

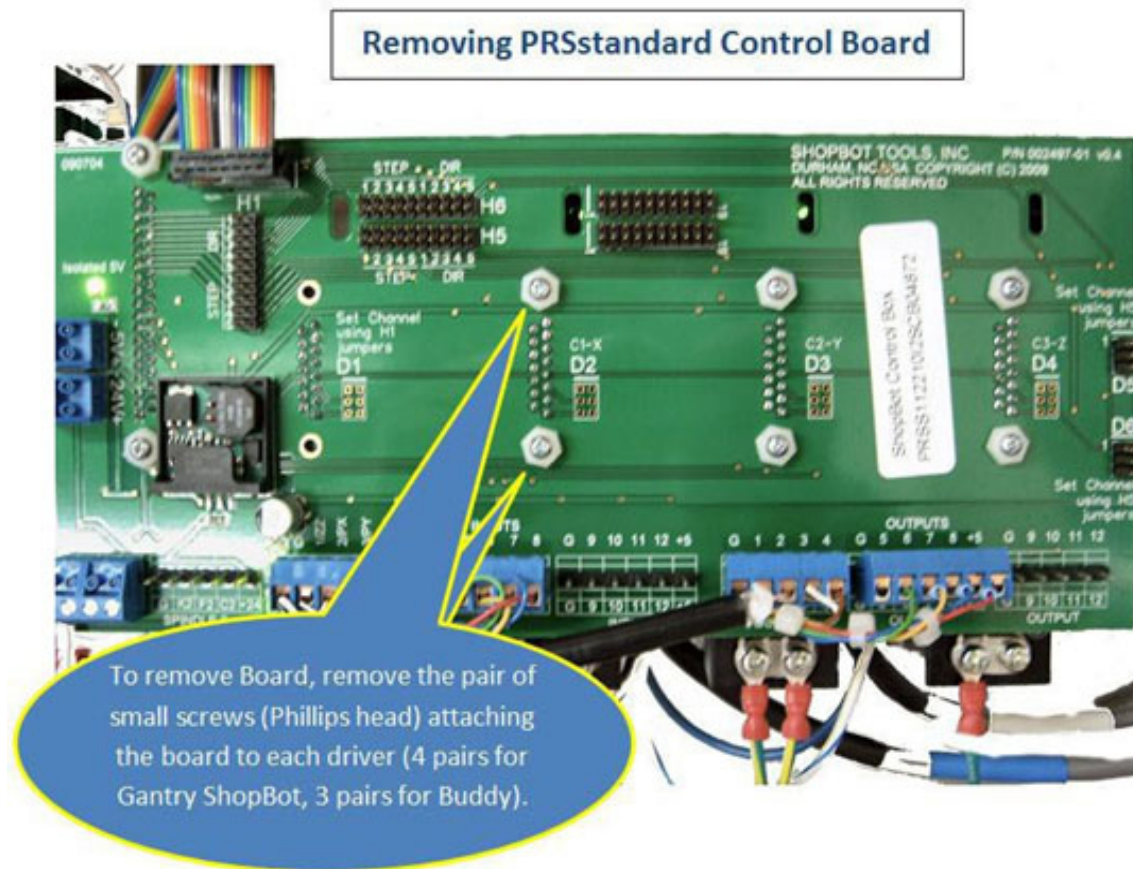


# Adjusting Settings on RBK Drivers for a PRS Standard

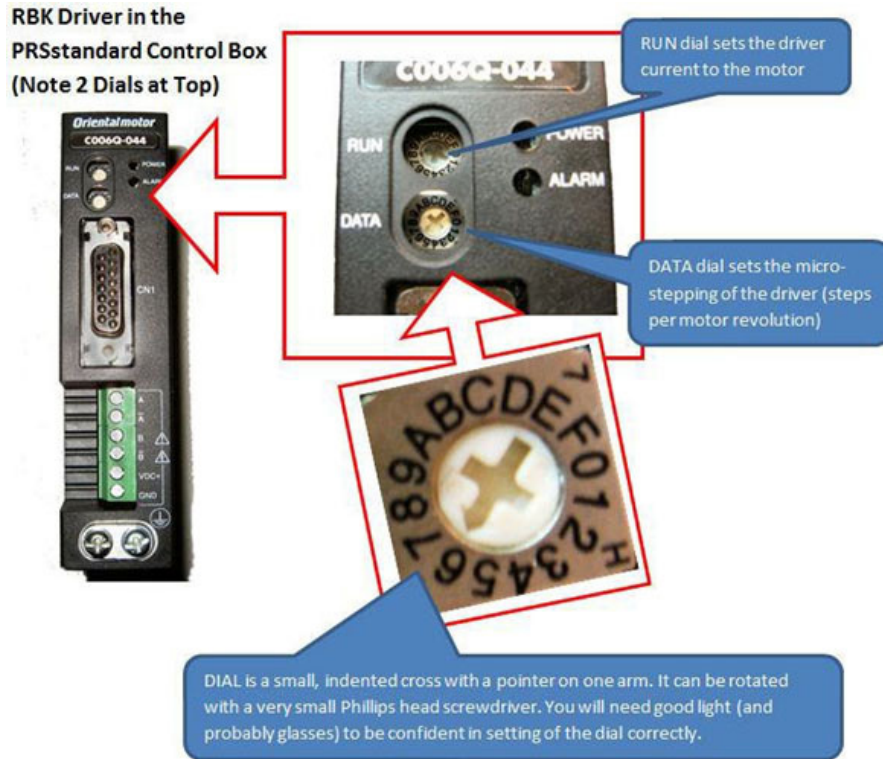
## Process

In certain situations it may be necessary to modify either the output current settings or the step resolution settings on the RBK stepper drivers in your PRSstandard Control Box. This might be necessary to adjust the current or the steps appropriate to the motors of an older ShopBot, or for stepper motors in the case that this is an Inventor's Kit Control Box.

In order to make the adjustment to the driver current or step resolution, remove the Control Board to uncover the drivers. Remove the pair of small, Phillips head screws that attach the Control Board to each driver and gently pull the board away from the drives.



Adjust the driver current or the step resolution by making the designated adjustment to the appropriate Dial on the driver. For the case of adjusting current for an upgrade to a PRT ShopBot, the dial marked “RUN” is set to 6. This is all that is required to change if standard gearboxes and pinions are present. In a PRT with high resolution gearbox or a PR with a ball-screw drive on the Z axis, reset the “DATA” to values listed in the table below to adjust the step resolution as necessary. Remember to make the adjustment on each driver!



The following tables provide values for setting the RUN current for very specialized situations.

TABLE 1 -- Recommended RBK Driver Settings (Dials at Top)

	PRSstd Setting	PRT Upgrd Setting	PRT (7.2gear) Upgrd	PR Upgrd Z-Setting
RUN Dial (Current)	9	6	6	6
DATA Dial (step ratio)	6	6	3	1 <sup>1</sup>

<sup>1</sup> 5:1 Ball Screw setting for Z only; for other drivers use PRT Upgrade Settings

TABLE 2 – Detailed Settings Information for PRSstandard Inventor Kit Control Boxes

	0	1	2	3	4	5	6	7	8	9	A	B	C	D	E	F
RUN (Current A) <sup>2</sup>	.28	.56	.84	1.13	1.40	1.70	2.00	2.25	2.50	2.80	3.10	3.40	3.65	3.95	4.20	4.50
DATA (steps rev)	200	400	800	1000	1600	1800	2000	3200	3600	4000	6400	7200	8000	12800	16000	25600

<sup>2</sup> Current Values assume SW-1 on top of driver is at Factory Default Setting – E (3rd harmonic filter and range setting)