

O.D. Crank & Bottom Bracket Instructions

Hi there. Thanks for spending your hard-earned cash on this Surly product. Surly stuff is designed to be useful and durable. We're confident it will serve you well for years to come.

The O.D. Crank is a dedicated offset double (get it?) crankset designed to run your chain further outboard to clear wider rear tires.

This document outlines how 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. If you do not have the proper tools and/or experience to install this crank, you could hurt your bike and yourself. Be smart. Do the right thing.

⚠WARNING! Cycling can be dangerous. Bicycle products should be installed and serviced by a professional mechanic. Never modify your bicycle or accessories. Read and follow all product instructions and warnings including information on the manufacturer's website. Inspect your bicycle before every ride. Always wear a helmet.

Additional Product and Safety Information can be found at the website: surlybikes.com/safety

Threaded Bottom Bracket Compatibility and Intended Use

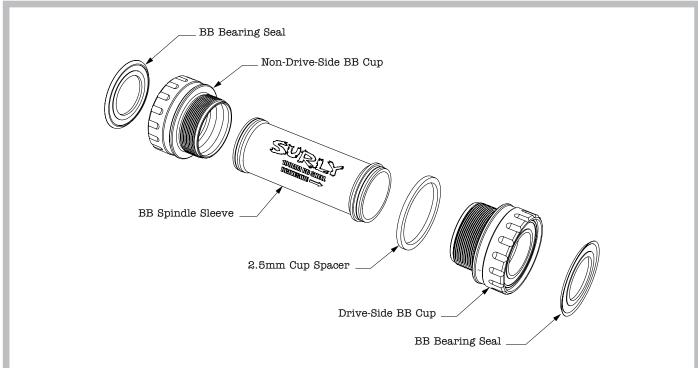
The Surly O.D. Bottom Bracket was designed for spindle lengths that fit 100mm and 73mm shells. The Moonlander specific O.D. Crank has a wider spindle and wider bottom bracket cups to add to the extended required chainline for that specific spindle and frame, but the cups are the same. Unless you are using an e-type front derailleur mount, or a chain guide accessory, a 2.5mm spacer is necessary between the drive-side cup and the frame.

Tools Required for Installation of the Threaded Bottom Bracket

- 16-notch external bottom bracket tool (Park BBT-19)
- Grease

Installation of the Threaded Bottom Bracket

NON-DRIVESIDE DRIVESIDE



- 1. Carefully inspect the bottom bracket to make sure it is free of burrs, sharp edges and excessive paint.
- 2. Grease the threads of the bottom bracket shell.
- 3. Install the bearing cups into your bottom bracket shell (40 Nm). Cups are driveside/non-driveside specific. Be sure to follow threading directions and remember to install the spindle sleeve between the two cups and a 2.5mm spacer on the drive-side (included). The 2.5mm spacer is not necessary if using an e-type mounted accessory for the 73mm bottom bracket shells.

Ongoing Maintenance

Annually remove and reinstall the bottom bracket with fresh grease and the proper torque to prevent any unwanted component fusion from moisture or offensive off season elements.

PressFit 41 Bottom Bracket Compatibility and Intended Use

The Surly O.D. PressFit 41 bottom bracket is designed to allow fitting of Surly O.D. Cranksets (24mm spindle) into fat bike frames featuring a PressFit 41 bottom bracket shell (I.D. = 41mm). Workable bottom bracket/crank configurations for the PressFit 41 bottom bracket are listed below:

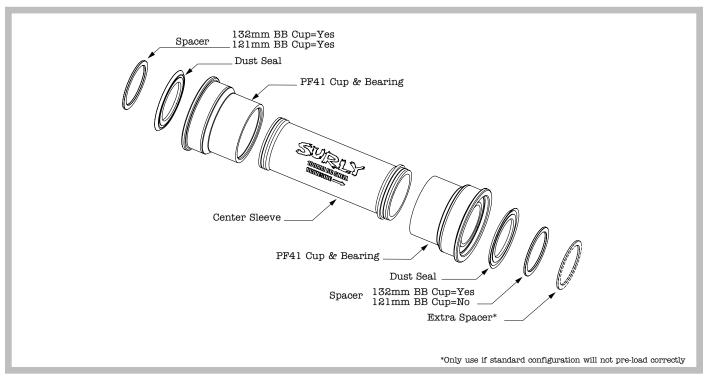
Frame Bottom Bracket Width	PAIR WITH	O.D. Crankset Configuration
PressFit 41 x 132mm Asymmetric		Moonlander/Ice Cream Truck (157mm spindle)
PressFit 41 x 121 Symmetric	=	Pugsley (144mm spindle)

Tools Required for the Installation of the PressFit 41 Bottom Bracket

- Bottom bracket or headset bearing press
- Grease

Installation of the PressFit 41 Bottom Bracket

NON-DRIVESIDE DRIVESIDE



1. Carefully inspect the bottom bracket to make sure it is free of burrs, sharp edges and excessive paint.

⚠WARNING! DO NOT GREASE THE CUP FOR INSTALLATION. For carbon frames, assembly paste may be used if desired, but dry is OK too.

- 2. Carefully follow the spacer & dust seal orientation shown above that applies to the bottom bracket width/crank configuration you are working with.
- 3. Install one of the two PressFit cup/bearing assemblies into the non-driveside of the bottom bracket shell using the press. Install the cup without the dust seal and ensure to push only on the flat face of the plastic cup and not the bearing. This will prevent any damage to the bearing during install. After install, check to make sure the lip of the cup is flush against the bottom bracket shell.
- 4. Install the center sleeve into the remaining cup/bearing assembly with the "Driveside--->" pointing towards the remaining cup. Using the press shaft as a guide, slide the center sleeve/cup assembly into position on the right side of the bottom bracket shell. Check that the center sleeve and right side cup are still connected securely and then pushing the assembly into the frame until the lip of the cup is snuggly against the frame bottom bracket.

*NOTE: Refer to the O.D. Crank instructions for proper pre-loading and torque specifications. If the proper preload cannot be achieved with the recommended spacer configuration, remove the crank and add the extra spacer provided to the driveside of the seal/spacer assembly and attempt to fit the crankset again.

Ongoing Maintenance

Annually remove the crankset and check the bearings for smooth operation. If bearings are rough or feel gritty, options are to replace the entire bottom bracket cup assembly or replace just the bearings in the PressFit cup. If replacing the bearings is the preferred method, the PressFit cups must first be carefully removed from the frame with proper tools before the bearings can be replaced in the PressFit cups themselves.

O.D. PressFit 41 cups can be removed by using either a PressFit cup removal tool (looks like a small headset cup remover) or a bearing extractor tool and punch. In either case, remove the right side cup first. If using a PressFit removal tool, ensure that the flared end of the tool is squarely and firmly seated against the interior rim of the PressFit cup behind the bearing. After the right side cup has been removed, extract the center sleeve and then proceed to remove the left side cup.

After fresh bearings have been installed in the cups, re-install the bottom bracket and crankset per the instructions above.

△WARNING! Do not attempt to remove the bearings from the PressFit cups while still installed in the frame. Compression from the interference fit between the cup and the frame makes removal of just the bearing extremely difficult if not impossible. Attempting to do so will result in damage to the bottom bracket components, your frame, or even yourself, and will void the warranty.

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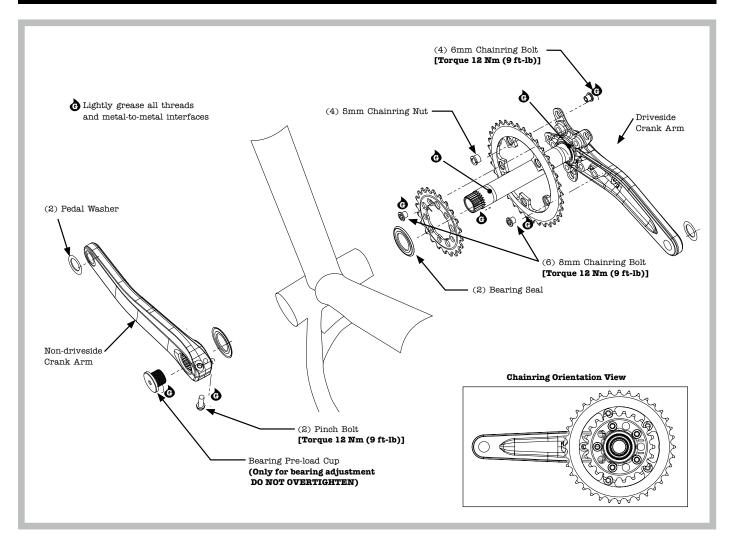
O.D. Crank Compatibility and Intended Use

The O.D. Crank is a 2-piece, dedicated two chainring crank, and it is 9- and 10-speed compatible. We offer a Pugsley option for bikes with tires up to 4" and a Moonlander option for bikes with tires up to 5". Available as complete cranks in 170, 175, and 180mm lengths (180mm as arm sets only). Completes for 73mm BB shells have 39/26t rings. The 100mm BB shell versions and the PF41/132 complete cranks have 36/22t rings. These chainrings are designed to shift best in specific combinations—change to a 39/22t, for example, and your shifting will suffer.

Tools Required for Installation of the O.D. Crankset

- 5mm hex wrench
- Grease
- Chainring bolt spanner—If necessary for chainring installation

Installation of the O.D. Crankset



- 1. If necessary, install the chainrings on the driveside crank arm using a 5mm hex wrench and a chainring bolt spanner.
- 2. Apply a small amount of grease to the polished bearing surfaces on the spindle and insert the driveside crank arm into the bottom bracket. Be sure to include the bearing seal.
- 3. Slide the non-driveside crank arm onto the spindle. Be sure to include the bearing seal.
- 4. Install bearing pre-load cap and adjust bearing tension. Not too tight, not too loose.
- 5. Tighten 5 mm crank arm pinch bolts evenly to 12 Nm alternating and increasing tension as you go.
- 6. Install the pedals w/washers and ride!

Ongoing Maintenance

Periodically check to make sure the chainring bolts and crank arm pinch bolts are properly torqued, and the chainrings do not show excessive wear or damage.

Limited Warranty

This Surly product is warranted against defects in materials and workmanship for one year from the date of retail purchase of the product, subject to the limitations detailed below. Save your dated receipt for proof of purchase.

This warranty does NOT cover the following:

- Damage due to improper assembly or follow-up maintenance or lack of skill, competence or experience of the user or assembler
- Products that have been modified, neglected, used in competition or for commercial purposes, misused or abused, involved in accidents or anything other than normal use
- · Installation of components, parts or accessories not originally intended for or compatible with Surly product as sold
- · Damage or deterioration to the paint, surface finish, aesthetics or appearance of the product
- Normal wear and tear
- · Labor required to remove and/or refit and re-adjust the product within the bicycle assembly

This limited warranty is expressly limited to the repair or replacement of a defective product, at the option of Surly, and is the sole remedy of the warranty. This limited warranty applies only to the original purchaser of the Surly product and is not transferable. This warranty applies only to products purchased through an authorized dealer or distributor. In no event shall Surly be liable for any loss, inconvenience or damage, whether direct, incidental, consequential, or otherwise resulting from breach of any express or implied warranty or condition, of merchantability, fitness for a particular purpose, or otherwise with respect to our products except as set forth herein.

This limited warranty gives the consumer specific legal rights, and those rights and other rights may vary from place to place. This limited warranty does not affect your statutory rights.

TO THE EXTENT NOT PROHIBITED BY LAW, THESE WARRANTIES ARE EXCLUSIVE AND THERE ARE NO OTHER EXPRESS OR IMPLIED WARRANTIES OR CONDITIONS INCLUDING WARRANTIES OR CONDITIONS OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE.

The Web Address: surlybikes.com