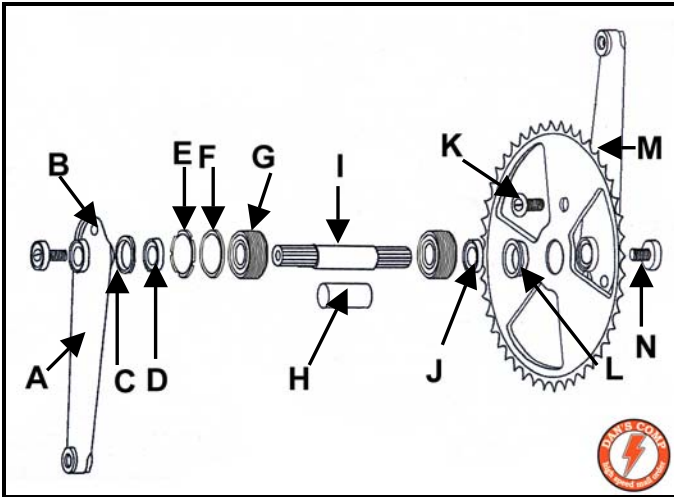


Poverty Euro POW Three-Piece Crank Install



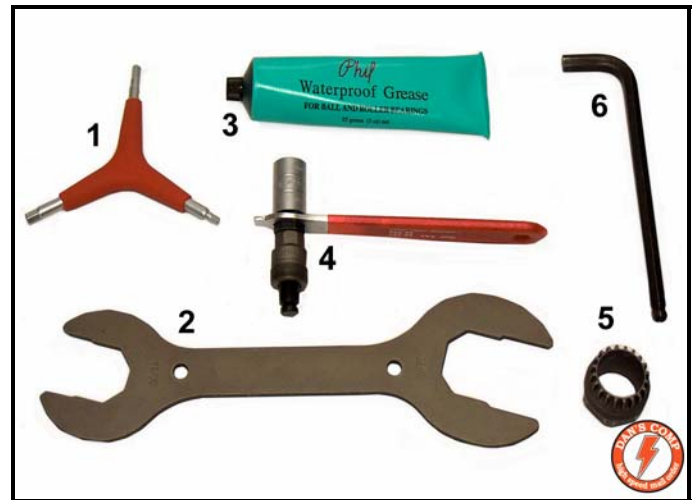
Included Parts

- A. Left Crank Arm
- B. Pinch Bolts (*Qty 2*)
- C. 1mm Alignment Spacers (*Qty 4 each*)
- D. 10mm Spacer
- E. Lockring
- F. Lockring Spacer
- G. Euro Sealed Bearings (*Qty 2*)
- H. Internal Tube Spacers (39mm & 44mm)
- I. Chromoly Spindle
- J. 6mm Spacer
- K. Chainwheel Bolt
- L. Chainwheel Adapter
- M. Right Crank Arm
- N. Spindle Bolt (*Qty 2*)

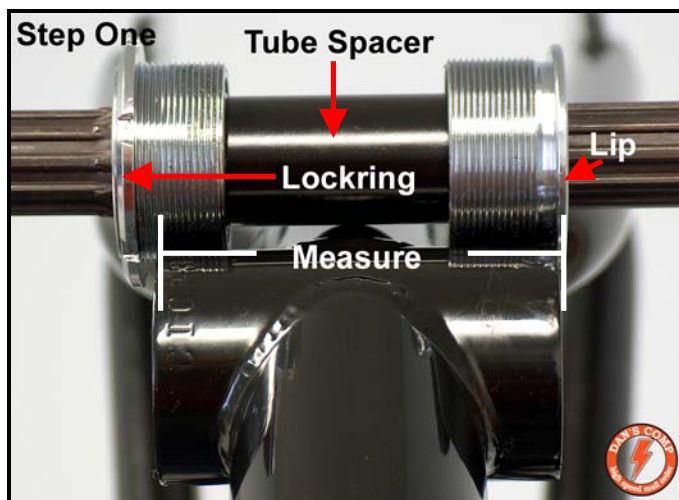
Poverty Euro POW three-piece cranks. Part # 451050

Tools Needed

1. 3 Way Allen Wrench (4,5,6mm)*
2. 30mm Open-end wrench* or Adjustable Wrench
3. Grease or Light Oil
4. Universal Crank Arm Puller*
5. Bottom Bracket Tool*
6. 8mm Allen Wrench
7. Wooden or Rubber Mallet (not pictured)



** Tools used from the Professional tool kit. Part # 811110
Park PCS-1 Home Work Stand Part # 811356
Phil Wood grease 3oz. Tube. Part # 811195
Park BBT-2 Bottom Bracket Tool. Part #811336*



Measuring the Frame

- Place the short tube spacer (39mm) on the spindle.
- Slide both of the sealed bearings on the spindle, one on each end. Do not use any alignment spacers (*See picture*).
- Place the assembly against the bottom bracket tube. The lip on the bearing cups should be against the ends of the bottom bracket tube. If the tube spacer is too short, replace the tube spacer with the longer spacer (44mm). If the spacer is too long, you can either grind one end of the spacer to the desired length or use the short spacer along with the lockring spacer.
- It is very important that the tube spacer is installed and is the correct length to avoid over side loading the bearing when tightening the spindle bolts.

These instructions are to be used as a guide only. Improperly installed parts may lead to severe injury or harm. We strongly recommend that a properly trained bike mechanic handle all installations, adjustments and repairs on your bike. As always...Ride Safe!

Poverty Euro POW Three-Piece Crank Install

Step Two



Preparing the Frame

- It is highly recommended to take your frame to a bike shop to have the threads tapped. This will help clean any paint or debris from the threads and allow the cups to tread in easily.
- Use a small amount of grease or light oil to lubricate the threads of the bottom bracket tube.

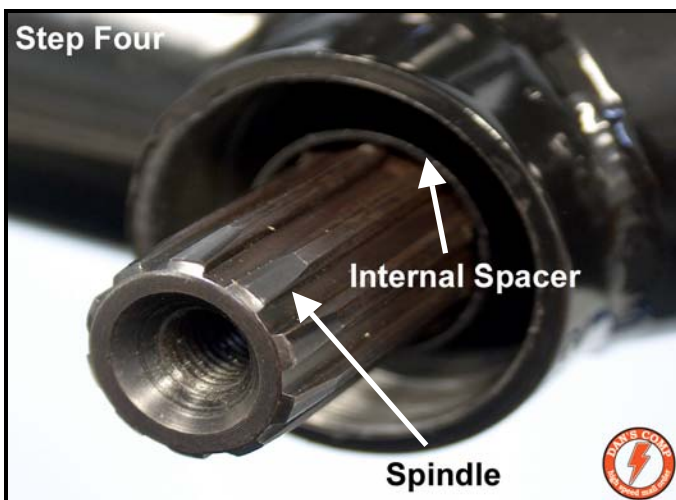
Installing the Right Side Cup and Bearings (Drive Side)

- Thread the right cup and bearings into the frame using a bottom bracket tool, 30mm open-end wrench or an adjustable wrench.
- The right cup will thread counter-clockwise into the frame.
- Make sure the bearing cup is threaded completely against the bottom bracket tube and is tight. There should be no gap between the frame and the lip on bearing cup.

Step Three



Step Four



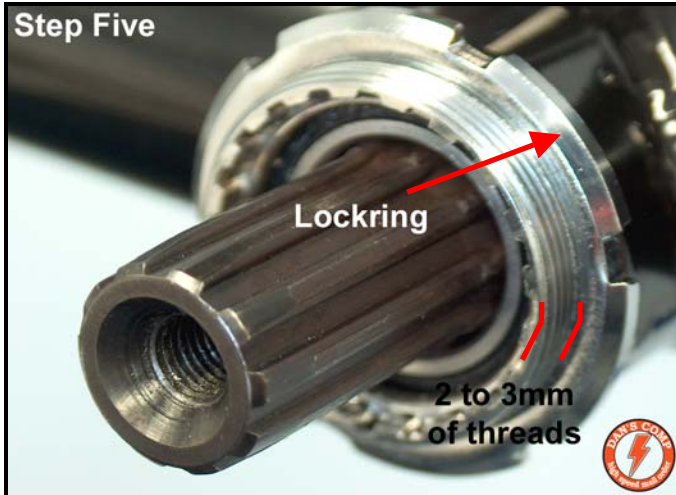
Installing the Spindle and Tube Spacer

- Lightly lubricate the outer surface of the spindle. This allows the spindle to slide into the bearing easier.
- Slide the spindle into the bearing until all of the splines are exposed. The spindle has three grooves on one end, this end goes through the drive side bearing.
- Slide the inner internal tube spacer over the spindle until it stops against the inside of the bearing (*See picture*).

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Poverty Euro POW Three-Piece Crank Install

Step Five



Installing the Left Side Cup and Bearings(Non-drive Side)

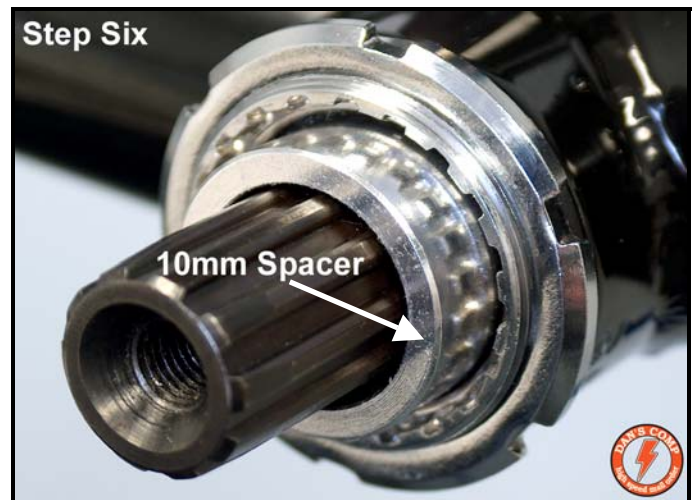
- Thread the left cup and bearings using a bottom bracket tool.
- Be sure to leave the spindle and tube spacer in the left cup and bearings. This will keep the internal tube spacer aligned.
- The left cup will thread clockwise into the frame.
- If the internal tube spacer is the correct length, the right bearing cup should have approximately 3 to 4mm of threads exposed for the lockring.
- Thread the lockring on to the bearing cup. If there is more than 2 to 3mm of threads still exposed, you will need to use the 2mm lockring spacer.
- Use a lockring tool to tighten the lockring. If you do not have a lockring tool, you can use a straight screwdriver and a hammer.

Installing the Alignment Spacers on the Spindle

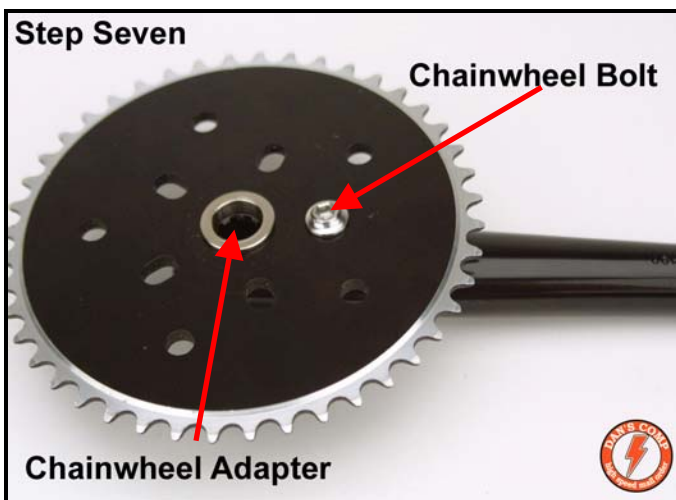
- Slide the 6mm spacer onto the right side (*Drive side*) of the spindle.
- Slide the 10mm spacer onto the left side (*Non-Drive side*) of the spindle.

Note: The spacers can be reversed if necessary. This may vary depending on your frame.

Step Six



Step Seven

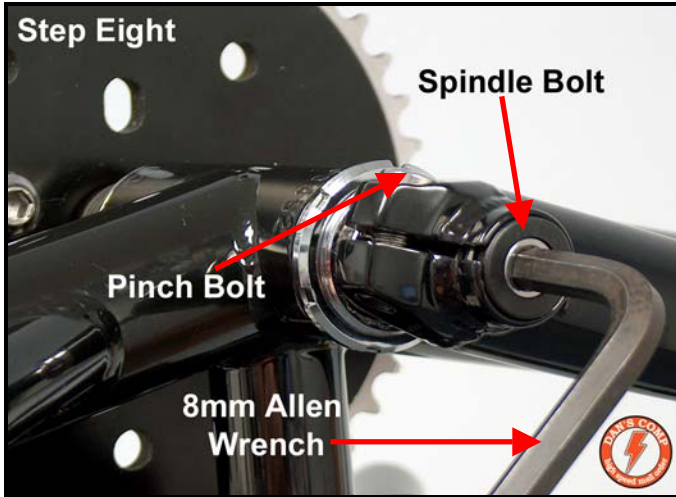


Installing the Chainwheel

- Measure the spindle hole in your chainwheel. If the measurement is 15/16", you will need to install a 15/16" to 3/4" adapter (included). If the measurement is 7/8" (22mm), you will need to a 7/8" to 3/4" adapter (not included). If the measurement is 3/4" (19mm), you do not need an adapter.
- If a chainwheel adapter is needed, install it in the backside of the chainwheel.
- Lubricate the threads of the chainwheel bolt.
- Line up the bolt hole on the right crank arm and the chainwheel.
- Thread the chainwheel bolt into the crank arm with a 6mm allen wrench. Do not tighten completely.

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Poverty Euro POW Three-Piece Crank Install

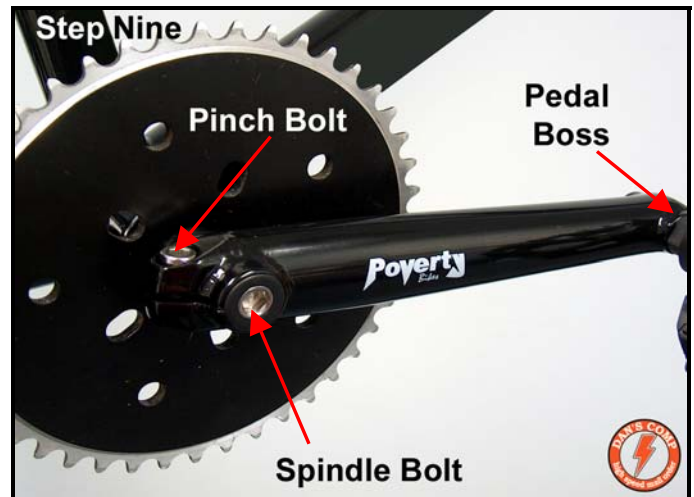


Installing the Crank Arms

- Loosen the pinch bolts on the crank arms with a 6mm allen wrench. This may help the arms slide on the spindle easier (*See picture*).
- Lightly lubricate the splines on the spindle.
- Slide the left and right crank arms onto the spindle. If the arm does not slide on easily, use a wooden or rubber mallet and lightly strike the splined area of the crank arm. Make sure the two arms are installed in opposite directions
- Lightly lubricate the spindle bolts and thread into the ends of the spindle. Use an 8mm allen wrench to tighten the spindle bolts. This may also help pull the arms onto the spindle completely. Make sure the spindle bolts don't bottom out on the spindle.
- Spin the crank arms as you are tightening the bolts to check the clearance between the chain stays of the frame and the end of the crank arm. There should be a minimum of 5mm clearance between the chainstays of the frame and pedal boss.
- You may need to install additional alignment spacers between the crank arms and the bearings. If so, pull the crank arm back off of the spindle. You may need to thread a Universal Crank arm removing tool into the crank arm.

Last, but not least...

- Tighten the chainwheel bolt completely with a 6mm allen wrench.
- Tighten both pinch bolts completely with a 6mm allen wrench.
- Install your pedals. Look for the "R" or "L" on the ends of the spindles. The "R" indicates the right pedal and the "L" indicates the left pedal. The left pedal has reversed threading. Be sure you thread the correct pedal into the correct pedal boss.



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