How to Mount a Comp Cams Degree Wheel to a Honda B-series Crankshaft

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We have a Comp Cams degree wheel in the tool box, which works well for degreeing the cams in our American cars. However, we were unable to locate a crank socket that would work with the B18A1 stroker crankshaft in our 84mm sleeved B18C1 block.

Since we didn't want to spend a lot of time and/or money machining something to fit, we looked around for a cheaper, easier way to mount the degree wheel to the crankshaft.

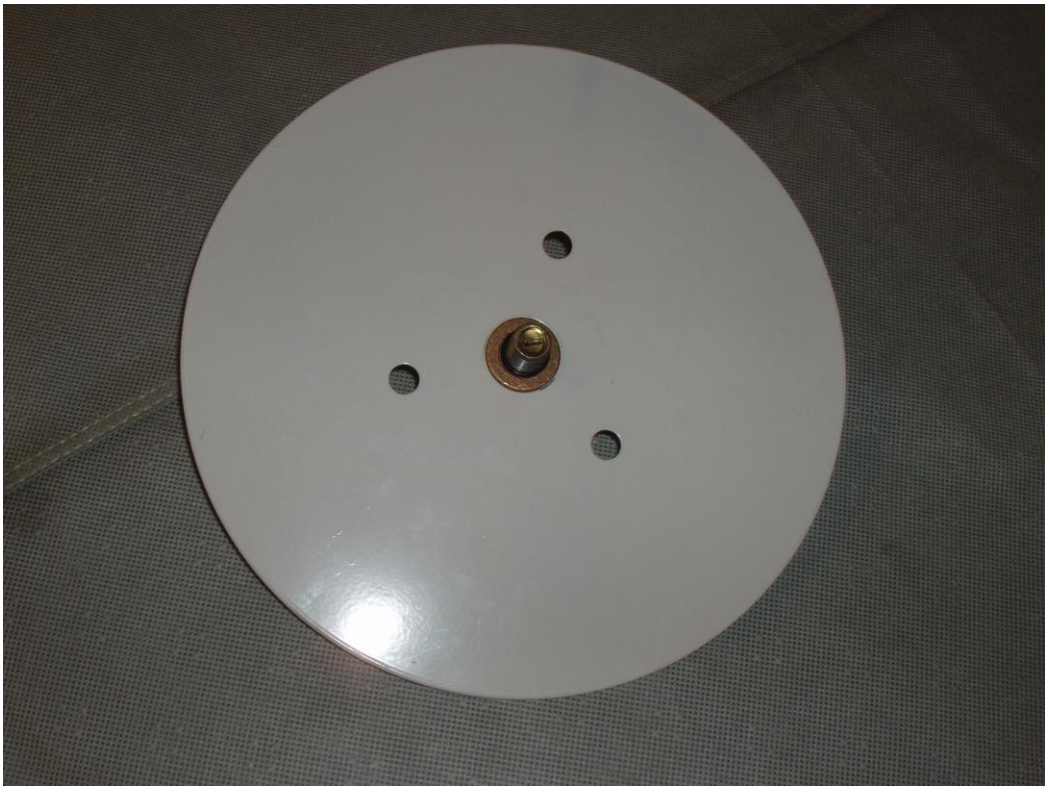
Here is what you will need: (All available from my local hardware store for less than $5)

- Stock B-series Crankshaft Bolt w/ Washer
- Servalite ST2032-4U Bronze Bearing – 5/8" ID x 1" OD x 1/8" $3.09
- #28 O-ring – ½"ID x 5/8"OD x 1/16"
- Flat Washer - ~1-1/16"ID x ~2-3/8"OD (ID must be larger than the bronze bearing OD)

The Servalite bronze bearing is the key item because it fits perfectly inside of the Comp Cams Degree Wheel and almost perfectly around the stock crank pulley bolt. I found it in the Hard-to-find section of the hardware store. Unfortunately, it is a bit thicker than the degree wheel, so the large flat washer is required to clamp the degree wheel in place against the end of the crankshaft.

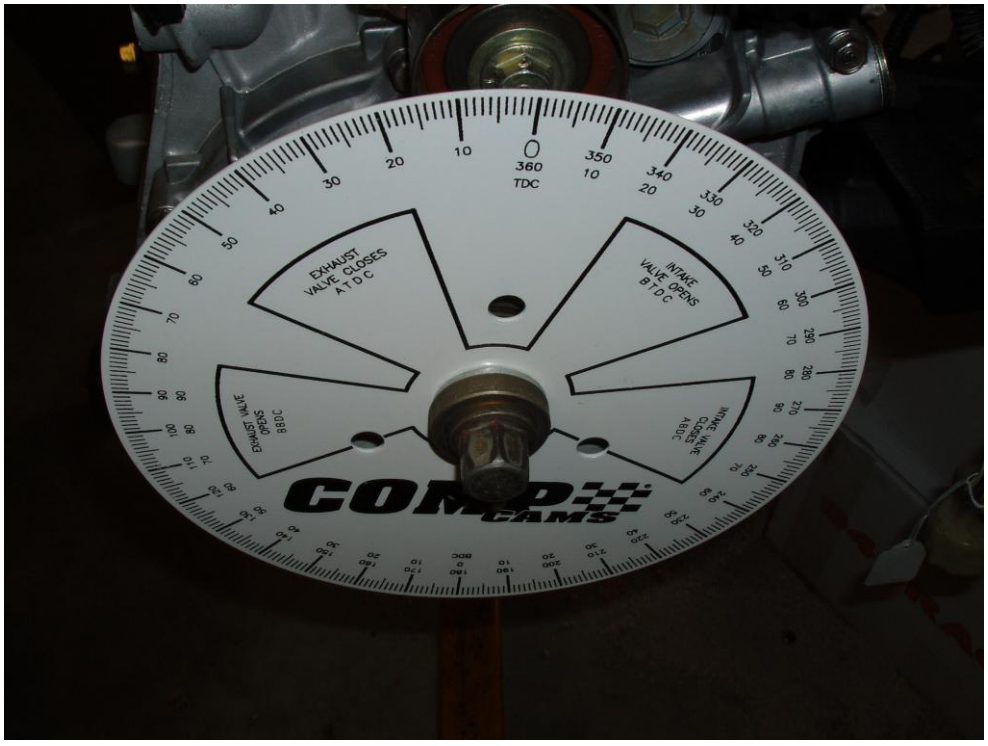
Put the bronze bearing on the stock crank bolt and washer first, followed by the O-ring. The O-ring holds the collection together and helps to center the bronze bearing on the crank bolt. It helps to poke the O-ring down into the ID of the bronze bearing as tight as possible:

Next put the Comp Cams degree wheel face down on the assembly. You will see that the bronze bearing fits perfectly inside the degree wheel, but is a bit thicker.



Put the larger flat washer over the bronze bearing on the back of the degree wheel.

Hold the large flat washer against the back of the degree wheel with two fingers while you screw the crank bolt into the crankshaft. Make sure that the larger washer stays around the OD of the bronze bearing, so it can clamp the degree wheel:



The only downside of this setup is that the B-series engine rotates counter-clockwise from the crank side, so you can't use the crank bolt to rotate the engine during the degreeing process since it will come loose. You will need to rotate the engine using the flywheel during the degreeing process.