

CVTech-IBC How to adjust your Powerbloc clutch

The *Powerbloc* clutches from CVTech-IBC are factory calibrated for every specific snowmobile model. However, depending on the conditions of use (altitude, temperature, snow condition, etc.), the condition of your snowmobile (track configuration: long vs short, wide vs narrow) or any other modification done to the snowmobile, your *Powerbloc* clutch may need to be slightly readjusted in order to get optimum engine RPM during acceleration.

Prior to adjustment

In order to ensure optimum results with your *Powerbloc* clutch, make sure that:

- Your secondary pulley (driven) is clean and in good condition. Clean, inspect and replace worn parts if necessary.
- You are using the belt recommended by the manufacturer of your snowmobile and that this belt is in good condition. Replace the belt if necessary.

ENGINE RPM ADJUSTMENT PROCEDURE

4- Belt tension adjustment

Refer to your snowmobile owner's manual for belt adjustment.

5- Calibration of engine RPM during acceleration

Principle: The quantity of weights inside the blocks will determine the engine operating RPM in acceleration.

- To increase the engine RPM: reduce the quantity of weights (item 2 – see image below).
- To reduce the engine RPM: increase the quantity of weights (item 2 – see image below).

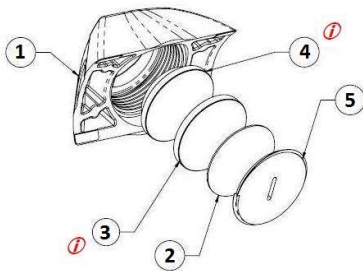
ⓘ For service procedure of your *Powerbloc* clutch, refer to your *Powerbloc* maintenance manual.

Reduce or increase the quantity of weights (item 2) one by one inside each block, until you obtain the desired behaviour.

IMPORTANT

Make sure that all 3 blocks contain exactly the same quantity of weights. (items 2, 3, 4 – see image below).

ⓘ Items 3 and 4 are not present in all assemblies. If either one is present (items 3 and/or 4), it is important not to remove them and leave them assembled in the order of the image below.



Calibration parts - Powerbloc 50

#	Part #	Description	Weight
1	0130-3014	Block	46g
2	X-81-3	Weight	3.4g
3	0135-3001	Weight	21g
4	0135-2049	Weight	43g
5	X-7	Threaded cap	1.5g

Calibration parts - Powerbloc 80

#	Part #	Description	Weight
1	1130-3003	Block	44g
2	1135-3001	Weight	5.7g
4	1135-1005	Weight	54.5g
5	1150-3001	Threaded cap	3.3g

6- Engagement RPM

Once you have obtained desired engine RPM in acceleration, it is possible that the engagement RPM has changed and/or that you want to adjust it. The engagement RPM can be adjusted by changing the spring. A spring with a lower load point at engagement will reduce the engagement RPM, give a softer launch and better control of the vehicle at low speeds. On the opposite, a spring with a higher load point at engagement will give more abrupt launch and a more sporty behaviour. See list of available springs.

WARNING

Never attempt to change the spring in your *Powerbloc* without the adequate tools and necessary precautions. The spring is under high load in the assembly. Removal or installation of the spring without the necessary precautions can cause death or serious injuries.

(Compression tool for spring removal and installation p/n : 5055-0002)

IMPORTANT

When adjusting the engagement RPM, you must select a new spring with different load point at engagement but you need to keep the same load point at top speed as your initial spring. Changing the spring load point at top speed will change the engine RPM in acceleration. The use of springs from other manufacturers is not recommended. They can cause the *Powerbloc* to get stuck and damage it.

① Refer to your snowmobile owner's manual for removal and installation of the clutch.

List of available springs

	NUMBER	COLOR CODE (reference)	LOAD AT	LOAD AT	RATE (N/mm)
			ENGAGEMENT	TOP SPEED	
			(Newtons)	(Newtons)	
			(to 72mm)	(to 45mm)	
	1151-1100	White/purple/purple/white	200	500	11.1
	0451-1101	purple/white/yellow	200	700	18.5
	0451-1102	purple/white/orange	200	900	25.9
	1151-1104	n/a	200	1300	40.7
	0451-1105	purple/white/purple	200	1600	51.9
	1151-1107	n/a	300	700	14.8
	0451-1108	n/a	300	900	22.2
	1151-1109	n/a	300	1100	29.6
	0451-1110	purple/yellow/red	300	1300	37
	1151-1113	n/a	400	700	11.1
	1151-1114	n/a	400	900	18.5
	1151-1115	n/a	400	1100	25.9
	1151-1116	n/a	400	1300	33.3
	1151-1118	White/purple/purple/pink	500	700	7.4
	1151-1119	n/a	500	900	14.8
	1151-1120	n/a	500	1100	22.2
	1151-1121	n/a	500	1300	29.6
	0451-1137	purple/blue/orange	600	850	9.41
	1151-1124	n/a	600	900	11.1
	1151-1125	n/a	600	1100	18.5
	1151-1126	n/a	600	1300	25.9
	0451-1138	purple/blue/pink	640	1440	29.6
	1151-1128	n/a	700	900	7.4
	1151-1129	n/a	700	1100	14.8
	0451-1130	purple/purple/orange/yellow	700	1300	22.2
	1151-1131	n/a	700	1600	33.3
	0151-1004	purple/purple/green	728	1110	14
	0151-1003	purple/purple/yellow	730	987	9.5
	1151-1132	n/a	800	1100	11.1
	1151-1133	n/a	800	1300	18.5
	1151-1134	n/a	800	1600	29.6
	1151-1135	n/a	900	1300	14.8

For technical support, contact your local dealer or :



CVTech-AAB

Canada : 1-800-518-7220 / USA : 1-866-802-2404
3037 blvd Frontenac East, Thetford Mines, QC, Canada
www.cvtech-aab.com/ info@cvtech-aab.com