MANLEY Performance Products, Inc.

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Distribution Center and Sales Office
9:00 AM - 5:30 PM EST

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West Coast Distribution Facility
12:00 PM - 8:00 PM EST
9:00 AM - 5:00 PM PST

Please visit our website at http://www.manleyperformance.com

SALES POLICY

Manley Performance urges the consumer to purchase all goods through an authorized dealer. Write or call for the names of the dealers in your area if you are not already familiar with them.

Prices: Due to the ever present fluctuation of material and labor costs, our prices are subject to change without notice.

Terms: Qualified accounts may be extended 2%, 10th proximo payment terms. We require five credit references to establish this open account status.

Freight: Orders exceeding $2250 will be shipped F.F.A. The deduction of freight charges will be allowed providing the invoice is paid on or before the 10th of the month. Special shipping requests such as Air Freight, Express Mail, etc. will be billed to the account.

Return Policy: Specified on the back of the Price List.

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WARRANTY DISCLAIMER

Due to the intended usage of the products in this catalog, they are sold WITHOUT WARRANTY OR ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR THE INTENDED PURPOSE. Installation of parts intended for “off-highway” use could adversely affect the vehicle manufacturer’s warranty coverage.

All weights specified are approximate and subject to manufacturing tolerances.

WARNING

Some parts in this catalog have been designed and are intended for off-highway application only. Installation on a vehicle intended for use on public roads may violate U.S., Canadian, state or provincial laws and regulations including those relating to emission requirements and motor vehicle safety standards. These parts are NOT intended for ANY aircraft applications.

In California some parts may legally be used only on a racing vehicle which will never be operated on public roads.

1960 SWARTHMORE AVENUE
LAKEWOOD, NEW JERSEY 08701

A MANLEY VALVE FOR EVERY APPLICATION

CHOOSE FROM ONE OF FIVE SERIES OF STAINLESS VALVES

PERFORMANCE SERIES

- Stainless Steel (XH-422 Exhaust and NK-840 Intake)
- Chrome Stems and Hard Tips
- Swirl Polished and Fully Machined
- Stock and .100" Longer Lengths Available

STREET SERIES

- Stainless Steel (XH-424 Exhaust and NK-841 Intake)
- Chrome Stems and Hard Tips
- Swirl Polished and Fully Machined
- Street Master (Straight Stem) and Street Flo Shapes Available

RACE SERIES

- Stainless Steel (XH-426 Exhaust and NK-842 Intake)
- Chrome Stems and Hard Tips
- Swirl Polished and Fully Machined
- Race Master (Straight Stem) and Race Flo Shapes Available
- Recommended Exhaust Valves for Alcohol Engines

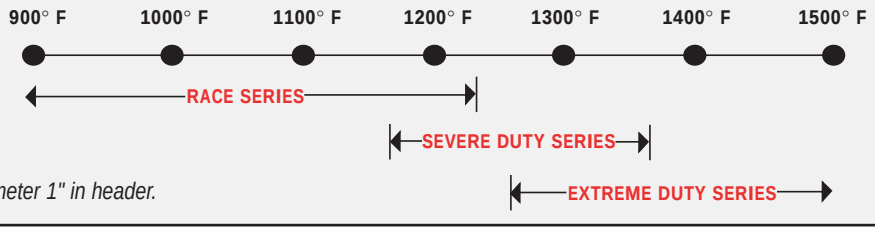
SEVERE DUTY® SERIES

- Superior Stainless for High Temperature Gasoline Engines
- Exhaust Material XH-428 with Double the Ultimate Tensile Strength (at 1500° F) over the competition
- Intake Material NK-844 with 1000 Times Better Fatigue Strength than competitors' offerings.

EXTREME DUTY SERIES

- Top Fuel, Funny Car and Marine Engine Exhaust Valves
- More Hot Hardness and High Temperature Strength than any Competitive Offerings
- XH-432 XtremeAlloy

EXHAUST VALVE TEMPERATURE RANGE CHART

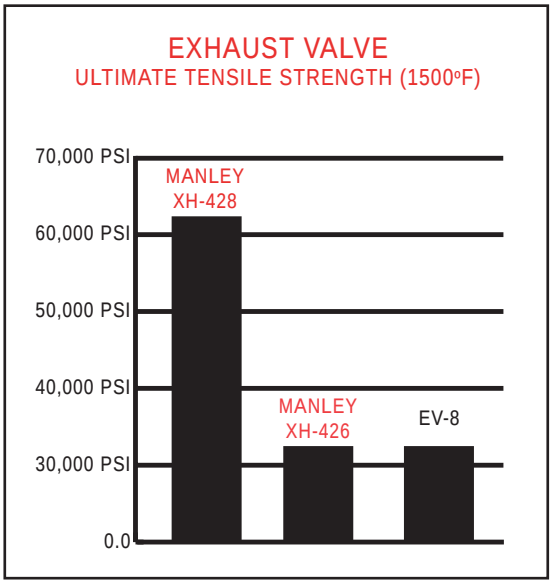


Temperatures at pyrometer 1" in header.

STAINLESS VALVES

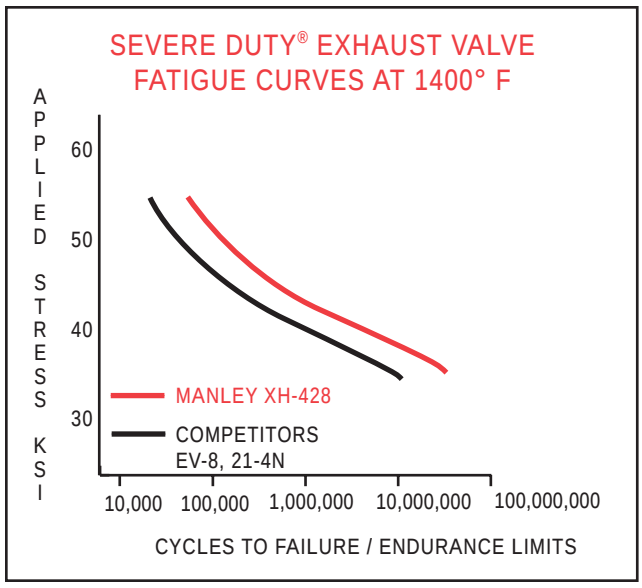
Manley Performance is universally acknowledged as the leading manufacturer of performance and racing valves in the world.

The reason for Manley's overwhelming success is simple: QUALITY. We offer the best materials in the industry - exclusive materials our competitors do not possess. Our stems are hard coated with .0002" thick chrome rather than a few millionths of flash. Our hard tips are superior to competitors' puddled stellite which can crack and erode off the stem. Our valve head and underhead shapes have been in the forefront of the quest for improved flow since the late 1960's. And always each Manley valve has been price targeted to specific markets to ensure the best possible value to the customer.



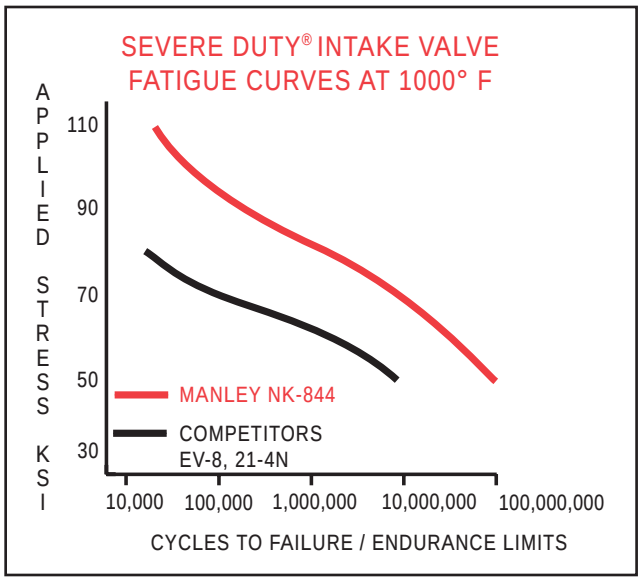
PERFORMANCE & STREET SERIES VALVES

Designed for the enthusiast preparing a stock or mildly modified street engine, or a bracket racer seeking maximum value for his dollar, the Manley Performance or Street Series valves are the perfect choice. These dependable valves are also offered in Street Flo versions providing significant flow gains without head porting. All valves in both these series feature chrome stems, hard tips, swirl polished underhead areas, and fully machined combustion faces.



RACE MASTER VALVES

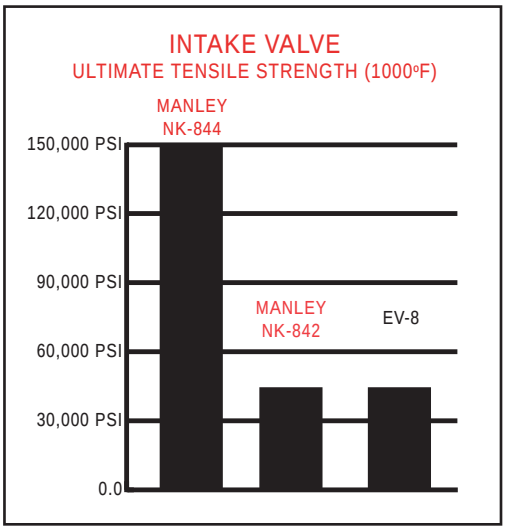
Race Master, and the Pro Flo versions identified as Race Flo valves, are manufactured of XH-426 material for the exhausts and NK-842 for the intakes. This series of valves is targeted at the bracket, drag and oval track racers operating below 8000 rpm - above which engine speed titanium is required. Any engine builder successfully using EV-8 alloy (21-4N) valves will find in this series of Manley valves a superior piece at a most attractive price. The Ultimate Tensile Strength charts on this page and the next, show the Manley Race Series to be equal to the best the competitors have to offer.



1960 SWARTHMORE AVENUE
LAKEWOOD, NEW JERSEY 08701

SEVERE DUTY® VALVES

The Severe Duty® series of valves is the Manley signature in the performance and racing industry. Exhaust material XH-428 and intake material NK-844 is offered by no competitor in the world. And no pair of materials show such clear and demonstratable dominance over all others. Ultimate tensile strength of XH-428 at 1500°F is nearly double the competitors' EV-8. At 1000°F the Manley NK-844 displays more than four times the ultimate tensile of the competition's best intake material.

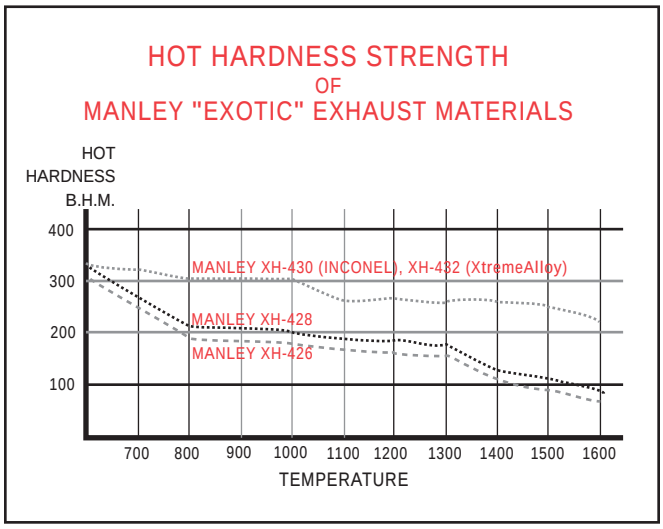


Further proof of the superiority of the Manley Severe Duty® valves is evident in our comprehensive fatigue tests. In normal operation where valve float is non-existent, a valve will experience 20,000 to 25,000 lbs of applied stress. However, when valves bounce on the seat the stress immediately soars to 40,000 to 60,000 lbs. Manley exhaust valves (at 40,000 psi and 1400°F) ran to 100,000,000 (one hundred million) cycles while competitors' offerings failed at 100,000 cycles. That's 1000 times better fatigue life.

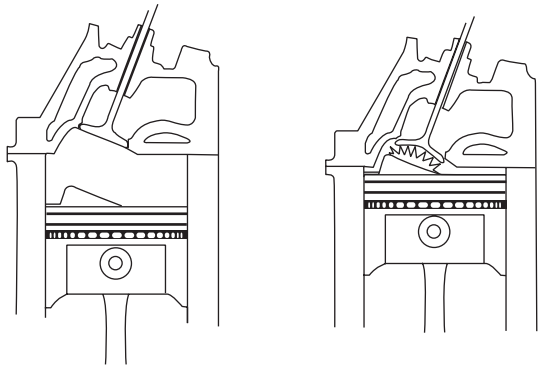
EXTREME DUTY VALVES

Top Fuel and Funny Car drag racers, Big Block Chevy marine enthusiasts, and Small Block Chevy restricted carburetor circle track competitors will all benefit by the use of Inconel and XtremeAlloy exhaust valves. Exotic steel is required simply because of the enormous heat imposed on the exhaust valves in these applications.

The accompanying graph illustrates the complete superiority of our "exotic" steels over our own XH-428 as well as competitor's EV-8.



In addition to the vastly superior strength and fatigue characteristics of Manley NK-844, our exclusive intake material exhibits an uncanny ability to resist chordal fractures. In an excellent sealing combustion chamber, the intake valve is actually deformed by the fuel explosion and pushed up into the port. The effect of this continuous deformation on competitors' material eventually is a chordal fracture propagating from the circumference of the valve and quickly becoming a missing pie shaped piece. Manley NK-844 is the absolute best choice of material to combat disastrous chordal fractures.



The illustration above shows an intake valve seated in the head with normal shape. The right illustration shows the valve being deformed under high combustion pressure.

STAINLESS VALVES

THE "PRO FLO" SHAPE
A MANLEY ORIGINAL

- *Up to 40% flow increase*
- *Proven performance improvement on the flow bench*

Test for: Hot Rod Magazine
Tests performed by: Edelbrock
Type of cylinder head: 1969 Camaro

AMOUNT OF NET VALVE LIFT	INTAKE IMPROVEMENT IN FLOW	EXHAUST IMPROVEMENT IN FLOW
.150"	42%	93%
.200"	37%	27%
.250"	25%	23%
.300"	12%	22%
.350"	7%	19%
.400"	5%	14%

AVAILABLE IN THREE SERIES OF VALVES

Series	"Pro Flo" Designation
Street	Street Flo
Race	Race Flo
Severe Duty	Pro Flo

STAINLESS STEEL & TITANIUM VALVE BUYERS GUIDE

Valve Type	Replacement and Mild Street Performance	Engine Builders Using EV-8 High Perf Street Bracket Racers Oval Track Sportsman Racers	Normally Aspirated Alcohol Burning Engines	Drag Racing Over 8000 RPM	Offshore Powerboat and Hi Performance Marine	Cup BGN Supertruck Oval Track
Performance Series	Acceptable					
Street Series	Preferred					
Race Series	Extra Insurance	Acceptable	Preferred Exhaust When Titanium is Not Allowed		Not Recommended	
Severe Duty®		Preferred	Preferred Intake When Titanium is Not Allowed		Required Intake	
Extreme Duty		Preferred with Restricted Carburetor		Top Fuel Funny Car Exhaust Only	Required Exhaust	
Titanium			Preferred	Required Other Than Top Fuel or Funny Car	Race Only	Required

STAINLESS VALVES

BUICK V-6

STAGE I AND PRODUCTION CAST IRON HEADS
SEVERE DUTY® VALVES

- XH-428 Exhaust Material
- NK-844 Intake Material
- Chrome Stems and Hard Tips
- Swirl Polished and Machined
- Intakes are "Pro Flo" for Improved Flow

Part No.	Type	Head Diameter	Stem Diameter	Installed Height	O / A Length	Tip Length	Underhead Angle / Radius	Margin	Seat Width	Top of Head	Wgt / Grams
11503-6	Exh.	1.500	.3415	Stock	4.725	.270	30° x 7/16"	.075	.090	20° Dish	98
11502-6	Int.	1.710	.3415	Stock	4.730	.270	Pro Flo: 12° x 3/8"	.065	.080	7° Dish	95
11504-6	Int.	1.775	.3415	Stock	4.730	.270	Pro Flo: 12° x 3/8"	.065	.080	7° Dish	97

LS-1 / LS-6 SMALL BLOCK CHEVY

RACE FLO / RACE MASTER VALVES

- XH-426 Stainless Exhaust Material
- Chrome Stems and Hard Tips
- Intakes are "Pro Flo" for Improved Flow
- NK-842 Stainless Intake Material
- Swirl Polished and Machined
- O.E. Style Radius Keeper Grooves

Part No.	Type	Head Diam.	Stem Diameter	Installed Height	O / A Length	Tip Length	Underhead Angle / Radius	Margin	Seat Width	Top of Head	Wgt / Grams
11361-8	Exh.	1.550	.3136	Stock	4.923	.175	25° x 7/16"	.065	.115	18° Dish	87
11363-8	Exh.	1.575	.3136	Stock	4.923	.175	25° x 7/16"	.065	.115	18° Dish	89
11365-8	Exh.	1.600	.3136	Stock	4.923	.175	25° x 7/16"	.065	.115	18° Dish	91
11360-8	Int.	2.000	.3133	Stock	4.874	.175	Pro Flo: 12° x 3/8"	.050	.095	7° Dish	103
11360H-8	Int.	2.000	.3133 Hollow Stem	Stock	4.874	.175	Pro Flo: 12° x 3/8"	.050	.095	7° Dish	91
11362-8	Int.	2.020	.3133	Stock	4.874	.175	Pro Flo: 12° x 3/8"	.050	.095	7° Dish	105
11362H-8	Int.	2.020	.3133 Hollow Stem	Stock	4.874	.175	Pro Flo: 12° x 3/8"	.050	.095	7° Dish	93
11390-8	Int.	2.055	.3133	Stock	4.874	.175	Pro Flo: 12° x 3/8"	.050	.095	7° Dish	106
11390H-8	Int.	2.055	.3133 Hollow Stem	Stock	4.874	.175	Pro Flo: 12° x 3/8"	.050	.095	7° Dish	94
11398-8	Int.	2.080	.3133	Stock	4.874	.175	Pro Flo: 12° x 3/8"	.050	.095	7° Dish	107
11398H-8	Int.	2.080	.3133 Hollow Stem	Stock	4.874	.175	Pro Flo: 12° x 3/8"	.050	.095	7° Dish	95
11350-8	Int.	2.100	.3133	Stock	4.874	.175	Pro Flo: 12° x 3/8"	.050	.095	7° Dish	109
11350H-8	Int.	2.100	.3133 Hollow Stem	Stock	4.874	.175	Pro Flo: 12° x 3/8"	.050	.095	7° Dish	97

L-92 SMALL BLOCK CHEVY

RACE FLO / RACE MASTER VALVES

NEW

- XH-426 Stainless Exhaust Material
- Chrome Stems and Hard Tips
- Intakes are "Pro Flo" for Improved Flow
- NK-842 Stainless Intake Material
- Swirl Polished and Machined
- O.E. Style Radius Keeper Grooves

Part No.	Type	Head Diam.	Stem Diameter	Installed Height	O / A Length	Tip Length	Underhead Angle / Radius	Margin	Seat Width	Top of Head	Wgt / Grams
11621-8	Exh.	1.590	.3136	Stock	4.923	.160	25° x 7/16"	.070	.115	18° Dish	92
11620-8	Int.	2.165	.3133	Stock	4.900	.160	Pro Flo: 12° x 3/8"	.055	.100	7° Dish	119
11620H-8	Int.	2.165	.3133 Hollow Stem	Stock	4.900	.160	Pro Flo: 12° x 3/8"	.055	.100	7° Dish	107

STAINLESS VALVES

SMALL BLOCK CHEVROLET

BUDGET REPLACEMENT VALVES

- *XH-422 Stainless Exhaust Material*
- *NK-840 Stainless Intake Material*
- *Chrome Stems and Hard Tips*
- *Original Underhead Shapes and Finishes*

Part No.	Type	Head Diameter	Stem Diameter	Installed Height	O / A Length	Tip Length	Underhead Angle / Radius	Margin	Seat Width	Top of Head	Wgt / Grams
10077-8	Exh.	1.500	.3415	Stock	4.920	.290	Stock	.100	.150	Dimple	106
10649-8	Exh.	1.600	.3415	Stock	4.910	.290	Stock	.070	.150	Dimple	105
10476-8	Int.	1.940	.3415	Stock	4.880	.250	Stock	.065	.125	Dimple	116
10650-8	Int.	2.020	.3415	Stock	4.880	.260	Stock	.060	.120	Flat Face	117

SMALL BLOCK CHEVROLET

BUDGET PERFORMANCE VALVES

- *XH-422 Stainless Exhaust Material*
- *NK-840 Stainless Intake Material*
- *Chrome Stems and Hard Tips*
- *Swirl Polished and Fully Machined*

Part No.	Type	Head Diameter	Stem Diameter	Installed Height	O / A Length	Tip Length	Underhead Angle / Radius	Margin	Seat Width	Top of Head	Wgt / Grams
10577-8	Exh.	1.500	.3415	Stock	4.911	.250	15° x 1/2"	.060	.100	10° Dish	96
10549-8	Exh.	1.600	.3415	Stock	4.911	.250	15° x 1/2"	.060	.100	10° Dish	101
10551-8	Exh.	1.600	.3415	.100 Longer	5.011	.250	15° x 1/2"	.060	.100	10° Dish	103
10548-8	Int.	1.900	.3415	Stock	4.911	.250	10° x 3/8"	.050	.080	6° Dish	105
10576-8	Int.	1.940	.3415	Stock	4.911	.250	10° x 3/8"	.050	.080	6° Dish	105
10550-8	Int.	2.020	.3415	Stock	4.911	.250	10° x 3/8"	.050	.080	6° Dish	109
10552-8	Int.	2.020	.3415	.100 Longer	5.011	.250	10° x 3/8"	.050	.080	6° Dish	111
10554-8	Int.	2.055	.3415	Stock	4.911	.250	10° x 3/8"	.050	.080	6° Dish	110
10556-8	Int.	2.055	.3415	.100 Longer	5.011	.250	10° x 3/8"	.050	.080	6° Dish	112

SMALL BLOCK CHEVROLET

STREET FLO VALVES

- *XH-424 Stainless Exhaust Material*
- *NK-841 Stainless Intake Material*
- *Chrome Stems and Hard Tips*
- *Swirl Polished and Fully Machined*
- *Increased Flow with "Pro Flo" Underhead*

Part No.	Type	Head Diameter	Stem Diameter	Installed Height	O / A Length	Tip Length	Underhead Angle / Radius	Margin	Seat Width	Top of Head	Wgt / Grams
10721-8	Exh.	1.500	.3415	Stock	4.911	.250	Pro Flo: 12° x 3/8"	.060	.100	7° Dish	89
10765-8	Exh.	1.600	.3415	Stock	4.911	.250	Pro Flo: 12° x 3/8"	.060	.100	7° Dish	94
10722-8	Int.	1.940	.3415	Stock	4.911	.250	Pro Flo: 10° x 3/8"	.050	.080	5° Dish	107
10764-8	Int.	2.000	.3415	Stock	4.911	.250	Pro Flo: 10° x 3/8"	.050	.080	6° Dish	108
10766-8	Int.	2.020	.3415	Stock	4.911	.250	Pro Flo: 10° x 3/8"	.050	.080	6° Dish	109

The 10764 will work on the new Chevy Vortec Bowtie cylinder head casting number 2553435IC and 2553437IC.

See page 3 for a description of our valve materials.

SMALL BLOCK CHEVROLET

STREET MASTER VALVES

- *XH-424 Stainless Exhaust Material*
- *NK-841 Stainless Intake Material*
- *Chrome Stems and Hard Tips*
- *Swirl Polished and Fully Machined*
- *Straight Stems*

Part No.	Type	Head Diameter	Stem Diameter	Installed Height	O / A Length	Tip Length	Underhead Angle / Radius	Margin	Seat Width	Top of Head	Wgt / Grams
10777-8	Exh.	1.500	.3415	Stock	4.911	.250	15° x 1/2"	.060	.100	10° Dish	96
10747-8	Exh.	1.560	.3415	Stock	4.911	.250	15° x 1/2"	.060	.100	10° Dish	99
10749-8	Exh.	1.600	.3415	Stock	4.911	.250	15° x 1/2"	.060	.100	10° Dish	101
10751-8	Exh.	1.600	.3415	.100 Longer	5.011	.250	15° x 1/2"	.060	.100	10° Dish	103
10776-8	Int.	1.940	.3415	Stock	4.911	.250	10° x 3/8"	.050	.080	6° Dish	105
10750-8	Int.	2.020	.3415	Stock	4.911	.250	10° x 3/8"	.050	.080	6° Dish	109
10752-8	Int.	2.020	.3415	.100 Longer	5.011	.250	10° x 3/8"	.050	.080	6° Dish	111
10754-8	Int.	2.055	.3415	Stock	4.911	.250	10° x 3/8"	.050	.080	6° Dish	110
10756-8	Int.	2.055	.3415	.100 Longer	5.011	.250	10° x 3/8"	.050	.080	6° Dish	112

The 10747 will work on the new Chevy Vortec Bowtie cylinder head casting number 2553435IC and 2553437IC.

See page 3 for a description of our valve materials.

STAINLESS VALVES

SMALL BLOCK CHEVROLET

RACE FLO VALVES

- 3 *XH-426 Stainless Exhaust Material*
- 3 *NK-842 Stainless Intake Material*
- 3 *Chrome Stems and Hard Tips*
- 3 *Swirl Polished and Fully Machined*
- 3 *Increased Flow with "Pro Flo" Underhead*

Part No.	Type	Head Diameter	Stem Diameter	Installed Height	O / A Length	Tip Length	Underhead Angle / Radius	Margin	Seat Width	Top of Head	Wgt / Grams
11521-8	Exh.	1.500	.3415	Stock	4.911	.250	Pro Flo: 12° x 3/8"	.060	.100	7° Dish	89
11501-8	Exh.	1.560	.3415	Stock	4.911	.250	Pro Flo: 12° x 3/8"	.060	.100	7° Dish	91
11565-8	Exh.	1.600	.3415	Stock	4.911	.250	Pro Flo: 12° x 3/8"	.060	.100	7° Dish	94
11545-8	Exh.	1.600	.3415	.100 Longer	5.065	.290	Pro Flo: 15° x 1/2"	.090	.100	9° Dish	95
11555-8	Exh.	1.600	.3415	.200 Longer	5.165	.290	Pro Flo: 15° x 1/2"	.090	.100	9° Dish	96
11559-8	Exh.	1.600	.3415	.300 Longer	5.265	.290	Pro Flo: 15° x 1/2"	.090	.100	9° Dish	97
11797-8	Exh.	1.625	.3415	.100 Longer	5.065	.290	Pro Flo: 15° x 1/2"	.090	.100	9° Dish	98
11799-8	Exh.	1.625	.3415	.200 Longer	5.165	.290	Pro Flo: 15° x 1/2"	.090	.100	9° Dish	99
11506-8	Int.	1.840	.3415	Stock	4.911	.250	Pro Flo: 10° x 3/8"	.060	.080	5° Dish	104
11522-8	Int.	1.940	.3415	Stock	4.911	.250	Pro Flo: 10° x 3/8"	.050	.080	5° Dish	107
11500-8	Int.	2.000	.3415	Stock	4.911	.250	Pro Flo: 12° x 3/8"	.050	.080	7° Dish	109
11566-8	Int.	2.020	.3415	Stock	4.911	.250	Pro Flo: 12° x 3/8"	.050	.080	5° Dish	113
11796-8	Int.	2.020	.3415	.100 Longer	5.040	.290	Pro Flo: 12° x 3/8"	.065	.080	7° Dish	115
11568-8	Int.	2.055	.3415	Stock	4.911	.250	Pro Flo: 12° x 3/8"	.050	.080	5° Dish	115
11546-8	Int.	2.055	.3415	.100 Longer	5.040	.290	Pro Flo: 12° x 3/8"	.065	.080	7° Dish	116
11552-8	Int.	2.055	.3415	.200 Longer	5.140	.290	Pro Flo: 12° x 3/8"	.065	.080	7° Dish	117
11556-8	Int.	2.055	.3415	.300 Longer	5.240	.290	Pro Flo: 12° x 3/8"	.065	.080	7° Dish	118
11558-8	Int.	2.080	.3415	.Stock	4.940	.290	Pro Flo: 12° x 3/8"	.065	.080	7° Dish	114
11560-8	Int.	2.080	.3415	.100 Longer	5.040	.290	Pro Flo: 12° x 3/8"	.065	.080	7° Dish	115
11564-8	Int.	2.080	.3415	.200 Longer	5.140	.290	Pro Flo: 12° x 3/8"	.065	.080	7° Dish	116
11574-8	Int.	2.080	.3415	.300 Longer	5.240	.290	Pro Flo: 12° x 3/8"	.065	.080	7° Dish	117
11576-8	Int.	2.100	.3415	.100 Longer	5.040	.290	Pro Flo: 12° x 3/8"	.065	.080	7° Dish	116
11584-8	Int.	2.100	.3415	.200 Longer	5.140	.290	Pro Flo: 12° x 3/8"	.065	.080	7° Dish	117
11594-8	Int.	2.100	.3415	.300 Longer	5.240	.290	Pro Flo: 12° x 3/8"	.065	.080	7° Dish	118
11774-8	Int.	2.125	.3415	.100 Longer	5.040	.290	Pro Flo: 12° x 3/8"	.050	.080	7° Dish	118
11776-8	Int.	2.125	.3415	.200 Longer	5.140	.290	Pro Flo: 12° x 3/8"	.050	.080	7° Dish	119
11778-8	Int.	2.125	.3415	.300 Longer	5.240	.290	Pro Flo: 12° x 3/8"	.050	.080	7° Dish	120

Exhaust valves 11501, 11521, 11565, and intake valves 11500, 11522, 11566, and 11568 have a Pro Flo start 1.400" from the head. All others have a Pro Flo start of 1.600" from the head.

See page 3 for a description of our valve materials.

Need a different length? Head diameter not listed?
See pages 40 & 41 for Gen II blanks to construct a valve to your exact specifications.

Note: New part numbers are *ITALICIZED*.

SMALL BLOCK CHEVROLET

RACE MASTER VALVES

- 3 *XH-426 Stainless Exhaust Material*
- 3 *NK-842 Stainless Intake Material*
- 3 *Chrome Stems and Hard Tips*
- 3 *Swirl Polished and Fully Machined*
- 3 *Straight Stems*

Part No.	Type	Head Diameter	Stem Diameter	Installed Height	O / A Length	Tip Length	Underhead Angle / Radius	Margin	Seat Width	Top of Head	Wgt / Grams
11861-8	Exh.	1.500	.3415	Stock	4.951	.290	15° x 1/2"	.060	.100	9° Dish	96
11301-8	Exh.	1.500	.3415	.100 Longer	5.065	.290	15° x 1/2"	.090	.100	9° Dish	103
11863-8	Exh.	1.600	.3415	Stock	4.951	.290	15° x 1/2"	.060	.100	9° Dish	102
11877-8	Exh.	1.600	.3415	.100 Longer	5.065	.290	15° x 1/2"	.090	.100	9° Dish	109
11321-8	Exh.	1.600	.3415	.200 Longer	5.165	.290	15° x 1/2"	.090	.100	9° Dish	110
11323-8	Exh.	1.600	.3415	.300 Longer	5.265	.290	15° x 1/2"	.090	.100	9° Dish	111
11325-8	Exh.	1.600	.3415	.400 Longer	5.365	.290	15° x 1/2"	.090	.100	9° Dish	112
11327-8	Exh.	1.600	.3415	.500 Longer	5.465	.290	15° x 1/2"	.090	.100	9° Dish	113
11329-8	Exh.	1.625	.3415	Stock	4.965	.290	15° x 1/2"	.090	.100	9° Dish	103
11879-8	Exh.	1.625	.3415	.100 Longer	5.065	.290	15° x 1/2"	.090	.100	9° Dish	110
11331-8	Exh.	1.625	.3415	.200 Longer	5.165	.290	15° x 1/2"	.090	.100	9° Dish	112
11333-8	Exh.	1.625	.3415	.300 Longer	5.265	.290	15° x 1/2"	.090	.100	9° Dish	114
11860-8	Int.	1.940	.3415	Stock	4.951	.290	10° x 3/8"	.050	.080	6° Dish	109
11300-8	Int.	1.940	.3415	.100 Longer	5.040	.290	10° x 3/8"	.050	.080	5° Dish	111
11864-8	Int.	2.020	.3415	Stock	4.951	.290	10° x 3/8"	.050	.080	6° Dish	114
11318-8	Int.	2.020	.3415	.100 Longer	5.040	.290	10° x 3/8"	.050	.080	5° Dish	116
11316-8	Int.	2.020	.3415	.200 Longer	5.140	.290	12° x 3/8"	.065	.080	7° Dish	122
11806-8	Int.	2.055	.3415	Stock	4.940	.290	12° x 3/8"	.065	.080	7° Dish	118
11810-8	Int.	2.055	.3415	.100 Longer	5.040	.290	12° x 3/8"	.065	.080	7° Dish	120
11808-8	Int.	2.080	.3415	Stock	4.940	.290	12° x 3/8"	.065	.080	7° Dish	124
11812-8	Int.	2.080	.3415	.100 Longer	5.040	.290	12° x 3/8"	.065	.080	7° Dish	126
11320-8	Int.	2.080	.3415	.200 Longer	5.140	.290	12° x 3/8"	.065	.080	7° Dish	127
11322-8	Int.	2.080	.3415	.300 Longer	5.240	.290	12° x 3/8"	.065	.080	7° Dish	129
11324-8	Int.	2.080	.3415	.400 Longer	5.340	.290	10° x 3/8"	.065	.080	5° Dish	131
11326-8	Int.	2.080	.3415	.500 Longer	5.440	.290	10° x 3/8"	.065	.080	5° Dish	133
11328-8	Int.	2.100	.3415	.100 Longer	5.040	.290	12° x 3/8"	.065	.080	7° Dish	127
11330-8	Int.	2.100	.3415	.200 Longer	5.140	.290	12° x 3/8"	.065	.080	7° Dish	128
11332-8	Int.	2.100	.3415	.300 Longer	5.240	.290	12° x 3/8"	.065	.080	7° Dish	129
11334-8	Int.	2.100	.3415	.400 Longer	5.340	.290	10° x 3/8"	.065	.080	5° Dish	132
11336-8	Int.	2.100	.3415	.500 Longer	5.440	.290	10° x 3/8"	.065	.080	5° Dish	134
11340-8	Int.	2.125	.3415	.100 Longer	5.040	.290	12° x 3/8"	.065	.080	7° Dish	130
11342-8	Int.	2.125	.3415	.200 Longer	5.140	.290	12° x 3/8"	.065	.080	7° Dish	132
11344-8	Int.	2.125	.3415	.300 Longer	5.240	.290	12° x 3/8"	.065	.080	7° Dish	134
11346-8	Int.	2.125	.3415	.400 Longer	5.340	.290	10° x 3/8"	.065	.080	5° Dish	136
11348-8	Int.	2.125	.3415	.500 Longer	5.440	.290	10° x 3/8"	.065	.080	5° Dish	138

See page 3 for a description of our valve materials.

Need a different length? Head diameter not listed?
See pages 40 & 41 for Gen II blanks to construct a valve to your exact specifications.

STAINLESS VALVES

SMALL BLOCK CHEVROLET

RACE MASTER VALVES
5/16" (.311") STEM

- *No Need for Inserted Tips or Wear Caps*
- *NK-842 Stainless Intake Material*
- *Swirl Polished and Fully Machined*
- *XH-426 Stainless Exhaust Material*
- *Chrome Stems and Hard Tips*
- *Thin Stem for Increased Flow and Light Weight*

These .311" stem valves are ONLY available with Bead Loc® keeper grooves. Bead Loc® valve locks are REQUIRED.

Part No.	Type	Head Diameter	Stem Diameter	Installed Height	O / A Length	Tip Length	Underhead Angle / Radius	Margin	Seat Width	Top of Head	Wgt / Grams
11305-8	Exh.	1.600	.3110	.100 Longer	5.040	.290	15° x 1/2"	.080	.100	9° Dish	94
11319-8	Exh.	1.600	.3110	.200 Longer	5.140	.290	15° x 1/2"	.080	.100	9° Dish	95
11335-8	Exh.	1.600	.3110	.300 Longer	5.240	.290	15° x 1/2"	.080	.100	9° Dish	96
11341-8	Exh.	1.600	.3110	.600 Longer	5.540	.290	15° x 1/2"	.080	.100	9° Dish	99
11343-8	Exh.	1.600	.3110	.700 Longer	5.640	.290	15° x 1/2"	.080	.100	9° Dish	100
11303-8	Exh.	1.625	.3110	.100 Longer	5.040	.290	15° x 1/2"	.080	.100	9° Dish	97
11345-8	Exh.	1.625	.3110	.300 Longer	5.240	.290	15° x 1/2"	.080	.100	9° Dish	99
11347-8	Exh.	1.625	.3110	.600 Longer	5.540	.290	15° x 1/2"	.080	.100	9° Dish	102
11349-8	Exh.	1.625	.3110	.700 Longer	5.640	.290	15° x 1/2"	.080	.100	9° Dish	103
11302-8	Int.	1.940	.3110	.100 Longer	5.010	.290	10° x 3/8"	.050	.080	5° Dish	105
11304-8	Int.	2.020	.3110	.100 Longer	5.010	.290	10° x 3/8"	.050	.080	5° Dish	108
11306-8	Int.	2.055	.3110	.100 Longer	5.010	.290	10° x 3/8"	.050	.080	5° Dish	110

Dodge 5.9 L, 360 CID Magnum Series engines can use 11303 exhaust valves and 11302 intake valves with aftermarket locks and retainers.

RPMS AND THIN STEM VALVES

Use of the thin stem valves listed on pages 12, 13, and 23 will enable an engine to achieve higher rpm levels. Strict vigilance must be maintained to keep the engine from rpm's that cause valve float. When valves float (bounce on the seat) the stresses rapidly increase and the fatigue life of the valves is dramatically reduced. These valves are heavier than titanium and cannot be expected to operate at comparable rpm ranges.

To help the engine avoid a valve float condition, purchase - and maintain - the best valve springs available. Use lightweight titanium retainers and titanium valve locks. Use quality pushrods. Operate the engine within sensible rpm limits.

ROCKERS AND THIN STEM VALVES

Because of the reduced size of the valve stems of the valves listed on pages 12 and 13, it is advised to use a shaft type rocker which keeps the rocker tip basically centered on the valve. If increased tip area is needed, utilize a wear cap, but be cognizant of the fact that the cap adds to the toss weight of the valve train thus reducing the safe rpm potential of the engine.

Need a different length? Head diameter not listed?
See pages 40 & 41 for Gen II blanks to construct a valve to your exact specifications.

SMALL BLOCK CHEVROLET

SEVERE DUTY® VALVES
5/16" (.311") STEM

- *No Need for Inserted Tips or Wear Caps*
- *NK-844 Stainless Intake Material*
- *Swirl Polished and Fully Machined*
- *XH-428 Stainless Material*
- *Chrome Stems and Hard Tips*
- *Thin Stem for Increased Flow and Light Weight*

These .311" stem valves are ONLY available with Bead Loc® keeper grooves. Bead Loc® valve locks are REQUIRED.

Part No.	Type	Head Diameter	Stem Diameter	Installed Height	O / A Length	Tip Length	Underhead Angle / Radius	Margin	Seat Width	Top of Head	Wgt / Grams
11231-8	Exh.	1.600	.3110	.100 Longer	5.040	.290	15° x 1/2"	.080	.100	9° Dish	94
11351-8	Exh.	1.600	.3110	.200 Longer	5.140	.290	15° x 1/2"	.080	.100	9° Dish	95
11357-8	Exh.	1.600	.3110	.300 Longer	5.240	.290	15° x 1/2"	.080	.100	9° Dish	96
11359-8	Exh.	1.600	.3110	.600 Longer	5.540	.290	15° x 1/2"	.080	.100	9° Dish	99
11387-8	Exh.	1.600	.3110	.700 Longer	5.640	.290	15° x 1/2"	.080	.100	9° Dish	100
11389-8	Exh.	1.625	.3110	.300 Longer	5.240	.290	15° x 1/2"	.080	.100	9° Dish	99
11397-8	Exh.	1.625	.3110	.600 Longer	5.540	.290	15° x 1/2"	.080	.100	9° Dish	102
11399-8	Exh.	1.625	.3110	.700 Longer	5.640	.290	15° x 1/2"	.080	.100	9° Dish	103
11230-8	Int.	1.940	.3110	.100 Longer	5.010	.290	12° x 3/8"	.050	.080	7° Dish	105
11232-8	Int.	2.020	.3110	.100 Longer	5.010	.290	12° x 3/8"	.050	.080	7° Dish	108
11234-8	Int.	2.055	.3110	.100 Longer	5.010	.290	12° x 3/8"	.050	.080	7° Dish	110
11234H-8	Int.	2.055	.3110 Hollow Stem	.100 Longer	5.010	.290	12° x 3/8"	.050	.080	7° Dish	98

See page 12 for information about rpm limitations and rocker arms.

SMALL BLOCK CHEVROLET

SEVERE DUTY® VALVES
7 MM (.274") STEM

- *No Need for Inserted Tips or Wear Caps*
- *NK-844 Stainless Intake Material*
- *Swirl Polished and Fully Machined*
- *XH-428 Stainless Material*
- *Chrome Stems and Hard Tips*
- *Thin Stem for Increased Flow and Light Weight*

These .274" stem valves are ONLY available with Bead Loc® keeper grooves. Bead Loc® valve locks are REQUIRED.

Part No.	Type	Head Diameter	Stem Diameter	Installed Height	O / A Length	Tip Length	Underhead Angle / Radius	Margin	Seat Width	Top of Head	Wgt / Grams
11235-8	Exh.	1.600	.2740	.100 Longer	5.040	.290	15° x 1/2"	.080	.100	9° Dish	84
11236-8	Int.	1.940	.2740	.100 Longer	5.010	.290	10° x 3/8"	.050	.080	5° Dish	95
11238-8	Int.	2.020	.2740	.100 Longer	5.010	.290	10° x 3/8"	.050	.080	5° Dish	98
11240-8	Int.	2.055	.2740	.100 Longer	5.010	.290	10° x 3/8"	.050	.080	5° Dish	100

See page 12 for information about rpm limitations and rocker arms.

Need a different length? Head diameter not listed?
See pages 40 & 41 for Gen II blanks to construct a valve to your exact specifications.

STAINLESS VALVES

SMALL BLOCK CHEVROLET

SEVERE DUTY® EXHAUST VALVES

- 3 *XH-428 Stainless Material*
- 3 *Chrome Stems*
- 3 *Hard Tips*
- 3 *Swirl Polished*
- 3 *Fully Machined*

Part No.	Type	Head Diameter	Stem Diameter	Installed Height	O / A Length	Tip Length	Underhead Angle / Radius	Margin	Seat Width	Top of Head	Wgt / Grams
11567-8	Exh.	1.500	.3415	Stock	4.911	.250	10° x 3/8"	.060	.100	7° Dish	92
11887-8	Exh.	1.500	.3415	.100 Longer	5.036	.250	15° x 1/2"	.085	.100	10° Dish	94
11747-8	Exh.	1.500	.3415	.200 Longer	5.140	.290	15° x 1/2"	.085	.100	9° Dish	101
11543-8	Exh.	1.600	.3415	Stock	4.911	.250	10° x 3/8"	.060	.100	7° Dish	95
11595-8	Exh.	1.600	.3415	Stock	4.936	.250	10° x 3/8"	.085	.100	Flat Face	100
11539-8	Exh.	1.600	.3415	.100 Longer	5.036	.250	10° x 3/8"	.085	.100	7° Dish	102
11865-8	Exh.	1.600	.3415	.200 Longer	5.121	.250	15° x 1/2"	.070	.100	9° Dish	105
11551-8	Exh.	1.600	.3415	Stock	4.921	.250	30° x 1/2"	.070	.100	25° Dish	106
11869-8	Exh.	1.600	.3415	.100 Longer	5.021	.250	30° x 1/2"	.070	.100	25° Dish	109
11771-8	Exh.	1.600	.3415	.200 Longer	5.121	.250	30° x 1/2"	.070	.100	25° Dish	111
11785-8	Exh.	1.600	.3415	.300 Longer	5.221	.250	30° x 1/2"	.070	.100	25° Dish	113
11573-8	Exh.	1.600	.3415	Stock	4.965	.290	15° x 1/2"	.090	.100	9° Dish	107
11749-8	Exh.	1.600	.3415	.100 Longer	5.065	.290	15° x 1/2"	.090	.100	9° Dish	108
11751-8	Exh.	1.600	.3415	.200 Longer	5.165	.290	15° x 1/2"	.090	.100	9° Dish	110
11753-8	Exh.	1.600	.3415	.300 Longer	5.265	.290	15° x 1/2"	.090	.100	9° Dish	111
11755-8	Exh.	1.600	.3415	.400 Longer	5.365	.290	15° x 1/2"	.090	.100	9° Dish	112
11513-8	Exh.	1.600	.3415	.500 Longer	5.465	.290	15° x 1/2"	.090	.100	9° Dish	113
11767-8	Exh.	1.600	.3415	.600 Longer	5.565	.290	15° x 1/2"	.090	.100	9° Dish	114
11541-8	Exh.	1.625	.3415	Stock	4.911	.250	15° x 1/2"	.060	.100	9° Dish	95
11585-8	Exh.	1.625	.3415	Stock	4.936	.250	15° x 1/2"	.085	.100	9° Dish	106
11537-8	Exh.	1.625	.3415	.100 Longer	5.036	.250	15° x 1/2"	.085	.100	9° Dish	102
11871-8	Exh.	1.625	.3415	.200 Longer	5.121	.250	15° x 1/2"	.070	.100	9° Dish	105
11557-8	Exh.	1.625	.3415	Stock	4.921	.250	30° x 1/2"	.070	.100	25° Dish	109
11569-8	Exh.	1.625	.3415	.100 Longer	5.021	.250	30° x 1/2"	.070	.100	25° Dish	111
11571-8	Exh.	1.625	.3415	.200 Longer	5.121	.250	30° x 1/2"	.070	.100	25° Dish	113
11579-8	Exh.	1.625	.3415	.300 Longer	5.221	.250	30° x 1/2"	.070	.100	25° Dish	115
11851-8	Exh.	1.625	.3415	.100 Longer	5.065	.290	15° x 1/2"	.090	.100	9° Dish	109
11577-8	Exh.	1.625	.3415	.200 Longer	5.165	.290	15° x 1/2"	.090	.100	9° Dish	115
11757-8	Exh.	1.625	.3415	.300 Longer	5.265	.290	15° x 1/2"	.090	.100	9° Dish	116
11759-8	Exh.	1.625	.3415	.400 Longer	5.365	.290	15° x 1/2"	.090	.100	9° Dish	117
11511-8	Exh.	1.625	.3415	.500 Longer	5.465	.290	15° x 1/2"	.090	.100	9° Dish	118
11763-8	Exh.	1.625	.3415	.600 Longer	5.565	.290	15° x 1/2"	.090	.100	9° Dish	122

See page 3 for a description of our valve materials.

Need a different length? Head diameter not listed?
See pages 40 & 41 for Gen II blanks to construct a valve to your exact specifications.

SMALL BLOCK CHEVROLET

SEVERE DUTY® INTAKE VALVES

- 3 *NK-844 Stainless Material*
- 3 *Chrome Stems*
- 3 *Hard Tips*
- 3 *Swirl Polished*
- 3 *Fully Machined*

Part No.	Type	Head Diameter	Stem Diameter	Installed Height	O / A Length	Tip Length	Underhead Angle / Radius	Margin	Seat Width	Top of Head	Wgt / Grams
11540-8	Int.	1.720	.3415	.100 Longer	5.011	.250	10° x 3/8"	.050	.080	5° Dish	99
11542-8	Int.	1.840	.3415	.100 Longer	5.011	.250	10° x 3/8"	.050	.080	5° Dish	106
11592-8	Int.	1.937	.3415	Stock	4.911	.250	10° x 3/8"	.050	.080	5° Dish	109
11886-8	Int.	1.940	.3415	.100 Longer	5.011	.250	10° x 3/8"	.050	.100	5° Dish	111
11748-8	Int.	1.940	.3415	.200 Longer	5.140	.290	10° x 3/8"	.050	.100	5° Dish	115
11596-8	Int.	2.020	.3415	Stock	4.911	.250	10° x 3/8"	.050	.080	7° Dish	111
11826-8	Int.	2.020	.3415	.100 Longer	5.026	.250	10° x 3/8"	.065	.080	5° Dish	113
11544-8	Int.	2.020	.3415	.200 Longer	5.140	.290	10° x 3/8"	.065	.080	5° Dish	125
11598-8	Int.	2.055	.3415	Stock	4.911	.250	12° x 3/8"	.050	.080	7° Dish	113
11828-8	Int.	2.055	.3415	Stock	4.926	.250	12° x 3/8"	.065	.080	Flat Face	128
11846-8	Int.	2.055	.3415	.100 Longer	5.026	.250	12° x 3/8"	.065	.080	7° Dish	125
11700-8	Int.	2.055	.3415	.200 Longer	5.140	.290	12° x 3/8"	.065	.080	7° Dish	127
11818-8	Int.	2.080	.3415	Stock	4.926	.250	12° x 3/8"	.065	.080	Flat Face	131
11844-8	Int.	2.080	.3415	.100 Longer	5.026	.250	12° x 3/8"	.065	.080	7° Dish	126
11858-8	Int.	2.080	.3415	.200 Longer	5.140	.290	12° x 3/8"	.065	.080	7° Dish	129
11762-8	Int.	2.080	.3415	.300 Longer	5.240	.290	12° x 3/8"	.065	.080	7° Dish	131
11764-8	Int.	2.080	.3415	.400 Longer	5.340	.290	12° x 3/8"	.065	.080	7° Dish	132
11512-8	Int.	2.080	.3415	.500 Longer	5.440	.290	12° x 3/8"	.065	.080	7° Dish	134
11852-8	Int.	2.100	.3415	.100 Longer	5.026	.250	12° x 3/8"	.065	.080	7° Dish	128
11862-8	Int.	2.100	.3415	.200 Longer	5.140	.290	12° x 3/8"	.065	.080	7° Dish	131
11750-8	Int.	2.100	.3415	.300 Longer	5.240	.290	12° x 3/8"	.065	.080	7° Dish	132
11752-8	Int.	2.100	.3415	.400 Longer	5.340	.290	12° x 3/8"	.065	.080	7° Dish	133
11510-8	Int.	2.100	.3415	.500 Longer	5.440	.290	12° x 3/8"	.065	.080	7° Dish	135
11770-8	Int.	2.100	.3415	.600 Longer	5.540	.290	12° x 3/8"	.065	.080	7° Dish	137
11848-8	Int.	2.125	.3415	.100 Longer	5.026	.250	12° x 3/8"	.065	.080	7° Dish	131
11866-8	Int.	2.125	.3415	.200 Longer	5.125	.250	12° x 3/8"	.065	.080	7° Dish	132
11754-8	Int.	2.125	.3415	.300 Longer	5.240	.290	12° x 3/8"	.065	.080	7° Dish	133
11756-8	Int.	2.125	.3415	.400 Longer	5.340	.290	12° x 3/8"	.065	.080	7° Dish	134
11508-8	Int.	2.125	.3415	.500 Longer	5.440	.290	12° x 3/8"	.065	.080	7° Dish	135
11768-8	Int.	2.125	.3415	.600 Longer	5.540	.290	12° x 3/8"	.065	.080	7° Dish	137
11758-8	Int.	2.150	.3415	.400 Longer	5.340	.290	12° x 3/8"	.065	.080	7° Dish	133
11760-8	Int.	2.150	.3415	.500 Longer	5.440	.290	12° x 3/8"	.065	.080	7° Dish	135
11766-8	Int.	2.150	.3415	.600 Longer	5.540	.290	12° x 3/8"	.065	.080	7° Dish	137

See page 3 for a description of our valve materials.

Need a different length? Head diameter not listed?
See pages 40 & 41 for Gen II blanks to construct a valve to your exact specifications.

STAINLESS VALVES

SMALL BLOCK CHEVROLET

SEVERE DUTY® "PRO FLO" VALVES

- 3 *XH-428 Stainless Exhaust Material*
- 3 *NK-844 Stainless Intake Material*
- 3 *Chrome Stems and Hard Tips*
- 3 *Swirl Polished and Fully Machined*
- 3 *Improved Flow with "Pro Flo" Underhead*

Part No.	Type	Head Diameter	Stem Diameter	Installed Height	O / A Length	Tip Length	Underhead Angle / Radius	Margin	Seat Width	Top of Head	Wgt / Grams
11827-8	Exh.	1.600	.3415	Stock	4.936	.250	Pro Flo: 12° x 3/8"	.085	.100	7° Dish	98
11823-8	Exh.	1.600	.3415	.100 Longer	5.036	.250	Pro Flo: 12° x 3/8"	.085	.100	7° Dish	100
11840-8	Int.	1.937	.3415	Stock	4.911	.250	Pro Flo: 12° x 3/8"	.050	.080	7° Dish	111
11830-8	Int.	2.020	.3415	Stock	4.911	.250	Pro Flo: 12° x 3/8"	.050	.080	7° Dish	114
11882-8	Int.	2.020	.3415	.100 Longer	5.011	.250	Pro Flo: 12° x 3/8"	.050	.080	7° Dish	115
11732-8	Int.	2.055	.3415	Stock	4.911	.250	Pro Flo: 12° x 3/8"	.050	.080	7° Dish	115
11824-8	Int.	2.055	.3415	.100 Longer	5.011	.250	Pro Flo: 12° x 3/8"	.050	.080	7° Dish	116
11734-8	Int.	2.055	.3415	.200 Longer	5.111	.250	Pro Flo: 12° x 3/8"	.050	.080	7° Dish	117
11736-8	Int.	2.080	.3415	Stock	4.911	.250	Pro Flo: 12° x 3/8"	.050	.080	7° Dish	117
11772-8	Int.	2.080	.3415	.100 Longer	5.011	.250	Pro Flo: 12° x 3/8"	.050	.080	7° Dish	118
11738-8	Int.	2.080	.3415	.200 Longer	5.111	.250	Pro Flo: 12° x 3/8"	.050	.080	7° Dish	119
11740-8	Int.	2.080	.3415	.300 Longer	5.211	.250	Pro Flo: 12° x 3/8"	.050	.080	7° Dish	120
11742-8	Int.	2.100	.3415	.100 Longer	5.011	.250	Pro Flo: 12° x 3/8"	.050	.080	7° Dish	119
11744-8	Int.	2.100	.3415	.200 Longer	5.111	.250	Pro Flo: 12° x 3/8"	.050	.080	7° Dish	120
11746-8	Int.	2.100	.3415	.300 Longer	5.211	.250	Pro Flo: 12° x 3/8"	.050	.080	7° Dish	121

All valves have a Pro Flo start of 1.600" from head, except P/Ns 11823, 11824, 11827, and 11882 which have a Pro Flo start of 1.400" from head.

SMALL BLOCK CHEVROLET

SEVERE DUTY® VALVES
LEGAL NHRA SUPER STOCK

- 3 *XH-428 Stainless Exhaust Material*
- 3 *NK-844 Stainless Intake Material*
- 3 *Chrome Stems and Hard Tips*
- 3 *Swirl Polished and Fully Machined*

Part No.	Type	Head Diameter	Stem Diameter	Installed Height	O / A Length	Tip Length	Underhead Angle / Radius	Margin	Seat Width	Top of Head	Wgt / Grams
11567-8	Exh.	1.500	.3415	Stock	4.911	.250	10° x 3/8"	.060	.100	7° Dish	92
11887-8	Exh.	1.500	.3415	.100 Longer	5.036	.250	15° x 1/2"	.085	.100	10° Dish	94
11747-8	Exh.	1.500	.3415	.200 Longer	5.140	.290	15° x 1/2"	.085	.100	9° Dish	101
11540-8	Int.	1.720	.3415	.100 Longer	5.011	.250	10° x 3/8"	.050	.080	5° Dish	99
11542-8	Int.	1.840	.3415	.100 Longer	5.011	.250	10° x 3/8"	.050	.080	5° Dish	106
11886-8	Int.	1.940	.3415	.100 Longer	5.011	.250	10° x 3/8"	.050	.100	5° Dish	111
11748-8	Int.	1.940	.3415	.200 Longer	5.140	.290	10° x 3/8"	.050	.100	5° Dish	115

STAINLESS VALVES

SMALL BLOCK CHEVROLET

EXTREME DUTY EXHAUST VALVES

- *XH-432 XtremeAlloy Material*
- *Chrome Stems and Hard Tips*
- *Swirl Polished and Fully Machined*

Part No.	Type	Head Diameter	Stem Diameter	Installed Height	O / A Length	Tip Length	Underhead Angle / Radius	Margin	Seat Width	Top of Head	Wgt / Grams
11599-8	Exh.	1.600	.3415	.050 Longer	5.015	.290	15° x 1/2"	.080	.100	9° Dish	106
11701-8	Exh.	1.600	.3415	.100 Longer	5.065	.290	15° x 1/2"	.080	.100	9° Dish	108
11705-8	Exh.	1.600	.3415	.200 Longer	5.165	.290	15° x 1/2"	.080	.100	9° Dish	110
11709-8	Exh.	1.600	.3415	.300 Longer	5.265	.290	15° x 1/2"	.080	.100	9° Dish	111
11711-8	Exh.	1.600	.3415	.400 Longer	5.365	.290	15° x 1/2"	.080	.100	9° Dish	112
11713-8	Exh.	1.625	.3415	.100 Longer	5.065	.290	15° x 1/2"	.080	.100	9° Dish	110
11715-8	Exh.	1.625	.3415	.200 Longer	5.165	.290	15° x 1/2"	.080	.100	9° Dish	111
11721-8	Exh.	1.625	.3415	.300 Longer	5.265	.290	15° x 1/2"	.080	.100	9° Dish	112
11725-8	Exh.	1.625	.3415	.400 Longer	5.365	.290	15° x 1/2"	.080	.100	9° Dish	113

See page 3 for a description of our valve materials.

409 CHEVROLET

RACE MASTER VALVES

- *XH-426 Stainless Exhaust Material*
- *NK-842 Stainless Intake Material*
- *Chrome Stems and Hard Tips*
- *Swirl Polished and Fully Machined*
- *Straight Stems*

Part No.	Type	Head Diameter	Stem Diameter	Installed Height	O/A Length	Tip Length	Underhead Angle/Radius	Margin	Seat Width	Top of Head	Wgt/ Grams
11311-8	Exh.	1.735	.3715	Stock	5.105	.225	15° x 1/2"	.080	.100	9° Dish	115
11313-8	Exh.	1.750	.3715	Stock	5.105	.225	15° x 1/2"	.080	.100	9° Dish	117
11310-8	Int.	2.200	.3715	Stock	5.105	.225	12° x 3/8"	.065	.080	7° Dish	139
11312-8	Int.	2.250	.3715	Stock	5.105	.225	12° x 3/8"	.065	.080	7° Dish	141

Need a different length? Head diameter not listed?
See pages 40 & 41 for Gen II blanks to construct a valve to your exact specifications.

STAINLESS VALVES

BIG BLOCK CHEVROLET

STREET FLO VALVES
STOCK 3/8" STEM DIAMETERS

- *XH-424 Stainless Exhaust Material*
- *NK-841 Stainless Intake Material*
- *Chrome Stems and Hard Tips*
- *Swirl Polished and Fully Machined*
- *Improved Flow with "Pro Flo" Underhead*

Part No.	Type	Head Diameter	Stem Diameter	Installed Height	O/A Length	Tip Length	Underhead Angle/Radius	Margin	Seat Width	Top of Head	Wgt/ Grams
10717-8	Exh.	1.725	.3715	Stock	5.350	.220	Pro Flo: 10° x 3/8"	.060	.100	5° Dish	120
10727-8	Exh.	1.880	.3715	Stock	5.350	.220	Pro Flo: 10° x 3/8"	060	.100	5° Dish	131
10714-8	Int.	2.065	.3715	Stock	5.218	.220	Pro Flo: 10° x 3/8"	.050	.080	5° Dish	130
10728-8	Int.	2.190	.3715	Stock	5.218	.220	Pro Flo: 10° x 3/8"	.050	.080	5° Dish	135
10726-8	Int.	2.250	.3715	Stock	5.218	.220	Pro Flo: 10° x 3/8"	.050	.080	5° Dish	138

BIG BLOCK CHEVROLET

RACE FLO VALVES
STOCK 3/8" STEM DIAMETER

- *XH-426 Stainless Exhaust Material*
- *NK-842 Stainless Intake Material*
- *Chrome Stems and Hard Tips*
- *Swirl Polished and Fully Machined*
- *Improved Flow with "Pro Flo" Underhead*

Part No.	Type	Head Diameter	Stem Diameter	Installed Height	O/A Length	Tip Length	Underhead Angle/Radius	Margin	Seat Width	Top of Head	Wgt/ Grams
11517-8	Exh.	1.725	.3715	Stock	5.350	.220	Pro Flo: 10° x 3/8"	.060	.100	5° Dish	120
11527-8	Exh.	1.880	.3715	Stock	5.350	.220	Pro Flo: 10° x 3/8"	.060	.100	5° Dish	131
11514-8	Int.	2.065	.3715	Stock	5.218	.220	Pro Flo: 10° x 3/8"	.050	.080	5° Dish	130
11528-8	Int.	2.190	.3715	Stock	5.218	.220	Pro Flo: 10° x 3/8"	.050	.080	5° Dish	135
11526-8	Int.	2.250	.3715	Stock	5.218	.220	Pro Flo: 10° x 3/8"	.050	.080	5° Dish	138

BIG BLOCK CHEVROLET
RACE MASTER VALVES
STOCK 3/8" STEM DIAMETER

- *XH-426 Stainless Exhaust Material*
- *NK-842 Stainless Intake Material*
- *Chrome Stems and Hard Tips*
- *Swirl Polished and Fully Machined*

Part No.	Type	Head Diameter	Stem Diameter	Installed Height	O/A Length	Tip Length	Underhead Angle/Radius	Margin	Seat Width	Top of Head	Wgt/ Grams
11509-8	Exh.	1.880	.3715	Stock	5.422	.250	15° x 1/2"	.075	.100	9° Dish	139
11515-8	Exh.	1.880	.3715	.100 Longer	5.522	.250	15° x 1/2"	.075	.100	9° Dish	141
11707-8	Exh.	1.900	.3715	Stock	5.422	.250	15° x 1/2"	.075	.100	9° Dish	141
11723-8	Exh.	1.900	.3715	.100 Longer	5.522	.250	15° x 1/2"	.075	.100	9° Dish	143
11849-8	Exh.	1.940	.3715	Stock	5.422	.250	15° x 1/2"	.075	.100	9° Dish	144
11893-8	Exh.	1.940	.3715	.100 Longer	5.522	.250	15° x 1/2"	.075	.100	9° Dish	146
11718-8	Int.	2.190	.3715	Stock	5.244	.250	12° x 3/8"	.050	.080	7° Dish	150
11720-8	Int.	2.190	.3715	.100 Longer	5.344	.250	12° x 3/8"	.050	.080	7° Dish	152
11722-8	Int.	2.250	.3715	Stock	5.244	.250	12° x 3/8"	.050	.080	7° Dish	153
11724-8	Int.	2.250	.3715	.100 Longer	5.344	.250	12° x 3/8"	.050	.080	7° Dish	155
11726-8	Int.	2.300	.3715	Stock	5.244	.250	12° x 3/8"	.050	.080	7° Dish	156
11728-8	Int.	2.300	.3715	.100 Longer	5.344	.250	12° x 3/8"	.050	.080	7° Dish	158

See page 3 for a description of our valve materials.

BIG BLOCK CHEVROLET
SEVERE DUTY® VALVES
STOCK 3/8" STEM DIAMETERS

- *XH-428 Stainless Exhaust Material*
- *NK-844 Stainless Intake Material*
- *Chrome Stems and Hard Tips*
- *Swirl Polished and Fully Machined*

Part No.	Type	Head Diameter	Stem Diameter	Installed Height	O/A Length	Tip Length	Underhead Angle/Radius	Margin	Seat Width	Top of Head	Wgt/ Grams
11553-8	Exh.	1.720	.3715	Stock	5.354	.220	10° x 3/8"	.065	.100	6° Dish	122
11519-8	Exh.	1.725	.3715	.100 Longer	5.474	.220	12° x 3/8"	.065	.100	7° Dish	125
11563-8	Exh.	1.880	.3715	Stock	5.354	.220	10° x 3/8"	.065	.100	6° Dish	134
11525-8	Exh.	1.880	.3715	.100 Longer	5.474	.220	12° x 3/8"	.085	.100	7° Dish	138
11593-8	Exh.	1.900	.3715	Stock	5.374	.220	12° x 3/8"	.085	.100	7° Dish	139
11535-8	Exh.	1.900	.3715	.100 Longer	5.474	.220	12° x 3/8"	.085	.100	7° Dish	138
11561-8	Exh.	1.940	.3715	Stock	5.374	.220	12° x 3/8"	.085	.100	7° Dish	139
11533-8	Exh.	1.940	.3715	.100 Longer	5.474	.220	12° x 3/8"	.085	.100	7° Dish	143
11836-8	Int.	2.065	.3720	Stock	5.218	.220	Pro Flo: 10° x 3/8"	.050	.080	5° Dish	131
11554-8	Int.	2.065	.3720	.100 Longer	5.325	.220	Pro Flo: 12° x 7/16"	.065	.080	7° Dish	138
11520-8	Int.	2.190	.3720	Stock	5.218	.220	10° x 3/8"	.050	.080	7° Dish	145
11832-8	Int.	2.190	.3720	Stock	5.218	.220	Pro Flo: 10° x 3/8"	.050	.080	5° Dish	138
11538-8	Int.	2.190	.3720	.100 Longer	5.325	.220	Pro Flo: 12° x 7/16"	.065	.080	7° Dish	146
11562-8	Int.	2.250	.3720	Stock	5.218	.220	10° x 3/8"	.050	.080	7° Dish	148
11524-8	Int.	2.250	.3720	.100 Longer	5.325	.220	Pro Flo: 12° x 7/16"	.065	.080	7° Dish	162
11534-8	Int.	2.250	.3720	.200 Longer	5.433	.220	Pro Flo: 12° x 7/16"	.065	.080	7° Dish	164
11530-8	Int.	2.300	.3720	.100 Longer	5.325	.220	Pro Flo: 12° x 7/16"	.065	.080	7° Dish	160
11536-8	Int.	2.300	.3720	.200 Longer	5.433	.220	Pro Flo: 12° x 7/16"	.065	.080	7° Dish	168
11570-8	Int.	2.300	.3720	.250 Longer	5.513	.250	Pro Flo: 12° x 7/16"	.065	.080	7° Dish	171

See page 3 for a description of our valve materials.

STAINLESS VALVES

BIG BLOCK CHEVROLET

SEVERE DUTY® "PRO FLO" VALVES
STOCK 3/8" STEM DIAMETERS

- *XH-428 Stainless Exhaust Material*
- *NK-844 Stainless Intake Material*
- *Improved Flow with "Pro Flo" Underhead*
- *Chrome Stems and Hard Tips*
- *Swirl Polished and Fully Machined*

Part No.	Type	Head Diameter	Stem Diameter	Installed Height	O/A Length	Tip Length	Underhead Angle/Radius	Margin	Seat Width	Top of Head	Wgt/ Grams
11835-8	Exh.	1.725	.3715	Stock	5.374	.220	Pro Flo: 10° x 3/8"	.085	.100	5° Dish	121
11831-8	Exh.	1.880	.3715	Stock	5.374	.220	Pro Flo: 10° x 3/8"	.085	.100	5° Dish	132
11836-8	Int.	2.065	.3720	Stock	5.218	.220	Pro Flo: 10° x 3/8"	.050	.080	5° Dish	131
11554-8	Int.	2.065	.3720	.100 Longer	5.325	.220	Pro Flo: 12° x 7/16"	.065	.080	7° Dish	138
11832-8	Int.	2.190	.3720	Stock	5.218	.220	Pro Flo: 10° x 3/8"	.050	.080	5° Dish	138
11538-8	Int.	2.190	.3720	.100 Longer	5.325	.220	Pro Flo: 12° x 7/16"	.065	.080	7° Dish	146
11524-8	Int.	2.250	.3720	.100 Longer	5.325	.220	Pro Flo: 12° x 7/16"	.065	.080	7° Dish	162
11534-8	Int.	2.250	.3720	.200 Longer	5.433	.220	Pro Flo: 12° x 7/16"	.065	.080	7° Dish	164
11530-8	Int.	2.300	.3720	.100 Longer	5.325	.220	Pro Flo: 12° x 7/16"	.065	.080	7° Dish	160
11536-8	Int.	2.300	.3720	.200 Longer	5.433	.220	Pro Flo: 12° x 7/16"	.065	.080	7° Dish	168
11570-8	Int.	2.300	.3720	.250 Longer	5.513	.250	Pro Flo: 12° x 7/16"	.065	.080	7° Dish	171

See page 3 for a description of our valve materials.

BIG BLOCK CHEVROLET

EXTREME DUTY & MARINE VALVES
STOCK 3/8" STEM DIAMETERS

- *XH-432 XtremeAlloy Exhaust Material*
- *NK-844 Intake Material*
- *Swirl Polished and Fully Machined*
- *Chrome Stems and Hard Tips*

Part No.	Type	Head Diameter	Stem Diameter	Installed Height	O/A Length	Tip Length	Underhead Angle/Radius	Margin	Seat Width	Top of Head	Wgt/ Grams
11587-8	Exh.	1.880	.3715	Stock	5.354	.220	10° x 3/8"	.065	.100	6° Dish	139
11731-8	Exh.	1.880	.3715	.100 Longer	5.454	.220	10° x 3/8"	.065	.100	6° Dish	142
11507-8	Exh.	1.900	.3715	Stock	5.354	.220	10° x 3/8"	.065	.100	6° Dish	140
11733-8	Exh.	1.900	.3715	.100 Longer	5.454	.220	10° x 3/8"	.075	.100	6° Dish	143
11735-8	Exh.	1.940	.3715	.100 Longer	5.454	.220	10° x 3/8"	.065	.100	6° Dish	144
11836-8	Int.	2.065	.3720	Stock	5.218	.220	Pro Flo: 10° x 3/8"	.050	.080	5° Dish	131
11554-8	Int.	2.065	.3720	.100 Longer	5.325	.220	Pro Flo: 12° x 7/16"	.065	.080	7° Dish	138
11520-8	Int.	2.190	.3720	Stock	5.218	.220	10° x 3/8"	.050	.080	7° Dish	145
11832-8	Int.	2.190	.3720	Stock	5.218	.220	Pro Flo: 10° x 3/8"	.050	.080	5° Dish	138
11538-8	Int.	2.190	.3720	.100 Longer	5.325	.220	Pro Flo: 12° x 7/16"	.065	.080	7° Dish	146
11562-8	Int.	2.250	.3720	Stock	5.218	.220	10° x 3/8"	.050	.080	7° Dish	148
11524-8	Int.	2.250	.3720	.100 Longer	5.325	.220	Pro Flo: 12° x 7/16"	.065	.080	7° Dish	162
11534-8	Int.	2.250	.3720	.200 Longer	5.433	.220	Pro Flo: 12° x 7/16"	.065	.080	7° Dish	164
11530-8	Int.	2.300	.3720	.100 Longer	5.325	.220	Pro Flo: 12° x 7/16"	.065	.080	7° Dish	160
11536-8	Int.	2.300	.3720	.200 Longer	5.433	.220	Pro Flo: 12° x 7/16"	.065	.080	7° Dish	168
11570-8	Int.	2.300	.3720	.250 Longer	5.513	.250	Pro Flo: 12° x 7/16"	.065	.080	7° Dish	171

See page 3 for a description of our valve materials.

1960 SWARTHMORE AVENUE
LAKEWOOD, NEW JERSEY 08701

BIG BLOCK CHEVROLET

RACE MASTER VALVES 11/32" STEM DIAMETER

- *XH-426 Stainless Exhaust Material*
- *Chrome Stems and Hard Tips*
- *11/32" Stems for Improved Flow, Lighter Weight*
- *NK-842 Stainless Intake Material*
- *Swirl Polished and Fully Machined*

Part No.	Type	Head Diameter	Stem Diameter	Installed Height	O/A Length	Tip Length	Underhead Angle/Radius	Margin	Seat Width	Top of Head	Wgt/ Grams
11881-8	Exh.	1.880	.3415	Stock	5.422	.250	10° x 3/8"	.075	.100	6° Dish	122
11717-8	Exh.	1.880	.3415	Stock	5.422	.250	25° x 3/8"	.075	.100	20° Dish	127
11761-8	Exh.	1.880	.3415	.100 Longer	5.522	.250	10° x 3/8"	.075	.100	6° Dish	124
11719-8	Exh.	1.880	.3415	.100 Longer	5.522	.250	25° x 3/8"	.075	.100	20° Dish	129
11883-8	Exh.	1.900	.3415	Stock	5.422	.250	10° x 3/8"	.075	.100	5° Dish	123
11765-8	Exh.	1.900	.3415	Stock	5.422	.250	25° x 3/8"	.075	.100	20° Dish	128
11769-8	Exh.	1.900	.3415	.100 Longer	5.522	.250	10° x 3/8"	.075	.100	5° Dish	125
11775-8	Exh.	1.900	.3415	.100 Longer	5.522	.250	25° x 3/8"	.075	.100	20° Dish	130
11885-8	Exh.	1.940	.3415	Stock	5.422	.250	10° x 3/8"	.075	.100	5° Dish	124
11777-8	Exh.	1.940	.3415	.100 Longer	5.522	.250	10° x 3/8"	.075	.100	5° Dish	126
11872-8	Int.	2.190	.3415	Stock	5.244	.250	10° x 3/8"	.050	.080	5° Dish	139
11894-8	Int.	2.190	.3415	.100 Longer	5.344	.250	10° x 3/8"	.050	.080	5° Dish	140
11874-8	Int.	2.250	.3415	Stock	5.244	.250	10° x 3/8"	.050	.080	5° Dish	140
11814-8	Int.	2.250	.3415	.100 Longer	5.344	.250	10° x 3/8"	.050	.080	5° Dish	142
11868-8	Int.	2.250	.3415	.250 Longer	5.494	.250	10° x 3/8"	.050	.080	5° Dish	145
11730-8	Int.	2.300	.3415	Stock	5.244	.250	10° x 3/8"	.050	.080	5° Dish	143
11816-8	Int.	2.300	.3415	.100 Longer	5.344	.250	10° x 3/8"	.050	.080	5° Dish	146
11870-8	Int.	2.300	.3415	.250 Longer	5.494	.250	10° x 3/8"	.050	.080	5° Dish	147

BIG BLOCK CHEVROLET

SEVERE DUTY® VALVES 11/32" STEM DIAMETERS

- *XH-428 Stainless Exhaust Material*
- *Chrome Stems and Hard Tips*
- *NK-844 Stainless Intake Material*
- *Swirl Polished and Fully Machined*

Part No.	Type	Head Diameter	Stem Diameter	Installed Height	O/A Length	Tip Length	Underhead Angle/Radius	Margin	Seat Width	Top of Head	Wgt/ Grams
11843-8	Exh.	1.880	.3415	Stock	5.422	.250	10° x 3/8"	.075	.100	6° Dish	122
11843 H-8	Exh.	1.880	.3415 Hollow Stem	Stock	5.422	.250	10° x 3/8"	.075	.100	6° Dish	110
11815-8	Exh.	1.880	.3415	.100 Longer	5.522	.250	10° x 3/8"	.075	.100	6° Dish	125
11845-8	Exh.	1.880	.3415	.100 Longer	5.522	.250	25° x 3/8"	.075	.100	20° Dish	130
11817-8	Exh.	1.900	.3415	Stock	5.422	.250	12° x 3/8"	.075	.100	7° Dish	122
11811-8	Exh.	1.900	.3415	.100 Longer	5.522	.250	12° x 3/8"	.075	.100	7° Dish	126
11847-8	Exh.	1.900	.3415	.100 Longer	5.522	.250	25° x 3/8"	.075	.100	20° Dish	132
11803-8	Exh.	1.940	.3415	Stock	5.422	.250	12° x 3/8"	.075	.100	7° Dish	123
11809-8	Exh.	1.940	.3415	.100 Longer	5.522	.250	12° x 3/8"	.075	.100	7° Dish	127
11800-8	Int.	2.190	.3415	Stock	5.244	.250	12° x 3/8"	.050	.080	7° Dish	139
11822-8	Int.	2.190	.3415	.100 Longer	5.344	.250	12° x 3/8"	.050	.080	7° Dish	140
11896-8	Int.	2.190	.3415	.350 Longer	5.610	.250	12° x 3/8"	.065	.100	7° Dish	146
11802-8	Int.	2.250	.3415	Stock	5.244	.250	12° x 3/8"	.050	.080	7° Dish	139
11850-8	Int.	2.250	.3415	.100 Longer	5.344	.250	12° x 3/8"	.050	.080	7° Dish	142
11856-8	Int.	2.250	.3415	.250 Longer	5.494	.250	12° x 3/8"	.050	.080	7° Dish	145
11898-8	Int.	2.250	.3415	.350 Longer	5.610	.250	12° x 3/8"	.065	.100	7° Dish	150
11780-8	Int.	2.300	.3415	Stock	5.244	.250	12° x 3/8"	.050	.080	7° Dish	143
11842-8	Int.	2.300	.3415	.100 Longer	5.344	.250	12° x 3/8"	.050	.080	7° Dish	146
11784-8	Int.	2.300	.3415	.200 Longer	5.444	.250	12° x 3/8"	.050	.080	7° Dish	147
11854-8	Int.	2.300	.3415	.250 Longer	5.494	.250	12° x 3/8"	.050	.080	7° Dish	148
11878-8	Int.	2.300	.3415	.350 Longer	5.610	.250	12° x 3/8"	.065	.100	7° Dish	149
11838-8	Int.	2.325	.3415	.250 Longer	5.509	.250	12° x 3/8"	.065	.080	7° Dish	150
11880-8	Int.	2.350	.3415	.350 Longer	5.610	.250	12° x 3/8"	.065	.100	7° Dish	152

Note: New part numbers are *ITALICIZED*.

STAINLESS VALVES

BIG BLOCK CHEVROLET

EXTREME DUTY & MARINE VALVES 11/32" STEM DIAMETERS

- *XH-432 XtremeAlloy Exhaust Material*
- *Reduced Stem Diameter*
- *Greater Flow and Less Weight*
- *NK-844 Stainless Intake Material*
- *Chrome Stems and Hard Tips*
- *Swirl Polished and Fully Machined*

Part No.	Type	Head Diameter	Stem Diameter	Installed Height	O/A Length	Tip Length	Underhead Angle/Radius	Margin	Seat Width	Top of Head	Wgt/ Grams
11743-8	Exh.	1.880	.3415	Stock	5.422	.250	15° x 1/2"	.075	.085	9° Dish	132
11737-8	Exh.	1.880	.3415	.100 Longer	5.522	.250	15° x 1/2"	.075	.085	9° Dish	133
11745-8	Exh.	1.900	.3415	Stock	5.422	.250	15° x 1/2"	.075	.085	9° Dish	137
11739-8	Exh.	1.900	.3415	.100 Longer	5.522	.250	15° x 1/2"	.075	.085	9° Dish	138
11773-8	Exh.	1.940	.3415	Stock	5.422	.250	15° x 1/2"	.075	.085	9° Dish	140
11741-8	Exh.	1.940	.3415	.100 Longer	5.522	.250	15° x 1/2"	.075	.085	9° Dish	141
11800-8	Int.	2.190	.3415	Stock	5.244	.250	12° x 3/8"	.050	.080	7° Dish	139
11822-8	Int.	2.190	.3415	.100 Longer	5.344	.250	12° x 3/8"	.050	.080	7° Dish	140
11896-8	Int.	2.190	.3415	.350 Longer	5.610	.250	12° x 3/8"	.065	.100	7° Dish	146
11802-8	Int.	2.250	.3415	Stock	5.244	.250	12° x 3/8"	.050	.080	7° Dish	139
11850-8	Int.	2.250	.3415	.100 Longer	5.344	.250	12° x 3/8"	.050	.080	7° Dish	142
11856-8	Int.	2.250	.3415	.250 Longer	5.494	.250	12° x 3/8"	.050	.080	7° Dish	145
11898-8	Int.	2.250	.3415	.350 Longer	5.610	.250	12° x 3/8"	.065	.100	7° Dish	150
11780-8	Int.	2.300	.3415	Stock	5.244	.250	12° x 3/8"	.050	.080	7° Dish	143
11842-8	Int.	2.300	.3415	.100 Longer	5.344	.250	12° x 3/8"	.050	.080	7° Dish	146
11784-8	Int.	2.300	.3415	.200 Longer	5.444	.250	12° x 3/8"	.050	.080	7° Dish	147
11854-8	Int.	2.300	.3415	.250 Longer	5.494	.250	12° x 3/8"	.050	.080	7° Dish	148
11878-8	Int.	2.300	.3415	.350 Longer	5.610	.250	12° x 3/8"	.065	.100	7° Dish	149
11838-8	Int.	2.325	.3415	.250 Longer	5.509	.250	12° x 3/8"	.065	.080	7° Dish	150
11880-8	Int.	2.350	.3415	.350 Longer	5.610	.250	12° x 3/8"	.065	.100	7° Dish	152

BIG BLOCK CHEVROLET

BRODIX BB-4/SAR, EDELBROCK VICTOR CHEVROLET #12363425 HEADS SEVERE DUTY® VALVES 11/32" STEMS

- *XH-428 Stainless Exhaust Material*
- *Swirl Polished and Fully Machined*
- *NK-844 Stainless Intake Material*
- *Chrome Stems and Hard Tips*

Part No.	Type	Head Diameter	Stem Diameter	Installed Height	O/A Length	Tip Length	Underhead Angle/Radius	Margin	Seat Width	Top of Head	Wgt/ Grams
11845-8	Exh.	1.880	.3415	.100 Longer	5.522	.250	25° x 3/8"	.075	.100	20° Dish	130
11847-8	Exh.	1.900	.3415	.100 Longer	5.522	.250	25° x 3/8"	.075	.100	20° Dish	132
11896-8	Int.	2.190	.3415	.350 Longer	5.595	.250	12° x 3/8"	.065	.100	7° Dish	146
11898-8	Int.	2.250	.3415	.350 Longer	5.605	.250	12° x 3/8"	.065	.100	7° Dish	148
11878-8	Int.	2.300	.3415	.350 Longer	5.610	.250	12° x 3/8"	.065	.100	7° Dish	148
11880-8	Int.	2.350	.3415	.350 Longer	5.610	.250	12° x 3/8"	.065	.100	7° Dish	150

DART BIG BLOCK PRO 1® & 320 / 360 HEADS

SEVERE DUTY® VALVES 11/32" STEM DIAMETERS

Part No.	Type	Head Diameter	Stem Diameter	Installed Height	O/A Length	Tip Length	Underhead Angle/Radius	Margin	Seat Width	Top of Head	Wgt/ Grams
11843-8	Exh.	1.880	.3415	Stock	5.422	.250	10° x 3/8"	.075	.100	6° Dish	122
11843 H-8	Exh.	1.880	.3415 Hollow Stem	Stock	5.422	.250	10° x 3/8"	.075	.100	6° Dish	110
11817-8	Exh.	1.900	.3415	Stock	5.422	.250	12° x 3/8"	.075	.100	7° Dish	122
11856-8	Int.	2.250	.3415	.250 Longer	5.494	.250	12° x 3/8"	.050	.080	7° Dish	145
11854-8	Int.	2.300	.3415	.250 Longer	5.494	.250	12° x 3/8"	.050	.080	7° Dish	147

Note: New part numbers are *ITALICIZED*.

STAINLESS VALVES

BIG BLOCK CHEVROLET
PONTIAC "PRO STOCK"
DART "BIG CHIEF"
SEVERE DUTY® VALVES 11/32" STEMS

- 3 *XH-428 Stainless Exhaust Material*
- 3 *NK-844 Stainless Intake Material*
- 3 *Chrome Stems and Hard Tips*
- 3 *Swirl Polished and Fully Machined*

Part No.	Type	Head Diameter	Stem Diameter	Installed Height	O/A Length	Tip Length	Underhead Angle/Radius	Margin	Seat Width	Top of Head	Wgt/ Grams
11581-8	Exh.	1.900	.3415	Stock	6.380	.250	25° x 3/8"	.085	.100	20° Dish	150
11583-8	Exh.	1.940	.3415	Stock	6.400	.250	25° x 3/8"	.085	.100	20° Dish	152
11580-8	Int.	2.325	.3415	Stock	6.590	.250	10° x 3/8"	.050	.075	5° Dish	165
11582-8	Int.	2.400	.3415	Stock	6.600	.250	10° x 3/8"	.050	.075	5° Dish	168

BIG BLOCK CHEVROLET
SEVERE DUTY® VALVES
5/16" (.311") STEM DIAMETERS

- 3 *XH-428 Stainless Exhaust Material*
- 3 *NK-844 Stainless Intake Material*
- 3 *Chrome Stems and Hard Tips*
- 3 *Swirl Polished and Fully Machined*

These .311" stem valves are ONLY available with Bead Loc® keeper grooves. Bead Loc® valve locks are REQUIRED.

Part No.	Type	Head Diameter	Stem Diameter	Installed Height	O/A Length	Tip Length	Underhead Angle/Radius	Margin	Seat Width	Top of Head	Wgt/ Grams
12843-8	Exh.	1.880	.3110	Stock	5.422	.250	12° x 3/8"	.075	.100	7° Dish	107
12815-8	Exh.	1.880	.3110	.100 Longer	5.522	.250	12° x 3/8"	.075	.100	7° Dish	110
12817-8	Exh.	1.900	.3110	Stock	5.422	.250	12° x 3/8"	.075	.100	7° Dish	108
12811-8	Exh.	1.900	.3110	.100 Longer	5.522	.250	12° x 3/8"	.075	.100	7° Dish	111
12803-8	Exh.	1.940	.3110	Stock	5.422	.250	12° x 3/8"	.075	.100	7° Dish	109
12809-8	Exh.	1.940	.3110	.100 Longer	5.522	.250	12° x 3/8"	.075	.100	7° Dish	112
12802-8	Int.	2.250	.3110	Stock	5.244	.250	10° x 3/8"	.050	.080	5° Dish	122
12850-8	Int.	2.250	.3110	.100 Longer	5.344	.250	10° x 3/8"	.050	.080	5° Dish	125
12850H-8	Int.	2.250	.3110 Hollow Stem	.100 Longer	5.344	.250	10° x 3/8"	.050	.080	5° Dish	113
12856-8	Int.	2.250	.3110	.250 Longer	5.494	.250	10° x 3/8"	.050	.080	5° Dish	128
12856H-8	Int.	2.250	.3110 Hollow Stem	.250 Longer	5.494	.250	10° x 3/8"	.050	.080	5° Dish	116
12898-8	Int.	2.250	.3110	.350 Longer	5.594	.250	10° x 3/8"	.050	.080	5° Dish	132
12780-8	Int.	2.300	.3110	Stock	5.244	.250	10° x 3/8"	.050	.080	5° Dish	126
12842-8	Int.	2.300	.3110	.100 Longer	5.344	.250	10° x 3/8"	.050	.080	5° Dish	128
12784-8	Int.	2.300	.3110	.200 Longer	5.444	.250	10° x 3/8"	.050	.080	5° Dish	129
12854-8	Int.	2.300	.3110	.250 Longer	5.494	.250	10° x 3/8"	.050	.080	5° Dish	130
12878-8	Int.	2.300	.3110	.350 Longer	5.594	.250	10° x 3/8"	.050	.080	5° Dish	133
12838-8	Int.	2.325	.3110	.250 Longer	5.594	.250	10° x 3/8"	.050	.080	5° Dish	134
12880-8	Int.	2.350	.3110	.350 Longer	5.594	.250	10° x 3/8"	.050	.080	5° Dish	135

Need a different length? Head diameter not listed?
See pages 40 & 41 for Gen II blanks to construct a valve to your exact specifications.

STAINLESS VALVES

CHRYSLER 340 - 360

RACE SERIES VALVES & SEVERE DUTY® "PRO FLO" VALVES

- 3 *Chrome Stems and Hard Tips*
- 3 *Swirl Polished and Fully Machined*
- 3 *W-2 Valves are "Pro Flo" Underhead*

-- Part No.	Type	Head Diameter	Stem Diameter	Installed Height	O / A Length	Tip Length	Underhead Angle / Radius	Margin	Seat Width	Top of Head	Wgt / Grams
				W-2 LATE MODEL STOCK P/N P5249769 CYLINDER HEAD							
11703-8	Exh.	1.600	.3415	Stock	5.255	.290	Pro Flo: 22° x 1/2"	.095	.080	17° Dish	111
11702-8	Int.	2.020	.3415	Stock	5.240	.290	Pro Flo: 12° x 3/8"	.065	.080	7° Dish	125
				P/N 11703-8 exhaust is a Race-Flo. P/N 11702-8 intake is a Severe Duty Pro-Flo.							
				W-2 CYLINDER HEAD SEVERE DUTY® "PRO FLO" VALVES							
11549-8	Exh.	1.600	.3715	.150 Longer	5.075	.220	Pro Flo: 12° x 3/8"	.085	.100	7° Dish	107
11550-8	Int.	2.020	.3720	.150 Longer	5.050	.220	Pro Flo: 12° x 7/16"	.050	.080	7° Dish	123
				STOCK CYLINDER HEAD RACE MASTER VALVES							
11781-8	Exh.	1.600	.3715	Stock	4.970	.225	15° x 1/2"	.080	.100	9° Dish	104
11783-8	Exh.	1.625	.3715	Stock	4.970	.225	15° x 1/2"	.080	.100	9° Dish	105
11782-8	Int.	2.020	.3715	Stock	4.980	.225	12° x 3/8"	.050	.080	7° Dish	118

CHRYSLER / DODGE 5.7 & 6.1L HEMI

RACE FLO & RACE MASTER VALVES

NEW

- 3 *XH-426 Stainless Exhaust Material*
- 3 *Swirl Polished & Fully Machined*
- 3 *Chrome Stems & Hard Tips*
- 3 *NK-842 Stainless Intake Material*
- 3 *Improved Flow with "Pro Flo" Underhead*
- 3 *Stock Radius Triple Keeper Grooves*

Part No.	Type	Head Diameter	Stem Diameter	Installed Height	O / A Length	Tip Length	Underhead Angle / Radius	Margin	Seat Width	Top of Head	Wgt / Grams
				Chrysler HEMI 5.7L							
11665-8	Exh.	1.555"	.3125"	Stock	4.845"	.120	25° x 1/2"	.065	.100	20° Dish	TBA
11667-8	Exh.	1.575"	.3125"	Stock	4.845"	.120	25° x 1/2"	.065	.100	20° Dish	TBA
11664-8	Int.	2.000"	.3125"	Stock	4.955"	.120	Pro Flo: 12° x 3/8"	.050	.085	7° Dish	TBA
11666-8	Int.	2.020"	.3125"	Stock	4.955"	.120	Pro Flo: 12° x 3/8"	.050	.085	7° Dish	TBA
				Chrysler HEMI 6.1L							
11669-8	Exh.	1.595"	.3125"	Stock	4.925"	.120	25° x 1/2"	.065	.100	20° Dish	TBA
11671-8	Exh.	1.625"	.3125"	Stock	4.925"	.120	25° x 1/2"	.065	.100	20° Dish	TBA
11668-8	Int.	2.080"	.3125"	Stock	4.990"	.120	Pro Flo: 12° x 3/8"	.050	.085	7° Dish	TBA
11670-8	Int.	2.100"	.3125"	Stock	4.990"	.120	Pro Flo: 12° x 3/8"	.050	.085	7° Dish	TBA

Manley Performance recommends that customers check their valve guide size in order to achieve the proper valve stem to guide clearance. Guides may need to be honed when replacing valves. Factory sizes may vary depending on the specific engine.

CHRYSLER 361 - 383
426 WEDGE - 440

RACE FLO & RACE MASTER VALVES

- 3 *XH-426 Stainless Exhaust Material*
- 3 *NK-842 Stainless Intake Material*
- 3 *Swirl Polished*
- 3 *Fully Machined*
- 3 *Chrome Stems*
- 3 *Hard Tips*
- 3 *Improved Flow with "Pro Flo" Underhead*

Part No.	Type	Head Diameter	Stem Diameter	Installed Height	O / A Length	Tip Length	Underhead Angle / Radius	Margin	Seat Width	Top of Head	Wgt / Grams
11859-8	Exh.	1.740	.3720	Stock	4.908	.275	Pro Flo: 10° x 3/8"	.085	.100	5° Dish	116
11307-8	Exh.	1.740	.3715	.100 Longer	5.010	.275	15° x 1/2"	.080	.100	9° Dish	121
11891-8	Exh.	1.810	.3720	Stock	4.908	.275	Pro Flo: 10° x 3/8"	.085	.100	5° Dish	121
11309-8	Exh.	1.810	.3715	.100 Longer	5.010	.275	15° x 1/2"	.080	.100	9° Dish	126
11892-8	Int.	2.080	.3720	Stock	4.873	.275	Pro Flo: 10° x 3/8"	.050	.100	5° Dish	122
11308-8	Int.	2.080	.3715	.100 Longer	5.000	.275	12° x 3/8"	.060	.080	7° Dish	125
11890-8	Int.	2.140	.3720	Stock	4.873	.275	Pro Flo: 10° x 3/8"	.050	.100	5° Dish	126
11314-8	Int.	2.140	.3715	.100 Longer	5.000	.275	12° x 3/8"	.060	.080	7° Dish	131
11388-8	Int.	2.180	.3715	.100 Longer	5.000	.275	12° x 3/8"	.060	.080	7° Dish	134

CHRYSLER 361 - 383
426 WEDGE - 440

SEVERE DUTY® "PRO FLO" VALVES

- 3 *XH-428 Stainless Exhaust Material*
- 3 *NK-844 Stainless Intake Material*
- 3 *Swirl Polished*
- 3 *Fully Machined*
- 3 *Chrome Stems*
- 3 *Hard Tips*
- 3 *Improved Flow with "Pro Flo" Underhead*

Part No.	Type	Head Diameter	Stem Diameter	Installed Height	O / A Length	Tip Length	Underhead Angle / Radius	Margin	Seat Width	Top of Head	Wgt / Grams
11841-8	Exh.	1.740	.3720	Stock	4.908	.275	Pro Flo: 10° x 3/8"	.085	.100	5° Dish	116
11839-8	Exh.	1.810	.3720	Stock	4.908	.275	Pro Flo: 10° x 3/8"	.085	.100	5° Dish	121
11833-8	Exh.	1.880	.3720	Stock	4.908	.275	Pro Flo: 10° x 3/8"	.085	.100	5° Dish	126
11876-8	Int.	2.080	.3720	Stock	4.873	.275	Pro Flo: 12° x 3/8"	.050	.080	7° Dish	122
11834-8	Int.	2.140	.3720	Stock	4.873	.275	Pro Flo: 12° x 3/8"	.050	.080	7° Dish	126

See page 3 for a description of our valve materials.

STAINLESS VALVES

CHRYSLER 440-I

"INDY CYLINDER HEADS"

RACE MASTER VALVES & SEVERE DUTY® VALVES

- 3 *Swirl Polished*
- 3 *Fully Machined*
- 3 *Chrome Stems*
- 3 *Hard Tips*

Manufactured specifically for Indy Cylinder Head's own 440-1 aluminum or cast iron head.

- Part No.	Type	Head Diameter	Stem Diameter	Installed Height	O/A Length	Tip Length	Underhead Angle/Radius	Margin	Seat Width	Top of Head	Wgt/ Grams
					RACE MASTER VALVES						
11381-8	Exh.	1.810	.3415	Stock	5.400	.250	10° x 3/8"	.075	.100	6° Dish	118
11380-8	Int.	2.190	.3415	Stock	5.344	.250	10° x 3/8"	.050	.080	5° Dish	134
11382-8	Int.	2.250	.3415	Stock	5.344	.250	10° x 3/8"	.050	.080	5° Dish	136
					SEVERE DUTY VALVES						
11813-8	Exh.	1.810	.3415	Stock	5.369	.250	12° x 3/8"	.075	.100	7° Dish	115
11822-8	Int.	2.190	.3415	Stock	5.344	.250	12° x 3/8"	.050	.080	7° Dish	140
11850-8	Int.	2.250	.3415	Stock	5.344	.250	12° x 3/8"	.050	.080	7° Dish	142

See page 3 for a description of our valve materials.

DODGE VIPER V-10

RACE MASTER VALVES

- 3 *XH-426 Stainless Exhaust Material*
- 3 *NK-842 Stainless Intake Material*
- 3 *Swirl Polished*
- 3 *Fully Machined*
- 3 *Chrome Stems*
- 3 *Hard Tips*
- 3 *Bead Loc® keeper grooves for use with the factory valve locks or Manley .3110" stem Bead Loc® valve locks.*

-- Part No.	Type	Head Diameter	Stem Diameter	Installed Height	O/A Length	Tip Length	Underhead Angle/Radius	Margin	Seat Width	Top of Head	Wgt/ Grams
11641-10	Exh.	1.580	.3110	Stock	5.770	.110	18° x 1/2"	.075	.100	12° Dish	101
11643-10	Exh.	1.600	.3110	Stock	5.770	.110	18° x 1/2"	.075	.100	12° Dish	102
11645-10	Exh.	1.600	.3110	.100 Longer	5.870	.110	18° x 1/2"	.075	.100	12° Dish	103
11647-10	Exh.	1.600	.3110	.200 Longer	5.970	.110	18° x 1/2"	.075	.100	12° Dish	104
11642-10	Int.	1.920	.3110	Stock	5.728	.110	12° x 3/8"	.050	.080	7° Dish	105
11644-10	Int.	2.020	.3110	Stock	5.728	.110	12° x 3/8"	.050	.080	7° Dish	112
11646-10	Int.	2.020	.3110	.100 Longer	5.828	.110	12° x 3/8"	.050	.080	7° Dish	113
11648-10	Int.	2.020	.3110	.200 Longer	5.928	.110	12° x 3/8"	.050	.080	7° Dish	114
11660-10	Int.	2.055	.3110	.100 Longer	5.828	.110	12° x 3/8"	.050	.080	7° Dish	114

Need a different length? Head diameter not listed?
See pages 40 & 41 for Gen II blanks to construct a valve to your exact specifications.

STAINLESS VALVES

CHRYSLER 426 HEMI

RACE MASTER & SEVERE DUTY® VALVES

- 3 *XH-426 Race Master Stainless Exhaust Material*
- 3 *NK-844 Severe Duty® Stainless Intake Material*
- 3 *NK-842 Race Master Stainless Intake Material*
- 3 *Chrome Stems and Hard Tips*
- 3 *Swirl Polished and Fully Machined*

"B" suffix indicates a Bead Loc® keeper groove. Bead Loc® valve locks are required.

Part No.	Type	Head Diameter	Stem Diameter	Installed Height	O/A Length	Tip Length	Underhead Angle/Radius	Margin	Seat Width	Top of Head	Wgt/ Grams
					RACE MASTER VALVES						
11315-8	Exh.	1.900	.3075	Stock	4.855	.200	22° x 3/8"	.070	.100	18° Dish	104
11315B-8	Exh.	1.900	.3075	Stock	4.855	.200	22° x 3/8"	.070	.100	18° Dish	104
11317-8	Exh.	1.940	.3075	Stock	4.865	.200	22° x 3/8"	.070	.100	18° Dish	107
11317B-8	Exh.	1.940	.3075	Stock	4.865	.200	22° x 3/8"	.070	.100	18° Dish	107
11901-8	Exh.	1.900	.3100	Stock	4.915	.250	22° x 1/4"	.075	.100	17° Dish	132
11905-8	Exh.	1.940	.3100	Stock	4.915	.250	22° x 1/4"	.075	.100	17° Dish	133
					SEVERE DUTY VALVES						
11902-8	Int.	2.200	.3085	Stock	5.405	.200	24° x 3/4"	.060	.095	20° Dish	133
11902B-8	Int.	2.200	.3085	Stock	5.405	.200	24° x 3/4"	.060	.095	20° Dish	133
11904-8	Int.	2.250	.3085	Stock	5.424	.200	24° x 3/4"	.060	.095	20° Dish	136
11904B-8	Int.	2.250	.3085	Stock	5.424	.200	24° x 3/4"	.060	.095	20° Dish	136
					RACE MASTER VALVES						
11516-8	Int.	2.200	.3100	Stock	5.490	.250	24° x 3/4"	.060	.080	19° Dish	128
11518-8	Int.	2.250	.3100	Stock	5.490	.250	24° x 3/4"	.060	.080	19° Dish	131

TOP FUEL & FUNNY CAR

EXTREME DUTY EXHAUST VALVES

- 3 *XH-432 XtremeAlloy Material*
- 3 *Chrome Stems and Swirl Polished*
- 3 *Hard Tips*

Part No.	Type	Head Diameter	Stem Diameter	Installed Height	O/A Length	Tip Length	Underhead Angle/Radius	Margin	Seat Width	Top of Head	Wgt/ Grams
11837-8	Exh.	1.950	.3715	.100 Longer	5.020	.250	22° x 1/2"	.100	.100	15° Dish	166
11729B-8*	Exh.	1.950	.3715	.200 Longer	5.120	.250	22° x 1/2"	.100	.100	15° Dish	169
11855-8	Exh.	2.000	.3715	.100 Longer	5.020	.250	22° x 1/2"	.080	.125	15° Dish	165
11895-8*	Exh.	2.000	.3715	*	5.315	*	22° x 1/2"	.090	.110	15° Dish	169

All valves above except 11855 have a 55° seat angle.

* Valve 11895 is stocked at the O/A length listed above with no keeper grooves.
Please specify the overall length and groove location you require. There is no charge for these machining operations.
Valve 11729B has a Bead Loc® keeper groove. Bead Loc® valve locks are required.

STAINLESS VALVES

FORD 2300

"ESSLINGER" RACE MASTER VALVES

- 3 *XH-426 Stainless Exhaust Material*
- 3 *NK-842 Stainless Intake Material*
- 3 *Chrome Stems and Hard Tips*
- 3 *Swirl Polished and Fully Machined*

Part No.	Type	Head Diameter	Stem Diameter	Installed Height	O/A Length	Tip Length	Underhead Angle/Radius	Margin	Seat Width	Top of Head	Wgt/ Grams
				SEMI-FINISHED VALVES FOR "ESSLINGER" HEADS							
11791-4	Exh.	1.590	.3415	*	4.800	*	15° x 1/2"	.060	.100	9° Dish	105
11790-4	Int.	1.890	.3415	*	4.800	*	10° x 3/8"	.050	.080	5° Dish	110
				FINISHED VALVES FOR "ESSLINGER" FLAT TAPPET APPLICATIONS							
11793-4	Exh.	1.590	.3415	Stock	4.800	.550	15° x 1/2"	.060	.100	9° Dish	104
11792-4	Int.	1.890	.3415	Stock	4.800	.550	10° x 3/8"	.050	.080	5° Dish	109
				FINISHED VALVES FOR "ESSLINGER" ROLLER TAPPET APPLICATIONS							
11795-4	Exh.	1.590	.3415	Stock	4.800	.400	15° x 1/2"	.060	.100	9° Dish	104
11794-4	Int.	1.890	.3415	Stock	4.800	.400	10° x 3/8"	.050	.080	5° Dish	109

Valves 11790 and 11791 have hard tips but no grooves. Use P/N 04008 to order custom grooved valves.

FORD 4.6L & 5.4L SOHC (2 VALVE)

RACE MASTER VALVES

- 3 *XH-426 Stainless Exhaust Material*
- 3 *NK-842 Stainless Intake Material*
- 3 *Chrome Stems and Hard Tips*
- 3 *Swirl Polished and Fully Machined*
- 3 *Stock Radius Triple Keeper Grooves*

Part No.	Type	Head Diameter	Stem Diameter	Installed Height	O/A Length	Tip Length	Underhead Angle/Radius	Margin	Seat Width	Top of Head	Wgt/ Grams
					1999 AND LATER						
11637-8	Exh.	36.0 mm	.2740	Stock	4.650	.470	15° x 1/2"	.060	.080	9° Dish	66
11639-8	Exh.	37.0 mm	.2740	Stock	4.650	.470	15° x 1/2"	.060	.080	9° Dish	68
11636-8	Int.	44.5 mm	.2750	Stock	4.705	.470	10° x 3/8"	.050	.080	5° Dish	76
11640-8	Int.	45.5 mm	.2750	Stock	4.705	.470	10° x 3/8"	.050	.080	5° Dish	78
					1996 - 1998						
11635-8	Exh.	34.0 mm	.2740	Stock	4.650	.470	15° x 1/2"	.060	.080	9° Dish	62
11637-8*	Exh.	36.0 mm	.2740	Stock	4.650	.470	15° x 1/2"	.060	.080	9° Dish	66
11634-8	Int.	44.5 mm	.2750	Stock	4.630	.470	10° x 3/8"	.050	.080	5° Dish	77
11638-8*	Int.	46.83 mm	.2750	Stock	4.630	.470	10° x 3/8"	.050	.080	5° Dish	82

* Part numbers 11637-8 and 11638-8 are for the Ford Racing M-6049-D46 cylinder head.

FORD 4.6L & 5.4L DOHC (3 VALVE)

RACE MASTER VALVES & EXTREME DUTY VALVES

- 3 *XtremeAlloy Stainless Exhaust Material*
- 3 *NK-842 Stainless Intake Material*
- 3 *Chrome Stems and Hard Tips*
- 3 *Swirl Polished and Fully Machined*
- 3 *Stock Radius Triple Keeper Grooves*

These Manley valves are boxed in sets of 8 pieces. Please order two boxes of intakes and one box of exhausts to fit your engine.

Part No.	Type	Head Diameter	Stem Diameter	Installed Height	O/A Length	Tip Length	Underhead Angle/Radius	Margin	Seat Width	Top of Head	Wgt/ Grams
					EXTREME DUTY VALVES						
11631-8	Exh.	37.5 mm	.2345	Stock	4.585	.380	25° x 11/32"	.080	.100	20° Dish	68
11633-8	Exh.	38.5 mm	.2345	Stock	4.585	.380	25° x 11/32"	.080	.100	20° Dish	70
					RACE MASTER VALVES						
11630-8	Int.	34 mm	.2355	Stock	4.620	.315	12° x 5/16"	.065	.100	7° Dish	53
11632-8	Int.	35 mm	.2355	Stock	4.620	.315	12° x 5/16"	.065	.100	7° Dish	55

See page 3 for a description of our valve materials.

FORD 4.6L & 5.4L DOHC (4 VALVE)

RACE MASTER VALVES

- 3 *XH-426 Stainless Exhaust Material*
- 3 *NK-842 Stainless Intake Material*
- 3 *Chrome Stems and Hard Tips*
- 3 *Swirl Polished and Fully Machined*
- 3 *Stock Radius Triple Keeper Grooves*

These Manley valves are boxed in sets of 8 pieces. Please order two boxes of both intakes and exhausts to fit your engine.

Part No.	Type	Head Diameter	Stem Diameter	Installed Height	O/A Length	Tip Length	Underhead Angle/Radius	Margin	Seat Width	Top of Head	Wgt/ Grams
11615-8	Exh.	30 mm	.2740	Stock	4.587	.425	15° x 1/2"	.050	.080	9° Dish	53
11617-8	Exh.	31 mm	.2740	Stock	4.587	.425	15° x 1/2"	.050	.080	9° Dish	55
11616-8	Int.	37 mm	.2750	Stock	5.339	.620	10° x 3/8"	.045	.080	5° Dish	68
11618-8	Int.	38 mm	.2750	Stock	5.339	.620	10° x 3/8"	.045	.080	5° Dish	70

STAINLESS VALVES

FORD 289 - 302 - 351W

BUDGET PERFORMANCE & STREET FLO VALVES

- 3 *Chrome Stems and Hard Tips*
- 3 *Swirl Polished and Fully Machined*

Part No.	Type	Head Diameter	Stem Diameter	Installed Height	O/A Length	Tip Length	Underhead Angle/Radius	Margin	Seat Width	Top of Head	Wgt/ Grams
				VALVES FOR USE WITH NON RAIL OR ROLLER ROCKERS							
10549-8*	Exh.	1.600	.3415	Stock	4.911	.250	15° x 1/2"	.060	.100	10° Dish	101
10548-8*	Int.	1.900	.3415	Stock	4.911	.250	10° x 3/8"	.050	.080	6° Dish	105
10576-8*	Int.	1.940	.3415	Stock	4.911	.250	10° x 3/8"	.050	.080	6° Dish	116
10550-8*	Int.	2.020	.3415	Stock	4.911	.250	10° x 3/8"	.050	.080	6° Dish	109
				VALVES FOR USE WITH RAIL TYPE ROCKERS							
10723-8	Exh.	1.465	.3415	Stock	5.080	.395	Pro Flo: 12° x 3/8"	.060	.080	7° Dish	93
10775-8	Exh.	1.550	.3415	Stock	5.080	.395	Pro Flo: 12° x 3/8"	.060	.100	7° Dish	94
10778-8	Int.	1.850	.3420	Stock	5.075	.395	Pro Flo: 12° x 3/8"	.050	.080	7° Dish	105

* Ford valves with .250" tips must use non rail type stock rockers or roller rockers.

FORD 289 - 302 - 351W

RACE FLO VALVES

- 3 *XH-426 Stainless Exhaust Material*
- 3 *NK-842 Stainless Intake Material*
- 3 *Improved Flow with "Pro Flow" Underhead*
- 3 *Chrome Stems and Hard Tips*
- 3 *Swirl Polished and Fully Machined*

Part No.	Type	Head Diameter	Stem Diameter	Installed Height	O/A Length	Tip Length	Underhead Angle/Radius	Margin	Seat Width	Top of Head	Wgt/ Grams
				VALVES FOR USE WITH NON RAIL OR ROLLER ROCKERS							
11531-8*	Exh.	1.600	.3415	Stock	4.911	.250	Pro Flo: 12° x 3/8"	.060	.100	7° Dish	94
11532-8*	Int.	1.940	.3415	Stock	4.911	.250	Pro Flo: 10° x 3/8"	.050	.080	5° Dish	107
11566-8*	Int.	2.020	.3415	Stock	4.911	.250	Pro Flo: 12° x 3/8"	.050	.080	5° Dish	113
				VALVES FOR USE WITH RAIL TYPE ROCKERS							
11523-8	Exh.	1.465	.3415	Stock	5.080	.395	Pro Flo: 12° x 3/8"	.060	.080	5° Dish	93
11575-8	Exh.	1.550	.3415	Stock	5.080	.395	Pro Flo: 12° x 3/8"	.060	.100	5° Dish	94
11889-8	Exh.	1.600	.3415	Stock	5.080	.395	Pro Flo: 12° x 3/8"	.060	.100	5° Dish	95
11572-8	Int.	1.785	.3420	Stock	5.075	.395	Pro Flo: 12° x 3/8"	.050	.080	5° Dish	104
11578-8	Int.	1.850	.3420	Stock	5.075	.395	Pro Flo: 12° x 3/8"	.050	.080	5° Dish	105
11888-8	Int.	1.940	.3420	Stock	5.075	.395	Pro Flo: 12° x 3/8"	.050	.080	5° Dish	110

* Ford valves with .250" tips must use non rail type stock rockers or roller rockers.

Ford S.V.O. straight stem equivalents: P/N 11575 = M-6505-G302 P/N 11578 = M-6507-G302

Need a different length? Head diameter not listed?
See pages 40 & 41 for Gen II blanks to construct a valve to your exact specifications.

STAINLESS VALVES

FORD 351C

RACE MASTER VALVES & SEVERE DUTY® VALVES

- 3 *Chrome Stems and Hard Tips*
- 3 *Swirl Polished and Fully Machined*

Part No.	Type	Head Diameter	Stem Diameter	Installed Height	O/A Length	Tip Length	Underhead Angle/Radius	Margin	Seat Width	Top of Head	Wgt/ Grams
					RACE MASTER VALVES						
11873-8	Exh.	1.710	.3415	Stock	5.042	.250	10° x 3/8"	.060	.100	7° Dish	108
11872-8	Int.	2.190	.3415	Stock	5.244	.250	10° x 3/8"	.050	.080	5° Dish	139
11874-8	Int.	2.250	.3415	Stock	5.244	.250	10° x 3/8"	.050	.080	5° Dish	140
					SEVERE DUTY® VALVES						
11807-8	Exh.	1.655	.3415	Stock	5.067	.220	12° x 3/8"	.085	.100	7° Dish	102
11853-8	Exh.	1.655	.3415	.100 Longer	5.167	.250	12° x 3/8"	.085	.100	7° Dish	105
11805-8	Exh.	1.710	.3415	Stock	5.067	.220	12° x 3/8"	.085	.100	7° Dish	108
11857-8	Exh.	1.710	.3415	.100 Longer	5.167	.250	12° x 3/8"	.085	.100	7° Dish	111
11800-8	Int.	2.190	.3415	Stock	5.244	.250	12° x 3/8"	.050	.080	7° Dish	139
11822-8	Int.	2.190	.3415	.100 Longer	5.344	.250	12° x 3/8"	.050	.080	7° Dish	140
11802-8	Int.	2.250	.3415	Stock	5.244	.250	12° x 3/8"	.050	.080	7° Dish	139
11850-8	Int.	2.250	.3415	.100 Longer	5.344	.250	12° x 3/8"	.050	.080	7° Dish	142

FORD SVO "SPORTSMAN"

N-351 CYLINDER HEAD
RACE MASTER VALVES & SEVERE DUTY® VALVES

- 3 *Chrome Stems and Hard Tips*
- 3 *Swirl Polished and Fully Machined*

Part No.	Type	Head Diameter	Stem Diameter	Installed Height	O/A Length	Tip Length	Underhead Angle/Radius	Margin	Seat Width	Top of Head	Wgt/ Grams
					RACE MASTER VALVES						
11321-8	Exh.	1.600	.3415	Stock	5.165	.290	15° x 1/2"	.090	.100	9° Dish	112
11316-8	Int.	2.020	.3415	Stock	5.140	.290	12° x 3/8"	.065	.080	7° Dish	127
					SEVERE DUTY® VALVES						
11865-8	Exh.	1.600	.3415	Stock	5.121	.250	15° x 1/2"	.070	.100	9° Dish	105
11751-8	Exh.	1.600	.3415	Stock	5.165	.290	15° x 1/2"	.090	.100	9° Dish	110
11544-8	Int.	2.020	.3415	Stock	5.140	.290	10° x 3/8"	.065	.080	5° Dish	125

Need a different length? Head diameter not listed?
See pages 40 & 41 for Gen II blanks to construct a valve to your exact specifications.

STAINLESS VALVES

FORD 429 - 460

RACE MASTER VALVES

- 3 *XH-426 Stainless Exhaust Material*
- 3 *NK-842 Stainless Intake Material*
- 3 *Chrome Stems and Hard Tips*
- 3 *Swirl Polished and Fully Machined*

Part No.	Type	Head Diameter	Stem Diameter	Installed Height	O / A Length	Tip Length	Underhead Angle / Radius	Margin	Seat Width	Top of Head	Wgt / Grams
11875-8	Exh.	1.760	.3415	Stock	5.042	.250	12° x 3/8"	.060	.100	7° Dish	113
11872-8	Int.	2.190	.3415	Stock	5.244	.250	10° x 3/8"	.050	.080	5° Dish	139
11874-8	Int.	2.250	.3415	Stock	5.244	.250	10° x 3/8"	.050	.080	5° Dish	140
					BLUE THUNDER HEADS						
11829-8	Exh.	1.880	.3415	Stock	5.070	.250	25° x 3/8"	.090	.100	20° Dish	118
11899-8	Exh.	1.880	.3415	.100 Longer	5.170	.250	25° x 3/8"	.090	.100	20° Dish	120
11874-8	Int.	2.250	.3415	Stock	5.244	.250	10° x 3/8"	.050	.080	5° Dish	140

FORD 429 - 460

SEVERE DUTY® VALVES

- 3 *XH-428 Stainless Exhaust Material*
- 3 *NK-844 Stainless Intake Material*
- 3 *Chrome Stems and Hard Tips*
- 3 *Swirl Polished and Fully Machined*

Part No.	Type	Head Diameter	Stem Diameter	Installed Height	O / A Length	Tip Length	Underhead Angle / Radius	Margin	Seat Width	Top of Head	Wgt / Grams
11529-8	Exh.	1.760	.3415	Stock	5.067	.250	12° x 3/8"	.085	.085	7° Dish	113
11801-8	Exh.	1.760	.3415	.100 Longer	5.167	.250	12° x 3/8"	.085	.085	7° Dish	116
11800-8	Int.	2.190	.3415	Stock	5.244	.250	12° x 3/8"	.050	.080	7° Dish	139
11822-8	Int.	2.190	.3415	.100 Longer	5.344	.250	12° x 3/8"	.050	.080	7° Dish	140
11802-8	Int.	2.250	.3415	Stock	5.244	.250	12° x 3/8"	.050	.080	7° Dish	139
11850-8	Int.	2.250	.3415	.100 Longer	5.344	.250	12° x 3/8"	.050	.080	7° Dish	142

The size of the Super Cobra Jet valves are 2.245" Int. (30° seat) and 1.750" Exh. Other 429 - 460 cylinder heads have smaller valve diameters. Our valves can be easily cut or the seats enlarged.

Need a different length? Head diameter not listed?
See pages 40 & 41 for Gen II blanks to construct a valve to your exact specifications.

STAINLESS VALVES

FORD 429 - 460

ALUMINUM AFTERMARKET HEADS
RACEMASTER & SEVERE DUTY VALVES

- *XH-426 Stainless Exhaust Material*
- *NK-844 Stainless Intake Material*
- *Chrome Stems and Hard Tips*
- *Swirl Polished and Fully Machined*

Part No.	Type	Head Diameter	Stem Diameter	Installed Height	O / A Length	Tip Length	Underhead Angle / Radius	Margin	Seat Width	Top of Head	Wgt / Grams
11591-8	Exh.	1.880	.3415	Stock	5.655	.260	25° x 3/8"	.075	.100	20° Dish	129
11586-8	Int.	2.250	.3415	Stock	5.725	.260	10° x 13/32"	.065	.075	5° Dish	153
11588-8	Int.	2.300	.3415	Stock	5.725	.260	10° x 13/32"	.065	.075	5° Dish	166
11590-8	Int.	2.400	.3415	Stock	5.725	.260	10° x 13/32"	.065	.075	5° Dish	170

(11588 = M-6507-A460; 11586 = M-6507-B460; 11591 = M-6505-A460; 11590 = M-6507-E460)

FORD 427

(MEDIUM, HI RISER, TUNNEL PORT)
SEVERE DUTY® SOLID STEM VALVES

- *XH-428 Stainless Exhaust Material*
- *NK-844 Stainless Intake Material*
- *Chrome Stems and Hard Tips*
- *Swirl Polished and Fully Machined*

Part No.	Type	Head Diameter	Stem Diameter	Installed Height	O / A Length	Tip Length	Underhead Angle / Radius	Margin	Seat Width	Top of Head	Wgt / Grams
11825-8	Exh.	1.750	.3705	Stock	5.426	.320	20° x 3/8"	.060	.100	15° Dish	124
11884-8	Int.	2.190	.3715	Stock	5.446	.320	23° x 5/16"	.070	.120	20° Dish	143
11804-8	Int.	2.250	.3715	Stock	5.454	.320	23° x 5/16"	.065	.090	20° Dish	145

The above valves can be cut down to 1.656" for the 428 exhaust and 2.090" for the 428 intake. The lengths of the 427 and 428 valves are the same. Valves 11804 and 11884 have a 30° seat.

FORD BOSS 429

RACE MASTER VALVES

- *XH-426 Stainless Exhaust Material*
- *NK-842 Stainless Intake Material*
- *Chrome Stems and Hard Tips*
- *Swirl Polished and Fully Machined*

Part No.	Type	Head Diameter	Stem Diameter	Installed Height	O / A Length	Tip Length	Underhead Angle / Radius	Margin	Seat Width	Top of Head	Wgt / Grams
11787-8	Exh.	1.900	.3715	Stock	5.650	.350	15° x 1/2"	.080	.100	9° Dish	122
11786-8*	Int.	2.280	.3715	Stock	5.625	.350	12° x 3/8"	.060	.100	7° Dish	141
11788-8*	Int.	2.400	.3715	Stock	5.570	.350	12° x 3/8"	.060	.100	7° Dish	143

* P/N 11786-8 & P/N 11788-8 have a 30° seat

5.570" is the length of the NASCAR intake valve. It is short because it is sunk in the head. If you do not wish to sink the valve, order a GEN II intake at your desired length.

STAINLESS VALVES

HONDA / ACURA

RACE MASTER VALVES

Part No.	Type	Head Diameter	Stem Diameter	O / A Length	Tip Length	Underhead Angle / Radius	Margin	Seat Width	Top of Head
			ACURA INTEGRA GSR 1.7L - DOHC V-TEC 16 VALVE (B17A1) - 1992 - 1993 ACURA INTEGRA GSR 1.8L - DOHC V-TEC 16 VALVE (B18C1-C3) - 1994 - 2000 HONDA DEL SOL 1.6L - DOHC V-TEC 16 VALVE (B16A1) - 1994 - 1997 HONDA CIVIC SI 1.6L - DOHC V-TEC 16 VALVE (B16A3) - 1999 - 2000					
11373-8	Exh.	28.0 mm	5.5 mm / .2165”	102.70 mm	2.5 mm	25° x 11/32"	.065"	.080"	20° Dish
11691-8	Exh.	28.0 mm	5.5 mm / .2165”	102.70 mm	2.5 mm	Pro Flo: 22° x 5/16"	.065"	.080"	Flat Face
11375-8	Exh.	28.5 mm	5.5 mm / .2165”	102.70 mm	2.5 mm	25° x 11/32"	.065"	.080"	20° Dish
11693-8	Exh.	28.5 mm	5.5 mm / .2165”	102.70 mm	2.5 mm	Pro Flo: 22° x 5/16"	.065"	.080"	Flat Face
11377-8	Exh.	29.0 mm	5.5 mm / .2165”	102.70 mm	2.5 mm	25° x 11/32"	.065"	.080"	20° Dish
11372-8	Int.	33.0 mm	5.5 mm / .2165”	102.40 mm	2.5 mm	Pro Flo: 22° x 5/16"	.050"	.075"	17° Dish
11690-8	Int.	33.0 mm	5.5 mm / .2165”	102.40 mm	2.5 mm	Pro Flo: 22° x 5/16"	.050"	.075"	Flat Face
11374-8	Int.	33.5 mm	5.5 mm / .2165”	102.40 mm	2.5 mm	Pro Flo: 22° x 5/16"	.050"	.075"	17° Dish
11692-8	Int.	33.5 mm	5.5 mm / .2165”	102.40 mm	2.5 mm	Pro Flo: 22° x 5/16"	.050"	.075"	Flat Face
11376-8	Int.	34.0 mm	5.5 mm / .2165”	102.40 mm	2.5 mm	Pro Flo: 22° x 5/16"	.050"	.075"	17° Dish
			ACURA RSX Type S 2.0L - DOHC i-VTEC 16 VALVE (K20A2) - 2001 - Up						
11127-8	Exh.	30.0 mm	5.5 mm / .2165”	109.04 mm	2.08 mm	25° x 11/32"	.065"	.080"	20° Dish
11129-8	Exh.	30.5 mm	5.5 mm / .2165”	109.04 mm	2.08 mm	25° x 11/32"	.065"	.080"	20° Dish
11131-8	Exh.	31.0 mm	5.5 mm / .2165”	109.04 mm	2.08 mm	25° x 11/32"	.065"	.080"	20° Dish
11128-8	Int.	35.0 mm	5.5 mm / .2165”	109.22 mm	2.08 mm	Pro Flo: 22° x 5/16"	.050"	.075"	17° Dish
11130-8	Int.	35.5 mm	5.5 mm / .2165”	109.22 mm	2.08 mm	Pro Flo: 22° x 5/16"	.050"	.075"	17° Dish
11132-8	Int.	36.0 mm	5.5 mm / .2165”	109.22 mm	2.08 mm	Pro Flo: 22° x 5/16"	.050"	.075"	17° Dish
			HONDA ACCORD 2.2L - SOHC V-TEC 16 VALVE (F22B1) - 1994 - 1997						
11371-8	Exh.	29 mm	5.5 mm / .2165”	114.25 mm	3.5 mm	25° x 11/32"	.065"	.080"	20° Dish
11379-8	Exh.	30 mm	5.5 mm / .2165”	114.25 mm	3.5 mm	25° x 11/32"	.065"	.080"	20° Dish
11370-8	Int.	34 mm	5.5 mm / .2165”	116.00 mm	3.5 mm	Pro Flo: 22° x 5/16"	.050"	.075"	17° Dish
11378-8	Int.	35 mm	5.5 mm / .2165”	116.00 mm	3.5 mm	Pro Flo: 22° x 5/16"	.050"	.075"	17° Dish
			HONDA CIVIC 1.6L - SOHC 16 VALVE (D16Z6-Y5-Y7-Y8) - 1992 - 2000						
11367-8	Exh.	26 mm	5.5 mm / .2165”	115.95 mm	1.9 mm	25° x 11/32"	.065"	.080"	20° Dish
11369-8	Exh.	27 mm	5.5 mm / .2165”	115.95 mm	1.9 mm	25° x 11/32"	.065"	.080"	20° Dish
11366-8	Int.	30 mm	5.5 mm / .2165”	118.60 mm	1.9 mm	Pro Flo: 22° x 5/16"	.050"	.075"	17° Dish
11368-8	Int.	31 mm	5.5 mm / .2165”	118.60 mm	1.9 mm	Pro Flo: 22° x 5/16"	.050"	.075"	17° Dish
			HONDA CIVIC CRX SI 1.6L - SOHC 16 VALVE (D16A6) - 1988 - 1991						
11383-8	Exh.	25 mm	5.5 mm / .2165”	118.75 mm	4.35 mm	Pro Flo: 22° x 5/16"	.065"	.080"	17° Dish
11385-8	Exh.	26 mm	5.5 mm / .2165”	118.75 mm	4.35 mm	Pro Flo: 22° x 5/16"	.065"	.080"	17° Dish
11384-8	Int.	29 mm	5.5 mm / .2165”	115.00 mm	4.1 mm	Pro Flo: 22° x 5/16"	.050"	.075"	17° Dish
11386-8	Int.	30 mm	5.5 mm / .2165”	115.00 mm	4.1 mm	Pro Flo: 22° x 5/16"	.050"	.075"	17° Dish
			HONDA PRELUDE 2.2L - DOHC V-TEC 16 VALVE (H22A1-A4) - 1993 - 2000						
11393-8	Exh.	30.0 mm	5.5 mm / .2165”	106.90 mm	1.9 mm	25° x 11/32"	.065"	.080"	20° Dish
11339-8	Exh.	30.5 mm	5.5 mm / .2165”	106.90 mm	1.9 mm	25° x 11/32"	.065"	.080"	20° Dish
11395-8	Exh.	31.0 mm	5.5 mm / .2165”	106.90 mm	1.9 mm	25° x 11/32"	.065"	.080"	20° Dish
11394-8	Int.	35.0 mm	5.5 mm / .2165”	106.65 mm	1.9 mm	Pro Flo: 22° x 5/16"	.050"	.075"	17° Dish
11338-8	Int.	35.5 mm	5.5 mm / .2165”	106.65 mm	1.9 mm	Pro Flo: 22° x 5/16"	.050"	.075"	17° Dish
11396-8	Int.	36.0 mm	5.5 mm / .2165”	106.65 mm	1.9 mm	Pro Flo: 22° x 5/16"	.050"	.075"	17° Dish

All Manley Performance aftermarket valves for the Honda / Acura engines are manufactured with a 5.5 mm stem diameter. We recommend that customers check their valve guide size in order to achieve the proper valve stem to guide clearance. Guides may need to be honed when replacing valves. Factory size may vary slightly depending on the specific engine.

1960 SWARTHMORE AVENUE
LAKEWOOD, NEW JERSEY 08701

MAZDA / NISSAN

RACE MASTER VALVES

- *XH-426 Stainless Exhaust Material*
- *Chrome Stems and Hard Tips*
- *Improved flow with "Pro Flo" Intakes*
- *NK-842 Stainless Intake Material*
- *Swirl Polished and Fully Machined*

Part No.	Type	Head Diameter	Stem Diameter	O / A Length	Tip Length	Underhead Angle / Radius	Margin	Seat Width	Top of Head
				MAZDA MIATA 1.8L - DOHC 16 VALVE (BP056) - 1990 - 1999					
11101-8	Exh.	28 mm	6 mm / .2362"	101.52 mm	3.5 mm	25° x 11/32"	.065"	.080"	20° Dish
11103-8	Exh.	29 mm	6 mm / .2362"	101.52 mm	3.5 mm	25° x 11/32"	.065"	.080"	20° Dish
11102-8	Int.	33 mm	6 mm / .2362"	101.35 mm	3.5 mm	Pro Flo: 22° x 5/16"	.050"	.075"	17° Dish
11104-8	Int.	34 mm	6 mm / .2362"	101.35 mm	3.5 mm	Pro Flo: 22° x 5/16"	.050"	.075"	17° Dish
				NISSAN 300 ZX 3.0L - DOHC 24 VALVE (VG30D - TURBO VG30DTT) - 1990 - 1996					
11105-12	Exh.	29.5 mm	6 mm / .2362"	103.65 mm	3.5 mm	25° x 11/32"	.065"	.080"	20° Dish
11107-12	Exh.	30.5 mm	6 mm / .2362"	103.65 mm	3.5 mm	25° x 11/32"	.065"	.080"	20° Dish
11106-12	Int.	34.0 mm	6 mm / .2362"	103.13 mm	3.5 mm	Pro Flo: 22° x 5/16"	.050"	.075"	17° Dish
11108-12	Int.	35.0 mm	6 mm / .2362"	103.13 mm	3.5 mm	Pro Flo: 22° x 5/16"	.050"	.075"	17° Dish
				NISSAN 3.5L V6 - DOHC 24 VALVE (VQ35DE, VQ35DET)					
11149-12	Exh.	31.5 mm	6 mm / .2362"	94.0 mm	3.5 mm	25° x 11/32"	.065"	.080"	20° Dish
11151-12	Exh.	32.0 mm	6 mm / .2362"	94.0 mm	3.5 mm	25° x 11/32"	.065"	.080"	20° Dish
11153-12	Exh.	32.5 mm	6 mm / .2362"	94.0 mm	3.5 mm	25° x 11/32"	.065"	.080"	20° Dish
11148-12	Int.	37.0 mm	6 mm / .2362"	96.5 mm	3.5 mm	Pro Flo: 22° x 5/16"	.050"	.075"	17° Dish
11150-12	Int.	37.5 mm	6 mm / .2362"	96.5 mm	3.5 mm	Pro Flo: 22° x 5/16"	.050"	.075"	17° Dish
11152-12	Int.	38.0 mm	6 mm / .2362"	96.5 mm	3.5 mm	Pro Flo: 22° x 5/16"	.050"	.075"	17° Dish
				NISSAN PATROL St-S, St-L, Ti 4.8L - DOHC 24 VALVE (VTC)					
11141-12	Exh.	33.5 mm	6.96 mm / .2740"	98.30 mm	3.56 mm	25° x 3/8"	.050"	.100"	Flat Face
11143-12	Exh.	34.5 mm	6.96 mm / .2740"	98.30 mm	3.56 mm	25° x 3/8"	.050"	.100"	Flat Face
11142-12	Int.	38.5 mm	6.96 mm / .2740"	100.21 mm	3.56 mm	12° x 3/8"	.045"	.100"	Flat Face
11144-12	Int.	39.5 mm	6.96 mm / .2740"	100.21 mm	3.56 mm	12° x 3/8"	.045"	.100"	Flat Face
				NISSAN SENTRA SE-R 2.0L - DOHC 16 VALVE (SR20DE) - 1991 - 1998					
11109-8	Exh.	30.15 mm	6 mm / .2362"	102.40 mm	3.5 mm	25° x 11/32"	.065"	.080"	20° Dish
11111-8	Exh.	31.15 mm	6 mm / .2362"	102.40 mm	3.5 mm	25° x 11/32"	.065"	.080"	20° Dish
				NISSAN SENTRA SE-R 2.0L - DOHC 16 VALVE (SR20DET) - 1991 - 1998					
11145-8*	Exh.	30.15 mm	7 mm / .2740"	102.40 mm	3.5 mm	15° x 1/2"	.065"	.080"	9° Dish
11147-8*	Exh.	31.15 mm	7 mm / .2740"	102.40 mm	3.5 mm	15° x 1/2"	.065"	.080"	9° Dish
				NISSAN SENTRA SE-R 2.0L - DOHC 16 VALVE (SR20DE, SR20DET) - 1991 - 1998					
11110-8	Int.	34.15 mm	6 mm / .2362"	101.40 mm	3.5 mm	Pro Flo: 22° x 5/16"	.050"	.075"	17° Dish
11112-8	Int.	35.15 mm	6 mm / .2362"	101.40 mm	3.5 mm	Pro Flo: 22° x 5/16"	.050"	.075"	17° Dish
				NISSAN 2.6L INLINE 6-24 VALVE (RB26DET/T)					
11163-12*	Exh.	30.15 mm	7 mm / .2740"	101.52 mm	3.5 mm	15° x 1/2"	.065"	.080"	9° Dish
11165-12*	Exh.	31.15 mm	7 mm / .2740"	101.52 mm	3.5 mm	15° x 1/2"	.065"	.080"	9° Dish
11162-12	Int.	34.6 mm	6 mm / .2362"	102.33 mm	3.5 mm	Pro Flo: 22° x 5/16"	.050"	.075"	17° Dish
11164-12	Int.	35.6 mm	6 mm / .2362"	102.33 mm	3.5 mm	Pro Flo: 22° x 5/16"	.050"	.075"	17° Dish

* Both of these exhaust valves feature a 1mm stem diameter reduction in the keeper groove area to allow the use of the same valve springs, retainers and locks as the intake valves.

* Both of these exhaust valves feature a 1mm stem diameter reduction in the keeper groove area to allow the use of the same valve springs, retainers and locks as the intake valves.

Manley Performance recommends that customers check their valve guide size in order to achieve the proper valve stem to guide clearance. Guides may need to be honed when replacing valves. Factory sizes may vary depending on the specific engine.

Note: New part numbers are *ITALICIZED*.

STAINLESS VALVES

MITSUBISHI

RACE FLO VALVES

- 3 *XH-426 Stainless Exhaust Material*
- 3 *Chrome Stems and Hard Tips*
- 3 *Improved flow with "Pro Flo" Underheads*
- 3 *NK-842 Stainless Intake Material*
- 3 *Swirl Polished and Fully Machined*

Part No.	Type	Head Diameter	Stem Diameter	O / A Length	Tip Length	Underhead Angle / Radius	Margin	Seat Width	Top of Head
MITSUBISHI ECLIPSE GS, GST 2.0L - DOHC 16 VALVE (4G63-4G63T) 1990 - 2000									
11133-8	Exh.	30.5 mm	6.54 mm / .2575"	109.7 mm	3.8 mm	Pro Flo: 22° x 7/16"	.065"	.080"	17° Dish
11161-8	Exh.	31.0 mm	6.54 mm / .2575"	109.7 mm	3.8 mm	Pro Flo: 22° x 7/16"	.065"	.080"	17° Dish
11135-8	Exh.	31.5 mm	6.54 mm / .2575"	109.7 mm	3.8 mm	Pro Flo: 22° x 7/16"	.065"	.080"	17° Dish
11134-8	Int.	34 mm	6.57 mm / .2587"	109.7 mm	3.8 mm	Pro Flo: 20° x 11/32"	.050"	.075"	15° Dish
11160-8	Int.	34.5 mm	6.57 mm / .2587"	109.7 mm	3.8 mm	Pro Flo: 20° x 11/32"	.050"	.075"	15° Dish
11136-8	Int.	35 mm	6.57 mm / .2587"	109.7 mm	3.8 mm	Pro Flo: 20° x 11/32"	.050"	.075"	15° Dish

OLDSMOBILE 330 - 455

SEVERE DUTY® VALVES

- 3 *XH-428 Stainless Exhaust Material*
- 3 *NK-844 Stainless Intake Material*
- 3 *Hard Tips*
- 3 *Swirl Polished*
- 3 *Chrome Stems*
- 3 *Fully Machined*

Part No.	Type	Head Diameter	Stem Diameter	Installed Height	O / A Length	Tip Length	Underhead Angle / Radius	Margin	Seat Width	Top of Head
11547-8	Exh.	1.710	.3420	Stock	4.668	.260	10° x 3/8"	.060	.100	5° Dish
11548-8	Int.	2.072	.3420	Stock	4.713	.260	10° x 3/8"	.050	.080	5° Dish

PONTIAC 400 - 428 - 455

RACE MASTER & RACE FLO VALVES

- 3 *XH-426 Stainless Exhaust Material*
- 3 *NK-842 Stainless Intake Material*
- 3 *Chrome Stems and Hard Tips*
- 3 *Swirl Polished and Fully Machined*

Part No.	Type	Head Diameter	Stem Diameter	Installed Height	O / A Length	Tip Length	Underhead Angle / Radius	Margin	Seat Width	Top of Head
11353-8	Exh.	1.660	.3415	Stock	5.230	.250	25° x 3/8"	.080	.100	20° Dish
11355-8	Exh.	1.770	.3415	Stock	5.100	.250	25° x 3/8"	.080	.100	20° Dish
11337-8	Exh.	1.770	.3415	Stock	5.230	.250	25° x 3/8"	.080	.100	20° Dish
11352-8	Int.	2.110	.3415	Stock	5.215	.250	Pro Flo 12° x 3/8"	.050	.100	7° Dish
11364-8	Int.	2.110	.3415	Stock	5.100	.250	Pro Flo 12° x 3/8"	.050	.100	7° Dish

Valves 11352 and 11353 fit Edelbrock 72cc cylinder heads. Both intakes have 30° seats.

Need a different length? Head diameter not listed?
See pages 40 & 41 for Gen II blanks to construct a valve to your exact specifications.

Note: New part numbers are *ITALICIZED*.

STAINLESS VALVES

SUBARU WRX 2000-03 EJ20 & 2004 STI

RACE SERIES VALVES & EXTREME DUTY VALVES

- 3 *XtremeAlloy and XH-426 Stainless Exhaust Material*
- 3 *Swirl Polished and Fully Machined*
- 3 *NK-842 Stainless Intake Material*
- 3 *Chrome Stems and Hard Tips*

Part No.	Type	Head Diameter	Stem Diameter	Installed Height	O/A Length	Tip Length	Underhead Angle/Radius	Margin	Seat Width	Top of Head
				RACE MASTER VALVES						
11155-8	Exh.	32 mm	6.0 mm/.2362"	Stock	104.75 mm	3.5 mm	25° x 11/32"	.060	.080	20° Dish
11171-8	Exh.	33 mm	6.0 mm/.2362"	Stock	104.75 mm	3.5 mm	25° x 11/32"	.060	.080	20° Dish
				EXTREME DUTY VALVES						
11137-8	Exh.	32 mm	5.96mm/.2345"	Stock	104.75 mm	3.5 mm	25° x 11/32"	.060	.100	20° Dish
11139-8	Exh.	33 mm	5.96mm/.2345"	Stock	104.75 mm	3.5 mm	25° x 11/32"	.060	.100	20° Dish
				RACE FLO VALVES						
11138-8	Int.	36 mm	6.0mm/.2362"	Stock	104.6 mm	3.5 mm	Pro Flo: 22° x 5/16"	.050	.080	17° Dish
11140-8	Int.	37 mm	6.0mm/.2362"	Stock	104.6 mm	3.5 mm	Pro Flo: 22° x 5/16"	.050	.080	17° Dish

All Manley Performance aftermarket intake valves and exhaust valve 11155 for the Subaru engines are manufactured with a 6 mm stem diameter. We recommend that customers check their valve guide size in order to achieve the proper valve stem to guide clearance. Guides may need to be honed when replacing valves. Factory sizes may vary depending on the specific motor.

TOYOTA RACE MASTER VALVES

- 3 *XH-426 Stainless Exhaust Material*
- 3 *NK-842 Stainless Intake Material*
- 3 *Improved flow with "Pro Flo" Intake Underheads*
- 3 *Chrome Stems, Swirl Polished and Fully Machined*

Part No.	Type	Head Diameter	Stem Diameter	O / A Length	Tip Length	Underhead Angle / Radius	Margin	Seat Width	Top of Head
				TOYOTA 4AG (ATLANTIC)					
11113-8	Exh.	27.5 mm	6 mm / .2362"	99.75 mm	3.5 mm	25° x 11/32"	.065"	.080"	20° Dish
11114-8	Int.	32.0 mm	6 mm / .2362"	99.60 mm	3.5 mm	Pro Flo: 22° x 5/16"	.050"	.075"	17° Dish
				TOYOTA LAND CRUISER 4.5L - DOHC 24 VALVE (1FZ-FE) - 1993 - 1998					
11167-12	Exh.	32.0 mm	7 mm / .2740"	98.0 mm	2.8 mm	15° x 1/2"	.065"	.080"	9° Dish
11169-12	Exh.	33.0 mm	7 mm / .2740"	98.0 mm	2.8 mm	15° x 1/2"	.065"	.080"	9° Dish
11166-12	Int.	38.0 mm	7 mm / .2740"	99.0 mm	2.8 mm	10° x 3/8"	.050"	.075"	5° Dish
11168-12	Int.	39.0 mm	7 mm / .2740"	99.0 mm	2.8 mm	10° x 3/8"	.050"	.075"	5° Dish
				TOYOTA MR2 2.0L - DOHC 16 VALVE (TURBO 3SGTE) - 1990 - 1995					
11115-8	Exh.	29.0 mm	6 mm / .2362"	99.50 mm	3.5 mm	25° x 11/32"	.065"	.080"	20° Dish
11117-8	Exh.	30.0 mm	6 mm / .2362"	99.50 mm	3.5 mm	25° x 11/32"	.065"	.080"	20° Dish
11116-8	Int.	33.5 mm	6 mm / .2362"	100.55 mm	3.5 mm	Pro Flo: 22° x 5/16"	.050"	.075"	17° Dish
11118-8	Int.	34.5 mm	6 mm / .2362"	100.55 mm	3.5 mm	Pro Flo: 22° x 5/16"	.050"	.075"	17° Dish
				TOYOTA SCION tC 2.4L - DOHC 16 VALVE (2AZFE)					
11157-8	Exh.	29.5 mm	5.5 mm / .2165"	101.65 mm	2.49 mm	25° x 11/32"	.065"	.080"	Flat Face
11159-8	Exh.	30.5 mm	5.5 mm / .2165"	101.65 mm	2.49 mm	25° x 11/32"	.065"	.080"	Flat Face
11156-8	Int.	34.0 mm	5.5 mm / .2165"	101.96 mm	2.49 mm	Pro Flo: 22° x 5/16"	.050"	.075"	Flat Face
11158-8	Int.	35.0 mm	5.5 mm / .2165"	101.96 mm	2.49 mm	Pro Flo: 22° x 5/16"	.050"	.075"	Flat Face
				TOYOTA SUPRA 3.0L - DOHC 24 VALVE (7MGE - TURBO 7MGTE) - 1986 - 1992					
11119-12	Exh.	27.5 mm	6 mm / .2362"	98.05 mm	4.0 mm	25° x 11/32"	.065"	.080"	20° Dish
11121-12	Exh.	28.5 mm	6 mm / .2362"	98.05 mm	4.0 mm	25° x 11/32"	.065"	.080"	20° Dish
11120-12	Int.	32.0 mm	6 mm / .2362"	98.05 mm	4.0 mm	Pro Flo: 22° x 5/16"	.050"	.075"	17° Dish
11122-12	Int.	33.0 mm	6 mm / .2362"	98.05 mm	4.0 mm	Pro Flo: 22° x 5/16"	.050"	.075"	17° Dish
				TOYOTA SUPRA 3.0L I/L 6 CYL - DOHC 24 VALVE (2JZGE - 2JZGTE) - 1994 - 1998					
11123-12	Exh.	29.0 mm	6 mm / .2362"	99.10 mm	3.5 mm	25° x 11/32"	.065"	.080"	20° Dish
11125-12	Exh.	30.0 mm	6 mm / .2362"	99.10 mm	3.5 mm	25° x 11/32"	.065"	.080"	20° Dish
11124-12	Int.	33.6 mm	6 mm / .2362"	98.55 mm	3.5 mm	Pro Flo: 22° x 5/16"	.050"	.075"	17° Dish
11126-12	Int.	34.6 mm	6 mm / .2362"	98.55 mm	3.5 mm	Pro Flo: 22° x 5/16"	.050"	.075"	17° Dish

All Manley Performance aftermarket valves for the Toyota engines are manufactured with either 5.5, 6 or 7mm stem diameters. We recommend that customers check their valve guide size in order to achieve the proper valve stem to guide clearance. Guides may need to be honed when replacing valves. Factory sizes may vary depending on the specific motor.

Note: New part numbers are *ITALICIZED*.

STAINLESS VALVES

VOLKSWAGEN RABBIT

RACE MASTER VALVES

- *XH-426 Stainless Exhaust Material*
- *NK-842 Stainless Intake Material*
- *Chrome Stems, Swirl Polished and Fully Machined*
- *Special Hard Tips and Hardened Keeper Grooves*

Part No.	Type	Head Diameter	Stem Diameter	Installed Height	O / A Length	Tip Length	Underhead Angle / Radius	Margin	Seat Width	Top of Head	Wgt / Grams
11657-4	Exh.	34.0 mm	.313	Stock	3.976	.130	15° x 3/8"	.075	.075	10° Dish	63
11656-4	Int.	40.5 mm	.313	Stock	3.976	.130	10° x 11/32"	.075	.075	5° Dish	76

VOLKSWAGEN 1200 - 1600

RACE MASTER VALVES

- *XH-426 Stainless Exhaust Material*
- *NK-842 Stainless Intake Material*
- *Chrome Stems, Swirl Polished and Fully Machined*
- *Special Hard Tips and Hardened Keeper Grooves*

Part No.	Type	Head Diameter	Stem Diameter	Installed Height	O / A Length	Tip Length	Underhead Angle / Radius	Margin	Seat Width	Top of Head	Wgt / Grams
11649-4	Exh.	32.0 mm	.3130	Stock	4.405	.170	15° x 3/8"	.070	.090	10° Dish	65
11651-4	Exh.	33.0 mm	.3130	Stock	4.405	.170	15° x 3/8"	.070	.090	10° Dish	67
11653-4	Exh.	35.5 mm	.3130	Stock	4.405	.170	15° x 3/8"	.070	.090	10° Dish	69
11655-4	Exh.	37.5 mm	.3130	Stock	4.405	.170	15° x 3/8"	.070	.090	10° Dish	73
11650-4	Int.	40.0 mm	.3130	Stock	4.405	.170	10° x 11/32"	.070	.090	6° Dish	79
11652-4	Int.	42.0 mm	.3130	Stock	4.405	.170	10° x 11/32"	.070	.090	6° Dish	79
11654-4	Int.	43.7 mm	.3130	Stock	4.405	.170	10° x 11/32"	.070	.090	6° Dish	83

VOLKSWAGEN TYPE IV

RACE MASTER VALVES

- *XH-426 Stainless Exhaust Material*
- *NK-842 Stainless Intake Material*
- *Chrome Stems, Swirl Polished and Fully Machined*
- *Special Hard Tips and Hardened Keeper Grooves*

Part No.	Type	Head Diameter	Stem Diameter	Installed Height	O / A Length	Tip Length	Underhead Angle / Radius	Margin	Seat Width	Top of Head	Wgt / Grams
11659-4	Exh.	38 mm	.3130	Stock	4.606	.170	15° x 1/2"	.060	.075	9° Dish	78
11658-4	Int.	48 mm	.3130	Stock	4.606	.170	10° x 3/8"	.060	.075	5° Dish	101

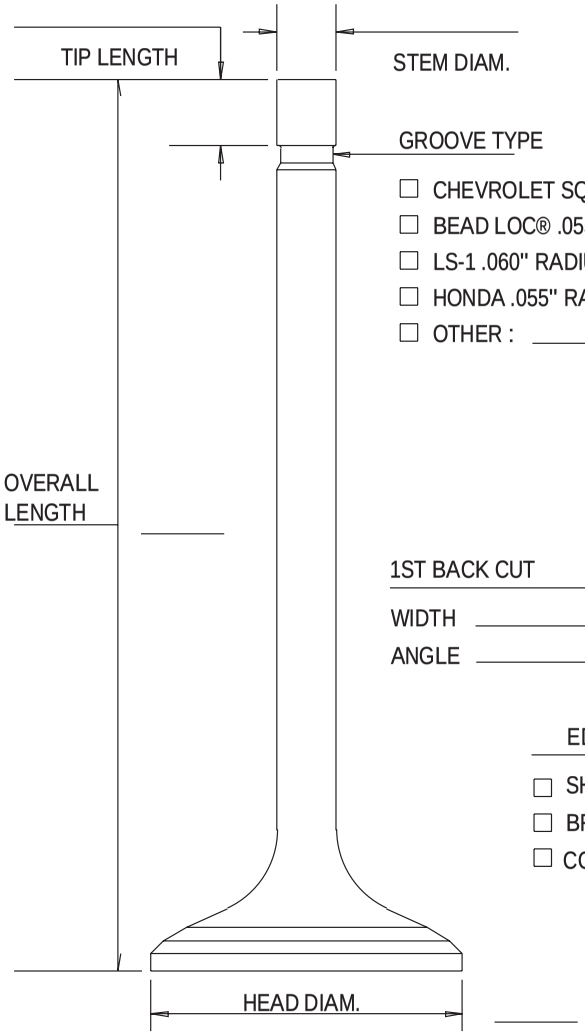
PLEASE SEE GEN II CUSTOM VALVE SPECIFICATIONS PAGES 40 & 41

A WEAR CAP IS NOT NECESSARY WITH GEN II*

PLEASE FILL IN ALL DIMENSIONS AND ORDER INFO

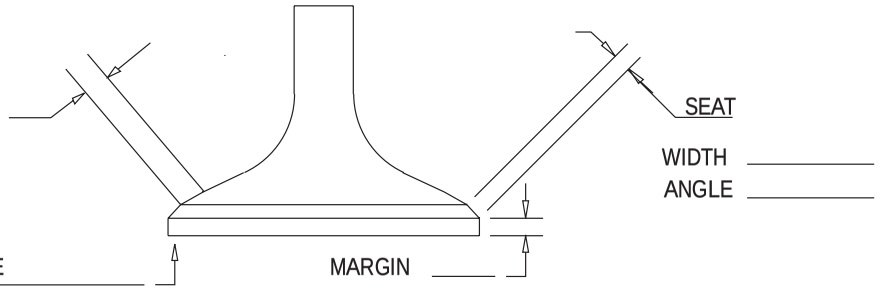
USE BLANK P/N _____

CYLINDER HEAD _____



GROOVE TYPE

- ☐ CHEVROLET SQUARE GROOVE
- ☐ BEAD LOC® .055" RADIUS
- ☐ LS-1 .060" RADIUS
- ☐ HONDA .055" RADIUS
- ☐ OTHER : _____



1ST BACK CUT _____

WIDTH _____

ANGLE _____

SEAT

WIDTH _____

ANGLE _____

EDGE _____

MARGIN _____

- ☐ SHARP
- ☐ BREAK _____
- ☐ CORNER RADIUS _____

* Provided that the overall length is within the minimum length parameter of the Gen II blank that is machined.

MANLEY PERFORMANCE PROD.
1960 SWARTHMORE AVE.
LAKEWOOD, NJ 08701
PHONE: 732-905-3366
FAX: 732-905-3010

ORDER INFO

ACCT. NO. _____

NAME _____

DATE _____

P.O. # _____

QTY. _____

DUE DATE _____

SHIP VIA _____

1960 SWARTHMORE AVENUE
LAKEWOOD, NEW JERSEY 08701

CUSTOM STAINLESS VALVES

GEN II
EXTREME DUTY & SEVERE DUTY SERIES

- *Hard Tips and Hardened Grooves*
- *No Need for Inserted Tips or Wear Caps*

The procedure for ordering a custom valve is as simple as 1-2-3 !

1. Select the blank appropriate for your finished piece based first on stem diameter.
2. Give us your final head diameter along with the seat and margin widths.
3. Specify the length of the valve you want, along with groove type and location.

* Part numbers with asterisks can be reduced 1.500" or 38 mm. All others .800" or 20.32 mm.

All Gen II custom stainless valve part numbers are priced to include all machining to render a finished valve provided that no more than .250" of material needs to be removed from the head diameter. If more than .250" of material is to be removed from the head diameter, then an additional machining charge P/N 04007 must be added to the price of the valve.

Part No.	Type	Maximum Head Diameter	Stem Diameter	Maximum Length	Underhead Angle / Radius	Margin	Seat Width	Top of Head	Material
			XTREMEALLOY GEN II CUSTOM EXHAUST VALVES						
11225-8*	Exh.	1.625	.3415	5.600	15° x 1/2"	.080	.100	9° Dish	XtremeAlloy
11273-8*	Exh.	1.880	.3415	5.522	15° x 1/2"	.075	.085	9° Dish	XtremeAlloy
11223-8*	Exh.	2.060	.3415	6.700	15° x 1/2"	.080	.100	9° Dish	XtremeAlloy
11275-8*	Exh.	42.0 mm	8.0 mm / .3136	5.600	25° x 7/16"	.065	.100	18° Dish	XtremeAlloy
11257-8	Exh.	1.750	.3095	5.400	25° x 3/8"	.060	.100	20° Dish	XtremeAlloy
11265-8*	Exh.	39.0 mm	5.96 mm / .2345	4.800	25° x 11/32"	.080	.100	20° Dish	XtremeAlloy
			SEVERE DUTY® GEN II CUSTOM VALVES						
11251-8	Exh.	1.940	.3715	5.650	12° x 3/8"	.085	.100	7° Dish	XH-428
11252-8*	Int.	2.300	.3720	5.600	Pro Flo: 12° x 7/16"	.065	.080	7° Dish	NK-844
11252H-8*	Int.	2.300	.3720 Hollow Stem	5.600	Pro Flo: 12° x 7/16"	.065	.080	7° Dish	NK-844
			Pro Flo start is 1.600" from the top of the head.						
11245-8	Exh.	1.625	.3415	5.640	15° x 1/2"	.090	.100	9° Dish	XH-428
11255-8	Exh.	1.625	.3415	5.640	30° x 1/2"	.070	.100	25° Dish	XH-428
11253-8	Exh.	1.940	.3415	5.650	12° x 3/8"	.075	.080	7° Dish	XH-428
11221-8	Exh.	2.000	.3415	6.700	25° x 3/8"	.080	.100	20° Dish	XH-428
11219-8	Exh.	2.060	.3415	6.700	15° x 1/2"	.080	.100	9° Dish	XH-428
11256-8*	Int.	2.080	.3415	5.640	10° x 3/8"	.065	.080	5° Dish	NK-844
11254-8*	Int.	2.150	.3415	5.640	12° x 3/8"	.065	.080	7 ° Dish	NK-844
11254H-8*	Int.	2.150	.3415 Hollow Stem	5.640	12° x 3/8"	.065	.080	7° Dish	NK-844
11242-8*	Int.	2.150	.3415	5.655	Pro Flo: 12° x 3/8"	.065	.080	7° Dish	NK-844
			Pro Flo start is 1.600" from the top of the head.						
11258-8*	Int.	2.425	.3415	5.700	12° x 3/8"	.065	.080	7° Dish	NK-844
11220-8*	Int.	2.425	.3415	6.800	10° x 3/8"	.050	.080	5° Dish	NK-844
11222-8*	Int.	2.425	.3415	6.700	20° x 3/8"	.050	.080	15° Dish	NK-844
11274-8*	Int.	56.5 mm	8.0 mm / .3133	5.600	Pro Flo: 12° x 3/8"	.060	.095	7° Dish	NK-844
*11274H-8**	Int.	56.5 mm	8.0 mm / .3133 Hollow Stem	5.600	Pro Flo: 12° x 3/8"	.060	.095	7° Dish	NK-844
11227-8	Exh.	1.625	.3110	5.750	15° x 1/2"	.080	.100	9° Dish	XH-428
11263-8	Exh.	1.940	.3110	6.100	12° x 3/8"	.085	.100	7° Dish	XH-428
11224-8*	Int.	2.200	.3110	5.750	12° x 3/8"	.050	.080	7° Dish	NK-844
11224H-8*	Int.	2.200	.3110 Hollow Stem	5.750	12° x 3/8"	.050	.080	7° Dish	NK-844
11264-8*	Int.	2.400	.3110	6.300	10° x 3/8"	.065	.080	5° Dish	NK-844
11264H-8*	Int.	2.400	.3110 Hollow Stem	6.300	10° x 3/8"	.065	.080	5° Dish	NK-844
11229-8	Exh.	1.625	7.0 mm / .2740	5.600	15° x 1/2"	.080	.100	9° Dish	XH-428
11226-8*	Int.	2.200	7.0 mm / .2740	5.600	10° x 3/8"	.050	.080	5° Dish	NK-844

Note: New part numbers are *ITALICIZED*.

CUSTOM STAINLESS VALVES

GEN II RACE SERIES

3 *Hard Tips and Hardened Grooves*
3 *No Need for Inserted Tips or Wear Caps*

The procedure for ordering a custom valve is as simple as 1-2-3 !

1. Select the blank appropriate for your finished piece based first on stem diameter.
2. Give us your final head diameter along with the seat and margin widths.
3. Specify the length of the valve you want, along with groove type and location.

* Part numbers with asterisks can be reduced 1.500" or 38 mm. All others .800" or 20.32 mm.

All Gen II custom stainless valve part numbers are priced to include all machining to render a finished valve provided that no more than .250" of material needs to be removed from the head diameter. If more than .250" of material is to be removed from the head diameter, then an additional machining charge P/N 04007 must be added to the price of the valve.

Part No.	Type	Maximum Head Diameter	Stem Diameter	Maximum Length	Underhead Angle / Radius	Margin	Seat Width	Top of Head	Material
11215-8	Exh.	1.940	.3715	5.650	15° x 1/2"	.080	.100	9° Dish	XH-426
11214-8	Int.	2.425	.3715	5.650	12° x 3/8"	.050	.080	7° Dish	NK-842
11203-8	Exh.	1.625	.3415	5.500	15° x 1/2"	.090	.100	9° Dish	XH-426
11217-8	Exh.	1.650	.3415	5.640	Pro Flo: 15° x 1/2"	.090	.100	9° Dish	XH-426
			Pro Flo start is 1.600" from the top of the head.						
11243-8	Exh.	1.900	.3415	5.700	25° x 3/8"	.080	.100	20° Dish	XH-426
11201-8	Exh.	1.940	.3415	6.415	25° x 3/8"	.080	.100	20° Dish	XH-426
11241-8	Exh.	1.940	.3415	6.000	10° x 3/8"	.075	.100	5° Dish	XH-426
11218-8	Int.	2.125	.3415	5.540	12° x 3/8"	.065	.080	7° Dish	NK-842
11216-8	Int.	2.150	.3415	5.655	Pro Flo 12° x 3/8"	.065	.080	7° Dish	NK-842
			Pro Flo start is 1.600" from the top of the head.						
11200-8	Int.	2.375	.3415	5.700	10° x 3/8"	.050	.080	5° Dish	NK-842
11244-8	Int.	2.425	.3415	6.600	10° x 3/8"	.050	.080	5° Dish	NK-842
11211-4	Exh.	38.5 mm	8.0 mm / .3130"	4.500	15° x 3/8"	.060	.090	10° Dish	XH-426
11205-4	Exh.	40.0 mm	8.0 mm / .3130"	5.000	15° x 1/2"	.080	.100	9° Dish	XH-426
11210-4	Int.	48.5 mm	8.0 mm / .3130"	4.500	10° x 11/32"	.060	.080	5° Dish	NK-842
11204-4	Int.	52.0 mm	8.0 mm / .3130"	5.000	10° x 3/8"	.050	.080	5° Dish	NK-842
11269-8*	Exh.	42.0 mm	8.0 mm / .3136"	5.600	25° x 7/16"	.065	.100	18° Dish	XH-426
11270-8*	Int.	56.5 mm	8.0 mm / .3133"	5.600	Pro Flo: 12° x 3/8"	.060	.095	7° Dish	NK-842
11270H-8*	Int.	56.5 mm	8.0 mm / .3133" Hollow Stem	5.600	Pro Flo: 12° x 3/8"	.060	.095	7° Dish	NK-842
11271-8	Exh.	1.625	.3125	5.100	25° x 1/2"	.065	.100	20° Dish	XH-426
11272-8	Int.	2.125	.3125	5.100	Pro Flo: 12° x 3/8"	.050	.095	7° Dish	NK-842
11207-8	Exh.	1.625	.3110	5.700	15° x 1/2"	.080	.100	9° Dish	XH-426
11261-8	Exh.	1.625	.3110	6.400	18° x 1/2"	.080	.100	12° Dish	XH-426
11206-8	Int.	2.100	.3110	5.700	10° x 3/8"	.050	.080	5° Dish	NK-842
11262-8	Int.	2.100	.3110	6.400	12° x 3/8"	.050	.080	7° Dish	NK-842
11249-8	Exh.	2.100	.3100	5.400	22° x 1/4"	.050	.100	17° Dish	XH-426
11248-8*	Int.	2.300	.3100	5.900	24° x 3/4"	.060	.080	19° Dish	NK-842
11247-8	Exh.	37.0 mm	7.0 mm / .2740"	4.800	15° x 1/2"	.080	.100	9° Dish	XH-426
11267-8	Exh.	41.9mm / 1.650	7.0 mm / .2755"	4.700	30° x 1/2"	.060	.100	24° Dish	XH-426
11246-8	Int.	48.0 mm	7.0 mm / .2740"	4.800	10° x 3/8"	.050	.080	5° Dish	NK-842
11250-8*	Int.	48.0 mm	7.0 mm / .2750"	5.430	10° x 3/8"	.065	.080	4° Dish	NK-842
11268-8	Int.	50.8mm / 2.000	7.0 mm / .2755"	4.600	28° x 7/16"	.050	.100	22° Dish	NK-842
11259-8	Exh.	32.5 mm	6.54 mm / .2575"	113.5 mm	Pro Flo: 22° x 7/16"	.065	.080	Flat Face	XH-426
11260-8	Int.	36.0 mm	6.57 mm / .2587"	113.5 mm	Pro Flo: 22° x 11/32"	.065	.080	Flat Face	NK-842
11213-8	Exh.	33.0 mm	6.0 mm / .2362"	113.5 mm	25° x 11/32"	.065	.080	20° Dish	XH-426
11212-8	Int.	39.0 mm	6.0 mm / .2362"	113.5 mm	Pro Flo: 22° x 5/16"	.065	.080	17° Dish	NK-842
11266-8*	Int.	35.0 mm	5.98 mm / .2355"	4.800	12° x 5/16"	.065	.100	7° Dish	NK-842
11209-8	Exh.	32.0 mm	5.5 mm / .2165"	119.0 mm	25° x 11/32"	.065	.080	Flat Face	XH-426
11239-8	Exh.	33.5 mm	5.5 mm / .2165"	122.0 mm	Pro Flo: 22° x 5/16"	.065	.080	Flat Face	XH-426
11208-8	Int.	37.0 mm	5.5 mm / .2165"	119.0 mm	Pro Flo: 22° x 5/16"	.065	.080	Flat Face	NK-842

Note: New part numbers are *ITALICIZED*.

TITANIUM VALVES

SMALL BLOCK GM, FORD & CHRYSLER

TITANIUM EXHAUST VALVES

- *All valves have inserted hard tips*
- *"HT" suffix indicates high temperature material*
- *"B" suffix indicates a Bead Loc® keeper groove*

Part No.	Type	Head Diameter	Stem Diameter	Installed Height	O / A Length	Tip Length	Underhead Angle / Radius	Margin	Seat Width	Wgt / Grams
11401 T-8	Exh.	1.600	.3415	.100 Longer	5.060	.290	15° x 1/2"	.100	.100	73
11403 T-8	Exh.	1.600	.3415	.200 Longer	5.160	.290	15° x 1/2"	.100	.100	74
11405 T-8	Exh.	1.600	.3415	.300 Longer	5.260	.290	15° x 1/2"	.100	.100	75
11407 T-8	Exh.	1.600	.3415	.400 Longer	5.360	.290	15° x 1/2"	.100	.100	76
11409 T-8	Exh.	1.600	.3415	.500 Longer	5.460	.290	15° x 1/2"	.100	.100	77
11451 T-8	Exh.	1.600	.3415	.600 Longer	5.560	.290	15° x 1/2"	.100	.100	78
11463 T-8	Exh.	1.600	.3415	Stock	4.960	.290	20° x 7/16"	.100	.100	74
11425 T-8	Exh.	1.600	.3415	.100 Longer	5.060	.290	20° x 7/16"	.100	.100	75
11467 HT-8*	Exh.	1.600	.3415	.200 Longer	5.140	.290	20° x 7/16"	.080	.085	73
11427 T-8	Exh.	1.600	.3415	.200 Longer	5.160	.290	20° x 7/16"	.100	.100	76
11427 HT-8	Exh.	1.600	.3415	.200 Longer	5.160	.290	20° x 7/16"	.100	.100	76
11429 T-8	Exh.	1.600	.3415	.300 Longer	5.260	.290	20° x 7/16"	.100	.100	77
11431 T-8	Exh.	1.600	.3415	.400 Longer	5.360	.290	20° x 7/16"	.100	.100	78
11433 T-8	Exh.	1.600	.3415	.500 Longer	5.460	.290	20° x 7/16"	.100	.100	79
11433 TB-8	Exh.	1.600	.3415	.500 Longer	5.460	.290	20° x 7/16"	.100	.100	79
11471 HT-8	Exh.	1.600	.3415	.600 Longer	5.560	.290	20° x 7/16"	.100	.100	80
11471 TB-8	Exh.	1.600	.3415	.600 Longer	5.560	.290	20° x 7/16"	.100	.100	80
11469 HT-8	Exh.	1.600	.3415	.600 Longer	5.560	.290	25° x 3/4"	.100	.100	83

* Valve 11467 HT has a back cut of .055" x 30".

Josh "Kid Rocket" Richards

Mark Richards Racing

Note: New part numbers are *ITALICIZED*.

SMALL BLOCK GM, FORD & CHRYSLER

TITANIUM EXHAUST VALVES

- *All valves have inserted hard tips*
- *"HT" suffix indicates high temperature material*
- *"B" suffix indicates a Bead Loc® keeper groove*

Part No.	Type	Head Diameter	Stem Diameter	Installed Height	O / A Length	Tip Length	Underhead Angle / Radius	Margin	Seat Width	Wgt / Grams
11411 T-8	Exh.	1.625	.3415	.100 Longer	5.060	.290	15° x 1/2"	.100	.100	74
11413 T-8	Exh.	1.625	.3415	.200 Longer	5.160	.290	15° x 1/2"	.100	.100	75
11417 T-8	Exh.	1.625	.3415	.400 Longer	5.360	.290	15° x 1/2"	.100	.100	77
11419 T-8	Exh.	1.625	.3415	.500 Longer	5.460	.290	15° x 1/2"	.100	.100	78
11447 T-8	Exh.	1.625	.3415	.600 Longer	5.560	.290	15° x 1/2"	.100	.100	79
11447 HT-8	Exh.	1.625	.3415	.600 Longer	5.560	.290	15° x 1/2"	.100	.100	79
11435 T-8	Exh.	1.625	.3415	.100 Longer	5.060	.290	20° x 7/16"	.100	.100	75
11437 T-8	Exh.	1.625	.3415	.200 Longer	5.160	.290	20° x 7/16"	.100	.100	76
11439 T-8	Exh.	1.625	.3415	.300 Longer	5.260	.290	20° x 7/16"	.100	.100	77
11441 T-8	Exh.	1.625	.3415	.400 Longer	5.360	.290	20° x 7/16"	.100	.100	78
11443 T-8	Exh.	1.625	.3415	.500 Longer	5.460	.290	20° x 7/16"	.100	.100	79
11443 HT-8	Exh.	1.625	.3415	.500 Longer	5.460	.290	20° x 7/16"	.100	.100	79
11453 T-8	Exh.	1.625	.3415	.600 Longer	5.560	.290	20° x 7/16"	.100	.100	80
11453 HT-8	Exh.	1.625	.3415	.600 Longer	5.560	.290	20° x 7/16"	.100	.100	80
11453 TB-8	Exh.	1.625	.3415	.600 Longer	5.560	.290	20° x 7/16"	.100	.100	80
11453 HTB-8	Exh.	1.625	.3415	.600 Longer	5.560	.290	20° x 7/16"	.100	.100	80
11475 HTB-8	Exh.	1.625	.3415	.700 Longer	5.660	.290	20° x 7/16"	.100	.100	81
11455 HT-8	Exh.	1.625	.3415	.500 Longer	5.460	.290	25° x 3/4"	.100	.100	85
11457 T-8	Exh.	1.625	.3415	.600 Longer	5.560	.290	25° x 3/4"	.100	.100	86
11457 HT-8	Exh.	1.625	.3415	.600 Longer	5.560	.290	25° x 3/4"	.100	.100	86
11457 TB-8	Exh.	1.625	.3415	.600 Longer	5.560	.290	25° x 3/4"	.100	.100	86
11473 T-8	Exh.	1.625	.3415	.700 Longer	5.660	.290	25° x 3/4"	.100	.100	87
11473 TB-8	Exh.	1.625	.3415	.700 Longer	5.660	.290	25° x 3/4"	.100	.100	87
11477 TB-8*	Exh.	1.625	.3415	.700 Longer	5.640	.290	25° x 1/2"	.080	.100	85
11445 T-8	Exh.	1.650	.3415	.500 Longer	5.460	.290	20° x 7/16"	.100	.100	81

* Valve 11477 TB* has a 55° seat.

TITANIUM VALVES

SMALL BLOCK GM, FORD & CHRYSLER

TITANIUM INTAKE VALVES

- *All valves have inserted hard tips*
- *"HT" suffix indicates high temperature material*
- *"B" suffix indicates a Bead Loc® keeper groove*

Part No.	Type	Head Diameter	Stem Diameter	Installed Height	O / A Length	Tip Length	Underhead Angle / Radius	Margin	Seat Width	Wgt / Grams
11948 T-8	Int.	2.020	.3415	.200 Longer	5.140	.290	10° x 3/8"	.080	.100	86
11452 T-8	Int.	2.055	.3415	Stock	4.940	.290	10° x 3/8"	.080	.100	85
11474 T-8	Int.	2.055	.3415	.100 Longer	5.040	.290	10° x 3/8"	.080	.100	86
11950 T-8	Int.	2.055	.3415	.200 Longer	5.140	.290	10° x 3/8"	.080	.100	87
11454 T-8	Int.	2.080	.3415	Stock	4.940	.290	10° x 3/8"	.080	.100	86
11400 T-8	Int.	2.080	.3415	.100 Longer	5.040	.290	10° x 3/8"	.080	.100	87
11402 T-8	Int.	2.080	.3415	.200 Longer	5.140	.290	10° x 3/8"	.080	.100	88
11404 T-8	Int.	2.080	.3415	.300 Longer	5.240	.290	10° x 3/8"	.080	.100	89
11408 T-8	Int.	2.100	.3415	.100 Longer	5.040	.290	10° x 3/8"	.080	.100	89
11410 T-8	Int.	2.100	.3415	.200 Longer	5.140	.290	10° x 3/8"	.080	.100	90
11412 T-8	Int.	2.100	.3415	.300 Longer	5.240	.290	10° x 3/8"	.080	.100	91
11456 T-8	Int.	2.100	.3415	.300 Longer	5.240	.290	12° x 7/16"	.080	.100	93
11462 T-8*	Int.	2.100	.3415	.345 Longer	5.285	.290	12° x 3/8"	.080	.090	94
11462 HT-8*	Int.	2.100	.3415	.345 Longer	5.285	.290	12° x 3/8"	.080	.090	94
11414 T-8	Int.	2.100	.3415	.400 Longer	5.340	.290	10° x 3/8"	.080	.100	94
11416 T-8	Int.	2.100	.3415	.500 Longer	5.440	.290	10° x 3/8"	.080	.100	95
11446 T-8	Int.	2.100	.3415	.500 Longer	5.440	.290	12° x 7/16"	.080	.100	96
11434 T-8	Int.	2.100	.3415	.600 Longer	5.540	.290	10° x 3/8"	.080	.100	96
11442 T-8	Int.	2.125	.3415	.100 Longer	5.040	.290	10° x 3/8"	.080	.100	90
11418 T-8	Int.	2.125	.3415	.200 Longer	5.140	.290	10° x 3/8"	.080	.100	91
11420 T-8	Int.	2.125	.3415	.300 Longer	5.240	.290	10° x 3/8"	.080	.100	92
11422 T-8	Int.	2.125	.3415	.400 Longer	5.340	.290	10° x 3/8"	.080	.100	93
11424 T-8	Int.	2.125	.3415	.500 Longer	5.440	.290	10° x 3/8"	.080	.100	94
11448 T-8	Int.	2.125	.3415	.500 Longer	5.440	.290	12° x 7/16"	.080	.100	95
11436 T-8	Int.	2.125	.3415	.600 Longer	5.540	.290	10° x 3/8"	.080	.100	95
11470 T-8	Int.	2.125	.3415	.600 Longer	5.540	.290	12° x 7/16"	.080	.100	96

* Valves 11462 T & 11462 HT have a back cut of .090" x 30°.

SMALL BLOCK GM, FORD & CHRYSLER

TITANIUM INTAKE VALVES

- *All valves have inserted hard tips*
- *"HT" suffix indicates high temperature material*
- *"B" suffix indicates a Bead Loc® keeper groove*

* Valve 11942 HTB has a 52° seat.

Part No.	Type	Head Diameter	Stem Diameter	Installed Height	O / A Length	Tip Length	Underhead Angle / Radius	Margin	Seat Width	Wgt / Grams
11428 T-8	Int.	2.150	.3415	.200 Longer	5.140	.290	10° x 3/8"	.080	.100	94
11430 T-8	Int.	2.150	.3415	.300 Longer	5.240	.290	10° x 3/8"	.080	.100	95
11432 T-8	Int.	2.150	.3415	.400 Longer	5.340	.290	10° x 3/8"	.080	.100	96
11458 T-8	Int.	2.150	.3415	.400 Longer	5.340	.290	12° x 7/16"	.080	.100	97
11426 T-8	Int.	2.150	.3415	.500 Longer	5.440	.290	10° x 3/8"	.080	.100	97
11450 T-8	Int.	2.150	.3415	.500 Longer	5.440	.290	12° x 7/16"	.080	.100	98
11450 TB-8	Int.	2.150	.3415	.500 Longer	5.440	.290	12° x 7/16"	.080	.100	98
11496 HTB-8	Int.	2.150	.3110	.600 Longer	5.540	.290	12° x 3/8"	.080	.100	91
11438 T-8	Int.	2.150	.3415	.600 Longer	5.540	.290	10° x 3/8"	.080	.100	99
11460 T-8	Int.	2.150	.3415	.600 Longer	5.540	.290	12° x 7/16"	.080	.100	100
11460 HTB-8	Int.	2.150	.3415	.600 Longer	5.540	.290	12° x 7/16"	.080	.100	100
11498 HTB-8	Int.	2.150	.3110	.700 Longer	5.640	.290	12° x 3/8"	.080	.100	92
11476 HT-8	Int.	2.150	.3415	.700 Longer	5.640	.290	12° x 3/8"	.080	.100	101
11476 HTB-8	Int.	2.150	.3415	.700 Longer	5.640	.290	12° x 3/8"	.080	.100	101
11466 T-8	Int.	2.180	.3415	.500 Longer	5.440	.290	12° x 3/8"	.080	.100	99
11466 TB-8	Int.	2.180	.3415	.500 Longer	5.440	.290	12° x 3/8"	.080	.100	99
11494 HTB-8	Int.	2.180	.3110	.600 Longer	5.540	.290	12° x 3/8"	.080	.100	92
11468 T-8	Int.	2.180	.3415	.600 Longer	5.540	.290	12° x 3/8"	.080	.100	100
11468 HTB-8	Int.	2.180	.3415	.600 Longer	5.540	.290	12° x 3/8"	.080	.100	100
11488 HTB-8	Int.	2.180	.3110	.700 Longer	5.640	.290	12° x 3/8"	.080	.100	93
11486 HT-8	Int.	2.180	.3415	.700 Longer	5.640	.290	12° x 3/8"	.080	.100	101
11486 HTB-8	Int.	2.180	.3415	.700 Longer	5.640	.290	12° x 3/8"	.080	.100	101
11942 HTB-8*	Int.	2.180	.3110	.800 Longer	5.740	.290	12° x 3/8"	.080	.080	94
11464 T-8	Int.	2.200	.3415	.600 Longer	5.540	.290	10° x 3/8"	.080	.100	100

Jimmy Owens

2007 North/South 100
and World 100 Winner
Cornett Racing Engines

Photo: Nancy Lane Feldner

Note: New part numbers are *ITALICIZED*.

TITANIUM VALVES

BIG BLOCK GENERAL MOTORS

TITANIUM VALVES

Big Block GM valves except 11490 T and 11944 T do not come with a hardened tip. Tip protection is required - Manley wear cap P/N 42104.

Part No.	Type	Head Diameter	Stem Diameter	Installed Height	O / A Length	Tip Length	Underhead Angle / Radius	Margin	Seat Width	Wgt / Grams
11485-8	Exh.	1.840	.3415	Stock	5.440	.250	30° x 5/8"	.090	.075	98
11479-8	Exh.	1.880	.3415	Stock	5.440	.250	30° x 5/8"	.090	.075	100
11481-8	Exh.	1.900	.3415	Stock	5.440	.250	30° x 5/8"	.090	.075	101
11483-8	Exh.	1.900	.3415	.100 Longer	5.540	.250	30° x 5/8"	.090	.075	102
11480-8	Int.	2.250	.3415	Stock	5.250	.250	10° x 3/8"	.065	.075	89
11490-8	Int.	2.250	.3415	.100 Longer	5.350	.250	10° x 3/8"	.065	.075	90
11490 T-8	Int.	2.250	.3415	.100 Longer	5.350	.290	10° x 3/8"	.065	.075	90
11492-8	Int.	2.250	.3415	.250 Longer	5.500	.250	10° x 3/8"	.065	.075	91
11492 T-8	Int.	2.250	.3415	.250 Longer	5.540	.290	10° x 3/8"	.065	.075	92
11952-8	Int.	2.250	.3415	.350 Longer	5.600	.250	10° x 3/8"	.065	.075	93
11944 T-8	Int.	2.300	.3415	.100 Longer	5.350	.290	10° x 3/8"	.065	.075	94
11482-8	Int.	2.300	.3415	.250 Longer	5.500	.250	10° x 3/8"	.065	.075	95
11940-8	Int.	2.325	.3415	.250 Longer	5.500	.250	10° x 3/8"	.065	.075	96
11484-8	Int.	2.350	.3415	.250 Longer	5.500	.250	10° x 3/8"	.065	.075	97
11954-8	Int.	2.350	.3415	.350 Longer	5.600	.250	10° x 3/8"	.065	.075	99

DART BIG BLOCK PRO 1® & 320 / 360 HEADS

TITANIUM VALVES

Dart Big Block titanium valves do not come with a hardened tip. Tip protection is required - Manley wear cap P/N 42104.

Part No.	Type	Head Diameter	Stem Diameter	Installed Height	O / A Length	Tip Length	Underhead Angle / Radius	Margin	Seat Width	Wgt / Grams
11479-8	Exh.	1.880	.3415	Stock	5.440	.250	30° x 5/8"	.090	.075	100
11481-8	Exh.	1.900	.3415	Stock	5.440	.250	30° x 5/8"	.090	.075	101
11492-8	Int.	2.250	.3415	.250 Longer	5.500	.250	10° x 3/8"	.065	.075	91
11482-8	Int.	2.300	.3415	.250 Longer	5.500	.250	10° x 3/8"	.065	.075	95

PONTIAC PRO STOCK & DART BIG CHIEF

TITANIUM VALVES

Pontiac valves P/N's 11920, 11921 and 11924 do not come with a hardened tip. Tip protection is required - Manley wear cap P/N 42104. Valves 11922 T and 11923 T have hard tips inserted.

Part No.	Type	Head Diameter	Stem Diameter	Installed Height	O / A Length	Tip Length	Underhead Angle / Radius	Margin	Seat Width	Wgt / Grams
11921-8	Exh.	1.900	.3415	Stock	6.450	.250	30° x 5/8"	.125	.075	116
11923 T-8	Exh.	1.900	.3415	Stock	6.490	.290	30° x 5/8"	.125	.075	117
11920-8	Int.	2.400	.3415	Stock	6.600	.250	12° x 3/8"	.065	.075	112
11922 T-8	Int.	2.400	.3415	Stock	6.640	.290	12° x 3/8"	.065	.075	113
11924-8	Int.	2.450	.3415	Stock	6.600	.250	12° x 3/8"	.065	.075	114

Note: New part numbers are *ITALICIZED*.

TOP FUEL, FUNNY CAR, TAD & TAFC

TITANIUM VALVES

These valves do not come with a hardened tip. Tip protection is required - Manley wear cap P/N 42104.

Part No.	Type	Head Diameter	Stem Diameter	Installed Height	O / A Length	Tip Length	Underhead Angle / Radius	Margin	Seat Width	Wgt / Grams
11989-8	Exh.	2.000	.3415	.100 Longer	5.020	.250	25° x 3/8"	.085	.075	100
11956-8	Int.	2.375	.3415	.100 Longer	5.600	.250	25° x 5/8"	.065	.075	139
11994 B-8*	Int.	2.400	.3415	.100 Longer	5.600	.250	25° x 5/8"	.070	.125	141
11998 B-8*	Int.	2.400	.3415	.200 Longer	5.700	.250	25° x 5/8"	.080	.125	142

* Valves 11994 B and 11998 B have a Bead Loc® keeper groove. Bead Loc® valve locks are required.

Note: Manley Performance can custom build valves for any possible combination with a very short lead time. Please call your sales representative.

Ashley Force
NHRA Top Fuel
Funny Car
John Force Racing

BRIGGS & STRATTON

TITANIUM VALVES

* Dimensions are per customer specifications.

Part No.	Type	Head Diameter	Stem Diameter	Installed Height	O / A Length	Tip Length	Underhead Angle / Radius	Margin	Seat Width	Wgt / Grams
98031-1	Exh.	1.500 Max	.2475	*	4.800 Max	.235	5° x 5/16" Max.	*	*	
98030-1	Int.	2.000 Max	.2475	*	4.800 Max	.235	5° x 5/16" Max.	*	*	

CUSTOM TITANIUM VALVES

Manley Performance can manufacture titanium valves for just about any application imaginable. Over the years, we've built titanium valves with 4.5mm stems for motorcycles as well as titanium valves with 3/8" stems for the Buick Indy car engines, and everything in between.

We inventory an extensive array of blanks in varying stem sizes with the correct stem coating positioning to properly fit the plethora of aftermarket cylinder heads available. This allows us to maintain reliable and very reasonable turnaround times (typically 7-10 working days) throughout the year.

If by chance we don't have a blank in stock to match your particular application, then don't worry. We'll simply make it from one of our raw forgings. This will lengthen the lead time to 6 weeks.

Ordering *Manley* custom hollow stem titanium valves is as easy as 1 – 2 – 3!

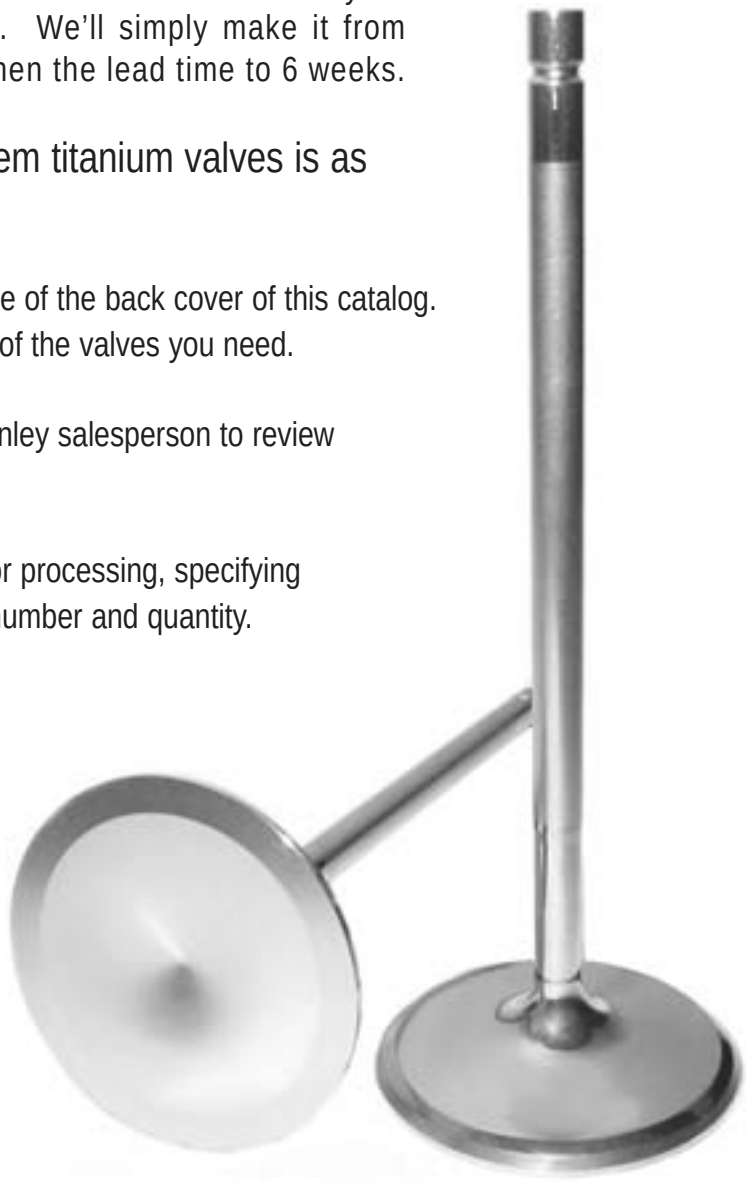
1. Refer to the blank valve print on the inside of the back cover of this catalog. Make a copy and fill in the specifications of the valves you need.

2. Please contact your inside or outside Manley salesperson to review your order.

3. Fax your approved prints to the factory for processing, specifying your account number, a purchase order number and quantity.

For any stem size, any groove type, machined (dished) combustion faces or special head shapes and seat cuts, we're here to service your needs.

Our customer's prints are proprietary and confidential.



CUSTOM TITANIUM VALVES

CUSTOM HOLLOW STEM TITANIUM INTAKE VALVES

NEW

Manley Performance is proud to offer our customers hollow stem titanium intake valve technology.

- *Precision gun drilling*
- *Smooth surface finish*
- *Generous corner radius, no stress risers*
- *Able to utilize a hard steel tip on 5/16" and larger stem diameter valves*
- *Extremely Lightweight - 10-12% weight reduction*
- *Thin film coated seats (optional)*

Look no further for the ultimate hollow stem titanium intake valve. Easy to order and relatively fast turnaround times...

Ordering *Manley* custom hollow stem titanium valves is as easy as 1 – 2 – 3!

1. Refer to the blank valve print on the inside of the back cover of this catalog. Make a copy and fill in the specifications of the valves you need.

2. Please contact your inside or outside Manley salesperson to review your order.

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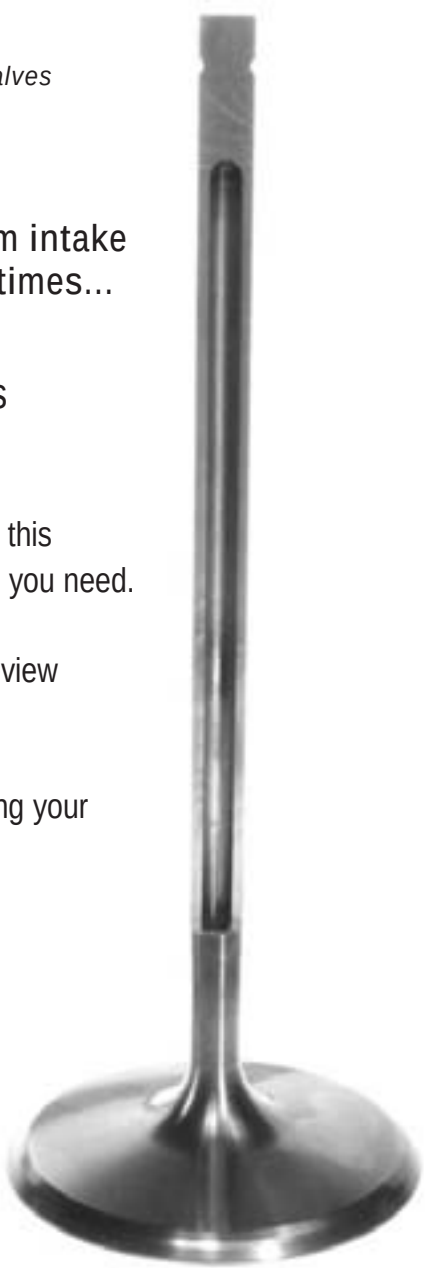


CUSTOM TITANIUM VALVES

TITANIUM VALVE "THIN FILM" SEAT COATING

NEW

Advantages:

- High hardness and lubricity dramatically increases valve seat life.
- Prevents damaging "trenching" of the seat.
- Provides greater resistance to wear typically seen when valve float or dirt is present in the engine.
- Better seal between the valve and the seat in the cylinder head equals more horsepower.

Contact your Manley salesperson for further details on how to order.

Jason "The Ragin' Cajun" Johnson
2006 ASCS National Driver of the Year
Wesmar Racing Engines

MANLEY VALVE LOCKS... SIMPLY THE BEST!

CONVENTIONAL vs BEAD LOC® VALVE STEM GROOVES

The groove in a valve stem, seemingly unimportant, in reality is vital to the success of a valve's performance. Imperfectly formed grooves, inferior or mismatched locks, and improper retainers can lead to catastrophic failure.

The so called "conventional" or square groove design has enjoyed enormous success. But the success of a "conventional" groove is not a given. First, the surface finish of the groove must be outstanding to guarantee against failure due to residual machining marks.

Next, the groove must have a precise .013" radius in the upper corner. Too small a radius leaves the groove subject to the dangers of a sharp fillet. Too large a radius leaves open the possibility of the groove being abraded in this area by the upper inside edge of the tang of the lock. Also, an oversized radius leaves a reduced horizontal shelf in the groove which is - or should be - the only contact point with the tang of the lock. Contact by the lock in the root of the groove is a disaster waiting to happen.

Perfectly formed "conventional" grooves with proper locks and retainers will deliver good service. However, there are a lot of junk components on the market that can conspire to destroy a correctly machined groove.

The essence of the Bead Loc® groove is its simplicity and forgiveness. The groove itself is a straight - forward .110" full radius. The contact points with a Bead Loc® radius lock are approximately 2:00 and 10:00 o'clock, not at the root of the groove. This system affords minimal vertical movement, especially when valve float is present, which means reduced erosion of the valve for enhanced service life.

Manley Performance supports both the "conventional" groove system and the Bead Loc® system with the most extensive line-up of the highest quality locks in the industry.

7° STAMPED VALVE LOCKS

- *Stamped locks are recommended ONLY for mild performance engines.*

Part No.	Quantity	Valve Stem	Groove Type
13238-16	16 pr.	5/16"	Conventional
13127-16	16 pr.	11/32"	Conventional

BULK PRICING AVAILABLE

7° MACHINED VALVE LOCKS

- *High quality alloy*
- *For mildly modified engines*
- *Heat treated*

Part No.	Quantity	Valve Stem	Groove Type
13090-16	16 pr.	5/16" (.3100)	Conventional
13091-16	16 pr.	11/32"	Conventional
13092-16	16 pr.	3/8"	Conventional
13098-16	16 pr.	5/16" (.3130)	Bead Loc® Chevy LS-1

BULK PRICING AVAILABLE

VALVE LOCKS

SUPER 7° VALVE LOCKS
STEEL MATERIAL

- *Heat treated and black oxide finished*
- *Highest quality steel alloy*
- *Thicker for greater strength*

Part No.	Quantity	Valve Stem	Installed Height	Groove Type	Wgt. / Pr.
13050-8	8 pr.	.3110"	.050" less	Bead Loc®	8.2 gms
13051-8	8 pr.	.3110"	Standard	Bead Loc®	8.2 gms
13052-8	8 pr.	.3110"	.050" more	Bead Loc®	8.2 gms
13080-16	16 pr.	.3110"	Standard	Conventional	8.3 gms
13085-16	16 pr.	.3110"	.050" more	Conventional	8.2 gms
13060-8	8 pr.	.3415"	.050" less	Bead Loc®	7.4 gms
13061-8	8 pr.	.3415"	Standard	Bead Loc®	7.4 gms
13062-8	8 pr.	.3415"	.050" more	Bead Loc®	7.4 gms
13081-16	16 pr.	.3415"	.050" less	Conventional	9.9 gms
13083-16	16 pr.	.3415"	Standard	Conventional	7.5 gms
13084-16	16 pr.	.3415"	.050" more	Conventional	7.6 gms

BULK PRICING AVAILABLE

SUPER 7° VALVE LOCKS
TITANIUM MATERIAL

- *Lightweight titanium material*

Part No.	Quantity	Valve Stem	Installed Height	Groove Type	Wgt. / Pr.
13030 T-8	8 pr.	7 mm /.2740"	.050" less	Bead Loc®	5.6 gms
13037 T-8	8 pr.	7 mm /.2740"	Standard	Bead Loc®	4.9 gms
13038 T-8	8 pr.	7 mm /.2740"	.050" more	Bead Loc®	4.6 gms
13051 T-8	8 pr.	.3110"	Standard	Bead Loc®	4.5 gms
13052 T-8	8 pr.	.3110"	.050" more	Bead Loc®	4.5 gms
13061 T-8	8 pr.	.3415"	Standard	Bead Loc®	4.1 gms
13062 T-8	8 pr.	.3415"	.050" more	Bead Loc®	4.1 gms
13081 T-16	16 pr.	.3415"	.050" less	Conventional	5.5 gms
13083 T-16	16 pr.	.3415"	Standard	Conventional	4.2 gms
13084 T-16	16 pr.	.3415"	.050" more	Conventional	4.1 gms

SUPER 7° "CAPTIV-LOC" VALVE LOCKS

- *Developed by Keith Dorton*
- *Encapsulates hard tip in titanium valve if it comes loose*
- *Use with valves with .290" to .330" tip lengths*
- *Available in steel and titanium material*

BULK PRICING AVAILABLE

Part No. Steel	Part No. Titanium	Quantity	Valve Stem	Installed Height	Groove Type	Wgt. / Pr.
---	13039 T-8	8 pr.	.3110"	.050" less	Bead Loc®	5.7 gms
13033-8	13033 T-8	8 pr.	.3110"	Standard	Bead Loc®	9.5 / 5.6 gms
13034-8	13034 T-8	8 pr.	.3110"	.050" more	Bead Loc®	9.4 / 5.3 gms
---	***13040 T-8***	8 pr.	.3415"	.050" less	Bead Loc®	5.0 gms
13035-8	13035 T-8	8 pr.	.3415"	Standard	Bead Loc®	8.6 / 4.9 gms
13036-8	13036 T-8	8 pr.	.3415"	.050" more	Bead Loc®	8.5 / 4.7 gms
13031-16	13031 T-16	16 pr.	.3415"	Standard	Conventional	9.2 / 5.3 gms
13032-16	13032 T-16	16 pr.	.3415"	.050" more	Conventional	9.3 / 5.0 gms

Note: New part numbers are *ITALICIZED*.

VALVE LOCKS

SPORT COMPACT VALVE LOCKS

- *Manufactured from premium quality heat treated steel*
- *Machined to exacting tolerances*
- *Proper fit with the valve and retainer*

BULK PRICING AVAILABLE

Part No.	Quantity	Description	Valve Stem	Groove Type	Angle	Wgt. / Pr.
13010-8	8 pr.	Honda / Acura	5.5 mm / .2165”	Bead Loc®	7°	1.5 gms
13012-8	8 pr.	Nissan	6.0 mm / .2362”	Bead Loc®	6°	1.4 gms
13014-8	8 pr.	Toyota	6.0 mm / .2362”	Bead Loc®	6°	1.3 gms
13016-8	8 pr.	Mitsubishi	6.56 mm / .2581”	Bead Loc®	6°	1.3 gms

PRECISION CRAFTED 10° MACHINED VALVE LOCKS

STEEL MATERIAL

- *Highest quality steel alloy*
- *Heat treated and black oxide finished*

BULK PRICING AVAILABLE

Part No.	Quantity	Valve Stem	Installed Height	Groove Type	Wgt. / Pr.
13171-8	8 pr.	7 mm /.2740"	.050" less	Bead Loc®	7.4 gms
13170-8	8 pr.	7 mm /.2740"	Standard	Bead Loc®	7.4 gms
13172-8	8 pr.	7 mm /.2740"	.050" more	Bead Loc®	7.4 gms
13190-8	8 pr.	.3075"	Standard	Bead Loc®	6.7 gms
13191-8	8 pr.	.3085"	Standard	Bead Loc®	6.7 gms
13193-16	16 pr.	.3085"	Standard	Conventional	6.7 gms
13151-8	8 pr.	.3110"	Standard	Bead Loc®	7.0 gms
13152-8	8 pr.	.3110"	.050" more	Bead Loc®	6.4 gms
13096-16	16 pr.	.3110"	Standard	Conventional	6.7 gms
13196-16	16 pr.	.3110”	.050" more	Conventional	6.0 gms
13161-8	8 pr.	.3415"	Standard	Bead Loc®	6.3 gms
13162-8	8 pr.	.3415"	.050" more	Bead Loc®	6.3 gms
13097-16*	16 pr.	.3415"	Standard	Conventional	6.8 gms
13194-16	16 pr.	.3415"	Standard	Conventional	6.1 gms
13198-16	16 pr.	.3415"	.050" more	Conventional	5.6 gms
13192-8	8 pr.	.3715"	Standard	Bead Loc®	5.0 gms
13195-16	16 pr.	.3715"	Standard	Conventional	5.0 gms

* Lock 13097 is NOT recessed to accept a wear cap.

PRECISION CRAFTED 10° MACHINED VALVE LOCKS

TITANIUM MATERIAL

- *Durable and lightweight*

BULK PRICING AVAILABLE

Part No.	Quantity	Valve Stem	Installed Height	Groove Type	Wgt. / Pr.
13171 T-8	8 pr.	7 mm /.2740"	.050" less	Bead Loc®	4.3 gms
13151 T-8	8 pr.	.3110"	Standard	Bead Loc®	3.9 gms
13152 T-8	8 pr.	.3110"	.050" more	Bead Loc®	3.6 gms
13096 T-16	16 pr.	.3110"	Standard	Conventional	3.8 gms
13161 T-8	8 pr.	.3415"	Standard	Bead Loc®	3.6 gms
13094 T-16	16 pr.	.3415"	Standard	Conventional	3.5 gms

LOCCAP SYSTEM

Manley Performance is proud to introduce our LocCap System

NEW

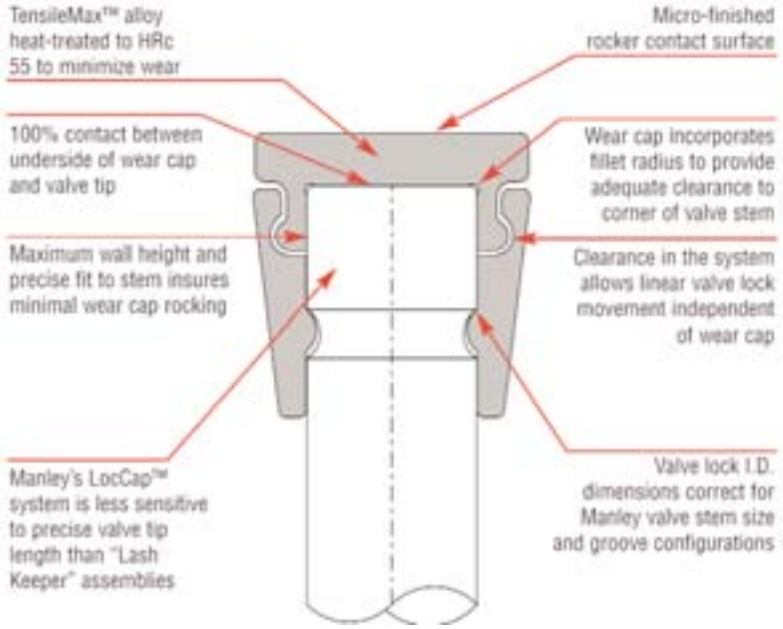
- *The ULTIMATE valve lock/wear cap assembly*
- *Designed specifically for Fuel, Alcohol and Pro Mod Racers*

First developed by our engineering team in the late 1990s for NASCAR applications, Manley's LocCap™ system is designed to retain the wear cap on the tip of the valve by employing an external bead on the wear cap that —when the system is assembled— resides within an internal "retention channel" located on the I.D. of the valve locks. Manley's valve train components group, headed by Manley GM Michael Tokarchik, refined the original designs combining a state-of the-art steel alloy and ultra precise manufacturing techniques to achieve the goal of delivering a no compromises valve lock/wear cap assembly for the supercharged classes.

Manley's LocCap™ systems are available in true 7-degree as well as 10-degree assemblies for 11/32" and 3/8" stem valves in both Manley Bead Loc™ and conventional square groove configurations. In addition, Manley's LocCap™ system retrofits to competitors' "Lash Keeper" assemblies, maintaining original valve spring installed height, valve overall length, valve tip length (0.250") and retainer designs.

Both the LocCap™ valve locks and wear caps are precision machined using Manley's TensileMax™ UHSS (ultra high strength steel). The wear caps are thru-hardened to HRc 55 (harder than typical tool steel) to minimize wear due to aggressive rocker contact. Manley's proprietary heat-treatment processes minimize distortion, thereby improving the fit of the wear cap and valve locks to the valve stem.

For high RPM alcohol and Pro Mod racers desiring the lightest possible valve train mass, Manley also manufactures LocCap™ valve locks from high strength titanium alloy.



VALVE LOCKS

Valve Stem Size	7° Bead Loc	7° Square Groove	10° Bead Loc	10° Square Groove
11/32" (.3415")	13361-8	13394-8	13461-8	13494-8
3/8" (.3715")	13392-8	13395-8	13492-8	13495-8

Note: -8 indicates one set of 8 pairs Valve Locks are available in high strength titanium alloy. Add "T" suffix when ordering.

WEAR CAPS

Valve Stem Size	Part No.
11/32" (.3415")	42404-8
3/8" (.3715")	42408-8

Note: -8 indicates 8 pieces.

TITANIUM RETAINERS

Valve Spring Type		Part No. - 7°	Part No. - 10°
Steel Triple Spring	221447, 221448, 221449	23673-8	23653-8
	221450, 22451, 221461		23753-8*
Titanium Double Spring		23678-8*	23668-8

Note: -8 indicates 8 pieces.

* Lightweight design high strength Super 7° titanium material

Titanium retainers are also available in "lightweight" versions (approximately 2-3 grams lighter than standard). To order, simply add "L" to the part number.

WEAR CAPS

INSERTED TIPS

- *Wear resistant steel alloy*
- *Ideal titanium valve tip protection*

Part No.	Quantity	Description	Knurl Diameter	Post Length
42311-8	8 pcs.	Fits 5/16" valves	.173"	.120"
42105-8	8 pcs.	Fits 11/32" valves	.193"	.120"
42340-8	8 pcs.	Fits 3/8" valves	.193"	.120"

WEAR CAPS

BULK PRICING AVAILABLE

- *4140 alloy steel*
- *Special heat treatment*
- *Non rotating caps afford less valve tip erosion*

Part No.	Quantity	Description	Minimum Tip	Type	Thickness
42263-8	8 pcs.	.2165" stem valves (5.5 mm)	.095"	Standard	.040"
42254-8	8 pcs.	.2360" stem valves (6 mm)	.275"	Non Rotating	.060"
42264-8	8 pcs.	.2360" stem valves (6 mm)	.095"	Standard	.040"
42100-8	8 pcs.	.2740" stem valves (7 mm)	.250"	Standard	.085"
42118-8	8 pcs.	.2740" stem valves (7 mm)	.290"	Non Rotating	.080"
42101-16	16 pcs.	.3085" stem valves (5/16")	.250"	Standard	.080"
42139-8	8 pcs.	.3110" stem valves (5/16")	.250"	Standard	.080"
42300-8	8 pcs.	.3110" stem valves (5/16")	.250"	Non Rotating	.080"
42125-8	8 pcs.	.3130" stem valves (8 mm)	.130"	Standard	.080"
42104-16	16 pcs.	.3415" stem valves (11/32")	.250"	Standard	.080"
42301-8	8 pcs.	.3415" stem valves (11/32")	.250"	Non Rotating	.080"
42108-16	16 pcs.	.3715" stem valves (3/8")	.220"	Standard	.080"

TENSILEMAX WEAR CAPS

NEW

- *Precision Machined from TensileMax™ UHSS (Ultra High Strength Steel)*
- *Thru-hardened to HRc55 to minimize wear due to aggressive rocker contact*
- *Proprietary heat-treatment processes minimize distortion*

Part No.	Quantity	Description	Minimum Tip	Type	Thickness
42100TM-8	8 pcs.	.2740" stem valves (7mm)	.250"	Standard	.085"
42139TM-8	8 pcs.	.3110" stem valves (5/16")	.250"	Standard	.080"
42104TM-16	16 pcs.	.3415" stem valves (11/32")	.250"	Standard	.080"

VALVE STEM SEALS, GUIDES & CUTTERS

VITON MATERIAL VALVE STEM SEALS

- *A necessity when using NexTek® triple valve springs.*
- *Special design allows clearance inside small I.D. springs.*

Part No.	Quantity	Description	Guide O.D.	Installed Seal O.D	Use Cutter No.
24041-8	8 pcs.	.274" valves	.431"	.566"	41410
24040-8	8 pcs.	5/16" valves	.420"	.566"	41510
24042-8	8 pcs.	5/16" valves	.500"	.608"	41610
24047-8	8 pcs.	5/16" valves	.530"	.677"	41710
24043-8	8 pcs.	11/32" valves	.500"	.620"	41611
24045-8	8 pcs.	11/32" valves	.530"	.674"	41711
24044-8	8 pcs.	3/8" valves	.500"	.623"	41612
24046-8	8 pcs.	3/8" valves	.530"	.677"	41712

ALL TEFLON VALVE STEM SEALS

- *Spring loaded wiper to remove excess oil*

Part No.	Quantity	Description	Guide O.D.	Use Cutter No
24029-16	16 pcs.	5/16" valves	.500"	41610
24034-16	16 pcs.	5/16" valves	.530"	41710
24037-16	16 pcs.	11/32" valves	.500"	41611
24035-16	16 pcs.	11/32" valves	.530"	41711
24039-16	16 pcs.	3/8" valves	.500"	41612
24036-16	16 pcs.	3/8" valves	.530"	41712
41709	1	Seal Installation Tool		

VALVE GUIDE SEAL CUTTERS

- *Carbide tipped cutters*
- *Due to the severe use to which these cutters are subjected, we are not able to warranty damaged goods*

Part No.	Quantity	Pilot Size	Seal No.	Guide O.D.
41410	1	7 mm (.274")	24041	.431"
41510	1	5/16"	24040	.420"
41610	1	5/16"	24029 / 24042	.500"
41710	1	5/16"	24034 / 24047	.530"
41611	1	11/32"	24037 / 24043	.500"
41711	1	11/32"	24035 / 24045	.530"
41612	1	3/8"	24039 / 24044	.500"
41712	1	3/8"	24036 / 24046	.530"

VALVE GUIDE SEAL CUTTER PILOT

- *For use with any spring seat or seal cutter*

Part No.	Quantity	Description
41274	1	7 mm cutter pilot
41516	1	5/16" cutter pilot
41132	1	11/32" cutter pilot
41138	1	3/8" cutter pilot

BRONZE VALVE GUIDES

- *.502" O.D.*
- *1.625" length under flange*
- *Threaded seal area above flange*

Part No.	Quantity	Description
12081-8	8 pcs.	Bronze insert guide - .274" I.D.
12084-8	8 pcs.	Bronze insert guide - .311" I.D.

BRONZE VALVE GUIDE SLEEVES

- *Repair worn guides quickly and easily*

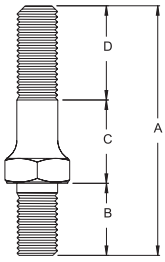
Part No.	Quantity	Description
42157-32	32 pcs.	Fits 5/16" valves. O.D. is 11/32"
42158-32	32 pcs.	Fits 11/32" valves. O.D. is 3/8"
42159-32	32 pcs.	Fits 3/8" valves. O.D. is .407"
42161-16	16 pcs.	.015" wall to convert 11/32" guides to accept 5/16" valves
42162-16	16 pcs.	.030" wall to convert 3/8" guides to accept 5/16" valves

ROCKER STUDS

PROFESSIONAL
ROCKER ARM SCREW-IN STUDS

- 8740 material with 190,000 psi
- Rolled threads
- Large radii
- Flat poly lock surface

BULK PRICING AVAILABLE

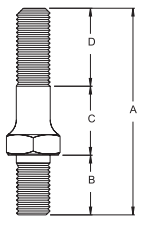


Part No.	Quantity	Application	Roller Rockers	Stud Girdles	Upper Threads	Dimensions A	B	C	D
42276-16	16 pcs.	SB Chevy & Ford	Yes	No	3/8"	2.425"	.670"	.945"	.810"
42277-16	16 pcs.	SB Chevy & Ford	Yes	No	7/16"	2.440"	.660"	.890"	.890"
42287-16	16 pcs.	SB Chevy w/ 18° head	Yes	Yes	7/16"	2.850"	.750"	1.300"	.800"
42288-16	16 pcs.	SB & BB Chevy	Yes	Yes	7/16"	2.810"	.740"	1.020"	1.050"
42290-8	8 pcs.	SB & BB Chevy	Yes	Yes	7/16"	2.810"	.740"	1.020"	1.050"
42287-16	16 pcs.	BB Chevy	Yes	Yes	7/16"	2.850"	.750"	1.300"	.800"
42278-16	16 pcs.	BB Chevy	No	No	7/16"	2.580"	.820"	.900"	.860"
42255-8	8 pcs.	BB Chevy w/ alum. head, exhaust stud only	Yes	Yes	7/16"	3.700"	1.700"	1.000"	1.000"
42256-16	16 pcs.	BB Chevy w/ tall springs	Yes	Yes	7/16"	3.200"	.850"	1.550"	.800"
42266-16	16 pcs.	BB Chevy Mark V w/ 3/8" lower threads converting to Mark IV heads	Yes	No	7/16"	2.600"	.775"	.885"	1.000"
42293-8	8 pcs.	BB Chevy w/ Dart aluminum	Yes	Yes	7/16"	3.300"	1.300"	1.000"	1.000"

STREET MASTER
ROCKER ARM SCREW-IN STUDS

- Special maxalloy steel
- Rolled threads

BULK PRICING AVAILABLE



Part No.	Quantity	Description	Upper Threads	Dimensions A	B	C	D
42106-16	16 pcs.	SB Chevy & Ford	3/8"	2.560"	.690"	.840"	1.030"
42147-16	16 pcs.	SB Chevy & Ford with poly locks	3/8"	2.420"	.690"	.920"	.810"
42103-16	16 pcs.	SB Chevy, BB Chevy & Ford	7/16"	2.550"	.790"	.890"	.870"

PROFESSIONAL
ROCKER ARM ADJUSTING NUTS

- Special chrome moly hex material
- Heat treated and black oxide
- Set screws and allen wrench included

Part No.	Quantity	Description
42107-16	16 pcs.	All 3/8" stud Chevys, Fords, Pontiacs
42112-16	16 pcs.	All 7/16" stud Chevys and Fords

ROCKER ARM KITS

CHEVROLET STAMPED STEEL ROCKER ARM KITS

- *Highest quality steel*
- *Heat treated*
- *Long slots to avoid stud interference*
- *Kits include oil grooved rocker balls and nuts*

Part No.	Quantity	Description	Stud Diameter
43140	1 set for 1 head	Small Block - Long Slot 1.5 Ratio	3/8"
43150	1 set for 1 head	Small Block - Long Slot 1.6 Ratio	3/8"
43170	1 set for 1 head	Big Block - Long Slot 1.7 Ratio	7/16"

ROCKER ARM KIT COMPONENTS

Note that individual rockers only are sold as -8, and rocker balls and rocker nuts are sold as -16. Kits include only 8 pieces of each part.

Kit	Rocker	Ball	Nut
43140	43141-8	43142-16	43143-16
43150	43151-8	43142-16	43143-16
43170	43171-8	43172-16	43173-16

The Manley Small Block Chevy rockers are the original non “self-aligning” type used from 1955 to 1989.

The Chevy L-19 Big Block 1991/up is equipped with “non-adjustable” rocker arms. To install the above adjustable rockers, the stock stud bosses must be drilled and tapped for 7/16"-14 screw - in studs.

332, 352, 390, 427, 428 FORD ADJUSTABLE ROCKERS

- *Precision casting with exact machining*
- *Quality hardware ensures accurate lash*
- *Stock rocker ratio 1.76:1*

Part No.	Quantity	Description
43128-8	8 pcs.	332, 352, 390, 427, 428 Ford

FORD PINTO PERFORMANCE ROCKER ARMS

- *Special material and heat treatment*
- *Stock rocker ratio*

Part No.	Quantity	Description
43116-8	8 pcs.	2300 Pinto

STEEL GUIDE PLATES

- *Meticulously crafted stamping*
- *Heat treated and black oxide finished*

BULK PRICING AND PRIVATE LABEL

SMALL BLOCK CHEVROLET
RAISED GUIDE PLATE

Part No.	Quantity	Description	Slots	Pushrods
42151-8	8 pcs.	Small Block Chevy	On-Center	5/16"
42150-8	8 pcs.	Small Block Chevy	On-Center	3/8"

SMALL BLOCK CHEVROLET
FLAT GUIDE PLATE

Part No.	Quantity	Description	Slots	Pushrods
42355-8	8 pcs.	Small Block Chevy	On-Center	5/16"
42356-8	8 pcs.	Small Block Chevy	On-Center	3/8"

BIG BLOCK CHEVROLET

ADJUSTABLE

Part No.	Quantity	Description	Pushrods
42164-8	8 pcs.	Big Block Chevy	3/8"
42165-8	8 pcs.	Big Block Chevy Adjustable	3/8"
42149-8	8 pcs.	Big Block Chevy	7/16"

FORD 289 - 302 - 351W
PRE 1977 HEADS

Part No.	Quantity	Description	Pushrods
42152-8	8 pcs.	289, 302 W, 351 W Ford	5/16"

FORD 302 BOSS - 351C
(WITH MODIFIED HEADS)

Part No.	Quantity	Description	Pushrods
42163-8	8 pcs.	302 Boss, 351 C Modified	5/16"
42156-8	8 pcs.	302 Boss, 351 C Modified	3/8"

To convert Ford 351C engines to adjustable rocker arms and pushrod guide plates, machine the old rocker stanchions down to a height of .550" as measured from the adjacent head bolt spot face with cutter 41860. Drill and tap the old screw hole to accept stud 42277.

FORD 429 - 460

Part No.	Quantity	Description	Pushrods
42166-8	8 pcs.	429, 460 Ford	5/16"
42160-8	8 pcs.	429, 460 Ford	3/8"

Note: New part numbers are *ITALICIZED*.

FASTENERS

SUPERIOR HEAD BOLTS

- *180,000 psi material*
- *Longer than stock for use with washers*
- *Improved wrenchability with 1/2" hex head*

Part No.	Quantity	Description
42193	1 set for 1 head	Chevrolet V-6
42171	1 set for 1 head	SB Chevy V-8
42312	1 set for 1 head	SB Chevy, Brodix - 12 and Pontiac 10093328 castings
42313	1 set for 1 head	SB Chevy, Brodix aluminum and Pontiac 10033867
42170	1 set for 1 head	BB Chevy
42180	1 set for 1 head	BB Chevy with Dart Pro 1 heads
42192	1 set for 1 head	BB Chevy with Brodix heads, Merlin II Aluminum
42322	1 set for 1 head	BB Chevy with Chevy Bow Tie, Dart Aluminum and Merlin heads
42178	1 set for 1 head	Chrysler 383-440
42198	1 set for 1 head	Indy Cylinder Head 440-1 BB Chrysler head

HARDENED HEAD BOLT WASHERS

- *Special heat treatment to prevent galling*

Part No.	Quantity	Description
42102	34 pcs.	All Chevys, 289-351 Fords, .760" O.D., 7/16" I.D., .125" thick
42127	20 pcs.	All Chryslers, Pontiacs, 390-427 Fords, .875" O.D., 1/2" I.D., .105" thick
42136	34 pcs.	Ideal washers for aluminum heads. 7/16" I.D. but larger .935" O.D. for better fit in aftermarket aluminum heads, .125" thick

7/16" CYLINDER HEAD STUD KITS

- *Chrome moly steel*
- *190,000 psi*
- *Kit includes studs, washers and nuts*

Part No.	Quantity	Description
42190	1 set for 1 head	SB Chevy OEM cast iron and aluminum Brodix -8, -10, -11, Track 1, Dart Sportsman and Dart II
42283	1 set for 1 head	BB Chevy with Dart and Chevy Bow Tie heads flat milled
42284	1 set for 1 head	BB Chevy with Brodix heads flat milled
42191	1 set for 1 head	BB Chevy with non Bow Tie heads flat milled
42197	1 set for 1 head	Ford 4.6 L 2 valve and 4 valve heads

7/16" CYLINDER HEAD STUD NUTS

Part No.	Quantity	Description
42279-4	4 pcs.	Hex head stud nut for all Chevrolets and 4.6L Fords
42289-4	4 pcs.	12 point stud nut for all Chevrolets and 4.6L Fords

HEX HEAD INTAKE MANIFOLD BOLTS

- *Bolts and washers black oxide finish*
- *Bolts include hardened washers*

Part No.	Quantity	Description	Underhead Length
42176	1 set	Small Block Chevrolet	1.250"
42177	1 set	Small Block Chevrolet using thin casting hi-rise manifolds	1.000"
42175	1 set	Big Block Chevrolet	1.250"
42299-16	16 pcs.	Hardened washers for above bolts. .125" thick. Black oxide	

12 POINT HEAD INTAKE MANIFOLD BOLTS

- *Bolts and washers gold irridite finish*
- *Shipped with hardened washers*

Part No.	Quantity	Description	Underhead Length
42292	1 set	Small Block Chevrolet, Chrysler “A” and “B” engines	1.125"
42291	1 set	Big Block Chevrolet using thin casting hi-rise manifolds	1.125"
42294-16	16 pcs.	Hardened washers for above bolts. .100" thick. Gold Irridite	

HARD TO FIND “AN” WASHERS

- *.060" thick*

Part No.	Quantity	I.D.	O.D.
42194	12 pcs.	5/16"	9/16"
42195	12 pcs.	3/8"	5/8"
42196	12 pcs.	7/16"	3/4"

STUD KITS, BOLTS & GEARS

FRONT TIMING COVER BOLTS

- *Special flange for greater "wrenchability"*
- *Integral lock washer*

Part No.	Quantity	Description
42174	1 set	Small and Big Block Chevys-black oxide
42179	1 set	Small and Big Block Chevys-gold irridite

FRONT TIMING COVER STUD KITS

- *Nut starter radius to prevent cross-threading*
- *Flanged, serrated, self-locking nuts included*

Part No.	Quantity	Description
42134	1 set	Small and Big Block Chevys

OIL PAN BOLTS

- *Special flange for greater "wrenchability"*
- *Integral lock washer*

Part No.	Quantity	Description
42173	1 set	Small Block Chevrolet - black oxide
42189	1 set	Small Block Chevrolet - gold irridite
42172	1 set	Big Block Chevrolet - black oxide
42188	1 set	Big Block Chevrolet - gold irridite

OIL PAN STUD KITS

- *Nut starter radius to prevent cross-threading*
- *Flanged, serrated, self-locking nuts included*

Part No.	Quantity	Description
42148	1 set	Small Block Chevrolet
42155	1 set	Big Block Chevrolet

BALANCER BOLTS

- *Parallel ground washer included*
- *Rolled threads*

Part No.	Quantity	Description
42223	1	SB Chevy 2.470" length. Use 13/16" 12-point socket.
42224	1	BB Chevy 1.560" length. Use 13/16" 12-point socket.

12 Point

BRONZE DISTRIBUTOR GEARS

- *Precision aluminum / silicon bronze*
- *Required with 8620 billet roller camshafts*

Part No.	Quantity	Description
42240	1	SB and BB Chevrolet - for .490" diameter shaft
42246	1	SB and BB Chevrolet - for .500" diameter aftermarket shaft

1960 SWARTHMORE AVENUE
LAKEWOOD, NEW JERSEY 08701

NEXTEK® BETTER by DESIGN

Manley proudly offers an outstanding array of valve springs for drag racers, oval / endurance competitors and niche markets like the Chevy LS, Ford Modular and Chrysler / Dodge Hemi.

- 3 *Winning performance*
- 3 *Long-term reliability*
- 3 *Ultimate value*
- 3 *Less load loss than competitors' offerings*
- 3 *Superior fatigue life*
- 3 *Better valve train stability*

MAJOR NHRA SPONSOR

IHRA MOTORSPORTS

Manufactured from "super clean" Hi-tensile Chrome Silicon steel

Shot-peened to MIL Specs for maximum fatigue life

Many part numbers available fully polished

Proprietary multi-step heat-treating minimizes load loss

Tightly controlled open end flatness reduces valve stem side loading

Many offerings are a damperless design which eliminates unnecessary damper weight and reduces retainer wear

Optimized "Select Size Fitting" between outer and inner springs to maximize harmonic dampening and reduce heat generated during operation

Computer-aided modeling of designs minimizes valve bounce and valve gear separation

Tip thickness designed to eliminate overload breakage

Doug Herbert

NHRA Top Fuel
Dragster
National Event Winner
Doug Herbert Racing

VALVE SPRINGS

NEXTEK® SERIES

OVAL TRACK & ENDURANCE VALVE SPRINGS

- *No degradation of spring pressure in the later stages of a race*
- *Spring I.D.'s are chamfered for retainer clearance*
- *State-of-the-art winding, thermal treatment and finishing practices that cannot be duplicated*
- *Specially processed premium-grade chrome silicon that is virtually free of impurities or surface irregularities*
- *NexTek® Series valve springs have been tested by leading engine builders and are confirmed to be the best performing valve springs on the market today*

All Manley NexTek® oval track valve springs listed below, except 221432, either come polished or are available in polished versions to reduce friction, improve fatigue life and minimize load loss. For example 221443P-16.

Part No.	Polished Part No.	Description	Maximum Valve Lift	O.D.	I.D.	Installed / Open Pressure	Rate (lbs. / in.)	Coil Bind	Component Code
221432-16	N/A	Late Model Stock w/ Flat Tappet	.630	1.530	.750 double with damper	162 @ 1.900 425 @ 1.300	500	1.200	A
221440P-16	Standard Feature	Circle Track Roller	.700	1.570	.760 double with damper	255 @ 2.000 629 @ 1.300	534	1.190	B
221441P-16	Standard Feature	Circle Track Roller	.730	1.570	.750 double with damper	280 @ 2.030 700 @ 1.300	575	1.215	C
221442-16	Standard Feature	Circle Track Roller	.750	1.560	.812 double without damper	260 @ 2.000 660 @ 1.250	533	1.200	D
221443-16	221443P-16	Circle Track Roller	.730	1.580	.832 double without damper	235 @ 1.950 610 @ 1.250	535	1.170	E
221444-16	221444P-16	Circle Track Roller	.750	1.610	.842 double without damper	235 @ 2.050 645 @ 1.300	546	1.220	F
221445P-16	Standard Feature	Circle Track Roller	.800	1.620	.852 double without damper	280 @ 2.050 680 @ 1.250	500	1.200	G

ANCILLARY COMPONENTS

Component Code	Super 7° Retainers	Super 7° Lightweight	Super 7° +.050	TensileMax Super 7°	Spring Cup	Type	Cup O.D.	Cup I.D.	Cup Thickness	Seat Cutter
A	23707 -16			23707 TM-16	42330-16	ID	1.535	.635	.062	41835
					42326-16	ID	1.535	.570	.062	41856
	23672 ICD-16				42426-16*	ID	1.535	.567	.062	41856
	23707 SCD-16				42466-16*	ID	1.535	.567	.045	41856
	23644-16	(10° Titanium Std.)								
	23650-16	(10° Titanium +.100)			*42426 and 42466 are CNC machined.					
B	23705 ICD-16	23705 L-16	23706 L-16	23705 TM-16	42331-16	ID	1.530	.570	.062	41856
		23705 LI-16	23706 LI-16							
	23644-16	(10° Titanium Std.)								
	23650-16	(10° Titanium +.100)								
C	23672-16	23672L-16		23672 TM-16	42330-16	ID	1.535	.635	.062	41835
	23672 I-16				42326-16	ID	1.535	.570	.062	41856
	23672 ICD-16				42426-16*	ID	1.535	.567	.062	41856
					42466-16*	ID	1.535	.567	.045	41856
	23647-16	(10° Titanium +.100)			*42426 and 42466 are CNC machined.					
D	23682-16	23682 L-16		23682 TM-16	42343-16	ID	1.550	.570	.062	41856
	23682 I-16	23682 LI-16			42443-16*	ID	1.550	.567	.062	41856
	23682 ICD-16									
	23643-16	(10° Titanium +.100)			*42443 is CNC machined.					
E	23681-16	23681 L-16	23691-16		42370-16	OD	1.687	.570	.062	41858
	23681 I-16	23681 LI-16			42369-16	ID	1.570	.635	.062	41856
	23681 ICD-16		23691 ICD-16		42373-16	ID	1.570	.570	.062	41856
					42573-16*	ID	1.570	.567	.062	41856
					42438-16*	ID	1.570	.567	.045	41856
	23648-16	(10° Titanium +.100)			* 42438 and 42573 are CNC machined.					
F	23681-16	23681 L-16	23691-16		42365-16	OD	1.740	.570	.062	41859
	23681 I-16	23681 LI-16			42367-16	ID	1.610	.570	.062	41857
	23681 ICD-16		23691 ICD-16		42368-16	ID	1.610	.635	.062	41855
	23648-16	(10° Titanium +.100)								
G	***23685-16***	23685 L-16		23685 TM-16	42342-16	ID	1.610	.570	.062	41857
		23685 LI-16		23685 DCTM-16						

SUFFIX CODE: I : Impinged ICD : Impinged, Convoluted and Drilled SCD : Steel, Convoluted and Drilled L : Lightweight LI : Lightweight and Impinged

Note: New part numbers are *ITALICIZED*.

VALVE SPRINGS

NexTek® SERIES

DRAG RACE VALVE SPRINGS

- *Unequalled performance*
- *All springs are triple except 221424 & 221425 double w/o damper*
- *Manley eclipses the 1200 lb. barrier*
- *Better valve train stability and component life*
- *Ideally suited for Fuel and Alcohol classes, Pro Stock, Competition, Super Stock, Super Gas and Mountain Motor applications*

All Manley NexTek® valve springs listed below are available in polished versions to reduce friction, improve fatigue life and minimize load loss. For example 221449P-16.

Part No.	Polished Part No.	Description	Maximum Valve Lift	O.D.	I.D.	Installed / Open Pressure	Rate (lbs. / in.)	Coil Bind	Component Code
221424-16	221424P-16	Super Gas, Super Comp., Big Block Bracket	.880	1.640	.860	250 @ 2.000 800 @ 1.150	647	1.070	A
221425-16	221425P-16	Super Gas, Super Comp., Big Block Bracket	.900	1.640	.860	280 @ 2.100 794 @ 1.250	604	1.150	A
221447-16*	221447P-16*	Super Stock, Pro Mod., Competition Eliminator	.800	1.677	.635	350 @ 2.000 895 @ 1.270	746	1.160	B
221448-16*	221448P-16*	Super Stock, Pro Mod., Competition Eliminator	.900	1.677	.635	350 @ 2.100 1010 @ 1.200	733	1.142	B
221449-16*	221449P-16*	Pro Stock, Fuel & Alcohol	1.000	1.677	.632	350 @ 2.200 1070 @ 1.200	720	1.142	B
221450-16*	221450P-16*	Pro Stock, Fuel & Alcohol	1.000	1.677	.632	370 @ 2.200 1140 @ 1.200	770	1.142	B
221451-16*	221451P-16*	Pro Stock, Fuel & Alcohol	1.050	1.677	.635	410 @ 2.300 1210 @ 1.250	761	1.180	B
221461-16*	221461P-16*	Pro Stock, Fuel & Alcohol	1.050	1.677	.635	480 @ 2.300 1290 @ 1.250	770	1.180	B

* Advertised pressures are achieved after springs have been pressed solid three times.

Component Code	10° Titanium Retainers	Type	Installed Height	Spring Cup	Type	Cup O.D.	Cup I.D.	Seat Cutter
A	23640-16	Standard	+.100	42121-16	OD	1.740	.635	41851
	23540-16	Lightweight	+.100	42128-16*	OD	1.740	.635	41851
	23649-16	Standard	Std.	42379-16*	OD	1.740	.570	41859
				* 42128 and 42379 have a wall height of .250 instead of .150.				
				42337-16	ID	1.570	.570	41857
				42437-16*	ID	1.570	.567	41857
				* 42437 is CNC machined.				
B	23663-16	Standard	Std.					
	23653-16	Standard	+.100	42371-16	OD	1.740	.635	41851
	23553-16	Lightweight	+.100	42372-16	OD	1.740	.570	41859
	23553 I-16	Lite & Impinged	+.100	42364-16	ID	1.660	.570	41858
	23673-16	7° Valve Locks Required	+.100					
	23753-16	Lite & Super 7° Material	+.100					
	23708L-16	Super 7° Valve Locks Required						

VALVE SPRING & TITANIUM RETAINER KITS

- *Large savings over purchasing items separately*

Kit No.	Quantity	Application	NexTek® Spring No.	10° Titanium Retainer No.
261424	1 kit	Super Gas, Super Comp., Big Block Bracket Engines	221424-16	23640-16
261424 L	1 kit	Same, except lightweight titanium retainers	221424-16	23540-16
261425	1 kit	Super Gas, Super Comp., Big Block Bracket Engines	221425-16	23640-16
261425 L	1 kit	Same, except lightweight titanium retainers	221425-16	23540-16

Note: New part numbers are *ITALICIZED*.

VALVE SPRINGS

NexTek® SERIES

HIGH PERFORMANCE STREET / STRIP VALVE SPRINGS
For SB Chevy LS, SB Chrysler Hemi & Ford Modular applications.

- *Specially processed premium-grade chrome silicon that is virtually free of impurities or surface irregularities*
- *State-of-the-art winding, thermal treatment and finishing practices that cannot be duplicated*
- *NexTek® Series valve springs have been tested by leading engine builders and are confirmed to be the best performing valve springs on the market today*

Part No.	Description	Maximum Valve Lift	O.D.	I.D.	Installed / Open Pressure	Rate (lbs. / in.)	Coil Bind	Component Code
221423-16	SBC LS-1, LT-1 / LT-4 / L-98 Stock Diameter Street / Strip	.575	1.255 Single Without Damper Ovate Wire	.830	115 @ 1.750 350 @ 1.175	409	1.100	A
221428-16	SBC LS-1, LT-1 / LT-4 / L-98 Stock Diameter Street/Strip	.600	1.076 Top 1.311 Bottom Single Conical Ovate Wire	.650 Top .885 Bottom	150 @ 1.800 355 @ 1.200	341	1.085	B
221436-16	SBC LS-1, High Performance Street / Strip	.660	1.295 Fully Polished Double Without Damper	.676	155 @ 1.810 405 @ 1.150	379	1.100	C
221430-16*	Chrysler Hemi 5.7L, 6.1L Stock Diameter High Performance Street/Strip	.600	1.056 Top 1.206 Bottom Fully Polished Single Conical Ovate Wire	.630 Top .780 Bottom	130 @ 1.811 360 @ 1.236	400	1.170	D
221427-16	Ford 4.6L, 5.4L SOHC 2 Valves per Cylinder Stock Diameter Street/Strip	.580	1.020 Top 1.125 Bottom Single Conical Ovate Wire	.642 Top .748 Bottom	95 @ 1.680 240 @ 1.130	264	1.080	E
221437-16	Ford 4.6L, 5.4L SOHC 2 Valves per Cylinder Stock Diameter Ideal for Boosted Applications	.580	1.030 Top 1.175 Bottom Single Conical Ovate Wire	.642 Top .787 Bottom	125 @ 1.680 265 @ 1.130	255	1.080	E
221429-24	Ford 4.6L, 5.4L 3 Valve 3 Valves per Cylinder Stock Diameter Street/Strip	.500	.880 Top 1.025 Bottom Fully Polished Single Conical	.565 Top .710 Bottom	95 @ 1.670 230 @ 1.170	270	1.100	F
221434-32	Ford 4.6L, 5.4L DOHC 4 Valves per Cylinder Stock Diameter High Performance Street/Strip	.525	1.016 Top 1.126 Bottom Single Conical Ovate Wire	.640 Top .750 Bottom	95 @ 1.420 260 @ .920	330	.880	G

* These Chrysler Hemi springs come with shims which are ONLY needed for 6.1L applications on the intake side in order to achieve the correct intalled heights.

Note: Please refer to opposite page 67 for the appropriate fitting retainers and spring cups. Match the component codes listed to find the correct parts.

Note: New part numbers are *ITALICIZED*.

ANCILLARY COMPONENTS

Component Code	Retainer Part No.	Description	Spring Cup Part No.	Type	Cup O.D.	Cup I.D.	Cup Thickness	Seat Cutter
A	23631-16	7° Steel for Manley 13098 or factory LS-1 valve lock and factory spring seat						
	23664-16	7° Steel +.050 for LT-1 and standard type valve lock						
	23632-16	7° Titanium for Manley 13098 or factory LS-1 valve lock and factory spring seat						
	23633-16	7° Titanium +.050 for Manley 13098 or factory LS-1 valve lock and factory spring seat						
	23634-16	7° Titanium +.050 for LT-1 and standard type valve lock						
			42341-16	ID	1.170	.525	.035	None
B	23620-16	7° Steel for Manley 13098 or factory LS-1 valve lock and factory spring seat						
	23622-16	7° Titanium for Manley 13098 or factory LS-1 valve lock and factory spring seat						
	23625-16	7° Titanium +.050 for Manley 13098 or factory LS-1 valve lock and factory spring seat						
	23626-16	7° Titanium +.050 for LT-1 and standard type valve lock						
			42338-16	ID	1.290	.525	.035	None
			42336-16	ID	1.290	.525	.062	None
C	23621-16	7° Steel +.050 for Manley 13098 or factory LS-1 valve lock						
	23623-16	7° Titanium +.050 for Manley 13098 or factory LS-1 valve lock						
	23624-16	7° Titanium +.050 for LT-1 and standard type valve lock						
			42334-16	ID	1.270	.525	.035	None
D	23629-16	7° Titanium for factory valve lock						
E	23627-16	7° Titanium for factory valve lock						
	23667-16	7° Titanium + .060 for factory valve lock						
F	23628-24	7° Titanium for factory valve lock						
G	***23627-32***	7° Titanium for factory valve lock						
	23667-32	7° Titanium + .060 for factory valve lock						

Ford Lightning 5.4L

Note: New part numbers are *ITALICIZED*.

VALVE SPRINGS

STREET MASTER VALVE SPRINGS

- *Chrome silicon material*
- *Designed for low stress and long service life*

Part No.	Type	Application	Size OD/ID	Pressures	Rate (lbs. / in.)	7° Steel Retainer	10° Steel Retainer	Titanium Retainer
22409-16	Outer w/ damper	SB Chevy Street Use	1.250" .865"	110 @ 1.700" 285 @ 1.210" Coil Bind: 1.180"	357	23651 (std.) 23652 (+.050")		23642 (7° x 11/32" +.050")
22408-16	Double w/ damper	SB Chevy, LS-1 Chevy, Ford, Chrysler	1.437" .720"	115 @ 1.800" 310 @ 1.250" 350 @ 1.200" Coil Bind: 1.100"	354	23645 (11/32") 23646 (11/32" +.100") 23666 (3/8")	23635	23630 (10 Degree) 23638 (7° x 5/16" LS-1) 23639 (7° x 5/16" +.050" LS-1)
22407-16	Double w/ damper	SB & BB Chevy	1.437" .720"	135 @ 1.800" 350 @ 1.250" Coil Bind: 1.085"	391	23645 (11/32") 23646 (11/32" +.100") 23666 (3/8")	23635	23630 (10 Degree)
22406-16	Outer w/ damper	BB Chevy, Chrysler	1.550" 1.080"	125 @ 1.875" 355 @ 1.375" Coil Bind: 1.190"	460	23645 (11/32") 23646 (11/32" +.100") 23666 (3/8")	23635	23630 (10 Degree)

PROFESSIONAL VALVE SPRINGS

- *Chrome silicon material for oval track racing*
- *H-11 tool steel for drag racing*

Part No.	Type	Application	Size OD/ID	Pressures	Coil Bind	Rate (lbs. / in.)	Super 7° Ti. Retainer	10° Ti. Retainer
22410-16	Outer w/ damper	Oval track Stock Class Chrome Silicon	1.250" .865"	130 @ 1.750" 320 @ 1.200"	1.150"	345	23651 (7°x11/32" Steel) 23652 (7°x11/32" +.050" Steel) 23642 (7°x11/32" +.050" Titanium)	
22411-16	Outer w/ damper	SB Chevy Stock Diameter Tool Steel	1.255" .870"	125 @ 1.800" 383 @ 1.200"	1.100"	428	23651 (7°x11/32" Steel) 23652 (7°x11/32" +.050" Steel) 23642 (7°x11/32" +.050" Titanium)	
22441-16	Double w/ damper	Oval Track Chrome Silicon	1.550" .740"	170 @ 1.900" 500 @ 1.200"	1.100"	471	23670	23658 (std.) 23660 (+.100")
22429-16	Double w/ damper	Oval Track Chrome Silicon	1.550" .740"	150 @ 1.880" 425 @ 1.280"	1.180"	458	23672	23657 (std) 23661 (+.100")
22430-16	Double w/ damper	Oval Track Chrome Silicon	1.550" .735"	210 @ 1.900" 525 @ 1.250"	1.200"	484	23672	23657 (std.) 23661 (+.100")
22440-16*	Double w/ damper	Drag Race Tool Steel	1.550" .720"	250 @ 1.850" 680 @ 1.150"	1.080"	614	23670	23658 (std.) 23660 (+.100")
22438-16*	Double w/ damper	Drag Race Tool Steel	1.625" .775"	328 @ 1.900" 806 @ 1.200"	1.090"	682	23669	23654 (std.) 23655 (+.100")
22448-16*	Double w/ damper	Drag Race Tool Steel	1.625" .775"	240 @ 1.900" 760 @ 1.150"	1.090"	693	23669	23654 (std.) 23655 (+.100")
22458-16*	Double w/ damper	Drag Race Tool Steel	1.625" .775"	260 @ 2.000" 840 @ 1.150"	1.090"	682	23669	23654 (std.) 23655 (+.100")

* Advertised pressures are achieved after springs have been pressed solid three times.

See page 130 for our new valve spring seat pressure tester P/N 40130.

SPORT COMPACT
VALVE SPRINGS
HONDA/ACURA, MITSUBISHI, NISSAN, TOYOTA, SUBARU & DODGE APPLICATIONS

- *Wound from super clean alloy*
- *Revs up to 10,000 RPM with Manley titanium retainers*
- *Designed to handle aftermarket camshafts*

Part No.	Quantity	Application	O.D. / I.D. Outer Inner	Pressures	Stock / Maximum Net Lift	Coil Bind	Rate (lbs. / in.)	Titanium Retainer
22105-16	16 pcs.	Acura B Series V-Tec High Performance Race	1.180"/.870" .865"/.660"	82 @ 1.350" 206 @ .950" 248 @ .815"	.400" .535"	.765"	310	23100-16
22110-16	16 pcs.	Honda H22 V-Tec	1.160"/.870" .865"/.660"	89 @ 1.460" 186 @ 1.030" 229 @ .840"	.430" .620"	.790"	225	23100-16
22120-16	16 pcs.	Honda B Series Non V-Tec Stock installed height on B Series Non V-Tec spring is: Intake - 1.320" / Exhaust - 1.425".	1.105"/.820" .800"/.630"	54 @ 1.375" 143 @ .990" 195 @ .760"	.385" .615"	.710"	230	23120-16
22140-16	16 pcs.	Honda K20A/K20Z	1.160"/.870" .865"/.660"	80 @ 1.590" 249 @ 1.140" 283 @ 1.050"	.450" .540"	1.000"	375	23140-16
22145-16	16 pcs.	Honda K20A3/K24A	1.106"/.787"	79 @ 1.565" 182 @ 1.185" 226 @ 1.025"	.380" .545"	.975"	274	23145-16
22150-16	16 pcs.	Honda F20C/F22C	1.160"/.870" .865"/.660"	84 @ 1.580" 264 @ 1.100" 283 @ 1.050"	.480" .530"	1.000"	375	23150-16
22190-16	16 pcs.	Dodge SRT-4	1.100"/.775"	92 @ 1.500" 188 @ 1.175" 237 @ 1.000"	.325" .500"	.950"	294	23190-16
22115-16	16 pcs.	Mitsubishi 4G63-4G63T DOHC 16 Valve (1990-2006)	1.160"/.870" .865"/.660"	104 @ 1.580" 237 @ 1.210" 269 @ 1.120"	.370" .460"	1.070"	359	23115-16
22125-16	16 pcs.	Mitsubishi 4G63-4G63T DOHC 16 Valve (1990-2006)	1.100"/.775"	66 @ 1.580" 175 @ 1.210" 237 @ 1.000"	.370" .580"	.950"	294	23125-16
22155-24	24 pcs.	Nissan Patrol TB48	1.100"/.775"	75 @ 1.550" 191 @ 1.165" 237 @ 1.100"	.385" .550"	.950"	294	23155-24
22160-16	16 pcs.	Nissan KA24DE	1.180"/.880" .870"/.670"	73 @ 1.400" 191 @ 1.050" 228 @ .900"	.350" .500"	.850"	310	23160-16
22165-16	16 pcs.	Nissan SR20DE/SR20DET	1.160"/.835"	90 @ 1.550" 185 @ 1.170" 225 @ 1.010"	.380" .540"	.960"	248	23165-16
22170-24	24 pcs.	Nissan VQ35DET	.990"/.710"	80 @ 1.425" 175 @ 1.050" 195 @ .970"	.375" .455"	.920"	253	23170-24
22175-24	24 pcs.	Nissan RB26DET	1.100"/.775"	80 @ 1.535" 197 @ 1.140" 237 @ 1.000"	.395" .535"	.950"	294	23175-24
22180-16	16 pcs.	Subaru WRX/Sti	1.050"/.755"	60 @ 1.420" 151 @ 1.050" 187 @ .895"	.370" .525"	.845"	245	23180-16
22185-16	16 pcs.	Subaru WRX/Sti	1.180"/.870" .865"/.660"	84 @ 1.315" 199 @ .945" 245 @ .815"	.370" .500"	.765"	310	23185-16
22130-24	24 pcs.	Toyota Supra 2JZGT/2JZGTE 6 cyl.	1.050"/.755"	82 @ 1.325" 165 @ .985" 187 @ .895"	.340" .430"	.845"	245	23130-24

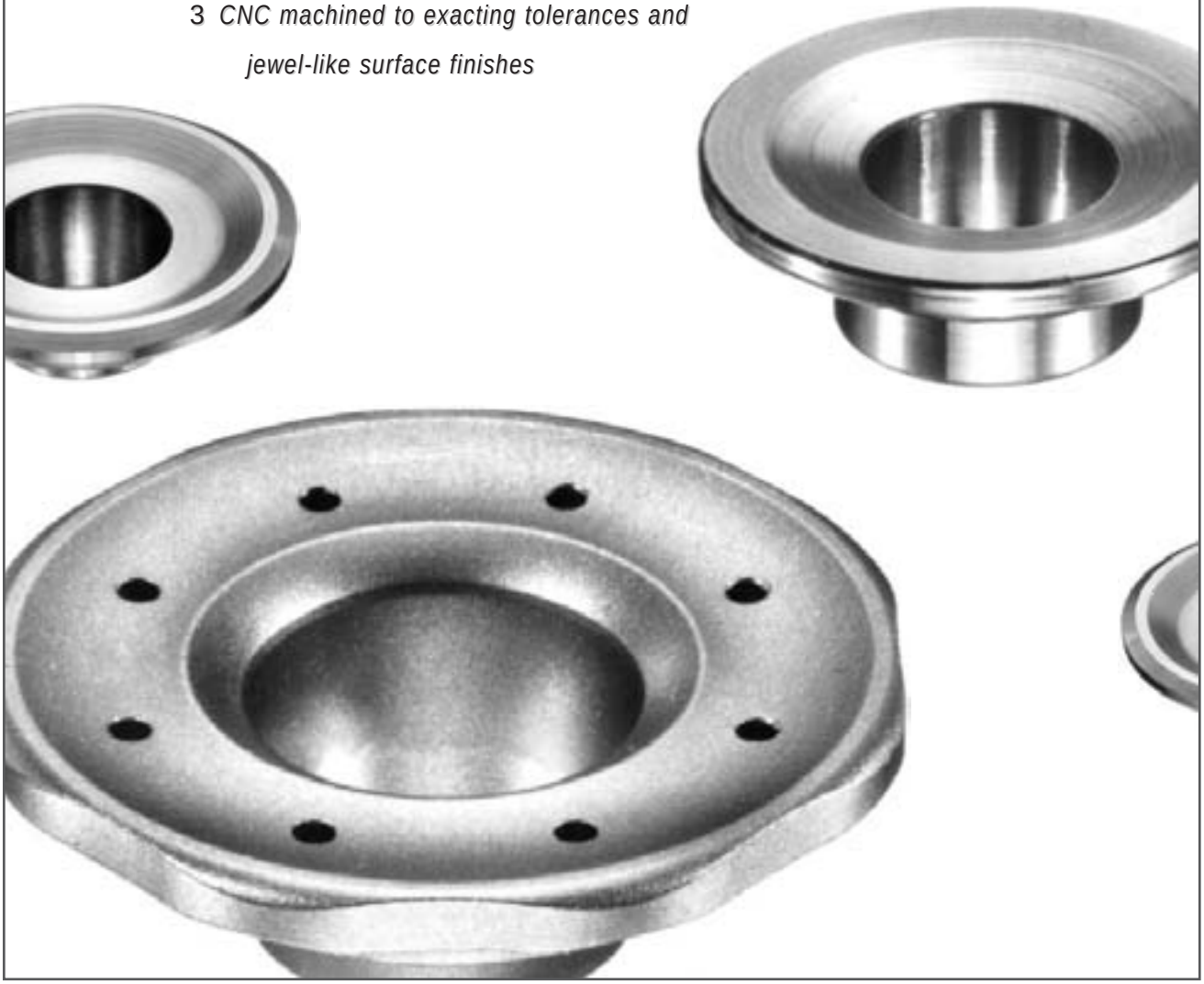
Note: New part numbers are *ITALICIZED*.

SPRING RETAINERS

MANLEY RETAINERS

....SIMPLY THE BEST!

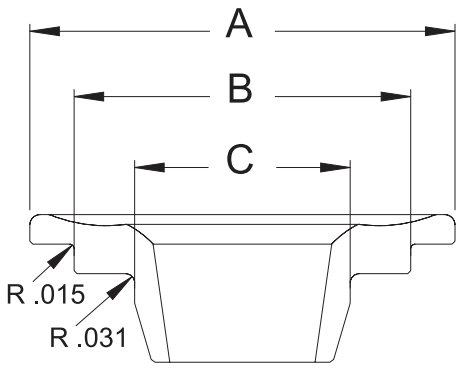
- *Engineered using finite element analysis*
- *Specially heat treated titanium material*
- *Exclusive "impingement" finishing process*
- *TensileMax steel alloy*
- *CNC machined to exacting tolerances and jewel-like surface finishes*



ICD SUPER 7° TITANIUM RETAINERS PAT. 5,322,039

Designed by our own Michael Tokarchik, the Manley ICD retainer represents the pinnacle of titanium retainer technology.

- Using Finite Element Analysis, the convoluted O.D. is engineered to provide the optimum balance of fatigue strength, weight and stress distribution.
- Holes precisely located through the retainers' cross section introduce oil to the valve spring at the critical inner to outer spring interface, greatly extending valve spring life.
- Finally, the heat-treated aerospace grade titanium alloy is surface enhanced with Manley's exclusive impingement process. This process eliminates all machining marks, improves fatigue strength and elevates surface hardness, thus reducing wear on both the ID and the spring shelves.
- Due to the larger .031" radius on the corner of the inner step, the I.D. of each valve spring, specifically the inner spring, must be chamfered prior to installation. It is highly recommended to use Manley's valve spring chamfering tool, P/N 40174.



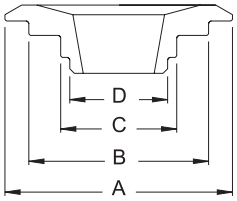
Super 7° ICD retainers require use of Super 7° valve locks.

ICD SUPER 7° TITANIUM RETAINERS

Part No.	Quantity	Spring Type	Spring	Spring O.D.	Dimensions A	B	C
23669 ICD-16	16 pcs.	Double	Manley 22438, 22448, 22458, Comp 26099	1.550" - 1.625"	1.440"	1.175"	.765"
23672 ICD-16	16 pcs.	Double	Manley 221441P, 22429, 22430	1.550" - 1.625"	1.440"	1.125"	.730"
23674 ICD-16	16 pcs.	Double	Comp 927, Isky 9315, 9365	1.550" - 1.625"	1.440"	1.140"	.730"
23681 ICD-16	16 pcs.	Double	Manley 221443, 221444	1.580" - 1.610"	1.440"	1.150"	.825"
23691 ICD-16	16 pcs.	Double	Same as 23681 except +.050"	1.580" - 1.610"	1.440"	1.150"	.825"
23682 ICD-16	16 pcs.	Double	Manley 221442	1.560"	1.440"	1.120"	.805"
23705 ICD-16	16 pcs.	Double	Manley 221440P	1.560"	1.440"	1.140"	.745"
23688 ICD-16	16 pcs.	Double	PSI CT1026	1.460"	1.440"	1.060"	.765"

SPRING RETAINERS

SUPER 7° TITANIUM RETAINERS



- *Super 7° angle is actually 8°*
- *Heat treated titanium material for maximum strength*
- *Available with or without our exclusive impingement surface enhancement process*
- *Impingement results in a 20% improvement in resistance to abrasion, a 30% improvement in fatigue strength, and an overall improvement in surface finish*

BULK PRICING AVAILABLE

Part No.	Part No. w/ Impinge	Quantity	Spring Type	Spring	Spring O.D.	Keeper Degree	Dimensions A	B	C	D
23700 L-16	23700 LI-16	16 pcs.	Double	PSI CT1040	1.500"	Super 7°	1.450"	1.080"	.785"	---
23669-16	- - - - - - - -	16 pcs.	Double	Manley 22438, 22448, 22458, Comp 26099	1.550" / 1.625"	Super 7°	1.500"	1.175"	.765"	---
23707-16	- - - - - - - -	16 pcs.	Double	Manley 221432	1.530" / 1.575"	Super 7°	1.500"	1.125"	.740"	---
23670-16	23670 I-16	16 pcs.	Double	Manley 22440, 22441	1.550"	Super 7°	1.500"	1.105"	.710"	---
23671-16	- - - - - - - -	16 pcs.	Double	K-1600	1.550"	Super 7°	1.500"	1.150"	.755"	---
23672-16	23672 I-16	16 pcs.	Double	Manley 221441P, 22429, 22430	1.550"	Super 7°	1.500"	1.125"	.730"	---
23672 L-16	- - - - - - - -	16 pcs.	Double	14% lighter than 23672	1.550"	Super 7°	1.500"	1.125"	.730"	---
23674-16	23674 I-16	16 pcs.	Double	Comp. 927	1.550"	Super 7°	1.500"	1.140"	.730"	---
23705 L-16	23705 LI-16	16 pcs.	Double	Manley 221440P	1.560"	Super 7°	1.450"	1.140"	.745"	---
23706 L-16	23706 LI-16	16 pcs.	Double	.050" more installed than 23705 L	1.560"	Super 7°	1.450"	1.140"	.745"	---
23682-16	23682 I-16	16 pcs.	Double	Manley 221442	1.560"	Super 7°	1.500"	1.120"	.805"	---
23682 L-16	23682 LI-16	16 pcs.	Double	14% lighter than 23682	1.560"	Super 7°	1.500"	1.120"	.805"	---
23681-16	23681 I-16	16 pcs.	Double	Manley 221443, 221444	1.580" / 1.610"	Super 7°	1.500"	1.150"	.825"	---
23681 L-16	23681 LI-16	16 pcs.	Double	14% lighter than 23681	1.580" / 1.610"	Super 7°	1.450"	1.150"	.825"	---
23691-16	- - - - - - - -	16 pcs.	Double	.050" more installed than 23681	1.580" / 1.610"	Super 7°	1.500"	1.150"	.825"	---
23685-16	- - - - - - - -	16 pcs.	Double	Manley 221445P	1.620"	Super 7°	1.500"	1.175"	.840"	---
23685 L-16	23685 LI-16	16 pcs.	Double	14% lighter than 23685	1.620"	Super 7°	1.460"	1.175"	.840"	---
23680-16	23680 I-16	16 pcs.	Double	Isky 9685	1.625"	Super 7°	1.500"	1.185"	.760"	---
23708 L-16	- - - - - - - -	16 pcs.	Triple	Manley 221447, 221448, 221449, 221450, 221451, 221461	1.660"	Super 7°	1.450"	1.185"	.870"	.635"

Please call with your custom retainer requirements.

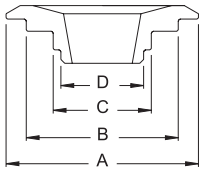
Note: New part numbers are *ITALICIZED*.

SPRING RETAINERS

10° TITANIUM RETAINERS

- *Special 6AL 4V titanium for maximum strength*
- *Excellent value for all forms of racing*

BULK PRICING AVAILABLE



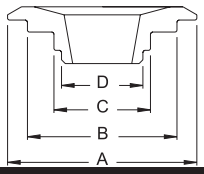
Part No.	Quantity	Spring Type	Spring	Height	Spring O.D.	Keeper Degree	Dimensions A	B	C	D
23630-16	16 pcs.	Outer-Inner	22406, 22407, 22408	Std.	1.437"/ 1.550"	10°	1.440"	1.050"	.700"	---
23644-16	16 pcs.	Double	Manley 221432, Manley 221440P, Comp. 927	Std.	1.550"	10°	1.500"	1.140"	.740"	---
23658-16	16 pcs.	Double	Manley 22440, 22441	Std.	1.550"	10°	1.500"	1.105"	.710"	---
23657-16	16 pcs.	Double	Manley 22429, 22430	Std.	1.550"	10°	1.500"	1.120"	.705"	---
23649-16	16 pcs.	Double	Manley 221424, 221425	Std.	1.625"	10°	1.500"	1.175"	.850"	---
23654-16	16 pcs.	Double	Manley 22458	Std.	1.625"	10°	1.500"	1.175"	.765"	---
23663-16	16 pcs.	Triple	Manley 221447, 221448, 221449, 221450, 221451, 221461	Std.	1.660"	10°	1.500"	1.185"	.860"	.620"
23641-16	16 pcs.	Triple	Crane 99882	+.100"	1.550"	10°	1.500"	1.130"	.735"	.640"
23650-16	16 pcs.	Double	Manley 221432, Manley 221440P, Comp. 927	+.100"	1.550"	10°	1.500"	1.140"	.740"	---
23660-16	16 pcs.	Double	Manley 22440, 22441	+.100"	1.550"	10°	1.500"	1.105"	.710"	---
23661-16	16 pcs.	Double	Manley 22429, 22430	+.100"	1.550"	10°	1.500"	1.120"	.705"	---
23647-16	16 pcs.	Double	Comp. 938, K-950	+.100"	1.550"	10°	1.500"	1.120"	.730"	---
23643-16	16 pcs.	Double	Manley 221442	+.100"	1.560"	10°	1.500"	1.120"	.805"	---
23648-16	16 pcs.	Double	Manley 221443, Manley 221444, Comp. 951	+.100"	1.580"/ 1.610"	10°	1.500"	1.150"	.825"	---
23655-16	16 pcs.	Double	Manley 22458 K-1000, K-1000H	+.100"	1.625"	10°	1.500"	1.175"	.765"	---
23640-16	16 pcs.	Double	Manley 221424, 221425	+.100"	1.625"	10°	1.500"	1.175"	.850"	---
23662-16	16 pcs.	Triple	Comp. 948	+.100"	1.625"	10°	1.500"	1.190"	.875"	.640"
23665-16	16 pcs.	Triple	K-1400	+.100"	1.625"	10°	1.500"	1.185"	.765"	.645"
23653-16	16 pcs.	Triple	Manley 221447, 221448, 221449, 221450, 221451, 221461	+.100"	1.660"	10°	1.500"	1.185"	.860"	.620"

Please call with your custom retainer requirements.

SPRING RETAINERS

LIGHTWEIGHT 10° TITANIUM RETAINERS

BULK PRICING AVAILABLE



- *Squeeze more RPM's out of your engine*
- *Avoid valve float*
- *Lightweight retainer that does not sacrifice reliability*
- *16 grams - compared to normal 19 to 21 grams*
- *Special heat treated titanium for maximum strength*
- *Must use 10° valve locks*

Part No.	Quantity	Spring Type	Spring	Height	Spring O.D.	Dimensions A	B	C	D
23540-16	16 pcs.	Double	Manley 221424, 221425	+.100"	1.625"	1.430"	1.175"	.850"	---
23562-16	16 pcs.	Triple	Pacaloy Comp 946, 947, 948	+.100"	1.625" / 1.650"	1.430"	1.190"	.875"	.640"
23553-16	16 pcs.	Triple	Manley 221447, 221448, 221449, 221450, 221451, 221461	+.100"	1.660"	1.430"	1.185"	.860"	.620"
23553 I-16	16 pcs.	Triple	Manley 221447, 221448, 221449, 221450, 221451, 221461	+.100"	1.660"	1.430"	1.185"	.860"	.620"
	23553 I retainer is impinged.								
23753-16*	16 pcs.	Triple	Manley 221447, 221448, 221449, 221450, 221451, 221461	+.100"	1.660"	1.430"	1.185"	.860"	.620"
	* Made from our high strength Super 7 Titanium Material								

7° TITANIUM RETAINERS

- *CAD designed for ultimate reduction in mass without sacrificing strength*

Part No.	Quantity	Manley Spring	Installed Height	Retainer O.D.	Spring O.D.	Spring I.D.	Keeper Degree x Valve Stem
23628-24	24 pcs.	221429	Std.	.775"	.880"	.565"	7° x 6mm
23627-16	16 pcs.	221427/221437	Std.	.875"	1.020"/1.030"	.642"	7° x 7mm
23667-16	16 pcs.	221427/221437	+.060"	.875"	1.020"/1.030"	.642"	7° x 7mm
23629-16	16 pcs.	221430	Std.	.915"	1.056"	.630"	7° x 5/16"
23622-16	16 pcs.	221428	Std.	.935"	1.076"	.650"	7° x 5/16"
23625-16	16 pcs.	221428	+.050"	.935"	1.076"	.650"	7° x 5/16"
23626-16	16 pcs.	221428	+.050"	.935"	1.076"	.650"	7° x 11/32"
23642-16	16 pcs.	22409, 22410	+.050"	1.150"	1.250"	.865"	7° x 11/32"
23632-16	16 pcs.	221423	Std.	1.155"	1.255"	.830"	7° x 5/16"
23633-16	16 pcs.	221423	+.050"	1.155"	1.255"	.830"	7° x 5/16"
23634-16	16 pcs.	221423	+.050"	1.150"	1.255"	.830"	7° x 11/32"
23623-16	16 pcs.	221436	+.050"	1.155"	1.290"/1.295"	.674"/.676"	7° x 5/16"
23624-16	16 pcs.	221436	+.050"	1.155"	1.290"/1.295"	.674"/.676"	7° x 11/32"
23638-16	16 pcs.	22408	Std.	1.340"	1.437"	.720"	7° x 5/16"
23639-16	16 pcs.	22408	+.050"	1.340"	1.437"	.720"	7° x 5/16"
23673-16	16 pcs.	221447, 221448, 221449 221450, 221451, 221461	+.100"	1.500"	1.660"	.635"	7° x 11/32", 3/8"

P/N's 23623, 23632, 23633, 23638, 23639, 23622, &23625 must use Manley 13098 or factory Chevrolet LS-1 valve locks.

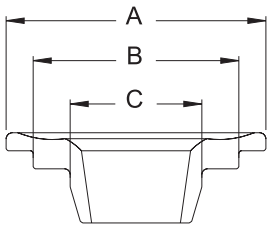
P/N's 23624, 23634, 23626, & 23642 are for the following engine models: LT-1 / LT-4 / L-98.

Note: New part numbers are *ITALICIZED*.

SPRING RETAINERS

SPORT COMPACT
TITANIUM RETAINERS

- *Heat treated aerospace grade titanium*
- *CNC machined to exacting tolerances*
- *Lightweight and extremely durable*
- *A must for your high reving sport compact engine*



Part No.	Application	Spring	Valve Stem Diameter	Valve Lock Degree	Dimensions A	B	C	Step
23000-16	Acura B18C / B16A / H22	Stock Spring	5.5 mm	7°	1.100"	.830"	.600"	.080"
23100-16	Acura B16A / B18C / B17A Honda H22 V-Tec	Manley 22105, 22110	5.5 mm	7°	1.150"	.850"	.650"	.080"
23120-16	Honda B18A / B (Non V-Tec)	Manley 22120	6.5 mm	7°	1.100"	.805"	.610"	.080"
23140-16	Honda K20A/K20Z	Manley 22140	5.5 mm	7°	1.050"	.850"	.610"	.080"
23145-16	Honda K20A3/K24A	Manley 22145	5.5 mm	7°	1.050"	.775"	.610"	.045"
23150-16	Honda F20C/F22C	Manley 22150	5.5 mm	7°	1.050"	.850"	.610"	.080"
23190-16	Dodge SRT-4	Manley 22190	6.0 mm	7°	1.050"	.760"	-----	.100"
23115-16	Mitsubishi 4G63-4G63T DOHC 16 Valve (1990-2006)	Manley 22115	6.6 mm	6°	1.050"	.850"	.610"	.040"
23125-16	Mitsubishi 4G63-4G63T DOHC 16 Valve (1990-2006)	Manley 22125	6.6 mm	6°	1.050"	.760"	-----	.140"
23155-24	Nissan Patrol TB48	Manley 22155	6.0 mm	6°	1.050"	.760"	-----	.080"
23160-16	Nissan KA24DE	Manley 22160	7.0 mm	7°	1.150"	.850"	.650"	.080"
23165-16	Nissan SR20DE/SR20DET	Manley 22165	6.0 mm	6°	1.150"	.825"	-----	.080"
23170-24	Nissan VQ35DET	Manley 22170	5.5 mm	6°	.960"	.690"	-----	.140"
23175-24	Nissan RB26DETT	Manley 22175	6.0 mm	6°	1.050"	.760"	-----	.080"
23180-16	Subaru WRX/Sti	Manley 22180	6.0 mm	6°	1.050"	.745"	.515"	.100"
23185-16	Subaru WRX/Sti	Manley 22185	6.0 mm	6°	1.150"	.850"	.650"	.080"
23130-24	Toyota Supra 2JZGT/2JZGTE 6 cyl.	Manley 22130	6.0 mm	6°	1.050"	.745"	.515"	.100"

SPORT COMPACT
VALVE SPRING & RETAINER KITS

- *Wound from super clean alloy*
- *Designed to handle aftermarket camshafts*

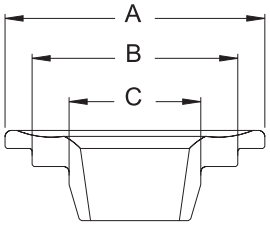
Part No. Without Valve Locks	Part No. With Valve Locks	Application	Max Net Lift	Spring No.	Titanium Retainer No.	Valve Locks
26105	26105K	Acura B Series, V-Tec	.535"	22105-16	23100-16	13010-8
26110	26110K	Honda H22, V-Tec	.620"	22110-16	23100-16	13010-8
26120	----------	Honda B Series, Non V-Tec	.615"	22120-16	23120-16	----------
26140	***26140K***	Honda K20A/K20Z	.540"	22140-16	23140-16	13010-8
26145	***26145K***	Honda K20A3/K24A	.545"	22145-16	23145-16	13010-8
26150	***26150K***	Honda F20C/F22C	.530"	22150-16	23150-16	13010-8
26190	----------	Dodge SRT-4	.500"	22190-16	23190-16	----------
26115	***26115K***	Mitsubishi 4G63-4G63T DOHC 16 Valve (1990-2006)	.460"	22115-16	23115-16	13016-8
26125	26125K	Mitsubishi 4G63-4G63T DOHC 16 Valve (1990-2006)	.580"	22125-16	23125-16	13016-8
26155	----------	Nissan Patrol TB48	.550"	22155-24	23155-24	----------
26160	----------	Nissan KA24DE	.500"	22160-16	23160-16	----------
26165	***26165K***	Nissan SR20DE/SR20DET	.540"	22165-16	23165-16	13012-8
26170	----------	Nissan VQ35DET	.455"	22170-24	23170-24	----------
26175	***26175K***	Nissan RB26DETT	.535"	22175-24	23175-24	13012-8
26180	----------	Subaru WRX/Sti	.525"	22180-16	23180-16	----------
26185	----------	Subaru WRX/Sti	.500"	22185-16	23185-16	----------
26130	26130K	Toyota Supra, 2JZGT/2JZGTE 6 cyl.	.430"	22130-24	23130-24	13014-8

Note: New part numbers are *ITALICIZED*.

SPRING RETAINERS

TENSILEMAX STEEL RETAINERS

NEW



Manley Performance revolutionized the titanium retainer aftermarket with it's signature "ICD" retainers. Whenever and wherever valve covers were popped off to lash valves or check valvesprings, racers would comment, "Hey, check out the retainers with the holes in them!" These "ICD" retainers, featuring Ti-17 alloy and a special impingement process, were originally developed for the Nascar Cup market to satisfy the need for lightweight yet durable retainers.

As valve spring technology progressed, the springs became harder due to the use of better materials and processing. Engine speeds continued to elevate to never before seen levels. Titanium retainer wear became inevitable in certain applications. How did we respond? We created something better... the Manley TENSILEMAX STEEL RETAINERS!

Standard TensileMax

Convoluted TensileMax

Double Convoluted TensileMax

- *Manufactured from our incredibly tough TensileMax alloy*
- *Designed to be as light as standard titanium retainers and very close in weight to lightweight titanium versions (within 2-4 grams)*
- *Specially heat treated to provide a hardness of Rc 52-54 and prevent retainer wear*
- *Exclusive process yields a part that provides the optimum balance between ultimate strength, fatigue strength, hardness and ductility*
- *Unique impingement process developed specifically for our TensileMax alloy and hardness range to improve fatigue strength and promote better oiling between the spring and retainer*

These are serious retainers for serious engine builders who DEMAND THE VERY BEST...

Part No.	Quantity	Spring Type	Spring	Spring O.D.	Keeper Degree	Dimensions A	B	C	Profile
23707 TM-16	16 pcs.	Double	Manley 221432	1.530"	Super 7°	1.420"	1.125"	.740"	Convoluted
23670 TM-16	16 pcs.	Double	Manley 22440, 22441	1.550"	Super 7°	1.420"	1.105"	.710"	Convoluted
23672 TM-16	16 pcs.	Double	Manley 221441P, 22429, 22430	1.570"	Super 7°	1.440"	1.125"	.730"	Standard
23674 TM-16	16 pcs.	Double	Comp. 927	1.550"	Super 7°	1.440"	1.140"	.730"	Standard
23705 TM-16	16 pcs.	Double	Manley 221440P	1.570"	Super 7°	1.440"	1.140"	.745"	Standard
23682 TM-16	16 pcs.	Double	Manley 221442	1.560"	Super 7°	1.440"	1.120"	.805"	Standard
23685 TM-16	16 pcs.	Double	Manley 221445P	1.620"	Super 7°	1.460"	1.175"	.840"	Standard
23685 DCTM-16	16 pcs.	Double	Manley 221445P	1.620"	Super 7°	1.460"	1.175"	.840"	Double Convoluted

SPRING RETAINERS

SUPER 7° "SCD" STEEL RETAINERS

PATENT NO. 5,322,039

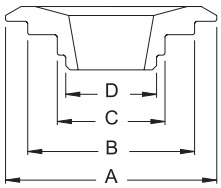
- *Convoluted and drilled*
- *All the "trickest" features of our ICD titanium retainers*
- *Thru-hardened 4140 chrome moly steel*
- *20% lighter than a steel 10° retainer*
- *Strategic holes to oil and cool springs*

Part No.	Material	Quantity	Manley Spring	Spring O.D.	Keeper Degree	Dimensions A	B	C
23707 SCD-16	Steel	16 pcs.	221432	1.530"/1.575"	Super 7°	1.440"	1.125"	.740"
23670 SCD-16	Steel	16 pcs.	22440	1.550"	Super 7°	1.440"	1.105"	.710"

STREET MASTER STEEL VALVE SPRING RETAINERS

BULK PRICING AVAILABLE

- *CNC machined to exacting tolerances*
- *Thru-hardened" 4140 chrome moly*



Part No.	Material	Quantity	Spring	Spring Height	Spring O.D.	Keeper Degree x Valve Stem	Dimensions A	B	C	D
23620-16	Steel	16 pcs.	221428	Std.	1.076"	7° x 5/16"	.935"	.640"	---	---
23631-16	Steel	16 pcs.	221423	Std.	1.255"	7° x 5/16"	1.155"	.825"	---	---
23664-16	Steel	16 pcs.	221423	+.050"	1.255"	7° x 11/32"	1.150"	.825"	---	---
23651-16	Steel	16 pcs.	22409, 22410	Std.	1.250"	7° x 11/32"	1.245"	.865"	.680"	---
23652-16	Steel	16 pcs.	22409, 22410	+.050"	1.250"	7° x 11/32"	1.245"	.865"	.680"	---
23621-16	Steel	16 pcs.	221436	+.050"	1.290"	7° x 5/16"	1.155"	.950"	.675"	---
23645-16	Steel	16 pcs.	22406, 22407, 22408	Std.	1.437"/1.550"	7° x 11/32"	1.440"	1.050"	.700"	---
23635-16	Steel	16 pcs.	22406, 22407, 22408	Std.	1.437"/1.550"	10° x All	1.440"	1.050"	.700"	---
23666-16	Steel	16 pcs.	22406, 22407, 22408	Std.	1.437"/1.550"	7° x 3/8"	1.440"	1.050"	.700"	---
23646-16	Steel	16 pcs.	22406, 22407, 22408	+.100"	1.437"/1.550"	7° x 11/32"	1.440"	1.050"	.700"	---
23636-16	Steel	16 pcs.	Crane 99882	Std.	1.550"	10° x All	1.500"	1.130"	.735"	.640"
23659-16	Steel	16 pcs.	Manley 22440, 22441	+.100"	1.550"	10° x All	1.500"	1.105"	.710"	---
23656-16	Steel	16 pcs.	Manley 22430	+.100"	1.550"	10° x All	1.500"	1.120"	.705"	---

P/N 23620, 23621, & 23631 must use Manley 13098 or factory Chevrolet LS-1 valve locks.

VALVE SPRING SHIMS

- *Available in .060", .030" and .015" thickness*
- *Heat treated to resist wear*

Part Numbers .060"	.030"	.015"	Quantity	O.D.	I.D.	Type	Description
02236-50	02233-50	02231-50	50 pcs.	1.250"	.812"	Hard	SB Chevy-stock size springs
03236-50	03233-50	03231-50	50 pcs.	1.480"	.703"	Hard	BB Chevrolet
03256-50	03253-50	03251-50	50 pcs.	1.437"	.785"	Hard	SB Chevrolet w/ larger springs
03266-50	03263-50	03261-50	50 pcs.	1.500"	.645"	Hard	Chevrolet - Chrysler
03276-50	03273-50	03271-50	50 pcs.	1.625"	.645"	Hard	Chevrolet - Chrysler -Ford

SPRING CUPS & I.D. LOCATORS

O.D. VALVE SPRING CUPS

- *CNC machined to exacting tolerances*
- *Accurate and durable .062" thick*
- *Heat treated and black oxide finished*

BULK PRICING AVAILABLE

Part No.	Quantity	Fits Spring O.D.	Cup O.D.	Cup I.D.	Wall Shoulder Height	Manley Spring	Use Cutter Number
42142-16	16 pcs.	1.250"	1.390"	.570"	.150"	22409, 22410	41850
42126-16	16 pcs.	1.437"	1.550"	.687"	.150"	22407, 22408	41835
42122-16	16 pcs.	1.550"	1.680"	.635"	.150"	22429, 22430, 22440, 22441	41852
42377-16	16 pcs.	1.550"	1.680"	.577"	.150"	22429, 22430, 22440, 22441	41858
42370-16	16 pcs.	1.580"	1.687"	.570"	.140"	221443	41858
42365-16	16 pcs.	1.610"	1.740"	.570"	.140"	221444	41859
42121-16	16 pcs.	1.625"	1.740"	.635"	.150"	22438, 221424, 221425	41851
42128-16	16 pcs.	1.625"	1.740"	.635"	.250"	22438, 221424, 221425	41851
42379-16	16 pcs.	1.650"	1.740"	.570"	.250"	221424, 221425	41859
42371-16	16 pcs.	1.660"	1.740"	.635"	.140"	221447, 221448, 221449 221450, 221451, 221461	41851
42372-16	16 pcs.	1.660"	1.740"	.570"	.140"	221447, 221448, 221449 221450, 221451, 221461	41859

CNC MACHINED
I.D. VALVE SPRING LOCATORS

- *Tight tolerances ± .002"*
- *Excellent surface finish*
- *8620 material heat treated and black oxide finished*

BULK PRICING AVAILABLE

Part No.	Quantity	Fits Spring O.D.	Locator O.D.	Locator I.D.	Cup Thickness	Wall Shoulder Height	Shoulder Diameter	Manley Spring	Use Cutter Number
42426-16	16 pcs.	1.550"	1.535"	.567"	.062"	.163"	.740"	221432 221441P	41856
42466-16	16 pcs.	1.550"	1.535"	.567"	.045"	.163"	.740"	221432 221441P	41856
42443-16	16 pcs.	1.560"	1.550"	.567"	.062"	.163"	.802"	221442	41856
42573-16	16 pcs.	1.580"	1.570"	.567"	.062"	.163"	.828"	221443	41856
42438-16	16 pcs.	1.580"	1.570"	.567"	.045"	.163"	.828"	221443	41856
42437-16	16 pcs.	1.625"	1.570"	.567"	.062"	.163"	.850"	221424 221425	41857

Please call with your custom spring locator requirements.

SPRING LOCATORS

I.D. VALVE SPRING LOCATORS

BULK PRICING AVAILABLE

- *Accurate and durable*
- *Heat treated and black oxide finished*

Part No.	Quantity	Fits Spring O.D.	Locator O.D.	Locator I.D.	Cup Thickness	Wall Shoulder Height	Shoulder Diameter	Spring	Use Cutter Number
42460-16	16 pcs.	.870"	.845"	.555"	.057"	.100"	.600"	Manley 22160 Inner Spring	None
42115-16	16 pcs.	1.160"	1.100"	.500"	.095"	.200"	.610"	Manley 22115	None
42341-16	16 pcs.	1.255"	1.170"	.505"	.035"	.145"	.825"	Manley 221423	None
42334-16	16 pcs.	1.290"	1.270"	.505"	.035"	.145"	.675"	Manley 221436	None
42338-16	16 pcs.	1.311"	1.290"	.505"	.035"	.145"	.875"	Manley 221428	None
42336-16	16 pcs.	1.311"	1.290"	.505"	.062"	.145"	.875"	Manley 221428	None
42119-16	16 pcs.	1.550"	1.535"	.635"	.062"	.140"	.720"	Manley 22440, Isky 9385	41835
42317-16	16 pcs.	1.550"	1.535"	.570"	.062"	.140"	.720"	Manley 22430, 22440	41856
42330-16	16 pcs.	1.550"	1.535"	.635"	.062"	.140"	.740"	Manley 221432, 221441P	41835
42326-16	16 pcs.	1.550"	1.535"	.570"	.062"	.140"	.740"	Manley 221432, 221441P	41856
42378-16	16 pcs.	1.550"	1.535"	.570"	.062"	.140"	.765"	Isky 9685	41856
42331-16	16 pcs.	1.550"	1.530"	.570"	.062"	.140"	.750"	Manley 221440P	41856
42332-16	16 pcs.	1.550"	1.535"	.570"	.062"	.140"	.810"	Comp 943	41856
42333-16	16 pcs.	1.550"	1.535"	.635"	.062"	.140"	.810"	Comp 943	41835
42343-16	16 pcs.	1.560"	1.550"	.567"	.062"	.163"	.802"	Manley 221442	41856
42373-16	16 pcs.	1.580"	1.570"	.570"	.062"	.140"	.825"	Manley 221443	41856
42369-16	16 pcs.	1.580"	1.570"	.635"	.062"	.140"	.825"	Manley 221443	41856
42367-16	16 pcs.	1.610"	1.610"	.570"	.062"	.140"	.825"	Manley 221444	41857
42368-16	16 pcs.	1.610"	1.610"	.635"	.062"	.140"	.825"	Manley 221444	41855
42342-16	16 pcs.	1.620"	1.610"	.570"	.062"	.140"	.840"	Manley 221445P	41857
42337-16	16 pcs.	1.625"	1.570"	.570"	.062"	.140"	.850"	Manley 221424, 221425	41857
42120-16	16 pcs.	1.625"	1.610"	.635"	.062"	.140"	.720"	K1000, K1000H	41855
42318-16	16 pcs.	1.625"	1.610"	.570"	.062"	.140"	.720"	K1000, K1000H	41857
42374-16	16 pcs.	1.625"	1.610"	.570"	.062"	.140"	.765"	Manley 22458	41857
42376-16	16 pcs.	1.625"	1.615"	.570"	.062"	.140"	.675"	Crane 99877	41857
42375-16	16 pcs.	1.625"	1.625"	.635"	.062"	.140"	.760"	Isky 9685	41855
42364-16	16 pcs.	1.660"	1.660"	.570"	.062"	.140"	.630"	Manley 221447, 221448, 221449, 221450, 221451, 221461	41858

Please call with your custom spring locator requirements.

TOOLS / CUTTERS

ROCKER STUD BOSS CUTTERS

- *Extra large diameter cutter to completely clean stud bosses while reducing height*
- *Due to the severe use to which these cutters are subjected, we are not able to warranty damaged goods*

Part No.	Quantity	Description
41860	1	Use for Fords and Small Block Chevys

CYLINDER HEAD SPRING SEAT CUTTERS

- *Extra strength carbide cutters*
- *Due to the severe use to which these cutters are subjected, we are not able to warranty damaged goods*

Replacement pilots: 7 mm/.274" - 41274, 5/16" - 41516, 11/32" - 41132, 3/8" - 41138

Part No.	Quantity	Description
41824	1	Cuts 1.250" O.D., .750" I.D. with 11/32" pilot
41825	1	Cuts 1.437" O.D., .625" I.D. with 11/32" pilot
41850	1	Cuts 1.445" O.D., .570" I.D. with 11/32" pilot
41835	1	Cuts 1.565" O.D., .625" I.D. with 11/32" pilot
41856	1	Cuts 1.580" O.D., .570" I.D. with 11/32" pilot
41857	1	Cuts 1.635" O.D., .570" I.D. with 11/32" pilot
41855	1	Cuts 1.635" O.D., .625" I.D. with 11/32" pilot
41858	1	Cuts 1.690" O.D., .570" I.D. with 11/32" pilot
41852	1	Cuts 1.690" O.D., .625" I.D. with 11/32" pilot
41859	1	Cuts 1.755" O.D., .570" I.D. with 11/32" pilot
41851	1	Cuts 1.755" O.D., .625" I.D. with 11/32" pilot

VALVE GUIDE SEAL CUTTERS

- *Extra strength carbide cutters*
- *Due to the severe use to which these cutters are subjected, we are not able to warranty damaged goods*

Part No.	Quantity	Pilot Size	Seal No.	Guide O.D.
41410	1	7 mm (.274")	24041	.431"
41510	1	5/16"	24040	.420"
41610	1	5/16"	24029	.500"
41710	1	5/16"	24034	.530"
41611	1	11/32"	24037	.500"
41711	1	11/32"	24035	.530"
41612	1	3/8"	24039	.500"
41712	1	3/8"	24036	.530"

VALVE GUIDE SEAL CUTTER PILOT

- *For use with any spring seat or seal cutter*

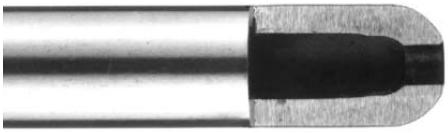
Part No.	Quantity	Description
41274	1	7 mm cutter pilot
41516	1	5/16" cutter pilot
41132	1	11/32" cutter pilot
41138	1	3/8" cutter pilot

4130 CHROME MOLY 5/16" SWEDGED END PUSHRODS

.080" WALL

- *Meticulously formed ends with exact radii*
- *Excellent concentricity, closely controlled length*
- *Heat treated and black oxide finished*

BULK PRICING AVAILABLE



Part No.	Length
25605-16	6.050"
25610-16	6.100"
25615-16	6.150"
25620-16	6.200"
25625-16	6.250"
25627-16	6.272"
25630-16	6.300"
25635-16	6.350"
25640-16	6.400"
25645-16	6.450"
25650-16	6.500"
25655-16	6.550"
25660-16	6.600"
25665-16	6.650"
25670-16	6.700"
25675-16	6.750"
25680-16	6.800"
25685-16	6.850"
25690-16	6.900"
25695-16	6.950"
25700-16	7.000"

Part No.	Length
25727-16	7.050"
25729-16	7.100"
25741-16	7.150"
25733-16	7.200"
25734-16	7.250"
25730-16	7.300"
25751-16	7.350"
25732-16	7.375"
25735-16	7.400"
25736-16	7.450"
25754-16	7.500"
25755-16	7.550"
25767-16	7.600"
25768-16	7.650"
25772-16	7.700"
25707-16	7.750"
25709-16	7.800"
25781-16	7.825"
25711-16	7.850"
25712-16	7.900"
25715-16	7.950"

Part No.	Length
25716-16	8.000"
25721-16	8.050"
25722-16	8.100"
25744-16	8.150"
25745-16	8.200"
25701-16	8.250"
25753-16	8.275"
25702-16	8.300"
25762-16	8.325"
25703-16	8.350"
25763-16	8.375"
25706-16	8.400"
25764-16	8.425"
25708-16	8.450"
25774-16	8.500"
25710-16	8.550"
25718-16	8.600"
25724-16	8.650"
25799-16	8.700"
25738-16	8.750"
25742-16	8.800"

Part No.	Length
25746-16	8.850"
25758-16	8.900"
25757-16	8.950"
25765-16	9.000"
25766-16	9.050"
25776-16	9.100"
25791-16	9.150"
25792-16	9.200"
25800-16	9.250"
25801-16	9.300"
25803-16	9.350"
25804-16	9.400"
25805-16	9.450"
25806-16	9.500"
25848-16	9.550"
25849-16	9.600"
25859-16	9.700"
25864-16	9.800"
25869-16	9.900"

COMMON SMALL BLOCK CHEVY 5/16" PUSHROD APPLICATIONS

Part No.	Length	Dimensions
25709-16	265-350 Stock	7.800"
25711-16	.050" Longer	7.850"
25712-16	.100" Longer	7.900"
25733-16	Late Model 350	7.200"
25735-16	LS-1 Stock	7.400"

COMMON SMALL BLOCK FORD 5/16" PUSHROD APPLICATIONS

Part No.	Length	Dimensions
25627-16	Stock 5.0 L	6.272"
25744-16	Stock 351 W	8.150"
25706-16	Stock 351 C	8.400"
25710-16	Yates +.150"	8.550"

CHRYSLER / DODGE 5.7L HEMI 5/16" PUSHROD APPLICATION KIT

Part No.	Length	Dimensions
26570	HEMI 5.7L Includes 8 Intakes and 8 Exhausts	Stock Length Int. 6.600" Exh. 7.825"

CHRYSLER / DODGE SRT-8 6.1L HEMI 5/16" PUSHROD APPLICATION KIT

Part No.	Length	Dimensions
26610	SRT-8 HEMI 6.1L Includes 8 Intakes and 8 Exhausts	Stock Length Int. 6.650" Exh. 7.850"

Note: New part numbers are *ITALICIZED*.

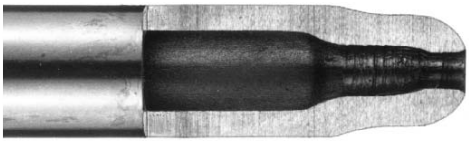
PUSHRODS

4130 CHROME MOLY 3/8" SWEDGED END PUSHRODS

.080" WALL

- *Meticulously formed ends with exact radii*
- *Excellent concentricity, closely controlled length*
- *Heat treated and black oxide finished*

BULK PRICING AVAILABLE



COMMON 3/8" PUSHROD LENGTH APPLICATIONS

Part No.	Description	Length
25787-8*	SB Chevy - Stock Length & Stock LS-7	7.800"
25788-8*	SB Chevy - .100" Longer	7.900"
25815-8*	351 W Ford - Stock Length	8.150"
25840-8*	351 C Ford - Stock Length	8.400"
25855-8*	Yates +.150" Longer	8.550"

Part No.	Description	Length
25795-8	BB Chevy - Stock Intake	8.280"
25796-8	BB Chevy - Stock Exhaust	9.250"
25797-8	BB Chevy - .400" Longer Int.	8.680"
25798-8	BB Chevy - .400" Longer Exh.	9.650"

* You must order 2 sets of 8 pieces for a complete engine.

Part No.	Length
25843-8	6.500"
25844-8	6.550"
25846-8	6.600"
25837-8	6.650"
25838-8	6.700"
25839-8	6.750"
25817-8	6.800"
25819-8	6.850"
25853-8	6.900"
25857-8	6.950"
25862-8	7.000"
25827-8	7.050"
25829-8	7.100"
25841-8	7.150"
25872-8	7.200"
25873-8	7.250"
25874-8	7.300"
25851-8	7.350"
25822-8	7.400"
25836-8	7.450"
25854-8	7.500"
25818-8	7.550"
25876-8	7.600"
25824-8	7.625"
25877-8	7.650"
25834-8	7.675"
25828-8	7.700"
25831-8	7.725"
25832-8	7.750"
25833-8	7.775"
25787-8	7.800"

Part No.	Length
25808-8	7.825"
25878-8	7.850"
25879-8	7.875"
25788-8	7.900"
25813-8	7.925"
25814-8	7.950"
25809-8	7.975"
25816-8	8.000"
25802-8	8.025"
25821-8	8.050"
25807-8	8.075"
25810-8	8.100"
25811-8	8.125"
25815-8	8.150"
25812-8	8.175"
25820-8	8.200"
25823-8	8.225"
25825-8	8.250"
25795-8	8.280"
25830-8	8.300"
25826-8	8.325"
25835-8	8.350"
25769-8	8.380"
25840-8	8.400"
25842-8	8.425"
25845-8	8.450"
25847-8	8.475"
25850-8	8.500"
25856-8	8.525"
25855-8	8.550"
25858-8	8.575"

Part No.	Length
25860-8	8.600"
25863-8	8.625"
25865-8	8.650"
25797-8	8.680"
25870-8	8.700"
25867-8	8.725"
25875-8	8.750"
25868-8	8.775"
25880-8	8.800"
25882-8	8.825"
25885-8	8.850"
25887-8	8.875"
25890-8	8.900"
25892-8	8.925"
25895-8	8.950"
25897-8	8.975"
25900-8	9.000"
25926-8	9.025"
25905-8	9.050"
25927-8	9.075"
25910-8	9.100"
25928-8	9.125"
25915-8	9.150"
25929-8	9.175"
25920-8	9.200"
25796-8	9.250"
25930-8	9.300"
25770-8	9.350"
25940-8	9.400"
25945-8	9.450"
25950-8	9.500"

Part No.	Length
25955-8	9.550"
25960-8	9.600"
25798-8	9.650"
25970-8	9.700"
25975-8	9.750"
25980-8	9.800"
25985-8	9.850"
25990-8	9.900"
25995-8	9.950"
25906-8	10.000"
25907-8	10.050"
25901-8	10.100"
25908-8	10.150"
25909-8	10.200"
25911-8	10.250"
25912-8	10.300"
25913-8	10.350"
25902-8	10.400"
25914-8	10.450"
25903-8	10.500"
25916-8	10.550"
25917-8	10.600"
25918-8	10.650"
25919-8	10.700"
25921-8	10.750"
25922-8	10.800"
25923-8	10.850"
25924-8	10.900"
25925-8	10.950"
25904-8	11.000"

4130 CHROME MOLY 5/16" SWEDGED END PUSHRODS

.120" WALL

- *Thicker wall for less deflection*
- *Better valvetrain stability in high RPM applications*
- *Meticulously formed ends with exact radii*
- *Excellent concentricity, closely controlled length*
- *Heat treated and black oxide finished*

BULK PRICING AVAILABLE

Part No.	Length
25233-16	7.700"
25234-16	7.750"
25235-16	7.800"
25236-16	7.850"
25237-16	7.900"
25238-16	7.950"
25239-16	8.000"

4130 CHROME MOLY 3/8" SWEDGED END PUSHRODS

.120" WALL

- *Thicker wall for less deflection*
- *Better valvetrain stability in high RPM applications*
- *Meticulously formed ends with exact radii*
- *Excellent concentricity, closely controlled length*
- *Heat treated and black oxide finished*

BULK PRICING AVAILABLE

Part No.	Length
25305-8	6.300"
25306-8	6.350"
25307-8	6.400"
25308-8	6.450"
25309-8	6.500"
25316-8	6.850"
25317-8	6.900"
25318-8	6.950"
25319-8	7.000"
25339-8	8.000"
25340-8	8.050"
25341-8	8.100"
25342-8	8.150"
25343-8	8.200"
25344-8	8.250"
25345-8	8.300"
25346-8	8.350"
25347-8	8.400"
25348-8	8.450"
25349-8	8.500"

Part No.	Length
25350-8	8.550"
25351-8	8.600"
25352-8	8.650"
25353-8	8.700"
25354-8	8.750"
25355-8	8.800"
25356-8	8.850"
25357-8	8.900"
25358-8	8.950"
25359-8	9.000"
25360-8	9.050"
25361-8	9.100"
25362-8	9.150"
25363-8	9.200"
25364-8	9.250"
25365-8	9.300"
25366-8	9.350"
25367-8	9.400"
25368-8	9.450"
25369-8	9.500"

Part No.	Length
25370-8	9.550"
25371-8	9.600"
25372-8	9.650"
25373-8	9.700"
25374-8	9.750"
25375-8	9.800"
25376-8	9.850"
25377-8	9.900"
25378-8	9.950"
25379-8	10.000"

Note: New part numbers are *ITALICIZED*.

PUSHRODS

4130 CHROME MOLY 7/16" SWEDGED PUSHRODS

.125" WALL

- *CNC machined ends result in perfectly formed radii*
- *Excellent concentricity with closely controlled length*
- *Heat treated and black oxide finished*
- *The highest quality pushrod in the industry*

BULK PRICING AVAILABLE

Part No.	Length
25074-8	7.600"
25029-8	7.650"
25030-8	7.700"
25031-8	7.750"
25032-8	7.800"
25033-8	7.850"
25034-8	7.900"
25035-8	7.950"
25036-8	8.000"
25037-8	8.050"
25038-8	8.100"
25039-8	8.150"
25040-8	8.200"
25041-8	8.250"
25042-8	8.280"
25043-8	8.300"
25044-8	8.350"
25045-8	8.400"
25046-8	8.450"
25047-8	8.500"
25048-8	8.550"

Part No.	Length
25049-8	8.600"
25050-8	8.650"
25051-8	8.680"
25052-8	8.700"
25053-8	8.750"
25054-8	8.800"
25055-8	8.850"
25056-8	8.900"
25057-8	8.950"
25058-8	9.000"
25059-8	9.050"
25060-8	9.100"
25061-8	9.150"
25062-8	9.200"
25063-8	9.250"
25064-8	9.300"
25065-8	9.350"
25066-8	9.400"
25067-8	9.450"
25068-8	9.500"
25069-8	9.550"

Part No.	Length
25070-8	9.600"
25071-8	9.650"
25073-8	9.750"
25076-8	9.850"
25077-8	9.900"
25078-8	9.950"
25079-8	10.000"
25000-8	10.050"
25001-8	10.075"
25002-8	10.100"
25003-8	10.125"
25004-8	10.150"
25023-8	10.200"
25024-8	10.250"
25005-8	10.300"
25006-8	10.325"
25025-8	10.350"
25026-8	10.400"
25007-8	10.450"
25008-8	10.475"
25009-8	10.500"

Part No.	Length
25010-8	10.525"
25011-8	10.550"
25012-8	10.575"
25013-8	10.600"
25014-8	10.625"
25019-8	10.650"
25020-8	10.700"
25021-8	10.750"
25027-8	10.800"
25015-8	10.850"
25016-8	10.875"
25017-8	10.900"
25018-8	10.925"
25022-8	10.950"
25028-8	11.000"

1010 STEEL SWEDGED END PUSHRODS

BULK PRICING AVAILABLE

- *.080" wall 1010 steel*
- *Heat treated and black oxide finish*
- *For use in hydraulic lifter applications with less than 400 lbs. open spring pressure and under 7500 rpm*

SMALL BLOCK CHEVROLET

Part No.	Quantity	Description	Diameter	Length
25785-16	16 pcs.	SB Chevy - Stock Length	5/16"	7.794"
25786-16	16 pcs.	SB Chevy - .100" Longer	5/16"	7.894"
25717-16	16 pcs.	Late model 350 - Stock Length	5/16"	7.170"
25719-16	16 pcs.	Late model 350 - .050" Longer	5/16"	7.220"

25717 and 25719 are for late model OEM hydraulic roller lifters. Hardened guide plates 42355 are required with aluminum heads.

Note: New part numbers are *ITALICIZED*.

SMALL BLOCK CHEVROLET

BALL END PUSHRODS

.080" WALL 1010 STEEL

BULK PRICING AVAILABLE

3 *Excellent pushrods for mildly modified engines with open spring pressure under 300 lbs*

Part No.	Quantity	Description	Diameter	Length
25737-16	16 pcs.	SB Chevy - Stock Length	5/16"	7.794"
25777-16	16 pcs.	SB Chevy - .100" Longer	5/16"	7.894"
25790-16	16 pcs.	SB Chevy - .150" Longer	5/16"	7.944"

BIG BLOCK CHEVROLET

SWEDGED END PUSHRODS

.080" WALL 1010 STEEL

BULK PRICING AVAILABLE

Part No.	Quantity	Description	Diameter	Length
25713-8	8 pcs.	BB Chevy - Stock Intake	3/8"	8.280"
25714-8	8 pcs.	BB Chevy - Stock Exhaust	3/8"	9.252"
25783-8	8 pcs.	BB Chevy - .100" longer Intake	3/8"	8.380"
25784-8	8 pcs.	BB Chevy - .100" longer Exhaust	3/8"	9.352"
25793-8	8 pcs.	BB Chevy Gen V, VI - Stock Intake	3/8"	7.625"
25794-8	8 pcs.	BB Chevy Gen V, VI - Stock Exhaust	3/8"	8.590"

FORD 5.0L

SWEDGED END PUSHRODS

.080" WALL 1010 STEEL

BULK PRICING AVAILABLE

3 *Stock length pushrod for use with stock Ford valve (5.080" O/A)*

3 *Use of Chevy valves (O/A 4.911") in Ford heads requires .172" shorter pushrods*

Part No.	Quantity	Description	Diameter	Length
25723-16	16 pcs.	Stock Length	5/16"	6.272"
25725-16	16 pcs.	.172" Shorter	5/16"	6.100"

FORD 5.0L

SWEDGED END PUSHRODS

.080" WALL 4130 CHROME MOLY

BULK PRICING AVAILABLE

3 *Stock length pushrod for use with stock Ford valve (5.080" O/A)*

3 *Use of Chevy valves (O/A 4.911") in Ford heads requires .172" shorter pushrods*

Part No.	Quantity	Description	Diameter	Length
25627-16	16 pcs.	Stock Length	5/16"	6.272"
25610-16	16 pcs.	.172" Shorter	5/16"	6.100"

PUSHRODS

CHRYSLER - FORD - PONTIAC - HOLDEN

PUSHRODS

- 3 *Cup and tip pushrods and ball end pushrods manufactured of 1010 steel*
- 3 *Swedged end pushrods manufactured of 4130 chrome moly*
- 3 *All pushrods are heat treated and black oxide finished*

BULK PRICING AVAILABLE

Part No.	Quantity	Description	Type	Diam.	Length
		CHRYSLER ENGINES			
26570	16 pcs.	HEMI 5.7 L Includes 8 Intakes and 8 Exhausts	Swedged	5/16"	Stock Int. 6.600" Exh. 7.825"
26610	16 pcs.	SRT-8 HEMI 6.1 L Includes 8 Intakes and 8 Exhausts	Swedged	5/16"	Stock Int. 6.650" Exh. 7.850"
25743-16	16 pcs.	440 Chrysler w/ adjustable rockers and solid lifters	Cup & Tip	3/8"	9.295"
25756-16	16 pcs.	440 Chrysler w/ adjustable rockers and hydraulic lifters	Cup & Tip	3/8"	8.995"
		FORD ENGINES			
25704-16	16 pcs.	260-289-302 Ford	Ball End	5/16"	6.776"
25728-16	16 pcs.	302 Boss Ford converted to use 42156 guide plates	Swedged	3/8"	7.700"
25748-16	16 pcs.	302W Ford - all engines after 10-21-68	Ball End	5/16"	6.886"
25705-16	16 pcs.	332-428 Ford with adjustable rocker arms	Cup & Tip	11/32"	9.157"
25747-16	16 pcs.	351W Ford	Ball End	5/16"	8.150"
25744-16	16 pcs.	351W Ford	Swedged	5/16"	8.150"
25750-16	16 pcs.	351C Ford - not Boss	Ball End	5/16"	8.408"
25752-16	16 pcs.	351C Ford - not Boss	Swedged	3/8"	8.408"
25779-16	16 pcs.	351M-400 Ford	Swedged	3/8"	9.500"
25789-16	16 pcs.	429-460 Ford	Ball End	5/16"	8.550"
25782-16	16 pcs.	429-460 Ford	Swedged	3/8"	8.550"
		PONTIAC ENGINES			
25726-16	16 pcs.	400-428-455 Pontiac	Ball End	5/16"	9.130"
		HOLDEN ENGINES			
25773-16	16 pcs.	Holden V-8	Ball End	5/16"	8.670"

CAMSHAFT SPACERS & MORE

ROLLER THRUST BUTTONS

- *Prevents camshaft from walking forward in the block*
- *Some Small Block Chevys require the center hole in the cam sprocket to be enlarged to .875" diameter*

Part No.	Quantity	Description
42111	1	Small Block Chevrolet w/ early (up to 1978) timing cover. Length .850"
42113	1	Small Block Chevrolet w/ late “short style” (1979/up) timing cover. Length .690"
42145	1	Big Block Chevrolet. Length .950"

ALUMINUM CAMSHAFT SPACERS

- *An excellent economical answer to the problem of camshaft “walk”*
- *Some Small Block Chevys require the center hole in the cam sprocket to be enlarged to .875" diameter*

Part No.	Quantity	Description
42146	1	Small Block Chevrolet w/ early (up to 1978) timing cover. Length .830"
42144	1	Small Block Chevrolet w/ late “short style” (1979/up) timing cover. Length .690"
42116	1	Big Block Chevrolet. Length .950"

BALANCER REPAIR SLEEVE

- *An inexpensive way to repair worn stock Chevrolet balancers*
- *Protects new, precious aluminum crankshaft hubs*

Part No.	Quantity	Description
42226	1	All Small Block Chevrolets

CAMSHAFT LOCK PLATE

- *Positively secures sprocket bolts in place*
- *Bendable tabs. Grade 8 camshaft bolts*

Part No.	Quantity	Description
42114	1 kit	SB and BB Chevrolet

TIMING CHAIN KITS

SMALL BLOCK WITH BIG BLOCK CHEVROLET SNOUT BILLET STEEL SPROCKETS

- *Fully machined billet steel camshaft and crankshaft sprockets*
- *Roller chain designed with .250" diameter rollers*
- *Crank sprocket includes three keyways*
- *Camshaft sprockets are machined for and include a brass wear shim or a Torrington thrust bearing*

Part No.	Description	Center-to Center	Chain	Shim/ Torrington
73201	Brass Shim	Stock	76161	42140
73221	Captive Torrington	Stock	76161	42420
73211	Brass Shim	.005" Shorter	76161	42140
73231	Captive Torrington	.005" Shorter	76161	42420

SMALL & BIG BLOCK CHEVROLET, CHEVROLET LS-1/LS-6 (1997-2004) & LS2 BILLET STEEL SPROCKETS

- *Fully machined billet steel camshaft and crankshaft sprockets*
- *Roller chain designed with .250" diameter rollers*
- *Three keyway or nine keyway crankshaft sprocket*
- *Camshaft sprockets are machined for and include a brass wear shim or a Torrington thrust bearing*

Part No.	Description	Center-to Center	Chain	Shim/ Torrington
73111	SB Chevy w/ Brass Shim	Stock	76161	42140
73121	SB Chevy w/ Captive Torrington	Stock	76161	42420
73233	SB Chevy LS-1/LS-6 w/ Captive Torrington and 9 Keyway Crankshaft Sprocket	Stock	76233	42419
73234	SB Chevy LS-2 w/ Captive Torrington and 9 Keyway Crankshaft Sprocket	Stock	76233	42419
73311	SB Chevy w/ Brass Shim	.005" Shorter	76161	42140
73321	SB Chevy w/ Captive Torrington	.005" Shorter	76161	42420
73333	SB Chevy LS-1/LS-6 w/ Captive Torrington and 9 Keyway Crankshaft Sprocket	.005" Shorter	76233	42419
73334	SB Chevy LS-2 w/ Captive Torrington and 9 Keyway Crankshaft Sprocket	.005" Shorter	76233	42419
73242	BB Chevy w/ Captive Torrington and Cam lock plate w/ roller thrust button	Stock	76162	42420

CAST CAM SPROCKET KITS WITH TORRINGTON BEARINGS, ROLLER THRUST BUTTONS & LOCKS

- *Fully machined steel crankshaft sprocket with three keyways*
- *Cast camshaft sprocket machined for Torrington thrust bearing*
- *Roller chain designed with .250" diameter rollers*
- *Kit includes captive Torrington bearing, roller thrust button, and Manley camshaft lock*

Part No.	Description	Center-to Center	Chain	Torrington Bearing	Thrust Button	Cam Lock
73141	SB Chevy `55-`78	Stock	76161	42420	42111	42114
73151	SB Chevy `79/up	Stock	76161	42420	42113	42114
73142	BB Chevy	Stock	76162	42420	42145	42114

Note: New part numbers are *ITALICIZED*.

TIMING CHAIN KITS

RACE ROLLER TIMING KITS WITH TORRINGTON BEARINGS & CAST CAM SPROCKET

- *Same kits as 73141, 73151 and 73142 on page 84 except they do not include the roller thrust button and cam lock*
- *Kits are available standard and .005" short*

Part No.	Description	Center -to -Center	Chain	Torrington Bearing
73181	SB Chevrolet	Stock	76161	42420
73191	SB Chevrolet	.005" Shorter	76161	42420
73182	BB Chevrolet	Stock	76162	42420
73192	BB Chevrolet	.005" Shorter	76162	42420

RACE ROLLER TIMING KITS WITH BRASS WEAR SHIMS & CAST CAM SPROCKET

- *Fully machined steel crankshaft sprocket with three keyways*
- *Cast camshaft sprocket machined for brass wear shim*
- *Roller chain designed with .250" diameter rollers*
- *Chevrolet kits include wear shim*

Part No.	Description	Center -to -Center	Chain	Brass Block Wear Shim
73161	SB Chevrolet	Stock	76161	42140
73171	SB Chevrolet	.005" Shorter	76161	42140
73162	BB Chevrolet	Stock	76162	42140
73172	BB Chevrolet	.005" Shorter	76162	42140
73174	Ford 255-302-351W (Late 1973-88)	Stock	76174	None
73146	Ford 429-460	Stock	76146	None

STREET MASTER ROLLER CHAIN KITS

- *Standard style roller chains*
- *Three keyway steel crankshaft sprocket and cast cam sproket*
- *Excellent value kit for mild performance engines*

Part No.	Description	Center -to -Center	Chain
73163	Small Block Chevrolet	Stock	76163
73168	Big Block Chevrolet	Stock	76168
73164	Ford 255-302-351W (Late 1973-88)	Stock	76163

SILENT TIMING CHAIN KITS

- *Original "silent" timing chain kits*
- *Cast cam sprocket*
- *Steel crankshaft sprocket*

Part No.	Description	Center -to -Center	Chain
73589	Small Block Chevrolet 350	Stock	76489

OIL PUMPS & MORE

OIL PUMPS

- *Quality oil pumps meticulously machined*
- *Precision formed gears to assure proper oil pressure*

Part No.	Quantity	Description	Volume	Cover Type	Inlet Size	Pick-up
71087	1	Small Block Chevy	25% Add'l	4 bolt	5/8"	Use Stock
71089	1	Small Block Chevy	25% Add'l	5 bolt	3/4"	72090 Included
71091	1	Big Block Chevy	22% Add'l	5 bolt	3/4"	Use Stock

Replacement pick-ups for pump 71089 are sold separately as P/N 72090.

OIL PUMP STUD & "DRIVE" SHAFTS

- *An oil pump stud is the professional way to secure your oil pump to the rear main cap*
- *Precision manufactured pump drive shafts*

Part No.	Quantity	Description	Application
42339	1	Oil pump stud	Fits all Chevys
42328	1	Oil pump drive shaft	SB Chevy and 90° V-6
42329	1	Oil pump drive shaft	BB Chevy

CHEVROLET LIGHTWEIGHT FUEL PUMP PUSHROD

A stock Chevrolet fuel pump can "float " at high engine speeds just like a heavy intake valve. A lightweight fuel pump pushrod helps a mechanical fuel pump do its job when the tach climbs past 6000 rpm. Made from 4130 chrome moly steel tubing.

Part No.	Quantity	Description
42236	1	Fits Small and Big Block Chevrolet

OIL RESTRICTOR KIT

- *Carefully machined for exact fit*
- *The .060" orifice precisely meters oil flow to the engine*
- *Spare "O" rings included*

BULK PRICING AVAILABLE

Part No.	Quantity	Material	Description
42237-2	Set of 2	Aluminum	Fits non Bow Tie Chevys. Hex Head
42238-2	Set of 2	Stainless	Fits all Chevys including Bow Tie and Rocket Block. Recessed Allen head

LIFTER VALLEY BREATHER TUBES

- *Eliminates excessive oil drain back while maintaining proper ventilation*
- *1/4" NPT Thread Size*

BULK PRICING AVAILABLE

Part No.	Quantity	Description
42235-8	8 pcs.	Fits all Chevrolets

PLATINUM SERIES PISTONS

ULTRA LITE SMALL BLOCK CHEVROLET

"FORMULA-WON®" DESIGN FLAT TOP & 14.5cc DISH

4" BORE 23° HEAD .043" x .043" x 3 MM RINGS

- 3 *2618 high strength material*
- 3 *Super lightweight design for 525 HP and 8,000 RPM*
- 3 *Lateral gas ports included*
- 3 *Round wire locks included*
- 3 *Pressure balance groove*
- 3 *Perfect ring groove to skirt squareness*
- 3 *Tool steel pin integral to design*

Part No.	Bore Size	Rod Length	Stroke	Compression Distance	Piston Wt / Gms	Piston & Pin Wt / Gms	Piston Ring Set
				FLAT TOP			
593030-8	4.030"	5.700"	3.480"/3.500"	1.550"	394	466	46213-8
593035-8	4.035"	5.700"	3.480"/3.500"	1.550"	396	468	46215-8
593040-8	4.040"	5.700"	3.480"/3.500"	1.550"	397	469	46214-8
593130-8	4.030"	6.000"	3.480"/3.500"	1.250"	355	427	46213-8
593135-8	4.035"	6.000"	3.480"/3.500"	1.250"	357	429	46215-8
593140-8	4.040"	6.000"	3.480"/3.500"	1.250"	358	430	46214-8
593230-8	4.030"	6.125"	3.480"/3.500"	1.125"	338	410	46213-8
593235-8	4.035"	6.125"	3.480"/3.500"	1.125"	340	412	46215-8
593240-8	4.040"	6.125"	3.480"/3.500"	1.125"	341	413	46214-8

Part No.	Bore Size	Rod Length	Stroke	Compression Distance	Piston Wt / Gms	Piston & Pin Wt / Gms	Piston Ring Set
				14.5cc DISH			
593430-8	4.030"	5.700"	3.480"/3.500"	1.550"	421	493	46213-8
593435-8	4.035"	5.700"	3.480"/3.500"	1.550"	423	495	46215-8
593440-8	4.040"	5.700"	3.480"/3.500"	1.550"	424	496	46214-8
593530-8	4.030"	6.000"	3.480"/3.500"	1.250"	382	454	46213-8
593535-8	4.035"	6.000"	3.480"/3.500"	1.250"	384	456	46215-8
593540-8	4.040"	6.000"	3.480"/3.500"	1.250"	385	457	46214-8
593630-8	4.030"	6.125"	3.480"/3.500"	1.125"	365	437	46213-8
593635-8	4.035"	6.125"	3.480"/3.500"	1.125"	367	439	46215-8
593640-8	4.040"	6.125"	3.480"/3.500"	1.125"	368	440	46214-8

The root diameter of the ring grooves accomodates Manley rings and others which have the following radial thickness
Top: .160" 2nd: .165" Oil: .145"

COMMON FEATURES

Dome Volume:	-2.0 cc Flat Top or -14.5cc Dish
Compression Ratio:	Flat Top: 10.34:1 w/ 64 cc & 3.48" Stroke
	Dish: 9.04:1 w/ 64 cc & 3.48" Stroke
Top Ring:	.043", .155" down
Second Ring:	.043"
Oil Ring:	3 mm
Deck Thickness:	.155"
Valve Notches:	Flat Top: .220" Int., .150" Exh.
	-14.5cc Dish: .300" Int., .215" Exh.
Maximum Fly Cut:	.310" Int., .190" Exh.

Max. Valve Sizes:	2.100" Int., 1.625" Exh.
Valve Angle:	22°
Pin Included:	tool steel P/N 42241
	(.095" wall, 72 grams, 2.300" long)
Round Wire Locks:	P/N 42262 - .061" wide
Recommended	
Piston Clearance:	.005" measured 1.100" from bottom of the oil ring

SEE PAGE 106 FOR CUSTOM PISTONS

PLATINUM SERIES PISTONS

SMALL BLOCK CHEVROLET

2 BARREL CLASS

4" BORE FLAT TOP 23° HEAD

- *2618 high strength material*
- *2.300" length tool steel pin included - integral to the piston design*
- *Lightweight design: .155" thick deck*
- *Perfect ring groove to skirt squareness*
- *Round Wire Locks included - NO CHARGE*
- *Pressure balance groove*
- *Semi-banded skirt for improved skirt stability*

Part No.	Bore Size	Rod Length	Stroke	Compression Distance	Piston Wt / Gms	Piston & Pin Wt / Gms	Piston Ring Set
			1/16" x 1/16" x 3/16" RINGS				
590030-8	4.030"	5.700"	3.480"/3.500"	1.550"	438	510	46353-8
590035-8	4.035"	5.700"	3.480"/3.500"	1.550"	441	513	46355-8
590040-8	4.040"	5.700"	3.480"/3.500"	1.550"	443	515	46354-8
590130-8	4.030"	6.000"	3.480"/3.500"	1.250"	399	471	46353-8
590135-8	4.035"	6.000"	3.480"/3.500"	1.250"	400	472	46355-8
590140-8	4.040"	6.000"	3.480"/3.500"	1.250"	401	473	46354-8
			The following pistons will include groove lock spacer 46400				
590230-8	4.030"	6.125"	3.480"/3.500"	1.125"	369	441	46353-8
590235-8	4.035"	6.125"	3.480"/3.500"	1.125"	370	442	46355-8
590240-8	4.040"	6.125"	3.480"/3.500"	1.125"	371	443	46354-8
			Gas Ported .043" x .043" x 3 mm RINGS				
591030-8	4.030"	5.700"	3.480"/3.500"	1.550"	438	510	46213-8
591035-8	4.035"	5.700"	3.480"/3.500"	1.550"	440	512	46215-8
591040-8	4.040"	5.700"	3.480"/3.500"	1.550"	442	514	46214-8
591130-8	4.030"	6.000"	3.480"/3.500"	1.250"	400	472	46213-8
591135-8	4.035"	6.000"	3.480"/3.500"	1.250"	401	473	46215-8
591140-8	4.040"	6.000"	3.480"/3.500"	1.250"	402	474	46214-8
591230-8	4.030"	6.125"	3.480"/3.500"	1.125"	380	452	46213-8
591235-8	4.035"	6.125"	3.480"/3.500"	1.125"	382	454	46215-8
591240-8	4.040"	6.125"	3.480"/3.500"	1.125"	384	456	46214-8
			The following pistons will include groove lock spacer 46400				
591330-8	4.030"	6.200"	3.480"/3.500"	1.050"	367	439	46213-8
591335-8	4.035"	6.200"	3.480"/3.500"	1.050"	368	440	46215-8
591340-8	4.040"	6.200"	3.480"/3.500"	1.050"	369	441	46214-8

The root diameter of the ring grooves accomodates Manley rings and others which have the following radial thickness

1/16" x 3/16" Top: .183" 2nd: .183" Oil: .183" .043" x 3mm Top: .160" 2nd: .165" Oil: .145"

COMMON FEATURES

Dome Volume:	-2.5 cc
Compression Ratio:	10.34:1 w/ 64 cc & 3.48" Stroke
Top Ring:	1/16" or .043" Gas Ported, .155" down
Second Ring:	1/16" or .043"
Oil Ring:	3/16" or 3 mm
Deck Thickness:	.155"
Valve Notches:	.210" Int., .150" Exh.
Maximum Fly Cut:	.270" Int., .170" Exh.
Max. Valve Sizes:	2.100" Int., 1.625" Exh.
Valve Angle:	22°
Pin Included:	tool steel P/N 42241 (.095" wall, 72 grams, 2.300" long)
Round Wire Locks:	P/N 42262 - .061" wide
Recommended Piston Clearance:	.005" measured 1.100" from bottom of the oil ring

SEE PAGE 106 FOR CUSTOM PISTONS

PLATINUM SERIES PISTONS

SMALL BLOCK CHEVROLET

4 BARREL CLASS

4" BORE FLAT TOP 23° HEAD

- *2618 high strength material*
- *Lightweight design*
- *Slightly thicker deck (.185") for higher horsepower applications*
- *Perfect ring groove to skirt squareness*
- *Pressure balance groove*
- *2.300" length tool steel pin included - integral to the piston design*
- *Round Wire Locks included - NO CHARGE*
- *Full banded skirt design for increased skirt stability*

Part No.	Bore Size	Rod Length	Stroke	Compression Distance	Piston Wt / Gms	Piston & Pin Wt / Gms	Piston Ring Set
			1/16" x 1/16" x 3/16" RINGS				
590530-8	4.030"	5.700"	3.480"/3.500"	1.550"	458	553	46353-8
590535-8	4.035"	5.700"	3.480"/3.500"	1.550"	459	554	46355-8
590540-8	4.040"	5.700"	3.480"/3.500"	1.550"	460	555	46354-8
590545-8	4.045"	5.700"	3.480"/3.500"	1.550"	465	560	46354-8
590560-8	4.060"	5.700"	3.480"/3.500"	1.550"	470	565	46356-8
590730-8	4.030"	5.700"	3.750"	1.425"	438	533	46353-8
590630-8	4.030"	6.000"	3.480"/3.500"	1.250"	415	510	46353-8
590635-8	4.035"	6.000"	3.480"/3.500"	1.250"	416	511	46355-8
590640-8	4.040"	6.000"	3.480"/3.500"	1.250"	418	513	46354-8
590660-8	4.060"	6.000"	3.480"/3.500"	1.250"	427	522	46356-8
			The following pistons will include groove lock spacer 46400				
590830-8	4.030"	6.125"	3.480"/3.500"	1.125"	399	494	46353-8
590835-8	4.035"	6.125"	3.480"/3.500"	1.125"	400	495	46355-8
590840-8	4.040"	6.125"	3.480"/3.500"	1.125"	401	496	46354-8
590860-8	4.060"	6.125"	3.480"/3.500"	1.125"	411	506	46356-8
			Gas Ported .043" x .043" x 3 mm RINGS				
591530-8	4.030"	5.700"	3.480"/3.500"	1.550"	457	552	46213-8
591535-8	4.035"	5.700"	3.480"/3.500"	1.550"	459	554	46215-8
591540-8	4.040"	5.700"	3.480"/3.500"	1.550"	460	555	46214-8
591560-8	4.060"	5.700"	3.480"/3.500"	1.550"	470	565	46216-8
591630-8	4.030"	6.000"	3.480"/3.500"	1.250"	415	510	46213-8
591635-8	4.035"	6.000"	3.480"/3.500"	1.250"	416	511	46215-8
591640-8	4.040"	6.000"	3.480"/3.500"	1.250"	418	513	46214-8
591660-8	4.060"	6.000"	3.480"/3.500"	1.250"	426	521	46216-8

The root diameter of the ring grooves accomodates Manley rings and others which have the following radial thickness
1/16" x 3/16" Top: .183" 2nd: .183" Oil: .183" .043" x 3mm Top: .160" 2nd: .165" Oil: .145"

COMMON FEATURES

Dome Volume:	-4.0 cc
Compression Ratio:	10.16:1 w/ 64 cc & 3.48" Stroke
Top Ring:	1/16" or .043" Gas Ported, .185" down
Second Ring:	1/16" or .043"
Oil Ring:	3/16" or 3 mm
Deck Thickness:	.185"
Valve Notches:	.300" Int., .190" Exh.
Maximum Fly Cut:	.360" Int., .260" Exh.
Max. Valve Sizes:	2.100" Int., 1.600" Exh.
Valve Angle:	22°
Pin Included:	tool steel P/N 42242 (.130" wall, 95 grams, 2.300" long)
Round Wire Locks:	P/N 42262 - .061" wide
Recommended Piston Clearance:	005" measured 1.100" from bottom of the oil ring

SEE PAGE 106 FOR CUSTOM PISTONS

Note: New part numbers are *ITALICIZED*.

PLATINUM SERIES PISTONS

SMALL BLOCK CHEVROLET LS SERIES

LS-1/LS-2/LS-6, LS-3/L-92, LS-7 FLAT TOP & DISH

- 2618 high strength material lightweight design
- Tool steel wrist pins included with round wire locks P/N 42262 (.061" wide)
- Offset wrist pin design
- Machined for reluctor wheel clearance
- 1.5, 1.5, 3mm ring package
- .200" deck thickness
- Forced pin oiling, pressure balance groove and precision pin fitting

Moly Coated Skirts

Part No.	Bore Size	Rod Length	Stroke	Compression Distance	Pin Diameter	Piston Wt / Gms	Piston & Pin Wt / Gms	Valve Pocket	Piston Ring Set
				-4cc FLAT TOP					
592007C-8	3.905"	6.098"	3.622"	1.340"	24mm/.945	430	525	LS-1,2,6	46107-8
592107C-8	3.905"	6.125"	3.622"	1.313"	.927	415	510	LS-1,2,6	46107-8
592207C-8	3.905"	6.125"	4.000"	1.115"	.927	393	488	LS-1,2,6	46107-8
592501C-8	4.001"	6.125"	3.622"	1.304"	.927	430	525	LS-1,2,3,6,92	46110-8
592510C-8	4.010"	6.125"	3.622"	1.304"	.927	433	528	LS-1,2,3,6,92	46111-8
592530C-8	4.030"	6.125"	3.622"	1.304"	.927	442	537	LS-1,2,3,6,92	46113-8
592565C-8	4.065"	6.125"	3.622"	1.304"	.927	455	550	LS-1,2,3,6,92	46116-8
592570C-8	4.070"	6.125"	3.622"	1.304"	.927	457	552	LS-1,2,3,6,92	46117-8
592605C-8	4.005"	6.125"	4.000"	1.115"	.927	388	483	LS-1,2,3,6,92	46110-8
592630C-8	4.030"	6.125"	4.000"	1.115"	.927	400	495	LS-1,2,3,6,92	46113-8
592670C-8	4.070"	6.125"	4.000"	1.115"	.927	412	507	LS-1,2,3,6,92	46117-8
				-5cc FLAT TOP					
592300C-8	4.125"	6.125"	4.000"	1.115"	.927	427	523	LS-1,2,3,6,7,92	46360-8
592305C-8	4.130"	6.125"	4.000"	1.115"	.927	429	525	LS-1,2,3,6,7,92	46360-8
				-10cc DISH					
592701C-8	4.001"	6.125"	4.000"	1.115"	.927	402	497	LS-1,2,3,6,92	46110-8
592705C-8	4.005"	6.125"	4.000"	1.115"	.927	405	500	LS-1,2,3,6,92	46110-8
592730C-8	4.030"	6.125"	4.000"	1.115"	.927	417	512	LS-1,2,3,6,92	46113-8
592765C-8	4.065"	6.125"	4.000"	1.115"	.927	432	527	LS-1,2,3,6,92	46116-8
592770C-8	4.070"	6.125"	4.000"	1.115"	.927	434	529	LS-1,2,3,6,92	46117-8
				-11cc DISH					
592400C-8	4.125"	6.125"	4.000"	1.115"	.927	422	518	LS-1,2,3,6,7,92	46360-8
592405C-8	4.130"	6.125"	4.000"	1.115"	.927	424	520	LS-1,2,3,6,7,92	46360-8
				-29cc DISH					
592807C-8	3.905"	6.125"	4.000"	1.115"	.927	357	452	LS-1,2,3,6,92	46107-8
592805C-8	4.005"	6.125"	4.000"	1.115"	.927	352	447	LS-1,2,3,6,92	46110-8
592830C-8	4.030"	6.125"	4.000"	1.115"	.927	389	484	LS-1,2,3,6,92	46113-8
592865C-8	4.065"	6.125"	4.000"	1.115"	.927	402	497	LS-1,2,3,6,92	46116-8
592870C-8	4.070"	6.125"	4.000"	1.115"	.927	404	499	LS-1,2,3,6,92	46117-8
592900C-8	4.125"	6.125"	4.000"	1.115"	.927	421	517	LS-1,2,3,6,7,92	46360-8
592905C-8	4.130"	6.125"	4.000"	1.115"	.927	423	519	LS-1,2,3,6,7,92	46360-8

Recommended piston clearance is .0045" measured 1.100" from bottom of the oil ring.

The root diameter of the ring grooves accomodates Manley rings and others which have the following radial thickness Top: .151" 2nd: .168" Oil: .136"

COMPRESSION RATIO CHART

Bore	Stroke	Cylinder Head "cc" 64	66	70	72
		-4cc & -5cc Flat Top			
3.905"	3.622"	10.2	10.0	9.5	9.3
3.905"	4.000"	11.2	11.0	10.4	10.2
4.001"	3.622"	10.6	10.4	9.8	9.6
4.005"	4.000"	11.7	11.4	10.9	10.7
4.010"	3.622"	10.7	10.5	9.9	9.7
4.030"	3.622"	10.8	10.6	10.1	9.9
4.030"	4.000"	11.9	11.6	11.1	10.9
4.065"	3.622"	11.0	10.7	10.2	10.0
4.070"	3.622"	11.1	10.8	10.3	10.1
4.070"	4.000"	12.1	11.8	11.3	11.1
4.125"	4.000"	12.3	12.0	11.5	11.3
4.130"	4.000"	12.4	12.1	11.6	11.4

Bore	Stroke	Cylinder Head "cc" 64	66	70	72
		-10cc & -11cc DISH			
4.001"	4.000"	10.8	10.6	10.1	9.9
4.005"	4.000"	10.9	10.7	10.2	10.0
4.030"	4.000"	11.1	10.8	10.3	10.1
4.065"	4.000"	11.3	11.0	10.5	10.3
4.070"	4.000"	11.4	11.1	10.6	10.4
4.125"	4.000"	11.6	11.3	10.8	10.6
4.130"	4.000"	11.7	11.4	10.9	10.5
		-29cc DISH			
3.905"	4.000"	8.7	8.5	8.2	8.1
4.005"	4.000"	9.1	8.9	8.6	8.5
4.030"	4.000"	9.2	9.0	8.7	8.6
4.065"	4.000"	9.3	9.1	8.8	8.7
4.070"	4.000"	9.4	9.2	8.9	8.8
4.125"	4.000"	9.6	9.4	9.1	9.0
4.130"	4.000"	9.7	9.5	9.2	9.1

Compression ratios are calculated at 0.00" deck clearence, a 9.240" deck height, and a .042" thick compressed head gasket.

PLATINUM SERIES PISTONS

SMALL BLOCK CHEVROLET
"DIRT" SERIES

4 1/8" BORE DART 13° HEAD FLAT TOP & MINI DOME

- *Forged 2618 high strength material*
- *Lightweight design*
- *Lateral gas ports included*
- *Round Wire Locks included - NO CHARGE*
- *Perfect ring groove to skirt squareness*
- *Other features include forced "double" pin oiling, pressure balance groove and precision pin fitting*
- *Full banded skirt design for increased skirt stability*

NEW

Note: These pistons are designed for use with .927" x 2.750" round wire chamfered wrist pins. Wrist pins are not included in set. Please specify if you require pins added separately.

Part No.	Bore Range	Rod Length	Stroke	Compression Distance	Weight Range	Deck Design
596100-8	4.125" - 4.185"	6.000"	4.000"	1.000"	427-465	Flat Top
596200-8	4.125" - 4.185"	6.000"	4.000"	1.000"	447-485*	Mini Dome
596300-8	4.125" - 4.185"	6.000"	3.875"	1.062"	430-470	Flat Top
596400-8	4.125" - 4.185"	6.000"	3.875"	1.062"	450-490*	Mini Dome

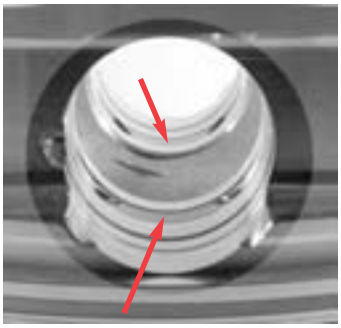
* Gram weight range calculated with .125 high dome.

ORDERING INFORMATION

1. Choose one of the above part numbers
2. Select finished bore size
3. Ring package - Specify ring package and radial depths
   Top: .043" or 1.2mm 2nd: .043", 1.5mm, or 1/16" Oil: 3mm
4. Select dome height if applicable - Max. .125" high
5. Select wrist pin P/N if needed.

COMMON FEATURES

Deck Thickness:	.250"
Valve Notches:	.320" Int. .250" Exh.
Maximum Fly Cut:	.320" Int., .250" Exh.
Max. Valve Sizes:	2.180" Int., 1.650" Exh.
Valve Angle:	13°
Round Wire Locks:	P/N 42272 .072" wide
Recommended Piston Clearance:	.005" measured .850" from bottom of the oil ring



Forced Double Pin Oiling with Trough

Brian Birkhofer
Multiple Dirt Late Model Winner
Pro Power Racing Engines

PLATINUM SERIES PISTONS

BIG BLOCK CHEVROLET

4.500" BORE FLAT TOP

- 2618 high strength material
- Lightweight design
- Full banded skirt for increased skirt stability
- Perfect ring groove to skirt squareness
- Pressure balance groove
- Tool steel pin included
- Spiral locks included
- Pin fitting included
- Suitable for superchargers, turbos, nitrous

Part No.	Bore Size	Rod Length	Stroke	Compression Distance	Piston Wt / Gms	Dome Volume	Piston Ring Set
696000-8	4.500"	6.135"	4.000"	1.645"	713	- 3.0 cc	46450-8
696030-8	4.530"	6.135"	4.000"	1.645"	721	- 3.0 cc	46453-8
696060-8	4.560"	6.135"	4.000"	1.645"	729	- 3.0 cc	46456-8
696080-8	4.600"	6.135"	4.000"	1.645"	755	- 3.0 cc	46458-8
696100-8	4.500"	6.385"	4.000"	1.395"	650	- 3.0 cc	46450-8
696130-8	4.530"	6.385"	4.000"	1.395"	660	- 3.0 cc	46453-8
696160-8	4.560"	6.385"	4.000"	1.395"	670	- 3.0 cc	46456-8
696180-8	4.600"	6.385"	4.000"	1.395"	695	- 3.0 cc	46458-8
696200-8	4.500"	6.135"	4.250"	1.520"	676	- 3.0 cc	46450-8
696230-8	4.530"	6.135"	4.250"	1.520"	692	- 3.0 cc	46453-8
696260-8	4.560"	6.135"	4.250"	1.520"	705	- 3.0 cc	46456-8
696280-8	4.600"	6.135"	4.250"	1.520"	732	- 3.0 cc	46458-8
696300-8	4.500"	6.385"	4.250"	1.270"	615	- 3.0 cc	46450-8
696330-8	4.530"	6.385"	4.250"	1.270"	632	- 3.0 cc	46453-8
696360-8	4.560"	6.385"	4.250"	1.270"	637	- 3.0 cc	46456-8
696380-8	4.600"	6.385"	4.250"	1.270"	665	- 3.0 cc	46458-8

The root diameter of the ring grooves accomodates Manley rings and others which have the following radial thickness
Top: .200" 2nd: .200" Oil: .170"

COMMON FEATURES

Top Ring:	1/16", .350" down
Second Ring:	1/16"
Oil Ring:	3/16"
Intake Valve Notch:	.300"
Exhaust Valve:	+.090"
Pin Included:	tool steel P/N 42220
	(.180" wall, 170 grams, 2.930" long, .990 dia.)
Spiral Locks:	P/N 42271 - .042" wide (4 per piston)
Recommended Piston Clearance:	.006" measured 1.100" from bottom of the oil ring

COMPRESSION RATIO CHART

Bore	Stroke	112 cc	118 cc	124 cc
4.500"	4.000"	9.0:1	8.7:1	8.4:1
4.530"	4.000"	9.1:1	8.8:1	8.5:1
4.560"	4.000"	9.3:1	8.9:1	8.6:1
4.600"	4.000"	9.4:1	9.0:1	8.7:1
4.500"	4.250"	9.6:1	9.2:1	8.8:1
4.530"	4.250"	9.7:1	9.3:1	8.9:1
4.560"	4.250"	9.8:1	9.4:1	9.0:1
4.600"	4.250"	9.9:1	9.5:1	9.1:1

All compression ratios are calculated at .010" deck clearance.

Pistons with 1.395" and 1.270" compression distances REQUIRE and are shipped with groove lock spacers.

SEE PAGE 106 FOR CUSTOM PISTONS

PLATINUM SERIES PISTONS

BIG BLOCK CHEVROLET

4.500" INVERTED DOME

- 2618 high strength material
- Lightweight design
- Full banded skirt for increased skirt stability
- Perfect ring groove to skirt squareness
- Pressure balance groove
- Tool steel pin included
- Spiral locks included
- Pin fitting included
- Suitable for superchargers, turbos, nitrous

Part No.	Bore Size	Rod Length	Stroke	Compression Distance	Piston Wt / Gms	Dome Volume	Piston Ring Set
696400-8	4.500"	6.135"	4.000"	1.645"	706	- 10 cc	46450-8
696430-8	4.530"	6.135"	4.000"	1.645"	724	- 10 cc	46453-8
696460-8	4.560"	6.135"	4.000"	1.645"	736	- 10 cc	46456-8
696480-8	4.600"	6.135"	4.000"	1.645"	757	- 10 cc	46458-8
696500-8	4.500"	6.385"	4.000"	1.395"	647	- 10 cc	46450-8
696530-8	4.530"	6.385"	4.000"	1.395"	660	- 10 cc	46453-8
696560-8	4.560"	6.385"	4.000"	1.395"	671	- 10 cc	46456-8
696580-8	4.600"	6.385"	4.000"	1.395"	695	- 10 cc	46458-8
696600-8	4.500"	6.135"	4.250"	1.520"	680	- 20 cc	46450-8
696630-8	4.530"	6.135"	4.250"	1.520"	700	- 20 cc	46453-8
696660-8	4.560"	6.135"	4.250"	1.520"	710	- 20 cc	46456-8
696680-8	4.600"	6.135"	4.250"	1.520"	724	- 20 cc	46458-8
696700-8	4.500"	6.385"	4.250"	1.270"	621	- 20 cc	46450-8
696730-8	4.530"	6.385"	4.250"	1.270"	634	- 20 cc	46453-8
696760-8	4.560"	6.385"	4.250"	1.270"	645	- 20 cc	46456-8
696780-8	4.600"	6.385"	4.250"	1.270"	668	- 20 cc	46458-8

The root diameter of the ring grooves accomodates Manley rings and others which have the following radial thickness
Top: .200" 2nd: .200" Oil: .170"

COMMON FEATURES

Top Ring:	1/16", .350" down
Second Ring:	1/16"
Oil Ring:	3/16"
Intake Valve Notch:	.300"
Exhaust Valve:	+.090"
Pin Included:	tool steel P/N 42220
	(.180" wall, 170 grams, 2.930" long, .990 dia.)
Spiral Locks:	P/N 42271 - .042" wide (4 per piston)
Recommended Piston Clearance:	.006" measured 1.100" from bottom of the oil ring

COMPRESSION RATIO CHART

Bore	Stroke	112 cc	118 cc	124 cc
4.500”	4.000”	8.6:1	8.3:1	8.0:1
4.530”	4.000”	8.7:1	8.4:1	8.1:1
4.560”	4.000”	8.8:1	8.5:1	8.2:1
4.600”	4.000”	8.9:1	8.6:1	8.3:1
4.500”	4.250”	8.6:1	8.3:1	8.0:1
4.530”	4.250”	8.7:1	8.4:1	8.1:1
4.560”	4.250”	8.8:1	8.5:1	8.2:1
4.600”	4.250”	8.9:1	8.6:1	8.3:1

All compression ratios are calculated at .010” deck clearance.

Pistons with 1.395” and 1.270” compression distances REQUIRE and are shipped with groove lock spacers.

SEE PAGE 106 FOR CUSTOM PISTONS

PLATINUM SERIES PISTONS

BIG BLOCK CHEVROLET

4.500" BORE HOLLOW DOME

- 2618 high strength material
- Lightweight design
- Perfect for drag race applications
- Exact ring groove to skirt squareness
- Full banded skirt design for increased skirt stability

Part No.	Bore Size	Rod Length	Stroke	Compression Distance	Piston Wt / Gms	Dome Volume	Piston Ring Set
697000-8	4.500"	6.385"	4.000"	1.395"	677	48 cc	46450-8
697030-8	4.530"	6.385"	4.000"	1.395"	690	48 cc	46453-8
697060-8	4.560"	6.385"	4.000"	1.395"	705	48 cc	46456-8
697080-8	4.600"	6.385"	4.000"	1.395"	725	48 cc	46458-8
697100-8	4.500"	6.535"	4.000"	1.245"	651	48 cc	46450-8
697130-8	4.530"	6.535"	4.000"	1.245"	664	48 cc	46453-8
697160-8	4.560"	6.535"	4.000"	1.245"	667	48 cc	46456-8
697180-8	4.600"	6.535"	4.000"	1.245"	692	48 cc	46458-8
697200-8	4.500"	6.135"	4.250"	1.520"	713	48 cc	46450-8
697230-8	4.530"	6.135"	4.250"	1.520"	726	48 cc	46453-8
697260-8	4.560"	6.135"	4.250"	1.520"	735	48 cc	46456-8
697280-8	4.600"	6.135"	4.250"	1.520"	755	48 cc	46458-8
697300-8	4.500"	6.385"	4.250"	1.270"	658	48 cc	46450-8
697330-8	4.530"	6.385"	4.250"	1.270"	672	48 cc	46453-8
697360-8	4.560"	6.385"	4.250"	1.270"	680	48 cc	46456-8
697380-8	4.600"	6.385"	4.250"	1.270"	697	48 cc	46458-8
697400-8	4.500"	6.535"	4.250"	1.120"	615	48 cc	46450-8
697430-8	4.530"	6.535"	4.250"	1.120"	627	48 cc	46453-8
697460-8	4.560"	6.535"	4.250"	1.120"	635	48 cc	46456-8
697480-8	4.600"	6.535"	4.250"	1.120"	655	48 cc	46458-8

The root diameter of the ring grooves accomodates Manley rings and others which have the following radial thickness
Top: .200" 2nd: .200" Oil: .170"

COMMON FEATURES

Top Ring:	1/16", .300" down except on 1.120" CD is .270" down
Second Ring:	1/16"
Oil Ring:	3/16"
Intake Valve Notch:	.300"
Exhaust Valve:	+.090"
Pin Included:	tool steel P/N 42219
	(.150" wall, 147 grams, 2.930" long, .990 dia.)
Spiral Locks:	P/N 42271 - .042" wide (4 per piston)
Recommended Piston Clearance:	.006" measured 1.100" from bottom of the oil ring

COMPRESSION RATIO CHART

Bore	Stroke	112 cc	118 cc	124 cc
4.500"	4.000"	14.4:1	13.4:1	12.6:1
4.530"	4.000"	14.6:1	13.6:1	12.8:1
4.560"	4.000"	14.7:1	13.7:1	12.9:1
4.600"	4.000"	15.0:1	14.0:1	13.1:1
4.500"	4.250"	15.2:1	14.2:1	13.3:1
4.530"	4.250"	15.4:1	14.4:1	13.5:1
4.560"	4.250"	15.6:1	14.6:1	13.6:1
4.600"	4.250"	15.8:1	14.8:1	13.8:1

All compression ratios are calculated at .010" deck clearance.

Pistons with 1.395" and shorter compression distances REQUIRE and are shipped with groove lock spacers.

SEE PAGE 106 FOR CUSTOM PISTONS

PLATINUM SERIES PISTONS

CHRYSLER 5.7L HEMI

9.3cc DOME & FLAT TOP

Call for 6.1L HEMI Applications

NEW

Moly Coated Skirts

- *Forged 2618 high strength material lightweight design*
- *2.300" X .130" wall tool steel pin included - integral to the piston design*
- *Offset wrist pin design*
- *Round Wire locks and Tool Steel Wrist Pins included - NO CHARGE*
- *1.5, 1.5, 3mm ring package*
- *Other features include forced pin oiling, pressure balance groove and precision pin fitting*
- *Full banded skirt design for increased skirt stability*

Note: These pistons are designed for connecting rods with .927 diamter floating wrist pins.

Part No.	Bore Size	Rod Length	Stroke	Compression Distance	Pin Diameter	Piston Wt / Gms	Piston & Pin Wt / Gms	Piston Ring Set
				9.3cc DOME				
597400C-8	3.917" / 99.5mm	6.240"	3.579" / 90.9mm	1.220"	.927"	425	520	46120-8
597405C-8	3.922" / 99.63mm	6.240"	3.579" / 90.9mm	1.220"	.927"	427	522	46121-8
597420C-8	3.937" / 100mm	6.240"	3.579" / 90.9mm	1.220"	.927"	435	530	46122-8
				FLAT TOP				
597500C-8	3.917" / 99.5mm	6.240"	3.579" / 90.9mm	1.220"	.927"	400	495	46120-8
597505C-8	3.922" / 99.63mm	6.240"	3.579" / 90.9mm	1.220"	.927"	402	497	46121-8
597520C-8	3.937" / 100mm	6.240"	3.579" / 90.9mm	1.220"	.927"	408	503	46122-8

The root diameter of the ring grooves accomodates Manley rings and others which have the following radial thickness
Top: .151" 2nd: .168" Oil: .136"

COMMON FEATURES

Top Ring:	1.5 mm, .200" down
Second Ring:	1.5 mm
Oil Ring:	3 mm
Deck Thickness:	Domed .180" / Flat Top .200"
Valve Notches:	None
Pin Included:	tool steel P/N 42242 (.130" wall, 95 grams, 2.300" long)
Round Wire Locks:	P/N 42262 - .061" wide
Recommended Piston Clearance:	.0045" measured 1.100" from bottom of the oil ring.

COMPRESSION RATIO CHART

Bore	Cylinder Head	9.3cc Dome	Flat Top
3.917" / 99.5mm	5.7 (85cc)	9.63:1	8.75:1
3.922" / 99.63mm	5.7 (85cc)	9.65:1	8.77:1
3.937" / 100mm	5.7 (85cc)	9.72:1	8.83:1
3.917" / 99.5mm	6.1 (74.5cc)	10.90:1	9.76:1
3.922" / 99.63mm	6.1 (74.5cc)	10.92:1	9.78:1
3.937" / 100mm	6.1 (74.5cc)	11.00:1	9.85:1

Compression ratios are calculated at .003" deck clearance, a 3.941" head gasket ID with a .028" compressed thickness.

PLATINUM SERIES PISTONS

FORD 4.6L & 5.4L (3 VALVE)

6.5 cc & 14 cc DISH PISTONS

- 3 *2618 high strength material lightweight design*
- 3 *1.2 mm offset wrist pin location for quiet start-ups. Mimics OEM design*
- 3 *Perfect ring groove to skirt squareness*
- 3 *Pressure balance groove*
- 3 *2.500" length tool steel pin included with round wire locks*
- 3 *Full banded skirt design for increased skirt stability*

Part No.	Bore Size	Rod Length	Stroke	Compression Distance	Piston Wt / Gms	Piston & Pin Wt / Gms	Piston Ring Set
			6.5 cc DISH				
594300C-8	3.552"	5.933"	3.543"	1.220"	352	440	46600-8
594320C-8	3.572"	5.933"	3.543"	1.220"	362	450	46620-8
594330C-8	3.582"	5.933"	3.543"	1.220"	367	455	46630-8
			14 cc DISH TURBO SERIES				
594500C-8	3.552"	5.933"	3.543"	1.220"	360	448	46600-8
594520C-8	3.572"	5.933"	3.543"	1.220"	370	458	46620-8
594530C-8	3.582"	5.933"	3.543"	1.220"	375	463	46630-8

The root diameter of the ring grooves accomodates Manley rings and others which have the following radial thicknes
Top: .162" 2nd: .152" Oil: .145"

COMMON FEATURES

Dome Volume:	-6.5 cc or -14 cc
Compression Ratios:	6.5 cc Dish: 9.65 : 1 w/ 51 cc & 3.543" Stroke 14 cc Dish: 8.75 : 1 w/ 51 cc & 3.543" Stroke
Deck Thickness:	.185"
Top Ring:	1.5 mm, .220" down
Second Ring:	1.5 mm
Oil Ring:	3 mm
Pin Included:	tool steel P/N 42203 (.120" wall, 88 grams, 2.500" long)
Round Wire Locks:	P/N 42270 - .061" wide
Recommended Piston Clearance:	.003" measured .850" from bottom of the oil ring

FORD 4.6L & 5.4L SOHC & DOHC (2 & 4 VALVE) AND 5.4L (3 VALVE)

FLAT TOP PISTONS

- 3 *2618 high strength material lightweight design*
- 3 *1.2 mm offset wrist pin location for quiet start-ups. Mimics OEM design*
- 3 *Perfect ring groove to skirt squareness*
- 3 *Pressure balance groove*
- 3 *2.500" length tool steel pin included with round wire locks*
- 3 *Full banded skirt design for increased skirt stability*

Part No.	Bore Size	Rod Length	Stroke	Compression Distance	Piston Wt / Gms	Piston & Pin Wt / Gms	Piston Ring Set
594000C-8	3.552"	5.933" / 6.657"	3.543" / 4.165"	1.220"	335	423	46600-8
594020C-8	3.572"	5.933" / 6.657"	3.543" / 4.165"	1.220"	345	433	46620-8
594030C-8	3.582"	5.933" / 6.657"	3.543" / 4.165"	1.220"	350	438	46630-8
			STROKER SERIES				
595000C-8	3.552"	5.850"	3.750"	1.200"	TBA	TBA	46600-8
595020C-8	3.572"	5.850"	3.750"	1.200"	TBA	TBA	46620-8
595030C-8	3.582"	5.850"	3.750"	1.200"	TBA	TBA	46630-8

The root diameter of the ring grooves accomodates Manley rings and others which have the following radial thickness
Top: .162" 2nd: .152" Oil: .145"

The pistons above will also work for the 6.8L V10 modular.

COMMON FEATURES

Dome Volume:	0 cc
Compression Ratio:	10.96:1 w/ 51 cc & 3.543" Stroke
Top Ring:	1.5 mm, .220" down
Second Ring:	1.5 mm
Oil Ring:	3 mm
Deck Thickness:	.185"
Pin Included:	tool steel P/N 42203 (.120" wall, 88 grams, 2.500" long)
Round Wire Locks:	P/N 42270 - .061" wide
Recommended Piston Clearance:	.003" measured .850" from bottom of the oil ring

Note: New part numbers are *ITALICIZED*.

SEE PAGE 106 FOR CUSTOM PISTONS

PLATINUM SERIES PISTONS

FORD 4.6L & 5.4L SOHC & DOHC (2 & 4 VALVE) AND 5.4L (3 VALVE)

11 cc DISH PISTON

- 2618 high strength material lightweight design
- 1.2 mm offset wrist pin location for quiet start-ups. Mimics OEM design
- Perfect ring groove to skirt squareness
- Pressure balance groove
- 2.500" length tool steel pin included round wire locks
- Full banded skirt design for increased skirt stability

Part No.	Bore Size	Rod Length	Stroke	Compression Distance	Piston Wt / Gms	Piston & Pin Wt / Gms	Piston Ring Set
594100C-8	3.552"	5.933" / 6.657"	3.543" / 4.165"	1.220"	350	438	46600-8
594120C-8	3.572"	5.933" / 6.657"	3.543" / 4.165"	1.220"	355	443	46620-8
594130C-8	3.582"	5.933" / 6.657"	3.543" / 4.165"	1.220"	362	450	46630-8
			STROKER SERIES				
595100C-8	3.552"	5.850"	3.750"	1.200"	346	434	46600-8
595120C-8	3.572"	5.850"	3.750"	1.200"	353	441	46620-8
595130C-8	3.582"	5.850"	3.750"	1.200"	358	446	46630-8

The root diameter of the ring grooves accomodates Manley rings and others which have the following radial thickness
Top: .162" 2nd: .152" Oil: .145"

The pistons above will also work for the 6.8L V10 modular.

COMMON FEATURES

Dome Volume:	-11 cc	Pin Included:	tool steel P/N 42203 (.120" wall, 88 grams, 2.500" long)
Compression Ratio:	9.38:1 w/ 51 cc & 3.543" Stroke	Round Wire Locks:	P/N 42270 - .061" wide
Deck Thickness:	.185"	Recommended Piston Clearance:	.003" measured .850" from bottom of the oil ring
Top Ring:	1.5 mm, .220" down		
Second Ring:	1.5 mm		
Oil Ring:	3 mm		

FORD 4.6L & 5.4L SOHC & DOHC (2 & 4 VALVE) AND 5.4L (3 VALVE)

18 cc SPHERICAL DISH PISTON

- 2618 high strength material lightweight design
- 1.2 mm offset wrist pin location for quiet start-ups. Mimics OEM design
- Perfect ring groove to skirt squareness
- Pressure balance groove
- 2.500" length tool steel pin included with round wire locks
- Full banded skirt design for increased skirt stability

Part No.	Bore Size	Rod Length	Stroke	Compression Distance	Piston Wt / Gms	Piston & Pin Wt / Gms	Piston Ring Set
594200C-8	3.552"	5.933" / 6.657"	3.543" / 4.165"	1.220"	384	472	46600-8
594220C-8	3.572"	5.933" / 6.657"	3.543" / 4.165"	1.220"	390	478	46620-8
594230C-8	3.582"	5.933" / 6.657"	3.543" / 4.165"	1.220"	393	481	46630-8
			STROKER SERIES				
595200C-8	3.552"	5.850"	3.750"	1.200"	372	460	46600-8
595220C-8	3.572"	5.850"	3.750"	1.200"	380	468	46620-8
595230C-8	3.582"	5.850"	3.750"	1.200"	383	471	46630-8

The root diameter of the ring grooves accomodates Manley rings and others which have the following radial thickness:
Top: .162" 2nd: .152" Oil: .145"

The pistons above will also work for the 6.8L V10 modular.

COMMON FEATURES

Dome Volume:	-18 cc	Round Wire Locks:	P/N 42270 - .061" wide
Compression Ratio:	8.53:1 w/ 51 cc & 3.543" Stroke	Recommended Piston Clearance:	.003" measured .850" from bottom of the oil ring
Top Ring:	1.5 mm, .220" down		
Second Ring:	1.5 mm		
Oil Ring:	3 mm		
Pin Included:	tool steel P/N 42203 (.120" wall, 88 grams, 2.500" long)		

PLATINUM SERIES PISTONS

FORD 4.6L & 5.4L SOHC & DOHC (2 & 4 VALVE) AND 5.4L (3 VALVE)

23 cc DISH PISTON

- 2618 high strength material lightweight design
- 1.2 mm offset wrist pin location for quiet start-ups. Mimics OEM design
- Perfect ring groove to skirt squareness
- Pressure balance groove
- 2.500" length tool steel pin included with round wire locks
- Full banded skirt design for increased skirt stability

Part No.	Bore Size	Rod Length	Stroke	Compression Distance	Piston Wt / Gms	Piston & Pin Wt / Gms	Piston Ring Set
594400C-8	3.552"	5.933" / 6.657"	3.543" / 4.165"	1.220"	351	439	46600-8
594420C-8	3.572"	5.933" / 6.657"	3.543" / 4.165"	1.220"	359	447	46620-8
594430C-8	3.582"	5.933" / 6.657"	3.543" / 4.165"	1.220"	363	451	46630-8
			STROKER SERIES				
595400C-8	3.552"	5.850"	3.750"	1.200"	336	424	46600-8
595420C-8	3.572"	5.850"	3.750"	1.200"	342	430	46620-8
595430C-8	3.582"	5.850"	3.750"	1.200"	346	434	46630-8

The root diameter of the ring grooves accomodates Manley rings and others which have the following radial thickness
Top: .162" 2nd: .152" Oil: .145"

The pistons above will also work for the 6.8L V10 modular.

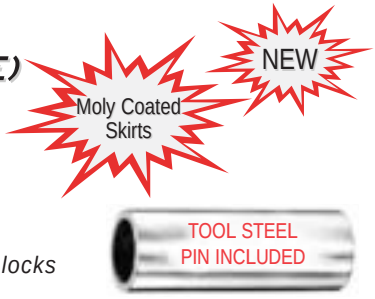
COMMON FEATURES

Dome Volume:	-23 cc
Compression Ratio:	8.15:1 w/ 51 cc & 3.543" Stroke
Deck Thickness:	.185"
Top Ring:	1.5 mm, .220" down
Second Ring:	1.5 mm
Oil Ring:	3 mm
Pin Included:	tool steel P/N 42203 (.120" wall, 88 grams, 2.500" long)
Round Wire Locks:	P/N 42270 - .061" wide
Recommended Piston Clearance:	.003" measured .850" from bottom of the oil ring

FORD 4.6L STROKER SOHC & DOHC (2 & 4 VALVE)

28 cc DISH PISTON

- 2618 high strength material lightweight design
- 1.2 mm offset wrist pin location for quiet start-ups. Mimics OEM design
- Perfect ring groove to skirt squareness
- Pressure balance groove
- 2.500" length tool steel pin included with round wire locks
- Full banded skirt design for increased skirt stability



Part No.	Bore Size	Rod Length	Stroke	Compression Distance	Piston Wt / Gms	Piston & Pin Wt / Gms	Piston Ring Set
595600C-8	3.552"	5.850"	3.750"	1.200"	341	429	46600-8
595620C-8	3.572"	5.850"	3.750"	1.200"	347	435	46620-8
595630C-8	3.582"	5.850"	3.750"	1.200"	351	439	46630-8

The root diameter of the ring grooves accomodates Manley rings and others which have the following radial thickness
Top: .162" 2nd: .152" Oil: .145"

The pistons above will also work for the 6.8L V10 modular.

COMMON FEATURES

Dome Volume:	-28 cc
Compression Ratio:	8.05:1 w/ 51 cc & 3.750" Stroke
Deck Thickness:	.185"
Top Ring:	1.5 mm, .220" down
Second Ring:	1.5 mm
Oil Ring:	3 mm
Pin Included:	tool steel P/N 42203 (.120" wall, 88 grams, 2.500" long)
Round Wire Locks:	P/N 42270 - .061" wide
Recommended Piston Clearance:	.003" measured .850" from bottom of the oil ring

SEE PAGE 106 FOR CUSTOM PISTONS

PLATINUM SERIES PISTONS

FORD 4.6L & 5.4L SOHC & DOHC (2 & 4 VALVE) AND 5.4L (3 VALVE)

HIGH SILICON "STREET MASTER" BUDGET VERSION
18 cc SPHERICAL DISH PISTON

- *Perfect blend of economy and high performance*
- *1.2 mm offset wrist pin location for quiet start-ups. Mimics OEM design*
- *Perfect ring groove to skirt squareness*
- *Pressure balance groove*
- *2.500" length tool steel pin included with round wire locks*
- *Full banded skirt design for increased skirt stability*

Part No.	Bore Size	Rod Length	Stroke	Compression Distance	Piston Wt / Gms	Piston & Pin Wt / Gms	Piston Ring Set
494200-8	3.552"	5.933" / 6.657"	3.543" / 4.165"	1.220"	369	457	46600-8
494220-8	3.572"	5.933" / 6.657"	3.543" / 4.165"	1.220"	376	464	46620-8
494230-8	3.582"	5.933" / 6.657"	3.543" / 4.165"	1.220"	379	467	46630-8

The root diameter of the ring grooves accomodates Manley rings and others which have the following radial thickness:

Top: .162" 2nd: .152" Oil: .145"

The pistons above will also work for the 6.8L V10 modular.

COMMON FEATURES

Dome Volume: -18 cc
Compression Ratio: 8.53:1 w/ 51 cc & 3.543" Stroke
Top Ring: 1.5 mm, .220" down
Second Ring: 1.5 mm
Oil Ring: 3 mm
Pin Included: tool steel P/N 42203 (.120" wall, 88 grams, 2.500" long)

Round Wire Locks: P/N 42270 - .061" wide
Recommended Piston Clearance: .0035" measured .850" from bottom of the oil ring

FORD MODULAR COMPRESSION RATIOS

BORE	STROKE	42cc	51cc	52cc
Flat Top 4.6/5.4L				
3.552	3.543	12.65	10.86	10.69
3.572	3.543	12.78	10.97	10.80
3.582	3.543	12.85	11.02	10.85
3.552	4.165	11.01	9.83	9.72
3.572	4.165	11.09	9.91	9.79
3.582	4.165	11.13	9.95	9.83
11cc 4.6/5.4L Std Dish				
3.552	3.543	10.53	9.29	9.18
3.572	3.543	10.64	9.39	9.27
3.582	3.543	10.69	9.43	9.31
3.552	3.750	11.09	9.78	9.65
3.572	3.750	11.20	9.88	9.75
3.582	3.750	11.25	9.92	9.80
3.552	4.165	9.61	8.72	8.64
3.572	4.165	9.68	8.79	8.70
3.582	4.165	9.72	8.83	8.74
18cc 4.6/5.4L Spherical Dish				
3.552	3.543	9.54	8.53	8.44
3.572	3.543	9.63	8.62	8.52
3.582	3.543	9.68	8.66	8.56
3.552	3.750	10.04	8.97	8.87
3.572	3.750	10.14	9.06	8.96
3.582	3.750	10.19	9.11	9.00
3.552	4.165	8.91	8.15	8.08
3.572	4.165	8.97	8.22	8.14
3.582	4.165	9.01	8.25	8.17

4.6L Stock Stroke 3.543 using 5.933 Connecting Rod and 1.220 C/H
4.6L Stroker 3.750 using 5.850 Connecting Rod and 1.200 C/H
5.4L Stock Stroke 4.165 using 6.657 Connecting Rod and 1.220 C/H.

BORE	STROKE	42cc	51cc	52cc
23cc 4.6/5.4L Std Dish				
3.552	3.543	8.95	8.07	7.98
3.572	3.543	9.04	8.15	8.06
3.582	3.543	9.08	8.19	8.10
3.552	3.750	9.41	8.48	8.39
3.572	3.750	9.51	8.57	8.47
3.582	3.750	9.55	8.61	8.52
3.552	4.165	8.47	7.79	7.73
3.572	4.165	8.53	7.85	7.79
3.582	4.165	8.57	7.89	7.82
28cc 4.6L Std Dish				
3.552	3.750	8.87	8.05	7.97
3.572	3.750	8.96	8.13	8.05
3.582	3.750	9.00	8.17	8.09
6.5cc 4.6L 3V Std Dish				
3.552	3.543		9.86	
3.572	3.543		9.95	
3.582	3.543		10.00	
14cc 4.6L 3V Std Dish				
3.552	3.543		8.94	
3.572	3.543		9.03	
3.582	3.543		9.07	

Head Gasket Bore 3.620
Compressed Gasket Thickness .036

4.6L Deck Clearence .008
5.4L Deck Clearence .120

42cc Combustion Chamber is 99-up PI 2V
51cc Combustion Chamber is 92-98 2V & 04-up 3V
52cc Combustion Chamber is 93-up 4V

PLATINUM SERIES PISTONS

ACURA / HONDA

Moly Coated Skirts

- 3 *2618 high strength material*
- 3 *Lightweight design*
- 3 *Tool steel pin included - integral to the piston design*
- 3 *Perfect ring groove to skirt squareness*
- 3 *Roundwire locks included - NO CHARGE*
- 3 *Pressure balance groove*
- 3 *Rings included - NO CHARGE*

Part No.	Bore Size mm	Over Size	Rod Length	Stroke	Compression Distance	Dome Volume(cc)	Compression Ratio	Piston Type	Piston Wt / Gms	Included Ring Set
Acura Integra GSR 94-01 - B18C1 DOHC V-Tec .827"/21mm x 2.250" Pin										
600000C-4	81.0	STD	5.433"	3.433"	1.181"	-9.3	9.0:1	Dish	290	46810-4
600005C-4	81.5	+.5mm	5.433"	3.433"	1.181"	-9.3	9.0:1	Dish	294	46815-4
600100C-4	81.0	STD	5.433"	3.433"	1.181"	1.2	11.0:1	Dome	293	46810-4
600105C-4	81.5	+.5mm	5.433"	3.433"	1.181"	1.2	11.0:1	Dome	297	46815-4
600200C-4	81.0	STD	5.433"	3.433"	1.195"	6.7	12.5:1	Dome	295	46810-4
600205C-4	81.5	+.5mm	5.433"	3.433"	1.195"	6.7	12.5:1	Dome	299	46815-4
Acura Integra Type R 97-00 - B18C5 DOHC V-Tec .827"/21mm x 2.250" Pin										
601005C-4	81.5	+.5mm	5.433"	3.433"	1.195"	3.4	11.5:1	Dome	315	46815-4
601105C-4	81.5	+.5mm	5.433"	3.433"	1.195"	-9.8	9.0:1	Dish	294	46815-4
Acura RSX 02-Up - K20A-A2-A3 DOHC V-Tec .866"/22mm x 2.500" Pin										
610000C-4	86.0	STD	5.472"	3.386"	1.181"	-6.5	9.0:1	Dish	319	46860-4
610100C-4	86.0	STD	5.472"	3.386"	1.181"	8.4	11.5:1	Dome	324	46860-4
610200C-4	86.0	STD	5.472"	3.386"	1.181"	12.5	12.5:1	Dome	329	46860-4
Honda CRV 97-00 - B20B4 w/ B16A1-A2-A3 Head .827"/21mm x 2.250" Pin										
602000C-4	84.0	STD	5.394"	3.504"	1.181"	-11.9	9.0:1	Dish	299	46840-4
602005C-4	84.5	+.5mm	5.394"	3.504"	1.181"	-11.9	9.0:1	Dish	312	46845-4
602010C-4	85.0	+1.0mm	5.394"	3.504"	1.181"	-11.9	9.0:1	Dish	325	46850-4
602100C-4	84.0	STD	5.394"	3.504"	1.181"	4.8	12.5:1	Dome	318	46840-4
602105C-4	84.5	+.5mm	5.394"	3.504"	1.181"	4.8	12.5:1	Dome	331	46845-4
602110C-4	85.0	+1.0mm	5.394"	3.504"	1.181"	4.8	12.5:1	Dome	344	46850-4
Honda CRV 02-Up - K24A w/ K20A-A2-A3 Head DOHC V-Tec .866"/22mm x 2.500" Pin										
611000C-4	87.0	STD	5.984"	3.897"	1.181"	-17.9	9.0:1	Dish	334	46870-4
611100C-4	87.0	STD	5.984"	3.897"	1.181"	-1.0	11.5:1	Flat Top	339	46870-4
611200C-4	87.0	STD	5.984"	3.897"	1.181"	4.5	12.5:1	Dome	344	46870-4
Honda Del Sol 93-97/Civic SI 99-00 - B16A1-A2-A3 DOHC V-Tec .827"/21mm x 2.250" Pin										
603000C-4	81.0	STD	5.290"	3.047"	1.181"	8.0	11.0:1	Dome	310	46810-4
603005C-4	81.5	+.5mm	5.290"	3.047"	1.181"	8.0	11.0:1	Dome	316	46815-4
603100C-4	81.0	STD	5.290"	3.047"	1.181"	-2.2	9.8:1	Flat Top	291	46810-4
603105C-4	81.5	+.5mm	5.290"	3.047"	1.181"	-2.2	9.8:1	Flat Top	297	46815-4

PLATINUM SERIES PISTONS

MITSUBISHI / SUBARU / TOYOTA

- *2618 high strength material; Lightweight design*
- *Tool steel pin included - integral to the piston design*
- *Pressure balance groove*
- *Roundwire locks included - NO CHARGE*
- *Rings included - NO CHARGE*

Moly Coated Skirts

Part No.	Bore Size mm	Over Size	Rod Length	Stroke	Compression Distance	Dome Volume(cc)	Compression Ratio	Piston Type	Piston Wt / Gms	Included Ring Set
Mitsubishi Eclipse GS/GST/GSX-Eagle Talon TSi 90-93.5 (6 Bolt) - 4G63/4G63T .827"/21mm x 2.250" Pin										
605005C-4	85.5	+.5mm	5.905"	3.465"	1.375"	-12.1	8.5:1	Dish	344	46855-4
Mitsubishi Eclipse GST/GSX-Eagle Talon TSi 93.5-99 (7 Bolt) - 4G63/4G63T Evo VIII, IX 03-06 4G63T .866"/22mm x 2.250" Pin										
606000C-4	85	STD	5.905"	3.465"	1.375"	-12.1	8.5:1	Dish	337	46850-4
606005C-4	85.5	+.5mm	5.905"	3.465"	1.375"	-12.1	8.5:1	Dish	341	46855-4
Mitsubishi Stroker 90-93.5 (6 Bolt) - 4G63/4G63T .827"/21mm x 2.250" Pin										
607005C-4	85.5	+.5mm	5.905"	3.937"	1.130"	-22.1	8.5:1	Dish	300	46855-4
Mitsubishi Stroker 93.5-99 (7 Bolt) - 4G63/4G63T - Evo VIII, IX Stroker 03-06 .866"/22mm x 2.250" Pin										
608000C-4	85	STD	5.905"	3.937"	1.130"	-22.1	8.5:1	Dish	291	46850-4
608005C-4	85.5	+.5mm	5.905"	3.937"	1.130"	-22.1	8.5:1	Dish	295	46855-4
Mitsubishi 4G64 w/ 4G63 Head 95-99 .866"/22mm x 2.250" Pin										
613000C-4	86.5	STD	5.905"	3.937"	1.375"	-23.5	8.5:1	Dish	TBA	46865-4
613005C-4	87	+.5mm	5.905"	3.937"	1.375"	-23.5	8.5:1	Dish	TBA	46870-4
Mitsubishi EVO X 08-Up - 4B11T .9055"/23mm x 2.250" Pin										
614000C-4	86	STD	5.656"	3.386"	1.313"	-5	9.0:1	Dish	TBA	46860-4
614005C-4	86.5	+.5mm	5.656"	3.386"	1.313"	-5	9.0:1	Dish	TBA	46865-4
Subaru WRX Sti 2004-Up - EJ257 .9055"/23mm x 2.500" Pin										
612000C-4	99.5	STD	5.141"	3.110"	1.209"	-22	8.5:1	Dish	TBA	46995-4
612005C-4	100	+.5mm	5.141"	3.110"	1.209"	-22	8.5:1	Dish	TBA	461000-4
Subaru WRX 1998-Up - EJ20 .9055"/23mm x 2.500" Pin										
615005C-4	92.5	+.5mm	5.137"	2.952"	1.285"	-12	8.5:1	Dish	TBA	46925-4
Toyota Supra Turbo 93-98 - 2JZGTE 3.0L .866"/22mm x 2.500" Pin										
609005C-6	86.5	+.5mm	5.590"	3.386"	1.338"	-14	8.5:1	Dish	355	46865-6

Groove lock spacers are supplied with all 1.130" CD pistons.

Andrew "ACP" Comrie-Picard

Mitsubishi Evo IX Rally Car

Slowboy Racing

Note: New part numbers are *ITALICIZED*.

PLATINUM SERIES PISTONS

PLATINUM PISTONS INCREMENTAL SIZES

Manley Performance will manufacture incremental bore sizes of any listed catalog piston with reasonably short lead times. The minimum quantity is eight pieces.

The ordering process is as simple as 1 - 2 - 3 !

1. Select the catalog part number you wish manufactured with the singular exception of the final size.
2. Tell us the bore size of your block. We will manufacture the exact piston number you have selected except with proper clearance for your stated block dimension.
3. You will be billed by our forging number, not the catalog part number.

CUSTOM PLATINUM PISTONS

Manley Performance inventories the piston forgings listed below to manufacture custom pistons for original equipment engine producers, private label engine part suppliers and volume performance engine builders. We can also produce a forging within ten weeks for any other application a customer may desire.

CUSTOM BLANK FORGING NUMBERS

Part No.	Bore Range	Description	Valve Angle	Wrist Pin Length
581200-4	80.5mm - 88.0mm	Sport Compact Dish, Flat Top, Dome	Factory	2.250" / 2.500"
581400-8	3.900" - 4.100"	Small Block Chevy LS-1 Flat Top	15° - 18°	2.300" / 2.500"
581000-8	4.000" - 4.155"	Small Block Chevy & Flat Top	21° - 23°	2.300"
583000-8	4.125" - 4.250"	Small Block Chevy Flat or Dish; Oldsmobile	13°	2.750" / 2.950"
589000-8	4.000" - 4.060"	Small Block Chevy Formula Won	21° - 23°	2.300"
586000-8	4.470" - 4.625"	Big Block Chevy Flat Top & Inverted Dome	Factory	2.930"
581100-8	4.500" - 4.600"	Big Block Chevy Hollow Dome	Factory	2.930"
588000-8	3.550" - 3.700"	Ford 4.6L and 5.4L 2618 Material	Factory	2.500"
488000-8	3.550" - 3.700"	Ford 4.6L and 5.4L High Silicon "Street Master" Material	Factory	2.500"

MINIMUM QUANTITIES

Minimum quantities depend on the variance from pistons we have previously produced, but in general reasonably small numbers such as 80 pieces can be manufactured on a one time order basis. With an annual contract, even smaller monthly releases such as 40 pieces are possible.

SELECTED PISTON PINS

Manley Performance carries in stock the following piston pins to support our custom blank forging inventory.

Forging No.	Piston Pin Selection
581200	42203 - 42207 - 42225 - 42243 - 42251
581400	42200 - 42204 - 42215 - 42216 - 42217 42218 - 42228 - 42241 - 42242
581000	42215 - 42216 - 42217 - 42218 - 42241 - 42242
583000	42210 - 42211 - 42213 - 42214 - 42231
589000	42215 - 42241
586000	42201 - 42202 - 42219 - 42220
581100	42201 - 42202 - 42219 - 42220
588000	42203 - 42207 - 42227 - 42230
488000	42203 - 42207 - 42227 - 42230

Please refer to page 108 for piston pin detailed information

GROOVE LOCK SPACERS

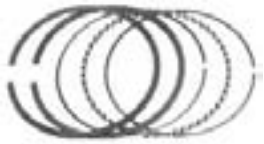
Should your custom Platinum Piston requirements necessitate the wrist pin hole break into the oil ring groove, we can widen the oil ring groove and incorporate a grove lock spacer in one of the following sizes listed below.

Part No.	Description
46387-8	85 mm to 85.5 mm
46391-8	3.552" to 3.582" Bore
46393-8	3.700" Bore
46397-8	3.905" Bore
46400-8	3.990" to 4.060" Bore
46401-8	4.125" to 4.155" Bore
46402-8	4.470" Bore
46403-8	4.500" to 4.560" Bore
46404-8	4.600" to 4.625" Bore

PISTON RING SETS

3 *Top Ring: High performance ductile iron with plasma moly in-lay*
3 *Second Ring: Reverse twist cast iron*
3 *Oil Ring: Three piece, standard tension, full oil return*

* Set contains premium steel top rings.



Part No.	Bore Size	File Fit / Drop In	Ring Widths	Oil Ring Type
			3.905" CHEVROLET LS-1	
46107-8	3.905"	File Fit	1.5 mm x 1.5 mm x 3 mm	Standard Tension (9-13 lbs.)
			4" CHEVROLET and FORD	
46352-8	4.020"	File Fit	1/16" x 1/16" x 3/16"	Standard Tension (18-22 lbs.)
46353-8	4.030"	File Fit	1/16" x 1/16" x 3/16"	Standard Tension (18-22 lbs.)
46355-8	4.035"	File Fit	1/16" x 1/16" x 3/16"	Standard Tension (18-22 lbs.)
46354-8	4.040"	File Fit	1/16" x 1/16" x 3/16"	Standard Tension (18-22 lbs.)
46354-8	4.045"	Drop In	1/16" x 1/16" x 3/16"	Standard Tension (18-22 lbs.)
46356-8	4.060"	File Fit	1/16" x 1/16" x 3/16"	Standard Tension (18-22 lbs.)
46110-8	4.001"	File Fit	1.5 mm x 1.5 mm x 3 mm	Standard Tension (9-13 lbs.)
46110-8	4.005"	Drop In	1.5 mm x 1.5 mm x 3 mm	Standard Tension (9-13 lbs.)
46111-8	4.010"	File Fit	1.5 mm x 1.5 mm x 3 mm	Standard Tension (9-13 lbs.)
46113-8	4.030"	File Fit	1.5 mm x 1.5 mm x 3 mm	Standard Tension (9-13 lbs.)
46115-8	4.035"	Drop In	1.5 mm x 1.5 mm x 3 mm	Standard Tension (9-13 lbs.)
46114-8	4.040"	File Fit	1.5 mm x 1.5 mm x 3 mm	Standard Tension (9-13 lbs.)
46116-8	4.060"	File Fit	1.5 mm x 1.5 mm x 3 mm	Standard Tension (9-13 lbs.)
46116-8	4.065"	Drop In	1.5 mm x 1.5 mm x 3 mm	Standard Tension (9-13 lbs.)
46117-8*	4.070"	File Fit	1.5 mm x 1.5 mm x 3 mm	Standard Tension (9-13 lbs.)
46213-8	4.030"	File Fit	.043" x .043" x 3 mm	Standard Tension (9-13 lbs.)
46215-8	4.035"	Drop In	.043" x .043" x 3 mm	Standard Tension (9-13 lbs.)
46214-8	4.040"	File Fit	.043" x .043" x 3 mm	Standard Tension (9-13 lbs.)
46216-8	4.060"	File Fit	.043" x .043" x 3 mm	Standard Tension (9-13 lbs.)
			4 1/8" CHEVROLET	
46160-8	4.125"	File Fit	1/16" x 1/16" x 3/16"	Standard Tension (18-22 lbs.)
46163-8	4.155"	File Fit	1/16" x 1/16" x 3/16"	Standard Tension (18-22 lbs.)
46360-8	4.125"	File Fit	1.5 mm x 1.5 mm x 3 mm	Standard Tension (9-13 lbs.)
46360-8	4.130"	Drop In	1.5 mm x 1.5 mm x 3 mm	Standard Tension (9-13 lbs.)
46260-8	4.125"	File Fit	.043" x .043" x 3 mm	Standard Tension (9-13 lbs.)
46263-8	4.155"	File Fit	.043" x .043" x 3 mm	Standard Tension (9-13 lbs.)
			4.500" CHEVROLET	
46450-8	4.500"	File Fit	1/16" x 1/16" x 3/16"	Standard Tension (21-25 lbs.)
46453-8	4.530"	File Fit	1/16" x 1/16" x 3/16"	Standard Tension (21-25 lbs.)
46456-8	4.560"	File Fit	1/16" x 1/16" x 3/16"	Standard Tension (21-25 lbs.)
46458-8	4.600"	File Fit	1/16" x 1/16" x 3/16"	Standard Tension (21-25 lbs.)
			5.7 L CHRYSLER HEMI	
46120-8	99.5 mm / 3.917"	File Fit	1.5 mm x 1.5 mm x 3 mm	Standard Tension (9-13 lbs.)
46121-8	99.62 mm / 3.922"	Drop In	1.5 mm x 1.5 mm x 3 mm	Standard Tension (9-13 lbs.)
46122-8	100 mm / 3.937"	File Fit	1.5 mm x 1.5 mm x 3 mm	Standard Tension (9-13 lbs.)
			4.6L and 5.4L FORD	
46600-8	3.552"	File Fit	1.5 mm x 1.5 mm x 3 mm	Standard Tension (9-13 lbs.)
46620-8	3.572"	File Fit	1.5 mm x 1.5 mm x 3 mm	Standard Tension (9-13 lbs.)
46630-8	3.582"	File Fit	1.5 mm x 1.5 mm x 3 mm	Standard Tension (9-13 lbs.)
			SPORT COMPACT	
46810-4	81 mm	Drop In	1.0 mm x 1.2 mm x 2.8 mm	Standard Tension (7-11 lbs.)
46815-4	81.5 mm	Drop In	1.0 mm x 1.2 mm x 2.8 mm	Standard Tension (7-11 lbs.)
46840-4	84 mm	Drop In	1.2 mm x 1.2 mm x 2.8 mm	Standard Tension (7-11 lbs.)
46845-4	84.5 mm	Drop In	1.2 mm x 1.2 mm x 2.8 mm	Standard Tension (7-11 lbs.)
46850-4	85 mm	Drop In	1.2 mm x 1.2 mm x 2.8 mm	Standard Tension (7-11 lbs.)
46855-4	85.5 mm	Drop In	1.2 mm x 1.2 mm x 2.8 mm	Standard Tension (7-11 lbs.)
46860-4	86 mm	Drop In	1.2 mm x 1.2 mm x 2.8 mm	Standard Tension (7-11 lbs.)
46865-4	86.5 mm	Drop In	1.2 mm x 1.2 mm x 2.8 mm	Standard Tension (7-11 lbs.)
46870-4	87 mm	Drop In	1.2 mm x 1.2 mm x 2.8 mm	Standard Tension (7-11 lbs.)
46925-4	92.5 mm	Drop In	1.2 mm x 1.2 mm x 2.8 mm	Standard Tension (7-11 lbs.)
46995-4	99.5 mm	Drop In	1.2 mm x 1.2 mm x 2.0 mm	Standard Tension (7-11 lbs.)
461000-4	100 mm	Drop In	1.2 mm x 1.2 mm x 2.0 mm	Standard Tension (7-11 lbs.)

WRIST PINS & LOCKS

WRIST PINS

- *Straight and taper wall construction*
- *Large O.D. chamfer pins requiring round wire locks*
- *Exacting size control and perfect concentricity*
- *Inside of each pin is totally free of tooling marks*

Part No.	Quantity	Description	Diameter	Wall Type	Material	Length	Wall Thickness	Lock Rings	Wgt / Grams
42215-8	8 pcs.	SB Chevy	.927"	Straight	Tool Steel	2.300"	.095"	Spiral	74
42216-8	8 pcs.	SB Chevy	.927"	Straight	Tool Steel	2.300"	.130"	Spiral	96
42241-8	8 pcs.	SB Chevy	.927"	Straight	Tool Steel	2.300"	.095"	Round Wire	72
42242-8	8 pcs.	SB Chevy	.927"	Straight	Tool Steel	2.300"	.130"	Round Wire	95
42229-8	8 pcs.	SB Chevy	.927"	Straight	Standard	2.450"	.150"	Round Wire	117
42204-8	8 pcs.	SB Chevy	.927"	Straight	Tool Steel	2.500"	.095"	Spiral	79
42200-8	8 pcs.	SB Chevy	.927"	Straight	Tool Steel	2.500"	.125"	Spiral	100
42228-8	8 pcs.	SB Chevy	.927"	Straight	Tool Steel	2.500"	.125"	Round Wire	99
42209-8	8 pcs.	SB Chevy	.927"	Straight	Standard	2.500"	.150"	Spiral	119
42210-8	8 pcs.	SB Chevy	.927"	Straight	Tool Steel	2.750"	.125"	Spiral	110
42211-8	8 pcs.	SB Chevy	.927"	Taper	Tool Steel	2.750"	.105" -.140"	Spiral	116
42231-8	8 pcs.	SB Chevy	.927"	Straight	Tool Steel	2.750"	.125"	Round Wire	109
42213-8	8 pcs.	SB Chevy	.927"	Straight	Tool Steel	2.950"	.125"	Spiral	117
42214-8	8 pcs.	SB Chevy	.927"	Taper	Tool Steel	2.950"	.100" -.140"	Spiral	122
42217-8	8 pcs.	SB Chevy LS-1	.945" / 24 mm	Straight	Tool Steel	2.300"	.120"	Spiral	91
42218-8	8 pcs.	SB Chevy LS-1	.945" / 24 mm	Straight	Tool Steel	2.300"	.120"	Round Wire	90
42219-8	8 pcs.	BB Chevy	.990"	Straight	Tool Steel	2.930"	.150"	Spiral	147
42220-8	8 pcs.	BB Chevy	.990"	Straight	Tool Steel	2.930"	.180"	Spiral	170
42201-8	8 pcs.	BB Chevy	.990"	Straight	Tool Steel	2.930"	.150"	Round Wire	146
42202-8	8 pcs.	BB Chevy	.990"	Straight	Tool Steel	2.930"	.180"	Round Wire	169
42233-4	4 pcs.	Sport Compact	.9055" / 23 mm	Straight	Tool Steel	2.250"	.117"	Round Wire	90
42234-4	4 pcs.	Sport Compact	.9055" / 23 mm	Straight	Tool Steel	2.500"	.117"	Tru Arc	92
42247-4	4 pcs.	Sport Compact	.9055" / 23 mm	Straight	Tool Steel	2.500"	.150"	Tru Arc	TBA
42253-4	4 pcs.	Sport Compact	.9055" / 23 mm	Straight	Tool Steel	2.500"	.150"	Round Wire	TBA
42225-4	4 pcs.	Sport Compact	.866" / 22 mm	Straight	Tool Steel	2.250"	.120"	Round Wire	79
42251-4	4 pcs.	Sport Compact	.866" / 22 mm	Straight	Tool Steel	2.250"	.150"	Round Wire	96
42227-8	8 pcs.	Ford 4.6, 5.4L	.866" / 22 mm	Straight	Tool Steel	2.500"	.120"	Spiral	89
42230-8	8 pcs.	Ford 4.6, 5.4L	.866" / 22 mm	Straight	Tool Steel	2.500"	.150"	Spiral	107
42203-8	8 pcs.	Ford 4.6, 5.4L	.866" / 22 mm	Straight	Tool Steel	2.500"	.120"	Round Wire	88
42207-8	8 pcs.	Ford 4.6, 5.4L	.866" / 22 mm	Straight	Tool Steel	2.500"	.150"	Round Wire	106
42243-4	4 pcs.	Sport Compact	.827" / 21 mm	Straight	Tool Steel	2.250"	.150"	Round Wire	91

WRIST PIN LOCKS

- *Wrist pin locks are shipped no charge with all Manley pistons*

Part No.	Quantity	Type	Pin Diameter	Description	Weight / Grams Per Lock
42296-16	16 pcs.	.072" Spiral	.927"	Small Block Chevrolet	1.8
42262-16	16 pcs.	.061" Round Wire	.927"	Small Block Chevrolet	1.0
42272-16	16 pcs.	.072" Round Wire	.927"	Small Block Chevrolet	1.4
42271-32	32 pcs.	.042" Spiral	.990"	Big Block Chevrolet & Small Block Chrysler	1.2
42275-16	16 pcs.	.072" Round Wire	.990"	Big Block Chevrolet	1.5
42297-8	8 pcs.	.042" Tru Arc	.9055" / 23 mm	Sport Compact	1.0
42269-32	32 pcs.	.042" Spiral	.867"	Ford 4.6L / 5.4L	1.0
42270-16	16 pcs.	.061" Round Wire	22 mm / .867"	Ford 4.6L / 5.4L, Sport Compact	0.8

Note: New part numbers are *ITALICIZED*.

1960 SWARTHMORE AVENUE
LAKEWOOD, NEW JERSEY 08701

SMALL BLOCK CHEVROLET

"H" BEAM RODS

STANDARD WEIGHT SERIES

- *Manufactured from 4340 forgings*
- *Heat treated, stress relieved, shot peened and magnafluxed*
- *Weight matched sets ± 1.5 grams*
- *Cap fasteners are premium 7/16" ARP 8740 cap screws*
- *Horsepower range for these rods is 750 H.P. at 8000 rpm*

Horsepower range is affected by rpm, stroke and piston weight.

Part No.	Length	Journal Size	Center-to Center	Big End Bore	Pin Bore	Gram Weight
14050-8	Stock	Large	5.700"	2.225"	.9281"	665
14054-8	.300" Longer	Large	6.000"	2.225"	.9281"	680
14051-8	.025" Longer LS-1	Large No Offset	6.125"	2.225"	.9281"	685
14053-8	.025" Longer LS-1	Large No Offset	6.125"	2.225"	.9457"	678

P/N 14051-8 and 14053-8 are for Small Block Chevy LS-1 engines with pistons ready to accept 6.125" length rods. Stock LS-1 rods are 6.100" long. Note the pin bore on the 14051-8 is .9281". Stock LS-1 pins are .945" diameter.

The Small Block Chevy "H" Beam rods listed above can be fitted with ARP 2000 bolts. To order rods with upgraded bolts, affix an "R" to the part number.

P/N 14050-8 is NHRA Legal for Stock & Super Stock.

P/N 14054-8 is NHRA Legal for Olds 307, 350, 403.

H-LITE SERIES

- *Manufactured from 4340 forgings*
- *Heat treated, stress relieved, shot peened and magnafluxed*
- *Weight matched sets ± 1.5 grams*
- *Cap fasteners are premium 3/8" ARP 2000 cap screws*
- *Horsepower range for these rods is 600 H.P. at 8000 rpm*

Horsepower range is affected by rpm, stroke and piston weight.

Part No.	Length	Journal Size	Center-to Center	Big End Bore	Pin Bore	Gram Weight
14030-8	Stock	Large	5.700"	2.225"	.9281"	585
14034-8	.300" Longer	Large	6.000"	2.225"	.9281"	595
14031-8	.025" Longer LS-1	Large No Offset	6.125"	2.225"	.9281"	605
14033-8	.025" Longer LS-1	Large No Offset	6.125"	2.225"	.9457"	603

P/N 14031-8 and 14033-8 are for Small Block Chevy LS-1 engines with pistons ready to accept 6.125" length rods. Stock LS-1 rods are 6.100" long. Note the pin bore on the 14031-8 is .9281". Stock LS-1 pins are .945" diameter.

COMMON FEATURES

Attribute	Dimension
Crankpin	2.100"
Big End Width	.941"
Pin End Width	1.060"

Private brand identification available.

P/N 14030-8 and 14031-8 is NHRA Legal for Stock & Super Stock.

REPLACEMENT PARTS

Part No.	Quantity	Description
42350-4	4 pcs.	3/8" ARP 2000 Cap Screws 1.500" UHL
42361-4	4 pcs.	7/16" ARP 8740 Cap Screws 1.600" UHL
42249-4	4 pcs.	7/16" ARP 2000 Cap Screws 1.600" UHL
42384-4	4 pcs.	7/16" ARP 2000 Cap Screws 1.650" UHL
42315-8	8 pcs.	Pin Bushings
42395-8	8 pcs.	Pin Bushings (14031, 14051)
42316-16	16 pcs.	Dowel Bushings 7/16"

STEEL CONNECTING RODS

SMALL BLOCK CHEVROLET

SPORTSMASTER® RODS

- *Forged from aircraft quality 4340 material*
- *Entire beam and cap area is profiled to remove stress risers and render the lightest possible rod*
- *Shot peened after machining and 100% magnaflux*
- *Cap fasteners are 3/8" ARP 8740 cap screw*
- *Premium Ampco pin bushings*
- *Horsepower range for these rods is 550 H.P. at 8000 rpm*

Horsepower range is affected by rpm, stroke and piston weight.

Part No.	Length	Journal Size	Center-to Center	Big End Bore	Pin Bore	Gram Weight
14101 C-8	Stock	Large	5.700"	2.225"	.9281"	555
14101-8	Stock	Large	5.700"	2.225"	.9281"	555
14104-8	Stock	Large	5.700"	2.225"	.8758"	570
14112-8	Stock	Large	5.700"	2.225"	Press	564
14112 A-8	Stock	Large	5.700"	2.225"	Press	564
14116-8	.150" Longer	Large	5.850"	2.225"	.9281"	573
14103-8	.300" Longer	Large	6.000"	2.225"	.9281"	578
14106-8	.400" Longer	Large	6.100"	2.225"	.9281"	593
14114-8	.400" Longer	Large	6.100"	2.225"	.9457"	592
	with stock 24 mm LS-1 wrist pin - must use pistons with floating pins					
14113-8	.425" Longer	Large	6.125"	2.225"	.9281"	595
14105-8	Stock	Small	5.700"	2.125"	.9281"	571
14108-8	Stock	Small	5.700"	2.125"	.8758"	579
14109-8	Stock	Small	5.700"	2.125"	Press	568
14109 A-8	Stock	Small	5.700"	2.125"	Press	568
14107-8	.300" Longer	Small	6.000"	2.125"	.9281"	575

P/N 14106-8 and 14114-8 have no offset on the crank journal, same as the stock LS-1 connecting rods.

COMMON FEATURES

Attribute	Dimension
Crankpin Sm. Jnl.	2.000"
Crankpin Lg. Jnl.	2.100"
Big End Width	.940"
Pin End Width	.980"

REPLACEMENT PARTS

Part No.	Quantity	Description
42383-4	4 pcs.	3/8" ARP 8740 Cap Screws
42310-8	8 pcs.	.927" Ampco Pin Bushings (.990" O.D.)
42366-8	8 pcs.	.927" Ampco Pin Bushings (.997" O.D.)
42308-8	8 pcs.	.875" Ampco Pin Bushings
42385-16	16 pcs.	Dowel Bushings 3/8"

P/N 14101 C-8 is CASCAR Legal

P/Ns 14101-8, 14104-8, 14112-8, 14105-8, 14106-8, 14108-8, 14109-8 and 14114-8 are NHRA Legal for Stock & Super Stock

P/Ns 14101-8, and 14104-8 are legal for Chevy 4.3 V-6.
P/N 14103-8 is legal for Olds 307, 350, & 403

P/Ns 14106-8 and 14114-8 are NHRA Legal for Small Block Chevy LS-1.
P/N 14116-8 is NHRA Legal for AMC 390 - 401

P/Ns 14109 A-8 and 14112 A-8 are APBA Legal

STEEL CONNECTING RODS

SMALL BLOCK CHEVROLET

NHRA LEGAL SUPER STOCK

PRO SERIES "I" BEAM RODS

- *Manufactured from 4340 aircraft quality vacuum degasssed material*
- *Fully machined to produce the lightest and strongest rod possible*
- *Shot peened after machining to Mil specs and 100% individually magnafluxed*
- *Cap fasteners are 3/8" ARP 2000 cap screws*
- *Horsepower range for these rods is 600+ H.P. at 8500 rpm*

Horsepower range is affected by rpm, stroke and piston weight.

Part No.	Length	Journal Size	Center-to Center	Big End Bore	Pin Bore	Gram Weight
			350 CHEVROLET			
14440-8	Stock 350	Small	5.700"	2.125"	.8761" to .9281"	560
14441-8	Stock 350	Large	5.700"	2.225"	.8761" to .9281"	550
			400 CHEVROLET			
14439-8	Stock 400	Large	5.565"	2.225"	.8761" to .9281"	544
			LS-1 CHEVROLET			
14442-8	Stock LS-1	Large	6.100"	2.225"	.8761" to .9281"	600

You must specify the exact final size pin bore desired.

COMMON FEATURES

Attribute	Dimension
Crankpin Sm. Jnl.	2.000"
Crankpin Lg. Jnl.	2.100"
Big End Width	.940"
Pin End Width	1.000"

REPLACEMENT PARTS

Part No.	Quantity	Description
42350-4	4 pcs.	3/8" ARP 2000 Cap Screws
42345-8	8 pcs.	Ampco Pin Bushings for .875" pin
42393-8	8 pcs.	Ampco Pin Bushings for .927" pin
42385-16	16 pcs.	Dowel Bushings 3/8"
40172	1 pc.	Rod Bolt Assembly Lube

Peter Biondo

NHRA & IHRA

Stock & Super Stock

Champion

STEEL CONNECTING RODS

SMALL BLOCK CHEVROLET

LATE MODEL STOCK

PRO SERIES "I" BEAM RODS

FEATHER LITE

- *Forged from 4340 aircraft quality vacuum degassed material*
- *Fully machined to produce the lightest and strongest rod possible*
- *Shot peened after machining to Mil specs and 100% individually magnafluxed*
- *Cap fasteners are 3/8" ARP 2000 cap screws*
- *Horsepower range for these rods is 400 H.P. at 7500 rpm*

Horsepower range is affected by rpm, stroke and piston weight.

Part No.	Length	Journal Size	Center-to Center	Big End Bore	Gram Weight
14540-8	Stock	Large	5.700"	2.225"	475
14544-8	.300" Longer	Large	6.000"	2.225"	480
14545-8	.425" Longer	Large	6.125"	2.225"	483

Lengths and journal sizes other than these typical listings may become popular after publication of this catalog. Please inquire about lengths not listed as we may have subsequently added applications. Also, we can manufacture 40 pieces of these rods at special lengths for no additional charge.

COMMON FEATURES

Attribute	Large Journal
Crankpin	2.100"
Pin Bore	.9281"
Big End Width	.940"
Pin End Width	.940"

REPLACEMENT PARTS

Part No.	Quantity	Description
42351-4	4 pcs.	3/8" ARP 2000 Cap Screws
42310-8	8 pcs.	Ampco Pin Bushings
42380-16	16 pcs.	Dowel Bushings 3/8"
40172	1 pc.	Rod Bolt Assembly Lube

STEEL CONNECTING RODS

SMALL BLOCK CHEVROLET

TOUR LITE® "I" BEAM RODS

4340 MATERIAL

- *Forged from 4340 aircraft quality material*
- *Fully machined to produce the lightest and strongest rod possible*
- *3/8" ARP 2000, 3/8" ARP 3.5, or 3/8" CARR cap screws*
- *Shot peened and 100% magnafluxed*
- *Horsepower range is 575 H.P. at 8500 rpm*

Horsepower range is affected by rpm, stroke and piston weight.

Part No.	Length	Journal Size	Center-to Center	Big End Bore	Gram Weight
14340-8	Stock Length	Honda / IRL	5.700"	2.008" / 2.015"	525 / 530 / 538
14344-8	.300" Longer	Honda / IRL	6.000"	2.008" / 2.015"	535 / 540 / 548
14345-8	.425" Longer	Honda / IRL	6.125"	2.008" / 2.015"	540 / 545 / 553

Above rods REQUIRE use of one of the connecting rod bearings listed below. To order rods finished to the exact size for Federal Mogul bearings, affix an "F" after the rod part number. For rods finished to exact size for Clevite bearings, affix a "C" after the rod part number. *In addition, you MUST specify which Clevite bearing will be used.*

Part No.	Length	Journal Size	Center-to Center	Big End Bore	Gram Weight
14240-8	Stock Length	Small	5.700"	2.125"	517
14242-8	.150" Longer	Small	5.850"	2.125"	521
14244-8	.300" Longer	Small	6.000"	2.125"	527
14245-8	.425" Longer	Small	6.125"	2.125"	530
14140-8	Stock Length	Large	5.700"	2.225"	516
14142-8	.150" Longer	Large	5.850"	2.225"	517
14144-8	.300" Longer	Large	6.000"	2.225"	524
14145-8	.425" Longer	Large	6.125"	2.225"	529

All connecting rods on this page are supplied with 1.600" underhead length 3/8" ARP 2000 cap screw fasteners P/N 42351. Upgraded 3/8" ARP 3.5 cap screws P/N 42358 or 3/8" CARR cap screws P/N 42357 are available. To order upgraded fasteners, affix an "RA" for the ARP 3.5 or an "R" for the CARR after the rod part number.

Lengths other than these typical sizes may become popular after publication of this catalog. Please inquire about lengths not listed as we may have subsequently added applications. Also, we can manufacture 40 pieces of these rods at special lengths for no additional charge.

BEARING CHART

Bearing Type	Part No.	Big End Bore	Crank Pin
Federal Mogul	7195CH	2.008"	1.8885" Honda
Clevite	CB1456P	2.008"	1.8885" Honda
Clevite	CB1663	2.015"	1.8885" Honda
Clevite	CB1664	2.008"	1.8500" IRL

COMMON FEATURES

Attribute	Honda / IRL	Small Journal	Large Journal
Crankpin	1.8885" / 1.8500"	2.000"	2.100"
Pin Bore	.9281"	.9281"	.9281"
Big End Width	.940"	.940"	.940"
Pin End Width	.980"	.980"	.980"

REPLACEMENT PARTS

Part No.	Quantity	Description
42351-4	4 pcs.	3/8" ARP 2000 Cap Screws
42358-4	4 pcs.	3/8" ARP 3.5 Cap Screws
42357-4	4 pcs.	3/8" CARR Cap Screws
42310-8	8 pcs.	Ampco Pin Bushings .975" long
42393-8	8 pcs.	Ampco Pin Bushings .995" long
42380-16	16 pcs.	Dowel Bushings 3/8" .900" long
42398-16	16 pcs.	Dowel Bushings 3/8" .960" long
40172	1 pc.	Rod Bolt Assembly Lube

STEEL CONNECTING RODS

SMALL BLOCK CHEVROLET

PRO SERIES "I" BEAM RODS

LIGHTWEIGHT

- *Forged from 4340 aircraft quality vacuum degassed material*
- *Fully machined to produce the lightest and strongest rod possible*
- *Shot peened after machining to Mil specs and 100% individually magnafluxed*
- *Cap fasteners are 7/16" ARP 2000 or 7/16" ARP 3.5 cap screws*
- *Horsepower range for these rods is 750 H.P. at 8500 rpm*

Horsepower range is affected by rpm, stroke and piston weight.

Part No.	Length	Journal Size	Center-to Center	Big End Bore	Gram Weight
14450-8	Stock	Small	5.700"	2.125"	597
14452-8	.150" Longer	Small	5.850"	2.125"	603
14454-8	.300" Longer	Small	6.000"	2.125"	606
14455-8	.425" Longer	Small	6.125"	2.125"	612
14350C-8	Stock	Large	5.700"	2.225"	599
14350-8	Stock	Large	5.700"	2.225"	599
14352-8	.150" Longer	Large	5.850"	2.225"	605
14354-8	.300" Longer	Large	6.000"	2.225"	607
14355-8	.425" Longer	Large	6.125"	2.225"	609
14359-8	.025" Longer LS-1	Large No Offset	6.125"	2.225"	609

P/N 14359-8 is for Small Block Chevy LS-1 engines with pistons ready to accept 6.125" length rods. Stock LS-1 rods are 6.100" long. Note the pin bore is .9281". Stock LS-1 pins are .945" diameter. The 14359-8 has no offset on the crank journal, same as the stock LS-1 connecting rods.

All connecting rods on this page are supplied with 1.450" under head length 7/16" ARP cap screw fasteners P/N 42390. Upgraded 7/16" ARP 3.5 cap screws P/N 42359 are available. To order upgraded fasteners, affix "R" after the rod part number.

Lengths other than these typical sizes may become popular after publication of this catalog. Please inquire about lengths not listed as we may have subsequently added applications. Also, we can manufacture 40 pieces of these rods at special lengths for no additional charge.

COMMON FEATURES

Attribute	Small Journal	Large Journal
Crankpin	2.000"	2.100"
Pin Bore	.9281"	.9281"
Big End Width	.940"	.940"
Pin End Width	1.000"	1.000"

REPLACEMENT PARTS

Part No.	Quantity	Description
42390-4	4 pcs.	7/16" ARP 2000 Cap Screws
42359-4	4 pcs.	7/16" ARP 3.5 Cap Screws
42393-8	8 pcs.	Ampco Pin Bushings (Except 14355, 14359)
42307-8	8 pcs.	Ampco Pin Bushings (14355, 14359)
42392-16	16 pcs.	Dowel Bushings 7/16"
40172	1 pc.	Rod Bolt Assembly Lube

P/N 14350C-8 are CASCAR Legal.

P/N 14350, 14359, & 14450-8 are NHRA Legal for Stock & Super Stock.
P/N 14354-8 is NHRA Legal for Olds 307, 350 and 403.
P/Ns 14352 & 14452 are NHRA Legal for AMC 343 - 390

STEEL CONNECTING RODS

SMALL BLOCK CHEVROLET

PRO SERIES "I" BEAM RODS
STANDARD WEIGHT

- *Forged from 4340 aircraft quality vacuum degassed material*
- *Fully machined to produce the lightest and strongest rod possible*
- *Shot peened after machining to Mil specs and 100% individually magnafluxed*
- *Cap fasteners are 7/16" ARP 2000 or 7/16" ARP 3.5 cap screws*
- *Horsepower range for these rods is 800 H.P. at 8500 rpm*

Horsepower range is affected by rpm, stroke and piston weight.

Part No.	Length	Journal Size	Center-to Center	Big End Bore	Gram Weight
14254-8	.300" Longer	Small	6.000"	2.125"	663
14255-8	.425" Longer	Small	6.125"	2.125"	665
14256-8	.500" Longer	Small	6.200"	2.125"	667
14150C-8	Stock	Large	5.700"	2.225"	655
14150-8	Stock	Large	5.700"	2.225"	655
14152-8	.150" Longer	Large	5.850"	2.225"	675
14154-8	.300" Longer	Large	6.000"	2.225"	664
14155-8	.425" Longer	Large	6.125"	2.225"	668

Dodge Viper V-10

Manley connecting rod 14256 fits the Viper Engine with .927" pins and 2.000" crank pin. Order 1 - 14256-10 for a set of 10 pcs.

All connecting rods on this page are supplied with 1.450" under head length 7/16" ARP cap screw fasteners P/N 42390. Upgraded 7/16" ARP 3.5 cap screws P/N 42359 are available. To order upgraded fasteners, affix "R" after the rod part number.

Lengths other than these typical sizes may become popular after publication of this catalog. Please inquire about lengths not listed as we may have subsequently added applications. Also, we can manufacture 40 pieces of these rods at special lengths for no additional charge.

COMMON FEATURES

Attribute	Small Journal	Large Journal
Crankpin	2.000"	2.100"
Pin Bore	.9281"	.9281"
Big End Width	.940"	.940"
Pin End Width	1.000"	1.000"

REPLACEMENT PARTS

Part No.	Quantity	Description
42390-4	4 pcs.	7/16" ARP 2000 Cap Screws
42359-4	4 pcs.	7/16" ARP 3.5 Cap Screws
42393-8	8 pcs.	Ampco Pin Bushings
42392-16	16 pcs.	Dowel Bushings 7/16"
40172	1 pc.	Rod Bolt Assembly Lube

P/N 14150C-8 is CASCAR Legal.

P/N 14150-8 is NHRA Legal for Stock & Super Stock.
P/N 14152 is NHRA Legal for AMC 343 - 390

STEEL CONNECTING RODS

SMALL BLOCK CHEVROLET

DIRT SERIES - 300 M ALLOY

- *Forged from 300 M aircraft quality material*
- *Fully machined to produce the lightest and strongest rod possible*
- *Shot peened and 100% magnafluxed*
- *7/16" ARP 2000 or 7/16" ARP Custom Age 625+ cap screws*
- *Horsepower range is 850 H.P. at 8500 rpm*

Horsepower range is affected by rpm, stroke and piston weight.

Part No.	Length	Journal Size	Center-to Center	Big End Bore	Gram Weight
15552-8	.150" Longer	Small	5.850"	2.125"	630
15554-8	.300" Longer	Small	6.000"	2.125"	635
15555-8	.425" Longer	Small	6.125"	2.125"	645
15556-8	.500" Longer	Small	6.200"	2.125"	650
15542-8	.150" Longer	Large	5.850"	2.225"	635
15544-8	.300" Longer	Large	6.000"	2.225"	640
15545-8	.425" Longer	Large	6.125"	2.225"	650
15546-8	.500" Longer	Large	6.200"	2.225"	655

All Dirt Series connecting rods are supplied with 7/16" ARP 2000 cap screw fasteners P/N 42390. Upgraded 7/16" ARP Custom Age 625+ cap screws P/N 42252 are available. To order upgraded fasteners, affix an "R" after the rod part number.

Part No.	Length	Journal Size	Center-to Center	Big End Bore	Gram Weight
15564-8	.300" Longer	Honda / IRL	6.000"	1.976" / 2.008" / 2.015"	667 / 662 / 660

Above rods REQUIRE use of one of the connecting rod bearings listed in the Bearing Chart on the opposite page. To order rods finished for Federal Mogul bearings, affix an "F" after the rod part number. For rods finished for one of the Clevite bearings listed, affix a "C" after the rod part number.

COMMON FEATURES

Attribute	Honda / IRL	Small.Journal	Large Journal
Crankpin	1.8885"/1.850"	2.000"	2.100"
Pin Bore	.9281"	.9281"	.9281"
Big End Width	.940"	.940"	.940"
Pin End Width	.950"	.950"	.950"

REPLACEMENT PARTS

Part No.	Quantity	Description
42390-4	4 pcs.	7/16" ARP 2000 Cap Screws
42252-4	4 pcs.	7/16" ARP Custom Age 625+ Cap Screws
42395-8	8 pcs.	Ampco Pin Bushings
42352-16	16 pcs.	Dowel Bushings 7/16" Large Jrnl, Honda Jrnl
42392-16	16 pcs.	Dowel Bushings 7/16" Small Journal
40172	1 pc.	Rod Bolt Assembly Lube

CUSTOM 300 M RODS

Manley Performance will manufacture 300 M Dirt Series, Tour Lite® or Pro Series "I" Beam connecting rods on a custom order basis in lots of 40 identical pieces.

We require a signed blueprint before production.

Note: New part numbers are *ITALICIZED*.

Dan Schlieper
Multiple Dirt Late Model Winner
Including World 100 At Eldora

STEEL CONNECTING RODS

SMALL BLOCK CHEVROLET

DIRT LITE® - 300 M ALLOY

Limited supply
Please call

- *Forged from 300 M aircraft quality material*
- *Fully machined to produce the lightest and strongest rod possible*
- *Shot peened and 100% magnafluxed*
- *3/8" ARP 2000, 3/8" ARP 3.5, or 3/8" CARR cap screws*
- *Horsepower range is 800 H.P. at 8500 rpm*
- *These rods will not have the same amount of cycle life as the Dirt Series rods. Engine builders are advised to replace these rods more frequently.*

Horsepower range is affected by rpm, stroke and piston weight.

Part No.	Length	Journal Size	Center-to Center	Big End Bore	Gram Weight
15665-8	.425" Longer	Honda / IRL	6.125"	2.008" / 2.015"	587 / 582 / 580

Above rod REQUIRES use of one of the connecting rod bearings listed below. To order rods finished to the exact size for Federal Mogul bearings, affix an "F" after the rod part number. For rods finished to exact size for Clevite bearings, affix a "C" after the rod part number. In addition, you MUST specify which Clevite bearing will be used.

COMMON FEATURES

Attribute	Honda / IRL Journal
Crankpin	1.8885" / 1.850"
Pin Bore	.9281"
Big End Width	.940"
Pin End Width	1.060"

BEARING CHART

Bearing Type	Part No.	Big End Bore	Crank Pin
Federal Mogul	7195CH	2.008"	1.8885" Honda
Clevite	CB1456P	2.008"	1.8885" Honda
Clevite	CB1663	2.015"	1.8885" Honda
Clevite	CB1664	2.008"	1.8500" IRL

TOUR LITE® "I" BEAM RODS 300 M MATERIAL

- *Forged from 300 M aircraft quality material*
- *Fully machined to produce the lightest and strongest rod possible*
- *Shot peened and 100% magnafluxed*
- *3/8" ARP 2000, 3/8" ARP 3.5, or 3/8" CARR cap screws*
- *Horsepower range is 600 H.P. at 8500 rpm*

Horsepower range is affected by rpm, stroke and piston weight.

Part No.	Length	Journal Size	Center-to Center	Big End Bore	Gram Weight
15344-8	.300" Longer	Honda / IRL	6.000"	2.008" / 2.015"	532 / 527 / 525
15345-8	.425" Longer	Honda / IRL	6.125"	2.008" / 2.015"	538 / 532 / 530

Above rods REQUIRE use of one of the connecting rod bearings listed below. To order rods finished to the exact size for Federal Mogul bearings, affix an "F" after the rod part number. For rods finished to exact size for Clevite bearings, affix a "C" after the rod part number. In addition, you MUST specify which Clevite bearing will be used.

Part No.	Length	Journal Size	Center-to Center	Big End Bore	Gram Weight
15244-8	.300" Longer	Small	6.000"	2.125"	525
15245-8	.425" Longer	Small	6.125"	2.125"	530

All connecting rods on this page are supplied with 1.600" underhead length 3/8" ARP 2000 cap screw fasteners P/N 42351. Upgraded 3/8" ARP 3.5 cap screws P/N 42358 or 3/8" CARR cap screws P/N 42357 are available. To order upgraded fasteners, affix an "RA" for the ARP 3.5 or an "R" for the CARR after the rod part number.

BEARING CHART

Bearing Type	Part No.	Big End Bore	Crank Pin
Federal Mogul	7195CH	2.008"	1.8885" Honda
Clevite	CB1456P	2.008"	1.8885" Honda
Clevite	CB1663	2.015"	1.8885" Honda
Clevite	CB1664	2.008"	1.8500" IRL

COMMON FEATURES

Attribute	Honda / IRL Journal	Small Journal
Crankpin	1.8885" / 1.850"	2.000"
Pin Bore	.9281"	.9281"
Big End Width	.940"	.940"
Pin End Width	.980"	.980"

Lengths other than these typical sizes may become popular after publication of this catalog. Please inquire about lengths not listed as we may have subsequently added applications. Also, we can manufacture 40 pieces of these rods at special lengths for no additional charge.

REPLACEMENT PARTS

Part No.	Quantity	Description
42351-4	4 pcs.	3/8" ARP 2000 Cap Screws
42358-4	4 pcs.	3/8" ARP 3.5 Cap Screws
42357-4	4 pcs.	3/8" CARR Cap Screws
42310-8	8 pcs.	Ampco Pin Bushings .975" long
42393-8	8 pcs.	Ampco Pin Bushings .995" long
42395-8	8 pcs.	Ampco Pin Bushings 1.055" long
42380-16	16 pcs.	Dowel Bushings 3/8" .900" long
42398-16	16 pcs.	Dowel Bushings 3/8" .960" long
40172	1 pc.	Rod Bolt Assembly Lube

STEEL CONNECTING RODS

BIG BLOCK CHEVROLET "H" BEAM RODS

- *Manufactured from 4340 forgings*
- *Heat treated, stress relieved, shot peened and magnafluxed*
- *Weight matched sets ± 1.5 grams*
- *Cap fasteners are premium 7/16" ARP 8740 cap screws*
- *Horsepower range for these rods is 900 H.P. at 8000 rpm*

Horsepower range is affected by rpm, stroke and piston weight.

Part No.	Description	Center-to Center	Big End Bore	Crank Pin	Pin Bore	Gram Weight
14060-8	Stock	6.135"	2.325"	2.200"	.9911"	793
14062-8	.250" Longer	6.385"	2.325"	2.200"	.9911"	810
14066-8	.400" Longer	6.535"	2.325"	2.200"	.9911"	823
14072-8	.565" Longer	6.700"	2.325"	2.200"	.9911"	835

The Big Block Chevy "H" Beam rods on this page can be fitted with ARP 2000 bolts P/N 42249. To order rods with upgraded bolts, affix an "R" to the part number.

COMMON FEATURES

Attribute	Dimension
Big End Width	.991"
Pin End Width	1.125"

P/N 14060-8 is NHRA Legal for Stock & Super Stock.

REPLACEMENT PARTS

Part No.	Quantity	Description
42361-4	4 pcs.	7/16" ARP 8740 Cap Screws
42249-4	4 pcs.	7/16" ARP 2000 Cap Screws
42327-8	8 pcs.	Pin Bushings
42316-16	16 pcs.	Dowel Bushings

SPORTSMASTER® RODS

Limited supply
Please call

- *Forged from aircraft quality 4340 material*
- *Entire beam and cap are profiled to remove stress risers and render the lightest possible rod*
- *Shot peened after machining*
- *Cap fasteners are 7/16" ARP 8740 cap screws*
- *Premium Ampco pin bushings*
- *Horsepower range for these rods is 700 H.P. at 7500 rpm*

Horsepower range is affected by rpm, stroke and piston weight.

Part No.	Description	Center-to Center	Big End Bore	Pin Bore	Gram Weight
14131-8	Stock	6.135"	2.325"	.9911"	798
14132-8	.250" Longer	6.385"	2.325"	.9911"	825

COMMON FEATURES

Attribute	Dimension
Crankpin	2.200"
Big End Width	.990"
Pin End Width	1.060"

P/N's 14131-8 & 14135-8 are NHRA Legal for Stock & Super Stock.

REPLACEMENT PARTS

Part No.	Quantity	Description
42239-4	4 pcs.	7/16" ARP 8740 Cap Screws
42394-8	8 pcs.	.990" Ampco Pin Bushings
42387-16	16 pcs.	Dowel Bushings 7/16"

STEEL CONNECTING RODS

BIG BLOCK CHEVROLET

PRO SERIES "I" BEAM RODS

- *Forged from 4340 aircraft quality vacuum degassed material*
- *Fully machined to produce the lightest and strongest rod possible*
- *Shot peened to Mil specs and 100% individually magnafluxed*
- *Cap fasteners are 7/16" ARP 2000 cap screws*
- *Horsepower range for these rods is 900 H.P. at 8000 rpm*

Horsepower range is affected by rpm, stroke and piston weight.

Part No.	Description	Center-to Center	Big End Bore	Crank Pin	Pin Bore	Gram Weight
14160-8	Stock	6.135"	2.325"	2.200"	.9911"	731
14162-8	.250" Longer	6.385"	2.325"	2.200"	.9911"	736
14166-8	.400" Longer	6.535"	2.325"	2.200"	.9911"	755
14167-8	.400" Longer Marine Duty	6.535"	2.325"	2.200"	.9911"	847
14168-8	.500" Longer	6.635"	2.325"	2.200"	.9911"	830
14170-8	.525" Longer	6.660"	2.325"	2.200"	.9911"	835
14172-8	.565" Longer	6.700"	2.325"	2.200"	.9911"	866
14272-8	.565" Longer Stroker version of the 14172.	6.700"	2.325"	2.200"	.9911"	777
14173-8	.665" Longer	6.800"	2.325"	2.200"	.9911"	873

P/N 14167, 14168, 14172, and 14173 can be fitted with ARP Custom Age 625+ bolts P/N 42397. To order these rods with upgraded bolts, affix an "R6" to the part number.

COMMON FEATURES

Attribute	Dimension
Big End Width	.990"
Pin End Width	1.125"

REPLACEMENT PARTS

Part No.	Quantity	Description
42384-4	4 pcs.	7/16" ARP 2000 Cap Screws (14160, 14162, 14166, 14170)
42391-4	4 pcs.	7/16" ARP 2000 Cap Screws (14167, 14168, 14172, 14173)
42397-4	4 pcs.	7/16" ARP Custom Age 625+ Cap Screws (14167R6, 14168R6, 14172R6, 14173R6)
42327-8	8 pcs.	Ampco Pin Bushings
42387-16	16 pcs.	Dowel Bushings 7/16"
40172	1 pc.	Rod Bolt Assembly Lube

P/N 14160-8 is NHRA Legal for Stock & Super Stock.
P/N 14168-8 is NHRA Legal for Ford 429, 460
P/N 14168-8 is NHRA Legal for Pontiac 350-455.

STEEL CONNECTING RODS

CHRYSLER 360

CASCAR RACING SERIES SPORTSMASTER® RODS & PRO SERIES "I" BEAM RODS

Sportsmaster® Pro Series Lightweight "I" Beam

- 3 *Forged from aircraft quality 4340 material*
- 3 *Entire Sportsmaster® beam is profiled to remove stress risers and render the lightest possible rod*
- 3 *Shot peened after machining*
- 3 *Cap fasteners for 14139 C-8 are 3/8" ARP 8740 cap screws*
- 3 *Cap fasteners for 14355 C-8 are 7/16" ARP 2000 cap screws*
- 3 *Premium Ampco pin bushings*
- 3 *Legal for CASCAR*
- 3 *Horsepower range for 14139 C-8 rods is 550 H.P. at 8000 rpm*
- 3 *Horsepower range for14355 C-8 rods is 750 H.P. at 8500 rpm*

Horsepower range is affected by rpm, stroke and piston weight.

P/N's 14139 C-8 & 14355 C-8 are CASCAR Legal

Part No.	Description	Center-to Center	Big End Bore	Big End Width	Crank Pin	Pin End Width	Pin Bore	Gram Weight
			SPORTSMASTER® RODS					
14139 C-8	Sportsmaster®	6.125"	2.250"	.933"	2.125"	1.000"	.9848"	570
			PRO SERIES "I" BEAM RODS					
14355 C-8	Lightweight Standard width SB Chevy bearing	6.125"	2.225"	.940"	2.100"	1.000"	.9848"	609

CHRYSLER 360

NHRA LEGAL STOCK & SUPER STOCK PRO SERIES "I" BEAM

- 3 *Forged from aircraft quality 4340 material*
- 3 *Fully machined to produce the lightest and strongest rod possible*
- 3 *Shot peened after machining*
- 3 *Cap fasteners are 3/8" ARP 2000 cap screws*
- 3 *Horsepower range for these rods is 700 H.P. at 8500 rpm*

Horsepower range is affected by rpm, stroke and piston weight.

P/N 14445-8 is NHRA Legal for Stock & Super Stock.

Part No.	Length	Center-to Center	Big End Bore	Big End Width	Pin End Width	Pin Bore	Gram Weight
14445-8	Stock	6.125"	2.250"	.933"	1.000"	.8761" to .9848"	668

You must specify the exact final size pin bore desired.

STEEL CONNECTING RODS

CHRYSLER 5.7L & 6.1L HEMI

PRO SERIES "I" BEAM RODS
LIGHTWEIGHT

- *Forged from 4340 aircraft quality vacuum degassed material*
- *Fully machined to produce the lightest and strongest rod possible*
- *Shot peened after machining to Mil specs and 100% individually magnafluxed*
- *Cap fasteners are 7/16" ARP 2000 or 7/16" ARP 3.5 cap screws*
- *Horsepower range for these rods is 800 H.P. at 8000 rpm with ARP 2000 and 1,000+ H.P. at 8,500 with ARP 3.5*

Horsepower range is affected by rpm, stroke and piston weight.

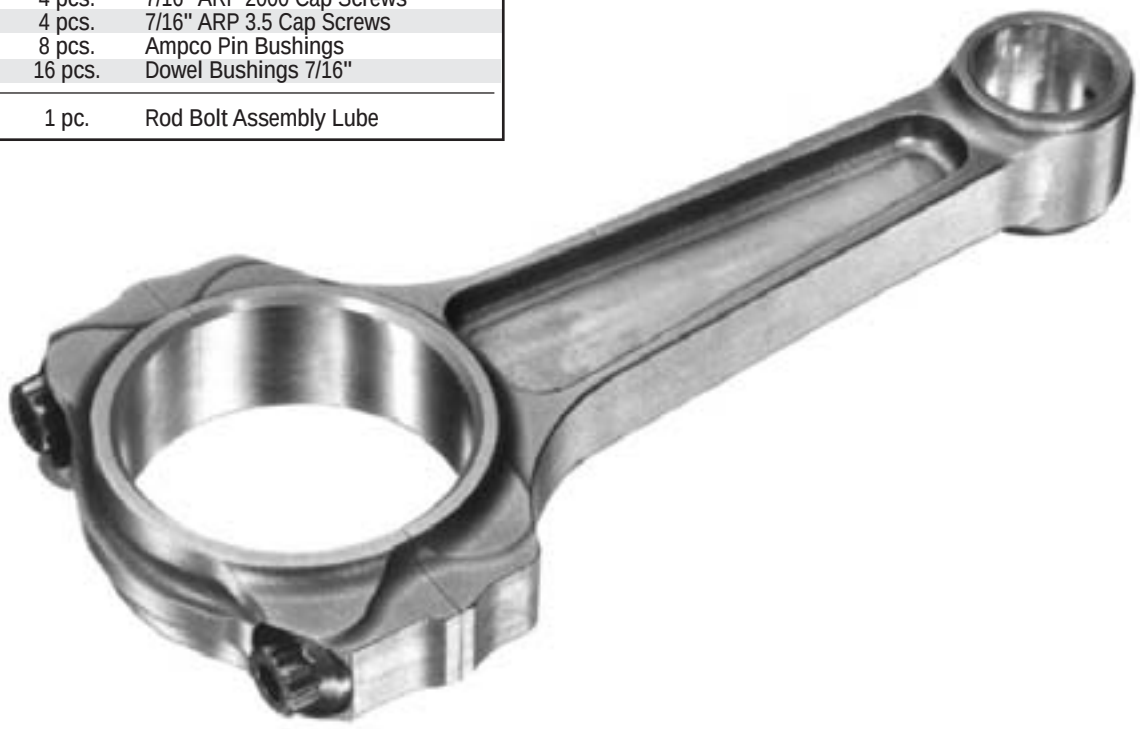
NOTE: Please specify the wrist pin diameter you intend to run when placing your order. The stock 5.7 HEMI uses a 24mm/.945" wrist pin and the 6.1 HEMI uses a 25mm/.984" wrist pin from the factory. The pistons you are using must have floating pins with a diameter of .927", 24mm/.945", or 25mm/.984".

Part No.	Length	Center-to Center	Big End Bore	Crank Pin	Big End Width	Pin End Width	Pin Bore	Gram Weight
14460-8	Stock	6.240"	2.252"	2.126"	.933"	1.000"	.9278", .9457" or .9848"	595

All connecting rods on this page are supplied with 1.450" under head length 7/16" ARP 2000 cap screw fasteners P/N 42390. Upgraded 7/16" ARP 3.5 cap screws P/N 42359 are available. To order upgraded fasteners, affix "R" after the rod part number.

REPLACEMENT PARTS

Part No.	Quantity	Description
42390-4	4 pcs.	7/16" ARP 2000 Cap Screws
42359-4	4 pcs.	7/16" ARP 3.5 Cap Screws
42307-8	8 pcs.	Ampco Pin Bushings
42392-16	16 pcs.	Dowel Bushings 7/16"
40172	1 pc.	Rod Bolt Assembly Lube



STEEL CONNECTING RODS

CHRYSLER 426 - 440
"H" BEAM RODS

- *Manufactured from 4340 forgings*
- *Heat treated, stress relieved, shot peened and magnafluxed*
- *Weight matched sets ± 1.5 grams*
- *Cap fasteners are premium 7/16" ARP 8740 cap screws*
- *Horsepower range for these rods is 800 H.P. at 8000 rpm*

Horsepower range is affected by rpm, stroke and piston weight.

Part No.	Description	Center-to Center	Big End Bore	Pin Bore	Gram Weight
		CHRYSLER 440			
14074-8	Stock Length w/ .990" pin	6.765"	2.500"	.9911"	887
14076-8	Stock Length w/ 1.094" pin	6.765"	2.500"	1.0951"	867
		CHRYSLER 426			
14077-8	Stock Length w/ 1.031" pin	6.865"	2.500"	1.0321"	891
14080-8	Stock Length w/ .990" pin	6.865"	2.500"	.9911"	903

The Big Block Chrysler "H" Beam rods on this page can be fitted with ARP 2000 bolts P/N 42391. To order rods with upgraded bolts, affix an "R" to the part number.

COMMON FEATURES

Attribute	Dimension
Big End Width	1.015"
Pin End Width	1.250"

Private brand identification available.

P/Ns 14074-8, 14076-8, 14077-8 & 14080-8 are NHRA Legal for Stock & Super Stock.

REPLACEMENT PARTS

Part No.	Quantity	Description
42239-4	4 pcs.	7/16" ARP 8740 Cap Screws
42391-4	4 pcs.	7/16" ARP 2000 Cap Screws
42362-8	8 pcs.	Ampco Pin Bushings for 1.031" pin
42381-8	8 pcs.	Ampco Pin Bushings for .990" pin
42363-8	8 pcs.	Ampco Pin Bushings for 1.094" pin
42316-16	16 pcs.	Dowel Bushings 7/16"

CHRYSLER 426
PRO SERIES "I" BEAM RODS

- *Forged from 4340 aircraft quality vacuum degassed material*
- *Fully machined to produce the lightest and strongest rod possible*
- *Shot peened after machining to Mil specs and 100% individually magnafluxed*
- *Cap fasteners are 7/16" ARP 2000 cap screws*
- *Horsepower range for these rods is 850 H.P. at 8,000 RPM*

Horsepower range is affected by rpm, stroke and piston weight.

Part No.	Description	Center-to Center	Big End Bore	Pin Bore	Gram Weight
14177-8	Stock Length w/ 1.031" pin	6.865"	2.500"	1.0321"	905
14184-8	.235" Longer w/ 1.031" pin	7.100"	2.500"	1.0321"	940
14185-8	.235" Longer w/ .990" pin	7.100"	2.500"	.9911"	945
14186-8	.235" Longer w/ 1.031" pin and BB Chevy rod journal	7.100"	2.325"	1.0321"	935
14187-8	.235" Longer w/ .990" pin and BB Chevy rod journal	7.100"	2.325"	.9911"	940

The Big Block Chrysler "I" Beam rods listed above can be fitted with ARP Custom Age 625+ bolts P/N 42397. To order these rods with upgraded bolts, affix an "R6" to the part number.

COMMON FEATURES

Attribute	Dimension
Big End Width	1.015"
Pin End Width	1.180"

P/N 14177-8 is NHRA Legal for Stock & Super Stock.

REPLACEMENT PARTS

Part No.	Quantity	Description
42391-4	4 pcs.	7/16" ARP 2000 Cap Screws
42397-4	4 pcs.	7/16" ARP Custom Age 625+ Cap Screws
42305-8	8 pcs.	Ampco Pin Bushings for .990" pin
42388-8	8 pcs.	Ampco Pin Bushings for 1.031" pin
42387-16	16 pcs.	Dowel Bushings 7/16" (14127, 14184, 14185)
42392-16	16 pcs.	Dowel Bushings 7/16" (14186, 14187)
40172	1 pc.	Rod Bolt Assembly Lube

STEEL CONNECTING RODS

FORD 2.3L
SPORTSMASTER® RODS
ESSLINGER TYPE

Part No.	Description	Center-to Center	Big End Bore	Big End Width	Pin End Width	Pin Bore	Gram Weight
14117-4	Modified Ford 2.3 L Esslinger type w/ .927" pin	5.700"	2.172"	.990"	.980"	.9281"	584

REPLACEMENT PARTS

Part No.	Quantity	Description
42383-4	4 pcs.	3/8" ARP 8740 Cap Screws
42310-8	8 pcs.	Ampco Pin Bushings
42385-16	16 pcs.	Dowel Bushings 3/8"

FORD 351 W
CASCAR RACING SERIES
PRO SERIES "I" BEAM RODS

Part No.	Description	Center-to Center	Big End Bore	Crank Pin	Big End Width	Pin End Width	Pin Bore	Gram Weight
14354 C-8	351 W Ford	6.000"	2.225"	2.100"	.940"	1.000"	.9131"	607
	Pro Series "I" Beam - Lightweight with standard width SB Chevy bearing							

P/N 14354 C-8 is CASCAR Legal.

REPLACEMENT PARTS

Part No.	Quantity	Description
42390-4	4 pcs.	7/16" ARP 2000 Cap Screws
42345-8	8 pcs.	Ampco Pin Bushings
42392-16	16 pcs.	Dowel Bushings 7/16"
40172	1 pc.	Rod Bolt Assembly Lube

FORD 429
PRO SERIES "I" BEAM RODS
6.800" CENTER-TO-CENTER

Part No.	Description	Center-to Center	Big End Bore	Big End Width	Pin End Width	Pin Bore	Gram Weight
14173-8	Ford 429	6.800"	2.325"	.990"	1.125"	.9911"	848

REPLACEMENT PARTS

Part No.	Quantity	Description
42391-4	4 pcs.	7/16" ARP 2000 Cap Screws
42327-8	8 pcs.	Ampco Pin Bushings
42387-16	16 pcs.	Dowel Bushings 7/16"

STEEL CONNECTING RODS

FORD 4.6L MODULAR V-8

"H" BEAM RODS

- *Manufactured from 4340 forgings*
- *Heat treated, stress relieved, shot peened and magnafluxed*
- *Weight matched sets ± 1.5 grams*
- *Cap fasteners are 3/8" ARP 8740 cap screws*
- *Horsepower range for these rods is 700 H.P. at 8000 rpm*

Horsepower range is affected by rpm, stroke and piston weight.

Part No.	Description	Center-to Center	Big End Bore	Big End Width	Pin End Width	Pin Bore	Gram Weight
14042-8	4.6 L Stock length w/ 22 mm pin	5.933"	2.239"	.940"	.940"	.8671"	602
14043-8	4.6 L Stock length w/ .912" pin	5.933"	2.239"	.940"	.940"	.9131"	598
14044-8	4.6 L Stroker w/ 22 mm pin and a 2.000" crank journal	5.850"	2.125"	.940"	.940"	.8671"	612

The Ford 4.6L "H" Beam rods on this page can be fitted with ARP 2000 bolts P/N 42350. To order rods with upgraded bolts, affix an "R" to the part number.

Private brand identification available.

REPLACEMENT PARTS

Part No.	Quantity	Description
42383-4	4 pcs.	3/8" ARP 8740 Cap Screws
42350-4	4 pcs.	3/8" ARP 2000 Cap Screws
42302-8	8 pcs.	Ampco Pin Bushings for 22 mm and .912" Pins
42260-8	8 pcs.	Ampco Pin Bushings (14044)
42274-16	16 pcs.	Dowel Bushings 3/8""

P/Ns 14042-8 & 14043-8 are NHRA Legal for Stock & Super Stock.

Manley Performance is the exclusive connecting rod supplier for the 2003 / 2004 Ford SVT Mustang Cobra

PRO SERIES "I" BEAM LIGHTWEIGHT

- *Forged from 4340 aircraft quality vacuum degassed material*
- *Fully machined to produce the lightest and strongest rod possible*
- *Shot peened after machining to Mil specs and 100% magnafluxed*
- *Cap fasteners are 7/16" ARP 2000 cap screws*
- *Horsepower range for these rods is 750 H.P. at 8500 rpm*

Horsepower range is affected by rpm, stroke and piston weight.

Part No.	Description	Center-to Center	Big End Bore	Big End Width	Pin End Width	Pin Bore	Gram Weight
14318-8	Stock Length w/ 22 mm pin	5.933"	2.239"	.940"	.940"	.8671"	602
14320-8	4.6 L Stroker w/ 22 mm pin and a 2.000" crank journal	5.850"	2.125"	.940"	.940"	.8671"	603

REPLACEMENT PARTS

Part No.	Quantity	Description
42390-4	4 pcs.	7/16" ARP 2000 Cap Screws
42302-8	8 pcs.	Ampco Pin Bushings
42392-16	16 pcs.	Dowel Bushings 7/16"
40172	1 pc.	Rod Bolt Assembly Lube

P/N 14318-8 is NHRA Legal for Stock & Super Stock.

John Mihovetz
First 4.6L Mod Motor in the 6's

Note: New part numbers are *ITALICIZED*.

STEEL CONNECTING RODS

FORD 5.4L MODULAR V-8 "H" BEAM RODS

- *Manufactured from 4340 forgings*
- *Heat treated, stress relieved, shot peened and magnafluxed*
- *Weight matched sets ± 1.5 grams*
- *Cap fasteners are 3/8" ARP 8740 cap screws*
- *Horsepower range for these rods is 700 H.P. at 8000 rpm*

Horsepower range is affected by rpm, stroke and piston weight.

Part No.	Description	Center-to Center	Big End Bore	Big End Width	Pin Bore	Gram Weight
14040-8	5.4 L Stock length w/ 22 mm pin	6.657"	2.239"	.940"	.8671"	636
14041-8	5.4 L Stock length w/ .912" pin	6.657"	2.239"	.940"	.9131"	629

P/N 14040 will also work for the 6.8L V10 modular.

The Ford 5.4L "H" Beam rods on this page can be fitted with ARP 2000 bolts P/N 42350. To order rods with upgraded bolts, affix an "R" to the part number.

Private brand identification available.

REPLACEMENT PARTS

Part No.	Quantity	Description
42383-4	4 pcs.	3/8" ARP 8740 Cap Screws
42350-4	4 pcs.	3/8" ARP 2000 Cap Screws
42302-8	8 pcs.	Ampco Pin Bushings for 22 mm and .912" Pins
42274-16	16 pcs.	Dowel Bushings 3/8"

P/Ns 14040-8 & 14041-8 are NHRA Legal for Stock & Super Stock.

Ford GT Powered by 5.4L Supercharged Modular Engine with Manley H-Beam Steel Connecting Rods

PRO SERIES "I" BEAM RODS LIGHTWEIGHT

- *Forged from 4340 aircraft quality vacuum degassed material*
- *Fully machined to produce the lightest and strongest rod possible*
- *Shot peened after machining to Mil specs and 100% individually magnafluxed*
- *Cap fasteners are 7/16" ARP 2000 cap screws*
- *Horsepower range for these rods is 750 H.P. at 8500 rpm*

Horsepower range is affected by rpm, stroke and piston weight.

Part No.	Description	Center-to Center	Big End Bore	Big End Width	Pin End Width	Pin Bore	Gram Weight
14319-8	Stock Length w/ 22 mm pin	6.657"	2.239"	.940"	.940"	.8671"	628

P/N 14319 will also work for the 6.8L V10 modular.

REPLACEMENT PARTS

Part No.	Quantity	Description
42390-4	4 pcs.	7/16" ARP 2000 Cap Screws
42302-8	8 pcs.	Ampco Pin Bushings
42392-16	16 pcs.	Dowel Bushings 7/16"
40172	1 pc.	Rod Bolt Assembly Lube

P/N 14319-8 is NHRA Legal for Stock & Super Stock.

Mark Luton
Modular Mustang Racing

STEEL CONNECTING RODS

HONDA / ACURA / MITSUBISHI / NISSAN / SUBARU

"H" BEAM RODS

- *Manufactured from 4340 forgings*
- *Heat treated, stress relieved, shot peened and magnafluxed*
- *Weight matched sets ± 1.5 grams*
- *Cap fasteners are 3/8" ARP 2000 cap screws*

Part No.	Description	Center-to Center	Big End Bore	Big End Width	Pin Diameter	Pin Bore	Gram Weight
14025-4	Integra LS 1.8 non V-Tec DOHC (B18A / B18B 1990-up)	5.394"	1.890"	.935"	.827" (21 mm)	.8281"	520
14026-4	Integra GSR 1.8 V-Tec DOHC (B18C 1994-up)	5.433"	1.890"	.858"	.827" (21 mm)	.8281"	505
14021-4	Mitsubishi Eclipse GS, GST, GSX & Eagle Talon TSi 2.0 (6 Bolt 4G63, 4G63T 1990-1993.5) Recommended bearings to be used: ACL 4B1146/H or Clevite CB-1120AL	5.905"	1.890"	1.115"	.827" (21 mm)	.8281"	573
14022-4	Mitsubishi Eclipse GST, GSX & Eagle Talon TSi 2.0 (7 Bolt 4G63, 4G63T 1993.5-1999) Mitsubishi Evolution VIII, IX (4G63T 2003-2006) Recommended bearings to be used: ACL 4B1185/H or Clevite CB-1643P	5.905"	1.890"	1.038"	.866" (22 mm)	.8671"	554
14023-4	Nissan 2.0 SR20DE, SR20DET (1991-2002)	5.365"	2.008"	.900"	.866" (22 mm)	.8671"	512
14024-4	Subaru EJ 18/20/22	5.137"	2.165"	.840"	.905" (23 mm)	.9063"	535

Private brand identification available.

VOLKSWAGEN

PRO SERIES "I" BEAM RODS
LIGHTWEIGHT DESIGN

- *Forged from 4340 aircraft quality vacuum degassed material*
- *Fully machined to produce the lightest and strongest rod possible*
- *Shot peened after machining and 100% magnafluxed*
- *Cap fasteners are 5/16" ARP 2000 cap screws*

Part No.	Description	Center-to Center	Big End Bore	Big End Width	Pin Diameter	Pin Bore	Gram Weight
14307-6	VOLKSWAGEN VR6 2.8	6.460"	2.237"	.786"	.787" (20 mm)	.7874"	542

MITSUBISHI

PRO SERIES 300 M ALLOY

NEW

- *Forged from 300 M aircraft quality material*
- *Fully machined to produce the lightest and strongest rod possible*
- *Shot peened and 100% magnafluxed*
- *3/8" ARP 2000 cap fasteners*
- *Horsepower range for these rods is 1,300+ H.P.*

Part No.	Description	Center-to Center	Big End Bore	Big End Width	Pin Diameter	Pin Bore	Gram Weight
15403-4	Mitsubishi Eclipse GST, GSX & Eagle Talon TSi 2.0 (7 Bolt 4G63, 4G63T 1993.5-1999) Mitsubishi Evolution VIII, IX (4G63T 2003-2006)	5.905"	1.890"	1.038"	.866" (22 mm)	.8671"	685

P/N 15403 can be fitted with ARP Custom Age 625+ Bolts P/N 42321. To order these rods with upgraded botls, affix an "R6" to the part number.

STEEL CONNECTING RODS

ACURA / HONDA / DODGE / MITSUBISHI / NISSAN / SUBARU / TOYOTA

PRO SERIES "I" BEAM RODS

TURBO TUFF DESIGN FOR SPORT COMPACTS

- *Forged from 4340 aircraft quality vacuum degassed material*
- *Shot peened after machining and 100% magnafluxed*
- *Cap fasteners are 3/8" ARP 2000 cap screws*
- *Specifically designed to handle high horsepower applications when using turbos and / or nitrous.*
- *Horsepower range for these rods is 1,000+ H.P.*

Part No.	Description	Center-to Center	Big End Bore	Big End Width	Pin Diameter	Pin Bore	Gram Weight
14404-4	Acura RSX 2.0 V-Tec DOHC (K20 2002-up)	5.472"	2.008"	.780"	.866" (22 mm)	.8671"	550
14412-4	Integra LS 1.8 non V-Tec DOHC (B18A / B18B 1990-up)	5.394"	1.890"	.935"	.827" (21 mm)	.8281"	555
14414-4	Integra GSR 1.8 V-Tec DOHC (B18C 1994-up)	5.433"	1.890"	.858"	.827" (21 mm)	.8281"	547
14415-4	Honda 1.6 V-Tec DOHC (B16A 1992-up)	5.290"	1.890"	.935"	.827" (21 mm)	.8281"	548
14405-4	Honda CRV 2.4 V-Tec DOHC (K24 2002-up)	5.984"	2.008"	.780"	.866" (22 mm)	.8671"	590
14417-4	Honda Prelude 2.2 V-Tec DOHC (H22 1992-up)	5.636"	2.008"	.935"	.866" (22 mm)	.8671"	614
14420-4	Dodge Neon SRT-4 2.4 I4 DOHC	5.945"	2.087"	1.015"	.866" (22 mm)	.8671"	697
14413-4	Mitsubishi Eclipse GS, GST, GSX & Eagle Talon TSi 2.0 (6 Bolt 4G63, 4G63T 1990-1993.5)	5.905"	1.890"	1.115"	.827" (21 mm)	.8281"	690
14403-4	Mitsubishi Eclipse GST, GSX & Eagle Talon TSi 2.0 (7 Bolt 4G63, 4G63T 1993.5-1999) Mitsubishi Evolution VIII, IX (4G63T 2003-2006)	5.905"	1.890"	1.038"	.866" (22 mm)	.8671"	675
14400-4	Mitsubishi Eclipse GST, GSX & Eagle Talon TSi 2.0 (7 Bolt 4G63, 4G63T 1993.5-1999) Mitsubishi Evolution VIII, IX (4G63T 2003-2006) Stroker, lighter weight straight beam design.	5.905"	1.890"	1.038"	.866" (22 mm)	.8671"	637
14421-4	Mitsubishi Eclipse GST, GSX & Eagle Talon TSi 2.0 (7 Bolt 4G63, 4G63T 1993.5-1999) Mitsubishi Evolution VIII, IX (4G63T 2003-2006)	6.142" .237"/6mm Longer	1.890"	1.038"	.866" (22 mm)	.8671"	694
14422-4	Mitsubishi Eclipse GST, GSX & Eagle Talon TSi 2.0 (7 Bolt 4G63, 4G63T 1993.5-1999) Mitsubishi Evolution VIII, IX (4G63T 2003-2006)	6.378" .473"/12mm Longer	1.890"	1.038"	.866" (22 mm)	.8671"	703
14409-4	Mitsubishi EVO X 4B11T (2008-Up)	5.656"	2.165"	.860"	.9055" (23 mm)	.9063"	620
14408-4	Nissan 2.0 SR20DE, SR20DET (1991-2002)	5.365"	2.008"	.900"	.866" (22 mm)	.8671"	574
14401-4	Nissan KA24 DE (1991-1999)	6.495"	2.086"	.973"	.827" (21 mm)	.8281"	656
14411-6	Nissan 2.6 Skyline RB26DETT (1992-2001)	4.783"	2.008"	.857"	.827" (21 mm)	.8281"	610
14418-6	Nissan 2.6 Skyline RB26DETT (1992-2001)	4.783"	2.008"	.857"	.866" (22 mm)	.8671"	608
14406-6	Nissan VQ35DE(T) (2002-Up Altima/Maxima and 2003-Up 350Z)	5.680"	2.165"	.820"	.866" (22 mm)	.8671"	605
14416-4	Subaru WRX EJ205/STi EJ257	5.141"	2.165"	.840"	.9055" (23 mm)	.9063"	613
14419-4	Toyota Scion 2.4 2AZFE	5.886"	2.008"	.784"	.866" (22 mm)	.8671"	582
14402-6	Toyota Supra 3.0 2JZG (1993-1998)	5.590"	2.167"	1.015"	.866" (22 mm)	.8671"	705

REPLACEMENT PARTS

Part No.	Quantity	Description
42350-4	4 pcs.	3/8" ARP 2000 Cap Screws (1.500 UHL)
42351-4	4 pcs.	3/8" ARP 2000 Cap Screws (1.600 UHL)
42380-8	8 pcs.	Dowel Bushings 3/8"
42382-8	8 pcs.	Dowel Bushings 3/8" (14402)
40172	1 pc.	Rod Bolt Assembly Lube

ENGINE BUILDING AIDS

EMBROIDERED MECHANICS APRON

- *Attractive black cotton/polyester with embroidered Manley logo in red and white*
- *Large twin front pockets*
- *One size fits all*

Part No.	Quantity	Description
42014	1	Mechanics apron

4 OZ. EXTREME PRESSURE LUBE #3

- *The assembly lubricant preferred by top engine builders*
- *Can be used as a rod bolt lubricant*

Part No.	Quantity	Description
40177	1	Extreme Pressure Lube #3

ASSEMBLY LUBE FOR CONNECTING ROD BOLTS

- *Provides superior lubrication for rod bolt assembly*

Part No.	Quantity	Description
40172	1 oz.	Pro Series "I" Beam Assembly Lube

2 OZ. MOLY LUBE

- *Molybdenum disulfide is excellent as a break in coating for camshafts, lifters, pushrod ends and rocker balls.*

Part No.	Quantity	Description
40199	1	Moly lube

MIRACLE SEAL EPOXY

- *Two part adhesive is best for repairing exhaust ports and other broken parts that are subject to high temperatures up to 1350° F*

Part No.	Quantity	Description
40180	1	Miracle Seal epoxy

MAGIC SEAL EPOXY

- *Use for intake ports and manifolds where there is lower temperature present*
- *Consistency of silly putty for easy shaping*

Part No.	Quantity	Description
40187	"A" - 1/2 lb. "B" - 1/2 lb.	Magic Seal epoxy

ENGINE BUILDING AIDS

CONNECTING ROD CAP SEPARATOR

- *Hand operated, no bench mounting*
- *Ball bearing design, non marring contact points*
- *A turn of the handle separates the four contact points, easily separating the rod.*

Part No.	Quantity	Description
40160	1	Cap separator (2" - 2 1/2" bore size)

ROD BOLT STRETCH GAUGE

- *The most accurate way to determine the correct pre-load in the rod bolt*
- *Dial indicator reads in increments of .0005"*
- *Lightweight and user friendly*

Part No.	Quantity	Description
40165	1	Rod Bolt Stretch Gauge

DECK CLEARANCE STAND FOR A DIAL INDICATOR (NOT SUPPLIED)

- *Measure piston deck clearances and piston domes*
- *Machined from sturdy aluminum and anodized*
- *Spans bores up to 4-7/16"*

Part No.	Quantity	Description
41100	1	Indicator stand

TOP DEAD CENTER STOP

- *One tool spans all bores up to 4.600"*
- *Both slots accept up to 1/2" diameter head bolts*
- *Machined from steel then cadmium plated*
- *Stop bolt and jam nut included*

Part No.	Quantity	Description
40098	1	TDC stop

ENGINE BUILDING AIDS

PUSHROD LENGTH CHECKER

- *Long valves, milled heads, cut blocks, small base circle camshafts all move rocker geometry far from optimum*
- *Correct length pushrods keep rockers centered on the valve tip and reduce stem and guide wear*
- *Checker tells the engine builder instantly what length pushrod is required*

Part No.	Quantity	Description
42137	1	Small Block Chevys w/ 3/8" studs
42132	1	Small Block Chevys w/ 7/16" studs
42133	1	Big Block Chevys (intakes and exhausts)

VALVE SPRING CHAMFERING TOOL

- *Detailing valve springs is crucial to preserving retainer life*
- *ID chamfering of springs provides clearance and distributes stress along flat surface of retainer step rather than the corner radii*

Part No.	Quantity	Description
40174	1	Chamfering tool w/ 4 abrasive cones
40175	12 pcs.	Replacement abrasive cones
40176	25 pcs.	Replacement abrasive cones

ON-THE-HEAD VALVE SPRING SEAT PRESSURE TESTER

- *This precision made tool is adjustable to measure valve spring pressure for various shaft style and stud mounted roller rocker systems. Features a 0-600 lbs liquid filled gauge. A set-up and adjustment guide is included.*

Part No.	Quantity	Description
40130	1	Valve spring pressure tester

VALVE SPRING COMPRESSOR TOOLS

- *Sturdy black oxide tools for changing valve springs*
- *Use in conjuction with air holding plug on page 139.*

Part No.	Quantity	Description
41830	1	Compressor tool for all Chevys, Fords and Pontiacs
41870	1	Compressor tool for all Chryslers and Fords with rocker shafts

ENGINE BUILDING AIDS

PISTON RING LAPPING TOOL

After you file and debur your piston rings you still aren't finished with today's metric size and narrow width piston rings. Lapping the rings on both sides gives them a much better fit in the pistons. This lapping removes all high spots and any ring coating buildup. All you need is 400 to 600 grit wet and dry sand paper and a flat plate of granite or steel, or a piece of thick glass. The set of four rings cover all the ring sizes from .043" width and 3.800" to 4.750" bore sizes.

Part No.	Quantity	Description
40124	1	Set of 4 lapping rings

PISTON RING END GAPPING TOOL

- *Custom tailor the end gap of your piston rings for tighter fit and greater combustion seal.*

Part No.	Quantity	Description
41833	1	End gap grinding tool

REPLACEMENT BLADE END GAPPING TOOL

- *Replacement blade for above tool*
- *Carbide coated for long life and quick cutting ability*

Part No.	Quantity	Description
41817	1	Carbide coated replacement blade

THICKNESS GAUGE SET

- *Included in the set: .0015", .002", .0025", .003", .004", .005", etc. to .035"*

Part No.	Quantity	Description
40182	1	Thickness gauge set

ALL PURPOSE CYLINDER-TYPE SCALE

- *Very accurate and includes tell-tale ring feature*
- *Check piston ring tension, transmission tower pressure*

Part No.	Quantity	Description
42013	1	25 lb. capacity cylinder - type scale
42012	1	50 lb. capacity cylinder - type scale

ENGINE BUILDING AIDS

CYLINDER LEAK DOWN TESTER

- *Easy to use, reliable and accurate*
- *Instructions and analysis procedure included*
- *14 mm hose included*

Part No.	Quantity	Description
41891	1	Cylinder leak down tester

SPARK PLUG INDEXER TOOL

- *Clever device that allows rotation and locking of the indexing ring to make the tedious task of spark plug indexing quick and simple*

Part No.	Quantity	Description
42324	1	Fits all 14 mm spark plugs

PROFESSIONAL DEGREE WHEEL / ADJUSTABLE POINTER

- *Excellent professional degree wheel*
- *Adapter kit allows engine builder to spin wheel independent of the engine*

Part No.	Quantity	Description
41720	1	10" diameter anodized degree wheel only
41724	1	Professional quality adjustable pointer

BALANCER INSTALLER

- *Clever and easy to use balancer installer*
- *Works on Big Block and Small Block Chevys*

Part No.	Quantity	Description
41713	1	Balancer installer

VALVE TRAIN
TROUBLE SHOOTING GUIDE

"You gotta be there at the end to win." Nothing could be more obvious; yet nothing could be more true. At Manley Performance we have made an unlimited commitment to ensure that our customers will be there at the end when they use our products.

The Manley commitment to product excellence is two phased. First, we continue to research, test and introduce improved materials, designs, heat treatment and finishes that result in superior products. Our HT titanium material, our impinged retainers, our Bead-Loc® keepers and our swedged end pushrods are all examples of new and improved commodities for the racing fraternity

Second, we have extensively tested to determine exactly what is happening to the valve train in a running engine. Our goal is to fully comprehend the problems each product faces in order to build the best piece possible. Our valve operating temperature data, our unbelievably vast valve fatigue testing (which we are convinced no other competitor has ever undertaken), and our comprehensive finite element analysis (FEA) of retainers are all illustrative of the depths to which we have probed to find real answers that result in real improvements.

There is another – absolutely crucial – ingredient in the success of a race engine, and that is the engine builder. The selection of related items such as camshafts and springs, and the preparation of the fuel system and the general state of the engine tune-up, all carry extremely heavy, often critical, responsibility for the success of the valve train components.

It is for the concerned engine builder that these remarks are targeted, so that hopefully with our test results and experience we can point out problem areas in the valve train and offer suggestions to keep everyone running at the end.

Valves don't just break. They are affected by temperatures and dynamic stress. Too much of either - or almost too much of both in combination - will result in valve failure. Valves MUST be kept within the temperature parameters of the material. Even the high temperature materials such as XH - 428 and XH - 430 stainless and HT titanium have finite limits. Items 6 and 7 expand on the subject of temperature. First, let's discuss dynamic stress.

In a smooth running Winston Cup engine with no valve float the valves are experiencing 20,000 psi of stress. If valve float occurs, the stress can reach 50,000 psi and this will reduce the life expectancy of the part by over 90%. And this happens if the valve temperature does not increase, which is an unrealistic expectation. Elevated temperatures will quickly reduce the life of the valve even more. From these facts - derived from our exhaustive rotating beam fatigue test - it is obvious that CONTROLLING THE VALVE TRAIN can not be emphasized too strongly.

1. VALVE LOCK SCRUBBING

This is the first place to look for valve float. If the locks are leaving scuff marks on the valve stem above and below the keeper groove, the valve is bouncing on the seat and the valve gear (lock, retainer, spring) is separating. Nothing but trouble is on the horizon.

SUGGESTIONS: Lighten the valve train. If using stainless valves, move to titanium. If using titanium, move to thinner stems to reduce weight. Change to a lighter retainer. Buy better valve springs, which can be found on pages 63 - 65 of this catalog. Go to a stiffer (3/8" diameter) pushrod. Finally, work with your camshaft grinder to develop a profile that won't toss the valve gear until eventual destruction.

2. MULTIPLE ROCKER PATTERN

The photo is fully illustrative of the multiple rocker contact areas on the valve tip. Since this type valve train is non-rotating by design, the only way the valve can rotate is if it experiences float. Again, disaster lurks around the corner when valve train instability is present.

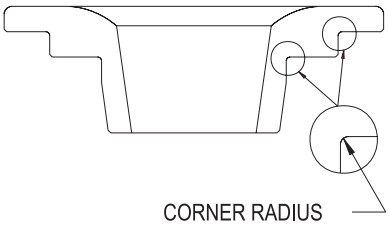
SUGGESTION: See suggestions under #1.

VALVE TRAIN GUIDE

3. RETAINER FIT

Retainer fit is an often over-looked issue. The steps on the retainer must match the I.D.'s of the spring package. Mismatch can cause the retainer to be over-stressed and fail. Our FEA (finite element analysis) highlights the most highly stressed areas of the retainer, and our discovery of these potential trouble spots is evident in the design of our pieces.

SUGGESTIONS: Use Manley titanium Super 7° ICD retainers with our exclusive impingement process that offers better abrasion resistance, improved impingement fatigue strength and an improved surface condition. Also, chamfer the I.D.'s of your spring to allow clearance between the spring and the corner radius of the retainer. If using springs with dampners, be certain to finish the ends of the dampners with a large radius and a smooth polish.



4. VALVE LOCK FIT

Do not underestimate the importance of proper fitting valve locks. The valve lock is designed to clamp on the stem of the valve - not in the root of the groove. The tongue of the lock is for locating purposes only. THERE ARE POORLY MACHINED LOCKS ON THE MARKET. Also, be certain the lock angle is compatible with the retainer angle. This is often not the case.

SUGGESTIONS: Use Manley Super 7° - either regular design or the safer Bead-Loc® style - along with Manley Super 7° retainers. These are made in our own double spindle CNC lathes to exacting tolerances to assure proper fit.

5. VALVE SPRING "LIFT-OFF"

Check the wear pattern in the photo. The coils are touching each other. Is this coil bind? No. The spring is actually lifting off the spring seat pad of the cylinder head causing the coils to touch each other. Springs have certain "fuss" points where in distinct rpm ranges they are in a harmonic state of discord and not under control. It is possible for a spring to control the valve train at 8500 rpm but be unable to do so at 8100 rpm.

SUGGESTIONS: Attempt to tune the "fuss point" out of the operating range of the engine with a different design valve spring. The best springs in the industry are found on pages 63 - 65. Also, stiffer pushrods and lighter valves and retainers will be beneficial.

6. STEADY STATE RPM ENGINES

Assembling a steady state r.p.m. marine engine or a narrow range oval track engine is perhaps the greatest challenge a builder can face today. This statement in no way denigrates the efforts of the drag race community. Success in the straight line arena depends on producing peak horsepower at a very high rpm level, with a large premium on the flatness of the power curve. No easy assignment! The added wrinkle in constructing an oval or marine engine, not of immediate concern in a drag race powerplant, is the existence of dangerous "fuss points" that will inject instability into the valve train. An unstable valve train drastically decreases the life of the components, inevitably leading to failure.

It is the responsibility of the builder to determine where the "fuss points" reside in the engine and be absolutely certain that none appear in the operating range of the engine. Determining the location of an engine's "fuss points" requires a Spintron machine to detect where the springs drift into a harmonic state of discord that allows the valve train to become disunited and the valves to bounce on the seats.

Building an engine to run in a narrow rpm range for extended periods of time without knowing positively if that range contains any "fuss points" is strongly discouraged. But if access to a Spintron is not possible, hopefully a few "bon mots" will benefit the engine builder.

1. The best marine engine builders change titanium valves after every race. Winston Cup valves only run one race. If the valves in your engine are experiencing bounce where the stresses are elevated to 40,000 psi from the normal 20,000 they may last 800,000 cycles or one five hundred mile race. But the fatigue life may be seriously compromised, and asking those valves to complete two or three more races may simply be beyond their fatigue life capabilities.

2. A valve spring cannot be judged solely on its ability to resist pressure loss. It is possible for a spring to control the valve train at 8400 rpm, end a race with minimal open load loss, yet be experiencing a "fuss point" at 8100 rpm that allows serious valve bounce.

3. Moving an engine's rpm range up only 200 or 300 can have a major effect on the valve train. If a builder has researched (or stumbled upon) a combination that works in a certain range, boosting that range should not be undertaken without thoroughly revisiting the choice of valve springs and the weight of the reciprocating components.

CONCLUSIONS: In general, valve springs are NOT the place to effect economies. Purchase the best springs that have been proven to work with similar components both on Spintrons and in race engines. Lighten the valves and change them often, being sympathetic to the notion that they have a fatigue life that is seriously shortened by being bounced on the seats. Related components such as spring retainers and locks should be lightened, and pushrods should be stiff as well as light. Give us a call at Manley Performance; we are always happy to share our testing results to keep racers running at the end.

MANLEY HISTORY

DID YOU KNOW. . . .

... in 1929 you could purchase a Manley 25 ton hydraulic press for $115.00 or a 2 1/2 ton hydraulic jack for $48.00. Both products were invented by Robert E. Manley then operating the Manley Manufacturing Company of Bridgeport, Connecticut.

... in 1931 the Eastern Valve Company of Hanover, Pennsylvania was purchased by Robert E. Manley, moved to York, Pennsylvania and renamed the Manley Products Corporation.

... in 1934 you could purchase Manley replacement Model T engine valves for $8.00 - per 100 pieces.

... in 1940 the price of Model T valves had actually dropped to $7.55 per 100 pieces. Depression!

... in 1950 Model T valves were sold for about $16.00 per 100 pieces. Post war inflation!

... in 1966 Manley Performance Products, Inc. was founded by Henry D. Manley III. Forged pistons were sold for $50.72 per set.

... in 1968 the Manley line included stainless valves, camshafts, lifters, vanadium valve springs, push rods and timing chain kits.

... in 1969 the race cars of Don Garlits, Bo Laws, and Joe Mondello appeared on the cover of the Manley Performance catalog.

... in 1971 Bill Jenkins' Grumpy's Toy made the first of ten appearances on the cover of the Manley Performance catalog.

... in 1983 Manley introduced its line of aluminum connecting rods. The jobber price was $394.56 per set.

... in 1986, Manley's 20th year, "H" beam steel connecting rods were introduced at $788.00 per set jobber price.

... in 1988 Manley Performance moved the factory from 13 Race Street in Bloomfield, NJ, to its present location in Lakewood, NJ.

... in 1997 Manley Performance introduced its Platinum Series of pistons.

... in 1998 an expansion of the factory doubled the manufacturing floor-space.

... in 2001 Manley Performance celebrated its 35th year of serving the racing and performance industry. Thank you to all our customers and especially the racers who trusted our products!

... in 2002 Manley entered the high performance passenger car market as an OEM supplier of connecting rods for the 2003 / 2004 Ford SVT Mustang Cobra.

... in 2004 Manley continued its presence in the OEM market as a connecting rod supplier for the Ford GT.