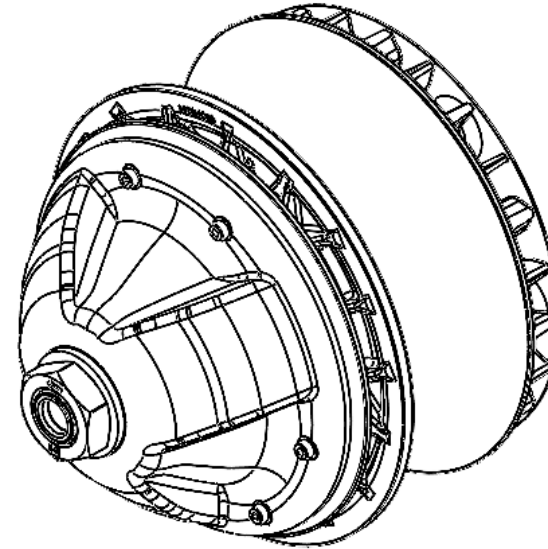


Figure 7

PULLEY TIGHTENING

Recommended torque: Refer to owner's manual

- Once the pulley is properly installed, use a torque wrench to tighten the fixation bolt.
- To tighten the drive pulley, use the retaining tool (see figure 8) to lock the rotation.



Do not forget to remove the tools from the drive pulley.



Before you start the engine:

- **Make sure all the components are clean without any trace of oil, dust or contaminants.**
- **Do not use any lubricants.**



For optimal tightening force:

- **Repeat this tightening procedure after traveling a few kilometers with the vehicle.**

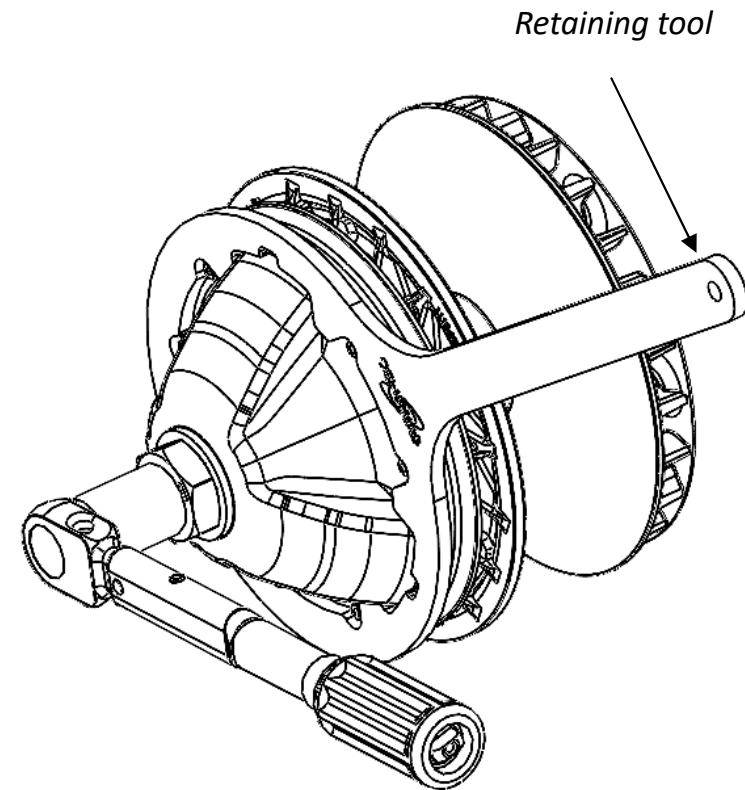


Figure 8

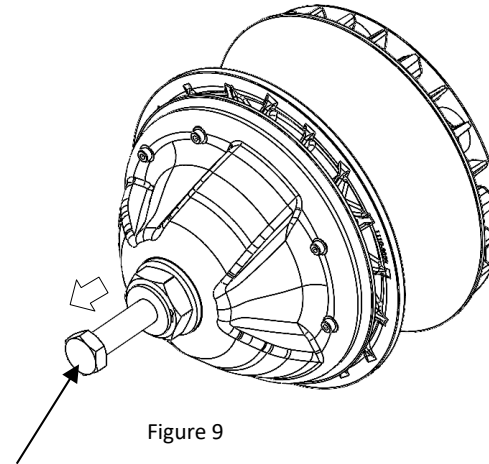


Do not hold the pulley by the cap nut to secure it to the vehicle; this could lead to a failure that is not covered by the CVT warranty.

PULLEY REMOVAL FROM THE VEHICLE

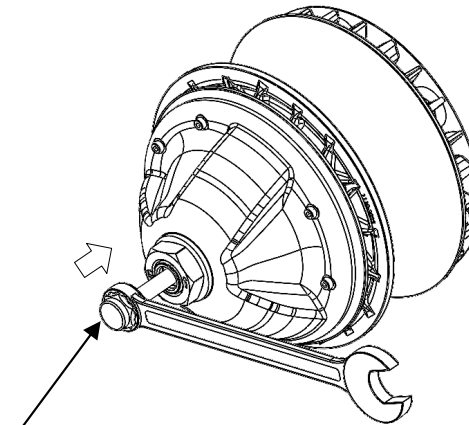
Removing the drive pulley:

- Remove the fixing bolt from the drive pulley (figure 9)
NOTE: Use the retaining tool (figure 3) to prevent the pulley from rotating.
- Screw the puller in the drive pulley shaft and use a breaker bar (or an equivalent); torque the puller until the pulley comes off (figure 10).
 - Hint: apply grease on the tip and on the threads of the puller.
- If the pulley does not come off, please refer to the CVTech document #0046-5239 for complementary information on how to remove the pulley.



Fixation
bolt

Figure 9



Puller

Figure 10

DRIVE PULLEY DISASSEMBLY

- ① Fixed sheave
- ② Sliding sheave
- ③ Spring seat
- ④ Stroke limiter
- ⑤ Spring
- ⑥ Spring guide
- ⑦ Spring cover
- ⑧ Washer
- ⑨ Screw
- ⑩ Centrifugal mass
- ⑪ Block
- ⑫ Mass
- ⑬ Mass
- ⑭ Threaded cap
- ⑮ Cap
- ⑯ Washer
- ⑰ Nut
- ⑱ Washer

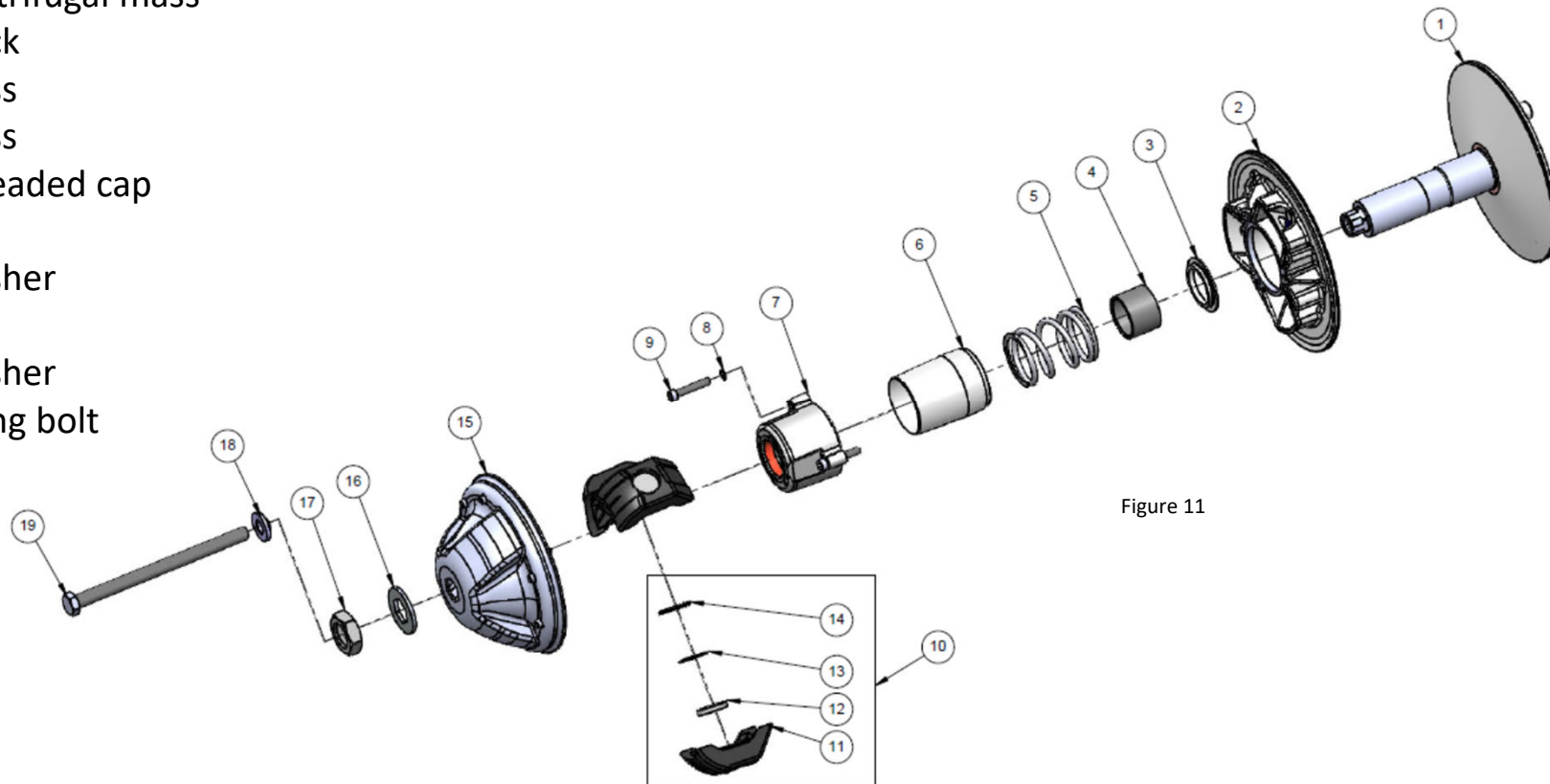


Figure 11

DRIVE PULLEY DISASSEMBLY



It is recommended to use a marker pen to identify the position of the components before disassembling the pulley.

Recommended inspection and replacement

1. Check the general condition of the blocks ⑪ and clean them off (figures 12 and 13).
2. Check that the bushings are in good condition.



Generic image: parts may differ depending on the pulley model.

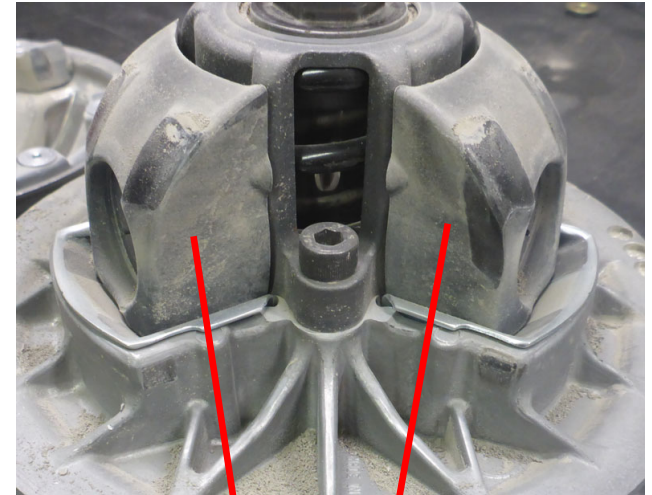


Figure 12



Figure 13

DRIVE PULLEY DISASSEMBLY

Recommended inspection and replacement

3. Clean the sliding sheave assembly (items ②③④⑤⑥⑦⑧⑨) with an air gun.
4. If it is necessary to disassemble the sliding sheave ② and the spring cover ⑦, use the disassembly tool 5055-0002 (figure 14).

RECOMMENDATIONS :

- It is strongly recommended to replace the 3 screws ⑨ if they are disassembled.



Generic image: parts may differ depending on the pulley model.

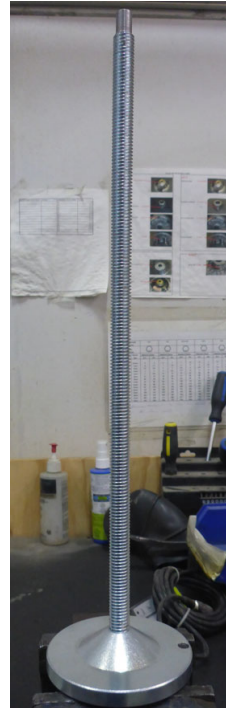


Figure 14



To maintain the performance of the pulley, make sure that the sliding flange ② and spring cover ⑦ bushings are cleaned with a microfiber towel or dry cloth. **CAUTION:** Do not use acetone to clean the bushings.

DRIVE PULLEY RE-ASSEMBLY

Alignment of fixed sheave (1), sliding sheave (2) and cap (15):

- Align the 2 notches on the sheaves (1) and (2) (figure 16), as well as the part number on the cap (15) (figure 15) to make sure the pulley assembly is balanced.



Figure 15

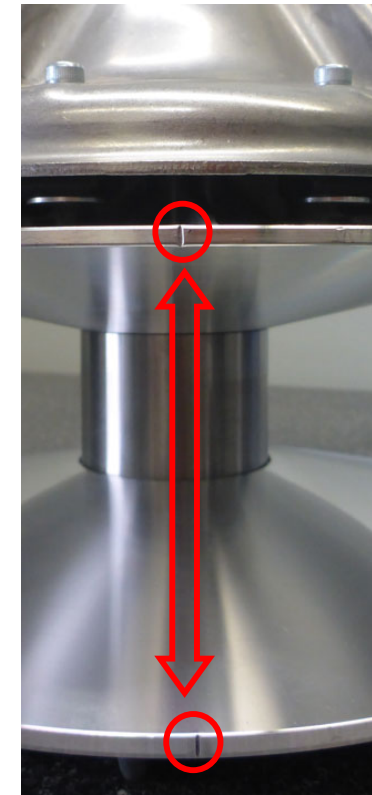


Figure 16

Tightening the Pulley nut (17)

- Use a torque wrench and a 36 mm socket to tighten the pulley nut (17) (figure 17) (for replacement pulleys, see the tightening torque chart by pulley number on the CVTech website – for OEM pulleys, see your owner's manual).

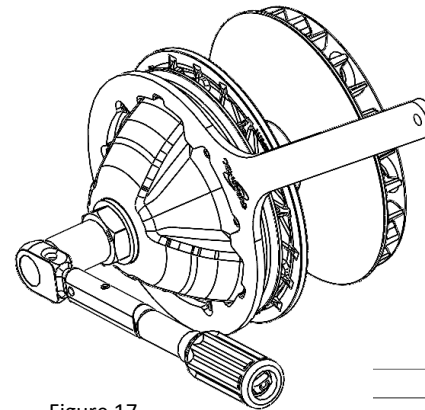


Figure 17



Make sure the alignment of the hexagon shapes of the cap (15) and washer (16) are fully engaged on the shaft hexagon shape before applying torque to the nut (17) (see figure 18).



Use the tightening torque value listed on the tightening torque chart by pulley number on the website www.cvttech-ibc.com or in your owner's manual.

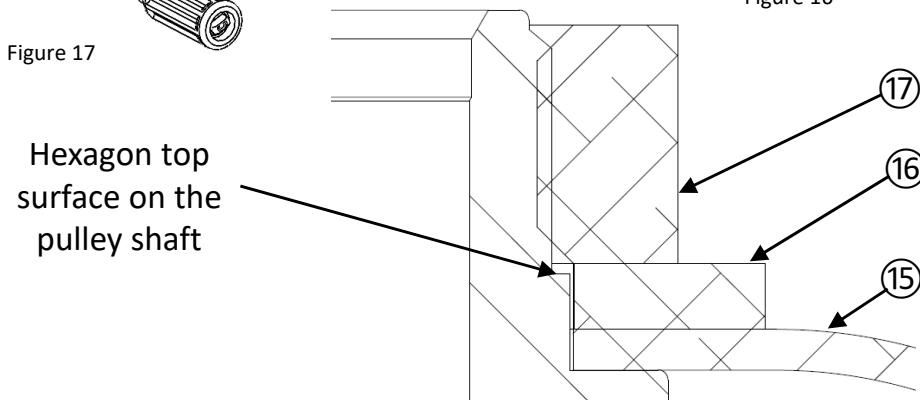


Figure 18