



## Technical Advice

You will notice that our connecting rod design is quite different from other manufacturers due in part to our stress riser free design. Certain precautions must be taken upon receiving your rods to ensure a trouble free service life. Included with every purchase you will receive an instruction sheet that must be followed completely.

The method needed to achieve proper torque and fastener stretch will be identical for all connecting rods manufactured within our facility, regardless of model or fastener size. The torque value will be determined by the size of the fastener head. Reference the list below for proper torque specifications.

Upon receiving your connecting rods, the rods must be completely disassembled, washed and dried before assembly in the engine can occur. It is imperative that the serrations on the rod cap and rod body remain free of oil, dirt and debris. Use extra caution when handling the rod cap and the rod body separately as the serrations must remain undamaged for proper fitment and assembly. The rod cap and rod body are mated pairs and can not be interchanged with one another. Once clean and dry and installed in the engine, lubricate the threads of each rod bolt with 50W motor oil (brand does not matter as long as it is 50W) and tighten until the head of each fastener just contacts the hat washer in the cap. Slowly and steadily torque each fastener once to the specified torque value listed below. **DO NOT STEP TORQUE** the rod bolts. Use of the step torque method and the use of lubricants other than 50W motor oil will result in the improper stretch of the fasteners. The use of a stretch gauge can be used to verify proper rod bolt stretch, but is not necessary for proper installation.

- 3/8" head ARP L19 fastener: 65ft/lbs torque, 0.0045"-0.0055" fastener stretch
- 7/16" head ARP L19 fastener: 90ft/lbs torque, 0.0055"-0.0065" fastener stretch
- 1/2" head ARP L19 fastener: 105ft/lbs torque, 0.0065"-0.0085" fastener stretch

Do not leave the fasteners torqued for a period greater than 6 months if the connecting rods will be sitting in a box on a shelf or installed in an engine if the engine is going to sit without use. It is good practice to remove all torque and therefore tension and load from the fasteners to avoid housing bore distortion and to avoid over stretching the fasteners beyond yield strength.

Per our recommendation, the vertical bearing clearance(oil clearance) for our connecting rods should be 0.0030"-0.0035".

The side clearance between connecting rods sharing a rod journal should be a minimum of 0.0150" and no more than 0.0200". Our recommendation for wrist pin oil clearance is 0.0012" for most applications, however we can accommodate any preference within reason. We have seen no advantage to increasing or decreasing clearances beyond recommendations. If we may be of assistance in answering any questions, please do not hesitate to contact us.