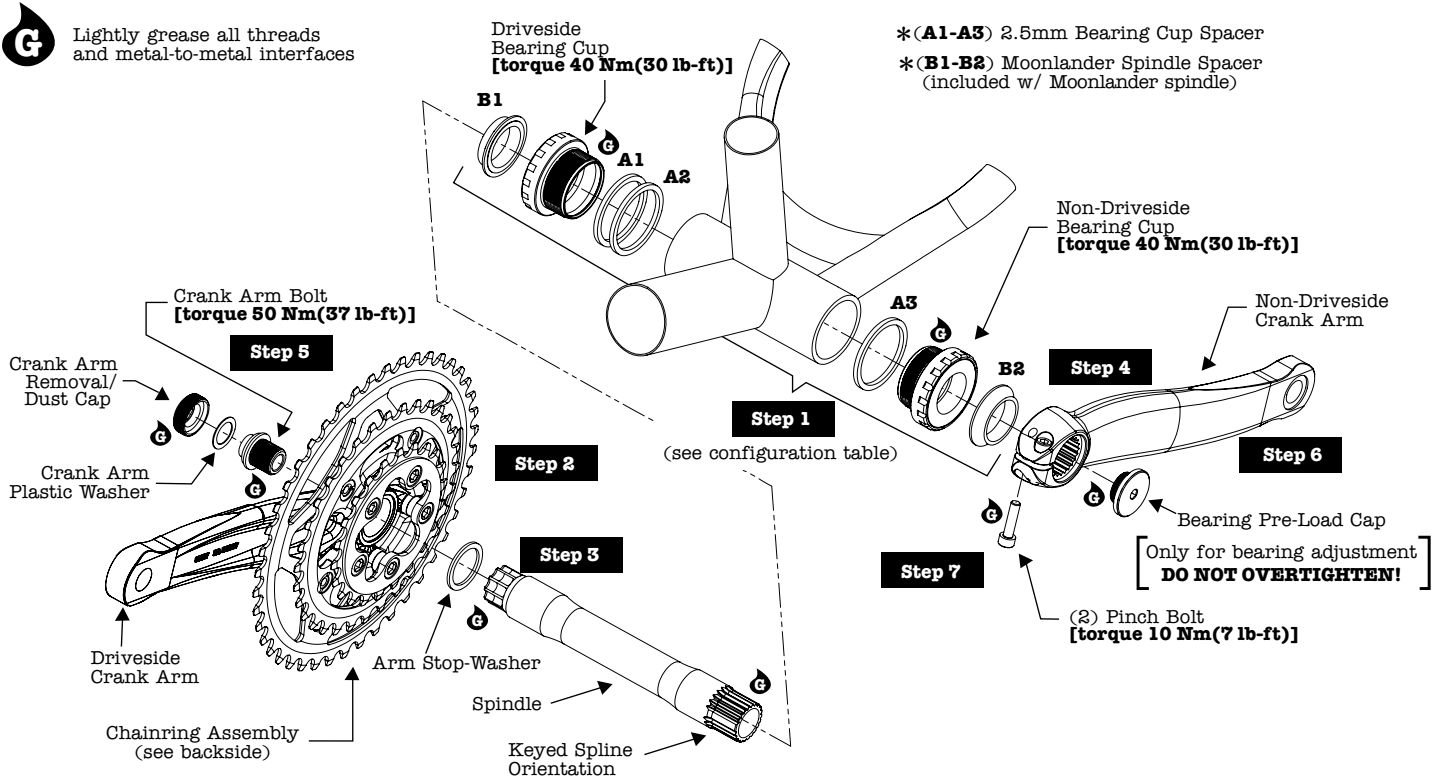


Mr. Whirly Instructions / General Assembly

Thanks for purchasing the Mr. Whirly crankset or armset. You now own the most versatile bicycle crank on the market. Set it up wide and geared for your Pugsley or set it up narrow and single for your Cross-Check. Visit surlybikes.com to see a full list of the parts available to configure your Mr. Whirly for any battle.

The following set of instructions should give you all the information you need to properly set up your new crankset on your bicycle. If you do not feel comfortable with the installation, please take your bike and pile of parts to your local bike shop so they can get you set up right.



Installation...

Step 1 Install the bearing cups, with appropriate spacers, into our your frame's bottom bracket shell. Use the Spacer Configuration Table to determine which spacers to use for your set-up.

Step 2 Install chainrings onto the driveside crank arm. See the detailed exploded view.

Step 3 Attach the driveside crank arm to the spindle.

- Be sure to include the arm stop-washer. The crankset WILL NOT function properly without it.
- The spindle is keyed and must be oriented correctly. It may help to slide the non-driveside crank arm onto the spindle during this step to ensure proper orientation.
- Do not worry about proper crank arm bolt torque at this time. You will fully torque the bolt later in the installation process.
- Install the crank arm plastic washer and the crank arm removal/dust cap.

Step 4 Insert the crankset into the bottom bracket, slide the non-driveside crank arm onto the spindle, and loosely tighten the pinch.

Step 5 Now that the non-driveside crank arm is available for support, USE A TORQUE WRENCH to tighten the driveside crank arm bolt (50 Nm).

Step 6 Install bearing preload cap and adjust bearing tension with the preload cap. Hey Hercules, this is only for bearing adjustment! Much like a headset, the bearings should not be too tight or too loose.

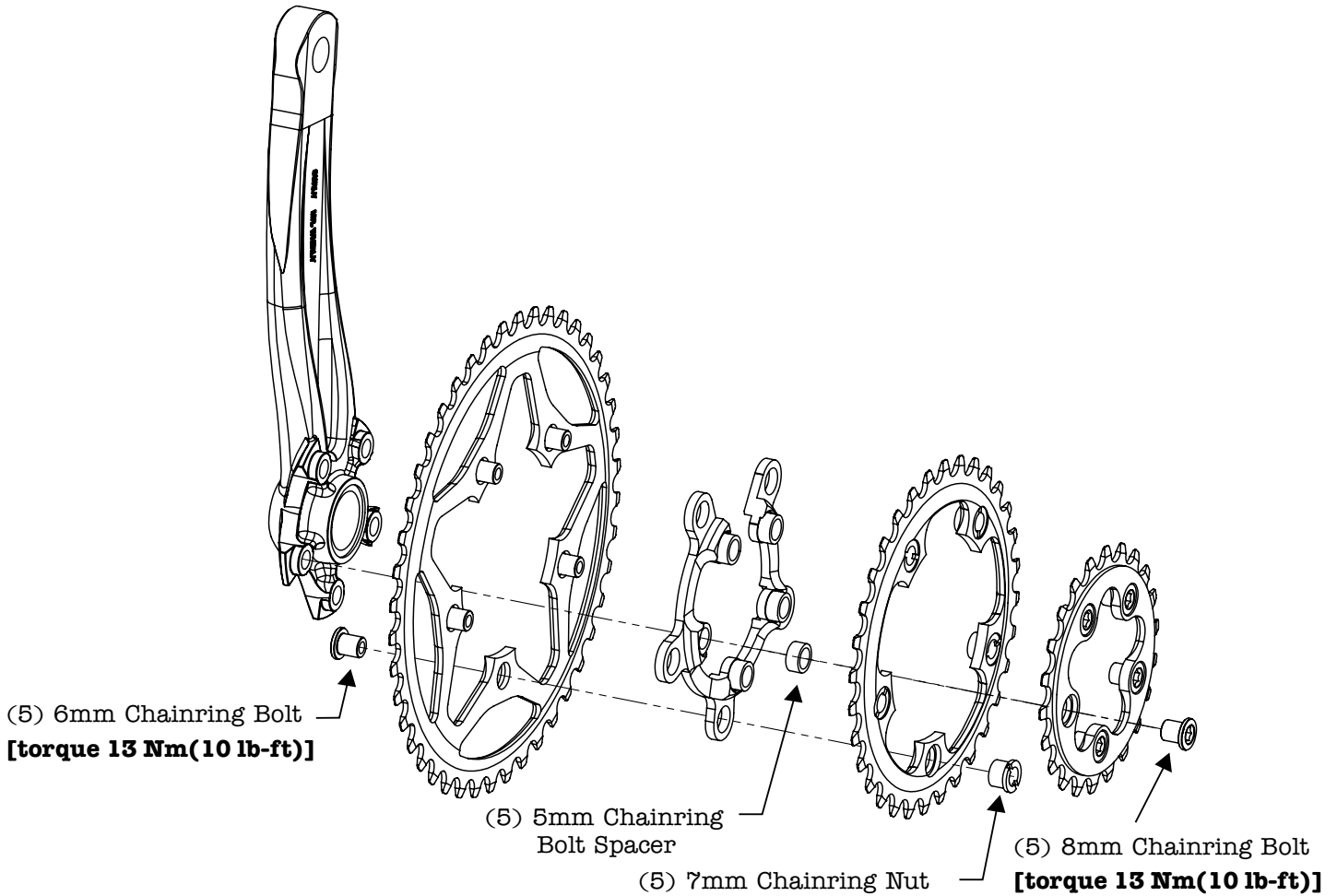
Step 7 Tighten the crankarm pinch bolts with a torque wrench (10 Nm).

Spacer Configuration Table

BB Shell Width	68mm	68mm	73mm	100mm	100mm
Mr. Whirly Spindle	Short	Medium	Medium	Mondo (Pugsley)	Super Mondo (Moonlander)
Spacers	A1	X	X	X	X
	A2		X		
	A3		X		
	B1				X
	B2				X

NOTE: E-type mounting components should replace A1 spacer

Triple Chaining Setup



COMPONENT WARRANTY

Stuff eventually breaks or wears out if you use it enough. That's beyond our control. We guarantee this product to be free from defects in manufacturing and design for one year from date of purchase. It's guaranteed not to fail under normal riding conditions. Surly is not responsible for the actions you take on your bicycle, however, and cannot be responsible for products that break when not installed correctly or used inconsistently with the product's design. If you're not sure if something will work the way you want, contact us. If you do destroy your Surly product, fess up and maybe we can get you some replacement parts to keep you riding. Sorry, the finish isn't covered, nor is any damage that happens to you or your other components as a result of any failure of one of our products. Lastly, if you modify or neglect our products, we can't be responsible for them or what might happen to you while you're using them. All potential warranty items should be returned to the original place of purchase, accompanied by a sales receipt. In the unlikely event that this is not possible, call or email us, and we'll do our best to get you riding again.

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