

The rod cap and beam are machined as a matched set and cannot be interchanged.

If you have any questions, please call us at 800-521-3560 or email us at [info@arc racing.com](mailto:info@arc racing.com).

[www.arcracing.com](http://www.arcracing.com)

We **strongly** recommend at least a **medium weight oil** with our OHV Billet rods, and it is also highly recommended that your crankshaft journal be polished prior to use.



Thank you for purchasing ARC connecting rods.

2. Measure your crankshaft with the outside micrometer in several places. It should be 1.180" +/- .0005" and appear and feel bearing smooth. If it is out of round by more than .0005", or rough to the touch, you may need to have it polished. However, if it is smaller than 1.1785", it should be replaced until undersized bearings are available.

3. Clean and inspect the bearings, and remove any burrs.

4. Remove the rod bolts and install the bearing halves in the rod beam and cap. The bearings need to be centered side to side, and the parting edges need to be as close to the parting edges of the rod and cap as possible before assembly. This should be done with clean bare hands taking care not to scar the soft bearing babbitt.

\*When fitting the cap to the beam to insert the rod bolts, press the parting edges of the rod and cap firmly together.

5. You now need to find the oil clearance between the bearing and the crankshaft journal, which can be done with plastigage string. Place a 1/4" piece of the string across the bearing surface in between the two oil holes in the rod beam's bearing. Apply a small amount of moly lube or 30 wt. oil to the bolts, install the rod on the crankshaft and tighten the bolts with your fingers.

## ARC GX200/Clone Rod Instructions

ARC connecting rods have been pre-clearanced for large cams. If further cam or crank clearance is necessary, grinding should be done to the cam or crank, not the rod. **Additional grinding of the rod will reduce its structural integrity.**

The rod bolts come with special washers that have a chamfer on one side of the hole to clear the radius under the bolt head. The chamfer must face the bolt head.

To install your connecting rod, you will need a 12 point 1/4" socket and a quality 1/4" drive in/lb torque wrench (a 3/8" drive torque wrench with a 1/4" adaptor will also work). You will also need an outside micrometer, plastigage string for clearance measurements of .001" to .007", some moly-grease or 30 wt. oil and assembly lube.

1. Clean and inspect the rod. Be certain there is no dirt, filings, or other contaminants between the bearing and rod bore or the serrations of the rod cap and beam. Note the two little dots milled into the side of the rod above and below the parting edge. They are there to help you orient the cap and beam. When the rod is properly installed on the crank in the engine, these dots will be one on top of the other and facing you.

6. Tighten each bolt with a torque wrench to approximately 60 in/lbs, and then alternate back and forth between bolts adding 20 in/lbs to each side until you reach 150 in/lbs. Back the bolts back down to 100 in/lbs then re-torque, again alternating 20 in/lbs side to side until you reach 150 in/lbs if you used moly lube or 170 in/lbs if you used oil. Then remove the rod from the crankshaft and compare the smashed width of the plastigage string to the plastigage chart and you will have an oil clearance figure. You are shooting for .0025" to .003" but it should be no less than .002" and no greater than .004". If your clearance is outside this range, please contact ARC at 800-521-3560 for more help.

7. Once clearance is set, apply some assembly lube to the rod, crank, and wrist pin, and install everything. Be very careful when installing the piston/rod into the block to avoid contact between the crank and rod serrations. Install the rod bolts as previously described torquing to at least 150 in/lbs if you use moly lube on the threads or to at least 170 in/lbs if you use oil on the threads. It is better to be slightly over these torque specs than to be below them. It is also a good practice to periodically recheck torque.

**IMPROPERLY TORQUING ROD BOLTS IS ONE OF THE MOST COMMON CAUSES OF FAILURE.**