Rod & Main Bearings

ROD BEARINGS

Crower high performance rod bearings are quality engine bearings designed to withstand the extreme loads of professionally tuned racing engines. Features high strength trimetal copper-lead material in the load area for superior strength and embedding. Lead overplate provides excellent fatigue strength and superior conformability to compensate for distortion and/or misalignment. Superlative bearing-to-bearing size consistency enables you to "build-in" the exact oil clearance you require, while narrowed and chamfered versions are available for large fillet journals where additional clearance is necessary. If running aluminum rods, Crower has chamfered rod bearings with dowel pin holes.

STANDARD

Part No.	Description
85300	CHEVROLET 283-327 V8
85301	CHEVROLET 302-305-327-350-400 V8
85310	CHEVROLET 396-402-427-454 V8

CHAMFERED

Part No.	Description
85300C	CHEVROLET 283-327 V8
85301C	CHEVROLET 302-305-327-350-400 V8
85310C	CHEVROLET 396-402-427-454 V8

CHAMFERED w/DOWEL PIN HOLE

Part No.	Description
85300CD	CHEVROLET 283-327 V8
85301CD	CHEVROLET 302-305-327-350-400 V8
85310CD	CHEVROLET 396-402-427-454 V8
85330CD	CHRYSLER 426 Hemi V8

Note: Specify standard, .010", .020" or .030" undersized when ordering.

MAIN BEARINGS

Crower high performance main bearings offer professional racers and engine builders the extreme accuracy and bearing-to-bearing consistency required to build an engine that can handle the extreme loads associated with high performance racing. Features high strength copper-lead in the load area for superior strength and embedding. Crower high performance main bearings are designed to deliver improved bearing-to-bore contact for better heat transfer and a reduction in high rpm bearing chatter and or failure. Order chamfered bearings, for use with large fillet journals. A must when running any Crower crank.

STANDARD

Part No.	Description
85400	CHEVROLET 283-327 V8
85401	CHEVROLET 302-305-327-350-400 V8
85402	CHEVROLET 400 V8
85410	CHEVROLET 396-402-427-454 V8

CHAMFERED

Part No.	Description
85400C	CHEVROLET 283-327 V8
85401C	CHEVROLET 302-305-327-350-400 V8
85402C	CHEVROLET 400 V8
85410C	CHEVROLET 396-402-427-454 V8
85430C	CHRYSLER 426 Hemi V8

BEARING SPACER KIT

Part No.	Description
85200	Adapts Chevrolet 350 crank to 400 block includes bearings.

Note: Specify standard, .010", .020" or .030" undersized when ordering.

Connecting Rods

THE CROWEROD DIFFERENCE

An extensive effort in CAD (Computer Assisted Design) & F.E.A (Finite Element Analysis), as well as rigorous dyno and track testing have been expended through perfection of our strongest yet lightest rods available. When you employ a set of genuine Crowerods you do so with the knowledge and peace of mind that each rod will perform flawlessly. That's why they are hands down, the favorite of professional and amateur engine builders throughout the world.

IT'S THE MATERIAL...

While other manufacturers are cutting corners, using inferior or low grade materials, Crower has kept costs down without lowering our standards. Crowerods incorporate only the finest aircraft quality steel and titanium materials. They are heat treated to obtain that perfect balance of strength and durability , to insure the best quality and reliability possible.

CROWER, your # 1 source for rods. CROWER makes rods for almost any application.

AND THE DESIGN

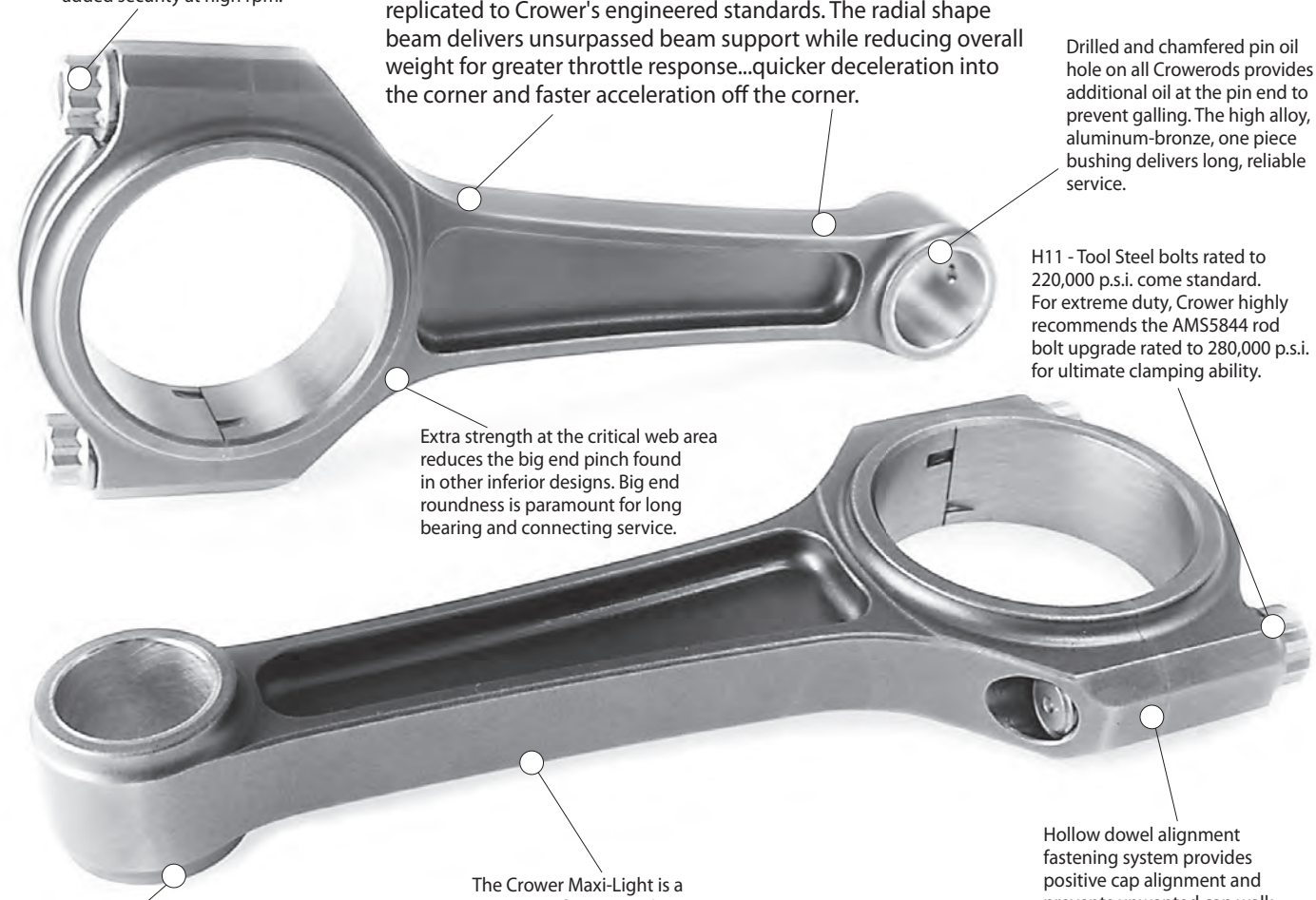
Take a close look at a Crowerod and you'll notice that it is shaped like no other rod in the industry. Every contour is designed to enhance overall strength and reliability at high engine rpm. Crower connecting rods incorporate an "I-beam" design that eliminates pockets of excess material and delivers exceptional longitudinal and horizontal strength. The cap screw design assures true roundness and a positive bearing seat under severe load factors, in which eliminating rod bearing failure. Tolerances are to an exacting ±0.0001" of an inch to insure trouble free installation. For those who prefer an "H-beam" design, Crower also offers this style of rod on a custom order basis.

THE BOTTOM LINE

When you install a set of genuine Crowerods in your high performance engine, the design expertise, material and craftsmanship are working hard to maximize your racing effort. It's the kind of dependability and confidence that can put you in the winner's circle. Crowerods are available for most domestic and foreign applications, as well as motorcycles, industrial, vintage and one of a kind prototypes. Our Crowerod design is often imitated, but never duplicated. For any new enthusiast we have an excellent staff that can help you on any particular design you may want. **Protect your investment by insisting on only genuine Crowerods for your high performance needs.**

"RBT" Steel Billet Connecting Rods

Crower's all new Radial Beam Technology design ("RBT") is the ultimate connecting rod, often copied by competitors, but never replicated to Crower's engineered standards. The radial shape beam delivers unsurpassed beam support while reducing overall weight for greater throttle response...quicker deceleration into the corner and faster acceleration off the corner.



RADIAL BEAM TECHNOLOGY ("RBT") MAXI-LIGHT DESIGN

Crower's exclusive "RBT" Maxi-Light design is a revolutionary new beam shape that removes excess material from noncritical stress areas for the lightest, yet strongest connecting rod available on the market. Choose from a wide variety of weight configurations, depending on your individual horsepower and rpm requirements.

AMS5844 ROD BOLT UPGRADE

Crower's AMS5844 rod bolt upgrade is available for all steel billet and titanium rods. Highly recommended for extreme duty rpm and endurance applications. Rated at 280,000 p.s.i., these bolts are corrosion resistant, nonmagnetic and deliver ultimate clamping capabilities for the highest cycle life. Specify desired rod bolt part number when ordering.

Proper bolt torque: Torque rod bolts to 10 ft lbs on both sides, then torque to proper spec with one pull.

Upgrades: 280,000 p.s.i. rod bolts, specify #90842 for 3/8
280,000 p.s.i. rod bolts, specify #90830 for 7/16

"RBT" Steel Billet Connecting Rods

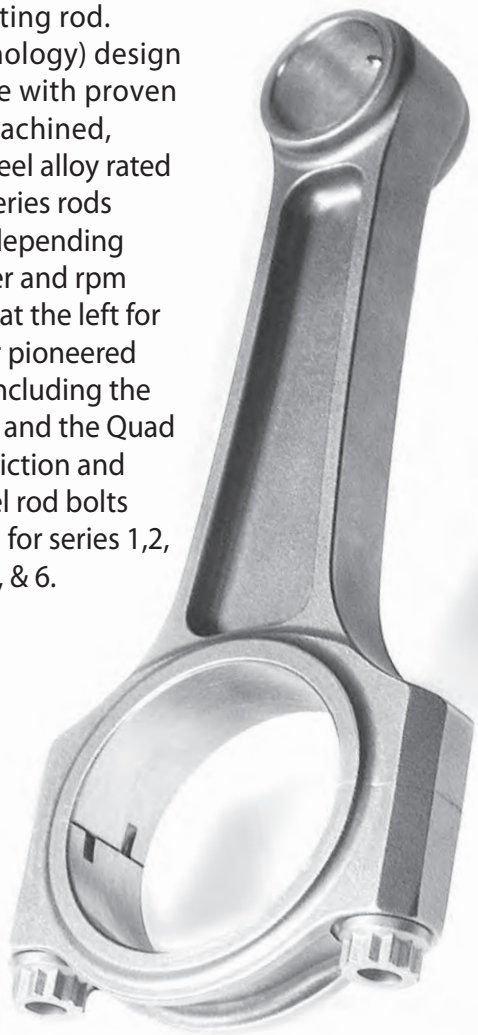
ALSO AVAILABLE IN TITANIUM

RADIAL BEAM TECHNOLOGY MAXI-LIGHT DESIGN

® Maxi-Light is a Registered Trademark of Crower, Inc.

The original tapered beam connecting rod. Crower's "RBT" (Radial Beam Technology) design combines lightweight performance with proven reliability at extended rpm. CNC machined, vacuum degassed, and premium steel alloy rated to 170,000 p.s.i. The Maxi-Light 93 Series rods are available in six unique designs, depending on intended application, horsepower and rpm considerations. Refer to the column at the left for weights and hp/rpm ratings. Crower pioneered the use of small journal diameters, including the popular Honda bearing size (2.008") and the Quad 4 bearing size (2.015") for reduced friction and increased horsepower. H11 tool steel rod bolts come in standard sizes, 3/8 (#90829) for series 1,2, & 3, and 7/16 (#90826) for series 4, 5, & 6.

Optional AMS5844 bolt upgrade available (280,000 p.s.i.) for both 3/8 (#90842) & 7/16 (#90830) bolts.



MAXI-LIGHT® 93 SERIES 1

APPROX. WEIGHT: 6.0" @ 495g
HORSEPOWER RANGE: 500+ (oval)
HORSEPOWER RANGE: 550+ (drag)

MAXI-LIGHT® 93 SERIES 2

APPROX. WEIGHT: 6.0" @ 520g
HORSEPOWER RANGE: 600+ (oval)
HORSEPOWER RANGE: 650+ (drag)

MAXI-LIGHT® 93 SERIES 3

APPROX. WEIGHT: 6.0" @ 580g
HORSEPOWER RANGE: 650+ (oval)
HORSEPOWER RANGE: 700+ (drag)

MAXI-LIGHT® 93 SERIES 4

APPROX. WEIIGHT: 6.0" @ 605g
HORSEPOWER RANGE: 750+ (oval)
HORSEPOWER RANGE: 800+ (drag)

MAXI-LIGHT® 93 SERIES 5

APPROX. WEIGHT: 6.0" @ 645g
HORSEPOWER RANGE: 850+ (oval)
HORSEPOWER RANGE: 1000+ (drag)

MAXI-LIGHT® 93 SERIES 6

Nitrous \ Turbo blown applications.
Extreme Horsepower.
Call to special order.

** Choose the desired HP Series number (1, 2, 3, 4 , 5, 6).*

Part No.	C-to-C	B.E. Bore	P.E. Bore	B.E. Width
ML93000B*-8	5.700"	2.125"	.927"	.941"
ML93002B*-8	6.000"	2.125"	.927"	.941"
ML93003B*-8	5.850"	2.125"	.927"	.941"
ML93004B*-8	6.125"	2.125"	.927"	.941"
ML93005B*-8	5.700"	2.225"	.927"	.941"
ML93006B*-8	6.000"	2.225"	.927"	.941"
ML93007B*-8	6.250"	2.225"	.927"	.941"
ML93008B*-8	5.850"	2.225"	.927"	.941"
ML93009B*-8	6.125"	2.225"	.927"	.941"
ML93040B*-8	6.200"	2.125"	.927"	.941"
ML93041B*-8	6.200"	2.225"	.927"	.941"
ML93042B*-8	6.000"	2.015"	.927"	.941"
ML93043B*-8	6.386"	2.225"	.990"	.990"
ML93900B*-8	Custom	2.125"	Custom	Custom
ML93901B*-8	Custom	2.008" Honda	Custom	Custom
ML93902B*-8	Custom	2.015" Quad 4	Custom	Custom
ML93903B*-8	Custom	2.008" IRL	Custom	Custom
ML93904B*-8	Custom	1.890"	Custom	Custom
ML93905B*-8	Custom	2.225"	Custom	Custom

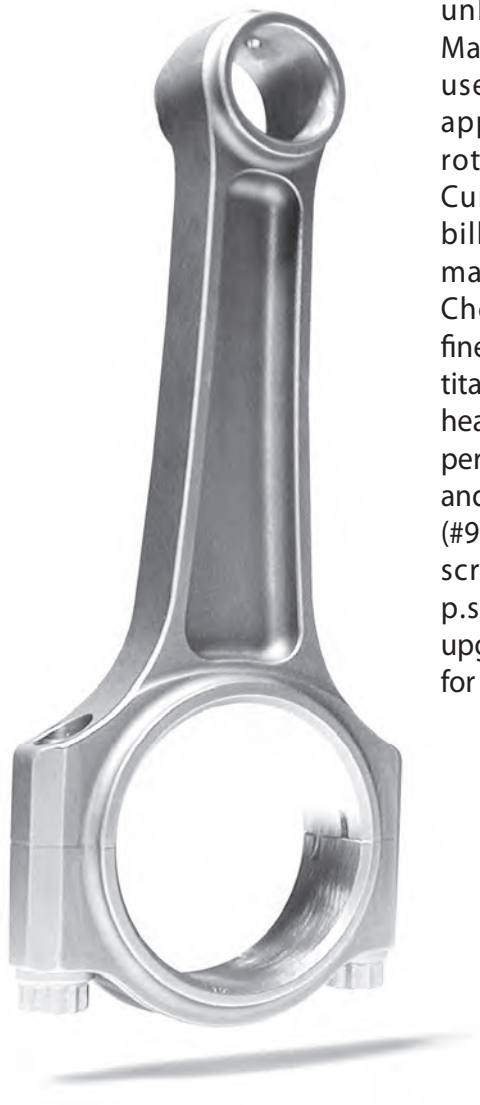
Steel Billet Connecting Rods

Big Block V8
366 396 402 427 454 502

THE SPEED DEMON TEAM
RELIES ON CROWER Clutch, Crankshaft & Connecting Rods

MAXI-LIGHT® DESIGN

® Maxi-Light is a Registered Trademark of Crower, Inc.



Extremely light, yet unbelievably strong, the Maxi-Light is intended for use in moderate horsepower applications, where light rotating mass is a must. Currently the lightest steel billet rod available on the market is for big block Chevrolet. Made with the finest aircraft quality steel and titanium materials. They are heat treated to obtain that perfect balance of durability and strength, including 7/16 (#90826) H-11 tool steel cap screw bolts rated at 220,000 p.s.i. Optional AMS5844 bolt upgrade available (280,000 p.s.i.) for 7/16 bolt (#90830).

MAXI-LIGHT® SERIES 4

APPROX. WEIGHT: 6.386" @ 735g
HORSEPOWER RANGE: 850+ (oval)
HORSEPOWER RANGE: 1000+ (drag)

MAXI-LIGHT® SERIES 5

APPROX. WEIGHT: 6.386" @ 800g
HORSEPOWER RANGE: 1000+ (oval)
HORSEPOWER RANGE: 1500+ (drag)

MAXI-LIGHT® SERIES 6

Nitrous \ Turbo blown applications.
Extreme Horsepower.
Call to special order.

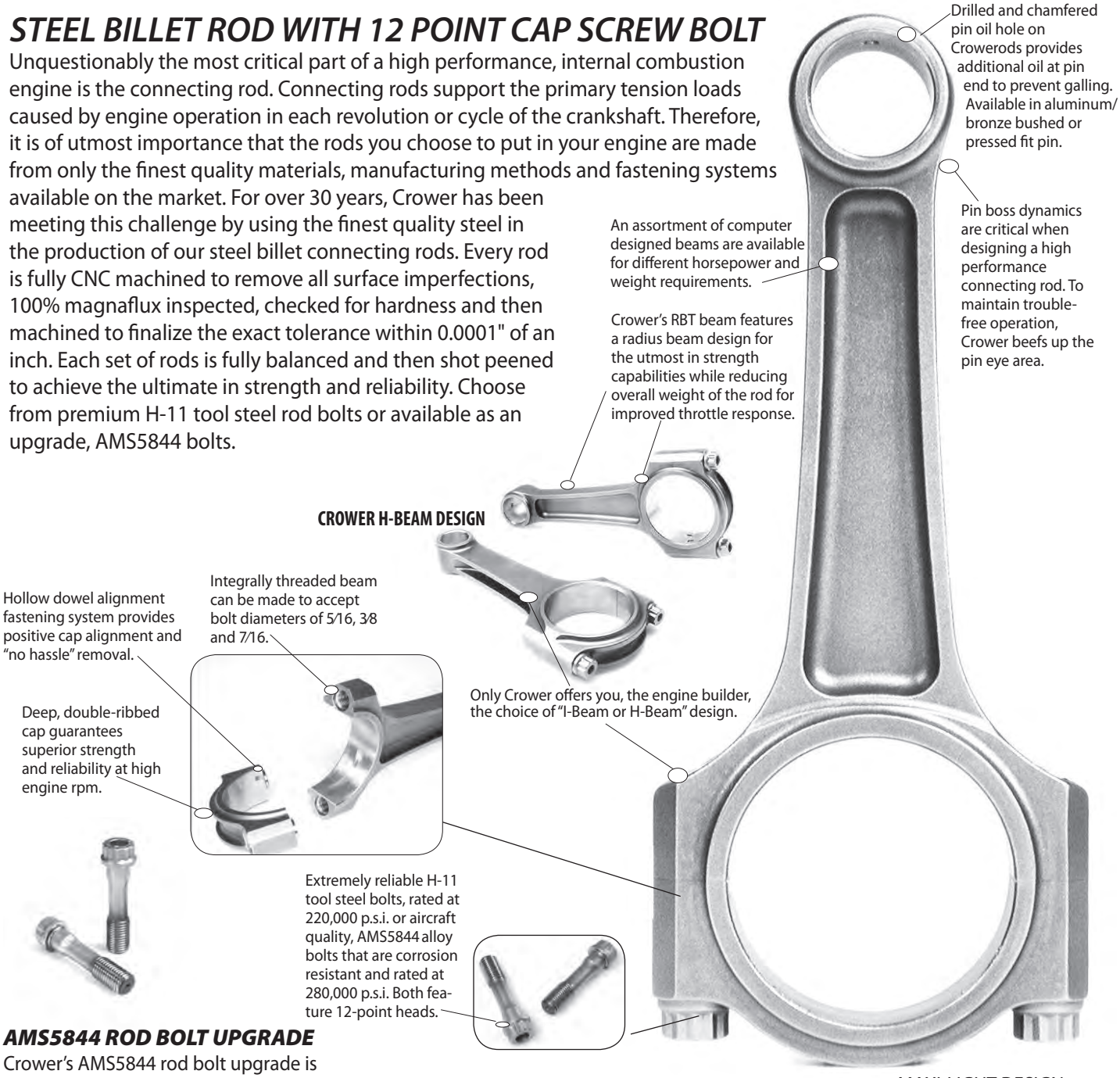
Part No.	*C-to-C*	*B.E. Bore*	*P.E. Bore*	*B.E. Width*
ML93010B*-8	6.136"	2.325"	.990"	.991"
ML93043B*-8	6.386"	2.225"	.990"	.990"
ML93011B*-8	6.386"	2.325"	.990"	.991"
ML93014B*-8	6.405"	2.325"	.990"	.991"
ML93012B*-8	6.536"	2.325"	.990"	.991"
ML93015B*-8	6.625"	2.325"	.990"	.991"
ML93016B*-8	6.700"	2.325"	.990"	.991"
ML93017B*-8	6.800"	2.325"	.990"	.991"
ML93911B*-8	Custom under 7.250"	2.325"	Custom	.991"
ML93909B*-8	Custom over 7.250"	2.325"	Custom	.991"

**** Choose the desired HP Series number (4, 5, or 6).***
If Pressed Fit Pin desired, replace "B" after Part No. (ex. ML93010PF4-8).
All weights are approximate.

Steel Billet Connecting Rods

STEEL BILLET ROD WITH 12 POINT CAP SCREW BOLT

Unquestionably the most critical part of a high performance, internal combustion engine is the connecting rod. Connecting rods support the primary tension loads caused by engine operation in each revolution or cycle of the crankshaft. Therefore, it is of utmost importance that the rods you choose to put in your engine are made from only the finest quality materials, manufacturing methods and fastening systems available on the market. For over 30 years, Crower has been meeting this challenge by using the finest quality steel in the production of our steel billet connecting rods. Every rod is fully CNC machined to remove all surface imperfections, 100% magnaflux inspected, checked for hardness and then machined to finalize the exact tolerance within 0.0001" of an inch. Each set of rods is fully balanced and then shot peened to achieve the ultimate in strength and reliability. Choose from premium H-11 tool steel rod bolts or available as an upgrade, AMS5844 bolts.



MAXI-LIGHT DESIGN

AMS5844 ROD BOLT UPGRADE

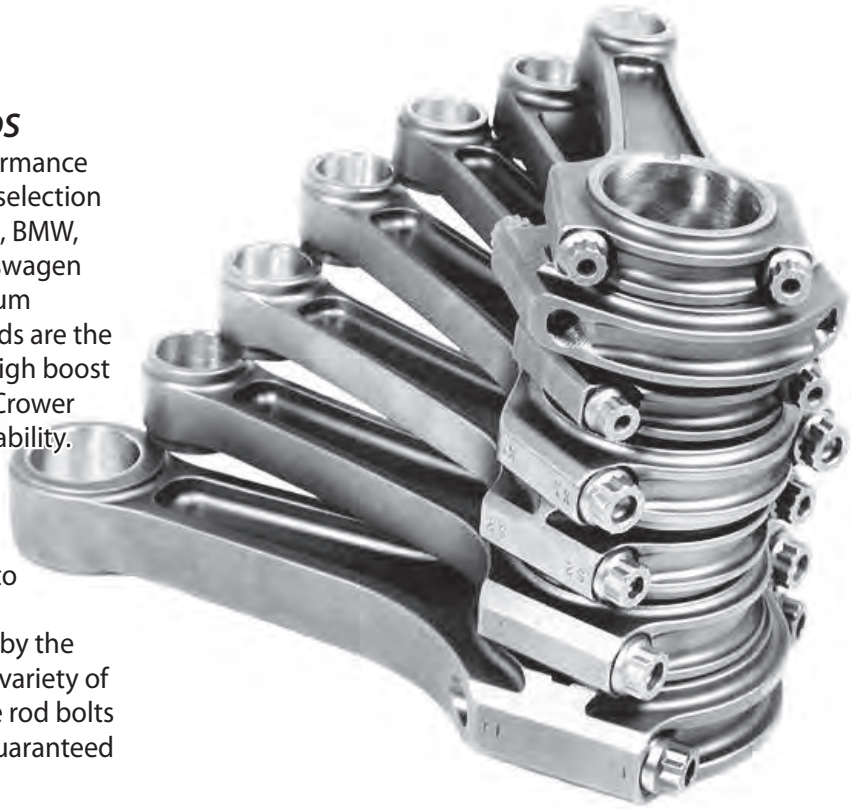
Crower's AMS5844 rod bolt upgrade is available for all steel billet and titanium rods. Highly recommended for extreme duty rpm and endurance applications. Rated at 280,000 p.s.i., these bolts are corrosion resistant, nonmagnetic and deliver ultimate clamping capabilities for the highest cycle life. Specify desired rod bolt when ordering.

Proper bolt torque: Torque rod bolts to 10 ft lbs on both sides, then torque to proper spec with one pull.

CROWER "H-BEAM" CONNECTING RODS

Although Crower is known mostly for it's "I-Beam" rods, we also build a variety of European influenced "H-Beam" designs as well. The thicker cross sections of the H-Beam are better suited for the EDM oil hole that runs the length of the beam delivering added oil to the pin. Weights are equivalent to Crower's standard "I-Beam" billet rod. Specify H-Beam when ordering. For Pressure Fed Pin option specify #90798 after rod part number.

Steel Billet Connecting Rods



CUSTOM BILLET CONNECTING RODS

Crower is the industry leader in high performance connecting rods. Choose from the largest selection of makes available including Honda/Acura, BMW, Porsche, Ferrari, Nissan, Toyota, Audi, Volkswagen and more. CNC manufactured from premium quality steel and titanium, Crower billet rods are the only choice when running nitrous oxide, high boost or high rpm in your vehicle. Contact your Crower Tech for more information, including availability.

MANUFACTURING

Crower has the manufacturing capability to produce connecting rods for any type of performance requirement. As you can see by the Crowerod availability list, we make a wide variety of rods. All are equipped with cap screw style rod bolts and hollow dowel alignment sleeves for guaranteed ultimate clamping.

MATERIALS

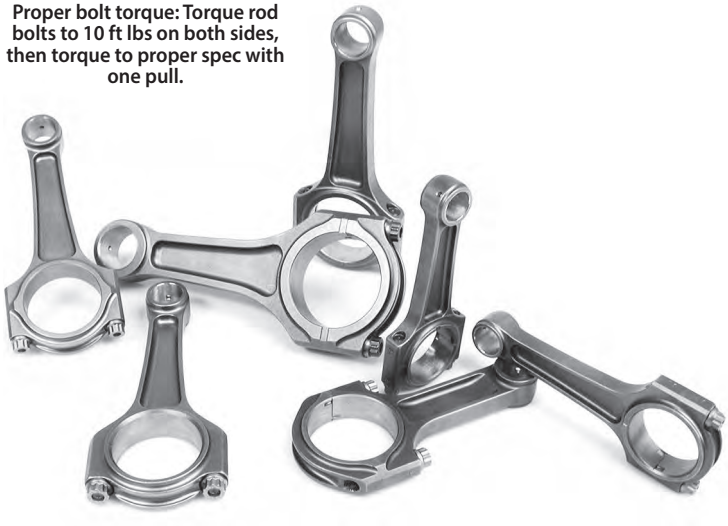
Crowerods incorporates only the finest aircraft quality materials. They are heat treated to obtain that perfect balance of strength and durability.

- Premium Steel and Titanium.
- Uniform hardness developed by heat treatment.
- High fatigue strength is ideal for stressed parts.
- H-11 (220,000 psi) or AMS5844 (280,000 psi) bolts.

CROWEROD AVAILABILITY

TRUCKS	DOMESTICS	IMPORT	MOTORCYCLES
Chevrolet	Buick	BMW	BSA
Caterpillar	Cadillac	Nissan/Datsun	Ducati
Cummings	Chevrolet	Fiat	Harley Davidson
Dodge	Chrysler	Honda/Acura	Honda
Ford	Dodge	Jaguar	Indian
GMC	Ford	Mercedes Benz	Kawasaki
Jeep	GMC	Mitsubishi	Norton
John Deere	Mopar	Porsche	Royal Infield
Mack	Oldsmobile	Renault	Suzuki
Peterbuilt	Plymouth	Toyota/Lexus	Triumph
White	Pontiac	VW/Audi	Yamaha

Proper bolt torque: Torque rod bolts to 10 ft lbs on both sides, then torque to proper spec with one pull.



BUICK

Part No	Description	Length	B.E. Bore	Pin Dia
B93907B-6	Buick 6 cyl	Custom	Specify	Specify
B93908B-8	Buick V8	Custom	Specify	Specify

If press fit pin is desired, specify "PF" after part number.

CHEVROLET/GM

Part No	Description	Length	B.E. Bore	Pin Dia
B93906B-6	Chevy 6 cyl	Custom	Specify	Specify
B93731B-4	GM Ecotec	5.767"	2.052"	.787"
B93732B-8	GM 2.4L	5.715"	2.015"	.866"
B93036B-8	GM Duramax 6600	6.420"	2.637"	1.358"
B93936B-8	GM Duramax 6600	Custom	Custom	Custom
B93051B-8	LS1 V8	6.100"	2.225"	.944"
B93737B-4	Saturn 99 & up	5.846"	1.976"	.787
B93736B-4	Saturn 1.9L	5.712"	1.976"	.787"

If press fit pin is desired, specify "PF" after part number.

Steel Billet Connecting Rods

FORD

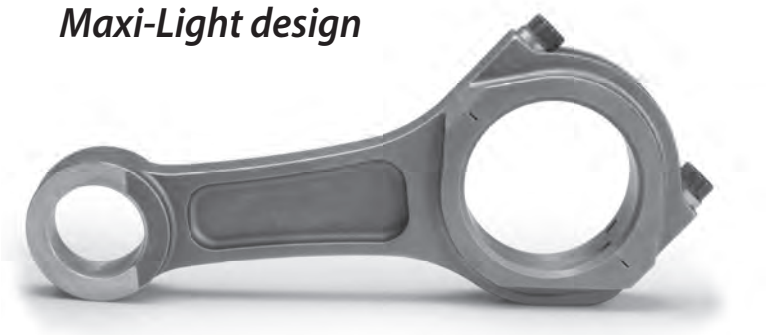
Part No	Description	Length	B.E. Bore	Pin Dia
B93074B-4	2.0L 4 cyl	5.000"	2.165	.944"
B93075B-4	2.3L 4 cyl	5.200"	2.172	.912"
B93974B-4	2.0L-2.3L 4 cyl	Custom	Specify	Specify
B93788B-4	Focus ZX3	5.482"	1.965"	.787"
B93034B-4	Ford Model B	7.500"	2.021"	.999"
B93926B-6	Ford 6 cyl	Custom	Specify	Specify
B93024B-8	289-302 V8	5.090"	2.239"	.912"
B93025B-8	289-302 V8	5.155"	2.239"	.912"
B93026B-8	289-302 V8	5.315"	2.239"	.912"
B93925B-8	289-302 V8	Custom	Specify	Specify
B93020B-8	351C V8	5.780"	2.436"	.912"
B93921B-8	351C V8	Custom	Specify	Specify
B93023B-8	351W V8	5.956"	2.426"	.912"
B93923B-8	351W V8	Custom	Specify	Specify
B93018B-8	390-427 V8	6.488"	2.590"	.975"
B93918B-8	390-427 V8	Custom	Specify	Specify
B93027B-8	370-460 V8	6.605"	2.652"	1.040"
B93919B-8	370-460 V8	Custom	Specify	Specify
B93028B-8	5.4L	6.657"	2.239"	.866"
B93021B-8	4.6L & 5.0L Coyote	5.933"	2.239"	.8671"

If press fit pin is desired, specify "PF" after part number.

DIESEL RODS

Part No	Description	Length	B.E. Bore	Pin Dia
B93037B-6	Cummins 5.9 L6 Diesel	7.545"	2.874"	1.575"
B93022B-8	Ford 6.0L PowerStroke	6.929"	2.874"	1.338"
B93039B-8	Ford 6.7L PowerStroke	6.969"	2.989"	1.338"
B93029B-8	Ford 7.3L PowerStroke	7.130"	2.691"	1.308"
B93036B-8	GM Duramax 6600	6.420"	2.637"	1.358"

Most rods can be made in the Maxi-Light design



MOPAR

Part No	Description	Length	B.E. Bore	Pin Dia
B93031B-8	273-360 "A" V8	6.120"	2.250"	.984"
B93931B-8	273-360 "A" V8	Custom	Specify	Specify
B93935B-8	361-400 "B" V8	Custom	Specify	Specify
B93033B-8	413-440 "RB" V8	6.766"	2.500"	1.094"
B93934B-8	426 Hemi V8	Custom	Specify	Specify
B93785B-4	Neon/Eclipse 2.0L	5.472"	2.007"	.827"
B93786B-4	SRT- 4/PT Crsr 2.4L	5.945"	2.086"	.866"
B93938B-10	Viper/RT10	Specify	Specify	Specify

Note: All non standard orders require a minimum 50% deposit.
All rods now available in Maxi- Light design. Specify "ML" before p/n

OLDSMOBILE

Part No	Description	Length	B.E. Bore	Pin Dia
B93056B-8	Olds V8	6.735"	2.625"	.9806
B93956B-8	Olds V8	Custom	Specify	Specify

If press fit pin is desired, specify "PF" after part number.

PONTIAC

Part No	Description	Length	B.E. Bore	Pin Dia
B93060B-8	Pontiac V8	6.625"	2.374"	.980"
B93960B-8	Pontiac V8	Custom	Specify	Specify

If press fit pin is desired, specify "PF" after part number.

PORSCHE

Part No	Description	Length	B.E. Bore	Pin Dia
B93784	Porsche 912	5.354"	2.243"	.866"

If press fit pin is desired, specify "PF" after part number.

CHEVY-BIG BLOCK

Part No	C-to-C	B.E. Bore	P.E. Bore	B.E. Width
B93010B-8	6.136"	2.325"	0.990"	0.991"
B93011B-8	6.386"	2.325"	0.990"	0.991"
B93014B-8	6.405"	2.325"	0.990"	0.991"
B93012B-8	6.536"	2.325"	0.990"	0.991"
B93015B-8	6.625"	2.325"	0.990"	0.991"
B93016B-8	6.700"	2.325"	0.990"	0.991"
B93017B-8	6.800"	2.325"	0.990"	0.991"
B93911B-8	Custom	2.325"	0.990"	0.991"
B93909B-8	Custom	2.325"	0.990"	0.991"

If Pressed Fit Pin desired, replace "B" after p/n (ex. B93010PF-8).

Sport Compact Connecting Rods

NISSAN

Part No.	Description	C-to-C	B.E. Bore	B.E. Thick	P.E. Bore	(mm)	P.E. Thick
B93774B-4	240SX -KA24	6.495″	2.086″	.973″	.827″	21	1.000″
B93776B-6	300ZX -VG30	6.069″	2.086″	.818″	.866″	22	.858″
B93775B-6	350Z	5.677″	2.165″	.818″	.866″	22	.820″
B93770B-4	Altima QR25	5.632″	1.889″	.896″	.787″	20	.900″
B93778B-6	CA16DE / CA18DET 16 valve	5.236″	1.890″	.957″	.787″	20	.957″
B93771B-6	Patrol 4.5L	6.552"	2.361"	1.290"	.905"	23	1.025"
B93772B-6	Patrol 4.8L	6.436"	2.361"	1.290"	.905"	23	1.025"
B93777B-6	RB26DETT	4.783″	2.008″	.858″	.827″	21	.858″
B93773B-4	SR20	5.366"	2.008"	.896"	.866"	22	.896"
B93779B-6	VR38DETT / GT-R	6.496"	2.323"	.896"	.904"	23	.896"

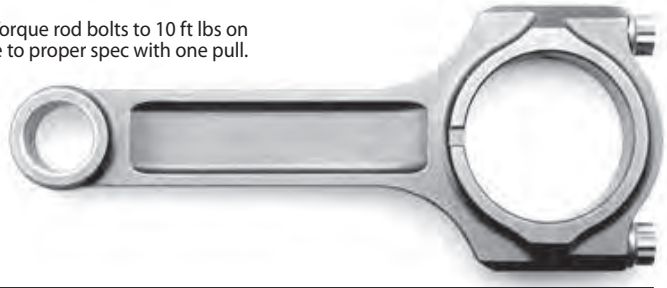
Crower Rods, incorporate only the finest aircraft quality materials, heat treated to obtain that perfect balance of strength and durability.

All rods now available in Maxi- Light design. Specify "ML" before p/n

Proper bolt torque: Torque rod bolts to 10 ft lbs on both sides, then torque to proper spec with one pull.

ROD BOLTS

Part No.	Torque	Dimension
90821-1	45 ft lbs	3⁄8 x 1.600
90824A-1	30 ft lbs	5⁄16 x 1.500



GM/CHEVROLET

Part No.	Make	Engine	C-to-C	B.E. Bore	B.E. Thick	P.E. Bore	(mm)	P.E. Thick
B93731B-4	GM	Ecotec 2.2L/2.0L	5.767"	2.052"	.943"	.787"	20	.945"
B93732B-4	GM	Ecotec 2.4L	5.715"	2.015"	.913"	.866"	22	.940"
B93736B-4	Saturn	1.9L	5.710"	1.976"	.973"	.767"		.975"
B93737B-4	Saturn	99 & up	5.846"	1.976"	.974"	.787"	20	.975"

FORD/MAZDA

Part No.	Make	Engine	C-to-C	B.E. Bore	B.E. Thick	P.E. Bore	(mm)	P.E. Thick
B93787B-4	Ford/Mazda	2.0L 93-97	5.322"	2.008"	.860"	.748"	19	.860"
B93788B-4	Ford	2.0L Zetec	5.482"	1.965"	.957"	.787"	20	.800"
B93789B-4	Ford/Mazda	2.3L Duratec	6.093"	2.087"	.859"	.826"	21	.710"
B93791B-4	Mazda	Miata 1.8L	5.234"	1.890"	.860"	.787"	20	.860"

MINI COOPER / BMW

Part No.	Make	Engine	C-to-C	B.E. Bore	B.E. Thick	P.E. Bore	(mm)	P.E. Thick
B93077B-4	Mini	01-up	5.180"	1.929"	.916"	.827"	21	.730"

VOLKSWAGEN / AUDI

Part No.	Make	Engine	C-to-C	B.E. Bore	B.E. Thick	P.E. Bore	(mm)	P.E. Thick
B93780B-4	VW	1.8 - 2.0L	5.669"	1.992"	.980"	.787"	20	.980"
B93781B-4	VW	2.0L	6.258"	1.992"	.980"	.826"	21	.980"
B93782B-6	VW	VR6	6.460"	2.237"	.784"	.787"	20	.784"

Crower can rebuild your existing Crower connecting rods for extended use by rebushing the pin end, resizing, magna-flux inspection and new rod bolt installation. Send the rods to Crower with contact and payment information.

CUSTOM APPLICATIONS

Part No.	Description	Engine	Length	B.E. Bore
B93978-3	Stock Spec	3cyl	Stock Spec	Stock Spec
B93970B-4	Custom	4 cyl	Specify	Specify
B93980B-4	Stock Spec	4 cyl	Stock Spec	Stock Spec
B93971B-6	Custom	6 cyl	Specify	Specify
B93981B-6	Stock Spec	6 cyl	Stock Spec	Stock Spec
B93972B-8	Custom	8 cyl	Specify	Specify
B93969B-10	Custom	10 cy	Specify	Specify
B93973B-12	Custom	12 cyl	Specify	Specify
B93979-3	Custom	3cyl	Specify	Specify

All rods come bushed for floating pin. If press fit pin is desired, replace "B" with "PF" after part number.

ROD BUSHINGS

Part No	Application	Dimension
90926-1	B16A, B Series, 4G63 (1g)	.827"
90947-1	D16, D15	.748"
90966-1	H22, H23, 4G63 (2g), Toyota	.866"
90987-1	VW, Toyota	.787"
90922-1	Custom application	Specify

Specify pin end width of your rods when odering.

Sport Compact Connecting Rods

Crower can rebuild your existing Crower connecting rods for extended use by rebushing the pin end, resizing, magna-flux inspection and new rod bolt installation.

All rods now available in Maxi- Light design. Specify "ML" before p/n

Crower Rods, incorporate only the finest aircraft quality materials, heat treated to obtain that perfect balance of strength and durability.

MITSUBISHI/DSM

Part No.	Make	Engine	C-to-C	B.E. Bore	B.E. Thick	P.E. Bore	(mm)	P.E. Thick
B93785B-4	DSM	420A / Neon	5.472″	2.007″	1.031″	.827″	21	1.031″
B93761B-4	DSM	4G63 (1Gen)	5.906"	1.890"	1.115"	.827"	21	1.038"
B93762B-4	DSM	4G63 (2G) / Evo	5.906"	1.890"	1.038"	.866"	22	1.038"
B93764B-4	DSM	4G93T	5.231″	1.890″	0.860″	.748″	19	0.860″
B93763B-6	DSM	6G72 / VR-4	5.548"	2.086"	0.821"	.866"	22	0.835"

TOYOTA

Part No.	Make	Engine	C-to-C	B.E. Bore	B.E. Thick	P.E. Bore	(mm)	P.E. Thick
B93758B-6	Toyota	1FZ-FE LndCrsr	6.063″	2.383″	1.095″	1.023″	26	1.095″
B93751B-4	Toyota	1ZZ	5.772″	1.851″	.779″	.787″	20	.780″
B93756B-6	Toyota	2JZ	5.590″	2.166″	1.020″	.866″	22	1.020″
B93750B-4	Toyota	2RZ	5.786″	2.205″	1.015″	.9447″	24	1.015″
B93760B-8	Toyota	2UZ-FE LndCrsr	5.748″	2.166″	.902″	.866″	22	.830″
B93759B-4	Toyota	2ZZ	5.433″	1.891″	.780″	.787″	20	.780″
B93753B-4	Toyota	3SGTE	5.433″	2.008″	1.055″	.866″	22	1.055″
B93755B-4	Toyota	3TC	4.844″	2.008″	1.053″	.866″	22	1.053″
B93752B-4	Toyota	4AGE	4.803″	1.772″	.859″	.787″	20	.860″
B93754B-4	Toyota	5SFE	5.435″	2.166″	1.055″	.866″	22	1.055″
B93724B-4	Toyota	7AFES	5.216	2.008"	.858	.787	20	.865"
B93757B-6	Toyota	7M/5M	5.980″	2.166″	.977″	.866″	22	.980″
B93725B-4	Toyota	Scion XB	5.545"	1.693"	.705"	.708"	18	.705"

SUBARU

Part No.	Make	Engine	C-to-C	B.E. Bore	B.E. Thick	P.E. Bore	(mm)	P.E. Thick
B93765B-4	Subaru	EJ25 II - SOHC	5.162"	2.165"	0.842"	.905"	23	0.842"
B93768B-4	Subaru	EJ25 II - DOHC	5.185"	2.165"	0.842"	.905"	23	0.842"
B93767B-4	Subaru	EJ25 Phase I	5.185"	2.008"	0.842"	.905"	23	0.840"
B93766B-4	Subaru	WRX and STi	5.138"	2.165"	0.842"	.905"	23	0.842"

HONDA/ACURA

Part No.	Make	Engine	C-to-C	B.E. Bore	B.E. Thick	P.E. Bore	(mm)	P.E. Thick
B93727B-4	Acura	B17A VTEC	5.208"	1.890"	.935"	.827"	21	.900"*
B93728B-4	Acura	B18A-B/B20B	5.394"	1.890"	.935"	.827"	21	.900"*
B93729B-4	Acura	B18C VTEC	5.433"	1.890"	.858"	.827"	21	.900"*
B93726B-4	Acura	D16A (ZC)	5.394″	1.890"	.898″	.748″	19	.716″
B93738B-4	Acura	K20A	5.473″	2.008″	.780″	.866″	22	.780″*
B93743B-4	Honda	1237cc	5.065″	1.693″	.858″	.669″	17	.710″
B93742B-4	Honda	1342cc	5.436″	1.693″	.898″	.748″	19	.710″
B93741B-4	Honda	1.5L Civic	5.275″	1.890″	.899″	.748″	19	.710″
B93720B-4	Honda	B16 Stroker	5.276″	1.890″	.935″	.787″	20	.900″
B93721B-4	Honda	B16 Stroker	5.356″	1.890″	.935″	.787″	20	.900″
B93722B-4	Honda	B18/20 Stroker	5.512″	1.890″	.935″	.787″	20	.900″
B93723B-4	Honda	B18/20 Stroker	5.564″	1.890″	.935″	.787″	20	.900″
B93733B-4	Honda	B16A VTEC	5.287″	1.772″	.935″	.827″	21	.900″*
B93745B-4	Honda	D16 Series	5.394″	1.890″	.898″	.748″	19	.716″
B93740B-4	Honda	D17A Civic	5.394″	1.890″	.780″	.748″	19	.900″*
B93739B-4	Honda	F20C	6.025″	2.008″	.938″	.905″	23	.940″
B93735B-4	Honda	F22C (04-up)	5.893"	2.008"	.938"	.905"	23	.938"
B93749B-4	Honda	F23	5.550″	1.890″	.780″	.866″	22	.780″
B93747B-4	Honda	H23/F22	5.580"	2.008"	.935"	.866"	22	.940"*
B93748B-4	Honda	H22 VTEC	5.636"	2.008"	.935"	.866"	22	.940"*
B93744B-4	Honda	K20A3 5	5.453″	1.890″	.780″	.866″	22	.780″
B93746B-4	Honda	K24A	5.985″	2.008″	.780″	.866″	22	.900″*
B93718B-4	Honda	L15A7	5.866"	1.693"	.702"	.708"	18	.702"

Not OEM thickness.

Motorcycle Connecting Rods

CUSTOM RODS

Available in 4340 Steel
or Titanium
made for any application

DUCATI

Part No.	Engine	C-to-C	B.E. Bore	B.E. Thick	P.E. Bore	P.E. Thick
B93095B-2	996 Corsa	4.881"	1.772"	.863"	.748" / 19mm	.865"
B93078B-2	900SS / 906 / 907	5.118"	1.772"	.863"	.748" / 19mm	.865"
B93079B-2	851 / 748 / 916	4.882"	1.772"	.863"	.826" / 20mm	.860"
B93078-2	DS1000	5.118"	1.772"	.863"	.748" / 19mm	.865"

HONDA

Part No.	Engine	C-to-C	B.E. Bore	B.E. Thick	P.E. Bore	P.E. Thick
B93094B-4	CBR600 F3	3.732"	1.338"	.821"	.669" / 17mm	.800"
B93090B-4	CBR1100XX Blackbird	4.297"	1.693"	.854"	.748" / 19mm	.710"
B93098B-4	CBR1000RR (04-up)	4.084"	1.551"	.855"	.669" / 17mm	.630"

KAWASAKI

Part No.	Engine	C-to-C	B.E. Bore	B.E. Thick	P.E. Bore	P.E. Thick
B93065B-4	ZX6R (00-01), ZX6R 636 (00-01), ZZR600 (05-08)	3.661"	1.299"	.727	.629" / 16mm	.590"
B93072B-4	ZXR750	3.937"	1.456"	.900"	.708" / 18mm	.710"
B93091B-4	ZX9	4.112"	1.496"	.899"	.708" / 18mm	.710"
B93073B-4	ZX10 (04-up)	4.203"	1.477"	.822"	.669" / 17mm	.630"
B93076B-4	ZX11	4.370"	1.536"	.900"	.708" / 18mm	.900"
B93096B-4	ZX12	4.231"	1.575"	.932"	.827" / 21mm	.750"
B93066B-4	ZX14 (06-11)	4.428"	1.614"	.932"	.787" / 20mm	.755"
B93064B-4	ZX14 (12-up)	4.549"	1.614"	.931"	.787" / 20mm	.755"

POLARIS

Part No.	Engine	C-to-C	B.E. Bore	B.E. Thick	P.E. Bore	P.E. Thick
ML93149B-2	POLARIS XP 900	5.056"	1.732"	.956"	.787"/ 20mm	.785"
ML93148B-2	POLARIS XP 1000	4.915"	1.732"	.957"	.800"/ 20mm	.800"

SUZUKI

Part No.	Engine	C-to-C	B.E. Bore	B.E. Thick	P.E. Bore	P.E. Thick
B93063B-4	GSXR 1000 (2009-2014)	4.405	1.496	.786"	.590" /15mm	.632
B93069B-4	GSXR 600 (2004-2014)	3.633"	1.338"	.786"	.551" / 14mm	.635"
B93071B-4	GSXR 600 (01-up)	3.750"	1.338"	.786"	.590" / 15mm	.635"
B93087B-4	GSXR 750 (00-05)	4.060"	1.417"	.786"	.590" / 15mm	.635"
B93068B-4	GSXR 750 (06-08)	3.732"	1.417"	.786"	.590" / 15mm	.635"
B93086B-4	GSXR 1000 2001-2004	4.370"	1.496"	.786"	.629" / 16mm	.632"
B93093B-4	GSXR 1000 2005-2006	4.370"	1.496"	.786"	.590" / 15mm	.635
B93088B-4	GSXR 1100 (Watercooled)	4.606"	1.614"	.826"	.787" / 20mm	.826"
B93084B-4	GSXR 1300 Hayabusa(2008)	4.704"	1.614"	.826"	.708" / 18mm	.826"
B93089B-4	GSXR 1300 Hayabusa	4.704"	1.614"	.826"	.787" / 20mm	.826"
B93099B-4	GSXR 1300 Hayabusa Heavy Duty / 3/8" Bolts	4.704"	1.614"	.826"	.787" / 20mm	.826"

For titanium rods, replace "B" with "T" in front of p/n on all of rods listed on this page. Ex: T93089B-4

Motorcycle Connecting Rods

Crower motorcycle connecting rods are available for most popular engines and come in your choice of I-Beam or H-Beam design. H-11 alloy 220,000 p.s.i. rod bolts come standard, 280,000 p.s.i. rod bolts upgrade available upon request.

ROD BOLTS

Part No.	P.S.I.	Torque	Dimension
90847-1	280,000	275 in. lbs	1/4 x 1.375
90824A-1	220,000	30 ft lbs	5/16 x 1.500
90845-1	280,000	45 ft lbs	5/16 x 1.500
90821-1	220,000	45 ft lbs	3/8 x 1.600
90842-1	280,000	65 ft lbs	3/8 x 1.600

Proper bolt torque: Torque rod bolts to 10 ft lbs on both sides, then torque to proper spec with one pull.

Note: If using stretch method, Crower recommends .005" to .007".

TRIUMPH

Part No.	Engine	C-to-C	B.E. Bore	B.E. Thick	P.E. Bore	P.E. Thick
B93130B-2	650 Twin T120	6.500"	1.770"	1.041"	.687"	1.000"
B93131B-2	750 Twin T140	6.000"	1.770"	1.041"	.750"	1.000"
B93132B-3	Triple (95-up)	4.587"	1.732"	.915"	.748" / 19mm	.875"
B93930B-3	3Cyl	Custom	Custom	Custom	Custom	Custom

YAMAHA

Part No.	Engine	C-to-C	B.E. Bore	B.E. Thick	P.E. Bore	P.E. Thick
B93124B-4	FJ 1100/1200	4.665″	1.614″	.936″	.708″ / 18mm	.800″
B93125B-4	FZR 1000	4.310″	1.536″	.819″	.748″ / 19mm	.630″
B93116B-3	Nytro Snowmobile	4.742″	1.6142″	.858″	.748″ / 19mm	.710″
T93116B-3	Nytro Snowmobile Titanium	4.742″	1.6142″	.858″	.748″ / 19mm	.710″
B93120B-4	R1 (04-up)	4.055"	1.456"	.885"	.669" / 17mm	.630"
B93122B-4	R6 (01-03)	3.603"	1.299"	.701"	.629" / 16mm	.630"
B93128B-1	TT 500 / XT 500	5.710″	1.645″	.943″	.826″ / 20mm	.945″
B93126B-4	V-Max	4.882″	1.614″	.784″	.748″ / 19mm	.675″
B93129B-1	XT 600	5.335″	1.693″	.865″	.866″ / 22mm	.865″
B93127B-1	XTZ 660 Raptor	5.374″	1.772″	.864″	.866″ / 22mm	.866″
B93121B-4	YZF R1	4.350″	1.536″	.819″	.669″ / 17mm	.715″
B93123B-4	YZF R6 (99-00)	3.622"	1.299"	.701"	.629" / 16mm	.700"
B93119B-4	YZF R6 (06-08)	3.563"	1.339"	.702"	.590" / 15mm	.595"
B93118B-4	YZF R6 (2009)	3.563″	1.339″	.701″	.590″ / 15mm	.591″

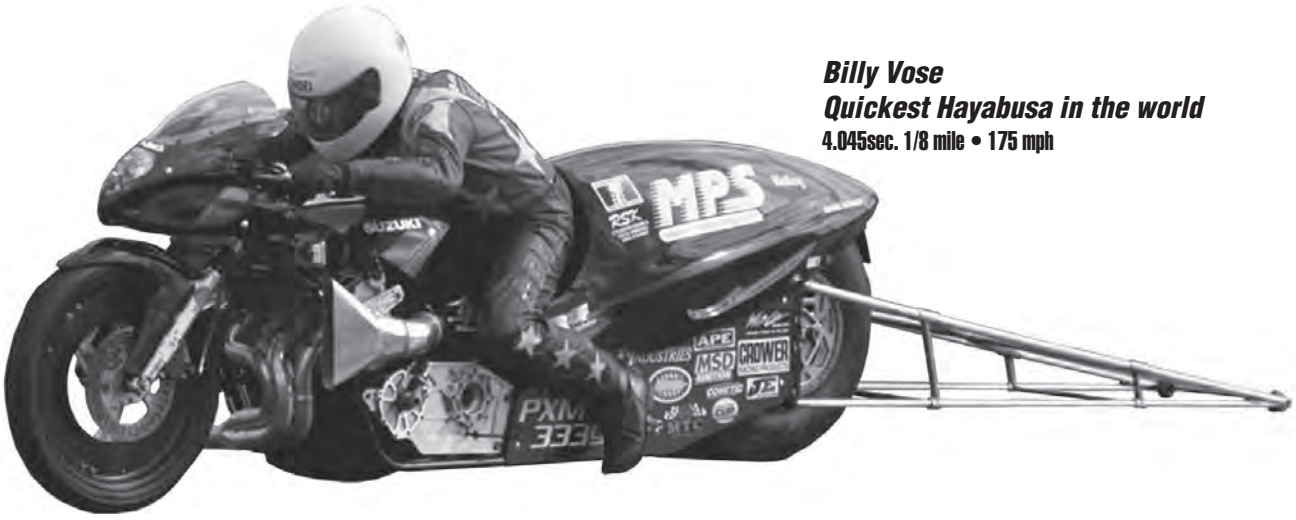
CUSTOM APPLICATIONS

Part No.	Engine	Description
B93976B-4	4 cyl	Steel Alloy - Any Desired Specifications
T93976B-4	4 cyl	Titanium - Any Desired Specifications
B93975B-3	3 cyl	Steel Alloy - Any Desired Specifications
T93975B-3	3 cyl	Titanium - Any Desired Specifications
B93975B-2	2 cyl	Steel Alloy - Any Desired Specifications
T93975B-2	2 cyl	Titanium - Any Desired Specifications

Note: To order the upgraded rod bolts (rated to 280,000 psi), refer to the rod bolt part numbers above and add the desired bolt to the end of the rod number. Ex: B93089B-4 / 90845

Note: Titanium rods are available by replacing "B" with "T" before p/n

Crower Rods incorporate only the finest aircraft quality premium steel and titanium materials,heat treated to obtain that perfect balance of strength and durability.

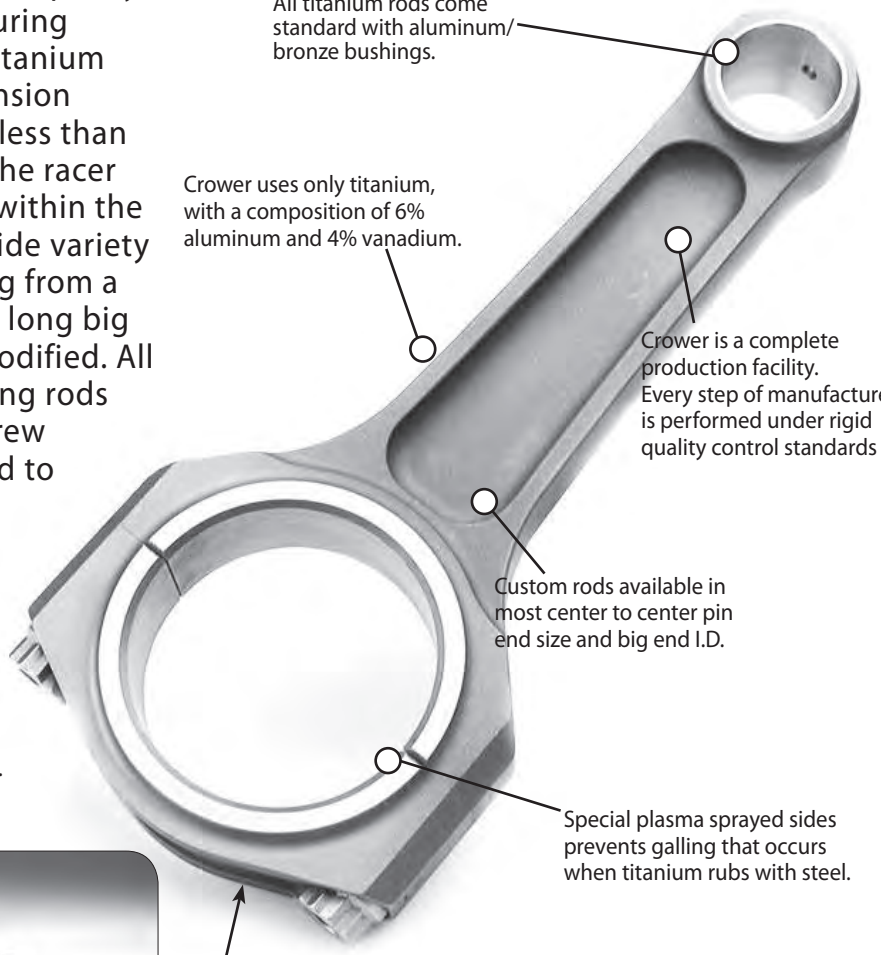


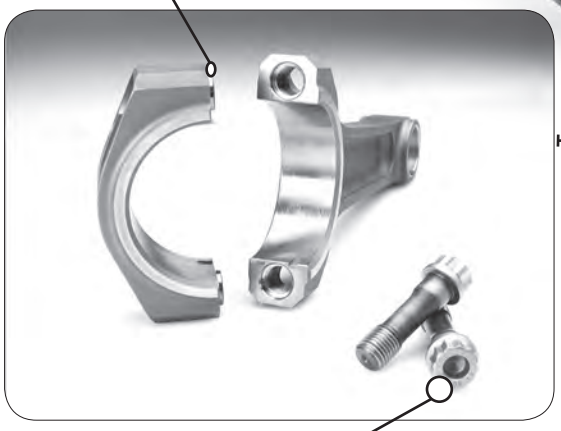
Billy Vose
Quickest Hayabusa in the world
4.045sec. 1/8 mile • 175 mph

Titanium Connecting Rods

TITANIUM RODS

Crower uses only aerospace quality, titanium in the manufacturing of our billet Crowerods. Titanium has a lower thermal expansion rate than steel and much less than aluminum, which allows the racer to hold closer tolerances within the engine. Crower offers a wide variety of applications. Everything from a 4 cycle motorcycle to a 8" long big block Chevrolet for Pro Modified. All Crower titanium connecting rods are equipped with cap screw bolts and stroker designed to insure plenty of camshaft and case clearance, also reducing weight in noncritical areas.





AMS5844 ROD BOLT UPGRADE

Crower now offers a new AMS5844 rod bolt upgrade option available for all steel billet and titanium rods. Highly recommended for extreme duty rpm and endurance applications. Rated at 280,000 p.s.i., these bolts are corrosion resistant, nonmagnetic and deliver ultimate clamping capabilities for the highest cycle life. Be sure and specify upgrade option when ordering.

Titanium Connecting Rods

Chevrolet

Part No.	Description	Length	B.E. Bore	Pin Dia.
ST93000B-8	262-400 V8	5.700"	2.125"	.927"
ST93003B-8	262-400 V8	5.850"	2.125"	.927"
ST93002B-8	262-400 V8	6.000"	2.125"	.927"
ST93900B-8	262-400 V8	Custom	2.125"	.927"
ST93005B-8	262-400 V8	5.700"	2.225"	.927"
ST93008B-8	262-400 V8	5.850"	2.225"	.927"
ST93006B-8	262-400 V8	6.000"	2.225"	.927"
ST93009B-8	262-400 V8	6.125"	2.225"	.927"
ST93007B-8	262-400 V8	6.250"	2.225"	.927"
ST93905B-8	262-400 V8	Custom	2.225"	.927"
ST93010B-8	396-454 V8	6.136"	2.325"	.990"
ST93011B-8	396-454 V8	6.386"	2.325"	.990"
ST93014B-8	396-454 V8	6.405"	2.325"	.990"
ST93012B-8	396-454 V8	6.536"	2.325"	.990"
ST93015B-8	396-454 V8	6.625"	2.325"	.990"
ST93016B-8	396-454 V8	6.700"	2.325"	.990"
ST93017B-8	396-454 V8	6.800"	2.325"	.990"
ST93909B-8	396-454 V8	Custom	(7.250" & over)	.990"
ST93911B-8	396-454 V8	Custom	(under 7.250")	.990"
ST93906B-6	Chevy 6 cyl	Custom	Specify	Specify

All Crower small & big block titanium rods are stroker designed.
Crower Titanium lube #90897 is supplied with all sets of titanium rods.

Approximate Chevrolet V8 Weights

Small Block: 5.700" @ 480g • 6.000" @ 495g • 6.250" @ 548g
Big Block: 6.136" @ 540g • 6.536" @ 625g • 7.650" @ 724g

Ford/Buick

Part No.	Description	Length	B.E. Bore	Pin Dia.
T93974B-4	Ford 2.0L / 2.3L 4 cyl	Custom	Specify	Specify
T93907B-6	Buick 6 cyl	Custom	Specify	Specify
T93908B-8	Buick V8	Custom	Specify	Specify

Mopar

Part No.	Description	Length	B.E. Bore	Pin Dia.
T93934B-8	426 Hemi V8	Custom	Specify	Specify

Import Applications

Part No.	Description	Length	B.E. Bore	Pin Dia.
T93970B-4	4 cyl	Custom	Specify	Specify
T93971B-6	6 cyl	Custom	Specify	Specify
T93972B-8	8 cyl	Custom	Specify	Specify
T93973B-12	12 cyl	Custom	Specify	Specify

Motorcycle (4 Cycle)

Part No.	Description	Length	B.E. Bore	Pin Dia.
T93088B-4	Suzuki GSX	4.606"	1.614"	.787"
T93089B-4	Suzuki Hayabusa	4.704"	1.614"	.787"
T93975B-2	2 cylinder	Custom	Specify	Specify
T93976B-4	4 cylinder	Custom	Specify	Specify

Crower has the capability of manufacturing just about any type of titanium connecting rod.

Proper bolt torque: Torque rod bolts to 10 ft lbs on both sides, then torque to proper spec with one pull.

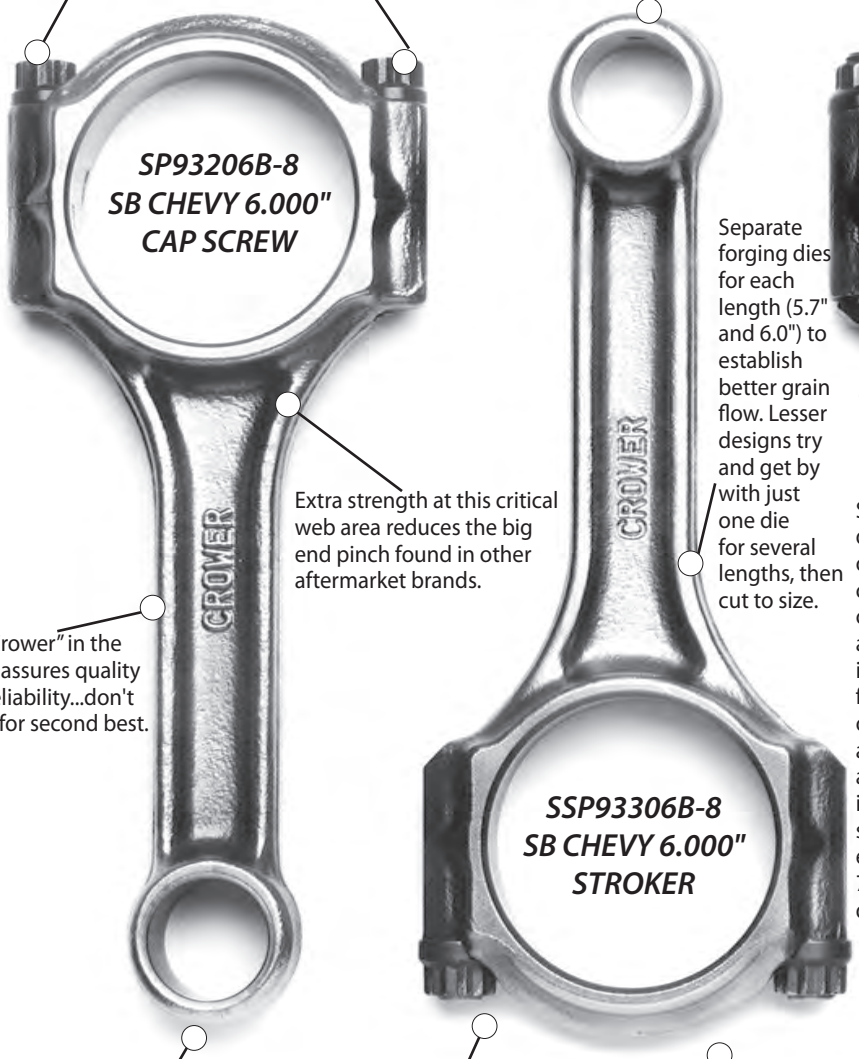
Custom Applications

Part No.	Description	Length	B.E. Bore	Pin Dia.
T93912B-4	Custom 4 cyl	Custom	Specify	Specify
T93913B-6	Custom 6 cyl	Custom	Specify	Specify
T93914B-8	Custom 8 cyl	Custom	Specify	Specify

Crower Moly lube #90897 is supplied with all titanium rods.

Note: All non standard orders require a minimum 50% deposit.

Sportsman Connecting Rods



3/8 cap screw bolt delivers a lighter big end rotating weight.

Premium grade 3/8 cap screw bolts are rated at 180,000 p.s.i. (#90828)

Drilled and chamfered pin oil hole puts additional oil at the wrist pin to prevent galling.

Single ribbed cap delivers distortion free performance and removes excess weight at a noncritical area.

3/8 thru-bolt (#90805) and nut (#90814) are rated at 180,000 p.s.i.

Separate forging dies for each length (5.7" and 6.0") to establish better grain flow. Lesser designs try and get by with just one die for several lengths, then cut to size.

Extra strength at this critical web area reduces the big end pinch found in other aftermarket brands.

Stroker design offers more cam-to-rod clearance and is intended for strokes of 3.750" and up. Can also be used in shorter stroke engines if 7/16 bolt is desired.

3/8 aircraft quality, 8740 chromoly steel thru-bolt and nut adheres to O.E.M. stock specs, making it stock legal for all major sanctioning bodies.

The "Crower" in the beam assures quality and reliability...don't settle for second best.

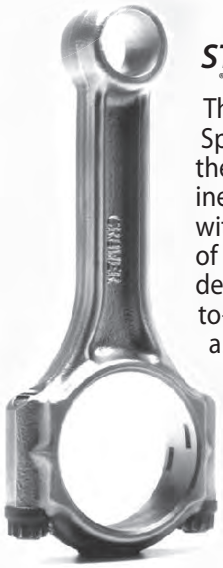
Properly engineered small end guarantees long, reliable pin alignment. Available in bushed aluminum/bronze or pressed fit pin.

Stroker design utilizes a larger 7/16 cap screw bolt for ultimate clamping ability (#90846).

Ribbed cap delivers distortion free performance at high horsepower and rpm.

Experienced engine builders know that heavy rods are notoriously hard on the wrist pin area. Crower reduces unwanted loads by minimizing overall weight.

Sportsman Connecting Rods



STROKER SPORTSMAN®

® Sportsman is a Registered Trademark of Crower, Inc.

The cap screw designed Sportsman incorporates all of the strength and value of our inexpensive Sportsman model with the clearance advantages of a stroker design. The stroker design allows additional cam-to-rod clearance for strokes above 3.750". Crower Stroker Sportsman's are forged from high strength alloy and feature extremely reliable 7/16 8740 steel alloy cap screw bolts (180,000 p.s.i.). Proven lightweight design (under 600g).

APPROX. WEIGHT: 5.7" @ 595g
HORSEPOWER RANGE: 700
RPM RANGE: 8200
TORQUE SPECS: 75 foot lbs.

Part No.	Engine	C- to -C	B.E. Bore	P.E. Bore	B.E. Width
SSP93300B-8	SB Chevy	5.700"	2.125"	.927"	.941"
SSP93305B-8	SB Chevy	5.700"	2.225"	.927"	.941"

If Pressed Fit Pin desired, specify "PF" after p/n (ex. SSP93300PF-8).

SPORTSMAN® CAP SCREW

® Sportsman is a Registered Trademark of Crower, Inc.

Features a 3⁄8 cap screw design for easier cap removal and placement. The new fastening system features 8740 steel alloy bolts (180,000 p.s.i.) that thread directly into the rod fork. Fully CNC machined steel. Crower Sportsman rods are the lighter, yet stronger alternative to factory "pinks." Installs without the need of an expensive balance job.

APPROX. WEIGHT: 5.7" @ 585g
HORSEPOWER RANGE: 600
RPM RANGE: 8200
TORQUE SPECS: 45 foot lbs.

Part No.	Engine	C- to -C	B.E. Bore	P.E. Bore	B.E. Width
SP93200B-8	SB Chevy	5.700"	2.125"	.927"	.941"
SP93205B-8	SB Chevy	5.700"	2.225"	.927"	.941"
SP93208B-4	Chevy II 4 cyl.	5.700"	2.125"	.927"	(set/4)
SP93210B-6	Chevy 6 cyl.	5.700"	2.125"	.927"	(set/6)

If Pressed Fit Pin desired, specify "PF" after p/n (ex. SP93200PF-8).
For Cosworth Vega, use #SP93208B-4

SPORTSMAN® THRU-BOLT

® Sportsman is a Registered Trademark of Crower, Inc.

First introduced back in 1987, the Crower Sportsman rod was the original high performance stock replacement rod. Features traditional thru-bolt and nut fasteners for stock legal classes. Includes 3⁄8 8740 bolts and nuts (180,000 p.s.i.).

APPROX. WEIGHT: 5.7" @ 585g
HORSEPOWER RANGE: 600
RPM RANGE: 8200
TORQUE SPECS: 50 foot lbs. w/oil

Part No.	Engine	C- to -C	B.E. Bore	P.E. Bore	B.E. Width
SP91200B-8	SB Chevy	5.700"	2.125"	.927"	.941"
SP91205B-8	SB Chevy	5.700"	2.225"	.927"	.941"
SP91208B-4	Chevy II 4 cyl.	5.700"	2.125"	.927"	(set/4)
SP91210B-6	Chevy 6 cyl.	5.700"	2.125"	.927"	(set/6)

If Pressed Fit Pin desired, specify "PF" after p/n (ex. SP91200PF-8).

Sportsman Connecting Rods

APPROX. WEIGHT: 6.536" @ 830g
HORSEPOWER RANGE: 1000+
RPM RANGE: 8200
TORQUE SPECS: 70 foot lbs.

Part No.	Engine	C- to -C	B.E. Bore	P.E. Bore
SP93415B-8	396-354 Chevy	6.536"	2.325"	.990"
SP93416B-8	396-354 Chevy	6.625"	2.325"	.990"
SP93417B-8	396-354 Chevy	6.700"	2.325"	.990"
SP93418B-8	396-354 Chevy	6.800"	2.325"	.990"
SP93419B-8	400-455 PONTIAC	6.625"	2.374"	.980"
SP93420B-8	400-455 PONTIAC	6.700"	2.374"	.980"
SP93421B-8	400-455 PONTIAC	6.800"	2.374"	.980"

WEIGHT: 5.090" @ 560g
HORSEPOWER RANGE: 600
RPM RANGE: 8200
TORQUE SPECS: 45 foot lbs. w/oil

Part No.	Engine	C- to -C	B.E. Bore	P.E. Bore	B.E. Width
SP91224B-8	302	5.090"	2.239"	.912"	.832"
SP91225B-8	302	5.155"	2.239"	.912"	.832"
SP91226B-8	302	5.315"	2.239"	.912"	.832"
SP91227B-8	302	5.090"	2.225"	.927"	.941"
SP91228B-8	302	5.155"	2.225"	.927"	.941"
SP91229B-8	302	5.315"	2.225"	.927"	.941"
SP91230B-4	2.0L	5.000"	2.165"	.944"	1.010"
SP91235B-4	2.0L	5.700"	2.165"	.927"	1.010"
SP91236B-4	2.0L	5.700"	2.125"	.927"	1.010"
SP91231B-4	2.3L	5.200"	2.172"	.912"	.990"
SP91232B-4	2.3L	5.400"	2.172"	.912"	.990"
SP91233B-4	2.3L	5.500"	2.172"	.912"	.990"
SP91234B-4	2.3L	5.700"	2.172"	.927	.990"
SP91237B-4	2.3L	5.700"	2.125"	.927	.990"
SP91220B-8	Custom 8 cylinder application (set/8)				
SP91221B-4	Custom 4 cylinder application (set/4)				

If Pressed Fit Pin desired, specify "PF" after p/n (ex. SP91224PF-8).
All weights are approximate.
SP91224 - Lt Model Stock / SP91225 - Early Model Stock
SP91231 - Stock 2300cc
.832" - Ford width, .941" - Chevy width

APROX. WEIGHT: 5.7" @ 625g
HORSEPOWER RANGE: 600
RPM RANGE: 8200
TORQUE SPECS: 45 foot lbs.

Part No.	Engine	C- to -C	B.E. Bore	P.E. Bore	B.E. Width
SP93230B-4	2.0L	5.000"	2.165"	.944"	1.010"
SP93235B-4	2.0L	5.700"	2.165"	.927"	1.010"
SP93236B-4	2.0L	5.700"	2.125"	.927"	1.010"
SP93231B-4	2.3L	5.200"	2.172"	.912"	.990"
SP93232B-4	2.3L	5.400"	2.172"	.912"	.990"
SP93233B-4	2.3L	5.500"	2.172"	.912"	.990"
SP93234B-4	2.3L	5.700"	2.172"	.927"	.990"
SP93237B-4	2.3L	5.700"	2.125"	.927"	.990"

If Pressed Fit Pin desired, specify "PF" after p/n (ex. SP93230PF-4).
SP93230B-4 is SCCA legal

SCCA FORMULA VEE APPROVED ROD

Part No.	C- to -C	B.E. Bore	B.E. Width	P.E. Bore	P.E. Width
SP93280B-4	5.120"	2.275"	.934"	.787"	1.010"

BIG BLOCK SPORTSMAN®

® Sportsman is a Registered Trademark of Crower, Inc.

The big block version of our popular small block design, the Sportsman offers a USA made, 4340 chromoly steel forged rod at an economical price. Available for both Big Block Chevrolet and Pontiac applications. Features 7/16 high strength steel alloy cap screw bolts rated at 180,000 p.s.i. for unrivaled strength .

FORD SPORTSMAN® THRU-BOLT

® Sportsman is a Registered Trademark of Crower, Inc.

First introduced back in 1987, the Crower Sportsman rod was the original high performance stock replacement rod. Features traditional thru-bolt and nut fasteners for stock legal classes. Includes 3⁄8 8740 bolts and nuts (180,000 p.s.i.).

FORD SPORTSMAN® CAP SCREW

® Sportsman is a Registered Trademark of Crower, Inc.

Crower offers the Ford Sportsman for the 2.0L & 2.3L Ford in a cap screw design. Forged from the best aircraft quality steel. Ford Sportsman's come standard with aircraft quality 3⁄8 8740 steel alloy cap screw bolts rated at 180,000 p.s.i.

Rod Bolts & Nuts

ROD BOLTS

Available in three unique styles, depending on your rod design and horsepower requirement. All Crower Sportsman feature high strength steel alloy bolts (180,000 p.s.i.), while all Crower steel billet and titanium rods come standard with H-11 tool steel bolts (220,000 p.s.i.). But for extreme rpm and endurance applications, Crower offers the new AMS5844 bolt (285,000 p.s.i.) available as an upgrade option. Both feature a 12-point head and rolled fillets, thread rolled after heat-treat. To determine which bolts are required for a particular rod, contact Crower. Sold by the piece or set. Bolt lengths are measured from under the head to the end of the threaded portion.

Part No.	Description	Torque Specs	Dimension
8740 STEEL ALLOY (180,000 p.s.i.)			
90800-1	Cap Screw 12-pt	See pg. 225	7/16 x 2.000"
90802-1	Thru-bolt (SB, F)	See pg. 225	7/16 x 1.715"
90803-1	Thru-bolt (F)	See pg. 225	7/16 x 1.940"
90804-1	Thru-bolt (F)	See pg. 225	7/16 x 2.320"
90805-1	Thru-bolt (B, SP^{SB})	See pg. 225	3/8 x 1.920"
90807-1	Thru-bolt (SB)	See pg. 225	7/16 x 2.070"
90828-1	Cap Screw bolt 12-pt (SP^{SB})	See pg. 225	3/8 x 1.600"
90829-1	Cap Screw bolt 12-pt (SP^{BB})	See pg. 225	7/16 x 1.800"
90846-1	Cap Screw (SSP)	See pg. 225	7/16 x 1.440"
H-11 TOOL STEEL ALLOY (220,000 p.s.i.)			
90818-1	Cap Screw bolt 12-pt	See pg. 225	3/8 x 1.600"
90820-1	Cap Screw bolt 12-pt	See pg. 225	7/16 x 1.800"
90824-A	Cap Screw bolt 12-pt	See pg. 225	5/16 x 1.500"
90823-1	Cap Screw bolt 12-pt	See pg. 225	7/16 x 1.650"
90826-A	Cap Screw bolt 12-pt	See pg. 225	7/16 x 1.540"
90821-1	Cap Screw bolt 12-pt	See pg. 225	3/8 x 1.600"
AMS5844 STEEL ALLOY (280,000 p.s.i.)			
90830-1	Cap Screw bolt 12-pt	See pg. 225	7/16 x 1.540"
90833-1	Cap Screw bolt 12-pt	See pg. 225	7/16 x 1.650"
90832-1	Cap Screw bolt 12-pt	See pg. 225	7/16 x 1.800"
90842-1	Cap Screw bolt 12-pt	See pg. 225	3/8 x 1.600"
90845-1	Cap Screw bolt 12-pt	See pg. 225	5/16 x 1.500"
90847-1	Cap Screw bolt 12-pt	See pg. 225	1/4 x 1.375"

ROD NUTS

Crower offers two grades of quality rod nuts. The H-11 tool steel nuts are rated at 220,000 p.s.i., while the high strength steel alloy nuts are rated at 180,000 p.s.i. Sold separately, by the piece.

Part No.	Description	Dimension
90811-1	Billet or Forged Rods	7/16
90813-1	Billet Rods	11/32
90814-1	Billet & Sportsman Rods , 12-point Alloy	3/8

Connecting Rod Accessories

ALIGNMENT SLEEVES

Crower hollow dowel connecting rod alignment sleeves are precision ground from high grade alloy. Sold by the piece.

Part No.	Description	Dimension
90850-1	Rod alignment sleeve (1 only)	5/16
90851-1	Rod alignment sleeve (1 only)	3/8
90852-1	Rod alignment sleeve (1 only)	7/16
90854-1	Rod alignment sleeve (1 only)	1/4
90855-1	Rod alignment sleeve (1 only)	1/2

STRETCH GAUGE

Crower highly recommends using a stretch gauge to tighten rod bolts to their recommended stretch figures. This tool will provide accurate and repeatable results every time if used correctly. Includes dial indicator, fixture and instructions.

Part No.	Description
90700	Rod bolt stretch gauge indicator

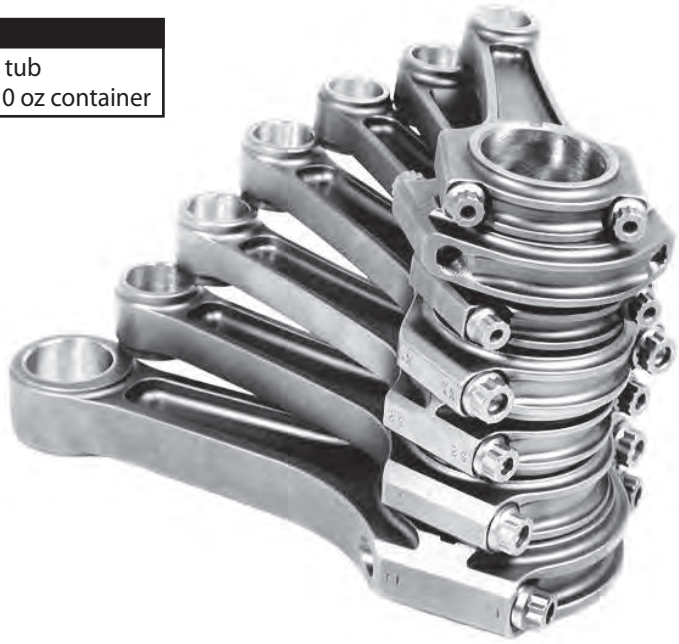
ARP ULTRA TORQUE LUBE

In order to achieve proper preload during rod bolt installation, it is important to use the lubricant that is recommended for that particular bolt and rod combination.

- Steel rods with 8740 bolts and Steel rods with H-11 or upgraded AMS5844 bolts must use ARP Ultra-Torque Lube (#90894).
- Titanium rods with H-11 or AMS5844 bolts must use special Crower titanium lube (#90897).

Part No.	Description
90894	ARP Ultra Torque Lubricant 1/2 oz. tube

Part No.	Description
90897	Crower Titanium Lube (Titanium rods) 1/2 oz tub
90897C	Crower Titanium Lube (Titanium rods) 2 lb, 10 oz container



Bushings

ROD BUSHINGS

Crower uses premium aluminum-bronze one piece billet bushings in all of the rods we manufacture. These high quality bushings are sold separately, by the piece.

Part Number	Wrist Pin	Rod Pin Size	Bushing O.D.	Final Rod Size
90991	.4907″	.547″	.550″	.4914″
90951	.5512″	.607″	.610″	.5519″
90959	.5905″	.647″	.650″	.5912″
90924	.6246″	.687″	.690″	.6253″
90929	.6299″	.687″	.690″	.6306″
90969	.6693″	.737″	.740″	.6700″
90988	.6883″	.747″	.750″	.6890″
90908	.7087″	.777″	.780″	.7094″
90928	.7283″	.787″	.790″	.7290″
90947	.7480″	.817″	.820″	.7487″
90950	.7500″	.817″	.820″	.7507″
90957	.7576″	.817″	.820″	.7583″
90906	.7663″	.827″	.830″	.7670″
90967	.7676″	.827″	.830″	.7683″
90987	.7874″	.857″	.860″	.7881″
90989	.7896″	.857″	.860″	.7903″
90979	.7913″	.857″	.860″	.7920″
90970	.8002″	.862″	.865″	.8009″
90911	.8122″	.877″	.880″	.8129″
90926	.8268″	.897″	.900″	.8275″
90966	.8662″	.932″	.935″	.8669″
90976	.8752″	.937″	.940″	.8759″
90901	.9009″	.967″	.970″	.9016″
90904	.9046″	.967″	.970″	.9053″
90905	.9055″	.967″	.970″	.9062″

Note: Custom orders available, specify bore, pin dia and length. Customer needs to specify width or overall length.

Part Number	Wrist Pin	Rod Pin Size	Bushing O.D.	Final Rod Size
90912	.9122″	.979″	.982″	.9129″
90927*	.9272″	.994″	.997″	.9279″
90927N	.9272″	.979″	.982″	.9279″
90930	.9308″	.979″	.982″	.9315″
90937	.9375″	.997″	1.000″	.9328″
90939	.9398″	.997″	1.000″	.9405″
90944	.9447″	.997″	1.000″	.9454″
90977	.9678″	1.027″	1.030″	.9685″
90975	.9752″	1.039″	1.042″	.9759″
90980	.9802″	1.039″	1.042″	.9809″
90984	.9842"	1.039"	1.042"	.9849"
90990	.9900"	1.039"	1.042"	.9908"
90923	1.0236"	1.087"	1.090"	1.0243"
90931	1.0306"	1.107"	1.110"	1.0313"
90940	1.0402"	1.107"	1.110"	1.0409"
90964	1.0639"	1.122"	1.125"	1.0646"
90994	1.0939"	1.152"	1.155"	1.0946"
90925	1.1253"	1.182"	1.185"	1.1260"
90948	1.2463"	1.307"	1.310"	1.2470"
90938	1.3080"	1.367"	1.370"	1.3087"
90933	1.3385"	1.422"	1.425"	1.3392"
90903	1.3582"	1.437"	1.440"	1.3590"
90962	1.6243"	1.762"	1.770"	1.6250"
90909	1.5748"	1.672"	1.675"	1.5753"

CUSTOM ROD BUSHINGS

Part Number	Bushing O.D.
90922X000	up to 1.099"
90922X100	1.100" to 1.199"
90922X200	1.200" to 1.299"
90922X300	1.300" to 1.399"
90922X400	1.400" to 1.499"
90922X500	1.500" to 1.599"
90922X600	1.600" to 1.699"

Rod Bolt Stretch & Torque Specs

Connecting Rod Bolt Specification				Steel Connecting Rods			Titanium Connecting Rods		
Part #	Diameter x U.H.Length	PSI	Material	Assembly Lubricant	Bolt Stretch	Torque	Assembly Lubricant	Bolt Stretch	Torque
90847	1/4" x 1.375"	280,000	AMS	Crower #90894 *	.005"-.007"	275 in lbs	Crower Lube #90897	.005"-.007"	240 in lbs
90824A	5/16" x 1.500"	220,000	ARP2000	Crower #90894 *	.005"-.007"	30 ft lbs	Crower Lube #90897	.005"-.007"	25 ft lbs
90845	5/16" x 1.500"	280,000	AMS	Crower #90894 *	.005"-.007"	45ft lbs	Crower Lube #90897	.005"-.007"	35 ft lbs
90821	3/8 x 1.600"	220,000	ARP2000	Crower #90894*	.005"-.007"	45 ft lbs	Crower Lube #90897	.005"-.007"	45 ft lbs
90818	3/8" x 1.600"	220,000	H-11	Crower #90894 *	.005"-.007"	45 ft lbs	Crower Lube #90897	.005"-.007"	45 ft lbs
90828	3/8" x 1.600"	180,000	8740	Crower #90894 *	.005"-.007"	45 ft lbs			
90842	3/8" x 1.600"	280,000	AMS	Crower #90894 *	.005"-.007"	65 ft lbs	Crower Lube #90897	.005"-.007"	50 ft lbs
90805	3/8" x 1.920"		ARP	20W/50 Motor Oil	.004"-.006"	50 ft lbs			
90846	7/16" x 1.440"	180,000	8740	20W/50 Motor Oil	.005"-.007"	75 ft lbs			
90830	7/16" x 1.540"	280,000	ARP 3.5	Crower #90894 *	.005"-.007"	95 ft lbs	Crower Lube #90897	.005"-.007"	80 ft lbs
90826A	7/16" x 1.550"	220,000	ARP2000	Crower #90894 *	.005"-.007"	75 ft lbs	Crower Lube #90987	.005"-.007"	65 ft lbs
90823	7/16" x 1.650"	220,000	ARP 11	Crower #90894 *	.005"-.007"	75 ft lbs	Crower Lube #90897	.005"-.007"	65 ft lbs
90823L	7/16" x 1.650"	220,000	ARP 11	Crower #90894 *	.005"-.007"	75 ft lbs	Crower Lube #90897	TITAN	70 ft lbs
90833	7/16" x 1.650"	280,000	ARP	Crower #90894 *	.005"-.007"	95 ft lbs	Crower Lube #90897	.005"-.007"	80 ft lbs
90802	7/16" x 1.700"			20W/50 Motor Oil	.004"-.006"	65 ft lbs			
90820	7/16" x 1.800"	220,000	ARP	Crower #90894 *	.005"-.007"	75 ft lbs	Crower Lube #90897	.005"-.007"	65 ft lbs
90829	7/16" x 1.800"	180,000	8740	Crower #90894 *	.005"-.007"	75 ft lbs			
90832	7/16" x 1.800"	280,000	AMS	Crower #90894 *	.005"-.007"	95 ft lbs	Crower Lube #90897	.005"-.007"	90 ft lbs
90803	7/16" x 1.940"			20W/50 Motor Oil	.004"-.006"	65 ft lbs			
90800	7/16" x 2.000"			Crower #90894 *	.005"-.007"	70 ft lbs			
90807	7/16" x 2.070"			20W/50 Motor Oil	.004"-.006"	65 ft lbs			
90804	7/16" x 2.320"			20W/50 Motor Oil	.004"-.006"	65 ft lbs			
90809	1/2" x 2.500"		ARP	Crower #90894*	.005"-.007"	95 ft lbs			
90849	1/2" x 1.885"		ARP	Crower #90894*	.005"-.007"	110 ft lbs			

** Note: Crower #90894 is ARP Ultra Torque Lubricant. Not all bolts listed are currently available.*

Proper bolt torque: Torque rod bolts to 10 ft lbs on both sides, then torque to proper spec with one pull.

***Thru-bolt torque specs based on steel rods using motor oil.**
***Cap Screw 8740 torque specs based on steel rods using oil**
***Cap Screw H-11 torque specs based on steel rods using anti-seize.**
***AMS5844 torque specs based on steel rods using anti-seize.**
*** Bolts for titanium rods require special lubricant available from Crower.**

Specify -8 after part number if four cylinder, -12 if six or -16 in eight cyl.
Note: If using stretch method, Crower recommends .005" to .007".

Rod-Bolt Stretch & Torque Specs

The following information is vital for the proper connecting rod assembly installation:

STEP 1: Your Crower connecting rods came with a connecting rod specification tag. Check the tag to find the rod bolt part number used to fasten your connecting rods. Rod bolt length listed here is the measurement from under the head to the end.

STEP 2: Use the chart to determine the recommended lubricant, rod bolt stretch and torque amounts.

IMPORTANT DO NOT EXCEED THE TORQUE AMOUNT SHOWN FOR EACH BOLT PART NUMBER AND ITS RECOMMENDED LUBRICATION (If you are using lubrication other than shown, a stretch gauge must be used)

STEP 3: Taking the necessary precautions to protect the rod surfaces, secure the rod in a vise and leave the cap free to float. If the rod is titanium, take extra precautions to avoid damaging the plasma coating on the big end sides of the rod.

STEP 4: Apply a liberal amount of the recommended assembly lubricant to the bolt's threads and under the head of the bolt (the underside of the bolt's head).

STEP 5: (Use Stretch Method to determine exact torque) Since it is near impossible to use a stretch gauge when installing rods inside the motor, please use the following method to determine the exact torque that your wrench will read when the correct stretch is achieved. Using the above table, torque the rod bolts to achieve the required amount of stretch for your application. Record this torque spec as this is the exact torque spec that you will be using to install your rods in the motor.

STEP 6: (Torquing the bolt) When tightening bolts, especially in titanium rods it is best to torque all bolts to 20% of the total required torque and then in one smooth motion torque the bolt to the final torque spec without stopping.

Torquing your rod bolts without pre-determining the required torque to achieve the correct rod bolt stretch is not recomended. However if this is the only tightening method available to you, DO NOT EXCEED THE TORQUE AMOUNT INDICATED FOR YOUR BOLTS.