

AERA/AERSCO
AERA Technical Services Department
500 Coventry Lane, Suite 180 Crystal Lake IL 60014
Phone 888/324-2372 Fax 888/329-2372

TECHNICAL BULLETIN		
	December 2002 TB 2018R	

Connecting Rod Bolt Torque Caution For
Allis Chalmers 201, 301 & 426 Cubic Inch Engines

The AERA Technical Committee offers the following information on connecting rod bolt torque specifications for Allis-Chalmers engines. This information applies to both early and late style engines, as several different hardware combinations have been used. Previously published TB-2018 should be discarded as TB-2018R contains updated information.

Two different connecting rod and cap mating surface finishes were used and identification can be made by visual inspection. Early style connecting rods have a serrated mating surface between the cap and the rod. Middle and Late style connecting rods can be identified by smooth/machined surfaces between the cap and the rod.

ALL MODELS

When installing, use a light amount of engine oil on capscrew threads and on the underside of the capscrew head at the mating surface. Tighten hardware using a minimum of two incremental torque steps, three on higher torque hardware (7.0L). Non-serrated connecting rod caps **MUST** be aligned with the rod during installation. To do so, install hardware finger tight, use two feeler gauges between the rod/cap assembly and the side of journal to hold assembly snug to one side of journal. Tighten hardware in multiple steps and then remove feeler gauges.

Allis-Chalmers engine models: 2000 series, 3.3 and 4.9-liter series (2200, 2800, 2900, 433 & 649 types, etc.)

Early style rods use hex-head capscrew with washer. The rod cap bolt holes have a 30° degree chamfer. Capscrew size used is .375" – 24 x 2.00" long, grade 8, tighten those capscrews to 50 ft/lbs.

Later style rods have the rod cap chamfer deleted and a new 12-point capscrew

This information is provided from the best available sources. However, AERA does not assume responsibility for data accuracy or consequences of its application. Members and others are not authorized to reproduce or distribute this material in any form, or issue it to their branches, divisions, or subsidiaries, etc. at a different location, without written permission.

© Copyright AERA 2006



Reference:	
-------------------	--

TECHNICAL BULLETIN



December 2002

TB 2018R

introduced. Capscrew size used is .375" - 24 x 2.00" long, grade 100, tighten those capscrews to 45 ft/lbs.

Note: Do not use later 12-point capscrews in early rods with chamfered holes or loosening of capscrews will occur. Early rods may be machined and balanced to accept later capscrews.

Allis-Chalmers engine models: 3000 Series, 7.0 liter series (3400, 3500, 3700, 3750 & 670 types, etc.)

Early style rods use serrated rod caps with hexhead capscrews and washers. Capscrew size .437" 20 x 2.25" grade 8, tighten those capscrews to 85 ft/lbs.

Middle style rods use smooth machined rod and cap mating surfaces. Socket head capscrew size .437" 20 x 2.156" long, grade 100, tighten those capscrews to 70 ft/lbs.

Later style rods use smooth machined rod and cap mating surfaces. 12-point capscrew size .437" 20 x 2.156" long, grade 100, tighten those capscrews to 70 ft/lbs.

Note: Do not use middle or later type hardware in early-serrated connecting rods.

The AERA Technical Committee

This information is provided from the best available sources. However, AERA does not assume responsibility for data accuracy or consequences of its application. Members and others are not authorized to reproduce or distribute this material in any form, or issue it to their branches, divisions, or subsidiaries, etc. at a different location, without written permission.
© Copyright AERA 2006



Reference: