

INSTALLATION AND MAINTENANCE GUIDE

0146-5013

Rev. 0



Powerbloc 80



WARNING

must be modified or installed
by a qualified technician

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You have purchased a quality product proudly made in Canada by CVTech-IBC.

IMPORTANT NOTICE

Skilled staff should carry out Variable-Speed Drive maintenance and repair operations.

-  **Identifies operations where a risk of serious injury exists when instructions are not properly followed.**
-  Identifies a step where there is a risk of part deterioration or component malfunction.
-  **Identifies that there is a liquid substance to be added.**

The tightening torque values shown must be precisely applied.

Pictures are used for representation purposes only. Items may differ from illustrations.

LIMIT OF LIABILITY

In no event shall CVTech be liable for damages or injuries due to poor text interpretation, improper Variable-Speed Drive handling or misuse of the recommended tools.

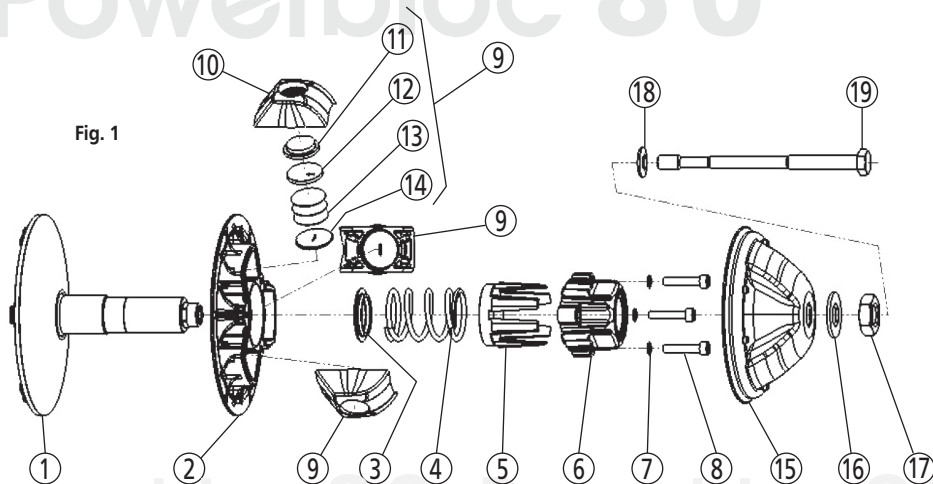
MAINTENANCE FREQUENCY

The CVTech Variable-Speed Drive requires no lubrication. It is designed to run dry. It is recommended to make a visual check of the CVT at 3000 miles (5000 km).

**For all questions, please contact our Technical Support Department :
info@cvtech-aab.com - Telephone : 1 800 518-7220**

Powerbloc 80

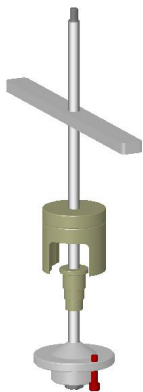
Fig. 1



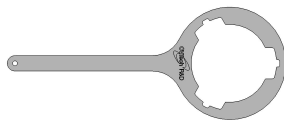
#	DESCRIPTION	Qty
1	Fixed sheave	1
2	Sliding sheave	1
3	Spring Seat	1
4	Spring	1
5	Spring guide	1
6	Spring Cover	1
7	Lock Washer	3
8	Screw	3
9	Centrifugal mass	3
10	Block	3
11	Weight	0 or 1
12	Weight	0 or 1
13	Weight	According to calibration
14	Threaded cap	1
15	Cap	1
16	Washer	1
17	Nut	1
18	Lock washer	0 or 1
19	Fixing Bolt	0 or 1



TOOL SELECTION



5055-0002*
Compression tool



0155-1018*
Retaining tool



Puller*
depends on application
(see catalog)

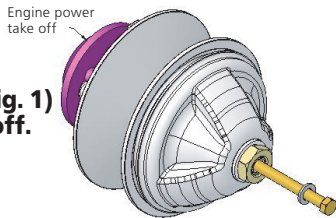
***(Not included with your driver pulley)**




DISASSEMBLING THE PULLEY FROM THE VEHICLE

1

Remove the fixing bolt #19 (Fig. 1) from the engine power take-off.



 Mark the direction of belt rotation thereby ensuring correct rotation after reassembling.

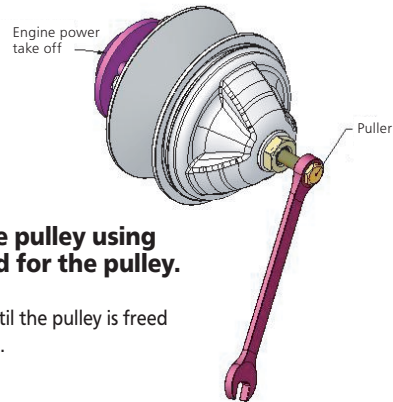
 **FOR THE OPERATIONS OF DISASSEMBLY AND REASSEMBLY OF THE PULLEY, IT IS RECOMMENDED TO USE MANUAL TOOLS AND THE RETAINING TOOL # 0155-1018**

 **DO NOT HIT THE DRIVE PULLEY IN ANY WAY.**

2

Disassemble the pulley using the puller suited for the pulley.

Screw-in the puller until the pulley is freed from the engine shaft.



DRIVER PULLEY DISASSEMBLY

1

Remove cap holding nut #17 (Fig.1).

i TO KEEP THE ORIGINAL PULLEY BALANCED, YOU MUST TAKE NOTE OF THE ORDER IN WHICH THE PARTS ARE ASSEMBLED.

h Assuming it is possible that the existing alignment marks on the sliding sheave #2 (Fig.1) and the fixed sheave #1 (Fig.1) to the identification number of the cap #15 (Fig.1) could be difficult to detect, it is advisable to mark with a line the orientation of the cap with the sliding and fixed sheaves so the parts will be reassembled in the same way.

h Note the side and position of the block assembly #9 (Fig.1).

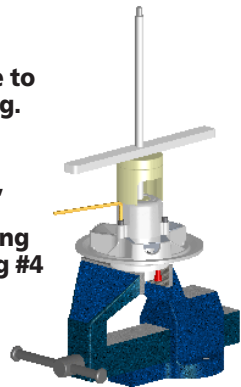


2

Use compression tool # 5055-0002. Use a vise to maintain the compression tool while working.

With the compression tool, apply a light pressure on the spring cover #6 (Fig.1). Then, remove the 3 screws #8 (Fig.1) holding the spring cover. Slowly release pressure on spring cover #6 (Fig.1) until the cover and the spring #4 (Fig.1) are freed.

h Note the sequence and orientation of parts before you remove them.





PARTS REMOVAL FROM BLOCKS

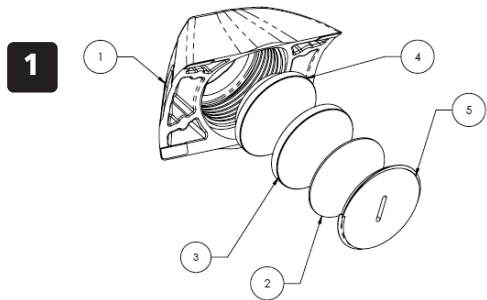


Fig. 2

Unscrew the threaded cap #5 (Fig.2) using a screwdriver with a blade wide enough to avoid damaging it. (Items may differ from illustration.)



Take note of sequence and orientation of parts.

REASSEMBLING THE SLIDING FLANGE

1

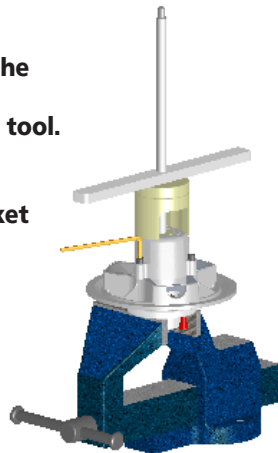
Assemble the spring seat #3 (Fig.1) and the spring #4 (Fig.1) into the sliding sheave #2 (Fig.1).

2

To assemble the sliding sheave, use the compression tool # 5055-0002. Use a vise to secure the compression tool.

Align the spring cover #6 (Fig.1) and spring guide #5 (Fig.1) in its pocket then insert the 3 screws #8 & washer #7 (Fig.1).

i For the 3 screws #8 (Fig.1), apply the specified torque value of 185 to 248 lbs-in (21 to 28 Nm)





FINAL ASSEMBLY

1 Assemble blocks as illustrated on Fig.2.

i Install the threaded cap #5 (fig.2) using a screwdriver with a blade wide enough to avoid any damage to it. Apply a tightening Torque of 13 to 35 lbs-in. (1,5 to 4 Nm).

i Make sure all components are well seated inside the block #1 (Fig.2).

i Make sure all three blocks have the same number of weights.

2 Having mounted the sliding sheave #2 (Fig.1) on top of the fixed sheave #1 (Fig.1), insert all three blocks #9 (Fig.1) with their curved side upward (Fig.3).

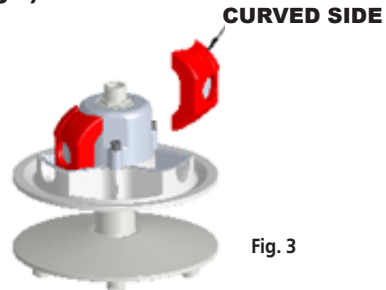



Fig. 3

FINAL ASSEMBLY





- 3** Assemble cap #15 (Fig.1) making sure the hexagonal opening engages on the hexagonal section of the shaft.



-  Remember to re-align with the markings made on components when disassembling (Fig.4).


- 4** Place washer #16 (Fig.1) and nut #17 (Fig1).



-  Use Loctite #271 threadlocker on the threads on the fixed sheave shaft # 1 (Fig.1).
-  Make sure the hexagonal washer engage in the hexagonal section of the shaft.
-  Tighten by hand until the hexagonal opening in the cap and washer are secured on hexagonal section of the shaft.
-  Prevent rotation of the pulley with retaining tool # 0155-1018 and use a torque wrench to apply a torque of 100 – 110 lbs-ft (135 – 150 Nm) to the nut.

RING GEAR REMOVAL AND INSTALLATION

Certain models of vehicles are originally equipped with a ring gear.



-  It is preferable to follow procedure for disassembly and reassembly of ring gear specified by the vehicle manufacturer.

1 REMOVAL

Heat holding screws to facilitate the ring gear removal.

-  **Do not heat above 150°C (300°F)**

2 INSTALLATION

-  **Use Loctite #271 brand threadlocker.**
-  **Apply the following torque value to the 6 holding screws :**

SCREW	Lbf-ft	N-m
M8	20	27
5/16-18	15	20



ASSEMBLY ON ENGINE

- i** Clean engine taper surface and pulley taper surface from any contaminant. Using a torque wrench and the retaining tool # 0155-1018, apply torque specified by the vehicle manufacturer to the mounting screw #19 (Fig.1) on the vehicle. Run the engine for a few minutes and torque again the mounting screws.