



06-10-15

## INSTALLATION INSTRUCTIONS PRO SERIES "I" BEAM CONNECTING ROD "300 M" MATERIAL WITH ARP BOLTS

The following guidelines will insure excellent service and "longevity from this set of premium connecting rods.

### FITTING IN BLOCK

Clearance must be checked to maintain a minimum of .060" between the connecting rod and the engine block and camshaft.

### CHECKING CLEARANCES

The following clearances must be maintained to insure proper connecting rod performance.

The big end housing bore is sized to provide proper bearing "crush". Connecting rod bearing to crankshaft clearance should be set at a minimum of .002" and a maximum of .003".

Side clearance should be a minimum of .015" to a maximum of .025" per pair, subject to engine builder preference.

The recommended wrist pin clearance is .0008" minimum to .0015" maximum. In some cases, depending on actual wrist pin diameter, the rods may require sizing at the time of installation.

### FASTENERS

PROPER FASTENER INSTALLATION WILL HELP TO PREVENT A ROD FAILURE! The vast majority of all rod failures are due to incorrect fastener installation. The parting line area and threads should be thoroughly cleaned prior to assembly and **be sure to seat the rod cap to the rod body evenly, otherwise the cap can become cocked and could result in cross threading of the fastener(s)**. This is best achieved by alternately tightening the fasteners until the cap is fully seated to the rod body. Apply the supplied lube to threads and under head of fasteners before assembly. Additional lube can be purchased separately as Manley part number **40171** (1/2 OZ.) or **40172** (1 OZ.).

When tightening the fastener, bolt stretch is the singular most important value to be considered. Torque the fastener within the indicated torque range until specified stretch is achieved. When the desired stretch has been achieved by applying a torque load that falls within the allowable range, the fastener is properly tightened.

Description	Bolt Part No.	Material	Under Head Length	Recommended Torque Value Range with Manley Lube in ft./lbs.	Recommended Bolt Stretch Value	Torque Value
						(with Manley Lube) During Final Assembly at Manley Performance
SB Chev (3/8 bolt)	42320	ARP 625+	1.500"	55-60	.0063" - .0067"	55
SB Chev (3/8 bolt)	42321	ARP 625+	1.600"	55-60	.0065" - .0075"	55
SB Chev (3/8 bolt)	42358	ARP 3.5	1.600"	45-50	.0059" - .0063"	45
SB Chev (3/8 bolt)	42350	ARP 2000	1.500"	45-55	.0058" - .0062"	50
SB Chev (3/8 bolt)	42351	ARP 2000	1.600"	45-55	.0058" - .0062"	50
SB Chev (7/16 bolt)	42390	ARP 2000	1.450"	70-80	.0050" - .0060"	75
SB Chev (7/16 bolt)	42359	ARP 3.5	1.450"	80-85	.0050" - .0054"	80
SB Chev (7/16 bolt)	42252	ARP 625+	1.450"	95-100	.0060" - .0065"	95
GT-R (7/16 bolt)	42384	ARP 2000	1.650"	90-100	.0064" - .0068"	95

If recommended bolt stretch is only achieved by applying torque that is outside of the recommended torque range, there is a problem either with the fastener, the bolt threads, the application of the lube, or the torque wrench.

**IMPORTANT:** Free length of fasteners should be measured and recorded prior to installation. If free length of fasteners increases by more than .001" at any time the fastener in question should be replaced immediately or failure may result.

**NOTE:** It is not recommended to remove any material from the connecting rod cap for balancing purposes.