



Revision 08/22/14

1013199 3RZ LCE Chromoly H-Beam Rods

Thank you for purchasing LCE Performance H-Beam connecting rods. We strive to maintain the highest quality products and services. To ensure optimum service, please read the following instructions thoroughly. Proper installation is crucial to insure dependable service life. If you need any further assistance or have any questions, please contact our technical department at (928) 855-6341.

Specific: This H-Beam Rod set is designed to **ONLY** to be used with the LCE Pro forged 3RZ piston. The piston pin location has been changed to accommodate this performance rod set.

Part Number	Description	Part Number	Description
1010021	3RZ Piston & Rod Set Low Compression 8.3:1 +.020"	1014375	Pro Piston Set 8.3:1 +.020"
1010022	3RZ Piston & Rod Set Stock Compression 10:1 +.020"	1014368	Pro Piston Set 10:1 +.020"
1010023	3RZ Piston & Rod Set High Compression 12:1 +.020"	1014362	Pro Piston Set 12.:1 +.020"
1010026	3RZ Piston & Rod Set With A Custom Piston	1014379	Pro Piston Set Custom

General: Always disassemble and thoroughly clean all rod bolt surfaces. Do not use metal stamps to number rods, Felt tip markers or tool maker's dye are an excellent alternative.

Fasteners: Rod bolt threads and underside of head of the bolt should be lubricated with ARP Moly assembly lube. Do not use oil or Loctite. Cap should be seated on rod by aligning cap by hand and lightly tapping into place. Alternate tightening bolts to avoid cocking cap.

Warning: If any other lubricant is used on bolt, bolt stretch method must be used due to different Viscosity lubricants. Improper bolt torque will cause premature bolt failure.

For Rod Bearings for this set you will need to use one of the following:

- 1013132 Rod Bearing Set(Toy Journal)-20R/22R/RE/RET 0.25mm
- 1013135 Rod Bearing Set(Toy Journal)-20R/22R/RE/RET 0.50mm
- 1013138 Rod Bearing Set(Toy Journal)-20R/22R/RE/RET 0.75mm
- 1013141 Rod Bearing Set(Toyota Journal)-20R/22R/RE/RET STD

Torque Specs: 3 Step Process

Thread Size & Material	Identification	Torque	Bolt Stretch
7/16" ARP 8740	7/16" bolt head	First 42 ft lbs, Second 55 ft lb, Final 63 ft lbs	.0059"-.0063"

With ARP Moly Lube

For disassembly break bolt loose ¼ turn each rod bolt alternating sides until loose. To accurately determine the life of a bolt, it is recommend that a log of the bolts original free-standing (untorqued) length should be kept and recorded upon subsequent teardowns for inspection. The freestanding length should be checked against its original length. If there is an increase of .001" or more, or if there is any permanent deformation or galling, the bolt should be replaced.



Connecting Rod Bolt Free Length Log Sheet

	Date:		Date:		Date:		Date:	
	IN	OUT	IN	OUT	IN	OUT	IN	OUT
#1								
#2								
#3								
#4								
#5								
#6								
#7								
#8								

Caution: Rod bolts are manufactured from high grade steel and are vulnerable to corrosion. Care should be taken when handling fasteners to prevent exposing to moisture. Bolts should be handled by the bolt head. Bolts should always be lubricated prior to handling or storage.

Warning: You must always check engine clearances when changing internal engine components! You should have a minimum of .030+clearance between the rod bolt head and the block.

Clearances: Listed below are typical clearances and will vary according your application. Refer to manufacturer's specifications for your application. See Factory service manual.
Do **NOT** modify rods or rod bolts for clearance.

Rod bearing oil clearance - .0015"-.0035"

Piston pin clearance - .0005" - .0015"

Rod side clearance (single rod journal) - .007"-.015"

Rod-to-block - .030" minimum

Wristpins: Bent or out of round wrist pins will cause deformation of pin bores. Check your pins! We do not recommend the use of pins of less than .110+wall in normally aspirated engines and .150+wall in forced induction applications. These are minimum wall requirements for Chrome Moly or equivalent materials. We can sell you pins if needed.