

MAHLE

Driven by performance

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APPLICATION GUIDE 2017

Racing Components

MMS12.Rev.9/16

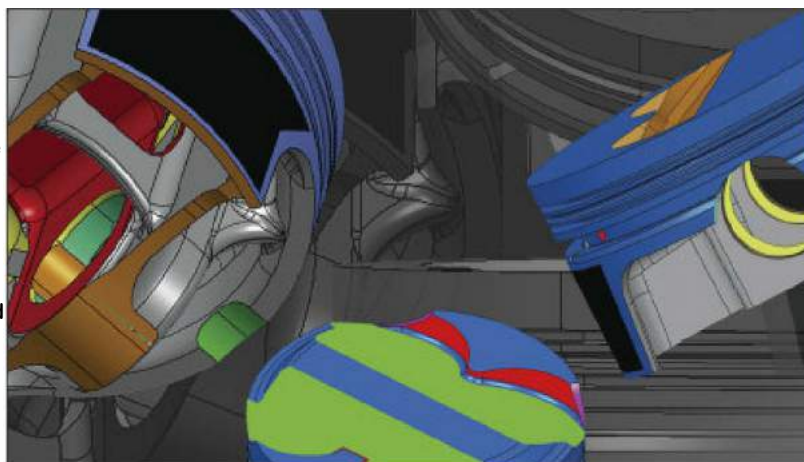
MAHLE
racing

MAHLE Means Performance

From powering champions in the world's premier racing series to delivering winning performances at dirt tracks and drag strips around the world, MAHLE means performance. It's a rich heritage that began over 95 years ago. In 1920, pistons made of heavy gray cast iron were used in the internal combustion engines of automobiles, but the Mahle brothers in Germany began working to develop light alloy pistons in their small, newly founded company.

The Mahle brothers revolutionized the piston industry in 1921 by building the world's first aluminum alloy piston. Because of their innovative approach to piston design and production, these lighter weight piston were sought out by racers of that era.

It was then that the MAHLE tradition of building the finest racing pistons was born, and today that tradition is being carried on in the United States by MAHLE Motorsports North America.



MAHLE Continues It's Winning Tradition

It's astounding to consider that MAHLE has only been participating in U.S. motorsports since early 2000. Because they've built on successes in NASCAR, American LeMans, and other top series, MAHLE continues to demonstrate why they are the first name in high performance racing pistons.

In recent years, MAHLE Motorsports powered vehicles have won multiple championships in everything from the NASCAR Sprint Cup, American LeMans, and World of Outlaws sprint cars to local circle track and drag strip championships across the country and everything else in between, not to mention capturing world records in the quarter mile and at the Bonneville Salt Flats. Whether you're competing professionally, running a street/strip car, time attack, diesel drag or pulling, or race on dirt or asphalt, be a part of the winning tradition of MAHLE Motorsports.





MAHLE Motorsport - The Racer's Best Value

The hardest and most important job for any manufacturer is bringing true value to its customers. MAHLE Motorsport, the piston technology leader, incorporates more features and value into every PowerPak piston kit than most companies offer in full custom pistons. MAHLE is constantly developing and adding new technology to every piston they produce. For uncompromising performance and the best value, trust MAHLE Motorsport to get you in the winner's circle.

Ultra Flat Ring Grooves

Every MAHLE Motorsport piston is machined to exacting tolerances, with focused attention given to the radial flatness of the ring grooves. A flat ring groove is essential in achieving and maintaining the best ring seal possible. The quality of the ring grooves is so critical to peak and lasting performance that MAHLE designed and built the machinery used to machine the ring grooves for its Motorsports piston assemblies. Combined with ultra flat MAHLE rings that are included in every PowerPak piston kit, MAHLE delivers the formula for the best sealing power on the market.

Slipper Skirt Forging

Designed through many years of R&D working with top Formula 1 teams, the "Slipper Skirt" forging is used exclusively in all MAHLE Motorsport piston kits. A true Slipper Skirt forging offers many benefits over the standard "Full Round" design, but the technology runs much deeper than looks alone. These benefits are only achieved through the proper management of the design; any misapplication can result in a similar looking part with poor performance and strength. Trust the leader in piston technology, MAHLE Motorsport.

CNC Machined Pin Bores

The pin bores of every MAHLE Motorsport piston are precision CNC machined on equipment designed and manufactured by MAHLE specifically for creating perfectly matched and aligned pin bores every time. This eliminates the need for finish honing and allows for tighter piston to pin clearances, resulting in more consistent performance and less stress in the pin boss area, another benefit that only MAHLE Motorsport can bring you.

Grafal® Skirt Coating

MAHLE proprietary Grafal® anti-friction skirt coating is like no other on the market. It is graphite impregnated to reduce drag like many other skirt coatings, but this is where the similarities end. Because Grafal® is compressible it offers a unique cushioning property that absorbs harsh contact between the piston skirt and the cylinder bore. This results in much less wear on the cylinder bore and significantly reduces piston skirt fatigue. The screen print application provides superior adhesion and is designed to last 100,000+ miles.

Cubic Inches	Bore	Stroke	Rod	Comp Height	Pin Diam.	Crown Vol	Wght G	Compression Ratio			Alloy	Clearance Guide Meas.			1.5,1.5,3mm Assembly	1, 1, 2mm Assembly
								58cc	64cc	70cc		Min	Max			
SMALL BLOCK CHEVY FLAT TOP																
File Fit Performance Ring Set included																
350	4.000	3.480/3.500	5.700	1.550	0.927	-5cc	452	11.1	10.3	9.7	4032	0.500	0.0025	0.0033		930200000
358	4.030						464	11.3	10.5	9.8					SBC550030F05	930200030
359	4.040						468	11.3	10.5	9.8					SBC550040F05	930200040
362	4.060						477	11.4	10.6	9.9					SBC550060F05	930200060
377	4.000	3.750	5.700	1.425	0.927	-5cc	438	11.8	11.0	10.3	4032	0.500	0.0025	0.0033	SBC425000F05	930200100
383	4.030						450	12.0	11.1	10.4					SBC425030F05	930200130
385	4.040						454	12.0	11.2	10.4					SBC425040F05	930200140
388	4.060						462	12.1	11.3	10.5					SBC425060F05	930200160
401	4.125						469	12.4	11.6	10.8						930200225
407	4.155						482	12.6	11.7	10.9						930200255
409	4.165						486	12.6	11.7	11.0						930200265
350	4.000	3.480/3.500	6.000	1.250	0.927	-5cc	417	11.0	10.2	9.5	4032	0.500	0.0025	0.0033		930200300
358	4.030						428	11.2	10.4	9.7					SBC250030F05	930200330
359	4.040						432	11.3	10.5	9.8					SBC250040F05	930200340
362	4.060						440	11.4	10.6	9.9					SBC250060F05	930200360
374	4.125						448	11.7	10.9	10.2						930200425
380	4.155						459	11.8	11.0	10.3						930200455
381	4.165						463	11.9	11.0	10.3						930200465
388	4.125	3.625	6.000	1.188	0.927	-5cc	441	12.1	11.2	10.5	4032	0.250	0.0025	0.0033	SBC188125F05	930200525
350	4.000	3.480/3.500	6.125	1.125	0.927	-5cc	404	11.1	10.3	9.7	4032	0.250	0.0025	0.0033	SBC125000F05	930200600
358	4.030						415	11.3	10.5	9.8					SBC125030F05	930200630
359	4.040						419	11.3	10.5	9.8					SBC125040F05	930200640
362	4.060						426	11.4	10.6	9.9					SBC125060F05	930200660
374	4.125						431	11.7	10.9	10.2					SBC125125F05	930200725
380	4.155						442	11.8	11.0	10.3					SBC125155F05	930200755
381	4.165						446	11.9	11.0	10.3					SBC125165F05	930200765
377	4.000	3.750	6.000	1.125	0.927	-5cc	404	11.8	11.0	10.3	4032	0.250	0.0025	0.0033		930200600
383	4.030						415	12.0	11.1	10.4					SBC125030F05	930200630
385	4.040						419	12.0	11.2	10.4					SBC125040F05	930200640
388	4.060						426	12.1	11.3	10.5					SBC125060F05	930200660
401	4.125						431	12.4	11.6	10.8					SBC125125F05	930200725
407	4.155						442	12.6	11.7	10.9					SBC125155F05	930200755
409	4.165						446	12.6	11.7	11.0					SBC125165F05	930200765
395	4.030	3.875	6.000	1.062R	0.927	-5cc	399	12.4	11.5	10.7	4032	0.250	0.0025	0.0033		930200830
397	4.040						403	12.4	11.5	10.8						930200840
414	4.125						409	12.8	11.9	11.1						930200925
420	4.155						419	12.9	12.0	11.2						930200955
422	4.165						423	13.0	12.1	11.3						930200965
427	4.185					-8cc	436	12.7	11.9	11.2	2618	0.250	0.0046	0.0054		930201385
408	4.030	4.000	6.000	1.000R	0.927	-5cc	387	12.7	11.8	11.0	4032	0.250	0.0025	0.0033	SBC000030F05	930201030
410	4.040						391	12.8	11.9	11.1					SBC000040F05	930201040
414	4.060						397	12.9	12.0	11.2					SBC000060F05	930201060
427	4.125						400	13.2	12.3	11.5					SBC000125F05	930201125
434	4.155						410	13.4	12.4	11.6					SBC000155F05	930201155
436	4.165						413	13.4	12.5	11.6						930201165
440	4.185					-7cc	411	13.4	12.4	11.6	2618	0.250	0.0046	0.0054	SBC000185F07	930201285

Compression Heights with "R" INCLUDE Oil Support Rails

SMALL BLOCK CHEVY 4-VALVE POCKET FLAT TOP

1.0, 1.0, 2.0mm File Fit Performance Ring Set included																
								58cc	64cc	70cc						
358	4.030	3.480/3.500	5.700	1.550	0.927	-5cc	489	11.3	10.5	9.8	4032	0.500	0.0025	0.0033		930203630
359	4.040						493	11.3	10.5	9.8						930203640
362	4.060						501	11.4	10.6	9.9						930203660
358	4.030	3.480/3.500	6.000	1.250	0.927	-5cc	447	11.3	10.5	9.8	4032	0.500	0.0025	0.0033		930203730

SMALL BLOCK CHEVY WISSOTA CONCEPT ENGINE

1.5, 1.5, 3.0mm File Fit Performance Ring Set included																
								58cc	64cc	70cc						
358	4.030	3.480/3.500	5.700	1.550	0.927	-5cc	463	11.3	10.5	9.8	4032	0.500	0.0025	0.0033	WIS550030F05	
359	4.040						467	11.3	10.5	9.8					WIS550040F05	
361	4.050						469	11.4	10.6	9.9					WIS550050F05	
362	4.060						471	11.4	10.6	9.9					WIS550060F05	

Cubic Inches	Bore	Stroke	Rod	Comp Height	Pin Diam.	Crown Vol	Wght G	Compression Ratio			Alloy	Clearance Guide Meas.			1.5,1.5,3mm Assembly	1, 1, 2mm Assembly
												Min	Max			
SMALL BLOCK CHEVY HIGH OUTPUT 2bbl Gasported 22°/23° Asymmetrical Valve Pockets																
1.0, 1.0, 2.0mm Performance Ring set and Light Weight 92 gram pins included																
								58cc	64cc	70cc						
358	4.030	3.500	5.700	1.550	0.927	-4cc	418	11.4	10.6	9.9	4032	0.500	0.0036	0.0044	930202530	
359	4.040						422	11.4	10.6	9.9					930202540	
361	4.050						425	11.5	10.7	10.0					930202550	
362	4.060						429	11.5	10.7	10.0					930202560	
358	4.030	3.500	6.000	1.250	0.927	-4cc	381	11.4	10.6	9.9	4032	0.250	0.0036	0.0044	930202630	
359	4.040						384	11.4	10.6	9.9					930202640	
361	4.050						388	11.5	10.7	10.0					930202650	
362	4.060						391	11.5	10.7	10.0					930202660	
358	4.030	3.500	6.125	1.125	0.927	-4cc	364	11.4	10.6	9.9	4032	0.250	0.0036	0.0044	930202830	
359	4.040						368	11.4	10.6	9.9					930202840	
383	4.030	3.750	6.000	1.125	0.927	-4cc	364	12.1	11.3	10.5	4032	0.250	0.0036	0.0044	930202830	
385	4.040						368	12.2	11.3	10.5					930202840	

SMALL BLOCK CHEVY 350ci FLAT TOP for DART 49cc and other 21° Angle Milled Heads Gasported/Asymmetrical Valve Pockets

1.0, 1.0, 2.0mm File Fit Performance Ring Set Included															
								50cc							
358	4.030	3.500	5.700	1.550	0.927	-8cc	460	12.0			2618	0.500	0.0056	0.0064	197724930*
359	4.040						464	12.1							197724940*
361	4.050						468	12.1							197724950*
362	4.060						472	12.2							197724960*
363	4.065						474	12.2							197724965*
358	4.030	3.500	6.000	1.250	0.927	-9cc	419	11.9			2618	0.500	0.0056	0.0064	197726830*
359	4.040						423	11.9							197726840*
361	4.050						427	12.0							197726850*
362	4.060						431	12.0							197726860*
363	4.065						432	12.0							197726865*
358	4.030	3.5/3.750	6.125/6.0	1.125	0.927	-9cc	403	11.9/12.6			2618	0.250	0.0056	0.0064	197753130*
359	4.040						406	11.9/12.6							197753140*
361	4.050						410	11.9/12.6							197753150*
362	4.060						413	12.0/12.7							197753160*
363	4.065						415	12.0/12.8							197753165*

*PowerPak Plus 2618 Alloy

SMALL BLOCK CHEVY 400ci FLAT TOP for DART 49cc and other 21° Angle Milled Heads Gasported/Asymmetrical Valve Pockets

1.0, 1.0, 2.0mm File Fit Performance Ring Set Included															
								50cc							
400	4.125	3.5/3.750	6.125/6.0	1.125	0.927	-9cc	418	12.3/13.1			2618	0.250	0.0056	0.0064	197753325*
407	4.155						428	12.5/13.3							197753355*
409	4.165						432	12.6/13.6							197753365*
400	4.125	3.625/3.875	6.125/6.0	1.062R	0.927	-9cc	404	12.7/13.5			2618	0.250	0.0056	0.0064	197779125*
407	4.155						414	12.9/13.7							197779155*
409	4.165						418	12.9/13.7							197779165*

*PowerPak Plus 2618 Alloy

SMALL BLOCK CHEVY 305ci FLAT TOP

File Fit Performance Ring Set included																
								58cc	64cc	70cc						
310	3.766	3.480	5.700	1.550	0.927	-3cc	413	10.3	9.5	8.9	4032	0.500	0.0025	0.0033	SBC550766F03	930204566
312	3.776						417	10.3	9.6	8.9					SBC550776F03	930204576
313	3.786						421	10.4	9.6	9.0					SBC550786F03	930204586
315	3.796						425	10.4	9.7	9.0					SBC550796F03	930204596

SMALL BLOCK CHEVY 305ci FLAT TOP Gasported / Asymmetrical Valve Pockets

File Fit Performance Ring set and Light Weight 92 gram pins included																
								58cc	64cc	70cc						
310	3.766	3.480	5.700	1.550	0.927	-1cc	410	10.5	9.7	9.0	4032	0.500	0.0036	0.0044	SBC550766T01	930205566
312	3.776						414	10.5	9.8	9.1					SBC550776T01	930205576
313	3.786						418	10.6	9.8	9.1					SBC550786T01	930205586
315	3.796						422	10.6	9.9	9.2					SBC550796T01	930205596

Meas. = The location to measure piston-to-wall clearance, referenced from the bottom of the piston skirt. "Min" and "Max" is the suggested range of clearance over the coating for each application.

Cubic Inches	Bore	Stroke	Rod	Comp Height	Pin Diam.	Crown Vol	Wght G	Compression Ratio			Alloy	Clearance Guide Meas.			1.5,1.5,3mm Assembly	1, 1, 2mm Assembly
												Min	Max			
SMALL BLOCK CHEVY 2bbi LIGHT WEIGHT Asymmetrical Valve Pockets																
1.0, 1.0, 2.0mm Performance Ring Set and Light Weight 92 gram pins included																
								58cc	64cc	70cc						
358	4.030	3.500	5.700	1.550	0.927	-2cc	412	11.3	10.8	9.8	4032	0.500	0.0036	0.0044		930206530
358	4.040						416	11.3	10.8	9.8						930206540
362	4.060						423	11.4	10.9	9.9						930206560
358	4.030	3.500	6.000	1.250	0.927	-2cc	375	11.3	10.8	9.8	4032	0.250	0.0036	0.0044		930206630
358	4.040						379	11.3	10.8	9.8						930206640
362	4.060						386	11.4	10.9	9.9						930206660
358	4.030	3.500	6.125	1.125	0.927	-2cc	359	11.3	10.8	9.8	4032	0.250	0.0036	0.0044		930206730
358	4.040						362	11.3	10.8	9.8						930206740
362	4.060						369	11.4	10.9	9.9						930206760
383	4.030	3.750	6.000	1.125	0.927	-2cc	359	12.4	11.5	10.7	4032	0.250	0.0036	0.0044		930206730
385	4.040						362	12.4	11.5	10.7						930206740
388	4.060						369	12.5	11.6	10.8						930206760

GM 604 Crate Engine Drop-In Forged Replacement

Requires 2.0mm, 1.5mm, 4.0mm Ring Set (Not Included)

								58cc	64cc	70cc						
350	4.005	3.480	5.700	1.559	0.927	-5cc		11.3	10.5	9.9	4032	0.500	0.0026	0.0034		930127805*
351	4.008															930127808*
353	4.020															930127820*
355	4.030															930127830*

*Weight matches OE cast piston

SMALL BLOCK CHEVY DOME

File Fit Performance Ring Set included

								58cc	64cc	70cc						
358	4.030	3.480/3.500	5.700	1.550	0.927	11cc	510	14.2	12.9	11.9	2618	0.500	0.0046	0.0054		930207530
359	4.040						515	14.3	13.0	11.9						930207540
401	4.125	3.750	5.700	1.425	0.927	4cc	496	14.1	12.9	12.0	2618	0.500	0.0046	0.0054		930207825
407	4.155						504	14.3	13.1	12.1					SBC425155D04	930207855
409	4.165						507	14.3	13.2	12.2						930207865
358	4.030	3.480/3.500	6.000	1.250	0.927	11cc	474	14.2	12.9	11.9	2618	0.500	0.0046	0.0054	SBC250030D11	930207930
359	4.040						478	14.3	13.0	11.9						930207940
362	4.060						485	14.4	13.1	12.0						930207960
380	4.155						524	14.9	13.6	12.5						930208055
358	4.030	3.480/3.500	6.125	1.125	0.927	11cc	460	14.2	12.9	11.9	2618	0.250	0.0046	0.0054	SBC125030D11	930208130
359	4.040						464	14.3	13.0	11.9					SBC125040D11	930208140
362	4.060						471	14.4	13.1	12.0						930208160
374	4.125						486	14.7	13.4	12.3	2618	0.500	0.0046	0.0054	SBC125125D11	930208225
380	4.155						497	14.9	13.6	12.5						930208255
381	4.165						501	15.0	13.6	12.5					SBC125165D11	930208265
383	4.030					6cc	453	13.0	12.0	11.0	2618	0.250	0.0046	0.0054	SBC125030D06	930208330
385	4.040						456	13.1	12.0	11.1					SBC125040D06	930208340
388	4.060						464	13.2	12.1	11.2						930208360
374	4.125					4cc	467	13.2	12.2	11.3	2618	0.500	0.0046	0.0054	SBC125125D04	930212525
380	4.155						479	13.4	12.3	11.4					SBC125155D04	930212555
381	4.165						482	13.4	12.3	11.4						930212565
383	4.030	3.750	6.000	1.125	0.927	11cc	460	15.2	13.8	12.6	2618	0.250	0.0046	0.0054	SBC125030D11	930208130
385	4.040						464	15.2	13.8	12.7					SBC125040D11	930208140
388	4.060						471	15.3	13.9	12.8						930208160
401	4.125						486	15.7	14.3	13.1	2618	0.500	0.0046	0.0054	SBC125125D11	930208225
407	4.155						497	15.9	14.5	13.3					SBC125155D11	930208255
409	4.165						501	16.0	14.5	13.3					SBC125165D11	930208265
383	4.030					6cc	453	14.0	12.8	11.8	2618	0.250	0.0046	0.0054	SBC125030D06	930208330
385	4.040						456	14.0	12.9	11.9					SBC125040D06	930208340
388	4.060						464	14.2	13.0	12.0						930208360
401	4.125					4cc	467	14.1	12.9	12.0	2618	0.500	0.0046	0.0054	SBC125125D04	930212525
407	4.155						479	14.2	13.1	12.1					SBC125155D04	930212555
409	4.165						482	14.3	13.1	12.2						930212565
395	4.030	3.875	6.000	1.062R	0.927	11cc	451	15.6	14.2	13.0	2618	0.250	0.0046	0.0054	SBC062030D11	930208530
397	4.040						455	15.7	14.3	13.1					SBC062040D11	930208540
401	4.060						462	15.8	14.4	13.2					SBC062060D11	930208560

Compression Heights with "R" INCLUDE Oil Support Rails

Meas. = The location to measure piston-to-wall clearance, referenced from the bottom of the piston skirt. "Min" and "Max" is the suggested range of clearance over the coating for each application.

Cubic Inches	Bore	Stroke	Rod	Comp Height	Pin Diam.	Crown Vol	Wght G	Compression Ratio			Alloy	Clearance Guide Meas.			1.5,1.5,3mm Assembly	1, 1, 2mm Assembly				
SMALL BLOCK CHEVY DOME continued																				
File Fit Performance Ring Set included								58cc	64cc	70cc										
414	4.125	3.875	6.000	1.062	0.927	4cc	448	14.5	13.3	12.4	2618	0.415	0.0046	0.0054	SBC062125D04	930208625				
420	4.155						470	14.7	13.5	12.5						930208655				
422	4.165						474	14.7	13.6	12.5						930208665				
434	4.155	4.000	6.000	1.000R	0.927	8cc	471	16.1	14.7	13.5	2618	0.250	0.0046	0.0054		930208755				
427	4.125					4cc	437	15.0	13.7	12.7	2618	0.350	0.0046	0.0054	SBC000125D04	930208825				
434	4.155						448	15.1	13.9	12.9					SBC000155D04	930208855				
436	4.165						452	15.2	14.0	12.9						930208865				

Compression Heights with "R" INCLUDE Oil Support Rails

SMALL BLOCK CHEVY 350ci 23° DOME Gasported / Asymmetrical Valve Pockets

1.0, 1.0, 2.0mm File Fit Performance Ring Set Included								64cc								
357	4.030	3.500	6.000	1.250	0.927	12cc	462				2618	0.500	0.0056	0.0064		197754130*
359	4.040						466									197754140*
361	4.050						469									197754150*
362	4.060						473									197754160*
357	4.030	3.5/3.750	6.125/6.0	1.125	0.927	12cc	444	13.1/14.0			2618	0.250	0.0056	0.0064		197754330*
359	4.040						447	13.2/14.1								197754340*
361	4.050						451	13.2/14.1								197754350*
362	4.060						454	13.2/14.2								197754360*

*PowerPak Plus 2618 Alloy

SMALL BLOCK CHEVY 400ci 23° DOME Gasported / Asymmetrical Valve Pockets

1.0, 1.0, 2.0mm File Fit Performance Ring Set Included								64cc								
400	4.125	3.5/3.750	6.125/6.0	1.125	0.927	9cc	443	13.0/13.9			2618	0.250	0.0056	0.0064		197754525*
403	4.135						447	13.1/13.9								197754535*
405	4.145						451	13.1/14.0								197754545*
407	4.155						454	13.2/14.1								197754555*
409	4.165						458	13.3/14.1								197754565*
413	4.185						465	13.4/14.3								197754585*
414	4.125	3.625/3.875	6.125/6.0	1.062R	0.927	4cc	425	12.4/13.2			2618	0.250	0.0056	0.0064		197754925*
416	4.135						429	12.4/13.2								197754935*
418	4.145						432	12.4/13.2								197754945*
420	4.155						436	12.4/13.2								197754955*
422	4.165						440	12.5/13.3								197754965*
426	4.185						447	12.5/13.3								197754985*
414	4.125					9cc	439	13.4/14.3								197754725*
415	4.130						441	13.4/14.3								197754730*
416	4.135						443	13.4/14.3								197754735*
417	4.140						444	13.5/14.4								197754740*
418	4.145						446	13.5/14.4								197754745*
419	4.150						448	13.5/14.4								197754750*
420	4.155						450	13.6/14.5								197754755*
421	4.160						451	13.6/14.5								197754760*
422	4.165						453	13.6/14.5								197754765*
423	4.170						455	13.6/14.5								197754770*
426	4.185						461	13.7/14.6								197754785*

*PowerPak Plus 2618 Alloy

SMALL BLOCK CHEVY INVERTED DOME

File Fit Performance Ring Set included								58cc	64cc	70cc						
358	4.030	3.480/3.500	5.700	1.550	0.927	-20cc	489	9.5	8.9	8.4	4032	0.500	0.0025	0.0033	SBC550030I20	930210130
383	4.030	3.750	5.700	1.425	0.927	-16cc	468	10.5	9.9	9.3	4032	0.500	0.0025	0.0033	SBC425030I16	930210230
385	4.040						472	10.6	9.9	9.3					SBC425040I16	930210240
388	4.060						480	10.6	10.0	9.4					SBC425060I16	930210260
407	4.155					-20cc	506	10.6	10.0	9.4	4032	0.500	0.0025	0.0033	SBC425155I20	930210355
409	4.165						511	10.6	10.0	9.5					SBC425165I20	930210365
383	4.030					-26cc	473	9.5	9.0	8.5	2618	0.500	0.0046	0.0054	SBC425030I26	930210430
385	4.040						477	9.5	9.0	8.5					SBC425040I26	930210440
383	4.030					-31cc	477	9.1	8.6	8.2	2618	0.500	0.0046	0.0054	SBC425030I31	930210530
358	4.030	3.480/3.500	6.000	1.250	0.927	-20cc	448	9.5	8.9	8.4	4032	0.250	0.0025	0.0033	SBC250030I20	930210630
358	4.030					-26cc	445	8.9	8.4	8.0	2618	0.250	0.0046	0.0054	SBC250030I26	930210730

Cubic Inches	Bore	Stroke	Rod	Comp Height	Pin Diam.	Crown Vol	Wght G	Compression Ratio			Alloy	Clearance Guide Meas.			1.5,1.5,3mm Assembly	1, 1, 2mm Assembly					
								58cc	64cc	70cc		Min	Max								
SMALL BLOCK CHEVY INVERTED DOME continued																					
File Fit Performance Ring Set included																					
358	4.030	3.480/3.500	6.125	1.125	0.927	-16cc	435	9.9	9.3	8.8	4032	0.250	0.0025	0.0033	SBC125030I16	930210830					
359	4.040						439	9.9	9.3	8.8					SBC125040I16	930210840					
362	4.060						446	10.0	9.4	8.9					SBC125060I16	930210860					
374	4.125						451	10.2	9.6	9.1					SBC125125I16	930210925					
380	4.155						462	10.3	9.8	9.2					SBC125155I16	930210955					
382	4.165	466	10.4	9.8	9.2	SBC125165I16	930210965														
383	4.030	3.750	6.000	1.125	0.927	-26cc	442	9.5	9.0	8.5	4032	0.250	0.0025	0.0033	SBC125030I26	930211030					
385	4.040						446	9.5	9.0	8.6					SBC125040I26	930211040					
409	4.155						472	10.0	9.4	8.9					SBC125155I26	930211155					
383	4.030						-16cc	435	10.5	9.9					9.3	4032	0.250	0.0025	0.0033	SBC125030I16	930210830
385	4.040							439	10.6	9.9					9.3					SBC125040I16	930210840
388	4.060	446	10.6	10.0	9.4	SBC125060I16		930210860													
400	4.125	451	11.0	10.3	9.7	SBC125125I16		930210925													
407	4.155	462	11.1	10.4	9.8	SBC125155I16		930210955													
409	4.165	466	11.1	10.4	9.8	SBC125165I16	930210965														
395	4.030	3.875	6.000	1.062R	0.927	-18cc	424	10.5	10.0	9.4	4032	0.250	0.0025	0.0033	SBC062030I18	930211230					
397	4.040						427	10.5	10.0	9.4					SBC062040I18	930211240					
414	4.125						-22cc	443	10.5	9.9					9.4	SBC062125I22	930211325				
420	4.155							455	10.6	10.0					9.5	SBC062155I22	930211355				
422	4.165							458	10.7	10.1					9.6	SBC062165I22	930211365				
427	4.125	4.000	6.000	1.000R	0.927	-20cc		419	11.1	10.4	9.9	4032	0.250	0.0025	0.0033	SBC000125I20	930211425				
434	4.155							429	11.2	10.6	10.0					SBC000155I20	930211455				
436	4.165						433	11.3	10.6	10.0	SBC000165I20					930211465					

Compression Heights with "R" INCLUDE Oil Support Rails

LS1/2/6 FLAT TOP & DOME

File Fit Performance Ring Set included																									
Cubic Inches	Bore	Stroke	Rod	Comp Height	Pin Diam.	Crown Vol	Wght G	Compression Ratio			Alloy	Clearance Guide Meas.			1.5,1.5,3mm Assembly	1, 1, 2mm Assembly									
								66cc	64cc	72cc		Min	Max												
346	3.898	3.622	6.098	1.340	0.945	-4cc	396	9.9	10.1	9.3	4032	0.580	0.0025	0.0033	LS1340898F04	930217698									
347	3.905						398	9.9	10.1	9.3					LS1340905F04	930217605									
348	3.908						399	9.9	10.1	9.3					LS1340908F04	930217608									
364	4.000						433	10.3	10.5	9.6					LS1340000F04	930217700									
365	4.005						435	10.3	10.5	9.7						930217705									
366	4.010	437	10.3	10.6	9.7	LS1340010F04	930217710																		
370	4.030	445	10.4	10.7	9.8	LS1340030F04	930217730																		
329	3.800	3.622	6.098	1.330	0.945	-4cc	403	9.5	9.7	8.9	4032	0.500	0.0025	0.0033		930217800*									
346	3.898						3.622	6.125	1.314	0.927					-4cc	394	9.9	10.1	9.3	4032	0.500	0.0025	0.0033	LS1314898F04	930217998
347	3.905															397	9.9	10.1	9.3					LS1314905F04	930217905
348	3.908															398	9.9	10.1	9.3					LS1314908F04	930217908
364	4.000															444	10.3	10.5	9.7						930218000
365	4.005	446	10.3	10.5	9.7	LS1314005F04					930218005														
366	4.010	448	10.3	10.5	9.7		930218010																		
370	4.030	455	10.4	10.7	9.8	LS1314030F04	930218030																		
403	4.005	4.000	6.125	1.105R	0.927	-4cc	396	11.3	11.5	10.6	4032	0.500	0.0025	0.0033	LS1340010F04	930218105									
408	4.030						404	11.4	11.7	10.7					LS1105030F04	930218130									
363	3.800							0cc	375	10.8					11.1	10.1	4032	0.500	0.0025	0.0033	LS1105800D00	930218200*			

Compression Heights with "R" INCLUDE Oil Support Rails

* 5.3L Application

LS1/2/6 INVERTED DOME

File Fit Performance Ring Set included																					
Cubic Inches	Bore	Stroke	Rod	Comp Height	Pin Diam.	Crown Vol	Wght G	Compression Ratio			Alloy	Clearance Guide Meas.			1.5,1.5,3mm Assembly	1, 1, 2mm Assembly					
								66cc	64cc	72cc		Min	Max								
347	3.905	3.622	6.125	1.314	0.927	-16cc	407	8.7	8.9	8.3	2618	0.530	0.0046	0.0054	LS1314905I16	930219005					
348	3.908						408	8.8	8.9	8.3					LS1314908I16	930219008					
383	3.905	4.000	6.125	1.105R	0.927	-6cc	387	10.6	10.8	9.9	4032	0.500	0.0025	0.0033	LS1105905I06	930219205					
384	3.908						388	10.6	10.8	10.0					LS1105908I06	930219208					
403	4.005						-12cc	397	10.3	10.6					9.8	4032	0.500	0.0025	0.0033	LS1105005I12	930219305
404	4.010							400	10.4	10.6					9.8					LS1105010I12	930219310
408	4.030							407	10.5	10.7					9.9					LS1105030I12	930219330
363	3.800	-16cc	348	9.1	9.3	8.6		4032	0.500	0.0025	0.0033	LS1105800I16	930219600*								
383	3.905		373	8.7	8.9	8.3						2618	0.340	0.0050	0.0058					LS1105905I26	930219405
403	4.005		413	8.9	9.1	8.5	2618					0.500	0.0061	0.0069	LS1105005I28	930219505					
408	4.030		422	9.0	9.2	8.6									LS1105030I28	930219530					

Compression Heights with "R" INCLUDE Oil Support Rails

* 5.3L Application

Cubic Inches	Bore	Stroke	Rod	Comp Height	Pin Diam.	Crown Vol	Wght G	Compression Ratio	Alloy	Clearance Meas.	Guide Min	Guide Max	1.5,1.5,3mm Assembly	1, 1, 2mm Assembly		
LS7 FLAT TOP & INVERTED																
File Fit Performance Ring Set included								66cc	64cc	72cc						
427	4.125	4.000	6.067	1.181R	0.927	-3cc	436	12.0	12.2	11.2	4032	0.500	0.0025	0.0033	LS7181125F03	930221525
429	4.130						437	12.0	12.3	11.2					LS7181130F03	930221530
427	4.125	4.000	6.125	1.105R	0.927	-3cc	438	12.0	12.2	11.2	4032	0.430	0.0025	0.0033	LS7105125F03	930221625
429	4.130						440	12.0	12.3	11.2						930221630
430	4.135						442	12.1	12.4	11.3						930221635
427	4.125					-25cc	454	9.7	9.9	9.2	2618	0.430	0.0046	0.0054	LS7105125P25*	930221825*
440	4.185					-6cc	436	11.6	11.8	11.0	4032	0.430	0.0025	0.0033	LS7105185I06	930221985

Compression Heights with "R" INCLUDE Oil Support Rails

*PowerPak Plus 2618 Alloy & Hard Anodized Top Ring Groove For Extreme Duty Applications

LS3 / L92 FLAT TOP & DOME

File Fit Performance Ring Set included								70cc								
376	4.065	3.622	6.098	1.340	0.945	-4cc	458	10.1			4032	0.580	0.0025	0.0033		930223065
377	4.070						460	10.1								930223070
378	4.075						462	10.2								930223075
365	4.005	3.622	6.125	1.314	0.927	-4cc	444	9.7			4032	0.530	0.0025	0.0033		930223105
366	4.010						446	9.8								930223110
370	4.030						448	10.0								930223130
376	4.065						456	10.1								930223165
377	4.070						458	10.1								930223170
378	4.075						460	10.2								930223175
365	4.005	3.622	6.125	1.314	0.927	2cc	484	10.5			4032	0.500	0.0025	0.0033		197719205
366	4.010						486	10.5								197719210
370	4.030						494	10.6								197719230
376	4.065						508	10.7								197719265
377	4.070						510	10.8								197719270
403	4.005	4.000	6.125	1.105R	0.927	-4cc	393	10.8			4032	0.500	0.0025	0.0033		930223205
408	4.030						402	10.9								930223230
415	4.065						415	11.1								930223265
416	4.070						417	11.1							L92105070F04	930223270
417	4.075						418	11.2							L92105075F04	930223275
427	4.070	4.125	6.125	1.045R	0.927	-8cc	421	11.1			2618	0.500	0.0046	0.0054		930223470*

Compression Heights with "R" INCLUDE Oil Support Rails

*PowerPak Plus 2618 Alloy & Hard Anodized Top Ring Groove For Extreme Duty Applications

LS3 / L92 INVERTED DOME

File Fit Performance Ring Set included								70cc								
366	4.010	3.622	6.125	1.314	0.927	-12cc	443	9.1			2618	0.530	0.0050	0.0058	L92314010I12	930224510
370	4.030						450	9.1							L92314030I12	930224530
377	4.070						465	9.3							L92314070I12	930224570
408	4.030	4.000	6.125	1.105R	0.927	-20cc	415	9.3			2618	0.500	0.0050	0.0058	L92105030I20	930224630
416	4.070					-25cc	428	9.1			4032	0.500	0.0025	0.0033	L92105070I25	930224770
417	4.075						430	9.2							L92105075I25	930224775
428	4.125						429	9.3							L92105125I25	930224825
415	4.065					-25cc	431	9.1			2618	0.500	0.0046	0.0054	L92105065P25*	930224965*
416	4.070						433	9.1							L92105070P25*	930224970*
428	4.125						450	9.3							L92105125P25*	930225025*
429	4.130						452	9.3							L92105130P25*	930225030*
428	4.070	4.125	6.125	1.055R	0.927	-30cc	414	9.0			2618	0.500	0.0046	0.0054	L92055070I30	930225170
427	4.065					-8cc	421	10.8			4032	0.500	0.0025	0.0033	L92055065I08	930225265
428	4.070						423	10.9							L92055070I08	930225270
428	4.075						424	10.9							L92055075I08	930225275
427	4.070	4.125	6.125	1.045R	0.927	-31cc	414	9.0			2618	0.500	0.0052	0.0060	L92045070P31*	930225370*

Compression Heights with "R" INCLUDE Oil Support Rails

*PowerPak Plus 2618 Alloy & Hard Anodized Top Ring Groove For Extreme Duty Applications

Meas. = The location to measure piston-to-wall clearance, referenced from the bottom of the piston skirt. "Min" and "Max" is the suggested range of clearance over the coating for each application.

Cubic Inches	Bore	Stroke	Rod	Comp Height	Pin Diam.	Crown Vol	Wght G	Compression Ratio	Alloy	Clearance Meas.	Guide Min	Guide Max	1.5,1.5,3mm Assembly	1, 1, 2mm Assembly
LS3/L92 DOME HIGH COMPRESSION RACING														
1.0mm, 1.0mm, 2.0mm File Fit Performance Ring Set Included														
70cc														
365	4.005	3.622	6.125	1.304	0.927	12cc	468	11.9	2618	0.500	0.0046	0.0054		197714805*
366	4.010						470	11.9						197714810*
370	4.030						477	12.0						197714830*
376	4.065						490	12.2						197714865*
377	4.070						492	12.2						197714870*
378	4.075						494	12.3						197714875*

*PowerPak Plus 2618 Alloy & Hard Anodized Top Ring Groove For Extreme Duty Applications

LT1														
1.0mm, 1.0mm, 2.0mm File Fit Performance Ring Set Included														
60cc														
376	4.065	3.622	6.125	1.304	0.927	-4cc	483	11.5	2618	0.500	0.0046	0.0054		930228765*
377	4.070						485	11.6						930228770*
376	4.065					-16cc	442	10.1						930228365*
377	4.070						443	10.1						930228370*
415	4.065	4.000	6.125	1.105	0.927	-6cc	441	12.0	2618	0.500	0.0046	0.0054		930165365*
416	4.070						443	12.1						930165370*
427	4.125						457	12.3						930173225*
428	4.130						459	12.4						930173230*
416	4.070					-22cc	412	10.0						930228070*

*PowerPak Plus 2618 Alloy & Hard Anodized Top Ring Groove For Extreme Duty Applications, designed for aftermarket rods

LSX COMBO FLAT TOP- Valve Pockets fit LS1, LS7, or L92 Heads

File Fit Performance Ring Set included															
64cc 70cc 72cc															
438	4.125	4.125	6.125	1.045R	0.927	-8cc	446	11.5	10.8	10.6	4032	0.500	0.0025	0.0033	LSX045125F08 930226525
439	4.130						448	11.6	10.9	10.7					LSX045130F08 930226530

Compression Heights with "R" INCLUDE Oil Support Rails

NHRA LEGAL COPO CAMARO

Does not include rings or pins. Made to order call for bore sizes/other tech

70cc

2014-2015 COPO 350 Supercharged 530HP - .043", .043", 3.0mm Ring Grooves														
350	4.065	3.370	6.350	1.200	0.927	12.7cc	484	Dependent Upon Bore Size	2618	0.435	0.0056	0.0064		197715800*
2016 COPO Supercharged 580HP - .043", .043", 3.0mm Ring Grooves														
350	4.125	3.370	6.350	1.200	0.927	12.7cc	484	Dependent Upon Bore Size	2618	0.435	0.0056	0.0064		197767300*
2013-2015 COPO 396 390HP - 1.5mm, 1.5mm, 3.0mm Ring Grooves														
396	4.065	4.000	6.125	1.105	0.927	-4cc	396	Dependent Upon Bore Size	4032	0.500	0.0026	0.0034		197758000*
2012-2015 COPO 427 425-430HP - .043", .043", 3.0mm Ring Grooves														
427	4.125	4.000	6.100	1.140	0.927	12cc	468	Dependent Upon Bore Size	2618	0.500	0.0046	0.0054		930148500*

*PowerPak Plus 2618 Alloy

Available in bore sizes up to the legal NHRA limit of .080" oversize

BIG BLOCK CHEVY FLAT TOP

1.5, 1.5, 3.0mm File Fit Performance Ring Set included															
112cc 118cc 124cc															
460	4.280	4.000	6.135	1.645	0.990	-3cc	528	8.6	8.2	7.9	4032	0.500	0.0041	0.0049	BBC645280F03
468	4.310						542	8.6	8.3	8.0					BBC645310F03
509	4.500						574	9.3	8.9	8.6					BBC645500F03
515	4.530						588	9.4	9.0	8.6					BBC645530F03
509	4.500	4.000	6.385	1.395	0.990	-3cc	537	9.3	8.9	8.6	4032	0.600	0.0041	0.0049	BBC395500F03
532	4.600						584	9.7	9.3	8.9					BBC395600F03
489	4.280	4.250	6.385	1.270R	0.990	-3cc	469	9.1	8.7	8.3	4032	0.250	0.0041	0.0049	BBC270280F03
496	4.310						481	9.2	8.8	8.4					BBC270310F03
498	4.320						485	9.2	8.8	8.5					BBC270320F03
505	4.350						498	9.3	8.9	8.6					BBC270350F03
540	4.500						513	9.8	9.4	9.1	4032	0.445	0.0041	0.0049	BBC270500F03
555	4.560						540	10.0	9.6	9.3					BBC270560F03
565	4.600						558	10.2	9.8	9.4					BBC270600F03
604	4.500	4.750	6.660	1.160R	0.990	-3cc	494	10.9	10.4	10.0	4032	0.375	0.0041	0.0049	BBC160500F03
632	4.600						537	11.3	10.8	10.4					BBC160600F03

Compression Heights with "R" INCLUDE Oil Support Rails

BIG BLOCK CHEVY 502 MARINE "DROP IN" REPLACEMENT

1/16", 1/16", 3/16" File Fit Performance Ring Set included															
118cc															
509	4.500	4.000	6.135	1.645	0.990	-3cc	679	9.0			4032	0.415	0.0041	0.0049	MER645500F03

Cubic Inches	Bore	Stroke	Rod	Comp Height	Pin Diam.	Crown Vol	Wght G	Compression Ratio			Alloy	Clearance Guide Meas.			1.5,1.5,3mm Assembly	1, 1, 2mm Assembly
BIG BLOCK CHEVY DOME																
1.5, 1.5, 3.0mm File Fit Performance Ring Set included																
112cc 118cc 124cc																
460	4.280	4.000	6.135	1.645	0.990	28cc	626	11.1	10.5	9.9	2618	0.855	0.0061	0.0069	BBC645280D28	
468	4.310						640	11.2	10.6	10.1					BBC645310D28	
460	4.280	4.000	6.385	1.395	0.990	28cc	587	11.1	10.5	9.9	2618	0.600	0.0061	0.0069	BBC395280D28	
467	4.310						601	11.2	10.6	10.1					BBC395310D28	
460	4.280					48cc	616	13.8	12.9	12.0	2618	0.600	0.0061	0.0069	BBC395280D48	
467	4.310						629	14.0	13.0	12.2					BBC395310D48	
540	4.500	4.250	6.385	1.270R	0.990	10cc	538	10.9	10.4	9.9	4032	0.445	0.0041	0.0049	BBC270500D10	
540	4.500					13cc	543	11.1	10.6	10.1	4032	0.445	0.0041	0.0049	BBC270500D13	
548	4.530						557	11.2	10.7	10.2					BBC270530D13	
555	4.560						570	11.4	10.8	10.3					BBC270560D13	
565	4.600						588	11.5	11.0	10.5					BBC270600D13	
489	4.280					18cc	526	10.7	10.2	9.7	4032	0.250	0.0041	0.0049	BBC270280D18	
496	4.310						539	10.8	10.3	9.8					BBC270310D18	
498	4.320						543	10.9	10.3	9.8					BBC270320D18	
505	4.350						555	11.0	10.4	9.9					BBC270350D18	
540	4.500					38cc	590	14.1	13.2	12.5	2618	0.445	0.0061	0.0069	BBC270500D38	
555	4.560						616	14.4	13.5	12.8					BBC270560D38	
565	4.600						635	14.6	13.7	12.9					BBC270600D38	
489	4.280					43cc	578	13.8	12.9	12.1	2618	0.445	0.0061	0.0069	BBC270280D43	
496	4.310						591	13.9	13.0	12.2					BBC270310D43	
498	4.320						595	14.0	13.1	12.3					BBC270320D43	
505	4.350						608	14.1	13.2	12.4					BBC270350D43	
496	4.310					48cc	605	14.8	13.7	12.8	2618	0.445	0.0061	0.0069	BBC270310D48	
505	4.350						622	15.0	14.0	13.0					BBC270350D48	
504	4.280	4.375	6.385	1.228R	0.990	18cc	537	11.0	10.4	9.9	4032	0.402	0.0041	0.0049	BBC228280D18	
511	4.310						549	11.1	10.5	10.1					BBC228310D18	
511	4.310					41cc	578	14.0	13.1	12.3	2618	0.400	0.0061	0.0069	BBC228310D41	

Compression Heights with "R" INCLUDE Oil Support Rails

BIG BLOCK CHEVY ELITE SPORTSMAN DRAG SERIES

.043", .043", 3.0mm Rings, not included

Available in Standard or Low Tension

															Low Tension							
															Ring Part #							
															112cc	118cc	124cc					
565	4.600	4.250	6.385	1.270R	0.990	47cc	663	16.2	15.1	14.1	2618	0.500	0.0061	0.0069	930239300	4605SL-043*						
566	4.605						666	16.2	15.1	14.2					930239305	4610SL-043*						
567	4.610						668	16.3	15.2	14.2					930239310	4615SL-043*						
571	4.625						676	16.4	15.3	14.3					930239325	4630SL-043*						
582	4.600	4.375	6.385	1.215R	0.990	47cc	652	16.7	15.5	14.5	2618	0.500	0.0061	0.0069	930239400	4605SL-043*						
583	4.605						654	16.7	15.5	14.6					930239405	4610SL-043*						
584	4.610						656	16.7	15.6	14.6					930239410	4615SL-043*						
588	4.625						664	16.8	15.7	14.7					930239425	4630SL-043*						
598	4.600	4.500	6.385	1.155R	0.990	45cc	633	16.6	15.5	14.6	2618	0.500	0.0061	0.0069	930239200	4605SL-043*						
599	4.605						635	16.7	15.6	14.6					930239205	4610SL-043*						
601	4.610						637	16.7	15.6	14.6					930239210	4615SL-043*						
605	4.625						645	16.8	15.7	14.7					930239225	4630SL-043*						
565	4.600	4.250	6.535	1.120R	0.990	42cc	617	15.2	14.2	13.4	2618	0.500	0.0061	0.0069	930239100	4605SL-043*						
566	4.605						619	15.3	14.3	13.4					930239105	4610SL-043*						
567	4.610						621	15.3	14.3	13.4					930239110	4615SL-043*						
571	4.625						628	15.4	14.4	13.5					930239125	4630SL-043*						
598	4.600	4.500	6.800	1.120R	0.990	42cc	617	16.1	15.1	14.2	2618	0.500	0.0061	0.0069	930239100	4605SL-043*						
599	4.605						619	16.1	15.1	14.2					930239105	4610SL-043*						
601	4.610						621	16.2	15.1	14.2					930239110	4615SL-043*						
605	4.625						628	16.3	15.2	14.3					930239125	4630SL-043*						
632	4.600	4.750	6.700	1.120R	0.990	42cc	617	16.9	15.9	14.9	2618	0.500	0.0061	0.0069	930239100	4605SL-043*						
633	4.605						619	17.0	15.9	14.9					930239105	4610SL-043*						
634	4.610						621	17.0	15.9	14.9					930239110	4615SL-043*						
638	4.625						628	17.1	16.0	15.0					930239125	4630SL-043*						

Compression Heights with "R" INCLUDE Oil Support Rails

Domes compatible with popular BBC cylinder heads and high lift, long duration cams. Dual coated and gas ported with advanced pin bore, profile, and ovality geometries. Focused attention on drag race specific key stress areas. In stock availability on assemblies and singles.

*Example: 4.600" Bore Size Low Tension Part #4605SL-043 / 4.600" Bore Size Standard Tension Part #4605SS-043

Cubic Inches	Bore	Stroke	Rod	Comp Height	Pin Diam.	Crown Vol	Wght G	Compression Ratio			Alloy	Clearance Guide Meas.			1.5,1.5,3mm Assembly	1, 1, 2mm Assembly
BIG BLOCK CHEVY ELITE SPORTSMAN DRAG SERIES																
.043", .043", 3.0mm Rings, not included																
Available in Standard or Low Tension																
112cc 118cc 124cc																
632	4.600	4.750	6.700	1.120R	0.990	47cc	631	18.6	17.3	16.1	2618	0.500	0.0061	0.0069	930239500	4605SL-043*
633	4.605						633	18.7	17.3	16.2					930239505	4610SL-043*
634	4.610						635	18.7	17.4	16.2					930239510	4615SL-043*
638	4.625						642	18.8	17.5	16.3					930239525	4630SL-043*
598	4.600	4.500	6.800	1.120R	0.990	47cc	631	17.1	15.9	14.9	2618	0.500	0.0061	0.0069	930239500	4605SL-043*
599	4.605						633	17.1	15.9	14.9					930239505	4610SL-043*
601	4.610						635	17.2	16.0	15.0					930239510	4615SL-043*
605	4.625						642	17.3	16.1	15.1					930239525	4630SL-043*
565	4.600	4.250	6.535	1.120R	0.990	47cc	631	16.2	15.1	14.1	2618	0.500	0.0061	0.0069	930239500	4605SL-043*
566	4.605						633	16.2	15.1	14.2					930239505	4610SL-043*
567	4.610						635	16.3	15.2	14.2					930239510	4615SL-043*
571	4.625						642	16.4	15.3	14.3					930239525	4630SL-043*
582	4.600	4.375	6.535	1.060R	0.990	47cc	617	17.2	16.0	14.9	2618	0.500	0.0061	0.0069	930239600	4605SL-043*
583	4.605						619	17.3	16.0	15.0					930239605	4610SL-043*
584	4.610						621	17.3	16.1	15.0					930239610	4615SL-043*
588	4.625						628	17.4	16.2	15.1					930239625	4630SL-043*
582	4.600	4.375	6.535	1.060R	0.990	40cc	597	15.3	14.3	13.5	2618	0.500	0.0061	0.0069	930239000	4605SL-043*
583	4.605						599	15.3	14.4	13.5					930239005	4610SL-043*
584	4.610						602	15.4	14.4	13.5					930239010	4615SL-043*
588	4.625						609	15.5	14.5	13.6					930239025	4630SL-043*

Compression Heights with "R" INCLUDE Oil Support Rails

Domes compatible with popular BBC cylinder heads and high lift, long duration cams. Dual coated and gas ported with advanced pin bore, profile, and ovality geometries. Focused attention on drag race specific key stress areas. In stock availability on assemblies and singles.

*Example: 4.600" Bore Size Low Tension Part #4605SL-043 / 4.600" Bore Size Standard Tension Part #4605SS-043

SMALL BLOCK FORD FLAT TOP

File Fit Performance Ring Set included																
58cc 64cc 70cc																
358	4.030	3.500	5.956	1.775	0.912	-6.5cc	497	11.0	10.2	9.6	4032	0.500	0.0025	0.0033		930244030
306	4.030	3.000	5.090	1.600	0.912	-6.5cc	477	9.6	8.9	8.4	4032	0.500	0.0025	0.0033	SBF600030F06	930244130
308	4.040						481	9.6	9.0	8.4						930244140
393	4.030	3.850	5.956	1.600	0.912	-6.5cc	477	12.0	11.2	10.5	4032	0.500	0.0025	0.0033	SBF600030F06	930244130
395	4.040						481	12.1	11.2	10.5						930244140
393	4.030	3.850	6.200	1.350	0.927	-6.5cc	445	12.0	11.2	10.5	4032	0.500	0.0025	0.0033		930244230
408	4.030	4.000	6.250	1.245	0.927	-6.5cc	431	12.4	11.6	10.8	4032	0.500	0.0025	0.0033	SBF245030F06	930244330
410	4.040						435	12.5	11.6	10.9						930244340
414	4.060						442	12.6	11.7	11.0						930244360
428	4.125						415	13.0	12.1	11.3					SBF245125F06	930244425
430	4.130						417	13.0	12.1	11.3					SBF245130F06	930244430
434	4.155						426	13.2	12.3	11.5						930244455
418	4.030	4.100	6.200	1.245	0.927	-6.5cc	431	12.7	11.8	11.1	4032	0.500	0.0025	0.0033	SBF245030F06	930244330
420	4.040						435	12.8	11.9	11.1						930244340
425	4.060						442	12.9	12.0	11.2						930244360
438	4.125						415	13.3	12.4	11.6					SBF245125F06	930244425
440	4.130						417	13.3	12.4	11.6					SBF245130F06	930244430
445	4.155						426	13.5	12.6	11.7						930244455
425	4.030	4.170	6.250	1.165	0.927	-6.5cc	409	13.0	12.1	11.3	4032	0.500	0.0025	0.0033	SBF165030F06	930244530
428	4.040						412	13.1	12.2	11.4					SBF165040F06	930244540
347	4.125						405	10.8	10.0	9.4					SBF165125F06	930244625
352	4.155						415	10.9	10.1	9.5						930244655
331	4.030	3.250	5.400	1.165	0.927	-6.5cc	409	10.4	9.7	9.1	4032	0.500	0.0025	0.0033	SBF165030F06	930244530
333	4.040						412	10.5	9.7	9.1					SBF165040F06	930244540
347	4.125						405	10.8	10.0	9.4					SBF165125F06	930244625
352	4.155						415	10.9	10.1	9.5						930244655
342	4.000	3.400	5.400	1.090R	0.927	-6.5cc	385	10.7	9.9	9.3	4032	0.500	0.0025	0.0033	SBF090000F06	930244700
347	4.030						395	10.8	10.1	9.4					SBF090030F06	930244730
348	4.035						397	10.8	10.1	9.4					SBF090035F06	930244735
349	4.040						398	10.9	10.1	9.5					SBF090040F06	930244740
352	4.060						405	11.0	10.2	9.6					SBF090060F06	930244760
364	4.125						404	11.2	10.5	9.8					SBF090125F06	930244825
369	4.155						414	11.4	10.6	9.9						930244855

Compression Heights with "R" INCLUDE Oil Support Rails

Cubic Inches	Bore	Stroke	Rod	Comp Height	Pin Diam.	Crown Vol	Wght G	Compression Ratio			Alloy	Clearance Guide Meas.			1.5,1.5,3mm Assembly	1, 1, 2mm Assembly									
								58cc	64cc	70cc		Min	Max												
SMALL BLOCK FORD SEALED RACE ENGINES																									
File Fit Performance Ring Set included																									
347	4.030	3.400	5.400	1.090R	0.927	-6cc	397	10.8	10.1	9.4	4032	0.500	0.0025	0.0033	SBF090030F06*	930244730*									
347	4.032						398	10.8	10.1	9.4					SBF090032F06*	930244732*									
348	4.035						399	10.8	10.1	9.4					SBF090035F06*	930244735*									
348	4.037						400	10.9	10.1	9.5					SBF090037F06*	930244737*									
349	4.040						401	10.9	10.1	9.5					SBF090040F06*	930244740*									
349	4.042						402	11.0	10.2	9.6					SBF090042F06*	930244742*									
350	4.045						403	11.0	10.2	9.6					SBF090045F06*	930244745*									
374	4.125						3.500	6.200	1.245	0.927					-6cc	415	13.0	12.1	11.3	4032	0.500	0.0025	0.0033	SBF245125F06**	930244425**
375	4.128															416	13.0	12.1	11.3					SBF245128F06**	930244428**
376	4.130															417	13.0	12.1	11.4					SBF245130F06**	930244430**
377	4.132	418	13.1	12.2	11.4	SBF245132F06**					930244432**														
378	4.135	419	13.1	12.2	11.4	SBF245135F06**					930244435**														

* 8.2" Deck Height, for FRPD347SR and S347JR

** 9.2" Deck Height, for FRP S374W

SMALL BLOCK FORD DOME

File Fit Performance Ring Set included																
58cc	64cc	70cc														
331	4.030	3.250	5.400	1.165	0.927	7cc	483	12.4	11.4	10.5	4032	0.360	0.0025	0.0033	SBF165030D07	930247030
347	4.030	3.400	5.400	1.090R	0.927	7cc	469	13.0	11.9	11.0	4032	0.500	0.0025	0.0033	SBF090030D07	930247130

Compression Heights with "R" INCLUDE Oil Support Rails

SMALL BLOCK FORD INVERTED DOME

File Fit Performance Ring Set included																
58cc	64cc	70cc														
393	4.030	3.850	5.956	1.600	0.912	-26cc	464	9.7	9.2	8.7	4032	0.725	0.0025	0.0033	SBF600030I26	930248130
395	4.040						469	9.8	9.2	8.8					SBF600040I26	930248140
408	4.030	4.000	6.200	1.300	0.927	-20cc	418	10.7	10.0	9.5	4032	0.500	0.0025	0.0033		930248230
410	4.040						422	10.7	10.1	9.5					SBF300040I20	930248240
408	4.030					-28cc	427	9.9	9.3	8.9	4032	0.425	0.0025	0.0033	SBF300030I28	930248330
408	4.030	4.000	6.250	1.245	0.927	-26cc	416	10.1	9.5	9.0	4032	0.250	0.0025	0.0033	SBF245030I26	930248430
410	4.040						420	10.1	9.6	9.1					SBF245040I26	930248440
418	4.030	4.100	6.200	1.245	0.927	-26cc	416	10.5	9.9	9.4	4032	0.250	0.0025	0.0033	SBF245030I26	930248430
420	4.040						420	10.6	10.0	9.5					SBF245040I26	930248440
427	4.125	4.000	6.250	1.245	0.927	-26cc	408	10.3	9.7	9.2	4032	0.440	0.0025	0.0033	SBF245125I26	930248525
438	4.125	4.100	6.200	1.245	0.927	-26cc	408	10.7	10.1	9.6	4032	0.440	0.0025	0.0033	SBF245125I26	930248525
408	4.030	4.000	6.250	1.230	0.927	-20cc	409	10.7	10.0	9.5	4032	0.500	0.0025	0.0033	SBF230030I20	930248730
410	4.040						412	10.7	10.1	9.5						930248740
425	4.030	4.170	6.250	1.165	0.927	-16cc	402	11.6	10.8	10.2	4032	0.500	0.0025	0.0033		930248830
428	4.040						406	11.6	10.9	10.3						930248840
452	4.155						419	11.6	11.0	10.4						930245055
331	4.030	3.250	5.400	1.165	0.927	-16cc	406	9.3	8.7	8.2	4032	0.500	0.0025	0.0033		930248830
333	4.040						409	9.3	8.7	8.2						930248840
352	4.155						419	9.4	8.8	8.3						930245055
347	4.030	3.400	5.400	1.090R	0.927	-16cc	389	9.6	9.0	8.5	4032	0.500	0.0025	0.0033	SBF090030I16	930249130
349	4.040						392	9.7	9.1	8.6					SBF090040I16	930249140
351	4.060						399	9.8	9.2	8.7					SBF090060I16	930249160
364	4.125						412	10.1	9.4	8.9	4032	0.260	0.0025	0.0033	SBF090125I16	930249025

Compression Heights with "R" INCLUDE Oil Support Rails

SMALL BLOCK FORD FLAT TOP for the TWISTED WEDGE® CYL HEAD

File Fit Performance Ring Set included																
61cc																
331	4.030	3.250	5.400	1.165	0.927	-6cc	438	10.0			4032	0.250	0.0025	0.0033		930250130
333	4.040						442	10.1							TWF165040F06	930250140
347	4.030	3.400	5.400	1.090R	0.927	-6cc	425	10.4			4032	0.500	0.0025	0.0033	TWF090030F06	930250330
349	4.040						429	10.5								930250340

Compression Heights with "R" INCLUDE Oil Support Rails

Cubic Inches	Bore	Stroke	Rod	Comp Height	Pin Diam.	Crown Vol	Wght G	Compression Ratio	Alloy	Clearance Meas.	Guide Min	Max	1.5,1.5,3mm Assembly	1, 1, 2mm Assembly
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SMALL BLOCK FORD INVERTED DOME for the TWISTED WEDGE® CYL HEAD

File Fit Performance Ring Set included

61cc

331	4.030	3.250	5.400	1.165	0.927	-16cc	437	8.9	4032	0.250	0.0025	0.0033	TWF165030H16	930251030
333	4.040						441	9.0					TWF165040H16	930251040
347	4.030	3.400	5.400	1.090R	0.927	-16cc	421	9.3	4032	0.500	0.0025	0.0033	TWF090030H16	930251130
349	4.040						425	9.4					TWF090040H16	930251140
363	4.125					-18cc	466	9.5	4032	0.500	0.0025	0.0033		930251225

Compression Heights with "R" INCLUDE Oil Support Rails

SMALL BLOCK FORD CLEVELAND

File Fit Performance Ring Set included

60cc 64cc 72cc

358	4.030	3.500	6.000	1.450	0.927	-3cc	477	11.3	10.7	9.8	4032	0.530	0.0025	0.0033	FCL450030F03	930252030
393	4.030	3.850	6.000	1.275R	0.927	-3cc	464	12.2	11.6	10.6	4032	0.320	0.0025	0.0033		930252130
395	4.040						468	12.3	11.7	10.7						930252140
412	4.125						502	12.7	12.1	11.1		0.500	0.0025	0.0033	FCL275125F03	930252225
412	4.125					-20cc	498	10.5	10.1	9.4		0.500	0.0025	0.0033	FCL275125I20	930252325
408	4.030	4.000	6.000	1.200R	0.927	-20cc	443	10.5	10.1	9.3	4032	0.245	0.0025	0.0033		930252430
427	4.125					-24cc	481	10.4	10.0	9.3		0.500	0.0025	0.0033	FCL200125I24	930252525
408	4.030					-3cc	455	12.7	12.1	11.0		0.245	0.0025	0.0033	FCL200030F03	930252630

Compression Heights with "R" INCLUDE Oil Support Rails

SMALL BLOCK FORD for the KAASE P-38® CYLINDER HEAD

File Fit Performance Ring Set included

60cc

408	4.030	4.000	6.250	1.245	0.927	-20cc	426	10.2			4032	0.500	0.0025	0.0033		930255030
427	4.125					-24cc	443	10.2			4032					930255125
331	4.030	3.250	5.400	1.165	0.927	-6cc	438	9.9			4032	0.500	0.0025	0.0033		930254430
347	4.125					-6cc	444	10.2			4032				K38165125I06	930254625
347	4.030	3.400	5.400	1.090R	0.927	-6cc	426	10.3			4032	0.500	0.0025	0.0033		930254030
364	4.125					-10cc	419	10.2			4032					930254225

Compression Heights with "R" INCLUDE Oil Support Rails

FORD MODULAR 4.6 2-VALVE or 4-VALVE

File Fit Performance Ring Set included

42cc 46cc 52cc

281	3.551	3.543	5.930	1.220	0.866	-16cc	350	9.9	9.4	8.7	M142	0.390	0.0006	0.0014	MOD220551H16	930256051
284	3.571						357	10.0	9.5	8.8					MOD220571H16	930256071
285	3.581						361	10.1	9.5	8.8					MOD220581H16	930256081
284	3.571					-22cc	379	9.2	8.8	8.2	2618	0.420	0.0026	0.0034	MOD220571P22*	930256171*
281	3.551					0cc	387	12.9	12.0	10.8	M142	0.410	0.0006	0.0014	MOD220551F00	930256251
284	3.571						394	13.0	12.1	10.9					MOD220571F00	930256271

*PowerPak Plus 2618 Alloy & Hard Anodized Top Ring Groove For Extreme Duty Applications; for Use with Aftermarket Rods Only

NHRA LEGAL MODULAR 5.4L 4-VALVE (2008, 2010, 2012 COBRA JET)

Call for bore sizes/other tech - 1.5mm, 1.5mm, 3.0mm Ring Grooves

52cc

330	3.553	3.543	5.930	1.220	0.866	-13cc	364	Dependent Upon Bore Size	M142	0.500	0.0060	0.0014	197740100	
	3.572													
	3.622													

Available in bore sizes up to the legal NHRA limit of .080" oversize

FORD MODULAR 5.4 2-VALVE or 4 VALVE

File Fit Performance Ring Set included

42cc 46cc 52cc

330	3.551	4.165	6.657	1.220	0.866	-16cc	350	9.7	9.2	8.7	M142	0.390	0.0006	0.0014	MOD220551H16	930256051
334	3.571						357	9.8	9.3	8.8					MOD220571H16	930256071
336	3.581						361	9.8	9.4	8.8					MOD220581H16	930256081
334	3.571					-22cc	379	9.1	8.8	8.3	2618	0.420	0.0026	0.0034	MOD220571P22*	930256171*
330	3.551					0cc	387	12.0	11.2	10.4	M142	0.410	0.0006	0.0014	MOD220551F00	930256251
334	3.571						394	12.0	11.3	10.5					MOD220571F00	930256271

*PowerPak Plus 2618 Alloy & Hard Anodized Top Ring Groove For Extreme Duty Applications

Meas. = The location to measure piston-to-wall clearance, referenced from the bottom of the piston skirt. "Min" and "Max" is the suggested range of clearance over the coating for each application.

Cubic Inches	Bore	Stroke	Rod	Comp Height	Pin Diam.	Crown Vol	Wght G	Compression Ratio		Alloy	Clearance Guide Meas.			1.5,1.5,3mm Assembly	1, 1, 2mm Assembly
											Min	Max			
FORD 5.0L MODULAR 4-VALVE "COYOTE"															
File Fit Performance Ring Set included 57cc															
302	3.630	3.650	5.933	1.167	0.866	3cc	389	11.2		M142	0.250	0.0006	0.0014	M4V167630D03**	930258030**
304	3.640						392	11.2							
302	3.630	3.650	5.933	1.167	0.866	-5cc	378	10.0		M142	0.250	0.0006	0.0014	M4V167630I05**	930134030**
304	3.640					381	10.0								
302	3.630	3.650	5.933	1.167	0.866	10cc	397	12.5		2618	0.250	0.0026	0.0034	M4V167630X10*	930258130*
304	3.640					400	12.5								
302	3.630	3.650	5.933	1.167	0.866	-13cc	355	9.0						M4V167630P13*	930258230*
304	3.640					358	9.0								

*PowerPak Plus 2618 Alloy & Hard Anodized Top Ring Groove For Extreme Duty Applications

**Hard Anodized Top Ring Groove For Extreme Duty Applications

NHRA LEGAL MODULAR 5.0L 4-VALVE (2014, 2015 COBRA JET)

Call for bore sizes/other tech - 1.2mm, 1.2mm, 2.5mm Ring Grooves

57cc															
302	3.630	3.650	5.933	1.167	0.866	-9cc	350	Dependent Upon Bore Size		2618	0.500	0.0026	0.0034	197736200*	
	3.650							197736200*							
	3.700							197736200*							

*PowerPak Plus 2618 Alloy

Available in bore sizes up to the legal NHRA limit of .080" oversize

FORD FLATHEAD - 3/16" STANDARD DOME

Top ring land is .280" tall to accommodate relieved blocks

1/16, 1/16, 3/16 Performance Ring Set included																			
65cc 74cc																			
276	3.312	4.000	7.000	1.438	0.750	13cc	338	9.0	8.1	4032	0.500	0.0016	0.0024	FFH438312D13					
281	3.342						348	9.1	8.2									FFH438342D13	
286	3.375						359	9.3	8.4									FFH438375D13	
284	3.312	4.125	7.000	1.375	0.750	13cc	324	9.2	8.3	4032	0.500	0.0016	0.0024	FFH375312D13					
290	3.342						333	9.4	8.4									FFH375342D13	
295	3.375						344	9.6	8.6									FFH375375D13	
293	3.312						4.250	7.000	1.313	0.750	13cc	310	9.5	8.5	4032	0.500	0.0016	0.0024	FFH313312D13
298	3.342	320	9.6	8.6														FFH313342D13	
304	3.375	330	9.8	8.8														FFH313375D13	

BIG BLOCK FORD

1.5, 1.5, 3.0mm File Fit Performance Ring Set included

72cc 80cc 84cc																
503	4.390	4.150	6.700	1.525	0.990	-28cc	591	10.4	9.7	9.4	4032	0.235	0.0041	0.0049	BBF525390I28	
503	4.390					-3cc	571	13.1	12.1	11.6	4032	0.235	0.0041	0.0049	BBF525390F03	
514	4.440					593	13.3	12.3	11.8							BBF525440F03
545	4.390	4.500	6.700	1.350	0.990	-38cc	564	10.3	9.7	9.5	4032	0.235	0.0041	0.0049	BBF350390I38	
557	4.440					585	10.5	9.9	9.7							BBF350440I38
545	4.390	4.500	6.700	1.350	0.990	-3cc	542	14.2	13.0	12.5	4032	0.235	0.0041	0.0049	BBF350390F03	
557	4.440					564	14.5	13.3	12.8							BBF350440F03
520	4.390	4.300	6.800	1.350	0.990	-38cc	564	9.8	9.3	9.0	4032	0.235	0.0041	0.0049	BBF350390I38	
532	4.440					585	10.0	9.5	9.2							BBF350440I38
520	4.390					-3cc	542	13.4	12.3	11.9	4032	0.235	0.0041	0.0049	BBF350390F03	
532	4.440					564	13.7	12.6	12.1				BBF350440F03			

BIG BLOCK FORD for the KAASE BOSS NINE® CYLINDER HEAD

1.5, 1.5, 3.0mm File Fit Performance Ring Set included

84cc 90cc																			
520	4.390	4.300	6.800	1.345	0.990	-8cc	615	11.3	10.7		4032	0.500	0.0041	0.0049	KB9345390F08				
545	4.390					4.500	6.700	1.345	0.990	-8cc	615	11.7	11.1		4032	0.500	0.0041	0.0049	KB9345390F08
545	4.390					1.345	0.990	-19cc	600	10.7	10.2		4032	0.250	0.0041	0.0049	930190990		

BIG BLOCK FORD for the KAASE P-51® CYLINDER HEAD

Also fits FRP SCJ Cylinder Heads

1.5, 1.5, 3.0mm File Fit Performance Ring Set included

72cc															
545	4.390	4.500	6.700	1.345	0.990	-34cc	559	10.3			4032	0.250	0.0041	0.0049	930190690

Meas. = The location to measure piston-to-wall clearance, referenced from the bottom of the piston skirt. "Min" and "Max" is the suggested range of clearance over the coating for each application.

Cubic Inches	Bore	Stroke	Rod	Comp Height	Pin Diam.	Crown Vol	Wght G	Compression Ratio			Alloy	Clearance Guide Meas.			1.5,1.5,3mm Assembly	1, 1, 2mm Assembly
								68cc	72cc	76cc		Min	Max			
FORD FE FLAT TOP																
File Fit Performance Ring Set included								68cc	72cc	76cc						
407	4.080	3.980	6.490	1.665	0.975	-7cc	507	11.0	10.5	10.1	4032	0.500	0.0025	0.0033	FFE665080F07	930264080
431	4.080	4.125	6.700	1.390	0.990	-7cc	473	11.6	11.1	10.7	4032	0.235	0.0025	0.0033	FFE390080F07	930264280
444	4.080	4.250	6.700	1.325	0.990	-7cc	473	11.8	11.3	10.8	4032	0.500	0.0025	0.0033		930264680
447	4.090							11.8	11.3	10.9						930264690
449	4.100							11.9	11.4	10.9						930264600
462	4.160							12.2	11.7	11.2						930265160
464	4.170							12.3	11.8	11.3						930265170
467	4.180							12.3	11.8	11.3						930265180
482	4.250	4.250	6.700	1.325	0.990	-9cc	487	12.5	12.0	11.5	4032	0.500	0.0041	0.0049	FFE325250F09	
487	4.270						495	12.6	12.1	11.6					FFE325270F09	
489	4.280						500	12.7	12.1	11.7					FFE325280F09	

FORD FE INVERTED																		
File Fit Performance Ring Set included								68cc	72cc	76cc								
431	4.080	4.125	6.700	1.390	0.990	-26cc	503	9.6	9.3	9.0	4032	0.235	0.0025	0.0033	FFE390080I26	930264180		
433	4.090															930264190		
445	4.080	4.250	6.700	1.325	0.990	-18cc	491	10.4	10.0	9.7	4032	0.500	0.0025	0.0033		930264480		
447	4.090							10.4	10.1	9.7						930264490		
449	4.100							10.5	10.1	9.8						930264400		
462	4.160							-20cc	519	10.8						10.4	10.0	930265060
464	4.170							523	10.8	10.4						10.1	930265070	
467	4.180							527	10.8	10.5						10.1	930265080	
482	4.250						508	11.2	10.8	10.4	4032	0.500	0.0041	0.0049	FFE325250I20			
487	4.270						517	11.3	10.9	10.5					FFE325270I20			
489	4.280						521	11.3	10.9	10.5					FFE325280I20			
445	4.080	4.250	6.700	1.325	0.990	-28cc	495	9.7	9.3	3.1	4032	0.500	0.0025	0.0033		930264980		
447	4.090							9.7	9.3	9.1						930264990		
449	4.100							9.8	9.4	9.1						930264900		
462	4.160	4.250	6.700	1.325	0.990	-33cc	520	9.6	9.3	9.1	4032	0.235	0.0025	0.0033	FFE325160I33	930264360		

SMALL BLOCK MOPAR FLAT TOP																
File Fit Performance Ring Set included								60cc	65cc	70cc						
345	4.070	3.313	6.123	1.804	0.984	-5cc	503	10.6	10.0	9.5	4032	0.970	0.0025	0.0033	SBM804070F05	930270070
365	4.030	3.580	6.123	1.670	0.984	-5cc	471	11.2	10.5	10.0	4032	0.840	0.0025	0.0033		930270130
367	4.040							11.2	10.6	10.0						930270140
408	4.030	4.000	6.123	1.460	0.984	-5cc	446	12.4	11.7	11.0	4032	0.625	0.0025	0.0033		930270230
410	4.040							12.4	11.7	11.1						930270240
416	4.070							12.6	11.9	11.2						930270270

SMALL BLOCK MOPAR INVERTED																
File Fit Performance Ring Set included								60cc	65cc	70cc						
408	4.030	4.000	6.123	1.460	0.984	-16cc	475	10.9	10.3	9.8	4032	0.625	0.0025	0.0033		930271030
410	4.040							11.0	10.4	9.9						930271040
414	4.060							11.0	10.5	10.0						930271060
408	4.030					-28cc	468	9.7	9.2	8.9	2618	0.625	0.0046	0.0054	SBM460030I28	930271130
410	4.040						472	9.7	9.3	8.9					SBM460040I28	930271140
416	4.070						485	9.8	9.4	9.0					SBM460070I28	930271170

BIG BLOCK MOPAR (RB) / 426, 440 Flat Top																
1.5, 1.5, 3.0mm File Fit Performance Ring Set included								72cc	80cc	84cc						
446	4.350	3.750	6.760	2.065	0.990	-8cc	608	11.2	10.3	10.0	4032	0.350	0.0041	0.0049	BBM065350F08	
493	4.350	4.150	6.760	1.865	0.990	-8cc	580	12.3	11.3	10.9	4032	0.350	0.0041	0.0049		BBM865350F08
499	4.375							12.4	11.4	11.0						BBM865375F08
505	4.350	4.250	7.100	1.475	0.990	-8cc	519	12.5	11.6	11.2	4032	0.350	0.0041	0.0049		BBM475350F08
511	4.375							12.7	11.7	11.3						BBM475375F08
520	4.350	4.375	7.100	1.412	0.990	-8cc	509	12.9	11.9	11.5	4032	0.350	0.0041	0.0049	BBM412350F08	
535	4.350	4.500	7.100	1.350	0.990	-8cc	500	13.2	12.2	11.8	4032	0.350	0.0041	0.0049		BBM350350F08
541	4.375							13.3	12.3	11.9						BBM350375F08

BIG BLOCK MOPAR (B) / 383, 400 Flat Top																
1.5, 1.5, 3.0mm File Fit Performance Ring Set included								72cc	80cc	84cc						
499	4.375	4.150	6.760	1.120R	0.990	-8cc	467	12.4	11.4	11.0	4032	0.350	0.0041	0.0049	BBM120375F08	

Compression Heights with "R" INCLUDE Oil Support Rails

Cubic Inches	Bore	Stroke	Rod	Comp Height	Pin Diam.	Crown Vol	Wght G	Compression Ratio	Alloy	Clearance Meas.	Guide Min	Guide Max	1.5,1.5,3mm Assembly	1, 1, 2mm Assembly	
HEMI 5.7L Stroker															
File Fit Performance Ring Set included								74cc	85cc						
392	3.927	4.050	6.125	1.095R	0.927	-2cc	408	10.4	9.3	4032	0.235	0.0025	0.0033	930276227	
394	3.937						411	10.4	9.3					HMI095937F02 930276237	
396	3.947						415	10.5	9.4					HMI095947F02 930276247	
392	3.927					6cc	434		10.5	4032	0.220	0.0025	0.0033	HMI095927D06 930276327	
396	3.947						440		10.6					HMI095947D06 930276347	
Compression Heights with "R" INCLUDE Oil Support Rails															
HEMI 6.1L Stroker															
File Fit Performance Ring Set included								74cc							
420	4.065	4.050	6.125	1.095R	0.927	-12cc	415		10.0	4032	0.220	0.0025	0.0033	HMI095065I12 930277565	
424	4.080						420		10.1					HMI095080I12 930277580	
426	4.090						424		10.2					HMI095090I12 930277590	
Compression Heights with "R" INCLUDE Oil Support Rails															
NHRA LEGAL 6.1L HEMI															
Call for bore sizes/other tech - 1.5mm, 1.5mm, 3.0mm Ring Grooves								74cc							
370	4.055	3.580	6.200	1.262	0.927	10.5cc	512	Dependent Upon Bore Size	2618	0.250	0.0046	0.0054	9299871**		
370	4.055		6.242	1.220	0.985	-1cc	420	Dependent Upon Bore Size	4032	0.250	0.0025	0.0033	197729300*		
371	4.060												197729300*		
*Hard Anodized Top Ring Groove For Extreme Duty Applications															
**PowerPak Plus 2618 Alloy and Hard Anodized Top Ring Grooves															
Available in bore sizes up to the legal NHRA limit of .080" oversize															
NHRA LEGAL 6.4L HEMI															
Call for bore sizes/other tech - 1.2mm, 1.2mm, 2.0mm Ring Grooves								74cc							
392	4.090	3.724	6.200	1.210	0.945	4cc	443	Dependent Upon Bore Size	4032	0.250	0.0025	0.0033	197729200*		
*Hard Anodized Top Ring Groove For Extreme Duty Applications															
Available in bore sizes up to the legal NHRA limit of .080" oversize															
HEMI 6.1L also works with the 6.4L CYLINDER HEAD															
File Fit Performance Ring Set included								74cc							
370	4.055	3.580	6.242	1.220	0.984	-1cc	426		10.0	4032	0.250	0.0025	0.0033	HMI220055F01* 930277655*	
371	4.060						428		10.1					930277660*	
370	4.055						450		10.0	2618	0.250	0.0046	0.0054	930277855*	
371	4.060						452		10.0					930277860*	
*Hard Anodized Top Ring Groove For Extreme Duty Applications															
HEMI 6.1L DROP-IN FORGED REPLACEMENT ASSEMBLY also works with the 6.4L CYLINDER HEAD															
NO BALANCING, NO COMP RATIO CHANGE, NO RINGS (USES OE RINGS)								74cc							
370	4.055	3.580	6.242	1.220	0.984	-1cc	426		10.0	4032	0.250	0.0025	0.0033	930111655*	
370	4.055						450		10.0	2618	0.250	0.0046	0.0054	930277855*	
371	4.060						452		10.0					930277860*	
*Hard Anodized Top Ring Groove For Extreme Duty Applications															
HEMI 6.4L															
File Fit Performance Ring Set included								74cc							
392	4.090	3.724	6.200	1.210	0.945	4cc	443		10.5	4032	0.250	0.0025	0.0033	HMI210090D04* 930279090	
*Hard Anodized Top Ring Groove For Extreme Duty Applications															
BIG BLOCK OLDSMOBILE / 455 Stroker															
1/16", 1/16", 3/16" File Fit Performance Ring Set included								72cc	80cc	84cc					
488	4.155	4.500	7.100	1.260R	0.990	-22cc	489	10.7	10.1	9.7	4032	0.235	0.0025	0.0033	BBO260155I22 930274555
495	4.185						501	10.8	10.1	9.8					BBO260185I22 930274585
Compression Heights with "R" INCLUDE Oil Support Rails															
BIG BLOCK PONTIAC FLAT TOP / 455 Stroker															
1/16", 1/16", 3/16" File Fit Performance Ring Set included								72cc	80cc	84cc					
461	4.155	4.250	6.800	1.285	0.990	-6cc	506	11.9	11.0	10.5	4032	0.235	0.0025	0.0033	BBP285155F06 930275055
468	4.185						518	12.0	11.1	10.7					BBP285185F06 930275085
488	4.155	4.500	6.800	1.160R	0.990	-6cc	480	12.5	11.5	11.1	4032	0.250	0.0025	0.0033	BBP160155F06 930275155
495	4.185						492	12.6	11.6	11.2					BBP160185F06 930275185
Compression Heights with "R" INCLUDE Oil Support Rails															

Bore	Stroke	Rod	Comp Height	Pin Diam.	Crown Vol	Wght G	Compression Ratio	Alloy	Clearance Guide			Assembly Part No.
									Meas.	Min	Max	

SPORT COMPACT
ACURA B18C1 DOHC VTEC 1.8L

1.0, 1.2, 2.8mm Performance Ring Set Included

41cc

81.00mm	87.2mm	137.9mm	30mm	21mm	-8cc	272	9.0	4032	0.236	0.0016	0.0024	ACR181189I08
81.50mm						277						ACR181209I08
81.50mm					-1cc	290	10.5	4032	0.236	0.0016	0.0024	ACR181209F01
81.00mm					9cc	307	12.5	4032	0.236	0.0016	0.0024	ACR181189D09
81.25mm						309	12.5					ACR181199D09
81.50mm						312	12.5					ACR181209D09

ACURA RSX K20 2.0L

1.2, 1.2, 2.8mm Performance Ring Set Included

51cc

86.00mm	86mm	139mm	30mm	22mm	-9cc	278	8.9	4032	0.236	0.0016	0.0024	ACR181386I09
86.50mm						284	ACR181405I09					
87.00mm						290	ACR181425I09					
86.00mm					12cc	327	12.7	4032	0.236	0.0016	0.0024	ACR181386D12
86.50mm						333	12.9					ACR181405D12
87.00mm						339	13.1					ACR181425D12

ACURA K24 2.4L

1.2, 1.2, 2.8mm Performance Ring Set Included

54cc

87.00mm	99mm	152mm	30mm	22mm	4cc	318	12.3	4032	0.236	0.0016	0.0024	ACR181425D04
87.25mm						321	12.3					ACR181435D04

FORD ST EcoBoost 2.0L

1.2, 1.2, 2.8mm Performance Ring Set Included

43cc

87.50mm	83.1mm	155.9mm	32.78mm	22.5m	-7cc	354	9.3	4032	0.250	0.0016	0.0024	197713945**		
87.50mm						347	10.0					0.0021	0.0029	197714245**
87.50mm						373	11.0					0.0021	0.0029	197714045*

*PowerPak Plus 2618 Alloy & Hard Anodized Top Ring Groove For Extreme Duty Applications

**Hard Anodized Top Ring Groove For Extreme Duty Applications

FORD EcoBoost 2.3L

1.2, 1.2, 2.8mm Performance Ring Set Included

43cc

87.50mm	94mm	149.3mm	32.8mm	22.5m	-7cc	359	9.5	2618	0.475	0.0021	0.0029	197755345*
88.00mm						366	9.6					197755365*

*PowerPak Plus 2618 Alloy & Hard Anodized Top Ring Groove For Extreme Duty Applications

**Hard Anodized Top Ring Groove For Extreme Duty Applications

HONDA B16 A1, A2, A3 DOHC VTEC 1.6L

1.0, 1.2, 2.8mm Performance Ring Set Included

42cc

81.50mm	77.4mm	134.5mm	30mm	21mm	-1cc	290	9.3	4032	0.236	0.0016	0.0024	ACR181209F01
81.00mm						307	11.4					4032
81.25mm					9cc	309	11.5					ACR181199D09
81.50mm						312	11.6					ACR181209D09

HONDA H22 GOLD SERIES 2.2L- FOR USE IN FACTORY FRM (FIBER REINFORCED MATRIX) CYLINDERS ONLY

1.2, 1.2, 2.8mm Performance Ring Set Included

54cc

87.00mm	90.0mm	143mm	31mm	22mm	-7cc	291	9.0	4032	0.236	0.0016	0.0024	H22220425I07
87.25mm						294	9.0					H22220435I07
87.00mm					-1cc	307	10.0	4032	0.236	0.0016	0.0024	H22220425F01
87.00mm					10cc	336	11.5	4032	0.236	0.0016	0.0024	H22220425D10
87.25mm						339	11.5					H22220435D10

Meas. = The location to measure piston-to-wall clearance, referenced from the bottom of the piston skirt. "Min" and "Max" is the suggested range of clearance over the coating for each application.
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Bore	Stroke	Rod	Comp		Pin	Crown	Wght	Compression Ratio	Alloy	Clearance Guide			Assembly Part No.
			Height	Diam.						Meas.	Min	Max	
HONDA S2000 F20C 2.0L GOLD SERIES - FOR USE IN FACTORY FRM (FIBER REINFORCED MATRIX) CYLINDERS ONLY													
1.2, 1.2, 2.8mm Performance Ring Set Included, Designed for Aftermarket Rods								54cc					
87.00mm						9cc	331	12.6	4032	0.374	0.0006	0.0014	S2K181425X09**
87.10mm							332	12.5	4032	0.374	0.0006	0.0014	S2K181429X09**
87.25mm							334	12.5	4032	0.374	0.0006	0.0014	S2K181435X09**
87.00mm						-11cc	303	8.9	2618	0.374	0.0016	0.0024	S2K181425P11*
87.25mm							306	8.9	2618	0.374	0.0016	0.0024	S2K181435P11*

*PowerPak Plus 2618 Alloy & Hard Anodized Top Ring Groove For Extreme Duty Applications

**Hard Anodized Top Ring Groove For Extreme Duty Applications

HONDA S2000 F22C 2.2L GOLD SERIES - FOR USE IN FACTORY FRM (FIBER REINFORCED MATRIX) CYLINDERS ONLY													
1.2, 1.2, 2.8mm Performance Ring Set Included, Designed for Aftermarket Rods								54cc					
87.00mm						9cc	331	13.4	4032	0.374	0.0006	0.0014	S2K181425X09**
87.10mm							332	13.5	4032	0.374	0.0006	0.0014	S2K181429X09**
87.25mm							334	13.5	4032	0.374	0.0006	0.0014	S2K181435X09**
87.00mm						-11cc	301	9.5	2618	0.374	0.0016	0.0024	S2K181425P11*
87.25mm							305	9.6	2618	0.374	0.0016	0.0024	S2K181435P11*

*PowerPak Plus 2618 Alloy & Hard Anodized Top Ring Groove For Extreme Duty Applications

**Hard Anodized Top Ring Groove For Extreme Duty Applications

HYUNDAI THETA L-4 TURBO 2.0L													
1.2, 1.2, 2.8mm Performance Ring Set Included								50.5cc					
86.00mm	86.00mm	146mm	30mm	22mm	-11cc	300		8.5	2618	0.260	0.0025	0.0033	HYU181385I11

HYUNDAI LAMBDA V-6 TURBO 3.8L													
1.2, 1.2, 2.8mm Performance Ring Set Included								67cc					
96.00mm	87.00mm	149.5mm	31.47mm	22mm	-23cc	396		9.0	4032	0.236	0.0016	0.0024	HYU239780I23

MITSUBISHI 4G63 2.0L 88-92 ECLIPSE													
1.2, 1.2, 2.8mm Performance Ring Set Included								47cc					
85.50mm	88.0mm	150mm	34.7mm	21mm	-10cc	313		9.0	4032	0.315	0.0016	0.0024	MIT367366I10
86.00mm						319		9.2					MIT367385I10

MITSUBISHI 4G63 2.0L 93-02 ECLIPSE 03-09 LANCER EVO													
1.2, 1.2, 2.8mm Performance Ring Set Included								47cc					
85.50mm	100.0mm	150mm	28.7mm	22mm	-19cc	276		9.0	4032	0.236	0.0016	0.0024	EVO130366I19
86.00mm						282		9.0					EVO130385I19
85.50mm						281		9.0	2618	0.236	0.0025	0.0033	EVO130366P19
86.00mm						286		9.0					EVO130385P19
85.50mm	94.00mm	150mm	31.7mm	22mm	-14cc	312		9.0	2618	0.236	0.0025	0.0033	EVO248366P14
86.00mm						318		9.0					EVO248385P14
85.00mm	88.0mm	150mm	34.7mm	22mm	-10cc	304		9.0	4032	0.315	0.0016	0.0024	EVO367346I10
85.50mm						310		9.0					EVO367366I10
86.00mm						316		9.0					EVO367385I10
85.50mm						-10cc	315	9.0	2618	0.236	0.0025	0.0033	EVO367366P10*
86.00mm						321		9.0					EVO367385P10*

*PowerPak Plus 2618 Alloy & Hard Anodized Top Ring Groove For Extreme Duty Applications

MITSUBISHI 4B11T EVO X 2.0L													
1.2, 1.2, 2.8mm Performance Ring Set Included								49cc					
86.00mm	86.0mm	143.75mm	33.37mm	23mm	-4.5cc	333		9.3	2618	0.510	0.0025	0.0033	EVO314385P05*
86.50mm						339		9.4					EVO314405P05*

*PowerPak Plus 2618 Alloy & Hard Anodized Top Ring Groove For Extreme Duty Applications

Meas. = The location to measure piston-to-wall clearance, referenced from the bottom of the piston skirt. "Min" and "Max" is the suggested range of clearance over the coating for each application.

Bore	Stroke	Rod	Comp Height	Pin Diam.	Crown Vol	Wght G	Compression Ratio	Alloy	Clearance Guide			Assembly Part No.
									Meas.	Min	Max	
NISSAN SR20DET (SILVIA) 2.0L												
NOTE : Must check oil squirter clearance, possible modification needed.												
1.2, 1.2, 2.8mm Performance Ring Set Included							46.5cc					
86.50mm	86.0mm	136mm	31.8mm	22mm	-11.5cc	307	8.5	4032	0.236	0.0016	0.0024	NIS253405112
87.00mm						313	8.5					NIS253425112

NISSAN KA24 DET 2.4L												
NOTE : Must check oil squirter clearance, possible modification needed.												
1.2, 1.2, 2.8mm Performance Ring Set Included							46cc					
90.00mm	96.0mm	165.0mm	34mm	21mm	-24cc	366	9.0	2618	0.420	0.0025	0.0033	NIS338543I24

NISSAN RB25DET (SKYLINE) 2.5L												
NOTE : Must check oil squirter clearance, possible modification needed.												
1.2, 1.2, 2.8mm Performance Ring Set Included							62cc					
86.50mm	71.7mm	121.5mm	31.3mm	21mm	11.5cc	353	8.5	4032	0.236	0.0016	0.0024	NIS232405D12
87.00mm						359	8.5					NIS232425D12

NISSAN RB26DET (SKYLINE) 2.6L												
NOTE : Must check oil squirter clearance, possible modification needed.												
1.2, 1.2, 2.8mm Performance Ring Set Included							65cc					
86.50mm	73.7mm	121.5mm	30.25mm	21mm	16cc	366	8.5	2618	0.236	0.0031	0.0039	NIS191405P16*
87.00mm						372	8.5					NIS191425P16*
*PowerPak Plus 2618 Alloy & Hard Anodized Top Ring Groove For Extreme Duty Applications												

NISSAN RB30DET(SKYLINE) 3.0L												
NOTE : Must check oil squirter clearance, possible modification needed.												
1.2, 1.2, 2.8mm Performance Ring Set Included							65cc					
86.50mm	85.0mm	152.5mm	32.1mm	21mm	-4.5cc	323	8.5	4032	0.236	0.0016	0.0024	NIS264405I05
87.00mm						329	8.5					NIS264425I05
86.50mm						332	8.5	2618	0.236	0.0031	0.0039	NIS264405P05*
87.00mm						339	8.5					NIS264425P05*
*PowerPak Plus 2618 Alloy & Hard Anodized Top Ring Groove For Extreme Duty Applications												

NISSAN VQ35DET (350z, INFINITI G35) 3.5L												
1.2, 1.2, 2.8mm Performance Ring Set Included							56cc					
95.50mm	81.4mm	144.1mm	29.6mm	22mm	-5cc	388	8.5	4032	0.236	0.0016	0.0024	NIS165760I05
96.00mm						394	8.6					NIS165780I05

NISSAN GT-R VR38 DETT 3.8L												
1.2, 1.2, 2.8mm Performance Ring Set Included							64cc					
95.51mm	88.4mm	165.1mm	34.25mm	23mm	-4cc	430	9.0	2618	0.250	0.0031	0.0039	NIS348760P04*
*PowerPak Plus 2618 Alloy & Hard Anodized Top Ring Groove For Extreme Duty Applications												

SUBARU 2.0L EJ20/207												
1.2, 1.2, 2.5mm Performance Ring Set Included							49cc					
92.00mm	75.0mm	130mm	32.7mm	23mm	-12cc	346	8.0	4032	0.236	0.0022	0.0030	SUB287622I12
92.50mm						352	8.0					SUB287642I12
93.00mm						359	8.0					SUB287661I12
92.50mm					-12cc	362	8.0	2618	0.236	0.0031	0.0039	SUB287642P12*
93.00mm						369	8.0					SUB287661P12*
*PowerPak Plus 2618 Alloy & Hard Anodized Top Ring Groove For Extreme Duty Applications												

Meas. = The location to measure piston-to-wall clearance, referenced from the bottom of the piston skirt. "Min" and "Max" is the suggested range of clearance over the coating for each application.

Bore	Stroke	Rod	Comp Height	Pin Diam.	Crown Vol	Wght G	Compression Ratio	Alloy	Clearance Guide			Assembly Part No.	
									Meas.	Min	Max		
SUBARU 2.2L STROKER													
1.2, 1.2, 2.5mm Performance Ring Set Included							49cc						
92.50mm	79.0mm	130.4mm	30.3mm	23mm	-16cc	337	8.0	4032	0.236	0.0022	0.0030	SUB193642I16	
93.00mm						344	8.1					SUB193661I16	
92.50mm					-16cc	347	8.0	2618	0.236	0.0031	0.0039	SUB193642P16*	
*PowerPak Plus 2618 Alloy & Hard Anodized Top Ring Groove For Extreme Duty Applications													
SUBARU FA20 TURBO													
1.2, 1.2, 2.8mm Performance Ring Set Included							40cc						
86.00mm	86.0mm	129.3mm	32.5mm	22mm	-8cc	339	10.5	2618	0.500	0.0031	0.0039	197769285	
86.50mm						345	10.6					197769205	
*PowerPak Plus 2618 Alloy & Hard Anodized Top Ring Groove For Extreme Duty Applications													
SUBARU WRX 2.5L STI, FORESTER, LEGACY													
1.0, 1.0, 2.5mm Performance Ring Set Included							56cc						
99.50mm	79.0mm	130.4mm	30.7mm	23mm	-22cc	390	8.2	4032	0.252	0.0022	0.0030	WRX209917I22	
99.75mm						393	8.2					WRX209927I22	
100.0mm						397	8.3					WRX209937I22	
99.50mm					-22cc	401	8.2	2618	0.252	0.0031	0.0039	WRX209917P22*	
99.75mm						405	8.2					WRX209927P22*	
100.0mm						409	8.3					WRX209937P22*	
99.50mm					-10cc	410	9.0	4032	0.252	0.0022	0.0030	WRX209917I10	
99.75mm						414	9.0					WRX209927I10	
100.0mm						417	9.0					WRX209937I10	
*PowerPak Plus 2618 Alloy & Hard Anodized Top Ring Groove For Extreme Duty Applications													
SUBARU WRX 2.5L STI, BOXED STRUT CONSTRUCTION													
1.0, 1.0, 2.5mm Performance Ring Set Included							56cc						
99.50mm	79.0mm	stock	30.7mm	23mm	-10cc	404	9.0	2618	0.252	0.0031	0.0039	930000917*	
99.75mm						407	9.0					930000927*	
100.0mm						410	9.0					930000937*	
*PowerPak Plus 2618 Alloy & Hard Anodized Top Ring Groove For Extreme Duty Applications													
TOYOTA 2ZZ-GE (CELICA GT-S) 1.8L													
1.0, 1.2, 2.8mm Performance Ring Set Included							38cc						
82.00mm	85.0mm	137.9mm	31.2mm	20mm	-12cc	298	9.0	4032	0.252	0.0021	0.0029	2ZZ228228I12	
82.00mm					4.3cc	330	12.3	4032	0.252	0.0021	0.0029	2ZZ228228D04	
TOYOTA 3SGTE 2.0L 90-95 MR2 TURBO													
1.2, 1.2, 2.8mm Performance Ring Set Included							51cc						
86.50mm	86.0mm	138mm	35.0mm	22mm	-4cc	343	9.0	4032	0.236	0.0016	0.0024	TOY378405I04	
TOYOTA 2JZ-GTE (SUPRA) 3.0L													
1.2, 1.2, 2.0mm Performance Ring Set Included							46cc						
86.50mm	86.0mm	142.0mm	34.0mm	22mm	-14cc	336	8.5	2618	0.236	0.0031	0.0039	TOY338405P14*	
*PowerPak Plus 2618 Alloy & Hard Anodized Top Ring Groove For Extreme Duty Applications													
XR6 for Australian Fords 4.0L													
1.2, 1.2, 2.5mm Performance Ring Set Included							65cc						
243	3.633	3.910	6.057	1.216	0.866	-14cc	335	8.7	4032	0.354	0.0025	0.0033	XR6216633I14
244	3.637						336	8.8				XR6216637I14	
246	3.652						341	8.8				XR6216652I14	
243	3.633					-14cc	345	8.7	2618	0.354	0.0031	0.0039	XR6216633P14*
244	3.637						346	8.8					XR6216637P14*
246	3.652						351	8.8					XR6216652P14*
*PowerPak Plus 2618 Alloy & Hard Anodized Top Ring Groove For Extreme Duty Applications													

Meas. = The location to measure piston-to-wall clearance, referenced from the bottom of the piston skirt. "Min" and "Max" is the suggested range of clearance over the coating for each application.

Bore	Stroke	Rod	Comp Height	Pin Diam.	Crown Vol	Wght G	Compression Ratio	Alloy	Clearance Meas.	Guide Min	Max	Assembly Part No.
EUROSPORT												
BMW MINI COOPER S PRINCE 2007- Current 1.6L												
1.0, 1.2, 2.8mm Performance Ring Set Included							Stock					
77.50mm	85.8mm	138.2mm	28.5mm	20mm	1cc	273	10.3	M142	0.385	0.0010	0.0018	MCP122051D01
BMW S52 B32 3.2L E36 M3												
1.2, 1.2, 2.8mm Performance Ring Set Included							33cc					
86.60mm	89.6mm	135mm	31mm	22mm	-25cc	304	9.0	2618	0.394	0.0020	0.0028	S52220409P25*
86.60mm					-11cc	324	11.3	4032	0.394	0.0010	0.0018	S52220409P11**
86.60mm					-5cc	340	12.5	4032	0.394	0.0010	0.0018	S52220409P05**
*PowerPak Plus 2618 Alloy & Hard Anodized Top Ring Groove For Extreme Duty Applications												
**Hard Anodized Top Ring Groove For Extreme Duty Applications												
BMW S54B 32 3.2L E46 M3												
1.2, 1.2, 2.8mm Performance Ring Set Included							33cc					
87.50mm	91.0mm	139mm	32.3mm	21mm	-29cc	334	9.0	2618	0.252	0.0028	0.0036	S54271445P29*
87.50mm					9cc	357	12.3	2618	0.252	0.0028	0.0036	S54271445T09*
*PowerPak Plus 2618 Alloy & Hard Anodized Top Ring Groove For Extreme Duty Applications												
PORSCHE 944 TURBO 2.5L for use in factory aluminum bores only												
1.2, 1.5, 3.0mm Performance Ring Set Included							54cc					
100.5mm	78.9mm	150mm	40.8mm	24mm	-21cc	473	8.5	2618	0.500	0.0036	0.0044	POR606956P21*
101.00mm						479	8.6					POR606976P21*
*PowerPak Plus 2618 Alloy & Hard Anodized Top Ring Groove For Extreme Duty Applications												
PORSCHE 968 TURBO 3.0L for use in factory aluminum bores only												
1.2, 1.5, 3.0mm Performance Ring Set Included							56cc					
104.5mm	87.8mm	150mm	36mm	24mm	-32cc	501	8.5	2618	0.400	0.0036	0.0044	POR417114P32*
*PowerPak Plus 2618 Alloy & Hard Anodized Top Ring Groove For Extreme Duty Applications												
VOLKSWAGEN/AUDI EARLY (95-2000) 1.8L TURBO												
1.0, 1.2, 2.8mm Performance Ring Set Included							42cc					
81.50mm	86.4mm	144mm	32.7mm	20mm	-12cc	294	8.5	4032	0.394	0.0010	0.0018	AUD287209I12
VOLKSWAGEN/AUDI S4 6-cyl. 5V Turbo												
1.0, 1.2, 2.8mm Performance Ring Set Included							42cc					
81.50mm	86.4mm	154mm	30.7mm	21mm	-7cc	295	9.0	4032	0.394	0.0010	0.0018	AUD209209I07
VOLKSWAGEN/AUDI LATE (2000+) 1.8L TURBO												
1.0, 1.2, 2.8mm Performance Ring Set Included							42cc					
81.50mm	86.4mm	144mm	32.7mm	19mm	-12cc	296	8.5	4032	0.394	0.0010	0.0018	TTA287209I12

Meas. = The location to measure piston-to-wall clearance, referenced from the bottom of the piston skirt. "Min" and "Max" is the suggested range of clearance over the coating for each application.

Bore	Stroke	Rod	Comp Height	Pin Diam.	Crown Vol	Wght G	Compression Ratio	Alloy	Clearance Guide			Assembly Part No.	
									Meas.	Min	Max		
VOLKSWAGEN TFSi (2006-2009) 2.0L													
1.2, 1.2, 2.8mm Performance Ring Set Included							45cc						
83.00mm	92.8mm	144mm	29.6mm	20mm	-8cc	311	9.0	M142	0.252	0.0010	0.0018	FSI165268P08*	
83.50mm						315	9.0	M142	0.252	0.0010	0.0018	FSI165287P08*	
*PowerPak Plus M142 Alloy & Hard Anodized Top Ring Groove For Extreme Duty Applications													
VOLKSWAGEN TSi (2010+) 2.0L													
1.2, 1.5, 2.0mm Performance Ring Set Included							65cc						
82.50 mm	92.8 mm	144 mm	29.6mm	21mm	-7cc	323	9.5	M142	0.275	0.0010	0.0018	TSI165248P07*	
83.00 mm						328	9.6					TSI165268P07*	
*PowerPak Plus M142 Alloy & Hard Anodized Top Ring Groove For Extreme Duty Applications													
VOLKSWAGEN VR6 3.2L 4V													
1.2, 1.2, 2.8mm Performance Ring Set Included							39cc						
84.50mm	95.9mm	164mm	34.7mm	20mm	-23cc	359	9.0	2618	0.177	0.0025	0.0033	VR6354326I23	

PREPARING THE RINGS Drop in ring sets typically require no adjustment to end gaps, but MAHLE recommends that the rings be checked for minimum end gap. File fit rings require individual gap adjustments to the top and second rings. This allows you to set the ring gap precisely to your exact needs. The following chart gives suggested minimum ring end gaps for various applications. If running aggressive boost or nitrous applications it may be necessary to increase end gaps.

PROPER RING GAP MEASUREMENT (See chart) A torque plate is highly recommended to insure correct measurements. The ring should be square in the bore, 1 inch down from the deck. Measure the end gap with a feeler gauge or other measuring device.

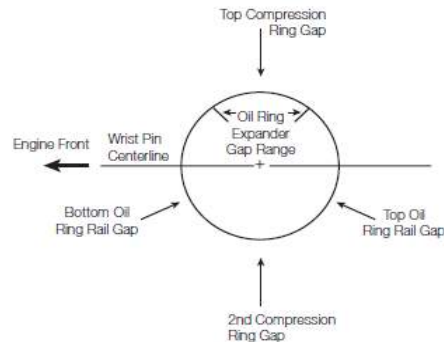
Application	Top Ring	Second Ring	Oil Ring Rail
High Performance Street - NA	Bore x 0.0045*	Bore x 0.0040*	Min 0.015*
Circle Track, Drag Racing - NA	Bore x 0.0050*	Bore x 0.0060*	Min 0.015*
Nitrous up to 200HP (25HP/cyl)	Bore x 0.0060*	Bore x 0.0050*	Min 0.015*
Nitrous over 200HP (25HP/cyl)	Bore x 0.0070*	Bore x 0.0070*	Min 0.015*
Turbo/Supercharged up to 15lb	Bore x 0.0060*	Bore x 0.0050*	Min 0.015*
Turbo/Supercharged over 15lb	Bore x 0.0070*	Bore x 0.0070*	Min 0.015*
Diesel - Turbocharged	Bore x 0.0060*	Bore x 0.0055*	Min 0.015*

OIL CONTROL RING TENSION MMS highly recommends that all wet sump or aluminum block applications use standard tension. Standard tension (3mm) expander sets are available to supplement the "ML-043" sets which are low tension.

PROPER RING FILING

The ring gap should be filed using the proper ring gap filing tool. Ring gap should only be filed in an inward direction and square to the ring sides.

PROPER RING ALIGNMENT



Due to the nature of performance applications, this information should not be considered absolute. Final decisions concerning the installation and use of these products is ultimately the responsibility of the customer.

WARNING: Tight ring gap clearances may cause major engine damage.

Finish Bore	Description	Assembly Part Number
1.5mm, 1.5mm, 3.0mm +.005" File Fit Rings		
3.551"	1.5, 1.5, 3.0mm File Fit	3556MS-15
3.571"	1.5, 1.5, 3.0mm File Fit	3576MS-15
3.581"	1.5, 1.5, 3.0mm File Fit	3586MS-15
3.766"	1.5, 1.5, 3.0mm File Fit	3771MS-15
3.796"	1.5, 1.5, 3.0mm File Fit	3801MS-15
3.810"	1.5, 1.5, 3.0mm 4cyl File Fit	3815MS-15
3.820"	1.5, 1.5, 3.0mm 4cyl File Fit	3825MS-15
3.830"	1.5, 1.5, 3.0mm 4cyl File Fit	3835MS-15
3.898"	1.5, 1.5, 3.0mm File Fit	3903MS-15
3.905"	1.5, 1.5, 3.0mm File Fit	3910MS-15
3.910"	1.5, 1.5, 3.0mm File Fit	3915MS-15
4.000"	1.5, 1.5, 3.0mm File Fit	4005MS-15
4.010"	1.5, 1.5, 3.0mm File Fit	4015MS-15
4.020"	1.5, 1.5, 3.0mm File Fit	4025MS-15
4.030"	1.5, 1.5, 3.0mm File Fit	4035MS-15
4.040"	1.5, 1.5, 3.0mm File Fit	4045MS-15
4.055"	1.5, 1.5, 3.0mm File Fit	4060MS-15
4.060"	1.5, 1.5, 3.0mm File Fit	4065MS-15
4.065"	1.5, 1.5, 3.0mm File Fit	4070MS-15
4.070"	1.5, 1.5, 3.0mm File Fit	4075MS-15
4.080"	1.5, 1.5, 3.0mm File Fit	4085MS-15
4.090"	1.5, 1.5, 3.0mm File Fit	4095MS-15
4.100"	1.5, 1.5, 3.0mm File Fit	4105MS-15
4.110"	1.5, 1.5, 3.0mm File Fit	4115MS-15
4.120"	1.5, 1.5, 3.0mm File Fit	4125MS-15
4.125"	1.5, 1.5, 3.0mm File Fit	4130MS-15
4.130"	1.5, 1.5, 3.0mm File Fit	4135MS-15
4.135"	1.5, 1.5, 3.0mm File Fit	4140MS-15
4.140"	1.5, 1.5, 3.0mm File Fit	4145MS-15
4.145"	1.5, 1.5, 3.0mm File Fit	4150MS-15
4.150"	1.5, 1.5, 3.0mm File Fit	4155MS-15
4.155"	1.5, 1.5, 3.0mm File Fit	4160MS-15
4.160"	1.5, 1.5, 3.0mm File Fit	4165MS-15
4.165"	1.5, 1.5, 3.0mm File Fit	4170MS-15
4.250"	1.5, 1.5, 3.0mm File Fit	4255MS-15
4.280"	1.5, 1.5, 3.0mm File Fit	4285MS-15
4.310"	1.5, 1.5, 3.0mm File Fit	4315MS-15
4.320"	1.5, 1.5, 3.0mm File Fit	4325MS-15
4.350"	1.5, 1.5, 3.0mm File Fit	4355MS-15
4.375"	1.5, 1.5, 3.0mm File Fit	4380MS-15
4.390"	1.5, 1.5, 3.0mm File Fit	4395MS-15
4.440"	1.5, 1.5, 3.0mm File Fit	4445MS-15
4.500"	1.5, 1.5, 3.0mm File Fit	4505MS-15
4.530"	1.5, 1.5, 3.0mm File Fit	4535MS-15
4.560"	1.5, 1.5, 3.0mm File Fit	4565MS-15
4.600"	1.5, 1.5, 3.0mm File Fit	4605MS-15
1.5mm, 1.5mm, 3.0mm STD Tension Drop In Rings		
3.551"	1.5, 1.5, 3.0 mm Drop In	3551MS-15
3.927"	1.5, 1.5, 3.0 mm Drop In	3927MS-15
3.937"	1.5, 1.5, 3.0 mm Drop In	3937MS-15
3.947"	1.5, 1.5, 3.0 mm Drop In	3947MS-15
4.000"	1.5, 1.5, 3.0 mm Drop In	4000MS-15D
4.030"	1.5, 1.5, 3.0 mm Drop In	4030MS-15D
4.125"	1.5, 1.5, 3.0 mm Drop In	4125MS-15D
4.155"	1.5, 1.5, 3.0 mm Drop In	4155MS-15D
4.250"	1.5, 1.5, 3.0 mm Drop In	4250MS-15D
4.500"	1.5, 1.5, 3.0 mm Drop In	4500MS-15D
4.600"	1.5, 1.5, 3.0 mm Drop In	4600MS-15D

Finish Bore	Description	Assembly Part Number
1.0mm, 1.0mm, 2.0mm +.005 File Fit Rings		
3.551"	1.0, 1.0, 2.0mm File Fit	3557MS-112
3.571"	1.0, 1.0, 2.0mm File Fit	3577MS-112
3.581"	1.0, 1.0, 2.0mm File Fit	3587MS-112
3.630"	1.0, 1.0, 2.0mm File Fit	3635MS-112
3.640"	1.0, 1.0, 2.0mm File Fit	3645MS-112
3.766"	1.0, 1.0, 2.0mm File Fit	3771MS-112
3.776"	1.0, 1.0, 2.0mm File Fit	3781MS-112
3.786"	1.0, 1.0, 2.0mm File Fit	3791MS-112
3.796"	1.0, 1.0, 2.0mm File Fit	3801MS-112
3.800"	1.0, 1.0, 2.0mm File Fit	3805MS-112
3.810"	1.0, 1.0, 2.0mm File Fit	3815MS-112
3.820"	1.0, 1.0, 2.0mm File Fit	3825MS-112
3.830"	1.0, 1.0, 2.0mm File Fit	3835MS-112
3.898"	1.0, 1.0, 2.0mm File Fit	3903MS-112
3.905"	1.0, 1.0, 2.0mm File Fit	3910MS-112
4.000"	1.0, 1.0, 2.0mm File Fit	4005MS-112
4.005"	1.0, 1.0, 2.0mm File Fit	4010MS-112
4.010"	1.0, 1.0, 2.0mm File Fit	4015MS-112
4.020"	1.0, 1.0, 2.0mm File Fit	4025MS-112
4.025"	1.0, 1.0, 2.0mm File Fit	4030MS-112
4.030"	1.0, 1.0, 2.0mm File Fit	4035MS-112
4.035"	1.0, 1.0, 2.0mm File Fit	4040MS-112
4.040"	1.0, 1.0, 2.0mm File Fit	4045MS-112
4.045"	1.0, 1.0, 2.0mm File Fit	4050MS-112
4.050"	1.0, 1.0, 2.0mm File Fit	4055MS-112
4.055"	1.0, 1.0, 2.0mm File Fit	4060MS-112
4.060"	1.0, 1.0, 2.0mm File Fit	4065MS-112
4.065"	1.0, 1.0, 2.0mm File Fit	4070MS-112
4.070"	1.0, 1.0, 2.0mm File Fit	4075MS-112
4.075"	1.0, 1.0, 2.0mm File Fit	4080MS-112
4.080"	1.0, 1.0, 2.0mm File Fit	4085MS-112
4.090"	1.0, 1.0, 2.0mm File Fit	4095MS-112
4.100"	1.0, 1.0, 2.0mm File Fit	4105MS-112
4.125"	1.0, 1.0, 2.0mm File Fit	4130MS-112
4.130"	1.0, 1.0, 2.0mm File Fit	4135MS-112
4.135"	1.0, 1.0, 2.0mm File Fit	4140MS-112
4.140"	1.0, 1.0, 2.0mm File Fit	4145MS-112
4.145"	1.0, 1.0, 2.0mm File Fit	4150MS-112
4.150"	1.0, 1.0, 2.0mm File Fit	4155MS-112
4.155"	1.0, 1.0, 2.0mm File Fit	4160MS-112
4.160"	1.0, 1.0, 2.0mm File Fit	4165MS-112
4.165"	1.0, 1.0, 2.0mm File Fit	4170MS-112
4.170"	1.0, 1.0, 2.0mm File Fit	4175MS-112
4.175"	1.0, 1.0, 2.0mm File Fit	4180MS-112
4.185"	1.0, 1.0, 2.0mm File Fit	4190MS-112
4.245"	1.0, 1.0, 2.0mm File Fit	4250MS-112
4.250"	1.0, 1.0, 2.0mm File Fit	4255MS-112
4.255"	1.0, 1.0, 2.0mm File Fit	4260MS-112
4.260"	1.0, 1.0, 2.0mm File Fit	4265MS-112
4.265"	1.0, 1.0, 2.0mm File Fit	4270MS-112
4.270"	1.0, 1.0, 2.0mm File Fit	4275MS-112
1.0mm, 1.0mm, 2.0mm STD Tension Drop In Rings		
4.000"	1.0, 1.0, 2.0mm Drop-In	4000MS-112D
4.030"	1.0, 1.0, 2.0mm Drop-In	4030MS-112D
4.040"	1.0, 1.0, 2.0mm Drop-In	4040MS-112D
4.055"	1.0, 1.0, 2.0mm Drop-In	4055MS-112D
4.125"	1.0, 1.0, 2.0mm Drop-In	4125MS-112D
4.155"	1.0, 1.0, 2.0mm Drop-In	4155MS-112D

Finish Bore	Description	Assembly Part Number
1/16", 1/16", 3/16" +.005" Standard Tension File Fit Rings		
4.020"	1/16", 1/16", 3/16" File Fit	4025MS
4.030"	1/16", 1/16", 3/16" File Fit	4035MS
4.040"	1/16", 1/16", 3/16" File Fit	4045MS
4.045"	1/16", 1/16", 3/16" File Fit	4050MS
4.060"	1/16", 1/16", 3/16" File Fit	4065MS
4.070"	1/16", 1/16", 3/16" File Fit	4075MS
4.100"	1/16", 1/16", 3/16" File Fit	4105MS
4.125"	1/16", 1/16", 3/16" File Fit	4130MS
4.130"	1/16", 1/16", 3/16" File Fit	4135MS
4.135"	1/16", 1/16", 3/16" File Fit	4140MS
4.145"	1/16", 1/16", 3/16" File Fit	4150MS
4.155"	1/16", 1/16", 3/16" File Fit	4160MS
4.165"	1/16", 1/16", 3/16" File Fit	4170MS
4.185"	1/16", 1/16", 3/16" File Fit	4190MS
4.250"	1/16", 1/16", 3/16" File Fit	4255MS
4.260"	1/16", 1/16", 3/16" File Fit	4265MS
4.270"	1/16", 1/16", 3/16" File Fit	4275MS
4.280"	1/16", 1/16", 3/16" File Fit	4285MS
4.290"	1/16", 1/16", 3/16" File Fit	4295MS
4.310"	1/16", 1/16", 3/16" File Fit	4315MS
4.320"	1/16", 1/16", 3/16" File Fit	4325MS
4.350"	1/16", 1/16", 3/16" File Fit	4355MS
4.360"	1/16", 1/16", 3/16" File Fit	4365MS
4.375"	1/16", 1/16", 3/16" File Fit	4380MS
4.440"	1/16", 1/16", 3/16" File Fit	4445MS
4.470"	1/16", 1/16", 3/16" File Fit	4475MS
4.500"	1/16", 1/16", 3/16" File Fit	4505MS
4.530"	1/16", 1/16", 3/16" File Fit	4535MS
4.560"	1/16", 1/16", 3/16" File Fit	4565MS
4.600"	1/16", 1/16", 3/16" File Fit	4605MS
4.630"	1/16", 1/16", 3/16" File Fit	4635MS

Finish Bore	Description	Assembly Part Number
1/16", 1/16", 3/16" Standard Tension Drop In Rings		
4.000"	1/16", 1/16", 3/16" Drop In	4000MS
4.020"	1/16", 1/16", 3/16" Drop In	4020MS
4.030"	1/16", 1/16", 3/16" Drop In	4030MS
4.040"	1/16", 1/16", 3/16" Drop In	4040MS
4.060"	1/16", 1/16", 3/16" Drop In	4060MS
4.080"	1/16", 1/16", 3/16" Drop In	4080MS
4.125"	1/16", 1/16", 3/16" Drop In	4125MS
4.145"	1/16", 1/16", 3/16" Drop In	4145MS
4.155"	1/16", 1/16", 3/16" Drop In	4155MS
4.165"	1/16", 1/16", 3/16" Drop In	4165MS
4.185"	1/16", 1/16", 3/16" Drop In	4185MS
4.250"	1/16", 1/16", 3/16" Drop In	4250MS
4.260"	1/16", 1/16", 3/16" Drop In	4260MS
4.270"	1/16", 1/16", 3/16" Drop In	4270MS
4.280"	1/16", 1/16", 3/16" Drop In	4280MS
4.290"	1/16", 1/16", 3/16" Drop In	4290MS
4.310"	1/16", 1/16", 3/16" Drop In	4310MS
4.330"	1/16", 1/16", 3/16" Drop In	4330MS
4.360"	1/16", 1/16", 3/16" Drop In	4360MS
4.390"	1/16", 1/16", 3/16" Drop In	4390MS
4.400"	1/16", 1/16", 3/16" Drop In	4400MS
4.420"	1/16", 1/16", 3/16" Drop In	4420MS
4.466"	1/16", 1/16", 3/16" Drop In	4466MS
4.500"	1/16", 1/16", 3/16" Drop In	4500MS
4.600"	1/16", 1/16", 3/16" Drop In	4600MS
4.630"	1/16", 1/16", 3/16" Drop In	4630MS

Finish Bore	Description	Assembly Part Number
1/16", 1/16", 3/16" +.005" Low Tension File Fit Rings		
4.000"	1/16", 1/16", 3/16" File Fit	4005ML
4.020"	1/16", 1/16", 3/16" File Fit	4025ML
4.030"	1/16", 1/16", 3/16" File Fit	4035ML
4.040"	1/16", 1/16", 3/16" File Fit	4045ML
4.045"	1/16", 1/16", 3/16" File Fit	4050ML
4.060"	1/16", 1/16", 3/16" File Fit	4065ML
4.070"	1/16", 1/16", 3/16" File Fit	4075ML
4.100"	1/16", 1/16", 3/16" File Fit	4105ML
4.125"	1/16", 1/16", 3/16" File Fit	4130ML
4.130"	1/16", 1/16", 3/16" File Fit	4135ML
4.135"	1/16", 1/16", 3/16" File Fit	4140ML
4.145"	1/16", 1/16", 3/16" File Fit	4150ML
4.155"	1/16", 1/16", 3/16" File Fit	4160ML
4.165"	1/16", 1/16", 3/16" File Fit	4170ML
4.185"	1/16", 1/16", 3/16" File Fit	4190ML
4.250"	1/16", 1/16", 3/16" File Fit	4255ML
4.270"	1/16", 1/16", 3/16" File Fit	4275ML
4.280"	1/16", 1/16", 3/16" File Fit	4285ML
4.290"	1/16", 1/16", 3/16" File Fit	4295ML
4.310"	1/16", 1/16", 3/16" File Fit	4315ML
4.320"	1/16", 1/16", 3/16" File Fit	4325ML
4.350"	1/16", 1/16", 3/16" File Fit	4355ML
4.360"	1/16", 1/16", 3/16" File Fit	4365ML
4.375"	1/16", 1/16", 3/16" File Fit	4380ML
4.380"	1/16", 1/16", 3/16" File Fit	4385ML
4.390"	1/16", 1/16", 3/16" File Fit	4395ML
4.400"	1/16", 1/16", 3/16" File Fit	4405ML
4.470"	1/16", 1/16", 3/16" File Fit	4475ML
4.500"	1/16", 1/16", 3/16" File Fit	4505ML
4.530"	1/16", 1/16", 3/16" File Fit	4535ML
4.560"	1/16", 1/16", 3/16" File Fit	4565ML
4.600"	1/16", 1/16", 3/16" File Fit	4605ML

Finish Bore	Description	Assembly Part Number
.043", .043", 3.0mm Low Tension File Fit Rings		
3.551"	.043", .043", 3.0mm File Fit	3556ML-043
3.571"	.043", .043", 3.0mm File Fit	3576ML-043
3.581"	.043", .043", 3.0mm File Fit	3586ML-043
3.766"	.043", .043", 3.0mm File Fit	3771MS-043
3.776"	.043", .043", 3.0mm File Fit	3781MS-043
3.786"	.043", .043", 3.0mm File Fit	3791MS-043
3.796"	.043", .043", 3.0mm File Fit	3801MS-043
3.810"	.043", .043", 3.0mm 2.3L File fit	3815ML-043
3.820"	.043", .043", 3.0mm 2.3L File fit	3825ML-043
3.830"	.043", .043", 3.0mm 2.3L File fit	3835ML-043
3.898"	.043", .043", 3.0mm File Fit	3903ML-043
3.905"	.043", .043", 3.0mm File Fit	3910ML-043
3.910"	.043", .043", 3.0mm File Fit	3915ML-043
4.000"	.043", .043", 3.0mm File Fit	4005ML-043
4.005"	.043", .043", 3.0mm File Fit	4010ML-043
4.010"	.043", .043", 3.0mm File Fit	4015ML-043
4.020"	.043", .043", 3.0mm File Fit	4025ML-043
4.025"	.043", .043", 3.0mm File Fit	4030ML-043
4.030"	.043", .043", 3.0mm File Fit	4035ML-043
4.035"	.043", .043", 3.0mm File Fit	4040ML-043
4.040"	.043", .043", 3.0mm File Fit	4045ML-043
4.045"	.043", .043", 3.0mm File Fit	4050ML-043
4.050"	.043", .043", 3.0mm File Fit	4055ML-043
4.055"	.043", .043", 3.0mm File Fit	4060ML-043
4.060"	.043", .043", 3.0mm File Fit	4065ML-043
4.065"	.043", .043", 3.0mm File Fit	4070ML-043
4.070"	.043", .043", 3.0mm File Fit	4075ML-043
4.080"	.043", .043", 3.0mm File Fit	4085ML-043
4.100"	.043", .043", 3.0mm File Fit	4105ML-043
4.125"	.043", .043", 3.0mm File Fit	4130ML-043
4.130"	.043", .043", 3.0mm File Fit	4135ML-043
4.135"	.043", .043", 3.0mm File Fit	4140ML-043
4.140"	.043", .043", 3.0mm File Fit	4145ML-043

Finish Bore	Description	Assembly Part Number
.043", .043", 3.0mm +.005" Low Tension File Fit Rings Cont..		
4.145"	.043", .043", 3.0mm File Fit	4150ML-043
4.150"	.043", .043", 3.0mm File Fit	4155ML-043
4.155"	.043", .043", 3.0mm File Fit	4160ML-043
4.160"	.043", .043", 3.0mm File Fit	4165ML-043
4.165"	.043", .043", 3.0mm File Fit	4170ML-043
4.170"	.043", .043", 3.0mm File Fit	4175ML-043
4.175"	.043", .043", 3.0mm File Fit	4180ML-043
4.180"	.043", .043", 3.0mm File Fit	4185ML-043
4.185"	.043", .043", 3.0mm File Fit	4190ML-043
.043", .043", 3.0mm +.005" Steel Low Tension File Fit Rings		
4.600"	.043", .043", 3.0mm File Fit	4605SL-043
4.605"	.043", .043", 3.0mm File Fit	4610SL-043
4.610"	.043", .043", 3.0mm File Fit	4615SL-043
4.625"	.043", .043", 3.0mm File Fit	4630SL-043
.043", .043", 3.0mm +.005" Steel STD Tension File Fit Rings		
4.600"	.043", .043", 3.0mm File Fit	4605SS-043
4.605"	.043", .043", 3.0mm File Fit	4610SS-043
4.610"	.043", .043", 3.0mm File Fit	4615SS-043
4.625"	.043", .043", 3.0mm File Fit	4630SS-043
1.1mm, 1.5mm, 3.0mm +.005" STD Tension File Fit Rings		
4.125"	1.1, 1.5, 3.0mm File Fit	4130MS-1115
4.130"	1.1, 1.5, 3.0mm File Fit	4135MS-1115
4.135"	1.1, 1.5, 3.0mm File Fit	4140MS-1115
4.140"	1.1, 1.5, 3.0mm File Fit	4145MS-1115
4.145"	1.1, 1.5, 3.0mm File Fit	4150MS-1115
4.150"	1.1, 1.5, 3.0mm File Fit	4155MS-1115
4.155"	1.1, 1.5, 3.0mm File Fit	4160MS-1115
4.160"	1.1, 1.5, 3.0mm File Fit	4165MS-1115
4.165"	1.1, 1.5, 3.0mm File Fit	4170MS-1115
4.185"	1.1, 1.5, 3.0mm File Fit	4190MS-1115
4.250"	1.1, 1.5, 3.0mm File Fit	4255MS-1115
Sport Compact Rings		
80.50 mm	1.0, 1.2, 2.8mm Drop In	8050MS-10
81.00 mm	1.0, 1.2, 2.8mm Drop In	8100MS-10
81.25 mm	1.0, 1.2, 2.8mm Drop In	8125MS-10
81.50 mm	1.0, 1.2, 2.8mm Drop In	8150MS-10
82.00 mm	1.0, 1.2, 2.8mm Drop In	8200MS-10
83.00 mm	1.2, 1.2, 2.8mm Drop In	8300MS-12
83.50 mm	1.2, 1.2, 2.8mm Drop In	8350MS-12
84.00 mm	1.2, 1.2, 2.8mm Drop In	8400MS-12
84.50 mm	1.2, 1.2, 2.8mm Drop In	8450MS-12
85.00 mm	1.2, 1.2, 2.8mm Drop In	8500MS-12
85.50 mm	1.2, 1.2, 2.8mm Drop In	8550MS-12
86.00 mm	1.2, 1.2, 2.8mm Drop In	8600MS-12
86.50 mm	1.2, 1.2, 2.8mm Drop In	8650MS-12
87.00 mm	1.2, 1.2, 2.8mm Drop In	8700MS-12
87.25 mm	1.2, 1.2, 2.8mm Drop In	8725MS-12
87.50 mm	1.2, 1.2, 2.8mm Drop In	8750MS-12
88.00 mm	1.2, 1.2, 2.8mm Drop In	8800MS-12
88.50 mm	1.2, 1.2, 2.8mm Drop In	8850MS-12
89.00 mm	1.2, 1.2, 2.8mm Drop In	8900MS-12
92.00 mm	1.2, 1.2, 2.5mm Drop In	9200MS-12
92.30 mm	1.2, 1.2, 2.5mm Drop In	9230MS6-12
92.38 mm	1.2, 1.2, 2.5mm Drop In	9238MS6-12
92.50 mm	1.2, 1.2, 2.5mm Drop In	9250MS-12
93.00 mm	1.2, 1.2, 2.5mm Drop In	9300MS-12
94.00 mm	1.2, 1.2, 2.5mm Drop In	9400MS-12
95.50 mm	1.2, 1.2, 2.5mm Drop In	9550MS-12
96.00 mm	1.2, 1.2, 2.5mm Drop In	9600MS-12
99.50 mm	1.2, 1.5, 2.8mm File Fit	9950MS-12
99.75 mm	1.2, 1.5, 2.8mm File Fit	9975MS-12
100.00 mm	1.2, 1.5, 2.8mm File Fit	1000MS-12

Finish Bore	Description	Assembly Part Number
1.5mm Gas Nitrided Steel Top Ring Sets (8cyl)		
4.280"	1.5mm GNS Top Ring File Fit	4280GNS-15T
4.310"	1.5mm GNS Top Ring File Fit	4310GNS-15T
4.320"	1.5mm GNS Top Ring File Fit	4320GNS-15T
4.350"	1.5mm GNS Top Ring File Fit	4350GNS-15T
4.375"	1.5mm GNS Top Ring File Fit	4375GNS-15T
4.390"	1.5mm GNS Top Ring File Fit	4390GNS-15T
4.440"	1.5mm GNS Top Ring File Fit	4440GNS-15T
4.500"	1.5mm GNS Top Ring File Fit	4500GNS-15T
4.530"	1.5mm GNS Top Ring File Fit	4530GNS-15T
4.560"	1.5mm GNS Top Ring File Fit	4560GNS-15T
4.600"	1.5mm GNS Top Ring File Fit	4600GNS-15T
3.0mm Oil Ring Standard Tension Rails (8cyl)		
4.000"	3.0mm STD Tension Rails (16pcs)	4000-300R
4.030"	3.0mm STD Tension Rails (16pcs)	4030-300R
4.040"	3.0mm STD Tension Rails (16pcs)	4040-300R
4.060"	3.0mm STD Tension Rails (16pcs)	4060-300R
4.125"	3.0mm STD Tension Rails (16pcs)	4125-300R
4.135"	3.0mm STD Tension Rails (16pcs)	4135-300R
4.145"	3.0mm STD Tension Rails (16pcs)	4145-300R
4.155"	3.0mm STD Tension Rails (16pcs)	4155-300R
4.165"	3.0mm STD Tension Rails (16pcs)	4165-300R
3.0mm Oil Ring Standard Tension Expanders (8cyl)		
4.000"	3.0mm STD Tension Expanders (8pcs)	4000-300S
4.030"	3.0mm STD Tension Expanders (8pcs)	4030-300S
4.040"	3.0mm STD Tension Expanders (8pcs)	4040-300S
4.050"	3.0mm STD Tension Expanders (8pcs)	4050-300S
4.060"	3.0mm STD Tension Expanders (8pcs)	4060-300S
4.125"	3.0mm STD Tension Expanders (8pcs)	4125-300S
4.135"	3.0mm STD Tension Expanders (8pcs)	4135-300S
4.145"	3.0mm STD Tension Expanders (8pcs)	4145-300S
4.155"	3.0mm STD Tension Expanders (8pcs)	4155-300S
4.165"	3.0mm STD Tension Expanders (8pcs)	4165-300S
Lock'N Tool		
Clip insertion tool for .927" clip		W-927
Clip insertion tool for .990" clip		W-990
Oil Ring Support Rails		
3.898-3.947 2mm Support Rail		9301947
4.000-4.040 2mm Support Rail		9301835
4.040-4.080 2mm Support Rail		9301838
4.080-4.120 2mm Support Rail		9301922
4.125-4.165 2mm Support Rail		9301840
4.165-4.205 2mm Support Rail		9301923
4.240-4.280 2mm Support Rail		1977167
3.810-3.840 3mm Support Rail		9302399
3.898-(LS1) 3mm Support Rail		9301680
3.917-3.957 3mm Support Rail		9301501
4.000-4.040 3mm Support Rail		9290024
4.040-4.080 3mm Support Rail		9298684
4.080-4.120 3mm Support Rail		9301133
4.125-4.185 3mm Support Rail		9290032
4.165-4.205 3mm Support Rail		9300686
4.250-4.290 3mm Support Rail		9299227
4.310-4.350 3mm Support Rail		9299226
4.390-4.430 3mm Support Rail		9301926
4.500-4.560 3mm Support Rail		9299228
4.600-4.630 3mm Support Rail		9299225
4.130-4.180 3mm Support Rail		9298909
4.250-4.290 3/16" Support Rail		9290040
4.310-4.350 3/16" Support Rail		9298577
4.500-4.560 3/16" Support Rail		9290057
4.600-4.630 3/16" Support Rail		9299942

Piston Pins

0.912 x 2.287 x 0.121W CH 87g LW	9900159
0.927 x 2.288 x 0.129W CH 93g LW	9900184
0.792 x 2.250 x 0.140W CH 83g	9900211
0.866 x 2.406 x 0.177W CH 118g	6458160
0.867 x 2.288 x 0.178W CH 112g	9900107
0.912 x 2.287 x 0.171W CH 116g	6458152
0.927 x 2.288 x 0.168W CH 118g	6457808
0.928 x 2.288 x 0.169W CH 118g	9900536
0.930 x 2.288 x 0.170W CH 119g	9900538
0.945 x 2.287 x 0.177W CH 125g	9900079
0.975 x 2.519 x 0.172W CH 130g	9311348
0.984 x 2.287 x 0.162W CH 122g	9299391
0.990 x 2.520 x 0.180W CH 148g	7758139
1.094 x 2.520 x 0.163W CH 153g	9839256
0.927 x 2.288 x 0.188W CH 128g HD	6457147
0.928 x 2.288 x 0.188W CH 128g HD	9900108
0.929 x 2.244 x 0.189W R 127g HD	6455117

LW = Light Weight
HD = Heavy Duty
CH = Chamfered
W = Wall Thickness
R = Radiused

Sport Compact Pins

20 x 50.8mm CH 84g	9900293
21 x 50mm CH 98g	9900109
22 x 52mm CH 103g	5859988
22 x 58.11mm CH 112g	9900106
23 x 57.404mm CH 124g	9298392

Clips (each)

.792" x 1.6mm no tang Clip	9900215
.866" x 1.6mm no tang Clip	2042968
.912" x 1.6mm no tang Clip	6458129
.927" x 1.6mm no tang Clip	6441489
.927" x 1.6mm w/ tang Clip	6436901
.945" x 1.6mm no tang Clip	9900539
.990" x 1.6mm no tang Clip	6458137

Sport Compact Clips (each)

20mm x 1.6mm no tang	9900112
21mm x 1.6mm no tang	9900110
22mm x 1.6mm no tang	2042968
23mm x 1.6mm no tang	6458129
23mm OE Subaru (double tang)	9298265

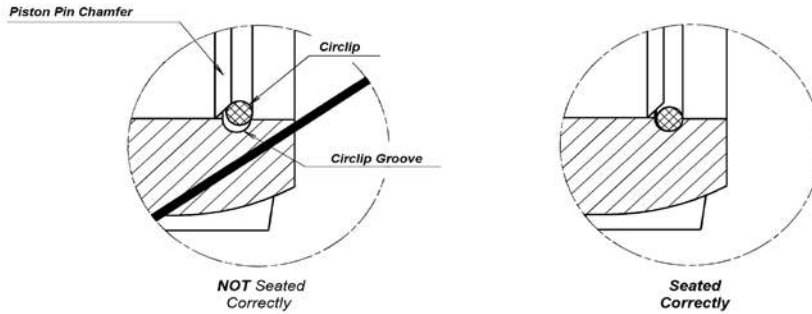
Important Notice

It is very important and critical for sustained durability that the "round wire locks" are properly seated in the lock groove of the piston.

The following is the recommended procedure for proper ring seating:

After placing the first round wire lock in the groove (caution: do not collapse the lock using pliers, but gently work the lock into the groove with a blunt edge tool) place **piston pin** in piston and gently tap the piston pin against the installed wire lock using a wooden or plastic dowel.

Upon final assembly of piston, pin, connecting rod, and remaining lock, repeat the seating process on the newly installed lock.



Part Number Reference Table



Current Part Number	1,1,2mm Part Number	Current Part Number	1,1,2mm Part Number	Current Part Number	1,1,2mm Part Number
LS3 / L92 INVERTED DOME		TWISTED WEDGE FLAT TOP		FORD FLATHEAD - 3/16" STANDARD DOME	
L9231401012	930224510	TWF245030F06	930250030	FFH438312D13	930260012
L92314070112	930224570	TWF245040F06	930250040	FFH438342D13	930260042
L92105010120	930224610	TWF165030F06	930250130	FFH438375D13	930260075
L92105030120	930224630	TWF165040F06	930250140	FFH375312D13	930260112
L92105070125	930224770	TWF165125F06	930250225	FFH375342D13	930260142
L92105075125	930224775	TWF090030F06	930250330	FFH375375D13	930260175
L92105125125	930224825	TWF090040F06	930250340	FFH313312D13	930260212
L92105065P25	930224965	TWF090125F06	930250425	FFH313342D13	930260242
L92105070P25	930224970			FFH313375D13	930260275
L92105125P25	930225025	TWISTED WEDGE DISH		2.3L FORD 4 CYLINDER PINTO	
L92055070I30	930225170	TWF165030I16	930251030	PIN090810F01	930261010
L92055065I08	930225265	TWF165040I16	930251040	PIN090820F01	930261020
L92055070I08	930225270	TWF090030I16	930251130		
L92055075I08	930225275	TWF090040I16	930251140	FORD FE FLAT TOP & INVERTED	
L92045070P3	930225370	TWF090125I18	930251225	FFE665080F07	930264080
				FFE390080I26	930264180
LSX COMBO FLAT TOP		SMALL BLOCK FORD CLEVELAND		FFE390080F07	930264280
LSX045125F08	930226525	FCL450030F03	930252030	FFE325160I33	930264360
LSX045130F08	930226530	FCL275030F03	930252130	FFE325080I20	930264480
		FCL275040F03	930252140	FFE325225I06	930264550
SBF FLAT TOP		FCL275125F03	930252225	FFE325080F07	930264680
SBF775030F06	930244030	FCL275125I20	930252325	FFE325160F07	930264760
SBF600030F06	930244130	FCL200030I20	930252430		
SBF600040F06	930244140	FCL200125I24	930252525	SMALL BLOCK MOPAR FLAT TOP	
SBF600030F06	930244130	FCL200030F03	930252630	SBM804070F05	930270070
SBF600040F06	930244140			SBM670030F05	930270130
SBF350030F06	930244230	SMALL BLOCK FORD KASSE P-38®		SBM670040F05	930270140
SBF245030F06	930244330	K38090030I06	930254030	SBM670060F05	930270160
SBF245040F06	930244340	K38090030I20	930254130	SBM460030F05	930270230
SBF245060F06	930244360	K38090125I10	930254225	SBM460040F05	930270240
SBF245125F06	930244425	K38090125I24	930254325	SBM460070F05	930270270
SBF245155F06	930244455	K38165030I06	930254430		
SBF165000F06	930244500	K38165030I16	930254625	SMALL BLOCK MOPAR INVERTED	
SBF165030F06	930244530	K38165125I06	930254730	SBM460030I16	930271030
SBF165040F06	930244540	K38165125I20	930254925	SBM460040I16	930271040
SBF165125F06	930244625	K38245030I20	930255030	SBM460060I16	930271060
SBF165155F06	930244655	K38245030I33	930255125	SBM460030I28	930271130
SBF090000F06	930244700	K38245125I24	930255230	SBM460040I28	930271140
SBF090030F06	930244730	K38245125I33	930255325	SBM460070I28	930271170
SBF090035F06	930244735			HEMI 5.7L Stroker	
SBF090040F06	930244740	FORD MOD 4.6 2V or 4V		HMI095927F02	930276227
SBF090060F06	930244760	MOD220551I16	930256051	HMI095937F02	930276237
SBF090125F06	930244825	MOD220571I16	930256071	HMI095947F02	930276247
SBF090155F06	930244855	MOD220581I16	930256081	HMI095927D06	930276327
		MOD220571P22	930256171	HMI095947D06	930276347
SBF DOME		MOD220551F00	930256251		
SBF165030D07	930247030	MOD220571F00	930256271	HEMI 6.1L	
SBF090030D07	930247130			HMI095065I12	930277565
		FORD MOD 5.4 2V or 4V		HMI095080I12	930277580
SBF INVERTED DOME		MOD220551I16	930256051	HMI095090I12	930277590
SBF600030I26	930248130	MOD220571I16	930256071	HMI220055F01	930277655
SBF600040I26	930248140	MOD220581I16	930256081	HMI220060F01	930277660
SBF300030I20	930248230	MOD220571P22	930256171	930111655	930111655
SBF300040I20	930248240	MOD220551F00	930256251	HEMI 6.4L	
SBF300030I28	930248330	MOD220571F00	930256271	HMI210090D04	930279090
SBF245030I26	930248430				
SBF245040I26	930248440	FORD 5.0L MOD 4V "COYOTE"			
SBF245125I26	930248525	M4V167630D03	930258030		
SBF245125I26	930248525	M4V167640D03	930258040		
SBF230030I20	930248730	M4V167630I05	930134030		
SBF230040I20	930248740	M4V167640I05	930134040		
SBF165030I16	930248830	M4V167630X10	930258130		
SBF165040I16	930248840	M4V167640X10	930258140		
SBF090030I16	930248930	M4V167630P13	930258230		
SBF090040I16	930248940	M4V167640P13	930258240		
SBF090060I16	930248960				
SBF090125I16	930249025				



Tech Information

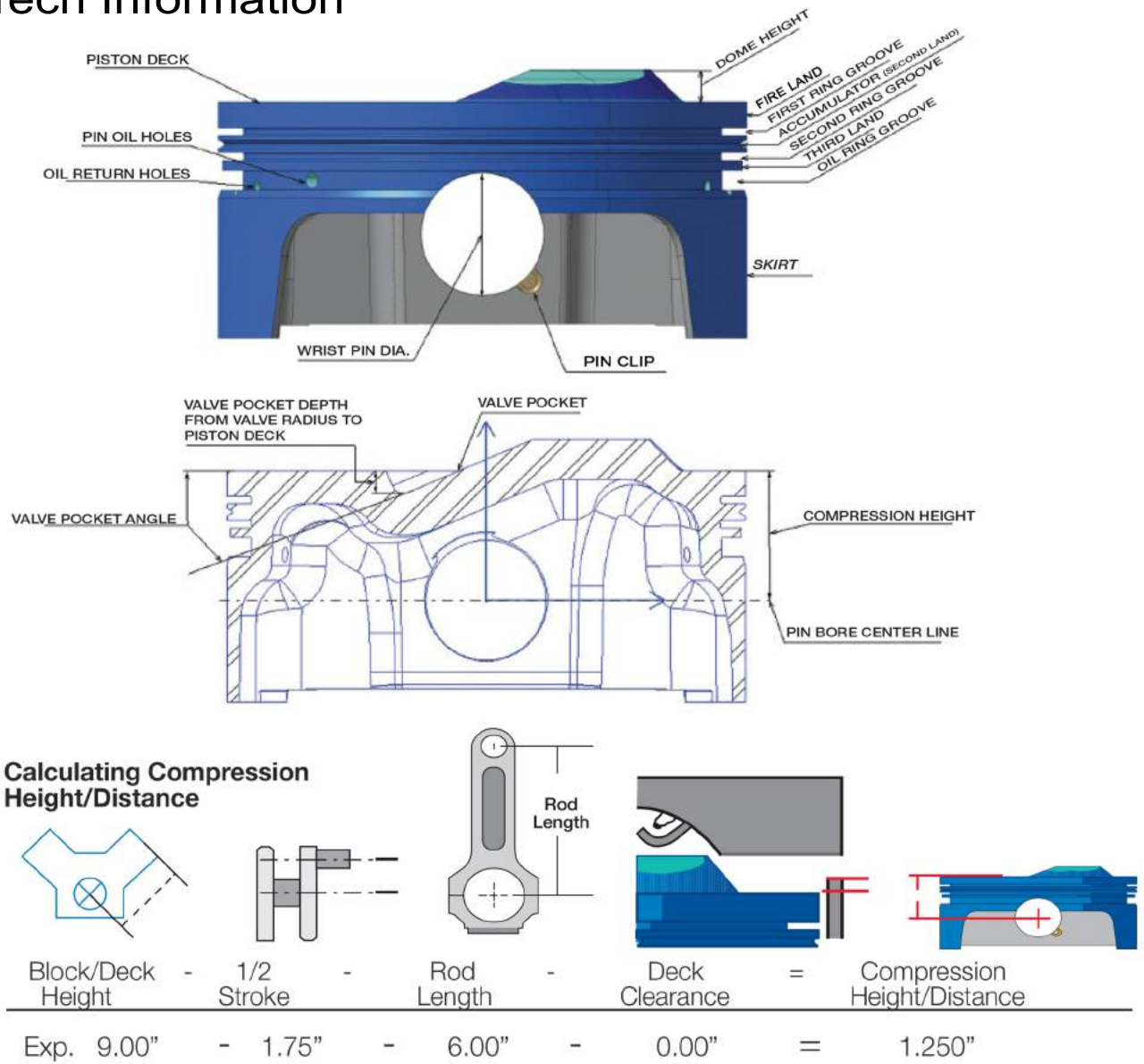


Fig. 1 Piston Sparkplug/Cylinder Head Clearance

Always check for adequate piston to sparkplug/cylinder head clearance. Use clay to measure clearance with piston installed on rod at TDC. Rock the piston to get minimum clearance. Minimum clearance for aluminum rods = .060" for steel rods = .040".

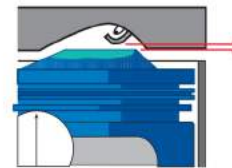


Fig. 2 Rod to Piston Clearance

Due to the multitude of variations in connecting rod materials and design, piston to rod clearances need to be checked. The minimum recommended clearance is .050" per side and .050" from the top of the rod to the underside of the piston. With the piston installed on the rod, rock the piston side to side, back and forth, checking for adequate clearance.

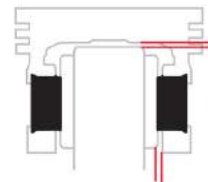


Fig 3 Crankshaft Counterweight Clearance

Always check counterweight to piston clearance at BDC. Recommended minimum is .060".

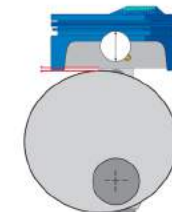


Fig. 4 Valve Relief Orientation/Clearance

Minimum recommended clearance for both intake and exhaust is .100" deep and .050" radially. Using clay or the cam manufacturer's recommendations, check for clearance. The cam must be degreed exactly as it will be during operation.

