

INSTALLATION INSTRUCTIONS 4340 MATERIAL

07-12-17

PRO SERIES "|" BEAM CONNECTING ROD WITH ARP BOLTS AND MANLEY LUBE

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.

			Under	Recommended Torque Value Range		Torque Value w/Manley Lube During Final
	Bolt		Head	w/Manley Lube	Bolt Stretch	Assembly at
Description	Part No.	Material	Length	•	Value Ma	anley Performance
Tour Lite / Custom (5/16 bolt)	42281	ARP 2000	1.500"	30-35	.0055"0058"	30
Ford 4.6L Tour Lite (3/8 bolt)	42351	ARP 2000	1.600"	45-55	.0058"0062"	50
Ford 4.6L, 5.4L LT/WT (7/16 bolt)	42390	ARP 2000	1.450"	70-80	.0050"0060"	75
Ford 4.6L, 5.4L LT/WT (7/16 bolt)	42359	ARP 3.5	1.450"	80-85	.0050"0054"	80
SB Chev, Sport Compact (3/8 bolt) 42350	ARP 2000	1.500"	45-55	.0058"0062"	50
SB Chev, Sport Compact (3/8 bolt) 42320	ARP 625+	1.500"	50-60	.0063"0067"	55
SB Chev, Sport Compact (3/8 bolt) 42351	ARP 2000	1.600"	45-55	.0058"0062"	50
Small Block Chevy (3/8 bolt)	42358	ARP 3.5	1.600"	45-50	.0059"0063"	45
SB Chev, Sport Compact (3/8 bolt) 42321	ARP 625+	1.600"	55-60	.0065"0075"	55
SB Chev, Chry 5.7/6.1L (7/16 bolt)	42390	ARP 2000	1.450"	70-80	.0050"0060"	75
Small Block Chevy (7/16 bolt)	42359	ARP 3.5	1.450"	80-85	.0050"0054"	80
Small Block Chevy (7/16 bolt)	42252	ARP 625+	1.450"	95-100	.0060"0065"	95
BBC, Duramax, GT-R (7/16 bolt)	42384	ARP 2000	1.650"	90-100	.0064"0068"	95
BBC & Chrysler (7/16 bolt)	42397	ARP 625+	1.750"	85-95	.0068"0072"	90
BBC, Chry, Powerstroke (7/16 bolt)	42391	ARP 2000	1.850"	85-95	.0069"0073"	90
BBC (7/16 bolt)	42296	ARP L-19	1.650"	85-95	.0065"0070"	90

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.

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