Manley Performance Products, Inc. Manufacturing Plant

Manley Performance Products, Inc.
1960 Swarthmore Ave
Lakewood, NJ 08701
Phone (732) 905-3366
Fax (732) 905-3010
East Coast Manufacturing Plant
9:00 AM - 5:30 PM EST

Manley West Distribution Facility

Manley West
634 D North Poplar Street
Orange, CA 92868
Phone (714) 978-3335
Fax (714) 978-3354
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

MANLEY PERFORMANCE PRODUCTS, INC. IS A PROUD SPONSOR OF THESE RACING ORGANIZATIONS

MAJOR NHRA SPONSOR

IHRA MOTORSPORTS

CASCAR

USAR UNITED SPEED ALLIANCE RACING

HOOTERS PRO CUP RACING

APBA AMERICAN POWER BOAT ASSOCIATION

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Manley West
634D N. Poplar Street, Orange, CA 92868
Phone (714) 978-3335 FAX (714) 978-3354

SALES POLICY

Manley Performance urges the consumer to purchase all goods through an authorized dealer. Write for the names of the dealers in your area if you are not already familiar with them, or check our website for the “Bricks and Clicks” partner in your state.

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 $2000 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.

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.

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

A MANLEY VALVE FOR EVERY APPLICATION
CHOOSE FROM ONE OF FIVE SERIES OF STAINLESS VALVES

BUDGET SERIES: REPLACEMENT VALVES

- ✓ Stainless Steel (XH-422 Exhaust and NK-840 Intake)
- ✓ Chrome Stems and Hard Tips
- ✓ Material and Heat Treatment Superior to Stock
- ✓ Original Shapes with Forged and Machined Finishes

BUDGET SERIES: PERFORMANCE VALVES

- ✓ 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) of Imported Valves
- ✓ Intake Material NK-844 with 1000 Times Better Fatigue Strength than Imported Valves.

EXTREME DUTY SERIES

- ✓ Top Fuel, Funny Car and Marine Engine Exhaust Valves
- ✓ More Hot Hardness and High Temperature Strength than any Competitive Offerings
- ✓ Exotic XH-430 Inconel Material
- ✓ New XH-432 Xtremealloy

VISUAL GUIDE TO VALVE SERIES BY PAGE BORDERS

Budget Series

Street Series

Race Series

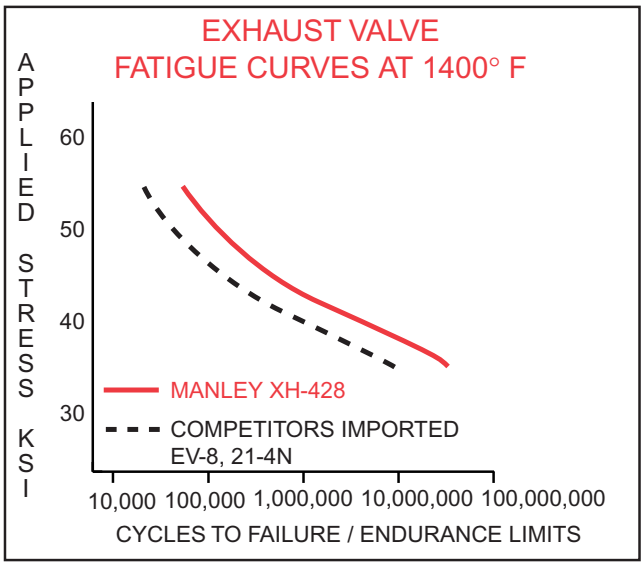
Severe Duty® Series

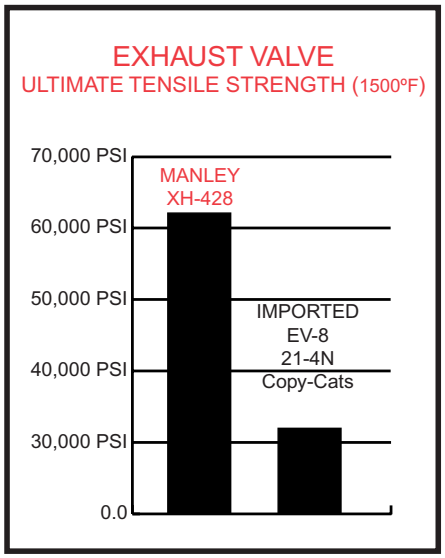
Extreme Duty Series

STAINLESS VALVES

Manley Performance is universally acknowledged as the leading manufacturer of performance and racing valves in the world. No other company comes close to matching Manley's domination of the the top levels of racing. And no other company offers such a broad selection of parts for competitors at all levels. For the Small Block Chevy alone, Manley offers 85 different exhaust valve part numbers and 101 intake numbers.

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.



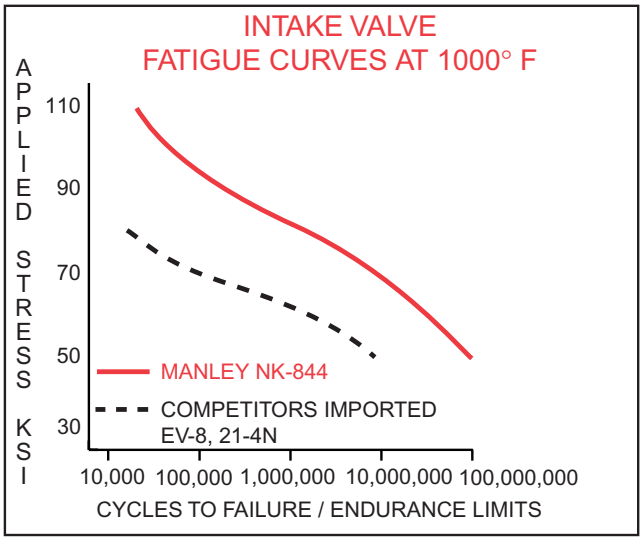


STREET MASTER VALVES

Designed for the enthusiast preparing a stock or mildly modified street engine, or a bracket racer seeking maximum value for his dollar, the Manley Street Master valves are the perfect choice. The exhaust valves are manufactured of our XH-424 material, and the intakes of our NK-841.These dependable valves are also offered in Street Flo versions providing significant flow gains without head porting. All valves in this series feature chrome stems, hard wafer 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 an imported copy-cat EV-8 (21-4N) valve will find in this series of Manley valves a superior piece at a most attractive price.



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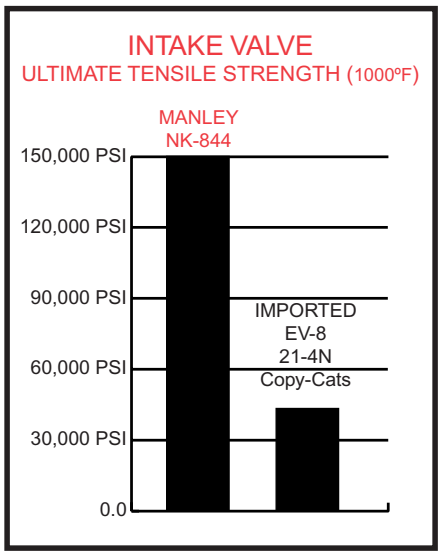
SEVERE DUTY® VALVES

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 imported copy cats' EV-8. At 1000°F the Manley NK-844 displays more than four times the ultimate tensile of the competition's best intake material.

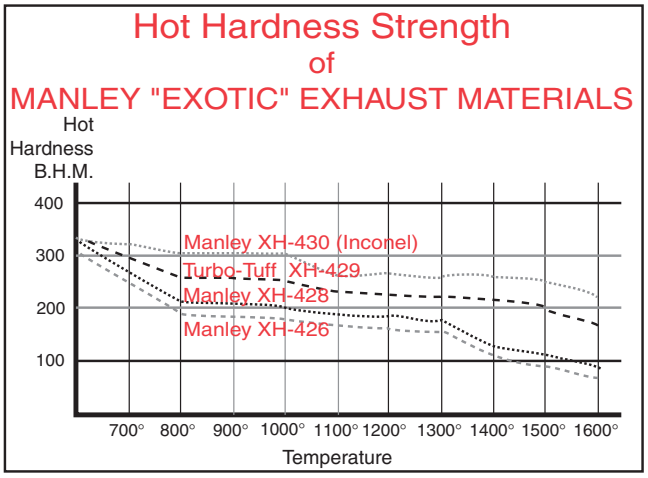


Further proof of the superiority of the Manley Severe Duty® valves is evident in our comprehensive fatigue tests. In normal operation where valve float is non-existent, a valve will experience 20,000 to 25,000 lbs of applied stress. However, when valves bounce on the seat the stress immediately soars 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.

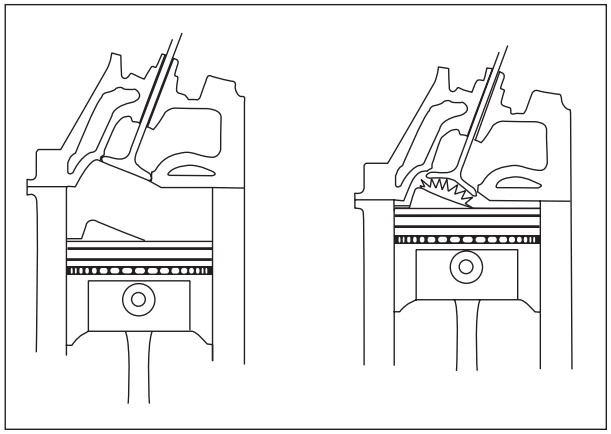
EXTREME DUTY VALVES

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 Extreme Duty 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 left illustration 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 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
Budget Series	Acceptable				
Street Series	Preferred				
Race Series	Extra Insurance	Acceptable	Acceptable		
Severe Duty®		Preferred	Preferred Intake When Titanium is Not Allowed		Required Intake
Extreme Duty		Preferred w/ Restricted Carburetor		Top Fuel Funny Car Exhaust Only	Required Exhaust

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BUICK V-6

STAGE 1 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 Diam.	Stem Diam.	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	9
11502-6	Int.	1.710	.3415	Stock	4.730	.270	Pro Flo: 10˚ x 3/8"	.065	.080	6˚ Dish	95
11504-6	Int.	1.775	.3415	Stock	4.730	.270	Pro Flo: 10˚ x 3/8"	.065	.080	6˚ Dish	97

LS-1 SMALL BLOCK CHEVY

RACE MASTER VALVES

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

Part No.	Type	Head Diam.	Stem Diam.	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	20˚ x 7/16"	.065	.115	18˚ Dish	89
11363-8	Exh.	1.575	.3136	Stock	4.923	.175	20˚ x 7/16"	.065	.115	18˚ Dish	90
11365-8	Exh.	1.600	.3136	Stock	4.923	.175	20˚ x 7/16"	.065	.115	18˚ Dish	91
11360-8	Int.	2.000	.3133	Stock	4.874	.175	Pro Flo: 10˚ x 5/16"	.050	.095	6˚ Dish	101
11362-8	Int.	2.020	.3133	Stock	4.874	.175	Pro Flo: 10˚ x 5/16"	.050	.095	6˚ Dish	103

STAINLESS VALVES

ORDERING INFORMATION
Part number suffix indicates number of pieces or pairs in one packaging unit. To order less pieces or pairs, use part number with -1 suffix and the quantity desired.

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 Diam.	Stem Diam.	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 Diam.	Stem Diam.	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
10553-8	Exh.	1.625	.3415	Stock	4.911	.250	15˚ x 1/2"	.060	.100	10˚ Dish	103
10555-8	Exh.	1.625	.3415	.100 Longer	5.011	.250	15˚ x 1/2"	.060	.100	10˚ Dish	105
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

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ORDERING INFORMATION
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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 Diam.	Stem Diam.	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: 12˚ x 3/8"	.050	.080	7˚ Dish	107
10766-8	Int.	2.020	.3415	Stock	4.911	.250	Pro Flo: 10˚ x 3/8"	.050	.080	6˚ Dish	109

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 Diam.	Stem Diam.	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
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
10753-8	Exh.	1.625	.3415	Stock	4.911	.250	15˚ x 1/2"	.060	.100	10˚ Dish	103
10755-8	Exh.	1.625	.3415	.100 Longer	5.011	.250	15˚ x 1/2"	.060	.100	10˚ Dish	105
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

STAINLESS VALVES

ORDERING INFORMATION
Part number suffix indicates number of pieces or pairs in one packaging unit. To order less pieces or pairs, use part number with -1 suffix and the quantity desired.

SMALL BLOCK CHEVROLET

RACE FLO VALVES

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

Need a different length? Head diameter not listed? Want a Bead Loc® groove? See page 40 for Gen II blanks to construct a valve to your exact specifications.

Part No.	Type	Head Diam.	Stem Diam.	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	9˚ 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
11522-8	Int.	1.940	.3415	Stock	4.911	.250	Pro Flo: 12˚ x 3/8"	.050	.080	7˚ 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	7˚ Dish	113
11568-8	Int.	2.055	.3415	Stock	4.911	.250	Pro Flo: 12˚ x 3/8"	.050	.080	7˚ Dish	115
11546-8	Int.	2.055	.3415	.100 Longer	5.040	.290	Pro Flo: 10˚ x 3/8"	.065	.080	5˚ Dish	116
11552-8	Int.	2.055	.3415	.200 Longer	5.140	.290	Pro Flo: 10˚ x 3/8"	.065	.080	5˚ Dish	117
11556-8	Int.	2.055	.3415	.300 Longer	5.240	.290	Pro Flo: 10˚ x 3/8"	.065	.080	5˚ Dish	118
11558-8	Int.	2.080	.3415	.Stock	4.940	.290	Pro Flo: 10˚ x 3/8"	.065	.080	5˚ Dish	114
11560-8	Int.	2.080	.3415	.100 Longer	5.040	.290	Pro Flo: 10˚ x 3/8"	.065	.080	5˚ Dish	115
11564-8	Int.	2.080	.3415	.200 Longer	5.140	.290	Pro Flo: 10˚ x 3/8"	.065	.080	5˚ Dish	116
11574-8	Int.	2.080	.3415	.300 Longer	5.240	.290	Pro Flo: 10˚ x 3/8"	.065	.080	5˚ Dish	117
11576-8	Int.	2.100	.3415	.100 Longer	5.040	.290	Pro Flo: 10˚ x 3/8"	.065	.080	5˚ Dish	116
11584-8	Int.	2.100	.3415	.200 Longer	5.140	.290	Pro Flo: 10˚ x 3/8"	.065	.080	5˚ Dish	117
11594-8	Int.	2.100	.3415	.300 Longer	5.240	.290	Pro Flo: 10˚ x 3/8"	.065	.080	5˚ Dish	118
11774-8	Int.	2.125	.3415	.100 Longer	5.040	.290	Pro Flo: 10˚ x 3/8"	.065	.080	5˚ Dish	118
11776-8	Int.	2.125	.3415	.200 Longer	5.140	.290	Pro Flo: 10˚ x 3/8"	.065	.080	5˚ Dish	119
11778-8	Int.	2.125	.3415	.300 Longer	5.240	.290	Pro Flo: 10˚ x 3/8"	.065	.080	5˚ Dish	120

NOTE: Exhaust valves 11545, 11555, 11559, 11797, 11799 and intake valves 11564, 11574, 11576, 11584, 11594, 11774, 11776 and 11778 have a Pro Flo start 1.600" up from the head. All others have a Pro Flo start 1.400" from the head.

ORDERING INFORMATION
Part number suffix indicates number of pieces or pairs in one packaging unit. To order less pieces or pairs, use part number with -1 suffix and the quantity desired.

SMALL BLOCK CHEVROLET

RACE MASTER VALVES

Need a different length? Head diameter not listed? Want a Bead Loc® groove? See page 40 for Gen II blanks to construct a valve to your exact specifications.

- ✓ 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 Diam.	Stem Diam.	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
11863-8	Exh.	1.600	.3415	Stock	4.951	.290	15˚ x 1/2"	.060	.100	9˚ Dish	101
11877-8	Exh.	1.600	.3415	.100 Longer	5.065	.290	15˚ x 1/2"	.090	.100	9˚ Dish	111
11321-8	Exh.	1.600	.3415	.200 Longer	5.165	.290	15˚ x 1/2"	.090	.100	9˚ Dish	112
11323-8	Exh.	1.600	.3415	.300 Longer	5.265	.290	15˚ x 1/2"	.090	.100	9˚ Dish	113
11325-8	Exh.	1.600	.3415	.400 Longer	5.365	.290	15˚ x 1/2"	.090	.100	9˚ Dish	114
11327-8	Exh.	1.600	.3415	.500 Longer	5.465	.290	15˚ x 1/2"	.090	.100	9˚ Dish	115
11329-8	Exh.	1.625	.3415	Stock	4.951	.290	15˚ x 1/2"	.060	.100	9˚ Dish	111
11879-8	Exh.	1.625	.3415	.100 Longer	5.065	.290	15˚ x 1/2"	.090	.100	9˚ Dish	112
11331-8	Exh.	1.625	.3415	.200 Longer	5.165	.290	15˚ x 1/2"	.090	.100	9˚ Dish	113
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	105
11864-8	Int.	2.020	.3415	Stock	4.951	.290	10˚ x 3/8"	.050	.080	6˚ Dish	109
11318-8	Int.	2.020	.3415	.100 Longer	5.040	.290	10˚ x 3/8"	.050	.080	5˚ Dish	114
11316-8	Int.	2.020	.3415	.200 Longer	5.140	.290	10˚ x 3/8"	.065	.080	5˚ Dish	115
11806-8	Int.	2.055	.3415	Stock	4.940	.290	10˚ x 3/8"	.065	.080	5˚ Dish	111
11810-8	Int.	2.055	.3415	.100 Longer	5.040	.290	10˚ x 3/8"	.065	.080	5˚ Dish	112
11808-8	Int.	2.080	.3415	Stock	4.940	.290	10˚ x 3/8"	.065	.080	5˚ Dish	114
11812-8	Int.	2.080	.3415	.100 Longer	5.040	.290	10˚ x 3/8"	.065	.080	5˚ Dish	115
11320-8	Int.	2.080	.3415	.200 Longer	5.140	.290	10˚ x 3/8"	.065	.080	5˚ Dish	116
11322-8	Int.	2.080	.3415	.300 Longer	5.240	.290	10˚ x 3/8"	.065	.080	5˚ Dish	117
11324-8	Int.	2.080	.3415	.400 Longer	5.340	.290	10˚ x 3/8"	.065	.080	5˚ Dish	118
11326-8	Int.	2.080	.3415	.500 Longer	5.440	.290	10˚ x 3/8"	.065	.080	5˚ Dish	119
11328-8	Int.	2.100	.3415	.100 Longer	5.040	.290	10˚ x 3/8"	.065	.080	5˚ Dish	116
11330-8	Int.	2.100	.3415	.200 Longer	5.140	.290	10˚ x 3/8"	.065	.080	5˚ Dish	117
11332-8	Int.	2.100	.3415	.300 Longer	5.240	.290	10˚ x 3/8"	.065	.080	5˚ Dish	118
11334-8	Int.	2.100	.3415	.400 Longer	5.340	.290	10˚ x 3/8"	.065	.080	5˚ Dish	119
11336-8	Int.	2.100	.3415	.500 Longer	5.440	.290	10˚ x 3/8"	.065	.080	5˚ Dish	120
11340-8	Int.	2.125	.3415	.100 Longer	5.040	.290	10˚ x 3/8"	.065	.080	5˚ Dish	117
11342-8	Int.	2.125	.3415	.200 Longer	5.140	.290	10˚ x 3/8"	.065	.080	5˚ Dish	118
11344-8	Int.	2.125	.3415	.300 Longer	5.240	.290	10˚ x 3/8"	.065	.080	5˚ Dish	119
11346-8	Int.	2.125	.3415	.400 Longer	5.340	.290	10˚ x 3/8"	.065	.080	5˚ Dish	120
11348-8	Int.	2.125	.3415	.500 Longer	5.440	.290	10˚ x 3/8"	.065	.080	5˚ Dish	121

STAINLESS VALVES

ORDERING INFORMATION
Part number suffix indicates number of pieces or pairs in one packaging unit. To order less pieces or pairs, use part number with -1 suffix and the quantity desired.

SMALL BLOCK CHEVROLET

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

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

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

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

NOTE: See notes below about rpm limitations and rocker arms.

Part No.	Type	Head Diam.	Stem Diam.	Installed Height	O/A Length	Tip Length	Underhead Angle/Radius	Margin	Seat Width	Top of Head	Wgt/ Grams
11305-8	Exh.	1.600	.311	.100 Longer	5.040	.290	15˚ x 1/2"	.080	.100	9˚ Dish	94
11302-8	Int.	1.940	.311	.100 Longer	5.010	.290	10˚ x 3/8"	.050	.080	5˚ Dish	105
11304-8	Int.	2.020	.311	.100 Longer	5.010	.290	10˚ x 3/8"	.050	.080	5˚ Dish	108
11306-8	Int.	2.055	.311	.100 Longer	5.010	.290	10˚ x 3/8"	.050	.080	5˚ Dish	110

RPMS AND THIN STEM VALVES

NOTE: Use of the thin stem valves listed on pages 12 and 13 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 light and stiff pushrods. Operate the engine within sensible rpm limits.

ROCKERS AND THIN STEM VALVES

NOTE: 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.

ORDERING INFORMATION
Part number suffix indicates number of pieces or pairs in one packaging unit. To order less pieces or pairs, use part number with -1 suffix and the quantity desired.

SMALL BLOCK CHEVROLET

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

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

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

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

NOTE: See page 12 for notes about rpm limitations and rocker arms.

Part No.	Type	Head Diam.	Stem Diam.	Installed Height	O/A Length	Tip Length	Underhead Angle/Radius	Margin	Seat Width	Top of Head	Wgt/ Grams
11231-8	Exh.	1.600	.311	.100 Longer	5.040	.290	15˚ x 1/2"	.080	.100	9˚ Dish	94
11230-8	Int.	1.940	.311	.100 Longer	5.010	.290	10˚ x 3/8"	.050	.080	5˚ Dish	105
11232-8	Int.	2.020	.311	.100 Longer	5.010	.290	10˚ x 3/8"	.050	.080	5˚ Dish	108
11234-8	Int.	2.055	.311	.100 Longer	5.010	.290	10˚ x 3/8"	.050	.080	5˚ Dish	110

SMALL BLOCK CHEVROLET

SEVERE DUTY® VALVES
7 mm (.274") STEM

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

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

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

NOTE: See page 12 for notes about rpm limitations and rocker arms.

Part No.	Type	Head Diam.	Stem Diam.	Installed Height	O/A Length	Tip Length	Underhead Angle/Radius	Margin	Seat Width	Top of Head	Wgt/ Grams
11235-8	Exh.	1.600	.274	.100 Longer	5.040	.290	15˚ x 1/2"	.080	.100	9˚ Dish	84
11236-8	Int.	1.940	.274	.100 Longer	5.010	.290	10˚ x 3/8"	.050	.080	5˚ Dish	95
11238-8	Int.	2.020	.274	.100 Longer	5.010	.290	10˚ x 3/8"	.050	.080	5˚ Dish	98
11240-8	Int.	2.055	.274	.100 Longer	5.010	.290	10˚ x 3/8"	.050	.080	5˚ Dish	100

STAINLESS VALVES

ORDERING INFORMATION
Part number suffix indicates number of pieces or pairs in one packaging unit. To order less pieces or pairs, use part number with -1 suffix and the quantity desired.

SMALL BLOCK CHEVROLET

SEVERE DUTY® EXHAUST VALVES

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

Need a different length? Head diameter not listed? Want a Bead Loc® groove? See page 40 for Gen II blanks to construct a valve to your exact specifications.

Part No.	Type	Head Diam.	Stem Diam.	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	7˚ Dish	105
11573-8	Exh.	1.600	.3415	Stock	4.965	.290	15˚ x 1/2"	.090	.100	9˚ Dish	111
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
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	7˚ Dish	95
11585-8	Exh.	1.625	.3415	Stock	4.936	.250	15˚ x 1/2"	.085	.100	Flat Face	106
11537-8	Exh.	1.625	.3415	.100 Longer	5.036	.250	15˚ x 1/2"	.085	.100	7˚ Dish	102
11871-8	Exh.	1.625	.3415	.200 Longer	5.121	.250	15˚ x 1/2"	.070	.100	7˚ Dish	105
11557-8	Exh.	1.625	.3415	Stock	4.921	.250	30˚ x 1/2"	.070	.100	25˚ Dish	109
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

ORDERING INFORMATION
Part number suffix indicates number of pieces or pairs in one packaging unit. To order less pieces or pairs, use part number with -1 suffix and the quantity desired.

SMALL BLOCK CHEVROLET

SEVERE DUTY® INTAKE VALVES

Need a different length? Head diameter not listed? Want a Bead Loc® groove? See page 40 for Gen II blanks to construct a valve to your exact specifications.

- ✓ NK-844 Stainless Material
- ✓ Chrome Stems and Hard Tips
- ✓ Hard Tips
- ✓ Swirl Polished
- ✓ Fully Machined

Part No.	Type	Head Diam.	Stem Diam.	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	5.000	.250	12˚ x 3/8"	.050	.080	5˚ Dish	99
11542-8	Int.	1.840	.3415	.100 Longer	5.000	.250	12˚ x 3/8"	.050	.080	5˚ Dish	106
11592-8	Int.	1.937	.3415	Stock	4.911	.250	10˚ x 3/8"	.050	.080	7˚ Dish	109
11886-8	Int.	1.940	.3415	.100 Longer	5.011	.250	12˚ x 3/8"	.050	.100	7˚ 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	10˚ x 3/8"	.050	.080	7˚ Dish	113
11828-8	Int.	2.055	.3415	Stock	4.926	.250	10˚ x 3/8"	.065	.080	Flat Face	128
11846-8	Int.	2.055	.3415	.100 Longer	5.026	.250	10˚ x 3/8"	.065	.080	5˚ Dish	125
11818-8	Int.	2.080	.3415	Stock	4.926	.250	10˚ x 3/8"	.065	.080	Flat Face	131
11844-8	Int.	2.080	.3415	.100 Longer	5.026	.250	10˚ x 3/8"	.065	.080	5˚ Dish	126
11858-8	Int.	2.080	.3415	.200 Longer	5.140	.290	10˚ x 3/8"	.065	.080	5˚ Dish	129
11762-8	Int.	2.080	.3415	.300 Longer	5.240	.290	10˚ x 3/8"	.065	.080	5˚ Dish	131
11764-8	Int.	2.080	.3415	.400 Longer	5.340	.290	10˚ x 3/8"	.065	.080	5˚ Dish	132
11512-8	Int.	2.080	.3415	.500 Longer	5.440	.290	10˚ x 3/8"	.065	.080	5˚ Dish	134
11852-8	Int.	2.100	.3415	.100 Longer	5.026	.250	10˚ x 3/8"	.065	.080	5˚ Dish	128
11862-8	Int.	2.100	.3415	.200 Longer	5.140	.290	10˚ x 3/8"	.065	.080	5˚ Dish	131
11750-8	Int.	2.100	.3415	.300 Longer	5.240	.290	10˚ x 3/8"	.065	.080	5˚ Dish	132
11752-8	Int.	2.100	.3415	.400 Longer	5.340	.290	10˚ x 3/8"	.065	.080	5˚ Dish	133
11510-8	Int.	2.100	.3415	.500 Longer	5.440	.290	10˚ x 3/8"	.065	.080	5˚ Dish	135
11770-8	Int.	2.100	.3415	.600 Longer	5.540	.290	10˚ x 3/8"	.065	.080	5˚ Dish	137
11848-8	Int.	2.125	.3415	.100 Longer	5.026	.250	10˚ x 3/8"	.065	.080	5˚ Dish	131
11866-8	Int.	2.125	.3415	.200 Longer	5.125	.250	10˚ x 3/8"	.065	.080	5˚ Dish	132
11754-8	Int.	2.125	.3415	.300 Longer	5.240	.290	10˚ x 3/8"	.065	.080	5˚ Dish	133
11756-8	Int.	2.125	.3415	.400 Longer	5.340	.290	10˚ x 3/8"	.065	.080	5˚ Dish	134
11508-8	Int.	2.125	.3415	.500 Longer	5.440	.290	10˚ x 3/8"	.065	.080	5˚ Dish	135
11768-8	Int.	2.125	.3415	.600 Longer	5.540	.290	10˚ x 3/8"	.065	.080	5˚ Dish	137
11758-8	Int.	2.150	.3415	.400 Longer	5.340	.290	10˚ x 3/8"	.065	.080	5˚ Dish	133
11760-8	Int.	2.150	.3415	.500 Longer	5.440	.290	10˚ x 3/8"	.065	.080	5˚ Dish	135
11766-8	Int.	2.150	.3415	.600 Longer	5.540	.290	10˚ x 3/8"	.065	.080	5˚ Dish	137

STAINLESS VALVES

ORDERING INFORMATION
Part number suffix indicates number of pieces or pairs in one packaging unit. To order less pieces or pairs, use part number with -1 suffix and the quantity desired.

SMALL BLOCK CHEVROLET

SEVERE DUTY® "PRO FLO" VALVES

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

Part No.	Type	Head Diam.	Stem Diam.	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
11824-8	Int.	2.055	.3415	.100 Longer	5.011	.250	Pro Flo: 12˚ x 3/8"	.050	.080	7˚ Dish	116

SMALL BLOCK CHEVROLET

SEVERE DUTY® VALVES
LEGAL NHRA SUPER STOCK

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

Part No.	Type	Head Diam.	Stem Diam.	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	5.000	.250	12˚ x 3/8"	.050	.080	5˚ Dish	99
11542-8	Int.	1.840	.3415	.100 Longer	5.000	.250	12˚ x 3/8"	.050	.080	5˚ Dish	106
11748-8	Int.	1.940	.3415	.200 Longer	5.140	.290	10˚ x 3/8"	.050	.100	5˚ Dish	115

ORDERING INFORMATION
Part number suffix indicates number of pieces or pairs in one packaging unit. To order less pieces or pairs, use part number with -1 suffix and the quantity desired.

SMALL BLOCK CHEVROLET

EXTREME DUTY XTREMEALLOY EXHAUST VALVES

Need a different length? Head diameter not listed? Want a Bead Loc® groove? See page 40 for Gen II blanks to construct a valve to your exact specifications.

- ✓ XH-432 Xtremealloy Material
- ✓ Chrome Stems and Hard Tips
- ✓ Swirl Polished and Fully Machined

Part No.	Type	Head Diam.	Stem Diam.	Installed Height	O/A Length	Tip Length	Underhead Angle/Radius	Margin	Seat Width	Top of Head	Wgt/ Grams
11789-8	Exh.	1.600	.3415	.050 Longer	4.971	.250	10˚ x 3/8"	.070	.100	5˚ Dish	103
11589-8	Exh.	1.600	.3415	.050 Longer	4.971	.250	10˚ x 3/8"	.070	.100	Flat Face	105
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

409 CHEVROLET

RACE MASTER VALVES

Need a different length? Head diameter not listed? Want a Bead Loc® groove? See page 40 for Gen II blanks to construct a valve to your exact specifications.

- ✓ 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 Diam.	Stem Diam.	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"	.080	.080	7˚ Dish	139
11312-8	Int.	2.250	.3715	Stock	5.105	.225	12˚ x 3/8"	.080	.080	7˚ Dish	141

STAINLESS VALVES

ORDERING INFORMATION
Part number suffix indicates number of pieces or pairs in one packaging unit. To order less pieces or pairs, use part number with -1 suffix and the quantity desired.

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

Need a different length? Head diameter not listed? Want a Bead Loc® groove? See page 40 for Gen II blanks to construct a valve to your exact specifications.

Part No.	Type	Head Diam.	Stem Diam.	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

Edmund Richardson
World Champion
1989 & 1992 Super Competition Eliminator
2001 Stock Eliminator

ORDERING INFORMATION
Part number suffix indicates number of pieces or pairs in one packaging unit. To order less pieces or pairs, use part number with -1 suffix and the quantity desired.

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 Diam.	Stem Diam.	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
11/32" STEM DIAMETER

Need a different length? Head diameter not listed? Want a Bead Loc® groove? See page 40 for Gen II blanks to construct a valve to your exact specifications.

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

Part No.	Type	Head Diam.	Stem Diam.	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
11883-8	Exh.	1.900	.3415	Stock	5.422	.250	10˚ x 3/8"	.075	.100	6˚ Dish	123
11885-8	Exh.	1.940	.3415	Stock	5.422	.250	10˚ x 3/8"	.075	.100	6˚ Dish	124
11872-8	Int.	2.190	.3415	Stock	5.244	.250	12˚ x 3/8"	.050	.080	7˚ Dish	139
11894-8	Int.	2.190	.3415	.100 Longer	5.344	.250	12˚ x 3/8"	.050	.080	7˚ Dish	140
11874-8	Int.	2.250	.3415	Stock	5.244	.250	12˚ x 3/8"	.050	.080	7˚ Dish	140
11814-8	Int.	2.250	.3415	.100 Longer	5.344	.250	12˚ x 3/8"	.050	.080	7˚ Dish	142
11868-8	Int.	2.250	.3415	.250 Longer	5.494	.250	12˚ x 3/8"	.050	.080	7˚ 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	12˚ x 3/8"	.050	.080	7˚ Dish	146
11870-8	Int.	2.300	.3415	.250 Longer	5.494	.250	12˚ x 3/8"	.050	.080	7˚ Dish	147

STAINLESS VALVES

ORDERING INFORMATION
Part number suffix indicates number of pieces or pairs in one packaging unit. To order less pieces or pairs, use part number with -1 suffix and the quantity desired.

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 Diam.	Stem Diam.	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
11554-8	Int.	2.065	.3720	.100 Longer	5.325	.220	Pro Flo: 12˚ x 7/16"	.065	.080	5˚ Dish	138
11520-8	Int.	2.190	.3720	Stock	5.218	.220	10˚ x 3/8"	.050	.080	7˚ Dish	145
11538-8	Int.	2.190	.3720	.100 Longer	5.325	.220	Pro Flo: 12˚ x 7/16"	.065	.080	5˚ 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	5˚ Dish	162
11534-8	Int.	2.250	.3720	.200 Longer	5.433	.220	Pro Flo: 12˚ x 7/16"	.065	.080	5˚ Dish	164
11530-8	Int.	2.300	.3720	.100 Longer	5.325	.220	Pro Flo: 12˚ x 7/16"	.065	.080	5˚ Dish	160
11536-8	Int.	2.300	.3720	.200 Longer	5.433	.220	Pro Flo: 12˚ x 7/16"	.065	.080	5˚ Dish	168

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 Diam.	Stem Diam.	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
11832-8	Int.	2.190	.3720	Stock	5.218	.220	Pro Flo: 10˚ x 3/8"	.050	.080	5˚ Dish	138

ORDERING INFORMATION
Part number suffix indicates number of pieces or pairs in one packaging unit. To order less pieces or pairs, use part number with -1 suffix and the quantity desired.

BIG BLOCK CHEVROLET

SEVERE DUTY® VALVES
11/32" 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 Diam.	Stem Diam.	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
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	10˚ x 3/8"	.075	.100	6˚ Dish	122
11811-8	Exh.	1.900	.3415	.100 Longer	5.522	.250	10˚ x 3/8"	.075	.100	6˚ 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	10˚ x 3/8"	.075	.100	6˚ Dish	123
11809-8	Exh.	1.940	.3415	.100 Longer	5.522	.250	10˚ x 3/8"	.075	.100	6˚ 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	5.595	.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	5.605	.250	12˚ x 3/8"	.065	.100	7˚ Dish	150
11780-8	Int.	2.300	.3415	Stock	5.244	.250	10˚ x 3/8"	.050	.080	5˚ Dish	143
11842-8	Int.	2.300	.3415	.100 Longer	5.344	.250	12˚ x 3/8"	.050	.080	7˚ Dish	146
11854-8	Int.	2.300	.3415	.250 Longer	5.494	.250	12˚ x 3/8"	.050	.080	7˚ Dish	147
11878-8	Int.	2.300	.3415	.350 Longer	5.610	.250	12˚ x 3/8"	.065	.100	7˚ Dish	148
11838-8	Int.	2.325	.3415	.250 Longer	5.509	.250	10˚ x 3/8"	.065	.075	5˚ Dish	150
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® and 320 / 360 HEADS

SEVERE DUTY® VALVES
11/32" STEM DIAMETERS

Part No.	Type	Head Diam.	Stem Diam.	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
11817-8	Exh.	1.900	.3415	Stock	5.422	.250	10˚ x 3/8"	.075	.100	6˚ 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

STAINLESS VALVES

ORDERING INFORMATION
Part number suffix indicates number of pieces or pairs in one packaging unit. To order less pieces or pairs, use part number with -1 suffix and the quantity desired.

BIG BLOCK CHEVROLET

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

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

Part No.	Type	Head Diam.	Stem Diam.	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

BIG BLOCK CHEVROLET

PONTIAC "PRO STOCK"
DART "BIG CHIEF"
SEVERE DUTY® VALVES

- ✓ XH-428 Stainless Exhaust Material
- ✓ NK-844 Stainless Intake Material
- ✓ Chrome Stems but NOT Hard Tips
- ✓ Swirl Polished and Fully Machined

Need a different length? Head diameter not listed? Want a Bead Loc® groove? See page 40 for Gen II blanks to construct a valve to your exact specifications.

ALL PONTIAC VALVES REQUIRE PROTECTION WITH WEAR CAP P/N 42104.

Part No.	Type	Head Diam.	Stem Diam.	Installed Height	O/A Length	Tip Length	Underhead Angle/Radius	Margin	Seat Width	Top of Head	Wgt/ Grams
11505-8	Exh.	1.900	.3415	*Special	6.310	.250	25˚ x 3/8"	.085	.100	20˚ Dish	145
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
11506-8	Int.	2.325	.3415	*Special	6.400	.250	10˚ x 3/8"	.065	.075	5˚ Dish	155
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

(* Short installed height for marine applications)

1960 Swarthmore Avenue, Lakewood, NJ 08701
732-905-3366 FAX: 732-905-3010
www.manleyperformance.com

ORDERING INFORMATION
Part number suffix indicates number of pieces or pairs in one packaging unit. To order less pieces or pairs, use part number with -1 suffix and the quantity desired.

BIG BLOCK CHEVROLET

EXTREME DUTY and 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 Diam.	Stem Diam.	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"	.065	.100	6˚ Dish	143
11735-8	Exh.	1.940	.3715	.100 Longer	5.454	.220	10˚ x 3/8"	.065	.100	6˚ Dish	144
11520-8	Int.	2.190	.3720	Stock	5.218	.220	10˚ x 3/8"	.050	.080	7˚ Dish	145
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	5˚ Dish	162

* Valve 11587-8 is XH-430 Inconel exhaust material.

BIG BLOCK CHEVROLET

EXTREME DUTY and MARINE VALVES
11/32" STEM DIAMETERS

✓ XH-432 Xtremealloy Exhaust Material
✓ Chrome Stems and Hard Tips
✓ Smaller Stem Diameter
✓ Greater Flow and Less Weight
✓ Swirl Polished and Fully Machined

Part No.	Type	Head Diam.	Stem Diam.	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	131
11737-8	Exh.	1.880	.3415	.100 Longer	5.522	.250	18˚ x 7/16"	.075	.085	11˚ Dish	135
11745-8	Exh.	1.900	.3415	Stock	5.422	.250	15˚ x 1/2"	.075	.085	9˚ Dish	132
11739-8	Exh.	1.900	.3415	.100 Longer	5.522	.250	18˚ x 7/16"	.075	.085	11˚ Dish	136
11773-8	Exh.	1.940	.3415	Stock	5.422	.250	15˚ x 1/2"	.075	.085	9˚ Dish	133
11741-8	Exh.	1.940	.3415	.100 Longer	5.522	.250	18˚ x 7/16"	.075	.085	11˚ Dish	138
11800-8	Int.	2.190	.3415	Stock	5.244	.250	12˚ x 3/8"	.050	.080	7˚ Dish	139
11802-8	Int.	2.250	.3415	Stock	5.244	.250	12˚ x 3/8"	.050	.080	7˚ Dish	140
11850-8	Int.	2.250	.3415	.100 Longer	5.344	.250	12˚ x 3/8"	.065	.080	7˚ Dish	142
11856-8	Int.	2.250	.3415	.250 Longer	5.494	.250	12˚ x 3/8"	.065	.080	7˚ Dish	145
11780-8	Int.	2.300	.3415	Stock	5.244	.250	10˚ x 3/8"	.050	.080	5˚ Dish	143
11842-8	Int.	2.300	.3415	.100 Longer	5.344	.250	12˚ x 3/8"	.065	.080	7˚ Dish	146
11854-8	Int.	2.300	.3415	.250 Longer	5.494	.250	12˚ x 3/8"	.065	.080	7˚ Dish	147

STAINLESS VALVES

ORDERING INFORMATION
Part number suffix indicates number of pieces or pairs in one packaging unit. To order less pieces or pairs, use part number with -1 suffix and the quantity desired.

CHRYSLER 340 - 360

(W-2, NOT KIT CAR)
SEVERE DUTY® "PRO FLO" VALVES

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

Part No.	Type	Head Diam.	Stem Diam.	Installed Height	O/A Length	Tip Length	Underhead Angle/Radius	Margin	Seat Width	Top of Head	Wgt/ Grams
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	.3725	.150 Longer	5.050	.220	Pro Flo: 12˚ x 3/8"	.050	.080	7˚ Dish	123

Bucky Hess
Winner
2001 U.S. National Mopar Hemi Challenge

1960 Swarthmore Avenue, Lakewood, NJ 08701
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www.manleyperformance.com

ORDERING INFORMATION
Part number suffix indicates number of pieces or pairs in one packaging unit. To order less pieces or pairs, use part number with -1 suffix and the quantity desired.

CHRYSLER 361 - 383 - 426 WEDGE - 440

RACE FLO and RACE MASTER VALVES

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

Part No.	Type	Head Diam.	Stem Diam.	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	.3725	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	.3725	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

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

Part No.	Type	Head Diam.	Stem Diam.	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	.3725	Stock	4.873	.275	Pro Flo: 10˚ x 3/8"	.050	.100	5˚ Dish	122
11834-8	Int.	2.140	.3725	Stock	4.873	.275	Pro Flo: 10˚ x 3/8"	.050	.100	5˚ Dish	126

STAINLESS VALVES

ORDERING INFORMATION
Part number suffix indicates number of pieces or pairs in one packaging unit. To order less pieces or pairs, use part number with -1 suffix and the quantity desired.

CHRYSLER 440-1

"INDY CYLINDER HEADS" RACE MASTER VALVES

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

Need a different length?
Head diameter not listed?
Want a Bead Loc® groove?
See page 40 for Gen II
blanks to construct a valve
to your exact specifications.

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

Part No.	Type	Head Diam.	Stem Diam.	Installed Height	O/A Length	Tip Length	Underhead Angle/Radius	Margin	Seat Width	Top of Head	Wgt/ Grams
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

CHRYSLER 440-1

"INDY CYLINDER HEADS" SEVERE DUTY® VALVES

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

Need a different length?
Head diameter not listed?
Want a Bead Loc® groove?
See page 40 for Gen II
blanks to construct a valve
to your exact specifications.

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

Part No.	Type	Head Diam.	Stem Diam.	Installed Height	O/A Length	Tip Length	Underhead Angle/Radius	Margin	Seat Width	Top of Head	Wgt/ Grams
11813-8	Exh.	1.810	.3415	Stock	5.369	.250	10˚ x 3/8"	.075	.100	5˚ 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

ORDERING INFORMATION
Part number suffix indicates number of pieces or pairs in one packaging unit. To order less pieces or pairs, use part number with -1 suffix and the quantity desired.

STAINLESS VALVES

CHRYSLER HEMI

RACE MASTER and SEVERE DUTY® VALVES

- ✓ XH-426 Race Master Stainless Exhaust Material
- ✓ NK-844 Severe Duty® Stainless Intake Material
- ✓ Chrome Stems
- ✓ Swirl Polished and Fully Machined

NOTE: "B" suffix indicates a Bead Loc® keeper groove.

Part No.	Type	Head Diam.	Stem Diam.	Installed Height	O/A Length	Tip Length	Underhead Angle/Radius	Margin	Seat Width	Top of Head	Wgt/ Grams
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
11902-8	Int.	2.200	.3085	Stock	5.405	.200	30˚ x 3/4"	.060	.095	20˚ Dish	133
11902B-8	Int.	2.200	.3085	Stock	5.405	.200	30˚ x 3/4"	.060	.095	20˚ Dish	133
11904-8	Int.	2.250	.3085	Stock	5.424	.200	30˚ x 3/4"	.060	.095	20˚ Dish	136
11904B-8	Int.	2.250	.3085	Stock	5.424	.200	30˚ x 3/4"	.060	.095	20˚ Dish	136

TOP FUEL and FUNNY CAR

EXTREME DUTY XTREMEALLOY EXHAUST VALVES

✓ XH-432 Xtremealloy Material ✓ Chrome Stems and Swirl Polished

Due to the geometry of the fuel cylinder heads, wear caps are recommended even though the Manley valves have hard tips.

Part No.	Type	Head Diam.	Stem Diam.	Installed Height	O/A Length	Tip Length	Underhead Angle/Radius	Margin	Seat Width	Top of Head	Wgt/ Grams
11867-8	Exh.	1.900	.3415	Stock	4.995	.250	22˚ x 1/2"	.075	.100	15˚ Dish	143
11821-8	Exh.	1.900	.3715	.100 Longer	5.020	.250	22˚ x 1/2"	.080	.100	15˚ Dish	146
11727-8	Exh.	1.900	.3715	.200 Longer	5.120	.250	22˚ x 1/2"	.080	.100	15˚ Dish	167
11897-8	Exh.	1.950	.3415	.100 Longer	5.000	.250	22˚ x 1/2"	.080	.100	15˚ Dish	157
11837-8	Exh.	1.950	.3715	.100 Longer	5.020	.250	22˚ x 1/2"	.080	.100	15˚ Dish	166
11729-8	Exh.	1.950	.3715	.200 Longer	5.120	.250	22˚ x 1/2"	.080	.100	15˚ Dish	169
11899-8	Exh.	2.000	.3415	.100 Longer	5.015	.250	22˚ x 1/2"	.075	.100	15˚ Dish	150
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"	.135	.090	15˚ Dish	169

* 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.

NOTE: Seat angle of 11727, 11729, 11821, 11837, 11867, 11895 and 11897 is 55˚.

STAINLESS VALVES

ORDERING INFORMATION
Part number suffix indicates number of pieces or pairs in one packaging unit. To order less pieces or pairs, use part number with -1 suffix and the quantity desired.

FORD SVO "SPORTSMAN"

N-351 CYLINDER HEAD
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

Need a different length? Head diameter not listed? Want a Bead Loc® groove? See page 40 for Gen II blanks to construct a valve to your exact specifications.

Part No.	Type	Head Diam.	Stem Diam.	Installed Height	O/A Length	Tip Length	Underhead Angle/Radius	Margin	Seat Width	Top of Head	Wgt/ Grams
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	10˚ x 3/8"	.065	.080	5˚ Dish	127

FORD SVO "SPORTSMAN"

N-351 CYLINDER HEAD
SEVERE DUTY® VALVES

- ✓ 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

Need a different length? Head diameter not listed? Want a Bead Loc® groove? See page 40 for Gen II blanks to construct a valve to your exact specifications.

Part No.	Type	Head Diam.	Stem Diam.	Installed Height	O/A Length	Tip Length	Underhead Angle/Radius	Margin	Seat Width	Top of Head	Wgt/ Grams
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

FORD 289 - 302 - 351W

BUDGET PERFORMANCE and STREET FLO VALVES

- ✓ Chrome Stems and Hard Tips
- ✓ Swirl Polished and Fully Machined

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

Part No.	Type	Head Diam.	Stem Diam.	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

ORDERING INFORMATION
Part number suffix indicates number of pieces or pairs in one packaging unit. To order less pieces or pairs, use part number with -1 suffix and the quantity desired.

FORD 289 - 302 - 351W

RACE FLO VALVES

Need a different length? Head diameter not listed? Want a Bead Loc® groove? See page 40 for Gen II blanks to construct a valve to your exact specifications.

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

Part No.	Type	Head Diam.	Stem Diam.	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: 12˚ x 3/8"	.050	.080	7˚ Dish	107
11566-8*	Int.	2.020	.3415	Stock	4.911	.250	Pro Flo: 12˚ x 3/8"	.050	.080	7˚ 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

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

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

FORD 4.6 L DOHC (4 VALVE)

RACE MASTER VALVES

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

NOTE: 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 Diam.	Stem Diam.	Installed Height	O/A Length	Tip Length	Underhead Angle/Radius	Margin	Seat Width	Top of Head	Wgt/ Grams
11611-8	Exh.	30 mm	7 mm	Stock	119 mm	15.6 mm	20˚ x 1/2"	.060	.080	Flat Face	60
11613-8	Exh.	31 mm	7 mm	Stock	119 mm	15.6 mm	20˚ x 1/2"	.060	.080	Flat Face	61
11612-8	Int.	37 mm	7 mm	Stock	138 mm	21.0 mm	15˚ x 5/16"	.040	.080	10˚ Dish	78
11614-8	Int.	38 mm	7 mm	Stock	138 mm	21.0 mm	15˚ x 5/16"	.040	.080	10˚ Dish	79

NOTE: Stock valves utilize triple radius groove locks. Manley valves employ single Bead Loc® locks. 7° Bead Loc® machined locks 13099-32 MUST be used. Installed height will be stock. Stock retainers may be used.

STAINLESS VALVES

ORDERING INFORMATION
Part number suffix indicates number of pieces or pairs in one packaging unit. To order less pieces or pairs, use part number with -1 suffix and the quantity desired.

FORD PINTO 2000

SEVERE DUTY® 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 Diam.	Stem Diam.	Installed Height	O/A Length	Tip Length	Underhead Angle/Radius	Margin	Seat Width	Top of Head	Wgt/ Grams
11819-4	Exh.	1.500	.315	Stock or .100	4.400	.135	10˚ x 3/8"	.055	.100	6˚ Dish	74
11820-4	Int.	1.750	.316	Stock or .100	4.400	.135	10˚ x 3/8"	.050	.080	6˚ Dish	86

NOTE: Ford Pinto valves have four grooves for keepers.
The lower three give stock installed height;
the upper three give .100" longer than stock installed height.

FORD 2300

"ESSLINGER" 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 Diam.	Stem Diam.	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

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

ORDERING INFORMATION
Part number suffix indicates number of pieces or pairs in one packaging unit. To order less pieces or pairs, use part number with -1 suffix and the quantity desired.

FORD 351C

RACE MASTER VALVES

Need a different length? Head diameter not listed? Want a Bead Loc® groove? See page 40 for Gen II blanks to construct a valve to your exact specifications.

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

Part No.	Type	Head Diam.	Stem Diam.	Installed Height	O/A Length	Tip Length	Underhead Angle/Radius	Margin	Seat Width	Top of Head	Wgt/ Grams
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	12˚ x 3/8"	.050	.080	7˚ Dish	139
11874-8	Int.	2.250	.3415	Stock	5.244	.250	12˚ x 3/8"	.050	.080	7˚ Dish	140

FORD 351C

SEVERE DUTY® VALVES

Need a different length? Head diameter not listed? Want a Bead Loc® groove? See page 40 for Gen II blanks to construct a valve to your exact specifications.

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

Part No.	Type	Head Diam.	Stem Diam.	Installed Height	O/A Length	Tip Length	Underhead Angle/Radius	Margin	Seat Width	Top of Head	Wgt/ Grams
11807-8	Exh.	1.655	.3415	Stock	5.067	.220	10˚ 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	9˚ Dish	105
11805-8	Exh.	1.710	.3415	Stock	5.067	.220	10˚ 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	9˚ 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

STAINLESS VALVES

ORDERING INFORMATION
Part number suffix indicates number of pieces or pairs in one packaging unit. To order less pieces or pairs, use part number with -1 suffix and the quantity desired.

FORD 429 - 460

RACE MASTER VALVES

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

Need a different length? Head diameter not listed? Want a Bead Loc® groove? See page 40 for Gen II blanks to construct a valve to your exact specifications.

Part No.	Type	Head Diam.	Stem Diam.	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	9˚ Dish	113
11872-8	Int.	2.190	.3415	Stock	5.244	.250	12˚ x 3/8"	.050	.080	7˚ Dish	139
11874-8	Int.	2.250	.3415	Stock	5.244	.250	12˚ x 3/8"	.050	.080	7˚ Dish	140
BLUE THUNDER HEADS											
11829-8	Exh.	1.880	.3415	Stock	5.070	.250	15˚ x 1/2"	.090	.100	11˚ Dish	116
11874-8	Int.	2.250	.3415	Stock	5.244	.250	12˚ x 3/8"	.050	.080	7˚ Dish	140

FORD 429 - 460

SEVERE DUTY® VALVES

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

Need a different length? Head diameter not listed? Want a Bead Loc® groove? See page 40 for Gen II blanks to construct a valve to your exact specifications.

Part No.	Type	Head Diam.	Stem Diam.	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	9˚ Dish	113
11801-8	Exh.	1.760	.3415	.100 Longer	5.167	.250	12˚ x 3/8"	.085	.085	9˚ Dish	116
11800-8	Int.	2.190	.3415	Stock	5.244	.250	12˚ x 3/8"	.050	.080	7˚ Dish	138
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	144
11850-8	Int.	2.250	.3415	.100 Longer	5.344	.250	12˚ x 3/8"	.050	.080	7˚ Dish	142

NOTE: The size of the Super Cobra Jet valves are 2.245" Int. (30˚ seat) and 1.75" Exh. Other 429 - 460 cylinder heads have smaller valve diameters. Our valves can be easily cut or the seats enlarged.

1960 Swarthmore Avenue, Lakewood, NJ 08701
732-905-3366 FAX: 732-905-3010
www.manleyperformance.com

ORDERING INFORMATION
Part number suffix indicates number of pieces or pairs in one packaging unit. To order less pieces or pairs, use part number with -1 suffix and the quantity desired.

STAINLESS VALVES

FORD 429 - 460

ALUMINUM AFTERMARKET HEADS
SEVERE DUTY 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 Diam.	Stem Diam.	Installed Height	O/A Length	Tip Length	Underhead Angle/Radius	Margin	Seat Width	Top of Head	Wgt/ Grams
11591-8	Exh.	1.880	.3420	Stock	5.655	.260	22˚ x 13/32"	.075	.100	17˚ Dish	129
11586-8	Int.	2.250	.3420	Stock	5.725	.260	10˚ x 13/32"	.075	.125	5˚ Dish	153
11588-8	Int.	2.300	.3420	Stock	5.725	.260	10˚ x 13/32"	.075	.125	5˚ Dish	166
11590-8	Int.	2.400	.3420	Stock	5.725	.260	10˚ x 13/32"	.075	.125	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 Diam.	Stem Diam.	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	5.446	.320	23˚ x 5/16"	.060	.080	20˚ Dish	145

NOTE: 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 Diam.	Stem Diam.	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	.080	7˚ Dish	141
11788-8*	Int.	2.400	.3715	Stock	5.570	.350	12˚ x 3/8"	.060	.080	7˚ Dish	143

(* NOTE: P/N 11786-8 & P/N 11788-8 have a 30° seat)

NOTE: 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

ORDERING INFORMATION
Part number suffix indicates number of pieces or pairs in one packaging unit. To order less pieces or pairs, use part number with -1 suffix and the quantity desired.

HONDA / ACURA

RACE MASTER VALVES

Part No.	Type	Head Diam.	Stem Diam.	O/A Length	Tip Length	Underhead Angle/Radius	Margin	Seat Width
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								
11373-8	Exh.	28.0 mm	5.5 mm	102.70 mm	2.5 mm	25° x 11/32"	.065"	.080"
11375-8	Exh.	28.5 mm	5.5 mm	102.70 mm	2.5 mm	25° x 11/32"	.065"	.080"
11377-8	Exh.	29.0 mm	5.5 mm	102.70 mm	2.5 mm	25° x 11/32"	.065"	.080"
11372-8	Int.	33.0 mm	5.5 mm	102.40 mm	2.5 mm	Pro Flo: 22° x 5/16"	.050"	.075"
11374-8	Int.	33.5 mm	5.5 mm	102.40 mm	2.5 mm	Pro Flo: 22° x 5/16"	.050"	.075"
11376-8	Int.	34.0 mm	5.5 mm	102.40 mm	2.5 mm	Pro Flo: 22° x 5/16"	.050"	.075"
HONDA ACCORD 2.2L - SOHC V-TEC 16 VALVE (F22B1) - 1994 - 1997								
11371-8	Exh.	29 mm	5.5 mm	114.25 mm	3.5 mm	25° x 11/32"	.065"	.080"
11379-8	Exh.	30 mm	5.5 mm	114.25 mm	3.5 mm	25° x 11/32"	.065"	.080"
11370-8	Int.	34 mm	5.5 mm	116.00 mm	3.5 mm	Pro Flo: 22° x 5/16"	.050"	.075"
11378-8	Int.	35 mm	5.5 mm	116.00 mm	3.5 mm	Pro Flo: 22° x 5/16"	.050"	.075"
HONDA CIVIC 1.6L - SOHC 16 VALVE (D16Z6-Y5-Y7-Y8) - 1992 - 2000								
11367-8	Exh.	26 mm	5.5 mm	115.95 mm	1.9 mm	25° x 11/32"	.065"	.080"
11369-8	Exh.	27 mm	5.5 mm	115.95 mm	1.9 mm	25° x 11/32"	.065"	.080"
11366-8	Int.	30 mm	5.5 mm	118.60 mm	1.9 mm	Pro Flo: 22° x 5/16"	.050"	.075"
11368-8	Int.	31 mm	5.5 mm	118.60 mm	1.9 mm	Pro Flo: 22° x 5/16"	.050"	.075"
HONDA CIVIC CRX SI 1.6L - SOHC 16 VALVE (D16A6) - 1988 - 1991								
11383-8	Exh.	25 mm	5.5 mm	118.75 mm	4.35 mm	25° x 11/32"	.065"	.080"
11385-8	Exh.	26 mm	5.5 mm	118.75 mm	4.35 mm	25° x 11/32"	.065"	.080"
11384-8	Int.	29 mm	5.5 mm	115.00 mm	4.1 mm	Pro Flo: 22° x 5/16"	.050"	.075"
11386-8	Int.	30 mm	5.5 mm	115.00 mm	4.1 mm	Pro Flo: 22° x 5/16"	.050"	.075"
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	102.70 mm	2.5 mm	25° x 11/32"	.065"	.080"
11375-8	Exh.	28.5 mm	5.5 mm	102.70 mm	2.5 mm	25° x 11/32"	.065"	.080"
11377-8	Exh.	29.0 mm	5.5 mm	102.70 mm	2.5 mm	25° x 11/32"	.065"	.080"
11372-8	Int.	33.0 mm	5.5 mm	102.40 mm	2.5 mm	Pro Flo: 22° x 5/16"	.050"	.075"
11374-8	Int.	33.5 mm	5.5 mm	102.40 mm	2.5 mm	Pro Flo: 22° x 5/16"	.050"	.075"
11376-8	Int.	34.0 mm	5.5 mm	102.40 mm	2.5 mm	Pro Flo: 22° x 5/16"	.050"	.075"
HONDA PRELUDE 2.2L - DOHC V-TEC 16 VALVE (H22A1-A4) - 1993 - 2000								
11393-8	Exh.	30 mm	5.5 mm	107.10 mm	1.9 mm	25° x 11/32"	.065"	.080"
11395-8	Exh.	31 mm	5.5 mm	107.10 mm	1.9 mm	25° x 11/32"	.065"	.080"
11394-8	Int.	35 mm	5.5 mm	106.85 mm	1.9 mm	Pro Flo: 22° x 5/16"	.050"	.075"
11396-8	Int.	36 mm	5.5 mm	106.85 mm	1.9 mm	Pro Flo: 22° x 5/16"	.050"	.075"

NOTE: 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 sizes may vary slightly depending on the specific engine.

ORDERING INFORMATION
Part number suffix indicates number of pieces or pairs in one packaging unit. To order less pieces or pairs, use part number with -1 suffix and the quantity desired.

MAZDA / NISSAN

RACE MASTER VALVES

MAZDA MIATA 1.8L - DOHC 16 VALVE (BP056) - 1990 - 1999

Part No.	Type	Head Diam.	Stem Diam.	O/A Length	Tip Length	Underhead Angle/Radius	Margin	Seat Width
11101-8	Exh.	28 mm	6 mm	101.52 mm	3.5 mm	25° x 11/32"	.065"	.080"
11103-8	Exh.	29 mm	6 mm	101.52 mm	3.5 mm	25° x 11/32"	.065"	.080"
11102-8	Int.	33 mm	6 mm	101.35 mm	3.5 mm	Pro Flo: 22° x 5/16"	.050"	.075"
11104-8	Int.	34 mm	6 mm	101.35 mm	3.5 mm	Pro Flo: 22° x 5/16"	.050"	.075"

NISSAN 300 ZX 3.0L - DOHC 24 VALVE (VG30D - TURBO VG30DTT) - 1990 - 1996

11105-12	Exh.	29.5 mm	6 mm	103.65 mm	3.5 mm	25° x 11/32"	.065"	.080"
11107-12	Exh.	30.5 mm	6 mm	103.65 mm	3.5 mm	25° x 11/32"	.065"	.080"
11106-12	Int.	34.0 mm	6 mm	103.13 mm	3.5 mm	Pro Flo: 22° x 5/16"	.050"	.075"
11108-12	Int.	35.0 mm	6 mm	103.13 mm	3.5 mm	Pro Flo: 22° x 5/16"	.050"	.075"

NISSAN SENTRA SE-R 2.0L - DOHC 16 VALVE (SR20DE) - 1991 - 1998

11109-8	Exh.	30.15 mm	6 mm	102.40 mm	3.5 mm	25° x 11/32"	.065"	.080"
11111-8	Exh.	31.15 mm	6 mm	102.40 mm	3.5 mm	25° x 11/32"	.065"	.080"
11110-8	Int.	34.15 mm	6 mm	101.40 mm	3.5 mm	Pro Flo: 22° x 5/16"	.050"	.075"
11112-8	Int.	35.15 mm	6 mm	101.40 mm	3.5 mm	Pro Flo: 22° x 5/16"	.050"	.075"

NOTE: All Manley Performance aftermarket valves for the Mazda / Nissan 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.

NISSAN 240Z - 260Z - 280Z

SEVERE DUTY® VALVES

- ✓ XH-428 Stainless Exhaust Material
- ✓ NK-844 Stainless Intake Material
- ✓ Improved flow with “Pro Flo” Underheads
- ✓ Chrome Stems, Swirl Polished and Fully Machined

Part No.	Type	Head Diam.	Stem Diam.	Installed Height	O/A Length	Tip Length	Underhead Angle/Radius	Margin	Seat Width	Top of Head	Wgt/ Grams
11689-6	Exh.	35 mm	.3125	Stock	4.620	.120	Pro Flo: 25˚ x 3/8"	.050	.080	8˚ Dish	81
11679-6	Exh.	38 mm	.3125	Stock	4.620	.120	Pro Flo: 25˚ x 3/8"	.050	.080	8˚ Dish	83
11678-6	Int.	44 mm	.3135	Stock	4.580	.110	Pro Flo: 10˚ x 3/8"	.045	.060	7˚ Dish	79

STAINLESS VALVES

ORDERING INFORMATION
Part number suffix indicates number of pieces or pairs in one packaging unit. To order less pieces or pairs, use part number with -1 suffix and the quantity desired.

OLDSMOBILE 330 - 455

SEVERE DUTY® VALVES

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

Part No.	Type	Head Diam.	Stem Diam.	Installed Height	O/A Length	Tip Length	Underhead Angle/Radius	Margin	Seat Width	Top of Head	Wgt/ Grams
11547-8	Exh.	1.710	.342	Stock	4.668	.260	10˚ x 3/8"	.060	.100	7˚ Dish	97
11548-8	Int.	2.072	.342	Stock	4.713	.260	10˚ x 3/8"	.050	.080	7˚ Dish	121

TOYOTA

RACE MASTER VALVES

- ✓ XH-426 Stainless Exhaust Material
- ✓ NK-842 Stainless Intake Material
- ✓ Improved flow with “Pro Flo” Intake Underheads
- ✓ Chrome Stems, Swirl Polished and Fully Machined

Part No.	Type	Head Diam.	Stem Diam.	O/A Length	Tip Length	Underhead Angle/Radius	Margin	Seat Width
TOYOTA 4AG (ATLANTIC)								
11113-8	Exh.	27.5 mm	6 mm	99.75 mm	3.5 mm	25° x 11/32"	.065"	.080"
11114-8	Int.	32.0 mm	6 mm	99.60 mm	3.5 mm	Pro Flo: 22° x 5/16"	.050"	.075"
TOYOTA MR2 2.0L - DOHC 16 VALVE (TURBO 3SGTE) - 1990 - 1995								
11115-8	Exh.	29.0 mm	6 mm	99.50 mm	3.5 mm	25° x 11/32"	.065"	.080"
11117-8	Exh.	30.0 mm	6 mm	99.50 mm	3.5 mm	25° x 11/32"	.065"	.080"
11116-8	Int.	33.5 mm	6 mm	100.55 mm	3.5 mm	Pro Flo: 22° x 5/16"	.050"	.075"
11118-8	Int.	34.5 mm	6 mm	100.55 mm	3.5 mm	Pro Flo: 22° x 5/16"	.050"	.075"
TOYOTA SUPRA 3.0L - DOHC 24 VALVE (7MGE - TURBO 7MGTE) - 1986 - 1992								
11119-12	Exh.	27.5 mm	6 mm	98.05 mm	4.0 mm	25° x 11/32"	.065"	.080"
11121-12	Exh.	28.5 mm	6 mm	98.05 mm	4.0 mm	25° x 11/32"	.065"	.080"
11120-12	Int.	32.0 mm	6 mm	98.05 mm	4.0 mm	Pro Flo: 22° x 5/16"	.050"	.075"
11122-12	Int.	33.0 mm	6 mm	98.05 mm	4.0 mm	Pro Flo: 22° x 5/16"	.050"	.075"
TOYOTA SUPRA 3.0L I/L 6 CYL - DOHC 24 VALVE (2JZGE - 2JZGTE) - 1994 - 1998								
11123-12	Exh.	29.0 mm	6 mm	99.10 mm	3.5 mm	25° x 11/32"	.065"	.080"
11125-12	Exh.	30.0 mm	6 mm	99.10 mm	3.5 mm	25° x 11/32"	.065"	.080"
11124-12	Int.	33.6 mm	6 mm	98.55 mm	3.5 mm	Pro Flo: 22° x 5/16"	.050"	.075"
11126-12	Int.	34.6 mm	6 mm	98.55 mm	3.5 mm	Pro Flo: 22° x 5/16"	.050"	.075"

NOTE: All Manley Performance aftermarket valves for the Toyota 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.

1960 Swarthmore Avenue, Lakewood, NJ 08701
732-905-3366 FAX: 732-905-3010
www.manleyperformance.com

ORDERING INFORMATION
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STAINLESS VALVES

PONTIAC 400 - 428 - 455

RACE MASTER and RACE FLO VALVES

Need a different length? Head diameter not listed? Want a Bead Loc® groove? See page 40 for Gen II blanks to construct a valve to your exact specifications.

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

Part No.	Type	Head Diam.	Stem Diam.	Installed Height	O/A Length	Tip Length	Underhead Angle/Radius	Margin	Seat Width	Top of Head	Wgt/ Grams
11353-8	Exh.	1.660	.3415	Stock	5.230	.250	25˚ x 3/8"	.080	.100	20˚ Dish	100
11355-8	Exh.	1.770	.3415	Stock	5.100	.250	25˚ x 3/8"	.080	.100	20˚ Dish	97
11352-8	Int.	2.110	.3415	Stock	5.215	.250	Pro Flo 10˚ x 3/8"	.050	.080	5˚ Dish	117
11364-8	Int.	2.110	.3415	Stock	5.100	.250	Pro Flo 10˚ x 3/8"	.050	.080	5˚ Dish	113

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

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 Diam.	Stem Diam.	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 RABBIT

SEVERE DUTY® 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 Diam.	Stem Diam.	Installed Height	O/A Length	Tip Length	Underhead Angle/Radius	Margin	Seat Width	Top of Head	Wgt/ Grams
11665-4	Exh.	34.0 mm	.313	Stock	3.976	.130	15˚ x 3/8"	.075	.075	10˚ Dish	63
11666-4	Int.	40.5 mm	.313	Stock	3.976	.130	10˚ x 11/32"	.075	.075	5˚ Dish	76

STAINLESS VALVES

ORDERING INFORMATION
Part number suffix indicates number of pieces or pairs in one packaging unit. To order less pieces or pairs, use part number with -1 suffix and the quantity desired.

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 Diam.	Stem Diam.	Installed Height	O/A Length	Tip Length	Underhead Angle/Radius	Margin	Seat Width	Top of Head	Wgt/ Grams
11651-4	Exh.	33.0 mm	.313	Stock	4.405	.170	15˚ x 3/8"	.050	.075	10˚ Dish	67
11653-4	Exh.	35.5 mm	.313	Stock	4.405	.170	15˚ x 3/8"	.050	.075	10˚ Dish	69
11655-4	Exh.	37.5 mm	.313	Stock	4.405	.170	15˚ x 3/8"	.050	.075	10˚ Dish	73
11650-4	Int.	40.0 mm	.313	Stock	4.405	.170	10˚ x 11/32"	.050	.075	6˚ Dish	79
11652-4	Int.	42.0 mm	.313	Stock	4.405	.170	10˚ x 11/32"	.050	.075	6˚ Dish	79
11654-4	Int.	43.7 mm	.313	Stock	4.405	.170	10˚ x 11/32"	.050	.075	6˚ Dish	83

VOLKSWAGEN 1200 - 1600

SEVERE DUTY® VALVES

- ✓ XH-428 Stainless Exhaust Material
- ✓ NK-844 Stainless Intake Material
- ✓ Chrome Stems, Swirl Polished and Fully Machined
- ✓ Special Hard Tips and Hardened Keeper Grooves

Part No.	Type	Head Diam.	Stem Diam.	Installed Height	O/A Length	Tip Length	Underhead Angle/Radius	Margin	Seat Width	Top of Head	Wgt/ Grams
11673-4	Exh.	33.0 mm	.313	Stock	4.405	.170	15˚ x 3/8"	.050	.075	10˚ Dish	67
11669-4	Exh.	35.5 mm	.313	Stock	4.405	.170	15˚ x 3/8"	.050	.075	10˚ Dish	69
11674-4	Exh.	37.5 mm	.313	Stock	4.405	.170	15˚ x 3/8"	.050	.075	10˚ Dish	73
11670-4	Int.	40.0 mm	.313	Stock	4.405	.170	10˚ x 11/32"	.050	.075	6˚ Dish	79
11672-4	Int.	42.0 mm	.313	Stock	4.405	.170	10˚ x 11/32"	.050	.075	6˚ Dish	79
11675-4	Int.	43.7 mm	.313	Stock	4.405	.170	10˚ x 11/32"	.050	.075	6˚ Dish	83

ORDERING INFORMATION
Part number suffix indicates number of pieces or pairs in one packaging unit. To order less pieces or pairs, use part number with -1 suffix and the quantity desired.

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 Diam.	Stem Diam.	Installed Height	O/A Length	Tip Length	Underhead Angle/Radius	Margin	Seat Width	Top of Head	Wgt/ Grams
11659-4	Exh.	38 mm	.313	Stock	4.606	.170	15˚ x 1/2"	.060	.075	9˚ Dish	78
11658-4	Int.	48 mm	.313	Stock	4.606	.170	10˚ x 3/8"	.060	.075	5˚ Dish	101

VOLKSWAGEN TYPE IV

SEVERE DUTY® VALVES

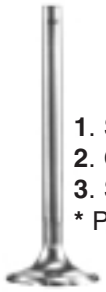
- ✓ XH-428 Stainless Exhaust Material
- ✓ NK-844 Stainless Intake Material
- ✓ Chrome Stems and Hard Tips
- ✓ Swirl Polished and Fully Machined

Part No.	Type	Head Diam.	Stem Diam.	Installed Height	O/A Length	Tip Length	Underhead Angle/Radius	Margin	Seat Width	Top of Head	Wgt/ Grams
11667-4	Exh.	38 mm	.313	Stock	4.606	.170	15˚ x 1/2"	.060	.075	9˚ Dish	78
11668-4	Int.	48 mm	.313	Stock	4.606	.170	10˚ x 3/8"	.060	.075	5˚ Dish	101

CUSTOM STAINLESS VALVES

ORDERING INFORMATION
Part number suffix indicates number of pieces or pairs in one packaging unit. To order less pieces or pairs, use part number with -1 suffix and the quantity desired.

GENERATION II
CUSTOM STAINLESS STEEL VALVES



✓ 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 single 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.

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
11223-8*	Exh.	2.060	.3415	6.565	15˚ x 1/2"	.080	.100	9˚ Dish	Xtremealloy
11237-8*	Exh.	35.0 mm	6.0 mm	113.5 mm	25˚ x 11/32"	.065	.080	20˚ Dish	Xtremealloy
11233-8*	Exh.	32.0 mm	5.5 mm	119.0 mm	25˚ x 11/32"	.065	.080	20˚ Dish	Xtremealloy
SEVERE DUTY® GEN II CUSTOM VALVES									
11245-8	Exh.	1.625	.3415	5.640	15˚ x 1/2"	.090	.100	9˚ 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
11242-8*	Int.	2.150	.3415	5.640	Pro Flo: 10˚ x 3/8"	.050	.080	5˚ Dish	NK-844
					NOTE: Pro Flo start is 1.600" from the top of the head.				
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
11227-8	Exh.	1.625	.3110	5.600	15˚ x 1/2"	.080	.100	9˚ Dish	XH-428
11224-8*	Int.	2.200	.3110	5.600	10˚ x 3/8"	.050	.080	5˚ Dish	NK-844
11228-8*	Int.	2.425	.3110	6.800	20˚ x 3/8"	.050	.080	15˚ Dish	NK-844
11229-8	Exh.	1.625	.2740	5.600	15˚ x 1/2"	.080	.100	9˚ Dish	XH-428
11226-8*	Int.	2.200	.2740	5.600	10˚ x 3/8"	.050	.080	5˚ Dish	NK-844
RACE FLO / RACE MASTER GEN II CUSTOM VALVES									
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
					NOTE: 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
11202-8	Int.	2.100	.3415	5.500	10˚ x 3/8"	.065	.080	5˚ Dish	NK-842
11216-8	Int.	2.150	.3415	5.640	Pro Flo 10˚ x 3/8"	.050	.080	5˚ Dish	NK-842
					NOTE: 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	.3130	4.425	15˚ x 3/8"	.060	.090	10˚ Dish	XH-426
11205-4	Exh.	40.0 mm	.3130	5.000	15˚ x 1/2"	.080	.100	9˚ Dish	XH-426
11210-4	Int.	48.5 mm	.3130	4.425	10˚ x 11/32"	.060	.080	6˚ Dish	NK-842
11204-4	Int.	52.0 mm	.3130	5.000	10˚ x 3/8"	.050	.080	5˚ Dish	NK-842
11207-8	Exh.	1.625	.3110	5.700	15˚ x 1/2"	.080	.100	9˚ Dish	XH-426
11206-8	Int.	2.100	.3110	5.700	10˚ x 3/8"	.050	.080	5˚ Dish	NK-842
11213-8	Exh.	32.0 mm	6.0 mm	113.5 mm	25˚ x 11/32"	.065	.080	20˚ Dish	XH-426
11212-8	Int.	39.0 mm	6.0 mm	113.5 mm	Pro Flo: 22˚ x 5/16"	.065	.080	17˚ Dish	NK-842
11209-8	Exh.	32.0 mm	5.5 mm	119.0 mm	25˚ x 11/32"	.065	.080	20˚ Dish	XH-426
11208-8	Int.	37.0 mm	5.5 mm	119.0 mm	Pro Flo: 22˚ x 5/16"	.065	.080	17˚ Dish	NK-842

1960 Swarthmore Avenue, Lakewood, NJ 08701
732-905-3366 FAX: 732-905-3010
www.manleyperformance.com

✓ **Forged one piece construction with grain flow - not a head welded to a stem.**

✓ **Orange exhaust valve material for use in Winston Cup, BGN, Super Truck, drag race and road race engines.**

✓ **Manley's exclusive "HT" alloy for high compression drag race engines, road race applications, Winston Cup, BGN and Super Truck intake valves.**

MANLEY TITANIUM VALVES
.....simply the best !

TITANIUM VALVES

ORDERING INFORMATION
Part number suffix indicates number of pieces or pairs in one packaging unit. To order less pieces or pairs, use part number with -1 suffix and the quantity desired.

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 Diam.	Stem Diam.	Installed Height	O/A Length	Tip Length	Underhead Angle/Radius	Margin	Seat Width
11401 T-8	Exh.	1.600	.3415	.100 Longer	5.060	.290	15˚ x 1/2"	.100	.100
11403 T-8	Exh.	1.600	.3415	.200 Longer	5.160	.290	15˚ x 1/2"	.100	.100
11405 T-8	Exh.	1.600	.3415	.300 Longer	5.260	.290	15˚ x 1/2"	.100	.100
11407 T-8	Exh.	1.600	.3415	.400 Longer	5.360	.290	15˚ x 1/2"	.100	.100
11409 T-8	Exh.	1.600	.3415	.500 Longer	5.460	.290	15˚ x 1/2"	.100	.100
11451 T-8	Exh.	1.600	.3415	.600 Longer	5.560	.290	15˚ x 1/2"	.100	.100
11463 T-8	Exh.	1.600	.3415	Stock	4.960	.290	20˚ x 7/16"	.100	.100
11425 T-8	Exh.	1.600	.3415	.100 Longer	5.060	.290	20˚ x 7/16"	.100	.100
11467 HT-8*	Exh.	1.600	.3415	.200 Longer	5.140	.290	20˚ x 7/16"	.080	.085
11427 T-8	Exh.	1.600	.3415	.200 Longer	5.160	.290	20˚ x 7/16"	.100	.100
11427 HT-8	Exh.	1.600	.3415	.200 Longer	5.160	.290	20˚ x 7/16"	.100	.100
11429 T-8	Exh.	1.600	.3415	.300 Longer	5.260	.290	20˚ x 7/16"	.100	.100
11465 HT-8	Exh.	1.600	.3415	.300 Longer	5.240	.290	20˚ x 7/16"	.080	.100
11431 T-8	Exh.	1.600	.3415	.400 Longer	5.360	.290	20˚ x 7/16"	.100	.100
11433 T-8	Exh.	1.600	.3415	.500 Longer	5.460	.290	20˚ x 7/16"	.100	.100
11471 HT-8	Exh.	1.600	.3415	.600 Longer	5.560	.290	20˚ x 7/16"	.100	.100
11469 HT-8	Exh.	1.600	.3415	.600 Longer	5.560	.290	25˚ x 3/4"	.100	.100

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

ORDERING INFORMATION
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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 Diam.	Stem Diam.	Installed Height	O/A Length	Tip Length	Underhead Angle/Radius	Margin	Seat Width
11411 T-8	Exh.	1.625	.3415	.100 Longer	5.060	.290	15˚ x 1/2"	.100	.100
11413 T-8	Exh.	1.625	.3415	.200 Longer	5.160	.290	15˚ x 1/2"	.100	.100
11415 T-8	Exh.	1.625	.3415	.300 Longer	5.260	.290	15˚ x 1/2"	.100	.100
11417 T-8	Exh.	1.625	.3415	.400 Longer	5.360	.290	15˚ x 1/2"	.100	.100
11419 T-8	Exh.	1.625	.3415	.500 Longer	5.460	.290	15˚ x 1/2"	.100	.100
11447 T-8	Exh.	1.625	.3415	.600 Longer	5.560	.290	15˚ x 1/2"	.100	.100
11447 HT-8	Exh.	1.625	.3415	.600 Longer	5.560	.290	15˚ x 1/2"	.100	.100
11461 T-8	Exh.	1.625	.3415	Stock	4.960	.290	20˚ x 7/16"	.100	.100
11435 T-8	Exh.	1.625	.3415	.100 Longer	5.060	.290	20˚ x 7/16"	.100	.100
11437 T-8	Exh.	1.625	.3415	.200 Longer	5.160	.290	20˚ x 7/16"	.100	.100
11439 T-8	Exh.	1.625	.3415	.300 Longer	5.260	.290	20˚ x 7/16"	.100	.100
11441 T-8	Exh.	1.625	.3415	.400 Longer	5.360	.290	20˚ x 7/16"	.100	.100
11443 T-8	Exh.	1.625	.3415	.500 Longer	5.460	.290	20˚ x 7/16"	.100	.100
11443 HT-8	Exh.	1.625	.3415	.500 Longer	5.460	.290	20˚ x 7/16"	.100	.100
11453 T-8	Exh.	1.625	.3415	.600 Longer	5.560	.290	20˚ x 7/16"	.100	.100
11453 HT-8	Exh.	1.625	.3415	.600 Longer	5.560	.290	20˚ x 7/16"	.100	.100
11453 TB-8	Exh.	1.625	.3415	.600 Longer	5.560	.290	20˚ x 7/16"	.100	.100
11453 HTB-8	Exh.	1.625	.3415	.600 Longer	5.560	.290	20˚ x 7/16"	.100	.100
11475 HTB-8	Exh.	1.625	.3415	.700 Longer	5.660	.290	20˚ x 7/16"	.100	.100
11455 T-8	Exh.	1.625	.3415	.500 Longer	5.460	.290	25˚ x 3/4"	.100	.100
11455 HT-8	Exh.	1.625	.3415	.500 Longer	5.460	.290	25˚ x 3/4"	.100	.100
11457 T-8	Exh.	1.625	.3415	.600 Longer	5.560	.290	25˚ x 3/4"	.100	.100
11457 HT-8	Exh.	1.625	.3415	.600 Longer	5.560	.290	25˚ x 3/4"	.100	.100
11457 TB-8	Exh.	1.625	.3415	.600 Longer	5.560	.290	25˚ x 3/4"	.100	.100
11473 T-8	Exh.	1.625	.3415	.700 Longer	5.660	.290	25˚ x 3/4"	.100	.100
11473 TB-8	Exh.	1.625	.3415	.700 Longer	5.660	.290	25˚ x 3/4"	.100	.100
11477 TB-8*	Exh.	1.625	.3415	.700 Longer	5.640	.290	25˚ x 1/2"	.080	.100
11421 T-8	Exh.	1.650	.3415	.500 Longer	5.460	.290	15˚ x 1/2"	.100	.100
11449 T-8	Exh.	1.650	.3415	.600 Longer	5.560	.290	15˚ x 1/2"	.100	.100
11445 T-8	Exh.	1.650	.3415	.500 Longer	5.460	.290	20˚ x 7/16"	.100	.100
11423 T-8	Exh.	1.650	.3415	.500 Longer	5.460	.290	25˚ x 3/4"	.100	.100
11459 T-8	Exh.	1.650	.3415	.600 Longer	5.560	.290	25˚ x 3/4"	.100	.100

*** NOTE:** Valve 11477TB* has a 55˚ seat.

ORDERING INFORMATION
Part number suffix indicates number of pieces or pairs in one packaging unit. To order less pieces or pairs, use part number with -1 suffix and the quantity desired.

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 Diam.	Stem Diam.	Installed Height	O/A Length	Tip Length	Underhead Angle/Radius	Margin	Seat Width
11452 T-8	Int.	2.055	.3415	Stock	4.940	.290	10˚ x 3/8"	.080	.100
11474 T-8	Int.	2.055	.3415	.100 Longer	5.040	.290	10˚ x 3/8"	.080	.100
11454 T-8	Int.	2.080	.3415	Stock	4.940	.290	10˚ x 3/8"	.080	.100
11400 T-8	Int.	2.080	.3415	.100 Longer	5.040	.290	10˚ x 3/8"	.080	.100
11402 T-8	Int.	2.080	.3415	.200 Longer	5.140	.290	10˚ x 3/8"	.080	.100
11404 T-8	Int.	2.080	.3415	.300 Longer	5.240	.290	10˚ x 3/8"	.080	.100
11406 T-8	Int.	2.080	.3415	.400 Longer	5.340	.290	10˚ x 3/8"	.080	.100
11472 T-8	Int.	2.080	.3415	.500 Longer	5.440	.290	10˚ x 3/8"	.080	.100
11444 T-8	Int.	2.080	.3415	.600 Longer	5.540	.290	10˚ x 3/8"	.080	.100
11408 T-8	Int.	2.100	.3415	.100 Longer	5.040	.290	10˚ x 3/8"	.080	.100
11410 T-8	Int.	2.100	.3415	.200 Longer	5.140	.290	10˚ x 3/8"	.080	.100
11412 T-8	Int.	2.100	.3415	.300 Longer	5.240	.290	10˚ x 3/8"	.080	.100
11456 T-8	Int.	2.100	.3415	.300 Longer	5.240	.290	12˚ x 7/16"	.080	.100
11462 T-8*	Int.	2.100	.3415	.345 Longer	5.285	.290	12˚ x 3/8"	.080	.090
11462 HT-8*	Int.	2.100	.3415	.345 Longer	5.285	.290	12˚ x 3/8"	.080	.090
11414 T-8	Int.	2.100	.3415	.400 Longer	5.340	.290	10˚ x 3/8"	.080	.100
11416 T-8	Int.	2.100	.3415	.500 Longer	5.440	.290	10˚ x 3/8"	.080	.100
11446 T-8	Int.	2.100	.3415	.500 Longer	5.440	.290	12˚ x 7/16"	.080	.100
11434 T-8	Int.	2.100	.3415	.600 Longer	5.540	.290	10˚ x 3/8"	.080	.100
11440 T-8	Int.	2.125	.3415	Stock	4.940	.290	10˚ x 3/8"	.080	.100
11442 T-8	Int.	2.125	.3415	.100 Longer	5.040	.290	10˚ x 3/8"	.080	.100
11418 T-8	Int.	2.125	.3415	.200 Longer	5.140	.290	10˚ x 3/8"	.080	.100
11420 T-8	Int.	2.125	.3415	.300 Longer	5.240	.290	10˚ x 3/8"	.080	.100
11422 T-8	Int.	2.125	.3415	.400 Longer	5.340	.290	10˚ x 3/8"	.080	.100
11424 T-8	Int.	2.125	.3415	.500 Longer	5.440	.290	10˚ x 3/8"	.080	.100
11448 T-8	Int.	2.125	.3415	.500 Longer	5.440	.290	12˚ x 7/16"	.080	.100
11436 T-8	Int.	2.125	.3415	.600 Longer	5.540	.290	10˚ x 3/8"	.080	.100
11470 T-8	Int.	2.125	.3415	.600 Longer	5.540	.290	12˚ x 7/16"	.080	.100

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

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SMALL BLOCK GM, FORD & CHRYSLER

TITANIUM INTAKE VALVES

✓ All valves have inserted hard tips
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Part No.	Type	Head Diam.	Stem Diam.	Installed Height	O/A Length	Tip Length	Underhead Angle/Radius	Margin	Seat Width
11428 T-8	Int.	2.150	.3415	.200 Longer	5.140	.290	10˚ x 3/8"	.080	.100
11430 T-8	Int.	2.150	.3415	.300 Longer	5.240	.290	10˚ x 3/8"	.080	.100
11432 T-8	Int.	2.150	.3415	.400 Longer	5.340	.290	10˚ x 3/8"	.080	.100
11458 T-8	Int.	2.150	.3415	.400 Longer	5.340	.290	12˚ x 7/16"	.080	.100
11426 T-8	Int.	2.150	.3415	.500 Longer	5.440	.290	10˚ x 3/8"	.080	.100
11450 T-8	Int.	2.150	.3415	.500 Longer	5.440	.290	12˚ x 7/16"	.080	.100
11496 HTB-8	Int.	2.150	.3110	.600 Longer	5.540	.290	12˚ x 3/8"	.080	.100
11438 T-8	Int.	2.150	.3415	.600 Longer	5.540	.290	10˚ x 3/8"	.080	.100
11460 T-8	Int.	2.150	.3415	.600 Longer	5.540	.290	12˚ x 7/16"	.080	.100
11460 HTB-8	Int.	2.150	.3415	.600 Longer	5.540	.290	12˚ x 7/16"	.080	.100
11498 HTB-8	Int.	2.150	.3110	.700 Longer	5.640	.290	12˚ x 3/8"	.080	.100
11476 HT-8	Int.	2.150	.3415	.700 Longer	5.640	.290	12˚ x 3/8"	.080	.100
11476 HTB-8	Int.	2.150	.3415	.700 Longer	5.640	.290	12˚ x 3/8"	.080	.100
11478 HT-8	Int.	2.170	.3415	.700 Longer	5.640	.290	12˚ x 3/8"	.080	.100
11478 HTB-8	Int.	2.170	.3415	.700 Longer	5.640	.290	12˚ x 3/8"	.080	.100
11466 T-8	Int.	2.180	.3415	.500 Longer	5.440	.290	12˚ x 3/8"	.080	.100
11494 HTB-8	Int.	2.180	.3110	.600 Longer	5.540	.290	12˚ x 3/8"	.080	.100
11468 T-8	Int.	2.180	.3415	.600 Longer	5.540	.290	12˚ x 3/8"	.080	.100
11468 T3-8	Int.	2.180	.3435	.600 Longer	5.540	.290	12˚ x 3/8"	.080	.100
11488 HTB-8	Int.	2.180	.3110	.700 Longer	5.640	.290	12˚ x 3/8"	.080	.100
11486 HT-8	Int.	2.180	.3415	.700 Longer	5.640	.290	12˚ x 3/8"	.080	.100
11486 HTB-8	Int.	2.180	.3415	.700 Longer	5.640	.290	12˚ x 3/8"	.080	.100
11942 HTB-8*	Int.	2.180	.3110	.800 Longer	5.740	.290	12˚ x 3/8"	.080	.080
11464 T-8	Int.	2.200	.3415	.600 Longer	5.540	.290	10˚ x 3/8"	.080	.100

*** NOTE:** Valve 11942HTB has a 52˚ seat.

TITANIUM VALVES

ORDERING INFORMATION
Part number suffix indicates number of pieces or pairs in one packaging unit. To order less pieces or pairs, use part number with -1 suffix and the quantity desired.

BIG BLOCK GENERAL MOTORS

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

Part No.	Type	Head Diam.	Stem Diam.	Installed Height	O/A Length	Tip Length	Underhead Angle/Radius	Margin	Seat Width
11479-8	Exh.	1.880	.3415	Stock	5.440	.250	30˚ x 5/8"	.090	.075
11481-8	Exh.	1.900	.3415	Stock	5.440	.250	30˚ x 5/8"	.090	.075
11483-8	Exh.	1.900	.3415	.100 Longer	5.540	.250	30˚ x 5/8"	.090	.075
11480-8	Int.	2.250	.3415	Stock	5.250	.250	10˚ x 3/8"	.065	.075
11490-8	Int.	2.250	.3415	.100 Longer	5.350	.250	10˚ x 3/8"	.065	.075
11490 T-8	Int.	2.250	.3415	.100 Longer	5.350	.290	10˚ x 3/8"	.065	.075
11492-8	Int.	2.250	.3415	.250 Longer	5.500	.250	10˚ x 3/8"	.065	.075
11944T-8	Int.	2.300	.3415	.100 Longer	5.350	.290	10˚ x 3/8"	.065	.075
11482-8	Int.	2.300	.3415	.250 Longer	5.500	.250	10˚ x 3/8"	.065	.075
11940-8	Int.	2.325	.3415	.250 Longer	5.500	.250	10˚ x 3/8"	.065	.075
11484-8	Int.	2.350	.3415	.250 Longer	5.500	.250	10˚ x 3/8"	.065	.075

BRIGGS and STRATTON

NOTE: * Dimensions are per customer specifications.

Part No.	Type	Head Diam.	Stem Diam.	Installed Height	O/A Length	Tip Length	Underhead Angle/Radius	Margin	Seat Width
98041-1	Exh.	1.125	.2475	Stock	3.845	.235	Pro Flo: 0˚ x 3/16"	.060	.080
98043-1	Exh.	1.200	.2475	Stock	3.845	.235	Pro Flo: 0˚ x 3/16"	.060	.080
98040-1	Int.	1.250	.2475	Stock	3.845	.235	Pro Flo: 0˚ x 3/16"	.050	.070
98042-1	Int.	1.375	.2475	Stock	3.845	.235	Pro Flo: 0˚ x 3/16"	.050	.070
98044-1	Int.	1.437	.2475	Stock	3.845	.235	0˚ x 3/16"	.050	.070
98030-1	Custom	1.800 Max	.2475	*	4.800 Max	.235	* 10˚ x 3/8" Max.	*	*

DART BIG BLOCK PRO 1® and 320 / 360 HEADS

NOTE: 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 Diam.	Stem Diam.	Installed Height	O/A Length	Tip Length	Underhead Angle/Radius	Margin	Seat Width
11479-8	Exh.	1.880	.3415	Stock	5.440	.250	30˚ x 5/8"	.090	.075
11481-8	Exh.	1.900	.3415	Stock	5.440	.250	30˚ x 5/8"	.090	.075
11492-8	Int.	2.250	.3415	.250 Longer	5.500	.250	10˚ x 3/8"	.065	.075
11482-8	Int.	2.300	.3415	.250 Longer	5.500	.250	10˚ x 3/8"	.065	.075

1960 Swarthmore Avenue, Lakewood, NJ 08701
732-905-3366 FAX: 732-905-3010
www.manleyperformance.com

ORDERING INFORMATION
Part number suffix indicates number of pieces or pairs in one packaging unit. To order less pieces or pairs, use part number with -1 suffix and the quantity desired.

HONDA / ACURA V-TEC

NOTE: These valves do not come with a hardened tip. Tip protection is required - Manley wear cap P/N 42263.

Part No.	Type	Head Diam.	Stem Diam.	Installed Height	O/A Length	Tip Length	Underhead Angle/Radius	Margin	Seat Width
11945-1	Exh.	29 mm	5.5 mm	Stock	102.7 mm	.095	25˚ x 3/8"	.065	.080
11946-1	Int.	34 mm	5.5 mm	Stock	102.4 mm	.095	22˚ x 1/4"	.050	.075

TOP FUEL and FUNNY CAR

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

Part No.	Type	Head Diam.	Stem Diam.	Installed Height	O/A Length	Tip Length	Underhead Angle/Radius	Margin	Seat Width
11989-8	Exh.	2.000	.3415	.100 Longer	5.020	.250	25˚ x 3/8"	.085	.075
11976-8	Int.	2.375	.3415	Stock	5.485	.250	25˚ x 5/8"	.065	.075
11956-8	Int.	2.375	.3415	.100 Longer	5.600	.250	25˚ x 5/8"	.065	.075
11994-8	Int.	2.400	.3415	.100 Longer	5.600	.250	25˚ x 5/8"	.070	.125
11994B-8*	Int.	2.400	.3415	.100 Longer	5.600	.250	25˚ x 5/8"	.070	.125
11996-8*	Int.	2.400	.3415	.100 Longer	5.600	.250	22˚ x 5/8"	.065	.065
11998-8	Int.	2.400	.3415	.200 Longer	5.700	.250	25˚ x 5/8"	.070	.125

* **NOTE**: Valve 11994B has a Bead Loc® keeper groove. Valve 11996 has a 37˚ back cut.

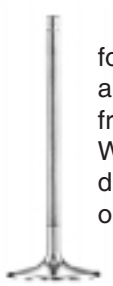
PONTIAC PRO STOCK & DART BIG CHIEF

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

Part No.	Type	Head Diam.	Stem Diam.	Installed Height	O/A Length	Tip Length	Underhead Angle/Radius	Margin	Seat Width
11921-8	Exh.	1.900	.3415	Stock	6.450	.250	30˚ x 5/8"	.125	.075
11923T-8	Exh.	1.900	.3415	Stock	6.490	.290	30˚ x 5/8"	.125	.075
11920-8	Int.	2.400	.3415	Stock	6.600	.250	12˚ x 3/8"	.065	.075
11922T-8	Int.	2.400	.3415	Stock	6.640	.290	12˚ x 3/8"	.065	.075

CUSTOM TITANIUM VALVES

ORDERING INFORMATION
Part number suffix indicates number of pieces or pairs in one packaging unit. To order less pieces or pairs, use part number with -1 suffix and the quantity desired.



Please contact any of the Manley technical representatives directly at the factory for your custom valve requirements. The following part numbers cover most common applications, but we can - and have - made titanium valves for a huge variety of engines from Alfa Romeo through Coventry Climax to Yamaha. (As of this writing, no Zephers). When ordering a custom valve you will need to supply dimensions for every aspect of the drawing shown on the inside back cover. Please fax this completed drawing with your order. We welcome the chance to serve you.

SPECIAL OPERATIONS AVAILABLE

Part No.	Operation
04020-8	Installation of hard tip. The cost of the tip itself is additional. Please see page 52 for our listing of hard tips.
04035-8	Second back angle cut. Please specify the angle and width you desire.
04026-8	Dish front face. Please specify the rim width and angle of the dish. The dish angle must be 5˚ LESS than the back angle of the valve, and a .250" wide rim is strongly suggested.
04048-8	Super finish enhancement.

Part No.	Application	Type	Stem Diam.	Head Diam.
11937-8	SB General Motors	Exh.- Orange	.3110"/.3415"	Up to 1.675"
11935-8	SB General Motors	Exh.- HT	.3110"/.3415"	Up to 1.675"
11933-8	SB General Motors	Int.	.3110"/.3415"	Up to 2.250"
11933 H-8	SB General Motors	Int. - HT	.2740"/.3110"/.3415"	Up to 2.250"
11939-8	BB General Motors	Exh.- Orange	.3110"/.3415"	Up to 2.050"
11939 H-8	BB General Motors	Exh.- HT	.3110"/.3415"	Up to 2.050"
11930-8	BB General Motors	Int.	.3110"/.3415"	Up to 2.500"
11930 H-8	BB General Motors	Int. - HT	.2740"/.3110"/.3415"	Up to 2.500"
11933-8	Chrysler Hemi	Exh.	.3415"	Up to 2.050"
11936-8	Chrysler Hemi	Int.	.3415"	Up to 2.575"
11937-8	SB Ford (Incl. Yates)	Exh.- Orange	.3110"/.3415"	Up to 1.710"
11935-8	SB Ford (Incl. Yates)	Exh.- HT	.3110"/.3415"	Up to 1.710"
11933-8	SB Ford (Incl. Yates)	Int.	.3110"/.3415"	Up to 2.250"
11933 H-8	SB Ford (Incl. Yates)	Int.- HT	.3110"/.3415"	Up to 2.250"
11939-8	Ford 429-460	Exh.- Orange	.3110"/.3415"	Up to 2.050"
11939 H-8	Ford 429-460	Exh.- HT	.3110"/.3415"	Up to 2.050"
11930-8	Ford 429-460	Int.	.3110"/.3415"	Up to 2.500"
11930 H-8	Ford 429-460	Int.- HT	.3110"/.3415"	Up to 2.500"
11937 V-1	Honda V-Tec.	Exh.	5.5 mm	Up to 32 mm
11933 V-1	Honda V-Tec	Int.	5.5 mm	Up to 40 mm
11937 M-4	Volkswagen, etc.	Exh.	.313"	Up to 42 mm
11938 M-4	Volkswagen, etc.	Int.	.313"	Up to 50 mm

Your invoice will reflect the addition of a letter suffix to the catalog number shown above. This suffix designates the correct moly length and placement of the custom valve you have ordered.

ORDERING INFORMATION
Part number suffix indicates number of pieces or pairs in one packaging unit. To order less pieces or pairs, use part number with -1 suffix and the quantity desired.

7˚ vs SUPER 7˚ vs 10˚ VALVE LOCKS

The original stamped 7˚ valve lock served the industry well until drag racers discovered the Vasco Jet valve spring in the early 1970's. The use of previously undreamed of spring pressures caused periodic failures as the little 7˚ lock was vulnerable to extrusion through the retainer.

Drag race engine builders seized upon the evidence of locks pushed through retainers as proof of the inadequacy of the 7˚ design. Hence was born the 10˚ lock to combat lock extrusion. In reality, the problem with the 7˚ lock was not the angle. The 7˚ lock was simply too skinny to provide enough resistance to being pushed through the retainer.

Meanwhile, circle track engine builders responded to the same challenge with a Super 7˚ lock that maintained the superior clamping properties of the original 7˚ piece but overcame the extrusion problem with increased lock thickness.

Manley Performance suppports both 10˚ and 7˚ systems with the highest quality locks and retainers in the industry, manufactured of both steel and titanium.

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
13294-16	16 pr.	3/8"	Conventional

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"	Conventional
13091-16	16 pr.	11/32"	Conventional
13092-16	16 pr.	3/8"	Conventional

VALVE LOCKS

ORDERING INFORMATION
Part number suffix indicates number of pieces or pairs in one packaging unit. To order less pieces or pairs, use part number with -1 suffix and the quantity desired.

SUPER 7° VALVE LOCKS - STEEL MATERIAL

- ✓ Heat treated and black oxide finished
- ✓ Preferred by Winston Cup and BGN engine builders
- ✓ 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

SUPER 7° VALVE LOCKS - TITANIUM MATERIAL

- ✓ Lightweight titanium material
- ✓ Preferred by Winston Cup and BGN engine builders
- ✓ Manufactured in our own CNC precision machines

Part No.	Quantity	Valve Stem	Installed Height	Groove Type	Wgt. / Pr.
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

Part No. Steel	Part No. Titanium	Quantity	Valve Stem	Installed Height	Groove Type	Wgt. / Pr.
---	13033 T-8	8 pr.	.3110"	Standard	Bead Loc®	5.6 gms
---	13034 T-8	8 pr.	.3110"	.050" more	Bead Loc®	5.3 gms
---	13035 T-8	8 pr.	.3415"	Standard	Bead Loc®	4.9 gms
---	13036 T-8	8 pr.	.3415"	.050" more	Bead Loc®	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

ORDERING INFORMATION
Part number suffix indicates number of pieces or pairs in one packaging unit. To order less pieces or pairs, use part number with -1 suffix and the quantity desired.

SPORT COMPACT VALVE LOCKS

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

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

PRECISION CRAFTED 10° MACHINED VALVE LOCKS STEEL MATERIAL

✓ Highest quality steel alloy
✓ Heat treated and black oxide finished

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
13193-16	16 pr.	.3085"	Standard	Conventional	6.7 gms
13151-8	8 pr.	.3110"	Standard	Bead Loc®	7.0 gms
13151-16	16 pr.	.3110"	Standard	Bead Loc®	7.0 gms
13152-8	8 pr.	.3110"	.050" more	Bead Loc®	6.4 gms
13152-16	16 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
13161-16	16 pr.	.3415"	Standard	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
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

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
13151 T-16	16 pr.	.3110"	Standard	Bead Loc®	3.9 gms
13096 T-16	16 pr.	.3110"	Standard	Conventional	3.8 gms
13161 T-8	8 pr.	.3415"	Standard	Bead Loc®	3.6 gms
13161 T-16	16 pr.	.3415"	Standard	Bead Loc®	3.6 gms
13094 T-16	16 pr.	.3415"	Standard	Conventional	3.5 gms

ORDERING INFORMATION
Part number suffix indicates number of pieces or pairs in one packaging unit. To order less pieces or pairs, use part number with -1 suffix and the quantity desired.

INSERTED TIPS

✓ Wear resistant alloy
✓ Fits both titanium and steel valves
✓ Manufactured in our own CNC precision machines

Part No.	Quantity	Description	Post Diam.	Post Length
42311-8	8 pcs.	Fits 5/16" valves	.156"	.120"
42105-8	8 pcs.	Fits 11/32" valves	.187"	.125"

WEAR CAPS

MANLEY
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.	.2160" stem valves (5.5 mm)	.095"	Standard	.040"
42218-8	8 pcs.	.2360" stem valves (6 mm)	.290"	Non Rotating	.080"
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"
42154-8	8 pcs.	.2740" stem valves (7 mm)	.275"	Non Rotating	.060"
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"

ORDERING INFORMATION
Part number suffix indicates number of pieces or pairs in one packaging unit. To order less pieces or pairs, use part number with -1 suffix and the quantity desired.

VITON MATERIAL OIL 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"	.630"	41410
24040-8	8 pcs.	5/16" valves	.425"	.560"	41510
24042-8	8 pcs.	5/16" valves	.500"	.605"	41610
24043-8	8 pcs.	11/32" valves	.500"	.620"	41611
24044-8	8 pcs.	3/8" valves	.500"	.620"	41612

MANLEY
BULK PRICING AVAILABLE

ALL TEFLON OIL 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		

MANLEY
BULK PRICING AVAILABLE

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	.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

ORDERING INFORMATION
Part number suffix indicates number of pieces or pairs in one packaging unit. To order less pieces or pairs, use part number with -1 suffix and the quantity desired.

BRONZE VALVE GUIDE INSERT

- ✓ Highest quality bronze material
- ✓ Close tolerance O.D. grinding
- ✓ Excellent concentricity
- ✓ .274" and .311" I.D.'s
- ✓ .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.

BIG BLOCK CHEVROLET CAST IRON REPLACEMENT GUIDES

- ✓ Quality castings
- ✓ Precision machining
- ✓ Close tolerance O.D. grinding

Part No.	Quantity	Description
12082-8	8 pcs.	Intake guide BB Chevy - 3/8" valves
12083-8	8 pcs.	Exhaust guide BB Chevy - 3/8" valves

BRONZE VALVE GUIDE SLEEVES

- ✓ Dissipate heat to reduce valve stem temperatures
- ✓ 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.	.034" wall to convert 11/32" guides to accept 5/16" valves
42162-16	16 pcs.	.060" wall to convert 3/8" guides to accept 5/16" valves

ORDERING INFORMATION
Part number suffix indicates number of pieces or pairs in one packaging unit. To order less pieces or pairs, use part number with -1 suffix and the quantity desired.

BRONZE VALVE GUIDE SLEEVE INSTALLATION KITS

✓ Kit consists of boring tool, sleeve driver, spiraling tool, self piloting reamer, trimming tool and cleaning brush

Part No.	Quantity	Description
41815	1 kit	Repair for 5/16" guides
41832	1 kit	Repair for 11/32" guides
41813	1 kit	Repair for 3/8" guides
41890	1	Speed reducer for boring, spiraling and reaming with an electric drill

BRONZE VALVE GUIDE SLEEVE CONVERSION KITS

✓ Convert 11/32" or 3/8" guides to accept 5/16" valves
✓ Kit consists of sleeve driver (no boring necessary) spiraling tool, self piloting reamer, trimming tool and cleaning brush

Part No.	Quantity	Description
41875	1 kit	Conversion kit 3/8" guides for 5/16" valves
41880	1 kit	Conversion kit 11/32" guides for 5/16" valves
41890	1	Speed reducer for boring, spiraling and reaming with an electric drill

REPLACEMENT PARTS FOR SLEEVE KITS

Part No.	Quantity	Description
40190	1	Boring tool for 5/16" guides
40191	1	Boring tool for 11/32" guides
40192	1	Boring tool for 3/8" guides
40193	1	Reamer for 5/16" guides
40194	1	Reamer for 11/32" guides
40195	1	Reamer for 3/8" guides
40196	1	Spiral tool for 5/16" guides
40197	1	Spiral tool for 11/32" guides
40198	1	Spiral tool for 3/8" guides

ORDERING INFORMATION
Part number suffix indicates number of pieces or pairs in one packaging unit. To order less pieces or pairs, use part number with -1 suffix and the quantity desired.

SUPERIOR HEAD BOLTS

- ✓ 170,000 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
42192	1 set for 1 head	BB Chevy with Brodix heads
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

7/16" CYLINDER HEAD STUD NUTS

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

ORDERING INFORMATION
Part number suffix indicates number of pieces or pairs in one packaging unit. To order less pieces or pairs, use part number with -1 suffix and the quantity desired.

HEX HEAD INTAKE MANIFOLD BOLTS

MANLEY
BULK PRICING AVAILABLE

✓ Bolts and washers black oxide finish
✓ Bolts include hardened washers

Part No.	Quantity	Description	Underhead Length
42176	1 set	Small Block Chevrolet	1.200"
42177	1 set	Small Block Chevrolet using thin casting hi-rise manifolds	1.000"
42175	1 set	Big Block Chevrolet	1.200"
42299-16	16 pcs.	Hardened washers for above bolts. .125" thick. Black oxide	

12 POINT HEAD INTAKE MANIFOLD BOLTS

MANLEY
BULK PRICING AVAILABLE

✓ Bolts and washers gold irridite finish
✓ Shipped with hardened washers

Part No.	Quantity	Description	Underhead Length
42292	1 set	Small Block Chevrolet	1.100"
42291	1 set	Big Block Chevrolet using thin casting hi-rise manifolds	1.100"
42294-16	16 pcs.	Hardened washers for above bolts. .100" thick. Gold Irridite	

HARD TO FIND "AN" WASHERS

MANLEY
BULK PRICING AVAILABLE

✓ .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"

FASTENERS and BLOCK OFF PLATES

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

✓ Extra tall, large diameter, 12 point bolt
✓ 8740 chrome moly material
✓ Parallel ground washer included

Part No.	Quantity	Description
42223	1	Small Block Chevy. Use 3/4" 12-point socket
42224	1	Big Block Chevy. Use 3/4" 12-point socket

FUEL PUMP BLOCK OFF PLATES

✓ Extra thick. Bolts and washers supplied

Part No.	Quantity	Description
42115	1 kit	Small Block Chevy (Gasket and bolts included)
42117	1 kit	351C Ford (Bolts included, but not gasket)

THREE PIECE ALUMINUM FRONT TIMING COVERS

- ✓ Change camshaft or timing without lowering oil pan or removing harmonic balancer
- ✓ Built in cam walk stop
- ✓ Fits behind any water pump.

Part No.	Quantity	Description
42129	1	Small Block Chevrolet and V-6 (includes hardware kit)
42129 K	1	Replacement hardware kit for above
42429	1	Big Block Chevrolet (includes hardware kit)
42429 K	1	Replacement hardware kit for above

SMALL BLOCK CHEVROLET WITH BIG BLOCK CHEVROLET CRANK SNOUT TWO PIECE ALUMINUM TIMING COVER

- ✓ Built in adjustable thrust button
- ✓ No machining for water pump clearance - extra thick
- ✓ Change camshafts or timing without lowering oil pan

Part No.	Quantity	Description
42529	1	Small Block Chevrolet with Big Block snout (includes hardware kit)
42529 K	1	Replacement hardware kit for above

REAR OIL- SEAL CARRIER

- ✓ Use with second generation SB Chevy 90˚ engines
- ✓ Allows use of early style oil pan and crankshaft

Part No.	Quantity	Description
42251	1	New design Chevrolet 90˚ blocks, both V-6 and V-8
42251 K	1	Replacement hardware kit for above

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

CAMSHAFT LOCK PLATES

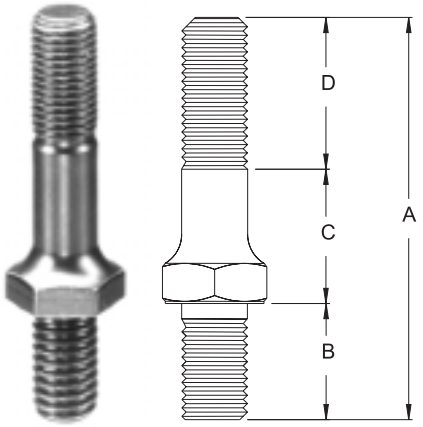
- ✓ Positively secures sprocket bolts in place
- ✓ Bendable tabs. Grade 8 camshaft bolts

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

MANLEY
BULK PRICING AVAILABLE

ORDERING INFORMATION
Part number suffix indicates number of pieces or pairs in one packaging unit. To order less pieces or pairs, use part number with -1 suffix and the quantity desired.

PROFESSIONAL ROCKER ARM SCREW-IN STUDS



- ✓ Manufactured in our own CNC double spindle turning centers
- ✓ Minimum run out
- ✓ 8740 material with 190,000 psi
- ✓ Rolled threads
- ✓ Large radii
- ✓ Flat poly lock surface

MANLEY
BULK PRICING AVAILABLE

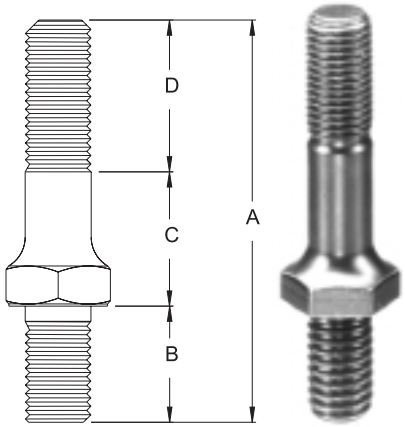
Part No.	Quantity	Application	Roller Rockers	Stud Girdles	Upper Threads	Dimensions A	B	C	D
42276-16	16 pcs.	SB Chevy & Ford	Yes	No	3/8"	2.425"	.670"	.945"	.810"
42277-16	16 pcs.	SB Chevy & Ford	Yes	No	7/16"	2.440"	.660"	.890"	.890"
42287-16	16 pcs.	SB Chevy w/ 18˚ head	Yes	Yes	7/16"	2.850"	.750"	1.300"	.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	Yes	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"
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"

ORDERING INFORMATION
Part number suffix indicates number of pieces or pairs in one packaging unit. To order less pieces or pairs, use part number with -1 suffix and the quantity desired.

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

ORDERING INFORMATION
Part number suffix indicates number of pieces or pairs in one packaging unit. To order less pieces or pairs, use part number with -1 suffix and the quantity desired.

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 Diam.
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

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

NOTE: 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.

CHRYSLER ADJUSTABLE ROCKER ARMS

- ✓ Allows use of solid lifter camshafts
- ✓ Improved valve train stability with hydraulic lifters
- ✓ Anti-pump-up lifters REQUIRE adjustable rockers
- ✓ Stock rocker ratio 1.5:1

Part No.	Quantity	Description
43137-8	1 set for 1 head	273, 340, 360 Chrysler

ORDERING INFORMATION
Part number suffix indicates number of pieces or pairs in one packaging unit. To order less pieces or pairs, use part number with -1 suffix and the quantity desired.

ROCKER ARM KITS

351 C, 400 M, 429, 460 FORD ADJUSTABLE ROCKER KITS

- ✓ Convert your cylinder heads to “Boss” type
- ✓ Kit comes complete with rockers, fulcrums and adjusting nuts
- ✓ Stock rocker ratio 1.7:1
- ✓ Instructions included

Part No.	Quantity	Description
43540	1 set for 1 head	351 C, 400 M, 429, 460 Ford w/ modified cylinder heads and all 351 C, 351 M, 460 engines

ROCKER ARM KIT COMPONENTS

Note that individual rockers only are sold as -8, and rocker balls and rocker nuts are sold as -16

Kit	Rocker	Fulcrums	Nut
43540	43541-8	43542-16	43173-16

NOTE: Ford cylinder heads are converted to accept adjustable rockers with Manley cutter 41860. Proper 5/16" guide plates, 7/16" screw-in studs and pushrods must be used. In many cases a 3/8" diameter pushrod interferes with the back of the rocker at full lift.

1977/UP 302, 351 W, 351 C, 429, 460 FORD FULCRUM

- ✓ Compatible with Ford rocker or Manley P/N 43541

Part No.	Quantity	Description
43544-16	16 pcs.	351 C, 429, 460 Ford

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

GUIDEPLATES

ORDERING INFORMATION
Part number suffix indicates number of pieces or pairs in one packaging unit. To order less pieces or pairs, use part number with -1 suffix and the quantity desired.

SMALL BLOCK CHEVROLET

RAISED STEEL GUIDE PLATE

- ✓ Raised design controls pushrods at their highest point
- ✓ Heat treated and black oxide finished

Part No.	Quantity	Description	Slots	Pushrods
42151-8	8 pcs.	Small Block Chevy	On-Center	5/16"
42135-8	4 lefts; 4 rights	Small Block Chevy	.150" off-set	5/16"
42150-8	8 pcs.	Small Block Chevy	On-Center	3/8"

Private brand identification available.

MANLEY
BULK PRICING AVAILABLE

SMALL BLOCK CHEVROLET

FLAT STEEL GUIDE PLATE

- ✓ Perfectly stamped for complete accuracy
- ✓ Heat treated and black oxide finished

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"

Private brand identification available.

MANLEY
BULK PRICING AVAILABLE

BIG BLOCK CHEVROLET

STEEL GUIDE PLATE

- ✓ Meticulous forming of this complex stamping
- ✓ Heat treated and black oxide finished

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

Private brand identification available.

MANLEY
BULK PRICING AVAILABLE

ORDERING INFORMATION
Part number suffix indicates number of pieces or pairs in one packaging unit. To order less pieces or pairs, use part number with -1 suffix and the quantity desired.

FORD 289 - 302 - 351W

STEEL GUIDE PLATE
PRE 1977 HEADS

- ✓ Heat treated and black oxide finished
- ✓ Carefully stamped for absolute accuracy

Part No.	Quantity	Description	Pushrods
42152-8	8 pcs.	289, 302 W, 351 W Ford	5/16"
42143-8	8 pcs.	289, 302 W, 351 W Ford	3/8"

Private brand identification available.

MANLEY
BULK PRICING AVAILABLE

FORD 302 BOSS - 351C

(with modified heads)
FORD STEEL GUIDE PLATE

- ✓ Intricate shaped guide plate meticulously formed for accuracy
- ✓ Heat treated and black oxide finished

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"

Private brand identification available.

MANLEY
BULK PRICING AVAILABLE

NOTE: 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 and use Manley rocker kit 43540. Complete instructions are on the rocker arm 43540 package.

FORD 429 - 460

STEEL GUIDE PLATE

- ✓ Carefully crafted stamping ensuring total accuracy
- ✓ Heat treated and black oxide finished

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

Private brand identification available.

MANLEY
BULK PRICING AVAILABLE

VALVE SPRINGS

ORDERING INFORMATION
Part number suffix indicates number of pieces or pairs in one packaging unit. To order less pieces or pairs, use part number with -1 suffix and the quantity desired.

NexTek® SERIES

OVAL TRACK and ENDURANCE VALVE SPRINGS

✓ No degradation of spring pressure in the later stages of a race
✓ Spring I.D.'s are chamfered for retainer clearance
✓ 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
✓ Available polished. Just add "P" to the part number when ordering. For example 221443P-16.

Part No.	Description	Maximum Valve Lift	O.D.	I.D.	Installed Pressure	Open Pressure	Coil Bind	Component Code
221423-16	SB Chevy LS-1 Stock Diameter Street / Strip	.600	1.255	.830	115 @ 1.750	350 @ 1.175	1.100	E
			single without damper					
221432-16	Late Model Stock w/ Flat Tappet	.630	1.530	.750	165 @ 1.900	450 @ 1.300	1.200	A
			double with damper					
221431-16	Circle Track Roller	.750	1.575	.740	250 @ 2.000	625 @ 1.250	1.210	B
			double with damper					
221443-16	BGN, Super Truck, Hav-a-Tampa, WoO and Late Model	.730	1.580	.832	235 @ 1.950	610 @ 1.250	1.170	C
			double without damper Replaces Manley P/N 221043, CT 1043					
221444-16	BGN, Super Truck, Hav-a-Tampa, WoO and Late Model	.750"	1.610	.842	235 @ 2.050	645 @ 1.300	1.220	D
			double without damper Replaces Manley P/N 221044, CT 1044					

ANCILLARY COMPONENTS

Component Code	Super 7° Retainers	Super 7° Lightweight	Super 7° +.050	Spring Cup	Type	Cup O.D.	Cup I.D.	Cup Thickness	Seat Cutter
A	23707 -16			42330-16	ID	1.535	.635	.062	41835
	23707 I-16			42326-16	ID	1.535	.570	.062	41856
	23707 ICD-16			42426-16*	ID	1.535	.567	.062	41856
	23707 SCD-16			42466-16*	ID	1.535	.567	.045	41856
	23650-16 (10° Titanium +.100)			***NOTE:** 42426 and 42466 are CNC machined.					
B	23707-16			42453-16*	ID	1.570	.567	.062	41856
	23707 I-16								
	23707 ICD-16								
	23707 SCD-16			***NOTE:** 42453 is CNC machined.					
C	23681-16	23681 L-16	23691-16	42370-16	OD	1.687	.570	.062	41858
	23681 I-16	23681 LI-16	23691 I-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)			***NOTE:** 42438 and 42573 are CNC machined.					
D	23681-16	23681 L-16	23691-16	42365-16	OD	1.740	.570	.062	41859
	23681 I-16	23681 LI-16	23691 I-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)								
E	23631-16	(7° Steel for factory keeper and factory spring seat)							
	23632-16	(7° Titanium for factory keeper and factory spring seat)							
	23633-16	(7° Titanium +.050)							

SUFFIX CODE

I :Impinged **ICD** :Impinged, Convoluted and Drilled **SCD** :Steel, Convoluted and drilled **L** :Lightweight **LI** :Lightweight and Impinged

1960 Swarthmore Avenue, Lakewood, NJ 08701
732-905-3366 FAX: 732-905-3010
www.manleyperformance.com

ORDERING INFORMATION
Part number suffix indicates number of pieces or pairs in one packaging unit. To order less pieces or pairs, use part number with -1 suffix and the quantity desired.

NexTek® SERIES
DRAG RACE VALVE SPRINGS

✓ Unequalled performance ✓ All springs are triple except 221424 & 221425 double w/o damper
✓ Manley eclipses the 1000 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® oval track and drag race valve springs, listed on pages 66 and 67, are available in polished versions to reduce friction, improve fatigue life and minimize load loss. To order polished springs affix a "P" to the part number. For example 221449P-16.

Part No.	Description	Maximum Valve Lift	O.D.	I.D.	Installed Pressure	Open Pressure	Coil Bind	Component Code
221424-16	Super Gas, Super Comp., Big Block Bracket	.880	1.640	.860	250 @ 2.000	850 @ 1.150	1.070	A
	Replaces Manley P/N 221024, DR 1024							
221425-16	Super Gas, Super Comp., Big Block Bracket	.900	1.640	.860	280 @ 2.100	794 @ 1.250	1.150	A
	Replaces Manley P/N 221024, DR 1024							
221447-16	Super Stock, Pro Mod Competition Eliminator,	.800	1.677	.635	350 @ 2.000	895 @ 1.270	1.160	B
	Replaces Manley P/N 221047, 221147, DR 1047, DR 1147							
221448-16	Super Stock, Pro Mod Competition Eliminator,	.900	1.677	.635	350 @ 2.100	1010 @ 1.200	1.142	B
	Replaces Manley P/N 221048, 221148, DR 1048, DR 1148							
221449-16	Pro Stock, Pro Stock Truck, Fuel & Alcohol	1.000	1.677	.632	350 @ 2.200	1070 @ 1.200	1.142	B
	Replaces Manley P/N 221049, DR 1049							

Component Code	10° Ti. 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
				42337-16	ID	1.570	.570	41857
				42437-16*	ID	1.570	.567	41857
B	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	Lt & Impng'd	+.100	42364-16	ID	1.660	.570	41858

*__NOTE:__ 42128 and 42379 have a wall height of .250 instead of .150

*__NOTE__: 42437 is CNC machined.

NexTek® SERIES VALVE SPRING and TITANIUM RETAINER KITS

✓ Large savings over purchasing items separately
✓ Spring 221424 & 221425 is far superior to older design H-11 springs

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

VALVE SPRINGS

ORDERING INFORMATION
Part number suffix indicates number of pieces or pairs in one packaging unit. To order less pieces or pairs, use part number with -1 suffix and the quantity desired.

STREET MASTER VALVE SPRINGS

✓ Chrome silicon material
✓ Designed for low stress and long service life

Part No.	Quantity	Type	Application	Size OD/ID	Pressures	7˚ Steel Retainer	10˚ Steel Retainer	10˚ Ti. Retainer
22409-16	16 pcs.	Outer w/ damper	SB Chevy Street Use	1.250" .765"	110 @ 1.700" 285 @ 1.210"	23651 (std.) 23652 (+.050")		23642 (7˚ x 11/32")
22400-16	16 pcs.	Outer w/ damper	SB Chevy,	1.437"	115 @ 1.800" 250 @ 1.250"	23645 (11/32")	23635	23630
22400-16 22428-16	16 pcs. 16 pcs.	Outer Inner	SB Chevy, Ford, Chrysler	1.437" .720"	115 @ 1.800" 310 @ 1.250"	23645 (11/32") 23666 (3/8")	23635	23630
22400-16 22427-16	16 pcs. 16 pcs.	Outer Inner	SB & BB Chevy	1.437" .720"	135 @ 1.800" 350 @ 1.250"	23645 (11/32") 23666 (3/8")	23635	23630
22406-16	16 pcs.	Outer w/ damper	BB Chevy, Chrysler	1.550" .780"	125 @ 1.875" 355 @ 1.375"	23645 (11/32") 23666 (3/8")	23635	23630

PROFESSIONAL VALVE SPRINGS

✓ Chrome silicon material for oval track racing
✓ H-11 tool steel for drag racing
✓ Each spring designed to withstand the brutal racing conditions

Part No.	Quantity	Type	Application	Size OD/ID	Pressures	Coil Bind	Super 7˚ Ti. retainer	10˚ Ti. Retainer
22410-16	16 pcs.	Outer w/ damper	Oval track Stock Class	1.250" .865"	130 @ 1.750" 320 @ 1.200"	1.150"	23652 (7˚ x 11/32" Steel) 23642 (7˚ x 11/32" Titanium)	
22441-16	16 pcs.	Double w/ damper	Oval Track Chrome Silicon	1.550" .740"	170 @ 1.900" 500 @ 1.200"	1.100"	23670	23658 (std.) 23660 (+.100")
22429-16	16 pcs.	Double w/ damper	Oval Track Chrome Silicon	1.550" .740"	150 @ 1.880" 425 @ 1.280"	1.180"	23671	23657 (std) 23661 (+.100")
22430-16	16 pcs.	Double w/ damper	Oval Track Chrome Silicon	1.550" .735"	210 @ 1.900" 525 @ 1.250"	1.200"	23671	23657 (std.) 23661 (+.100")
22440-16	16 pcs.	Double w/ damper	Drag Race Tool Steel	1.550" .720"	250 @ 1.850" 680 @ 1.150"	1.050"	23670	23658 (std.) 23660 (+.100")
22438-16	16 pcs.	Double w/ damper	Drag Race Tool Steel	1.625" .775"	285 @ 1.900" 800 @ 1.200"	1.050"	23669	23654 (std.) 23655 (+.100")
22448-16	16 pcs.	Double w/ damper	Drag Race Tool Steel	1.625" .775"	240 @ 1.900" 750 @ 1.150"	1.050"	23669	23654 (std.) 23655 (+.100")
22458-16	16 pcs.	Double w/ damper	Drag Race Tool Steel	1.625" .775"	280 @ 2.000" 825 @ 1.200"	1.050"	23669	23654 (std.) 23655 (+.100")

ORDERING INFORMATION
Part number suffix indicates number of pieces or pairs in one packaging unit. To order less pieces or pairs, use part number with -1 suffix and the quantity desired.

SPORT COMPACT
VALVE SPRINGS

✓ Wound from super clean alloy
✓ Designed to handle aftermarket camshafts
✓ Revs up to 10,000 rpms with Manley titanium retainers

Part No.	Quantity	Application	O.D. / I.D. Outer Inner	Pressures	Coil Bind	Rate (lbs. / in.)	Max. Net Lift	Manley Titanium Retainer
22100-16	16 pcs.	B Series V-Tec Dual Spring	1.175"/.875" .820"/.620"	49 @ 1.350" 155 @ .950"	.805"	252	.480"	23100-16
22110-16	16 pcs.	H22 V-Tec Dual Spring	1.160"/.870" .865"/.660"	89 @ 1.460" 204 @ .950"	.790"	228	.480"	23110-16
22120-16	16 pcs.	B Series Non V-Tec Dual Spring	1.105"/.820" .800"/.627"	56 @ 1.350" 148 @ .950"	.710"	234	.400"	23120-16
22130-24	24 pcs.	Toyota Supra 2JZ 6 cyl. Single Spring	1.045"/.745"	82 @ 1.325" 174 @ .950"	.820"	240	.400"	23130-24

NOTE: Stock installed height on B Series Non V-Tec spring is: Intake - 1.320" / Exhaust - 1.425".

SPORT COMPACT
VALVE SPRING and RETAINER KITS

✓ Wound from super clean alloy
✓ Designed to handle aftermarket camshafts
✓ Revs up to 10,000 rpms with Manley titanium retainers

Part No.	Quantity	Application	Max Net Lift	Spring No.	Retainer No.
26100	1 kit	B Series, V-Tec	.480"	22100	23100
26110	1 kit	H22, V-Tec	.480"	22110	23110
26120	1 kit	B Series, Non V-Tec	.400"	22120	23120
26130	1 kit	Toyota Supra, 2JZ 6 cyl.	.400"	22130	23130

MANLEY RETAINERS
....simply the best !

✓ Engineered using finite element analysis

✓ Specially heat treated titanium material

✓ Exclusive “impingement” finishing process

✓ Manufactured totally in-house on our own double spindle CNC machines

1960 Swarthmore Avenue, Lakewood, NJ 08701
732-905-3366 FAX: 732-905-3010
www.manleyperformance.com

ORDERING INFORMATION
Part number suffix indicates number of pieces or pairs in one packaging unit. To order less pieces or pairs, use part number with -1 suffix and the quantity desired.

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

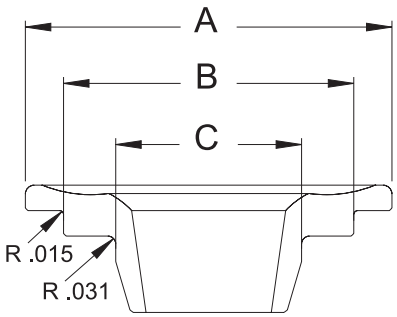
Designed by our own Michael Tokarchik, the Manley ICD retainer represents the pinnacle of titanium retainer technology.

✓ 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 surfaced 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.



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

Quantity Ordering
All retainers are available in bulk packaging.
Use the suffixes below.
-100 (100 pcs. / box)
-250 (250 pcs. / box)

ICD SUPER 7° TITANIUM RETAINERS

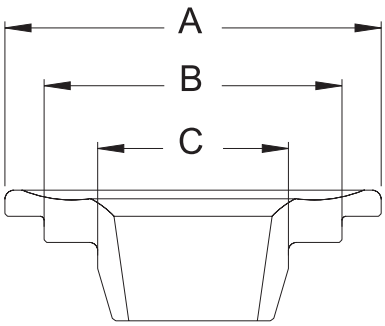
Part No.	Quantity	Spring Type	Spring	Spring O.D.	Dimensions A	B	C
23669 ICD-16	16 pcs.	Double	Manley 22438, 22448, 22458	1.550" - 1.625"	1.440"	1.175"	.765"
23671 ICD-16	16 pcs.	Double	Manley 22429, K-Motion 1600	1.550" - 1.625"	1.440"	1.150"	.755"
23672 ICD-16	16 pcs.	Double	Comp 938, Crane 99882	1.550" - 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"
23676 ICD-16	16 pcs.	Double	Comp 959	1.625"	1.500"	1.190"	.865"
23679 ICD-16	16 pcs.	Double	Comp 943, Isky 9435	1.550" - 1.625"	1.440"	1.135"	.810"
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"
23688 ICD-16	16 pcs.	Double	PSI CT1026	1.460"	1.440"	1.060"	.765"
23689 ICD-16	16 pcs.	Double	PSI CT1029D	1.580"	1.440"	1.155"	.760"
23699 ICD-16	16 pcs.	Double	PSI CT 1029D +.050"	1.580"	1.440"	1.155"	.760"
23692 ICD-16	16 pcs.	Double	Comp 927 +.050"	1.550"	1.440"	1.125"	.730"
23700 ICD-16	16 pcs.	Double	PSI CT1040	1.500"	1.360"	1.080"	.785"
23702 ICD-16	16 pcs.	Double	PSI CT 1041	1.550"	1.440"	1.125"	.815"
23705 ICD-16	16 pcs.	Double	9915, 9965, 9975, 9985	1.560"	1.440"	1.140"	.745"
23707 ICD-16	16 pcs.	Double	Manley 221431, 221432	1.530" - 1.575"	1.440"	1.125"	.740"

NOTE: 23691 ICD, 23692 ICD, and 23699 ICD are +.050" more installed height than standard Super 7°.

SPRING RETAINERS

ORDERING INFORMATION
Part number suffix indicates number of pieces or pairs in one packaging unit. To order less pieces or pairs, use part number with -1 suffix and the quantity desired.

SUPER 7° TITANIUM RETAINERS



✓ The preferred choice of Winston Cup and Busch Grand National engine builders

✓ Heat treated titanium material for maximum strength

✓ Machined in our own double spindle CNC machines

✓ 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

Quantity Ordering
All retainers are available in bulk packaging.
Use the suffixes below.
-100 (100 pcs. / box)
-250 (250 pcs. / box)

Part No.	Part No. with Impinge	Quantity	Spring Type	Spring	Spring O.D.	Keeper Degree	Dimensions A	B	C
23669-16	23669 I-16	16 pcs.	Double	Manley 22438, 22448, 22458	1.550" / 1.625"	Super 7°	1.500"	1.175"	.765"
23707-16	23707 I-16	16 pcs.	Double	Manley 221431, 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	23671 I-16	16 pcs.	Double	K-1600, 22429	1.550"	Super 7°	1.500"	1.150"	.755"
23672-16	23672 I-16	16 pcs.	Double	Comp. 938	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"
23678-16	23678 I-16	16 pcs.	Double	Roush	1.550"	Super 7°	1.500"	1.150"	.740"
23679-16	23679 I-16	16 pcs.	Double	C-943; I-9435	1.550"	Super 7°	1.440"	1.135"	.810"
23705 L-16	23705 LI-16	16 pcs.	Double	Isky 9915, 9965 9975, 9985	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"
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	23691 I-16	16 pcs.	Double	.050" more installed than 23681	1.580" / 1.610"	Super 7°	1.500"	1.150"	.825"
23680-16	23680 I-16	16 pcs.	Double	Isky 9685	1.625"	Super 7°	1.500"	1.185"	.760"

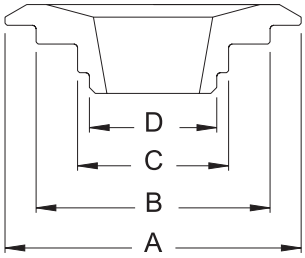
ORDERING INFORMATION
Part number suffix indicates number of pieces or pairs in one packaging unit. To order less pieces or pairs, use part number with -1 suffix and the quantity desired.

SPRING RETAINERS

10˚ TITANIUM RETAINERS

- ✓ Special 6AL 4V titanium for maximum strength
- ✓ Carefully crafted in our own CNC turning centers
- ✓ Excellent value for all forms of racing

Quantity Ordering
All retainers are available in bulk packaging.
Use the suffixes below.
-100 (100 pcs. / box)
-250 (250 pcs. / box)



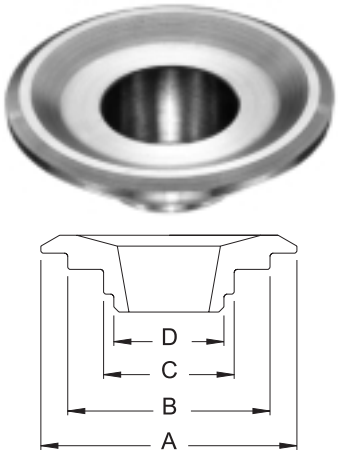
Part No.	Quantity	Spring Type	Spring	Height	Spring O.D.	Keeper Degree	Dimensions A	B	C	D
23630-16	16 pcs.	Outer-Inner	22400, 22406	Std.	1.437"/ 1.550"	10˚	1.440"	1.050"	.700"	---
23658-16	16 pcs.	Double	Manley 22440, 22441	Std.	1.550"	10˚	1.500"	1.105"	.710"	---
23657-16	16 pcs.	Double	Manley 22429, 22430	Std.	1.550"	10˚	1.500"	1.120"	.705"	---
23649-16	16 pcs.	Double	Manley 221424	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	Assoc.333	Std.	1.625"	10˚	1.500"	1.180"	.875"	.645"
23641-16	16 pcs.	Triple	Crane 99882	+.100"	1.550"	10˚	1.500"	1.130"	.735"	.640"
23650-16	16 pcs.	Double	Manley 221432, 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	+.100"	1.550"	10˚	1.500"	1.120"	.730"	---
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	+.100"	1.625"	10˚	1.500"	1.175"	.765"	---
23640-16	16 pcs.	Double	Manley 221424	+.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,	+.100"	1.660"	10˚	1.500"	1.185"	.860"	.620"

Please call with your custom retainer requirements. Minimum quantities are surprisingly low!

MANLEY
BULK PRICING AVAILABLE

SPRING RETAINERS

ORDERING INFORMATION
Part number suffix indicates number of pieces or pairs in one packaging unit. To order less pieces or pairs, use part number with -1 suffix and the quantity desired.



LIGHTWEIGHT 10˚ TITANIUM RETAINERS

- ✓ 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

MANLEY
BULK PRICING AVAILABLE

Part No.	Quantity	Spring Type	Spring	Height	Spring O.D.	Dimensions A	B	C	D
23540-16	16 pcs.	Double	Manley 221424	+.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	+.100"	1.660"	1.430"	1.185"	.860"	.620"
23553 I-16	16 pcs.	Triple	Impinged	+.100"	1.660"	1.430"	1.185"	.860"	.620"

1.250" DIAMETER 7˚ TITANIUM VALVE SPRING RETAINERS

- ✓ CAD designed for ultimate lightness without sacrificing strength
- ✓ Crafted in our own CNC turning centers

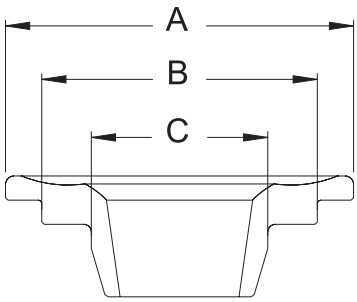
Part No.	Quantity	Spring Used	Installed Height	Retainer O.D.	Spring O.D.	Spring I.D.	Keeper Degree
23642-16	16 pcs.	22409, 22410	+.050"	1.150"	1.250"	.765"	7˚ x 11/32"
23632-16	16 pcs.	221423	Std.	1.155"	1.255"	.830"	7˚ x 5/16"
23633-16	16 pcs.	221423	+.050"	1.155"	1.255"	.830"	7˚ x 5/16"
23634-16	16 pcs.	221423	+.050"	1.150"	1.255"	.830"	7˚ x 11/32"

NOTE: P/N's 23632 & 23633 must use factory Chevrolet LS-1 valve locks.

ORDERING INFORMATION
Part number suffix indicates number of pieces or pairs in one packaging unit. To order less pieces or pairs, use part number with -1 suffix and the quantity desired.

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	Dimensions A	B	C	Step	Height
23000-16	Fits B18C / B16A / H22	Stock Spring	5.5 mm	1.100"	.830"	.600"	.080"	Stock
23100-16	Fits B16A / B18C / B17A	Manley 22100	5.5 mm	1.150"	.870"	.610"	.080"	Stock
23110-16	Fits H22 V-Tec	Manley 22110	5.5 mm	1.150"	.870"	.610"	.080"	+.060"
23120-16	Fits B18A / B (Non V-Tec)	Manley 22120	6.5 mm	1.100"	.805"	.600"	.080"	Stock
23130-24	Fits Toyota Supra 2JZ	Manley 22130	6.0 mm	1.050"	.745"	.515"	.100"	Stock

SPORT COMPACT
VALVE SPRING and RETAINER KITS

✓ Wound from super clean alloy
✓ Designed to handle aftermarket camshafts
✓ Revs up to 10,000 rpms with Manley titanium retainers

Part No.	Quantity	Application	Max Net Lift	Spring No.	Retainer No.
26100	1 kit	B Series, V-Tec	.480"	22100	23100
26110	1 kit	H22, V-Tec	.480"	22110	23110
26120	1 kit	B Series, Non V-Tec	.400"	22120	23120
26130	1 kit	Toyota Supra, 2JZ 6 cyl.	.400"	22130	23130

SPRING RETAINERS

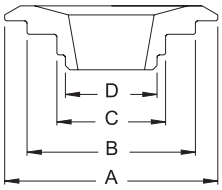
ORDERING INFORMATION
Part number suffix indicates number of pieces or pairs in one packaging unit. To order less pieces or pairs, use part number with -1 suffix and the quantity desired.

Patent No. 5,322,039

SUPER 7° "SCD" STEEL RETAINERS

✓ 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	Spring Used	Spring O.D.	Keeper Degree	Dimensions A	B	C
23707 SCD-16	Steel	16 pcs.	Manley 221431, 221432	1.530"/1.575"	Super 7°	1.440"	1.125"	.740"
23670 SCD-16	Steel	16 pcs.	Manley 22440	1.550"	Super 7°	1.440"	1.105"	.710"



STREET MASTER STEEL VALVE SPRING RETAINERS

✓ Manufactured in our own CNC turning centers
✓ "Thru-hardened" 4140 chrome moly

Part No.	Material	Quantity	Spring Used	Spring Height	Spring O.D.	Keeper Degree	Dimensions A	B	C	D
23631-16	Steel	16 pcs.	221423	Std.	1.255"	7° x 5/16"	1.155"	.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"	---
23645-16	Steel	16 pcs.	22400, 22406	Std.	1.437"/1.550"	7° x 11/32	1.440"	1.050"	.700"	---
23635-16	Steel	16 pcs.	22400, 22406	Std.	1.437"/1.550"	10°	1.440"	1.050"	.700"	---
23666-16	Steel	16 pcs.	22400, 22406	Std.	1.437"/1.550"	7° x 3/8"	1.440"	1.050"	.700"	---
23636-16	Steel	16 pcs.	Crane 99882	Std.	1.550"	10°	1.500"	1.130"	.735"	.640"
23659-16	Steel	16 pcs.	Manley 22440, 22441	+.100"	1.550"	10°	1.500"	1.105"	.710"	---
23656-16	Steel	16 pcs.	Manley 22430	+.100"	1.550"	10°	1.500"	1.120"	.705"	---

NOTE: P/N23631 must use 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"	.765"	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

1960 Swarthmore Avenue, Lakewood, NJ 08701
732-905-3366 FAX: 732-905-3010
www.manleyperformance.com

ORDERING INFORMATION
Part number suffix indicates number of pieces or pairs in one packaging unit. To order less pieces or pairs, use part number with -1 suffix and the quantity desired.

O.D. VALVE SPRING CUPS

- ✓ Manufactured in our own CNC turning centers
- ✓ Accurate and durable .062" thick
- ✓ Heat treated and black oxide finished

Part No.	Quantity	Fits Spring O.D.	Cup O.D.	Cup I.D.	Wall Shoulder Height	Spring	Use Cutter Number
42142-16	16 pcs.	1.250"	1.390"	.570"	.150"	Manley 22409, 22410	41850
42126-16	16 pcs.	1.437"	1.550"	.687"	.150"	Manley 22400	41835
42122-16	16 pcs.	1.550"	1.680"	.635"	.150"	Manley 22441	41852
42377-16	16 pcs.	1.550"	1.680"	.577"	.150"	22400, 221430	41858
42370-16	16 pcs.	1.580"	1.687"	.570"	.140"	Manley 221443	41858
42365-16	16 pcs.	1.610"	1.740"	.570"	.140"	Manley 221444	41859
42121-16	16 pcs.	1.625"	1.740"	.635"	.150"	Manley 22438, 221424	41851
42128-16	16 pcs.	1.625"	1.740"	.635"	.250"	Manley 22438, 221424	41851
42379-16	16 pcs.	1.650"	1.740"	.570"	.250"	Pacaloy, 221424	41859
42371-16	16 pcs.	1.660"	1.740"	.635"	.140"	Manley 221447, 221448, 221449	41851
42372-16	16 pcs.	1.660"	1.740"	.570"	.140"	Manley 221447, 221448, 221449	41859

Quantity Ordering

All spring cups and locators are available in bulk packaging.
Use the suffixes below.
-100 (100 pcs. / box)
-250 (250 pcs. / box)

TWO OF THE MANY WINNERS USING MANLEY VALVE SPRINGS AND RETAINERS

JIM YATES (NHRA PRO STOCK)

JOHN FORCE (NHRA FUNNY CAR)

SPRING LOCATORS

ORDERING INFORMATION
Part number suffix indicates number of pieces or pairs in one packaging unit. To order less pieces or pairs, use part number with -1 suffix and the quantity desired.

CNC MACHINED I.D. VALVE SPRING LOCATORS

- ✓ Precision crafted in our own CNC double spindle turning centers
- ✓ Tight tolerances ± .002"
- ✓ Excellent surface finish
- ✓ 8620 material 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 Diam.	Spring	Use Cutter Number
42426-16	16 pcs.	1.550"	1.535"	.567"	.062"	.163"	.740"	Manley 221432, Comp 927	41856
42466-16	16 pcs.	1.550"	1.535"	.567"	.045"	.163"	.740"	Manley 221432, Comp 927	41856
42453-16	16 pcs.	1.575"	1.570"	.567"	.062"	.163"	.740"	Manley 221431	41856
42573-16	16 pcs.	1.580"	1.570"	.567"	.062"	.163"	.828"	Manley 221443	41856
42438-16	16 pcs.	1.580"	1.570"	.567"	.045"	.163"	.828"	Manley 221443	41856
42437-16	16 pcs.	1.625"	1.570"	.567"	.062"	.163"	.850"	Manley 221424	41857

Please call with your custom spring locator requirements. Minimum quantities are surprisingly low!

BULK PRICING AVAILABLE

ORDERING INFORMATION
Part number suffix indicates number of pieces or pairs in one packaging unit. To order less pieces or pairs, use part number with -1 suffix and the quantity desired.

SPRING LOCATORS

I.D. VALVE SPRING LOCATORS

✓ Manufactured in our own turning centers
✓ Accurate and durable .062" thick
✓ Heat treated and black oxide finished

Part No.	Quantity	Fits Spring O.D.	Locator O.D.	Locator I.D.	Wall Shoulder Height	Shoulder Diam.	Spring	Use Cutter Number
42119-16	16 pcs.	1.550"	1.535"	.635"	.140"	.720"	Manley 22440, Isky 9385	41835
42317-16	16 pcs.	1.550"	1.535"	.570"	.140"	.720"	Manley 22430, 22440	41856
42330-16	16 pcs.	1.550"	1.535"	.635"	.140"	.740"	Manley 221432, Isky 9365	41835
42326-16	16 pcs.	1.550"	1.535"	.570"	.140"	.740"	Manley 221432, Comp 927	41856
42378-16	16 pcs.	1.550"	1.535"	.570"	.140"	.765"	Isky 9685	41856
42331-16	16 pcs.	1.550"	1.530"	.570"	.140"	.750"	Comp 932	41856
42332-16	16 pcs.	1.550"	1.535"	.570"	.140"	.810"	Comp 943	41856
42333-16	16 pcs.	1.550"	1.535"	.635"	.140"	.810"	Comp 943	41835
42373-16	16 pcs.	1.580"	1.570"	.570"	.140"	.825"	Manley 221443	41856
42369-16	16 pcs.	1.580"	1.570"	.635"	.140"	.825"	Manley 221443	41856
42367-16	16 pcs.	1.610"	1.610"	.570"	.140"	.825"	Manley 221444	41857
42368-16	16 pcs.	1.610"	1.610"	.635"	.140"	.825"	Manley 221444	41855
42375-16	16 pcs.	1.625"	1.625"	.635"	.140"	.760"	Isky 9685	41855
42120-16	16 pcs.	1.625"	1.610"	.635"	.140"	.720"	K1000, K1000H	41855
42318-16	16 pcs.	1.625"	1.610"	.570"	.140"	.720"	K1000, K1000H	41857
42374-16	16 pcs.	1.625"	1.610"	.570"	.140"	.765"	Manley 22458	41857
42376-16	16 pcs.	1.625"	1.615"	.570"	.140"	.675"	Crane 99877	41857
42337-16	16 pcs.	1.625"	1.570"	.570"	.140"	.850"	Manley 221424	41857
42364-16	16 pcs.	1.660"	1.660"	.570"	.140"	.630"	Manley 221447, 221448, 221449	41858

Please call with your custom spring locator requirements. Minimum quantities are surprisingly low!

BULK PRICING AVAILABLE

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!

35 YEARS MANLEY Powering the Winners!

1960 Swarthmore Avenue, Lakewood, NJ 08701
732-905-3366 FAX: 732-905-3010
www.manleyperformance.com

ORDERING INFORMATION
Part number suffix indicates number of pieces or pairs in one packaging unit. To order less pieces or pairs, use part number with -1 suffix and the quantity desired.

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

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	LS1 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"

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"

Part No.	Length
25695-16	6.950"
25700-16	7.000"
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"
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"
25711-16	7.850"

Part No.	Length
25712-16	7.900"
25715-16	7.950"
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"

Part No.	Length
25724-16	8.650"
25799-16	8.700"
25738-16	8.750"
25742-16	8.800"
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"

Quantity Ordering

All 5/16" pushrods are available in bulk packaging. Use the suffixes below.
-50 (50 pcs. / box)
-100 (100 pcs. / box)

ORDERING INFORMATION
Part number suffix indicates number of pieces or pairs in one packaging unit. To order less pieces or pairs, use part number with -1 suffix and the quantity desired.

4130 CHROME MOLY 3/8" SWEDGED END PUSHRODS

Quantity Ordering
All 3/8" pushrods are available in bulk packaging.
Use the suffix below.
-50 (50 pcs. / box)

.080" WALL

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

COMMON 3/8" PUSHROD LENGTH APPLICATIONS

Part No.	Description	Length	Part No.	Description	Length
25787-16	SB Chevy - Stock Length	7.800"	25795-8	BB Chevy - Stock Intake	8.280"
25788-16	SB Chevy - .100" Longer	7.900"	25796-8	BB Chevy - Stock Exhaust	9.250"
25740-16	5.0 L Ford - Stock Length	6.272"	25797-8	BB Chevy - .400" Longer Int.	8.680"
25815-16	351 W Ford - Stock Length	8.150"	25798-8	BB Chevy - .400" Longer Exh.	9.650"
25840-16	351 C Ford - Stock Length	8.400"			
25855-16	Yates +.150" Longer	8.550"			

Part No.	Length	Part No.	Length	Part No.	Length	Part No.	Length
25740-8	6.272"	25813-8	7.925"	25870-8	8.700"	25970-8	9.700"
25817-8	6.800"	25814-8	7.950"	25867-8	8.725"	25975-8	9.750"
25819-8	6.850"	25809-8	7.975"	25875-8	8.750"	25980-8	9.800"
25853-8	6.900"	25816-8	8.000"	25868-8	8.775"	25985-8	9.850"
25857-8	6.950"	25802-8	8.025"	25880-8	8.800"	25990-8	9.900"
25862-8	7.000"	25821-8	8.050"	25882-8	8.825"	25995-8	9.950"
25827-8	7.050"	25807-8	8.075"	25885-8	8.850"	25906-8	10.000"
25829-8	7.100"	25810-8	8.100"	25887-8	8.875"	25907-8	10.050"
25841-8	7.150"	25811-8	8.125"	25890-8	8.900"	25901-8	10.100"
25872-8	7.200"	25815-8	8.150"	25892-8	8.925"	25908-8	10.150"
25873-8	7.250"	25812-8	8.175"	25895-8	8.950"	25909-8	10.200"
25874-8	7.300"	25820-8	8.200"	25897-8	8.975"	25911-8	10.250"
25851-8	7.350"	25823-8	8.225"	25900-8	9.000"	25912-8	10.300"
25822-8	7.400"	25825-8	8.250"	25926-8	9.025"	25913-8	10.350"
25836-8	7.450"	25795-8	8.280"	25905-8	9.050"	25902-8	10.400"
25854-8	7.500"	25830-8	8.300"	25927-8	9.075"	25914-8	10.450"
25818-8	7.550"	25826-8	8.325"	25910-8	9.100"	25903-8	10.500"
25876-8	7.600"	25835-8	8.350"	25928-8	9.125"	25916-8	10.550"
25824-8	7.625"	25769-8	8.380"	25915-8	9.150"	25917-8	10.600"
25877-8	7.650"	25840-8	8.400"	25929-8	9.175"	25918-8	10.650"
25834-8	7.675"	25842-8	8.425"	25920-8	9.200"	25919-8	10.700"
25828-8	7.700"	25845-8	8.450"	25796-8	9.250"	25921-8	10.750"
25831-8	7.725"	25850-8	8.500"	25930-8	9.300"	25922-8	10.800"
25832-8	7.750"	25856-8	8.525"	25770-8	9.350"	25923-8	10.850"
25833-8	7.775"	25855-8	8.550"	25940-8	9.400"	25924-8	10.900"
25787-8	7.800"	25858-8	8.575"	25945-8	9.450"	25925-8	10.950"
25808-8	7.825"	25860-8	8.600"	25950-8	9.500"	25904-8	11.000"
25878-8	7.850"	25863-8	8.625"	25955-8	9.550"		
25879-8	7.875"	25865-8	8.650"	25960-8	9.600"		
25788-8	7.900"	25797-8	8.680"	25798-8	9.650"		

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732-905-3366 FAX: 732-905-3010
www.manleyperformance.com

ORDERING INFORMATION
Part number suffix indicates number of pieces or pairs in one packaging unit. To order less pieces or pairs, use part number with -1 suffix and the quantity desired.

4130 CHROME MOLY 3/8" SWEDGED PUSHRODS with FULL 3/8" RADIUS ENDS

JESEL ROCKERS

- ✓ Meticulously formed full 3/8" radii
- ✓ Excellent concentricity with closely controlled length
- ✓ Heat treated and black oxide finished
- ✓ For use with Jesel full 3/8" radius adjustors and lifters
- ✓ Fits 18˚ Yates head or SB-2

.080" WALL

Part No.	Length	Part No.	Length	Part No.	Length
25328-8	8.700"	25338-8	8.950"	25348-8	9.200"
25329-8	8.725"	25339-8	8.975"	25350-8	9.250"
25330-8	8.750"	25340-8	9.000"	25352-8	9.300"
25331-8	8.775"	25341-8	9.025"	25354-8	9.350"
25332-8	8.800"	25342-8	9.050"	25356-8	9.400"
25333-8	8.825"	25343-8	9.075"	25358-8	9.450"
25334-8	8.850"	25344-8	9.100"	25360-8	9.500"
25335-8	8.875"	25345-8	9.125"	25362-8	9.550"
25336-8	8.900"	25346-8	9.150"	25364-8	9.600"
25337-8	8.925"	25347-8	9.175"	25366-8	9.650"

ORDERING INFORMATION
Part number suffix indicates number of pieces or pairs in one packaging unit. To order less pieces or pairs, use part number with -1 suffix and the quantity desired.

1010 STEEL SWEDGED END PUSHRODS

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

Part No.	Quantity	Description	Diam.	Length
SMALL BLOCK CHEVROLET				
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"

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

BIG BLOCK CHEVROLET				
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"

ORDERING INFORMATION
Part number suffix indicates number of pieces or pairs in one packaging unit. To order less pieces or pairs, use part number with -1 suffix and the quantity desired.

FORD 5.0 LITRE
SWEDGED END PUSHRODS

- ✓ .080" wall 1010 steel AND 4130 chrome moly
- ✓ Heat treated and black oxide finish
- ✓ Stock length pushrod for use with stock Ford valve (5.080" O/A)
- ✓ Use of Chevy valves (O/A 4.911") in Ford heads requires .172" shorter pushrods

Part No.	Quantity	Description	Material	Diam.	Length
25723-16	16 pcs.	Stock Length	1010	5/16"	6.272"
25725-16	16 pcs.	.172" Shorter	1010	5/16"	6.100"
25731-16	16 pcs.	Stock Length	1010	3/8"	6.272"
25627-16	16 pcs.	Stock Length	4130	5/16"	6.272"
25610-16	16 pcs.	.172" Shorter	4130	5/16"	6.100"
25740-16	16 pcs.	Stock Length	4130	3/8"	6.272"

SMALL BLOCK CHEVROLET
BALL END PUSHRODS

- ✓ .080" wall 1010 steel
- ✓ Excellent pushrods for mildly modified engines with open spring pressure under 300 lbs

Part No.	Quantity	Description	Diam.	Length
25739-16	16 pcs.	SB Chevy - .100" Shorter	5/16"	7.694"
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"

ORDERING INFORMATION
Part number suffix indicates number of pieces or pairs in one packaging unit. To order less pieces or pairs, use part number with -1 suffix and the quantity desired.

CHRYSLER - FORD - PONTIAC - HOLDEN
PUSHRODS

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

Part No.	Quantity	Description	Type	Diam.	Length
		CHRYSLER ENGINES			
25720-16	16 pcs.	273-340 Chrysler w/ adjustable rockers and solid lifters	Cup & Tip	5/16"	7.342"
25759-16	16 pcs.	340 Chrysler w/ stock non-adjustable rockers	Ball End	5/16"	7.513"
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"
25775-16	16 pcs.	260-289-302 Ford	Swedged	3/8"	6.776"
25749-16	16 pcs.	302 Boss Ford with stock rocker set-up	Ball End	5/16"	7.645"
25728-16	16 pcs.	302 Boss Ford converted to use 42156 guide plates	Swedged	3/8"	7.694"
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"
25778-16	16 pcs.	351M-400 Ford	Ball End	5/16"	9.500"
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			
25771-12	12 pcs.	Holden 6 cylinder	Ball End	5/16"	9.121"
25773-16	16 pcs.	Holden V-8	Ball End	5/16"	8.670"

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CAMSHAFT SPACERS, THRUST BUTTONS and MORE

ROLLER THRUST BUTTON

✓ Manufactured in our own CNC double spindle turning centers
✓ 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"

MANLEY
BULK PRICING AVAILABLE

ALUMINUM CAMSHAFT SPACER

✓ 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"

MANLEY
BULK PRICING AVAILABLE

DISTRIBUTOR / MAGNETO HOLD-DOWN

✓ Precision cast stainless steel
✓ Positive pre-load adjustment that assures zero housing movement

Part No.	Quantity	Description
42234	1	All Small Block and Big Block Chevrolets

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 DRIVE SYSTEMS

SMALL BLOCK CHEVROLET WITH BIG BLOCK CHEVROLET CRANK SNOUT RACE ROLLER BILLET STEEL TIMING KITS

- ✓ Fully machined billet steel camshaft and crankshaft sprockets
- ✓ Winston Cup style roller chain 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	Cam Sprocket	Crank Sprocket	Shim/ Torrington
73201	Brass Shim	Stock	76161	77270	77291	42109
73221	Captive Torrington	Stock	76161	77280	77291	42420
73211	Brass Shim	.005" Shorter	76171	77270	77291	42109
73231	Captive Torrington	.005" Shorter	76171	77280	77291	42420

RACE ROLLER TIMING KITS WITH BILLET STEEL CAM GEAR

- ✓ Fully machined billet steel camshaft and crankshaft sprockets
- ✓ Winston Cup style roller chain with .250" diameter rollers
- ✓ Three 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	Cam Sprocket	Crank Sprocket	Shim/ Torrington
73111	SB Chevy w/ Brass Shim	Stock	76161	77270	77249	42109
73121	SB Chevy w/ Captive Torrington	Stock	76161	77280	77249	42420
73311	SB Chevy w/ Brass Shim	.005" Shorter	76171	77270	77249	42109
73321	SB Chevy w/ Captive Torrington	.005" Shorter	76171	77280	77249	42420

RACE ROLLER TIMING KITS WITH TORRINGTON BEARINGS, ROLLER THRUST BUTTONS and LOCKS

- ✓ Fully machined crankshaft sprocket with three keyways
- ✓ Cast camshaft sprocket machined for Torrington thrust bearing
- ✓ Winston Cup style roller chain with .250" diameter rollers
- ✓ Kit includes captive Torrington bearing, roller thrust button, and Manley camshaft lock

Part No.	Description	Included Components				
		Chain	Cam Sprocket	Crank Sprocket	Torrington Bearing	Thrust Button	Cam Lock
73141	SB Chevy `55-`78	76161	77252	77249	42420	42111	42114
73151	SB Chevy `79/up	76161	77252	77249	42420	42113	42114
73142	BB Chevy	76162	77253	77251	42420	42145	42114

RACE ROLLER TIMING KITS WITH TORRINGTON BEARINGS

- ✓ Same kits as 73141, 73151 and 73142 on page 88 except they do not include the roller thrust button and cam lock
- ✓ Kits are available with standard length and .005"shorter chains

Part No.	Description	Center - to Center	Included Components			
			Chain	Cam Sprocket	Crank Sprocket	Torrington Bearing
73181	SB Chevrolet	Stock	76161	77252	77249	42420
73191	SB Chevrolet	.005" Shorter	76171	77252	77249	42420
73182	BB Chevrolet	Stock	76162	77253	77251	42420
73192	BB Chevrolet	.005" Shorter	76172	77253	77251	42420

RACE ROLLER TIMING KITS

- ✓ Fully machined crankshaft sprocket with three keyways
- ✓ Cast camshaft sprocket machined for brass wear shim
- ✓ Winston Cup style roller chain with .250" diameter rollers
- ✓ Chevrolet kits include wear shim

Part No.	Description	Center - to Center	Chain	Cam Sprocket	Crank Sprocket	Brass Block Wear Shim
73161	SB Chevrolet	Stock	76161	77248	77249	42109
73171	SB Chevrolet	.005" Shorter	76171	77248	77249	42109
73162	*BB Chevrolet	Stock	76162	77250	77251	42110
73172	*BB Chevrolet	.005" Shorter	76172	77250	77251	42110
	* including Gen VI					
73174	221-351W Ford	Stock	76174	77255	77254	None
73146	429-460 Ford	Stock	76146	77220	77221	None

STREET MASTER ROLLER CHAIN KITS

- ✓ Standard style roller chains
- ✓ Three keyway crankshaft sprocket
- ✓ Excellent value kit for mild performance engines

Part No.	Description	Chain	Cam Sprocket	Crank Sprocket
73163	Small Block Chevrolet	76163	77288	77287
73168	Big Block Chevrolet	76168	77394	77395
73164	221-351W Ford	76163	77230	77231

SILENT TIMING CHAIN KITS

- ✓ Original “silent” timing chain kits
- ✓ Nylon cam sprockets
- ✓ Steel crankshaft sprockets

Part No.	Description	Chain	Cam Sprocket	Crank Sprocket
73589	Small Block Chevrolet	76489	77261	77241
73500	Big Block Chevrolet	76500	77362	77363

OIL PUMPS and 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

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

OIL PUMP STUD and "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 OIL PUMP PRIMER

✓ Primer features an aluminum oil galley sealing plug and aluminum distributor hole centering plug
✓ More effective pressurization of lifters and upper valve train

Part No.	Quantity	Description	Application
42336	1	Deluxe oil pump primer	SB and BB Chevy

OIL RESTRICTOR KIT

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

MANLEY
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

MANLEY
BULK PRICING AVAILABLE

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

LIFTER VALLEY SCREEN KITS

- ✓ Prevents foreign material from falling into the oil pan
- ✓ Does not restrict oil drainage
- ✓ Kit includes general purpose epoxy which can be cleaned or “hot tanked” several times

Part No.	Quantity	Description
42260	1 kit	Fits SB Chevrolet
42261	1 kit	Fits SB Chevrolet and includes lifter valley breather tubes
42262	1 kit	Fits BB Chevrolets

Periodic tech articles by Hank Manley are just one of the many attractions at our website.

Reprinted from website tech article of April 2000.

The first product offered by Manley Performance when I opened the door (there was just one) in 1966 was a forged piston by TRW. For all its deficiencies, which I was not aware of at the time, the pistons were extremely popular for two reasons. They were reasonably priced compared to other forged pistons available, and they made better power than the "West Coast" pistons. The reason for the power gain was attributable to the high silicon material which, in combination with a ground skirt profile, ran easier in the bore than the custom pieces.

The forged domes, which indeed gave away much aesthetically to the fully machined California pistons, may have contributed to the power increase because of their inherent radius shape, as opposed to the sharp edges resulting from machining. I recall witnessing a dyno test pitting Bill Jenkins and his engine against that of another racer. Bill's engine made significantly more horsepower with his TRW based pistons. When a cylinder head on the other engine was removed, revealing sharp edges on the machined domes, Bill grumbled, "Grind the damn edges off and the thing'll gain twenty horse." It did too!

Looking back on those pistons now, having recently completed the installation of our industry trumping, advanced piston manufacturing facility to produce Platinum Series pistons, I marvel at how far we have progressed. The Manley piston of today is a completely superior product to that of just a few years ago.

First, the material we use presently is stronger than the old high silicon type. We do not give up any of the cylinder wall compatibility because of the carefully crafted and totally accurate skirt profile. Our new machines produce a skirt with a proper cam shape (essentially out-of-roundness) and barrel (radius and taper combination from beneath the oil ring to the end of the skirt) that allows the piston to operate with close piston to wall clearance and rigidity of the piston skirt (to keep the piston from rocking), that results in a top compression ring that is square to the bore at all times for maximum seal. This is one of the primary tenants to achieving optimum power.

Our exclusive processing, which allows us to form the skirt shape in the same fixturing as the cutting of the ring grooves, ensures the correctness of the relationship between the skirt and the rings, further enhancing the ability of the rings to seal the engine. Our piston to piston size is maintained at under .0005" total variation, as opposed to plus or minus .0005" just a few years ago. Also, our top ring is sized within one ten thousandth instead of one thousandth in the old TRW days. The flatness is held around one ten thousandth and often is eighty millionths or better. This quality groove was undreamed of just a year or so ago! Small wonder a Winston Cup engine at 350 CID makes almost 2.2:1 horsepower per cubic inch (750 H.P.) with a single four barrel carburetor, when years ago a Small Block Pro Stock drag race engine with two four barrel carburetors and a high rise manifold struggled to get close to a 2.0:1 ratio.

Our Small Block Chevrolet
4" Bore
Flat Top
23° Head
4 Barrel Class
Platinum Piston

Our Small Block Chevrolet
4" Bore
Flat Top
23° Head
2 Barrel Class
Platinum Piston

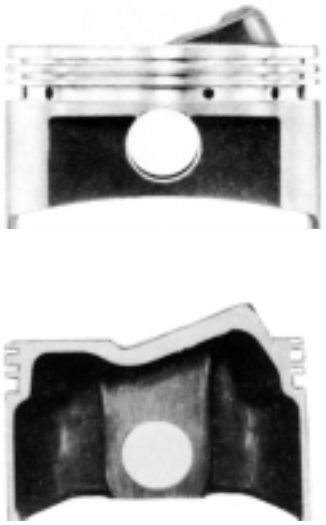
Lightweight pistons that don't crack or break, that run easily in the bore, giving away as little parasitic power loss through friction as possible, and presenting the compression ring flat and square to the bore … this is the formula for maximum power in an engine. And this combination of attributes is exactly what Manley Performance delivers to the customer with our new Platinum Series pistons.

We now have a full compliment of shelf stock numbers featuring .043" compression rings with lateral gas ports, 3 mm oil rings and tool steel pins. Please give us the opportunity to show you we can manufacture the finest piston possible within a time frame that fits your hectic engine building schedule.

Reprinted from website tech article of September 2000.

In 1966, when I started Manley Performance the first product I offered was a line of forged racing pistons by TRW. Naturally, I immediately looked for a piston ring set to sell as a complimentary item. The Grant Piston Ring Company from California was the dominate name in the industry at the time. Their signature offering was a ring they called the "6800 Plus" which was essentially a fat dykes gas activated ("L" shaped) ring that required a special ring groove in the piston. (Believe it or not, back then anything over 6800 rpm was considered "high rpm".) This ring weighed a ton, had no face coating and was essentially a piece of junk. Mercifully for the racing fraternity, this ring soon died in the market and the Grant Piston Ring Company, unable to keep pace with the rapidly advancing technologies chronicled below, quickly entered the steering wheel business and abandoned all efforts with pistons rings.

Grant Piston Ring Company's "6800 Plus" rings.



The first piston offered by Manley Performance.

Since my TRW pistons came to me from the factory with standard type ring grooves, I was not interested in the "6800 Plus" style ring, and I had to look farther down their line of offerings. What they had to offer was a plain cast iron, rectangular, top and second ring along with a very high tensioned oil ring, although at the time nobody was wise enough to realize the consequences of such high tension. The ring grooves in my first pistons were 5/64" wide tops, 5/64" wide seconds and 3/16" oils. The reason? This is what was generally used in passenger car applications from the factory at the time. Good enough for the fledgling racing industry, right?

The first improvement I ushered in to the line was thinner compression rings. These 1/16" wide rings were lighter in weight which meant that at top dead center the ring had less tendency to lift off the bottom of the groove, "flutter" and lose compression seal. Some years later, with positive input from Bill Jenkins, I introduced the first moly faced .043" wide rings in the industry, further reducing the weight of the ring and providing positive seal in even higher rpm situations.

At this time in the mid 1960's there were chrome faced top rings available from the Detroit suppliers, but the racers were not enamored of the results. The problem with a chrome faced top ring was that it was so hard it never really broke in, even with an aggressive cross hatch in the bore, to establish a good intimacy with the cylinder wall and properly seal the engine. The way was open for the introduction of the moly faced ring.

The Ramsey Piston Ring Company, marketing as Ramco Rings sold by TRW, introduced the "Double Moly" ring set. These sets featured the same ring in both the top and the second position, which raised many more questions than it answered and showed that the thinking behind the marketing was seriously flawed. Is the best ring for the top groove really the best ring for the second groove? Is the second ring simply a "back-up" for the top ring? Both rings were rectangular with bevels on the top inside edge, by the way.

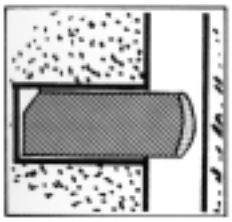


Illustration of a Manley "radius faced" ductile iron "moly" top compression ring.

Illustration of a Ramco square faced "moly" top and second ring.

In trying to develop a superior ring package for Manley Performance and compete with the marketing jugernaught of TRW - Ramco, I began to look at several issues. Examination of rings removed from race engines indicated the face of the top ring became radiused in use. The reason was easily discerned when one considered the amount of piston to wall clearance - about .008" - generally used with a forged piston and the resultant amount of piston rock.

My question then became, why not build a ring with a radius face from the get-go? This improvement, a radius face moly coated top compression ring with a bevel on the top inside edge to promote a subtle positive twist upward, first introduced in the early 1970's, is arguably the best sealing ring available still today. This is the ring offered by Manley Performance in our latest catalog.

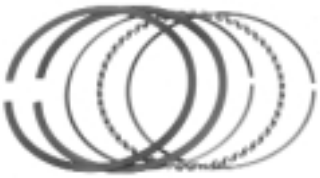
My understanding of the actual function of the second ring was greatly enhanced by Wally Booth in 1970. Wally experimented with a second ring beveled on the underside to give a REVERSE twist so the face of the ring torqued downward against the cylinder wall. Combined with a tapered face, this radical design afforded a very effective oil scraping action which peeled the oil on the walls down and away, ensuring a less contaminated combustion chamber. The immediate power improvement afforded by the reverse twist second ring, which Manley Performance began marketing soon after the discovery was validated, made a mockery of the Ramco double moly set and became an immediate success.

Illustration of the taper face “reverse twist” second ring.

Sealed Power’s SS-5OU three piece oil ring was considered the best choice by racers in the early 1960’s. My complaint with the ring initially was its high tension against the walls. Simple tests where I pulled a piston equipped with SS-5OU rings with a scale established the considerable drag inherent in the design. Replacing the expander with a .030" undersize version resulted in tension reductions from about 24 lbs. to 16-18 lbs. This reduced tension improved power output while controlling oil adequately, especially when used in conjunction with a reverse twist second ring. Today, however, Manley Performance offers Hastings “Mini Flex-Vent” oil ring for its superior oil returning capabilities.

Sealed Power’s SS-50U Oil Ring.

Another innovation I can credit to Wally Booth is the .005" oversize ring. In a conversation late one night in Detroit in the early 1970’s, Wally mentioned that he acid dipped his pistons. When I asked if the reason was to somehow reduce them in weight, he laughed and said it was simply to reduce them in size so he could achieve a tighter end gap with his rings. Shortly afterward, Manley Performance introduced the .005" oversize ring so racers could file fit their end gaps to a figure less than the .020" afforded by standard sized rings.



Manley Performance Piston Rings.

Today there are a plethora of rings available to the performance enthusiast. But for nearly any application, it is very difficult if not impossible to find a better setup than the tried and proven sets available from Manley Performance. Installing a thin top ring of ductile (high strength) material - either 1/16" or .043" wide - with a radius face and positive twist and moly faced, along with a cast iron, reverse twist and taper face second ring, and finally a low tension, effective oil ring is a combination that will produce outstanding power, long life and positive oil control.

ORDERING INFORMATION
Part number suffix indicates number of pieces or pairs in one packaging unit. To order less pieces or pairs, use part number with -1 suffix and the quantity desired.

PLATINUM SERIES PISTONS

SMALL BLOCK CHEVROLET

4 BARREL CLASS

4" BORE
FLAT TOP
23˚ HEAD
1/16" x 3/16" RINGS

- ✓ 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
- ✓ Spiral locks included - NO CHARGE
- ✓ Full banded skirt design for increased skirt stability

Part No.	Bore Size	Rod Length	Stroke	Comp. Dist.	Piston Wt/Gms	Piston and Pin Wt/Gms	Piston Ring Set
590530-8	4.030"	5.700"	3.480"/3.500"	1.550"	435	531	46353-8
590535-8	4.035"	5.700"	3.480"/3.500"	1.550"	436	532	46355-8
590540-8	4.040"	5.700"	3.480"/3.500"	1.550"	437	533	46354-8
590560-8	4.060"	5.700"	3.480"/3.500"	1.550"	439	535	46356-8
590630-8	4.030"	6.000"	3.480"/3.500"	1.250"	393	489	46353-8
590635-8	4.035"	6.000"	3.480"/3.500"	1.250"	394	490	46355-8
590640-8	4.040"	6.000"	3.480"/3.500"	1.250"	395	491	46354-8
590660-8	4.060"	6.000"	3.480"/3.500"	1.250"	397	493	46356-8
590730-8	4.030"	5.700"	3.750"	1.425"	414	510	46353-8

NOTE: The root diameter of the ring grooves accomodates Manley rings and others which have the following radial thickness
Top: .183" 2nd: .183" Oil: .190"

COMMON FEATURES

Dome Volume: -4.0 cc
C.R.: 10.16:1 w/ 64 cc & 3.48" Stroke
Top Ring: 1/16", .185" down
Second Ring: 1/16"
Oil Ring: 3/16"
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 42216 (.130" wall, 96 grams, 2.300" long)
Spiral Locks: P/N 42296 - .072" wide
Recommended Piston Clearance: .006" measured 1.100" from bottom of the oil ring

SEE PAGE 106 FOR CUSTOM PISTONS

PLATINUM SERIES PISTONS

ORDERING INFORMATION
Part number suffix indicates number of pieces or pairs in one packaging unit. To order less pieces or pairs, use part number with -1 suffix and the quantity desired.

SMALL BLOCK CHEVROLET

2 BARREL CLASS - 1/16" RINGS

4" BORE
FLAT TOP
23° HEAD
1/16" x 3/16" RINGS

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

Part No.	Bore Size	Rod Length	Stroke	Comp. Dist.	Piston Wt/Gms	Piston and Pin Wt/Gms	Piston Ring Set
590030-8	4.030"	5.700"	3.480"/3.500"	1.550"	427	497	46353-8
590035-8	4.035"	5.700"	3.480"/3.500"	1.550"	424	498	46355-8
590040-8	4.040"	5.700"	3.480"/3.500"	1.550"	425	499	46354-8
590130-8	4.030"	6.000"	3.480"/3.500"	1.250"	384	458	46353-8
590135-8	4.035"	6.000"	3.480"/3.500"	1.250"	385	459	46355-8
590140-8	4.040"	6.000"	3.480"/3.500"	1.250"	386	460	46354-8
The following pistons will include goove lock spacer 46400							
590230-8	4.030"	6.125"	3.480"/3.500"	1.125"	369	443	46353-8
590235-8	4.035"	6.125"	3.480"/3.500"	1.125"	370	444	46355-8
590240-8	4.040"	6.125"	3.480"/3.500"	1.125"	371	445	46354-8
590330-8	4.030"	6.200"	3.480"/3.500"	1.050"	356	430	46353-8
590335-8	4.035"	6.200"	3.480"/3.500"	1.050"	357	431	46355-8
590340-8	4.040"	6.200"	3.480"/3.500"	1.050"	358	432	46354-8
590430-8	4.030"	6.250"	3.480"/3.500"	1.000"	348	422	46353-8
590435-8	4.035"	6.250"	3.480"/3.500"	1.000"	349	423	46355-8
590440-8	4.040"	6.250"	3.480"/3.500"	1.000"	350	424	46354-8

NOTE: The root diameter of the ring grooves accomodates Manley rings and others which have the following radial thickness
Top: .183" 2nd: .183" Oil: .190"

COMMON FEATURES

Dome Volume: -2.5 cc
C.R.: 10.34:1 w/ 64 cc & 3.48" Stroke
Top Ring: 1/16", .155" down
Second Ring: 1/16"
Oil Ring: 3/16"
Deck Thickness: .155"

Valve Notches: .210" Int., .150" Exh.
Maximum Fly Cut: .270" Int., .170" Exh.
Max. Valve Sizes: 2.080" Int., 1.600" Exh.
Valve Angle: 22°
Pin Included: tool steel P/N 42215
(.095" wall, 74 grams, 2.300" long)
Spiral Locks: P/N 42296 - .072" wide

Recommended Piston Clearance: .006" measured 1.100" from bottom of the oil ring

SEE PAGE 106 FOR CUSTOM PISTONS

1960 Swarthmore Avenue, Lakewood, NJ 08701
732-905-3366 FAX: 732-905-3010
www.manleyperformance.com

ORDERING INFORMATION
Part number suffix indicates number of pieces or pairs in one packaging unit. To order less pieces or pairs, use part number with -1 suffix and the quantity desired.

PLATINUM SERIES PISTONS

SMALL BLOCK CHEVROLET

2 BARREL CLASS - .043" RINGS

4" BORE
FLAT TOP
23˚ HEAD
.043" x 3 mm RINGS

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

Part No.	Bore Size	Rod Length	Stroke	Comp. Dist.	Piston Wt/Gms	Piston and Pin Wt/Gms	Piston Ring Set
591030-8	4.030"	5.700"	3.480"/3.500"	1.550"	428	497	46213-8
591035-8	4.035"	5.700"	3.480"/3.500"	1.550"	425	498	46215-8
591040-8	4.040"	5.700"	3.480"/3.500"	1.550"	426	499	46214-8
591130-8	4.030"	6.000"	3.480"/3.500"	1.250"	387	458	46213-8
591135-8	4.035"	6.000"	3.480"/3.500"	1.250"	431	459	46215-8
591140-8	4.040"	6.000"	3.480"/3.500"	1.250"	386	460	46214-8
591230-8	4.030"	6.125"	3.480"/3.500"	1.125"	369	443	46213-8
591235-8	4.035"	6.125"	3.480"/3.500"	1.125"	363	444	46215-8
591240-8	4.040"	6.125"	3.480"/3.500"	1.125"	371	445	46214-8
The following pistons will include goove lock spacer 46400							
591330-8	4.030"	6.200"	3.480"/3.500"	1.050"	356	430	46213-8
591335-8	4.035"	6.200"	3.480"/3.500"	1.050"	357	431	46215-8
591340-8	4.040"	6.200"	3.480"/3.500"	1.050"	358	432	46214-8
591430-8	4.030"	6.250"	3.480"/3.500"	1.000"	348	422	46213-8
591435-8	4.035"	6.250"	3.480"/3.500"	1.000"	349	423	46215-8
591440-8	4.040"	6.250"	3.480"/3.500"	1.000"	350	424	46214-8

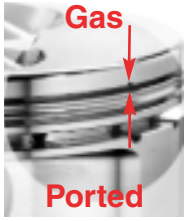
NOTE: The root diameter of the ring grooves accomodates Manley rings and others which have the following radial thickness
Top: .155" 2nd: .163" Oil: .190"

COMMON FEATURES

Dome Volume: -2.5 cc
C.R.: 10.34:1 w/ 64 cc & 3.48" Stroke
Top Ring: .043", .155" down
Second Ring: .043"
Oil Ring: 3 mm
Deck Thickness: .155"

Valve Notches: .210" Int., .150" Exh.
Maximum Fly Cut: .270" Int., .170" Exh.
Max. Valve Sizes: 2.080" Int., 1.600" Exh.
Valve Angle: 22˚
Pin Included: tool steel P/N 42215
(.095" wall, 74 grams, 2.300" long)
Spiral Locks: P/N 42296 - .072" wide

Recommended Piston Clearance: .006" measured 1.100" from bottom of the oil ring



SEE PAGE 106 FOR CUSTOM PISTONS

ORDERING INFORMATION
Part number suffix indicates number of pieces or pairs in one packaging unit. To order less pieces or pairs, use part number with -1 suffix and the quantity desired.

350 CHEVROLET
CASCAR RACING SERIES

- ✓ 2618 high strength material
- ✓ Lightweight design
- ✓ Perfect ring groove to skirt squareness
- ✓ Manley Performance is a proud sponsor of the CASCAR Series

Part No.	Bore Size	Rod Length	Stroke	Comp. Dist.	Piston Wt/Gms	Piston and Pin Wt/Gms	Piston Ring Set
597020-8	4.020"	5.700"	3.480"	1.550"	509	603	46352-8
597030-8	4.030"	5.700"	3.480"	1.550"	511	605	46353-8
597035-8	4.035"	5.700"	3.480"	1.550"	512	606	46355-8
597040-8	4.040"	5.700"	3.480"	1.550"	513	607	46354-8
597060-8	4.060"	5.700"	3.480"	1.550"	515	609	46356-8

SEE PAGE 123 FOR CASCAR SERIES CONNECTING ROD P/N 14101C-8

COMMON FEATURES

Dome Volume: -11 cc
C.R.: 9.6:1 w/ 64 cc & 3.480" Stroke
Top Ring: 1/16", .250" down
Second Ring: 1/16"
Oil Ring: 3/16"
Deck Thickness: .275"

Valve Notches: .260" Int., .170" Exh.
Max. Valve Sizes: 2.080" Int., 1.600" Exh.
Valve Angle: 22˚
Pin Included: tool steel P/N 42200
(.125" wall, 97 grams, 2.500" long)
Spiral Locks: P/N 42296 - .072" wide

Recommended Piston Clearance: .006" measured 1.100" from bottom of the oil ring

SEE PAGE 106 FOR CUSTOM PISTONS

ORDERING INFORMATION
Part number suffix indicates number of pieces or pairs in one packaging unit. To order less pieces or pairs, use part number with -1 suffix and the quantity desired.

SPORTSMASTER® PISTONS

SMALL BLOCK CHEVROLET

4" BORE
23˚ HEAD
FLAT TOP

- ✓ MS-75 high silicon material
- ✓ Famous Manley skirt profile for smooth cylinder wall compatability

Part No.	Bore Size	Application	Rod Length	Stroke	Comp. Distance	Weight	Ring Set
49423-8	4.030"	4" SB Chevy	5.700"	3.480"	1.560"	484	46353-8
49424-8	4.040"	4" SB Chevy	5.700"	3.480"	1.560"	485	46354-8
49426-8	4.060"	4" SB Chevy	5.700"	3.480"	1.560"	499	46356-8

NOTE: Above pistons also fit engines with 3.750" stroke and 5.565" 400 type connecting rods.

49443-8	4.030"	4" SB Chevy	6.000"	3.480"	1.260"	419	46353-8
49444-8	4.040"	4" SB Chevy	6.000"	3.480"	1.260"	420	46354-8
49446-8	4.060"	4" SB Chevy	6.000"	3.480"	1.260"	422	46356-8
49453-8	4.030"	4" SB Chevy	5.700"	3.750"	1.425"	454	46353-8
49473-8	4.030"	4" SB Chevy	6.000"	3.750"	1.125"	403	46353-8

Engine builders who have used 49523, 49543 and 49553 Ultra Lite 4" Flat Top pistons in the past are encouraged to investigate the Platinum Series pistons on page 97 that fit the same application.

CUSTOM VERSIONS OF SPORTSMASTER® PISTONS ARE AVAILABLE

Blank Forging Part No.	Bore Range	Description	Valve Angle	Wrist Pin Length
49000-8	4.000" - 4.155"	SB Chevy & Ford Flat Top	21˚ - 23˚	2.500"

COMMON FEATURES

Dome Volume: -3.5 cc
C.R.: 10:1 w/ 64 cc & 3.48" Stroke
Top Ring: 1/16", .175" down
Second Ring: 1/16"
Oil Ring: 3/16"

Valve Notches: .240" Int. .230" Exh.
Maximum Fly cut: .300" Int., .280" Exh.
Max. Valve Sizes: 2.080" Int., 1.600" Exh.
Valve Angle: 22˚
Pin Included: P/N 42209 w/ .150" wall
Spiral Locks: P/N 42296 .072" wide

Recommended Piston Clearance: .006" measured 1.100" from bottom of the oil ring

ORDERING INFORMATION
Part number suffix indicates number of pieces or pairs in one packaging unit. To order less pieces or pairs, use part number with -1 suffix and the quantity desired.

CHRYSLER 360
CASCAR RACING SERIES

- ✓ 2618 high strength material
- ✓ Lightweight design
- ✓ Perfect ring groove to skirt squareness
- ✓ Manley Performance is a proud sponsor of the CASCAR Series

Part No.	Bore Size	Rod Length	Stroke	Comp. Dist.	Piston Wt/Gms	Piston and Pin Wt/Gms	Piston Ring Set
597220-8	4.020"	6.125"	3.580"	1.665"	515	618	46352-8
597230-8	4.030"	6.125"	3.580"	1.665"	517	620	46353-8
597235-8	4.035"	6.125"	3.580"	1.665"	518	621	46355-8
597240-8	4.040"	6.125"	3.580"	1.665"	519	622	46354-8
597260-8	4.060"	6.125"	3.580"	1.665"	521	624	46356-8

SEE PAGE 134 FOR CASCAR SERIES CONNECTING ROD P/N 14139C-8

COMMON FEATURES

Dome Volume: -11 cc
C.R.: 9.7:1 w/ 65 cc & 3.580" Stroke
Top Ring: 1/16", .250" down
Second Ring: 1/16"
Oil Ring: 3/16"
Deck Thickness: .260"

Valve Notches: .300" Int., .195" Exh.
Max. Valve Sizes: 2.150" Int., 1.700" Exh.
Valve Angle: 18˚
Pin Included: tool steel P/N 42222
(.120" wall, 103 grams, 2.500" long)
Spiral Locks: P/N 42271 - .042" wide

Recommended Piston Clearance: .006" measured 1.100" from bottom of the oil ring

SEE PAGE 106 FOR CUSTOM PISTONS

FORD 351 W
CASCAR RACING SERIES

- ✓ 2618 high strength material
- ✓ Lightweight design
- ✓ Perfect ring groove to skirt squareness
- ✓ Manley Performance is a proud sponsor of the CASCAR Series

Part No.	Bore Size	Rod Length	Stroke	Comp. Dist.	Piston Wt/Gms	Piston and Pin Wt/Gms	Piston Ring Set
597120-8	4.020"	5.955"	3.500"	1.769"	537	633	46352-8
597130-8	4.030"	5.955"	3.500"	1.769"	539	635	46353-8
597135-8	4.035"	5.955"	3.500"	1.769"	540	636	46355-8
597140-8	4.040"	5.955"	3.500"	1.769"	541	637	46354-8
597160-8	4.060"	5.955"	3.500"	1.769"	543	639	46356-8

SEE PAGE 139 FOR CASCAR SERIES CONNECTING ROD P/N 14137C-8

COMMON FEATURES

Dome Volume: -14 cc
C.R.: 9.6:1 w/ 62 cc & 3.500" Stroke
Top Ring: 1/16", .250" down
Second Ring: 1/16"
Oil Ring: 3/16"
Deck Thickness: .285"

Valve Notches: .270" Int., .230" Exh.
Max. Valve Sizes: 2.080" Int., 1.600" Exh.
Valve Angle: 12˚
Pin Included: tool steel P/N 42205
(.120" wall, 95 grams, 2.500" long)
Spiral Locks: P/N 42296 - .072" wide

Recommended Piston Clearance: .006" measured 1.100" from bottom of the oil ring

SEE PAGE 106 FOR CUSTOM PISTONS

ORDERING INFORMATION
Part number suffix indicates number of pieces or pairs in one packaging unit. To order less pieces or pairs, use part number with -1 suffix and the quantity desired.

FORD 4.6 L and 5.4 L DOHC (4 VALVE)

FLAT TOP PISTONS
SEAN HYLAND MOTORSPORTS DESIGN

- ✓ 2618 high strength material
- ✓ Lightweight design
- ✓ Perfect ring groove to skirt squareness
- ✓ Pressure balance groove
- ✓ 2.500" length tool steel pin included
- ✓ Spiral locks included - NO CHARGE
- ✓ Full banded skirt design for increased skirt stability

Part No.	Bore Size	Rod Length	Stroke	Comp. Dist.	Piston Wt/Gms	Piston and Pin Wt/Gms	Piston Ring Set
594020-8	3.572"	5.933" / 6.657"	3.543" / 4.165"	1.220"	344	433	46620-8
594030-8	3.582"	5.933" / 6.657"	3.543" / 4.165"	1.220"	345	434	46630-8

NOTE: See pages 138 - 141 for connecting rods.

NOTE: The root diameter of the ring grooves accomodates Manley rings and others which have the following radial thickness
Top: .149" 2nd: .154" Oil: .128"

COMMON FEATURES

Dome Volume: 0 cc
C.R.: 10.2:1 w/ 54 cc & 3.543" Stroke
Top Ring: 1.5 mm, .250" down
Second Ring: 1.5 mm
Oil Ring: 3 mm

Deck Thickness: .185"
Pin Included: tool steel P/N 42227
(.120" wall, 89 grams, 2.500" long)
Spiral Locks: P/N 42269 - .042" wide

Recommended Piston Clearance: .0035" measured 1.100" from bottom of the oil ring

SEE PAGE 106 FOR CUSTOM PISTONS

ORDERING INFORMATION
Part number suffix indicates number of pieces or pairs in one packaging unit. To order less pieces or pairs, use part number with -1 suffix and the quantity desired.

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

11 cc DISH PISTON
SEAN HYLAND MOTORSPORTS DESIGN

- ✓ 2618 high strength material
- ✓ Lightweight design
- ✓ Perfect ring groove to skirt squareness
- ✓ Pressure balance groove
- ✓ 2.500" length tool steel pin included
- ✓ Spiral locks included - NO CHARGE
- ✓ Full banded skirt design for increased skirt stability

Part No.	Bore Size	Rod Length	Stroke	Comp. Dist.	Piston Wt/Gms	Piston and Pin Wt/Gms	Piston Ring Set
594120-8	3.572"	5.933" / 6.657"	3.543" / 4.165"	1.220"	344	433	46620-8
594130-8	3.582"	5.933" / 6.657"	3.543" / 4.165"	1.220"	345	434	46630-8

NOTE: See pages 138 - 141 for connecting rods.

NOTE: The root diameter of the ring grooves accomodates Manley rings and others which have the following radial thickness
Top: .149" 2nd: .154" Oil: .128"

COMMON FEATURES

Dome Volume: -11 cc
C.R.: 9.2:1 w/ 52 cc & 3.543" Stroke
Top Ring: 1.5 mm, .250" down
Second Ring: 1.5 mm
Oil Ring: 3 mm

Deck Thickness: .185"
Pin Included: tool steel P/N 42227
(.120" wall, 89 grams, 2.500" long)
Spiral Locks: P/N 42269 - .042" wide

Recommended Piston Clearance: .0035" measured 1.100" from bottom of the oil ring

SEE PAGE 106 FOR CUSTOM 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.

INCREMENTAL BORE SIZE ORDER FORM

CUSTOMER # : _____

CUSTOMER NAME : _____

DATE : _____

PURCHASE ORDER # : _____

CATALOG PISTON NUMBER DESIRED : _____
(EXCEPT FOR FINAL SIZE)

QUANTITY : _____

FINAL BORE SIZE OF BLOCK : _____

ORDERING INFORMATION
Part number suffix indicates number of pieces or pairs in one packaging unit. To order less pieces or pairs, use part number with -1 suffix and the quantity desired.

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
581000-8	4.000" - 4.155"	SB Chevy & Ford Flat Top	21˚ - 23˚	2.300"
582000-8	4.000" - 4.155"	Small Block Chevy “D” Dish	21˚ - 23˚	2.500"
583000-8	4.120" - 4.185"	SB Chevy Flat or Dish; Oldsmobile	18˚	2.750" / 2.950"
586000-8	4.470" - 4.625"	Big Block Chevy	Factory	2.930"
587000-8	4.000" - 4.060"	SB Chevy, Chrysler, Ford with thicker deck	Factory	2.500"
588000-8	3.550" - 3.700"	Ford 4.6 L and 5.4 L	Factory	2.500"

If your piston fits the envelope of our forging, we can produce custom pistons to your specifications of the highest quality, most exacting tolerances, absolute skirt to ring groove squareness and extremely reasonable prices.

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.

COMPLIMENTARY PISTON PINS

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

Forging No.	Piston Pin Selection
581000	42215 - 42216 - 42225
582000	42200 - 42204 - 42209
583000	42210 - 42211 - 42213 - 42214
586000	42219 - 42220 - 42221
587000	42200 - 42204 - 42205 42209 - 42222
588000	42227

Please refer to page 109 for piston pin detailed information

GROOVE LOCK SPACERS

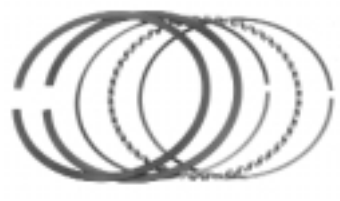
Should your custom Platinum Piston requirements necessitate the wrist pin hole break into the oil ring groove, we can widen the oil ring groove and incorporate a grove lock spacer in one of the following sizes listed below.

Part No.	Description
46391-8	3.552" to 3.582" Bore
46393-8	3.700" Bore
46400-8	4.020" to 4.060" Bore
46401-8	4.125" to 4.155" Bore
46402-8	4.470" Bore
46403-8	4.500" to 4.530" Bore
46404-8	4.560" Bore
46405-8	4.600" Bore

PISTON RINGS

ORDERING INFORMATION
Part number suffix indicates number of pieces or pairs in one packaging unit. To order less pieces or pairs, use part number with -1 suffix and the quantity desired.

PISTON RING SETS



- ✓ Top Ring: High strength ductile iron with barrel face in-lay plasma moly .005" oversize
- ✓ Second Ring: Low tension, reverse twist, taper face cast iron .005" oversize
- ✓ Oil Ring: Hastings “Mini Flex-Vent” with more space for oil return and lower tension

Part No.	Size	Actual Bore	Ring Widths
4" CHEVROLET and FORD			
46352-8	.025"	4.020"	1/16" x 1/16" x 3/16"
46353-8	.035"	4.030"	1/16" x 1/16" x 3/16"
46355-8	.040"	4.035"	1/16" x 1/16" x 3/16"
46354-8	.045"	4.040"	1/16" x 1/16" x 3/16"
46356-8	.065"	4.060"	1/16" x 1/16" x 3/16"
46213-8	.035"	4.030"	.043" x .043" x 3 mm
46215-8	.040"	4.035"	.043" x .043" x 3 mm
46214-8	.045"	4.040"	.043" x .043" x 3 mm
46216-8	.065"	4.060"	.043" x .043" x 3 mm

Part No.	Size	Actual Bore	Ring Widths
4 1/8"" CHEVROLET			
46163-8	.035"	4.155"	1/16" x 1/16" x 3/16"
4.6 L FORD SEAN HYLAND MOTORSPORTS			
46620-8	.025"	3.572"	1.5 mm x 1.5 mm x 3 mm
46630-8	.035"	3.582"	1.5 mm x 1.5 mm x 3 mm

PISTON RING INSTALLATION INSTRUCTIONS

1. All top compression rings require file fitting to acheive correct end gap. Use Manley tool P/N 41833. After grinding, stone all edges at each gap.

Application	Top Ring End Gap	2nd Ring End Gap
Supercharged / Injected alcohol	.018" / .020"	.012" / .014"
Supercharged / Injected gasoline	.022" / .024"	.012" / .014"
Carbureted Gasoline Oval Track	.018" / .020"	.012" / .014"
Pro Stock, Competition, Modified Production Drag Race	.018" / .020"	.012" / .014"
Super Stock	.018" / .020"	.010" / .012"
Stock and Street Engines	.016" / .018"	.010" / .012"

2. Install all compression rings with the marked side up. Top rings will be bevel up. Reverse twist second rings will be bevel down.

3. Be certain not to overlap the ends of the oil ring expander. The end gap of the oil ring rails may be from .035" to .080".

ORDERING INFORMATION
Part number suffix indicates number of pieces or pairs in one packaging unit. To order less pieces or pairs, use part number with -1 suffix and the quantity desired.

PISTON PINS & LOCK RINGS

WRIST PINS

- ✓ Straight and taper wall construction
- ✓ Large O.D. chamfer pins requiring round wire locks
- ✓ Chrome moly (4340) and tool steel available
- ✓ Exacting size control and perfect concentricity
- ✓ Inside of each pin is totally free of tooling marks

Part No.	Quantity	Description	Diam.	Wall Type	Material	Length	Wall Thickness	Lock Rings	Weight/ Grams
42215-8	8 pcs.	SB Chevy	.927"	Straight	Tool Steel	2.300"	.095"	Spiral	73
42216-8	8 pcs.	SB Chevy	.927"	Straight	Tool Steel	2.300"	.130"	Spiral	96
42225-8	8 pcs.	SB Chevy	.927"	Straight	Tool Steel	2.300"	.130"	Round Wire	94
42209-8	8 pcs.	SB Chevy	.927"	Straight	Standard	2.500"	.150"	Spiral	119
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	97
42210-8	8 pcs.	SB Chevy	.927"	Straight	Tool Steel	2.750"	.125"	Spiral	109
42211-8	8 pcs.	SB Chevy	.927"	Taper	Tool Steel	2.750"	.105" -.140"	Spiral	116
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
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
42221-8	8 pcs.	BB Chevy	.990"	Taper	Tool Steel	2.930"	.125" -.180"	Spiral	161
42227-8	8 pcs.	Ford 4.6, 5.4L	22 mm	Straight	Tool Steel	2.500"	.120"	Spiral	89
42205-8	8 pcs.	Ford 351 W	.912"	Straight	Tool Steel	2.500"	.120"	Spiral	103
42222-8	8 pcs.	Chrys 360	.984"	Straight	Tool Steel	2.500"	.120"	Spiral	95

WRIST PIN LOCKS

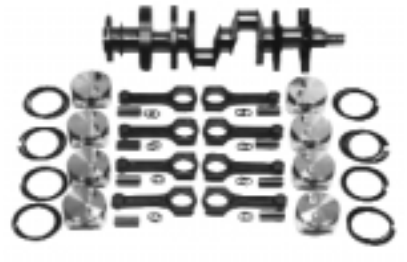
- ✓ .042" and .072" spiral locks for cautious engine builders
- ✓ .072" spiral locks are shipped - no charge - with all Platinum Series and Sportsmaster® pistons
- ✓ Round wire locks for large O.D. chamfer wrist pins - NO CHARGE when ordered with custom pistons

Part No.	Quantity	Type	Pin Diam.	Description	Weight/ Grams
42269-32	32 pcs.	.042" Spiral	.867"	4.6 / 5.4 Litre - Ford	2.1
42208-32	32 pcs.	.042" Spiral	.927"	Small Block Chevrolet	2.3
42296-16	16 pcs.	.072" Spiral	.927"	Small Block Chevrolet	3.6
42271-32	32 pcs.	.042" Spiral	.990"	Big Block Chevrolet - and Small Block Chrysler	2.4
42272-16	16 pcs.	.074" Round Wire	.927"	Small Block Chevrolet	2.8

ROTATING ASSEMBLIES

350 CHEVROLET

ROTATING ASSEMBLY
SHORT TRACK KIT

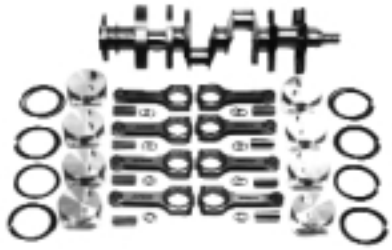


✓ All new, stock replacement,
2 piece rear seal type cast iron crankshaft
✓ Crankshaft internally balanced for these components
✓ No need to balance (Save up to $300.00)
✓ File fit premium ring set

Part No.	Stroke	Crankshaft Part No.	Rod Length	Rod Type	Rod Part No.	Piston Size	Piston Type	Piston Part No.	Ring Part No.
18000	3.480"	18100	5.700"	Streetmaster	14201	4.030"	Sportsmaster®	49423	46353

383 CHEVROLET

ROTATING ASSEMBLY
5.700" ROD STREET DOMINATOR KIT

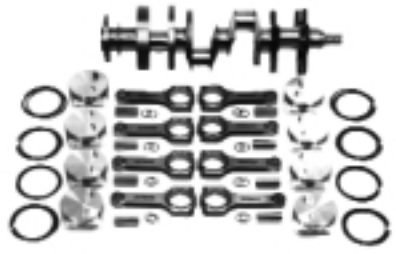


✓ Standard weight, 2 piece rear seal type crankshaft
✓ Knife edged, nodular iron crankshaft
✓ "H" Beam connecting rods
✓ Sportsmaster® forged pistons
✓ File fit premium ring set
✓ Externally balanced

Part No.	Stroke	Crankshaft Part No.	Rod Length	Rod Type	Rod Part No.	Piston Size	Piston Type	Piston Part No.	Ring Part No.
18001	3.750"	18101	5.700"	"H" Beam	14050	4.030"	Sportsmaster®	49453	46353

383 CHEVROLET

ROTATING ASSEMBLY
6" ROD STREET DOMINATOR KIT



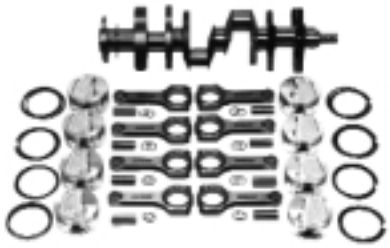
✓ Lightweight, 2 piece rear seal type crankshaft
✓ Knife edged, nodular iron crankshaft
✓ Crankshaft internally balanced for these components
✓ No need to balance (Save up to $300.00)
✓ Lighter than 5.700" assembly above
✓ Uses a 350 CID damper and flywheel
✓ File fit premium ring set

Part No.	Stroke	Crankshaft Part No.	Rod Length	Rod Type	Rod Part No.	Piston Size	Piston Type	Piston Part No.	Ring Part No.
18002	3.750"	18102	6.000"	"H" Beam	14054	4.030"	Sportsmaster®	49473	46353

400 CHEVROLET

ROTATING ASSEMBLY
5.700" STREET DOMINATOR KIT (23° HEAD)

- ✓ Standard weight, 2 piece rear seal type crankshaft
- ✓ Knife edged, nodular iron cranshaft
- ✓ “H” Beam connecting rods
- ✓ Platinum forged pistons
- ✓ File fit premium ring set
- ✓ Externally balanced

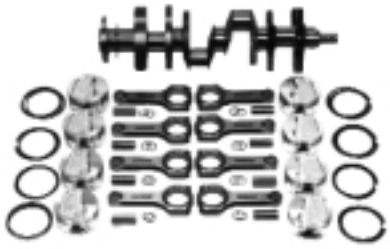


Part No.	Stroke	Crankshaft Part No.	Rod Length	Rod Type	Rod Part No.	Piston Size	Piston Type	Piston Part No.	Ring Part No.
18003	3.750"	18103	5.700"	“H” Beam	14050	4.155"	Platinum (-19cc “D” Dish)	596530	46163

400 CHEVROLET

ROTATING ASSEMBLY
6" STREET DOMINATOR KIT (23° HEAD)

- ✓ Lightweight, 2 piece rear seal type crankshaft
- ✓ Knife edged, nodular iron crankshaft
- ✓ Crankshaft internally balanced for these components
- ✓ No need to balance (Save up to $300.00)
- ✓ Lighter than 5.700" assembly above
- ✓ Uses a 350 CID damper and flywheel
- ✓ File fit premium ring set

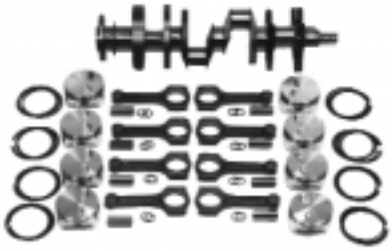


Part No.	Stroke	Crankshaft Part No.	Rod Length	Rod Type	Rod Part No.	Piston Size	Piston Type	Piston Part No.	Ring Part No.
18004	3.750"	18104	6.000"	“H” Beam	14054	4.155"	Platinum (-19cc “D” Dish)	596730	46163

400 CHEVROLET

ROTATING ASSEMBLY
6" STREET DOMINATOR KIT (23° HEAD)

- ✓ Lightweight, 2 piece rear seal type crankshaft
- ✓ Knife edged, nodular iron crankshaft
- ✓ Crankshaft internally balanced for these components
- ✓ No need to balance (Save up to $300.00)
- ✓ Lighter than 5.700" assembly above
- ✓ Uses a 350 CID damper and flywheel
- ✓ File fit premium ring set



Part No.	Stroke	Crankshaft Part No.	Rod Length	Rod Type	Rod Part No.	Piston Size	Piston Type	Piston Part No.	Ring Part No.
18005	3.750"	18104	6.000"	Sportsmaster®	14103	4.155"	Platinum Flat Top	596430	46163

SMALL BLOCK CHEVY
350 STOCK REPLACEMENT CRANKSHAFTS

- ✓ New, not reconditioned, cast iron crankshaft
- ✓ Simplify your bearing stocks to all std. / std. sizes
- ✓ Stronger than stock factory cast crank
- ✓ Higher tensil strength of 105,000 lbs. compared to 95,000 lbs. for stock
- ✓ Ready to install right out of the box

Part No.	Stroke	Main Journal Type	Rod Length	Rod Journal	Balance Type	Rear Main Seal
18100	3.480"	350	5.700" / 6.000"	2.100"	Internal	2 pc.

SMALL BLOCK CHEVY
350 STROKER and 400 CRANKSHAFTS

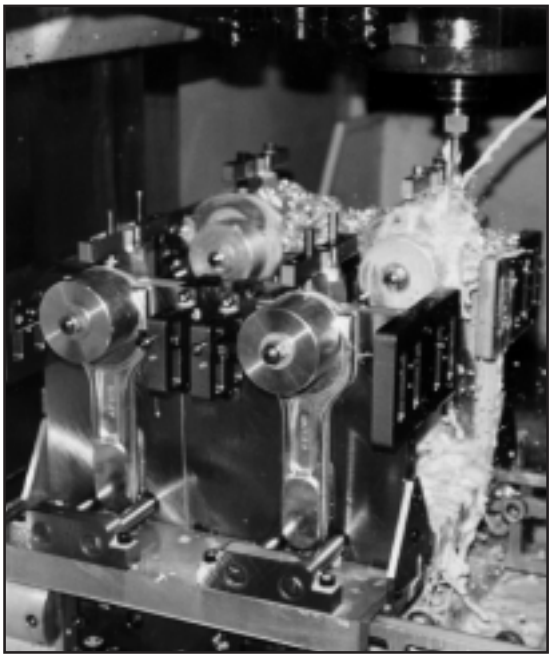
- ✓ Nodular iron material
- ✓ Knife-edge counterweights
- ✓ Lightening holes in all rod throws
- ✓ Only 47 - 50 lbs. - Lighter than old style 383

Part No.	Stroke	Main Journal Type	Rod Length	Rod Journal	Balance Type	Rear Main Seal	Standard Design or Lightweight
18101	3.750"	350	5.565" / 5.700	2.100"	External	2 pc.	Standard
18102	3.750"	350	6.000"	2.100"	Internal	2 pc.	Lightweight
18103	3.750"	400	5.565" / 5.700	2.100"	External	2 pc.	Standard
18104	3.750"	400	6.000"	2.100"	Internal	2 pc.	Lightweight

MANLEY®

IS A PRIMARY MANUFACTURER OF RACING ALUMINUM CONNECTING RODS

Forgings of high strength Super 70® fracture tough aluminum or durable 7075 T-6 are profiled and bored to exacting tolerances.



Bolt holes are drilled and tapped and rod caps are meticulously formed before final finishing.

ALUMINUM CONNECTING RODS

ORDERING INFORMATION
Part number suffix indicates number of pieces or pairs in one packaging unit. To order less pieces or pairs, use part number with -1 suffix and the quantity desired.

SMALL BLOCK CHEVROLET

7075 T-6 MATERIAL
FORGED and POLISHED

- ✓ Machined in our own CNC milling centers
- ✓ Completely polished on all forging surfaces
- ✓ Totally machined beam
- ✓ Unused bolt threads removed
- ✓ Sets weight matched to ± 1.5 grams
- ✓ Lightened caps
- ✓ Big and small ends final honed to ± .0002"
- ✓ 8740 alloy 7/16" ARP cap screws
- ✓ Rods are .010" shorter than dimensions listed

Part No.	Application	Journal Size	Length	Center-to Center	Big End Bore	Crank Pin	Gram Weight
14001-8	Standard Weight	Small	Stock	5.700"	2.125"	2.000"	532
14003-8	Standard Weight	Small	.300" Longer	6.000"	2.125"	2.000"	548
14004-8	Standard Weight	Large	Stock	5.700"	2.225"	2.100"	515
14006-8	Standard Weight	Large	.300" Longer	6.000"	2.225"	2.100"	538

COMMON FEATURES

Attribute	Dimension
Big End Width	.940"
Pin End Width	.975"
Bolt Centers	2.920"
Pin Bore	.9281"
Material Above Pin	.275"

REPLACEMENT PARTS

Part No.	Quantity	Description
42245-4	4 pcs.	8740 Alloy 7/16" Cap Screws
42247-16	16 pcs.	Rod Bolt Washers
42248-4	4 pcs.	Bearing Pins

NO CUSTOM VERSIONS OF 7075 T-6 ALUMINUM RODS ARE AVAILABLE

1960 Swarthmore Avenue, Lakewood, NJ 08701
732-905-3366 FAX: 732-905-3010
www.manleyperformance.com

ORDERING INFORMATION
Part number suffix indicates number of pieces or pairs in one packaging unit. To order less pieces or pairs, use part number with -1 suffix and the quantity desired.

ALUMINUM CONNECTING RODS

SMALL BLOCK CHEVROLET

SUPER 70® MATERIAL
FULLY MACHINED BILLET

- ✓ Machined in our own CNC milling centers
- ✓ 13% stronger and harder than 7075 T-6
- ✓ Approximately half the stretch of 7075 T-6
- ✓ Machined for maximum weight reduction
- ✓ Sets weight matched to ±1.5 grams
- ✓ Cap fasteners for the Ultra Lite rods are 8740 alloy 3/8" ARP cap screws
- ✓ Cap fasteners for the Lightweight rods are 8740 alloy 7/16" ARP cap screws
- ✓ Cap fasteners for the Nitrous rods are 7/16" ARP 2000 cap screws
- ✓ Impinged surface provides enhanced fatigue strength
- ✓ Rods are .010" shorter than dimensions listed


LIGHTWEIGHT


NITROUS

Part No.	Application	Journal Size	Length	Center-to Center	Big End Bore	Crank Pin	Bolt Centers	Gram Weight
14601-8	Ultra Lite	Small	Stock	5.700"	2.125"	2.000"	2.820"	445
14603-8	Ultra Lite	Small	.300" Longer	6.000"	2.125"	2.000"	2.820"	452
14604-8	Ultra Lite	Large	Stock	5.700"	2.225"	2.100"	2.920"	486
14606-8	Ultra Lite	Large	.300" Longer	6.000"	2.225"	2.100"	2.920"	495
14701-8	Lightweight	Small	Stock	5.700"	2.125"	2.000"	2.875"	531
14703-8	Lightweight	Small	.300" Longer	6.000"	2.125"	2.000"	2.875"	540
14704-8	Lightweight	Large	Stock	5.700"	2.225"	2.100"	2.925"	531
14706-8	Lightweight	Large	.300" Longer	6.000"	2.225"	2.100"	2.925"	543
14803-8	Nitrous	Small	.300" Longer	6.000"	2.125"	2.000"	2.875"	561
14806-8	Nitrous	Large	.300" Longer	6.000"	2.225"	2.100"	2.925"	561

COMMON FEATURES

Attribute	Dimension
Big End Width	.940"
Pin End Width	1.100"
Pin Bore	.9281"
Material Above Pin	
Ultra Lite	.260"
Lightweight	.285"
Nitrous	.285"

REPLACEMENT PARTS

Part No.	Quantity	Description
42244-4	4 pcs.	7/16" ARP 2000 Cap Screws
42245-4	4 pcs.	8740 Alloy 7/16" Cap Screws
42348-4	4 pcs.	8740 Alloy 3/8" Cap Screws
42247-16	16 pcs.	7/16" Rod Bolt Washers
42347-16	16 pcs.	3/8" Rod Bolt Washers
42248-4	4 pcs.	Bearing Pins

SEE PAGES 118 AND 119 FOR CUSTOM ALUMINUM RODS

ALUMNUM CONNECTING RODS

ORDERING INFORMATION
Part number suffix indicates number of pieces or pairs in one packaging unit. To order less pieces or pairs, use part number with -1 suffix and the quantity desired.

BIG BLOCK CHEVROLET

7075 T-6 MATERIAL
FORGED and POLISHED

- ✓ Machined in our own CNC milling centers
- ✓ Completely polished on all forging surfaces
- ✓ Totally machined beam
- ✓ Unused bolt threads removed
- ✓ Sets weight matched to ± 1.5 grams
- ✓ 8740 alloy 7/16" ARP cap screws
- ✓ Rods are .010" shorter than dimensions listed

Part No.	Application	Journal Size	Length	Center-to Center	Big End Bore	Crank Pin	Gram Weight
14011-8	Standard Weight	Stock	Stock	6.135"	2.325"	2.200"	590
14012-8	Standard Weight	Stock	.250" Longer	6.385"	2.325"	2.200"	609
14015-8	Standard Weight	Stock	.400" Longer	6.535"	2.325"	2.200"	615

COMMON FEATURES

Attribute	Dimension
Big End Width	.990"
Pin End Width	1.150"
Bolt Centers	3.125"
Pin Bore	.9911"
Material Above Pin	.360"

REPLACEMENT PARTS

Part No.	Quantity	Description
42245-4	4 pcs.	8740 Alloy 7/16" Cap Screws
42247-16	16 pcs.	Rod Bolt Washers
42248-4	4 pcs.	Bearing Pins

NO CUSTOM VERSIONS OF 7075 T-6 ALUMINUM RODS ARE AVAILABLE

ORDERING INFORMATION
Part number suffix indicates number of pieces or pairs in one packaging unit. To order less pieces or pairs, use part number with -1 suffix and the quantity desired.

ALUMINUM CONNECTING RODS

BIG BLOCK CHEVROLET

SUPER 70® MATERIAL
FULLY MACHINED BILLET

- ✓ Machined in our own CNC milling centers
- ✓ 13% stronger and harder than 7075 T-6
- ✓ Approximately half the stretch of 7075 T-6
- ✓ Machined for maximum weight reduction
- ✓ Sets weight matched to ± 1.5 grams
- ✓ Cap fasteners for the Lightweight rods are 8740 alloy 7/16" ARP cap screws
- ✓ Cap fasteners for the Nitrous rods are 7/16" ARP 2000 cap screws
- ✓ Impinged surface provides enhanced fatigue strength
- ✓ Rods are .010" shorter than dimensions listed

Part No.	Application	Journal Size	Length	Center-to Center	Big End Bore	Crank Pin	Gram Weight
14711-8	Lightweight	Stock	Stock	6.135"	2.325"	2.200"	624
14712-8	Lightweight	Stock	.250" Longer	6.385"	2.325"	2.200"	636
14715-8	Lightweight	Stock	.400" Longer	6.535"	2.325"	2.200"	640
14811-8	Nitrous	Stock	Stock	6.135"	2.325"	2.200"	665
14812-8	Nitrous	Stock	.250" Longer	6.385"	2.325"	2.200"	676
14815-8	Nitrous	Stock	.400" Longer	6.535"	2.325"	2.200"	688

COMMON FEATURES

Attribute	Dimension
Big End Width	.990"
Pin End Width	1.250"
Bolt Centers	3.125"
Pin Bore	.9911"
Material Above Pin	
Lightweight	.320"
Nitrous	.320"

REPLACEMENT PARTS

Part No.	Quantity	Description
42244-4	4 pcs.	7/16" ARP 2000 Cap Screws
42245-4	4 pcs.	8740 Alloy 7/16" Cap Screws
42247-16	16 pcs.	Rod Bolt Washers
42248-4	4 pcs.	Bearing Pins

SEE PAGES 118 AND 119 FOR CUSTOM ALUMINUM RODS

CUSTOM ALUMNUM CONNECTING RODS

SUPER 70® CUSTOM ALUMINUM CONNECTING RODS

The procedure for ordering a custom SUPER 70® rod is as simple as 1-2-3 !

1. To order a custom rod, select from this list of "blanks"
2. Photocopy the blueprint on page 119. Fill in all the blank dimensions. Fax this blueprint with your purchase order.
3. The price of the blank connecting rod includes all operations to bring the part to a completely finished condition except for the installation of optional bronze bushings.

Part No.	Engine	Journal	Application	Weight	Bolt Code
14690-8	SB Chevy	Honda : 1.8885"	Ultra Lite	475	B
14790-8	SB Chevy	Honda : 1.8885"	Lightweight	560	A
14890-8	SB Chevy	Honda : 1.8885"	Nitrous	580	C
14608-8	SB Chevy	SB Small	Ultra Lite	475	B
14708-8	SB Chevy	SB Small	Lightweight	560	A
14808-8	SB Chevy	SB Small	Nitrous	580	C
14609-8	SB Chevy	SB Large	Ultra Lite	475	B
14709-8	SB Chevy	SB Large	Lightweight	560	A
14809-8	SB Chevy	SB Large	Nitrous	580	C
14713-8	BB Chevy	BB Standard	Lightweight	645	A
14818-8	BB Chevy	BB Standard	Nitrous	755	C
14817-8	BB Chevy	BB Standard	Pro Mod	680	D
14714-8	BB Chevy	SB Large	Lightweight	645	A
14814-8	BB Chevy	SB Large	Nitrous	720	C
14716-8	BB Chevy	SB Small	Lightweight	645	A
14816-8	BB Chevy	SB Small	Nitrous	730	C
14745-8	Chrysler 426 - 440	Standard	Lightweight	790	A
14845-8	Chrysler 426 - 440	Standard	Nitrous	850	C
14824-8	Ford 5.0 L	Custom	Nitrous	555	C
14734-8	Ford 429 - 460	Custom	Lightweight	665	A
14835-8	Ford 429 - 460	Custom	Nitrous	740	C

SUPER 70® APPLICATION EXPLANATION

Ultra Lite: Pro Stock Truck and Competition Eliminator and all engines with lightweight pistons.

Lightweight: Super Class and Bracket engine applications

Pro Mod: Pro Mod as well as all severe Super Charged catagories. This is the second heaviest design made by Manley.

Nitrous: Nitrous and Super Charged engines or any engines requiring greater rod strength with additional material in critical areas.

BOLT CODE

Code	Material	Diam.	Part No.	Washer
A	8740 Alloy	7/16"	42245-4	42247-16
B	8740 Alloy	3/8"	42348-4	42347-16
C	ARP 2000	7/16"	42244-4	42247-16
D	Large Flange ARP 2000	7/16"	42353-4	42354-16

SAMPLE ROD WEIGHTS

Engine	Length of Rod Weighed
Small Block Chevy	6.000"
Big Block Chevy	6.535"
Chrysler	6.865"
Ford 5.0	5.400"
Ford 429 - 460	6.800"

CUSTOM ALUMINUM CONNECTING RODS

MINIMUM & MAXIMUM CENTER-TO-CENTER LENGTHS

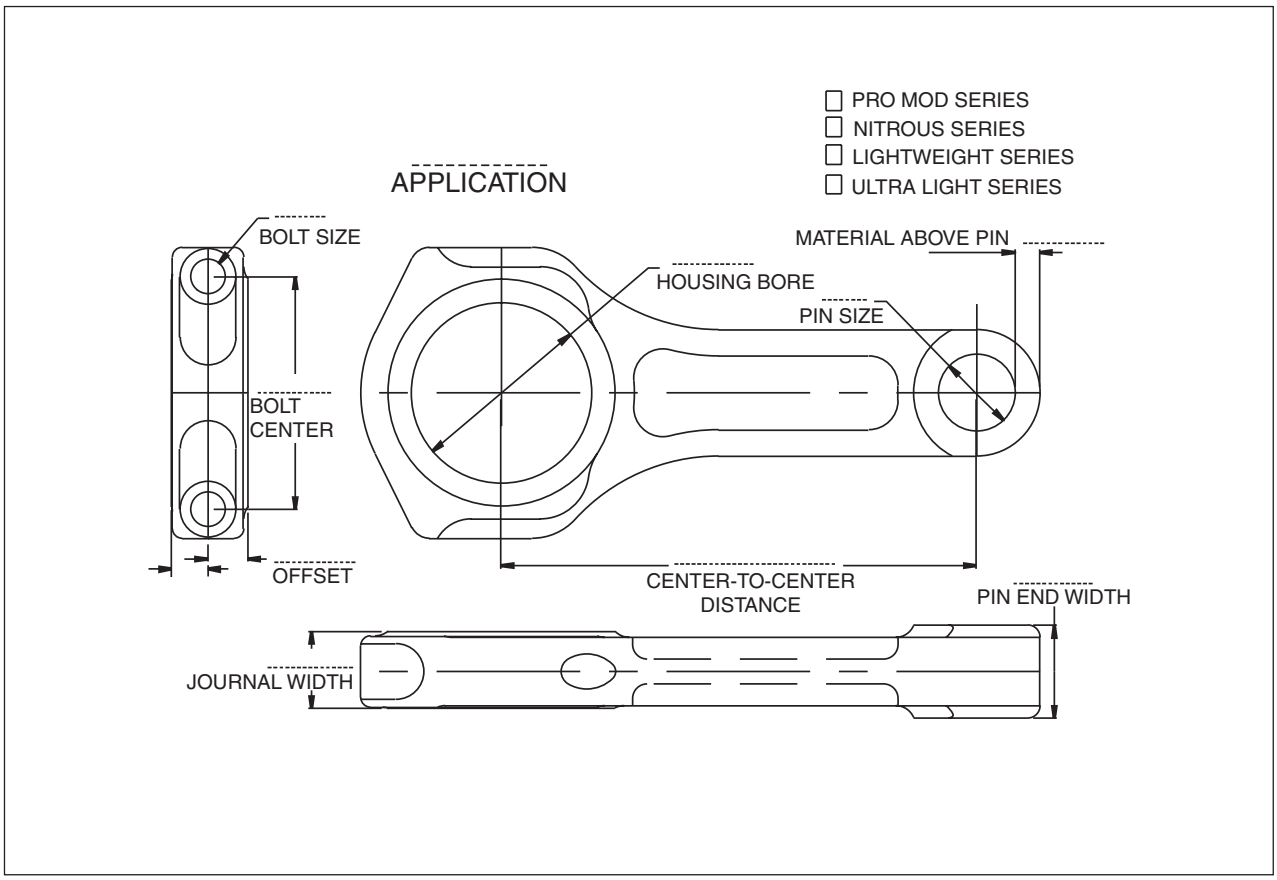
Description	Minimum	Maximum
Small Block	5.300"	7.600"
Big Block Lightweight	5.500"	7.800"
Big Block Nitrous	5.700"	7.800"
Chrysler	5.700"	7.900"
Ford 5.0 L	5.300"	7.600"
Ford 429- 460	5.500"	7.800"

BRONZE BUSHINGS AVAILABLE

Part No.	Application	Bushing Length	Fits Pin
42320-8	SB Chevy - Ford	1.100"	.927"
42321-8	BB Chevy - Chrysler	1.250"	.990"
42335-8	Chrysler	1.250"	.990"/1.031"
04032-8	Installation of optional bushings		

MATERIAL ABOVE PIN

Rod Style	Dimension SB Chevy	BB Chevy	Chrysler	Ford 5.0	Ford 429-460
Ultra Lite	.260"	---	---	---	---
Lightweight	.285"	.320"	.320"	.290"	.320"
Pro Mod	---	.400"	---	---	---
Nitrous	.285"	.320"	.360"	.290"	.320"



MANLEY STEEL CONNECTING RODS
.....simply the best !

- ✓ Choice of Streetmaster, Sportsmaster®, Pro Series "I" beam or budget "H" beam rods
- ✓ Manufactured in our own CNC machining centers
- ✓ 4340 material or 300 M available in our special Grand National oval track rods
- ✓ Bend and twist held to a minimum
- ✓ Sets weight matched to ± 1.5 grams
- ✓ Exacting attention to detail and finish
- ✓ Big and small ends finished to ± .0002"

REPRESENTATIVE SERIES ROD WEIGHTS
Small Block Chevy @ 6.000" Small Journal

Series	Gram Weight
Tour Lite®	527
Grand National	565
Sportsmaster®	602
Pro Series "I" Beam Light Weight	606
Pro Series "I" Beam Standard 300M	652
Pro Series "I" Beam Standard 4340	663
"H" Beam Large Journal	705

1960 Swarthmore Avenue, Lakewood, NJ 08701
732-905-3366 FAX: 732-905-3010
www.manleyperformance.com

SMALL 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 8740 alloy 7/16" ARP cap screws
- ✓ Horsepower range is 700+ H.P. at 8000 rpm

Part No.	Length	Journal Size	Center-to Center	Big End Bore	Pin Bore	Gram Weight
14050-8	Stock	Large	5.700"	2.225"	.9281"	685
14054-8	.300" Longer	Large	6.000"	2.225"	.9281"	705

*** NOTE:** The Small Block Chevy "H" Beam rods on this page can be fitted with ARP 2000 bolts P/N 42384. To order rods with upgraded bolts, affix an "R" to the part number.

COMMON FEATURES

Attribute	Dimension
Crankpin	2.100"
Big End Width	.940"
Pin End Width	1.060"

REPLACEMENT PARTS

Part No.	Quantity	Description
42361-4	4 pcs.	8740 Alloy 7/16" Cap Screws
42315-8	8 pcs.	Pin Bushings
42316-16	16 pcs.	Dowel Bushings 7/16"

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

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

Private brand identification available.

STEEL CONNECTING RODS

ORDERING INFORMATION
Part number suffix indicates number of pieces or pairs in one packaging unit. To order less pieces or pairs, use part number with -1 suffix and the quantity desired.

SMALL BLOCK CHEVROLET

STREETMASTER RODS
QUALITY FOR BUDGET RACERS

- ✓ Manufactured from aircraft quality 4340 forgings
- ✓ Entire beam but not the cap area is profiled to remove stress risers
- ✓ Shot peened after machining
- ✓ Cap fasteners are premium 8740 alloy 3/8" (190,000 psi) ARP cap screws
- ✓ Premium wrist pin bushings
- ✓ Horsepower range is 450 H.P. at 7000 rpm

These rods are not intended for serious race engines

NOTE: 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
14201-8	Stock	Large	5.700"	2.225"	.9281"	562
14203-8	.300" Longer	Large	6.000"	2.225"	.9281"	586

COMMON FEATURES

Attribute	Dimension
Crankpin	2.100"
Big End Width	.940"
Pin End Width	.980"

REPLACEMENT PARTS

Part No.	Quantity	Description
42383-4	4 pcs.	8740 Alloy 3/8" Cap Screws
42338-8	8 pcs.	Wrist Pin Bushings
42385-16	16 pcs.	Dowel Bushings 3/8"

P/N 14201-8 is NHRA Legal for Stock Eliminator only.

ORDERING INFORMATION
Part number suffix indicates number of pieces or pairs in one packaging unit. To order less pieces or pairs, use part number with -1 suffix and the quantity desired.

STEEL CONNECTING RODS

SMALL BLOCK CHEVROLET

SPORTSMASTER® RODS

- ✓ Forged from aircraft quality 4340 material
- ✓ Manufactured in our own CNC machining centers
- ✓ Entire beam and cap area is profiled to remove stress risers and render the lightest possible rod
- ✓ Shot peened after machining
- ✓ Cap fasteners are 8740 alloy 3/8" (190,000 psi) ARP cap screw
- ✓ Premium Ampco pin bushings
- ✓ Horsepower range is 550 H.P. at 8000 rpm

NOTE: 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
14101C-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
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
14116-8	.150" Longer	Large	5.850"	2.225"	.9281"	583
14103-8	.300" Longer	Large	6.000"	2.225"	.9281"	565
14107-8	.300" Longer	Small	6.000"	2.125"	.9281"	602
14106-8	.400" Longer	Large	6.100"	2.225"	.9281"	598
14113-8	.425" Longer	Large	6.125"	2.225"	.9281"	590

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.	8740 Alloy 3/8" Cap Screws
42310-8	8 pcs.	.927" Ampco Pin Bushings (.990" O.D)
42366-8	8 pcs.	.927" Ampco Pin Bushings (.973" O.D)
42308-8	8 pcs.	.875" Ampco Pin Bushings
42385-16	16 pcs.	Dowel Bushings 3/8"

P/N 14101C-8 is CASCAR Legal

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

P/N 14106-8 is 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

ORDERING INFORMATION
Part number suffix indicates number of pieces or pairs in one packaging unit. To order less pieces or pairs, use part number with -1 suffix and the quantity desired.

SMALL BLOCK CHEVROLET

NHRA LEGAL SUPER STOCK PRO SERIES "I" BEAM RODS

- ✓ Manufactured from 4340 aircraft quality vacuum degasssed material
- ✓ Manufactured in our own CNC machining centers
- ✓ Fully machined to produce the lightest 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 is 700 H.P. at 8500 rpm

NOTE: 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
14440-8	Stock 350	Small	5.700"	2.125"	.8758" to .9281"	550
14441-8	Stock 350	Large	5.700"	2.225"	.8758" to .9281"	550
14439-8	Stock 400	Large	5.565"	2.225"	.8758" to .9281"	544

COMMON FEATURE

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"

ORDERING INFORMATION
Part number suffix indicates number of pieces or pairs in one packaging unit. To order less pieces or pairs, use part number with -1 suffix and the quantity desired.

STEEL CONNECTING RODS

SMALL BLOCK CHEVROLET

GRAND NATIONAL "I" BEAM RODS
300 M MATERIAL

- ✓ Manufactured from special 300 M material
- ✓ Shot peened to Mil specs and 100% individually magnafluxed
- ✓ Cap fasteners are 3/8" ARP 2000 or 3/8" CARR cap screws
- ✓ Horsepower range is up to 750 H.P. in an oval track application at 9000 rpm

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

Part No.	Length	Center-to Center	Journal Size	Big End Bore	Gram Weight
15394-8	.300" Longer	6.000"	1.8885"	2.008" /2.015"	545
15395-8	.425" Longer	6.125"	1.8885"	2.008" /2.015"	550
15396-8	.500" Longer	6.200"	1.8885"	2.008" /2.015"	555
15397-8	.550" Longer	6.250"	1.8885"	2.008" /2.015"	560

NOTE: Above rods REQUIRE use of one of the following connecting rod bearings: Federal Mogul P/N 7195CH (2.008"), Clevite P/N CB1664 (2.008") or Clevite P/N CB1663 (2.015"). 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	Center-to Center	Journal Size	Big End Bore	Gram Weight
15494-8	.300" Longer	6.000"	Small	2.125"	565
15495-8	.425" Longer	6.125"	Small	2.125"	569
15496-8	.500" Longer	6.200"	Small	2.125"	574
15497-8	.550" Longer	6.250"	Small	2.125"	578

NOTE: 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" CARR cap screws P/N 42357 are available. To order upgraded fasteners, affix an "R" after the rod part number.

COMMON FEATURES

Attribute	2.008" Jnl.	Sm. Jnl.	Lg.Jnl.
Crankpin	1.8885"	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
42357-4	4 pcs.	3/8" CARR Cap Screws
42393-8	8 pcs.	Ampco Pin Bushings
42398-16	16 pcs.	Dowel Bushings 3/8"

STEEL CONNECTING RODS

ORDERING INFORMATION
Part number suffix indicates number of pieces or pairs in one packaging unit. To order less pieces or pairs, use part number with -1 suffix and the quantity desired.

SMALL BLOCK CHEVROLET

TOUR LITE® "I" BEAM RODS
4340 MATERIAL

- ✓ Manufactured from 4340 material
- ✓ Shot peened and 100% magnafluxed
- ✓ 3/8" ARP 2000 or 3/8" CARR cap screws
- ✓ Horsepower range is 450-525 H.P. at 8500 rpm

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

Part No.	Length	Center-to Center	Journal Size	Big End Bore	Gram Weight
14344-8	.300" Longer	6.000"	1.8885"	2.008" /2.015"	515
14345-8	.425" Longer	6.125"	1.8885"	2.008" /2.015"	520
14346-8	.500" Longer	6.200"	1.8885"	2.008" /2.015"	524
14347-8	.550" Longer	6.250"	1.8885"	2.008" /2.015"	526

NOTE: Above rods REQUIRE use of one of the following connecting rod bearings: Federal Mogul P/N 7195CH (2.008"), Clevite P/N CB1664 (2.008") or Clevite P/N CB1663 (2.015"). 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	Center-to Center	Journal Size	Big End Bore	Gram Weight
14240-8	Stock Length	5.700"	Small	2.125"	517
14242-8	.150" Longer	5.850"	Small	2.125"	521
14244-8	.300" Longer	6.000"	Small	2.125"	527
14245-8	.425" Longer	6.125"	Small	2.125"	530
14246-8	.500" Longer	6.200"	Small	2.125"	532
14247-8	.550" Longer	6.250"	Small	2.125"	534
14140-8	Stock Length	5.700"	Large	2.225"	516
14142-8	.150" Longer	5.850"	Large	2.225"	517
14144-8	.300" Longer	6.000"	Large	2.225"	524
14145-8	.425" Longer	6.125"	Large	2.225"	529
14146-8	.500" Longer	6.200"	Large	2.225"	531
14147-8	.550" Longer	6.250"	Large	2.225"	529

NOTE: 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" CARR cap screws P/N 42357 are available. To order upgraded fasteners, affix an "R" after the rod part number.

COMMON FEATURES

Attribute	2.008" Jnl.	Sm. Jnl.	Lg.Jnl.
Crankpin	1.8885"	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
42357-4	4 pcs.	3/8" CARR Cap Screws
42310-8	8 pcs.	Ampco Pin Bushings .975" long
42398-16	16 pcs.	Dowel Bushings 3/8"
42393-8	8 pcs.	Ampco Pin Bushings .995" long

ORDERING INFORMATION
Part number suffix indicates number of pieces or pairs in one packaging unit. To order less pieces or pairs, use part number with -1 suffix and the quantity desired.

STEEL CONNECTING RODS

SMALL BLOCK CHEVROLET

TOUR LITE® "I" BEAM RODS
300 M MATERIAL

- ✓ Manufactured from 300 M material
- ✓ Shot peened and 100% magnafluxed
- ✓ 3/8" ARP 2000 or 3/8" CARR cap screws
- ✓ Horsepower range is 625 H.P. at 9000 rpm

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

Part No.	Length	Center-to Center	Journal Size	Big End Bore	Gram Weight
15344-8	.300" Longer	6.000"	1.8885"	2.008" /2.015"	515
15345-8	.425" Longer	6.125"	1.8885"	2.008" /2.015"	520
15346-8	.500" Longer	6.200"	1.8885"	2.008" /2.015"	524
15347-8	.550" Longer	6.250"	1.8885"	2.008" /2.015"	526

NOTE: Above rods REQUIRE use of one of the following connecting rod bearings: Federal Mogul P/N 7195CH (2.008"), Clevite P/N CB1664 (2.008") or Clevite P/N CB1663 (2.015"). 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.

NOTE: 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" CARR cap screws P/N 42357 are available. To order upgraded fasteners, affix an "R" after the rod part number.

COMMON FEATURES

Attribute	2.008" / 2.015"
Crankpin	1.8885"
Pin Bore	.9281"
Big End Width	.940"
Pin End Width	.980"

REPLACEMENT PARTS

Part No.	Quantity	Description
42351-4	4 pcs.	3/8" ARP 2000 Cap Screws
42357-4	4 pcs.	3/8" CARR Cap Screws
42393-8	8 pcs.	Ampco Pin Bushings
42398-16	16 pcs.	Dowel Bushings 3/8"

ORDERING INFORMATION
Part number suffix indicates number of pieces or pairs in one packaging unit. To order less pieces or pairs, use part number with -1 suffix and the quantity desired.

SMALL BLOCK CHEVROLET

PRO SERIES "I" BEAM RODS LIGHTWEIGHT

- ✓ Forged from 4340 aircraft quality vacuum degassed material
- ✓ Manufactured in our own CNC machining centers
- ✓ 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 (220,000 psi) cap screws
- ✓ Horsepower range for these rods is 750+ H.P. at 8500 rpm

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

Part No.	Length	Journal Size	Center-to Center	Gram Weight
14450-8	Stock	Small	5.700"	597
14452-8	.150" Longer	Small	5.850"	603
14454-8	.300" Longer	Small	6.000"	606
14455-8	.425" Longer	Small	6.125"	612
14456-8	.500" Longer	Small	6.200"	611
14457-8	.550" Longer	Small	6.250"	613
14350-8	Stock	Large	5.700"	599
14352-8	.150" Longer	Large	5.850"	605
14354-8	.300" Longer	Large	6.000"	607
14355-8	.425" Longer	Large	6.125"	609
14356-8	.500" Longer	Large	6.200"	612
14357-8	.550" Longer	Large	6.250"	620

COMMON FEATURES

Attribute	Sm. Jnl.	Lg. Jnl
Big End Bore	2.125"	2.225"
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
42393-8	8 pcs.	Ampco Pin Bushings
42392-16	16 pcs.	Dowel Bushings 7/16"

P/Ns 14350-8 &14450-8 are NHRA Legal for Stock & Super Stock.

P/N 14354-8 is NHRA Legal for Olds 307, 350 and 403.

P/N 14454-8 is NHRA Legal for AMC 343.

ORDERING INFORMATION
Part number suffix indicates number of pieces or pairs in one packaging unit. To order less pieces or pairs, use part number with -1 suffix and the quantity desired.

SMALL BLOCK CHEVROLET

PRO SERIES "I" BEAM RODS
LIGHTWEIGHT
300 M MATERIAL

- ✓ Forged from 300 M material
- ✓ Manufactured in our own CNC machining centers
- ✓ 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 (220,000 psi) cap screws
- ✓ Horsepower range for these rods is 800+ H.P. at 9500 rpm

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

Part No.	Length	Journal Size	Center-to Center	Big End Bore	Gram Weight
15454-8	.300" Longer	Small	6.000"	2.125"	600
15354-8	.300" Longer	Large	6.000"	2.225"	602
15355-8	.425" Longer	Large	6.125"	2.225"	603

COMMON FEATURES

Attribute	Sm. Jnl.	Lg. Jnl
Big End Bore	2.125"	2.225"
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
42393-8	8 pcs.	Ampco Pin Bushings
42392-16	16 pcs.	Dowel Bushings 7/16"

ORDERING INFORMATION
Part number suffix indicates number of pieces or pairs in one packaging unit. To order less pieces or pairs, use part number with -1 suffix and the quantity desired.

SMALL BLOCK CHEVROLET

PRO SERIES "I" BEAM RODS
STANDARD WEIGHT

- ✓ Forged from 4340 aircraft quality vacuum degassed material
- ✓ Manufactured in our own CNC machining centers
- ✓ 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 (220,000 psi) cap screws
- ✓ Horsepower range for these rods is 800+ H.P. at 8500 rpm

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

Part No.	Length	Journal Size	Center-to Center	Gram Weight
14254-8	.300" Longer	Small	6.000"	663
14255-8	.425" Longer	Small	6.125"	665
14256-8	.500" Longer	Small	6.200"	668
14150-8	.Stock	Large	5.700"	658
14152-8	.150" Longer	Large	5.850"	654
14154-8	.300" Longer	Large	6.000"	664
14155-8	.425" Longer	Large	6.125"	668
14156-8	.500" Longer	Large	6.200"	661
14157-8	.550" Longer	Large	6.250"	670

COMMON FEATURES

Attribute	Sm. Jnl.	Lg. Jnl
Big End Bore	2.125"	2.225"
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
42393-8	8 pcs.	Ampco Pin Bushings
42392-16	16 pcs.	Dowel Bushings 7/16"

P/N 14150-8 is NHRA Legal for Stock & Super Stock.

ORDERING INFORMATION
Part number suffix indicates number of pieces or pairs in one packaging unit. To order less pieces or pairs, use part number with -1 suffix and the quantity desired.

SMALL BLOCK CHEVROLET

PRO SERIES "I" BEAM RODS
STANDARD WEIGHT
300 M MATERIAL

- ✓ Forged from 300 M material
- ✓ Manufactured in our own CNC machining centers
- ✓ 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 (220,000 psi) cap screws
- ✓ Horsepower range for these rods is 800+ H.P. at 9000 rpm

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

Part No.	Length	Center-to Center	Journal Size	Big End Bore	Gram Weight
15254-8	.300" Longer	6.000"	Small	2.125"	652
15256-8	.500" Longer	6.200"	Small	2.125"	656
15154-8	.300" Longer	6.000"	Large	2.225"	652

COMMON FEATURES

Attribute	Sm. Jnl.	Lg. Jnl
Big End Bore	2.125"	2.225"
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
42393-8	8 pcs.	Ampco Pin Bushings
42392-16	16 pcs.	Dowel Bushings 7/16"

STEEL CONNECTING RODS

ORDERING INFORMATION
Part number suffix indicates number of pieces or pairs in one packaging unit. To order less pieces or pairs, use part number with -1 suffix and the quantity desired.

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 8740 alloy 7/16" (190,000 psi) ARP cap screws
- ✓ Horsepower range for these rods is 800 H.P. at 8000 rpm

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

* **NOTE:** The Big Block Chevy "H" Beam rods on this page can be fitted with ARP 2000 bolts P/N 42384. To order rods with upgraded bolts, affix an "R" to the part number.

COMMON FEATURES

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

REPLACEMENT PARTS

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

P/N 14060-8 is NHRA Legal for Stock & Super Stock.
P/N 14066-8 is NHRA Legal for Ford 390, 427, 428 and Pontiac 400-455.

BIG BLOCK CHEVROLET

SPORTSMASTER® RODS

- ✓ Forged from aircraft quality 4340 material
- ✓ Manufactured in our own CNC machining centers
- ✓ Entire beam is profiled to remove stress risers and render the lightest possible rod
- ✓ Shot peened after machining
- ✓ Cap fasteners are 8740 alloy 7/16" (190,000 psi) ARP cap screws
- ✓ Premium Ampco pin bushings
- ✓ Horsepower range 700 H.P. at 7500 rpm

Part No.	Description	Center-to Center	Big End Bore	Pin Bore	Gram Weight
14131-8	Stock	6.135"	2.325"	.9911"	798
14135-8	Stock	6.135"	2.325"	Press	828
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"

REPLACEMENT PARTS

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

P/N 14131-8 is NHRA Legal for Stock & Super Stock.

ORDERING INFORMATION
Part number suffix indicates number of pieces or pairs in one packaging unit. To order less pieces or pairs, use part number with -1 suffix and the quantity desired.

BIG BLOCK CHEVROLET

PRO SERIES "I" BEAM RODS

- ✓ Forged from 4340 aircraft quality vacuum degassed material
- ✓ Machined in our own CNC milling centers
- ✓ 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 (220,000 psi) cap screws
- ✓ Horsepower range for these rods is 850+ H.P. at 8000 rpm

Part Numbers
14160 thru 14166,
14170 and 14266

NOTE: 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"	791
14162-8	.250" Longer	6.385"	2.325"	2.200"	.9911"	776
14166-8	.400" Longer	6.535"	2.325"	2.200"	.9911"	805
14167-8	.400" Longer Marine Duty	6.535"	2.325"	2.200"	.9911"	835
14168-8	.500" Longer	6.635"	2.325"	2.200"	.9911"	839
14170-8	.525" Longer	6.660"	2.325"	2.200"	.9911"	816
14172-8	.565" Longer	6.700"	2.325"	2.200"	.9911"	841
14173-8	.665" Longer	6.800"	2.325"	2.200"	.9911"	848
14266-8	.400" Longer w/ SBC Lg.Journal Big End	6.535"	2.225"	2.100"	.9911"	780

Part Numbers 14160 thru 14166,
14170 and 14266

Part Numbers 14167 thru 14173,
except 14170

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, 14266)
42391-4	4 pcs.	7/16" ARP 2000 Cap Screws (14168, 14172, 14173, 14167)
42327-8	8 pcs.	Ampco Pin Bushings
42387-16	16 pcs.	Dowel Bushings 7/16"

P/N 14160-8 is NHRA Legal for Stock & Super Stock.
P/N 14166-8 is NHRA Legal for Ford 390, 427, 428 and Pontiac 400-455.

STEEL CONNECTING RODS

ORDERING INFORMATION
Part number suffix indicates number of pieces or pairs in one packaging unit. To order less pieces or pairs, use part number with -1 suffix and the quantity desired.

CHRYSLER 360

CASCAR RACING SERIES SPORTSMASTER® RODS

- ✓ Forged from aircraft quality 4340 material
- ✓ Manufactured in our own CNC machining centers
- ✓ Entire beam is profiled to remove stress risers and render the lightest possible rod
- ✓ Shot peened after machining
- ✓ Cap fasteners are 8740 alloy 3/8" (190,000 psi) ARP cap screws
- ✓ Premium Ampco pin bushings
- ✓ Legal for CASCAR
- ✓ Horsepower range for these rods is 500 H.P. at 8000 rpm

Part No.	Description	Center-to Center	Big End Bore	Big End Width	Pin End Width	Pin Bore	Gram Weight
14139C-8	360 Chrysler	6.125"	2.250"	.933"	1.000"	.9848"	570

REPLACEMENT PARTS

Part No.	Quantity	Description
42383-4	4 pcs.	8740 Alloy 3/8" Cap Screws
42307-8	8 pcs.	Ampco Pin Bushings
42385-16	16 pcs.	Dowel Bushings 3/8"

CHRYSLER 360

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

- ✓ Forged from aircraft quality 4340 material
- ✓ Manufactured in our own CNC machining centers
- ✓ Entire beam is profiled to remove stress risers and render the lightest possible rod
- ✓ Shot peened after machining
- ✓ Cap fasteners are 3/8" ARP 2000 cap screws
- ✓ Horsepower range for these rods is 700 H.P. at 8500 rpm

Part No.	Length	Center-to Center	Big End Bore	Big End Width	Pin End Width	Pin Bore	Gram Weight
14445-8	Stock	6.125"	2.225"	.933"	1.000"	.8758" to .9848"	610

REPLACEMENT PARTS

Part No.	Quantity	Description
42350-4	4 pcs.	3/8" ARP 2000 Cap Screws
42268-8	8 pcs.	Ampco Pin Bushings for .875" pin
42307-8	8 pcs.	Ampco Pin Bushings for .984" pin
42385-16	16 pcs.	Dowel Bushings 3/8"

ORDERING INFORMATION
Part number suffix indicates number of pieces or pairs in one packaging unit. To order less pieces or pairs, use part number with -1 suffix and the quantity desired.

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 8740 alloy 7/16" ARP cap screws
- ✓ Horsepower range for these rods is 800 H.P. at 8000 rpm

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"	880
14076-8	Stock Length w/ 1.094" pin	6.765"	2.500"	1.0951"	854
		CHRYSLER 426			
14077-8	Stock Length w/ 1.031" pin	6.865"	2.500"	1.0321"	882
14080-8	Stock Length w/ .990" pin	6.865"	2.500"	.9911"	891
14081-8	.100" Longer w/ 1.031" pin	6.965"	2.500"	1.0321"	890
14082-8	.100" Longer w/ .990" pin	6.965"	2.500"	.9911"	902

Private brand identification available.

COMMON FEATURES

Attribute	Dimension
Big End Width	1.010"
Pin End Width	1.080"

REPLACEMENT PARTS

Part No.	Quantity	Description
42239-4	4 pcs.	8740 Alloy 7/16" 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"

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

STEEL CONNECTING RODS

ORDERING INFORMATION
Part number suffix indicates number of pieces or pairs in one packaging unit. To order less pieces or pairs, use part number with -1 suffix and the quantity desired.

CHRYSLER 426 - 440

SPORTSMASTER® RODS

- ✓ Manufactured from 4340 forgings
- ✓ Manufactured in our own CNC turnoing centers
- ✓ Entire beam is profiled to remove stress risers and render the lightest possible rod
- ✓ Shot peened after machining
- ✓ Cap fasteners are 8740 alloy 7/16" (190,000 psi) ARP cap screws.
- ✓ Horsepower range for these rods is 700 H.P. at 7500 rpm

Part No.	Description	Center-to Center	Big End Bore	Pin Bore	Gram Weight
	CHRYSLER 440				
14274-8	Stock Length w/ .990" pin	6.765"	2.500"	.9911"	843
14276-8	Stock Length w/ 1.094" pin	6.765"	2.500"	1.0951"	863
	CHRYSLER 426				
14277-8	Stock Length w/ 1.031" pin	6.865"	2.500"	1.0321"	842
14280-8	Stock Length w/ .990" pin	6.865"	2.500"	.9911"	848

COMMON FEATURES

Attribute	Dimension
Big End Width	1.015"
Pin End Width	1.080"

REPLACEMENT PARTS

Part No.	Quantity	Description
42239-4	4 pcs.	8740 Alloy 7/16" Cap Screws
42303-8	8 pcs.	Ampco Pin Bushings for 1.031" pin
42305-8	8 pcs.	Ampco Pin Bushings for .990" pin
42306-8	8 pcs.	Ampco Pin Bushings for 1.094" pin
42387-16	16 pcs.	Dowel Bushings 7/16"

P/Ns 14274-8, 14276-8, 14277-8 & 14280-8 are NHRA Legal for Stock & Super Stock.

ORDERING INFORMATION
Part number suffix indicates number of pieces or pairs in one packaging unit. To order less pieces or pairs, use part number with -1 suffix and the quantity desired.

STEEL CONNECTING RODS

CHRYSLER 426 - 440

PRO SERIES "I" BEAM RODS

- ✓ Forged from 4340 aircraft quality vacuum degassed material
- ✓ Manufactured in our own CNC machining centers
- ✓ 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 (220,000 psi) cap screws
- ✓ Horsepower range for these rods is 850+ H.P.

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

Part No.	Description	Center-to Center	Big End Bore	Pin Bore	Gram Weight
		CHRYSLER 426			
14177-8	Stock Length w/ 1.031" pin	6.865"	2.500"	1.0321"	905
		CHRYSLER 440			
14174-8	Stock Length w/ .990" pin	6.765"	2.500"	.9911"	854

COMMON FEATURES

Attribute	426	440
Big End Width	1.010"	1.010"
Pin End Width	1.180"	1.080"

REPLACEMENT PARTS FOR CHRYSLER

Part No.	Quantity	Description
42391-4	4 pcs.	7/16" ARP 2000 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"

P/Ns 14177-8 & 14174-8 are NHRA Legal for Stock & Super Stock.

STEEL CONNECTING RODS

ORDERING INFORMATION
Part number suffix indicates number of pieces or pairs in one packaging unit. To order less pieces or pairs, use part number with -1 suffix and the quantity desired.

FORD ENGINES

FORD 2.3 LITRE 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

FORD 4.6 L MODULAR V-8 SPORTSMASTER® RODS

P/Ns 14118-8 & 14120-8 are NHRA Legal for Stock & Super Stock.

Part No.	Description	Center-to Center	Big End Bore	Big End Width	Pin End Width	Pin Bore	Gram Weight
14118-8	Stock Length w/ 22 mm pin	5.933"	2.239"	.940"	.940"	.8671"	571
14120-8	Stock Length w/ .912" pin	5.933"	2.239"	.940"	.940"	.9131"	567

FORD 4.6 L MODULAR V-8 PRO SERIES "I" BEAM LIGHTWEIGHT

P/N 14318-8 is NHRA Legal for Stock & Super Stock.

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

FORD STEEL CONNECTING ROD REPLACEMENT PARTS

Description	Quantity	Rod 14117	Rod 14118	Rod 14120	Rod 14318
7/16" ARP 2000 Cap Screws	4 pcs.	---	---	---	42390-4
8740 Alloy 3/8" Cap Screws	4 pcs.	42383-4	42383-4	42383-4	---
Ampco Pin Bushings	8 pcs.	42310-8	42302-8	42302-8	42302-8
Dowel Bushings	16 pcs.	42385-16	42385-16	42385-16	42392-16

ORDERING INFORMATION
Part number suffix indicates number of pieces or pairs in one packaging unit. To order less pieces or pairs, use part number with -1 suffix and the quantity desired.

STEEL CONNECTING RODS

FORD ENGINES

FORD 351 W
SPORTSMASTER® RODS
CASCAR RACING SERIES

Part No.	Description	Center-to Center	Big End Bore	Big End Width	Pin End Width	Pin Bore	Gram Weight
14137C-8	351 Ford w/ Std. width SB Chevy bearing	5.955"	2.225"	.940"	.980"	.9131"	572

P/N 14137C is CASCAR Legal.

FORD 5.4 L MODULAR V-8
PRO SERIES "I" BEAM RODS
LIGHTWEIGHT

P/Ns 14319-8 & 14321-8 are NHRA Legal for Stock & Super Stock.

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
14321-8	Stock Length w/ .912" pin	6.657"	2.239"	.940"	.940"	.9131"	624

FORD 429
PRO SERIES "I" BEAM RODS

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

FORD STEEL CONNECTING ROD REPLACEMENT PARTS

Description	Quantity	Rod 14137C	Rod 14173	Rod 14319	Rod 14321
7/16" ARP 2000 Cap Screws	4 pcs.	---	42391-4	42390-4	42390-4
8740 Alloy 3/8" Cap Screws	4 pcs.	42383-4	---	---	---
Ampco Pin Bushings	8 pcs.	42309-8	42327-8	42302-8	42302-8
Dowel Bushings	16 pcs.	42385-16	42387-16	42392-16	42392-16

ORDERING INFORMATION
Part number suffix indicates number of pieces or pairs in one packaging unit. To order less pieces or pairs, use part number with -1 suffix and the quantity desired.

FORD ENGINES

"H" BEAM RODS
FORD 4.6 L

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

Part No.	Description	Center-to Center	Big End Bore	Crank Pin	Pin Bore	Gram Weight
14042-8	4.6 L Stock length w/ 22 mm pin	5.933"	2.239"	.940"	.8671"	602
14043-8	4.6 L Stock length w/ .912" pin	5.933"	2.239"	.940"	.9131"	598

Private brand identification available.

REPLACEMENT PARTS

Part No.	Quantity	Description
42383-4	4 pcs.	8740 Alloy 3/8" Cap Screws
42302-8	8 pcs.	Ampco Pin Bushings for 22 mm and .912" Pins

P/Ns 14042-8 & 14043-8 are NHRA Legal for Stock & Super Stock.

ORDERING INFORMATION
Part number suffix indicates number of pieces or pairs in one packaging unit. To order less pieces or pairs, use part number with -1 suffix and the quantity desired.

FORD ENGINES

"H" BEAM RODS
5.4 L MODULAR V-8

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

Part No.	Description	Center-to Center	Big End Bore	Crank Pin	Pin Bore	Gram Weight
14040-8	5.4 L Stock length w/ 22 mm pin	6.657"	2.239"	.940"	.8671"	625
14041-8	5.4 L Stock length w/ .912" pin	6.657"	2.239"	.940"	.9131"	618

Private brand identification available.

REPLACEMENT PARTS

Part No.	Quantity	Description
42383-4	4 pcs.	8740 Alloy 3/8" Cap Screws
42302-8	8 pcs.	Ampco Pin Bushings for 22 mm and .912" Pins

P/Ns 14040-8 & 14041-8 are NHRA Legal for Stock & Super Stock.

ORDERING INFORMATION
Part number suffix indicates number of pieces or pairs in one packaging unit. To order less pieces or pairs, use part number with -1 suffix and the quantity desired.

HONDA / ACURA

PRO SERIES "I" BEAM RODS
LIGHTWEIGHT DESIGN

- ✓ Forged from 4340 aircraft quality vacuum degassed material
- ✓ Manufactured in our own CNC machining centers
- ✓ Fully machined to produce the lightest and strongest rod possible
- ✓ Shot peened after machining and 100% magnafluxed
- ✓ Cap fasteners are 3/8" ARP 2000 cap screws

Part No.	Description	Center-to Center	Big End Bore	Big End Width	Pin Diam.	Gram Weight
14310-4	Acura Integra 1.6 (D16 1986-93)	5.394"	1.890"	.892"	.747" (19 mm)	480
14312-4	Integra 1.8 non V-Tec DOHC (B18A / B18B 1990-up)	5.394"	1.890"	.935"	.826" (21 mm)	496
14314-4	Integra 1.8 V-Tec DOHC (B18C 1994-up)	5.433"	1.890"	.858"	.826" (21 mm)	472
14315-4	Honda 1.6 V-Tec DOHC (B16A 1992 -up)	5.290"	1.890"	.935"	.827" (21 mm)	488
14316-4	Honda 1.6 SOHC (D16 Series 1988-up)	5.394"	1.890"	.892"	.748" (19 mm)	486
14317-4	Honda Prelude 2.2 V-Tec DOHC (H22 1992-up)	5.636"	2.008"	.935"	.866" (22 mm)	524

COMMON FEATURES

Attribute	Dimension
Pin End Width	.786"
Crankpin 1.6 L	1.7710"
1.8 L	1.7710"
2.2 L	1.8885"

REPLACEMENT PARTS

Part No.	Quantity	Description
42351-4	4 pcs.	3/8" ARP 2000 Cap Screws
42273-4	4 pcs.	Ampco Pin Bushings (19 mm)
42282-4	4 pcs.	Ampco Pin Bushings (21-22 mm)
42398-8	8 pcs.	Dowel Bushings 3/8"

ORDERING INFORMATION
Part number suffix indicates number of pieces or pairs in one packaging unit. To order less pieces or pairs, use part number with -1 suffix and the quantity desired.

HONDA / ACURA

PRO SERIES "I" BEAM RODS
TURBO TUFF DESIGN

- ✓ Forged from 4340 aircraft quality vacuum degassed material
- ✓ Manufactured in our own CNC machining centers
- ✓ 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.

Part No.	Description	Center-to Center	Big End Bore	Big End Width	Pin Diam.	Gram Weight
14410-4	Acura Integra 1.6 (D16 1986-93)	5.394"	1.890"	.892"	.747" (19 mm)	565
14412-4	Integra 1.8 non V-Tec DOHC (B18A / B18B 1990-up)	5.394"	1.890"	.935"	.826" (21 mm)	581
14414-4	Integra 1.8 V-Tec DOHC (B18C 1994-up)	5.433"	1.890"	.858"	.826" (21 mm)	547
14415-4	Honda 1.6 V-Tec DOHC (B16A 1992 -up)	5.290"	1.890"	.935"	.827" (21 mm)	573
14416-4	Honda 1.6 SOHC (D16 Series 1988-up)	5.394"	1.890"	.892"	.748" (19 mm)	571
14417-4	Honda Prelude 2.2 V-Tec DOHC (H22 1992-up)	5.636"	2.008"	.935"	.866" (22 mm)	609

COMMON FEATURES

Attribute	Dimension
Pin End Width	.850"
Crankpin 1.6 L	1.7710"
1.8 L	1.7710"
2.2 L	1.8885"

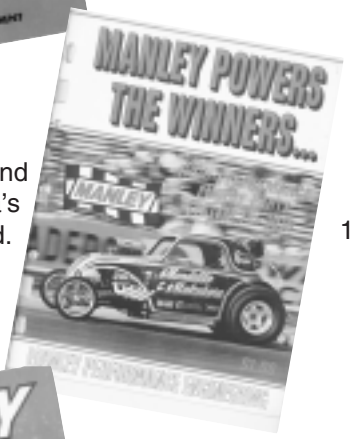
REPLACEMENT PARTS

Part No.	Quantity	Description
42351-4	4 pcs.	3/8" ARP 2000 Cap Screws
42285-4	4 pcs.	Ampco Pin Bushings (21-22 mm)
42286-4	4 pcs.	Ampco Pin Bushings (19 mm)
42398-8	8 pcs.	Dowel Bushings 3/8"

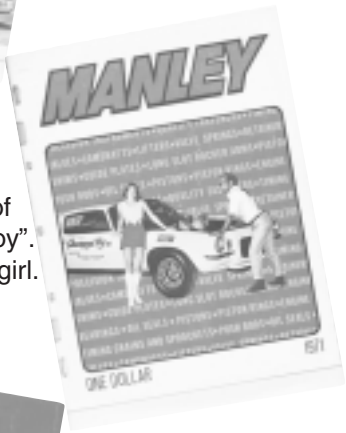
DO YOU REMEMBER ...

1966 The first catalog. The Rader Wheels dragster was featured on the cover.

1969 Don Garlits, Bo Laws, Joe Mondello and Terry Clark.

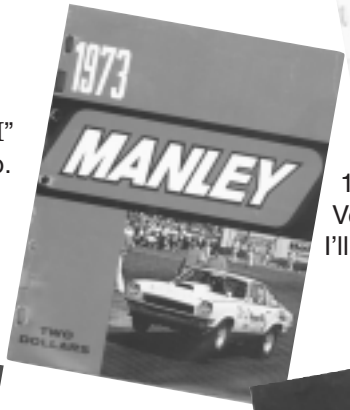


1970 Joe Mondello's and Sush Matsubara's AA / Fuel Altered.

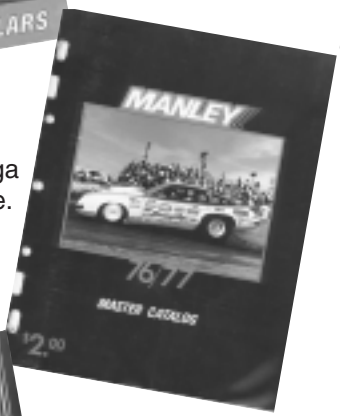


1971 the first appearance of Bill Jenkins' "Grumpy's Toy". Nancy Fisher cover girl.

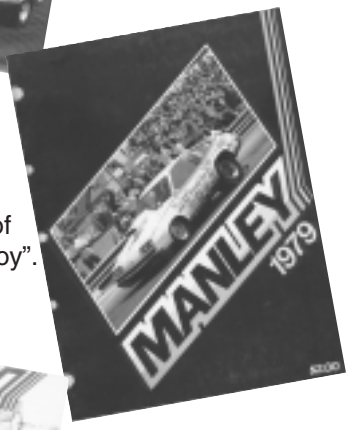
1972 "Grumpy's Toy VIII" Mountain Motor Camaro.



1973 The Small Block Vega. "If it goes straight, I'll win." It did; he did!

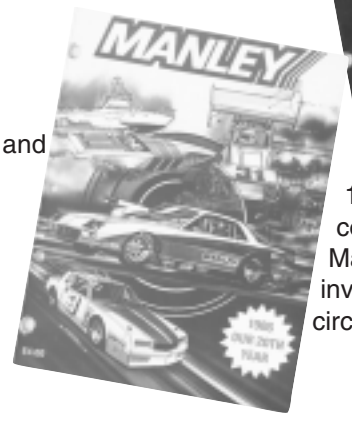


1976 The Vega continued to dominate.



1979 The last of ten appearances of "Grumpy's Toy".

1980 Frank Iaconio's and Ray Allen's Camaro.



1986 The 20th anniversary cover was emblematic of Manley Performance's growing involvement with marine and circle track racers.

ORDERING INFORMATION
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MONDELLO 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

4 OZ. EXTREME PRESSURE LUBE #3

✓ The assembly lubricant preferred by Winston Cup and other savvy 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.	Carr Rod Bolt Assembly Lube

2 0Z. 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

ENGINE BUILDING AIDS

ORDERING INFORMATION
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PRECISION MACHINED CONNECTING ROD VISE

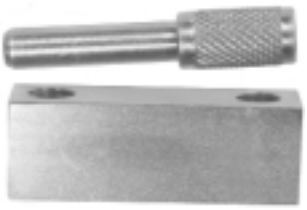
- ✓ Protect expensive rods w/ 100% parallel jaws
- ✓ Accepts up to 4 rods w/ 4.250" travel
- ✓ Bosses drilled for permanent mounting

Part No.	Quantity	Description
40090	1	Connecting rod vise

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



2-in-1 SB CHEVY ROCKER STUD TOOL

- ✓ CNC machined from steel then gold cadmium plated
- ✓ Removes press-in studs quickly and easily
- ✓ Guides for tapping 7/16" rocker stud threads perfectly every time

Part No.	Quantity	Description
40096	1	Rocker stud tool

TOP DEAD CENTER STOP

- ✓ One tool spans all bores up to 4.600"
- ✓ Both slots accept up to 1/2" diameter head bolts
- ✓ CNC machined from steel then gold cadmium plated
- ✓ Stop bolt, jam nut and washer included

Part No.	Quantity	Description
40098	1	TDC stop

ORDERING INFORMATION
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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

FREEZE PLUG INSTALLATION TOOL

✓ Unique tool for installing freeze plugs in Chevys or any 1-5/8" and 1-3/4" size plugs
✓ Tool drives to a positive stop preventing improper installation

Part No.	Quantity	Description
41726	1	All Chevrolets or any 1-5/8" and 1-3/4" plugs

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

ORDERING INFORMATION
Part number suffix indicates number of pieces or pairs in one packaging unit. To order less pieces or pairs, use part number with -1 suffix and the quantity desired.

ON-THE-HEAD VALVE SPRING PRESSURE TESTER

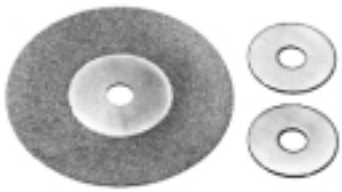
✓ Test valve springs on the head for tension loss without removing rockers
✓ Using a 1/2" torque wrench, record the pounds of pressure required to compress the spring just enough to allow the pushrod to turn.
✓ Weakening of valve spring is easily detected with future tests

Part No.	Quantity	Description
42130	1	Universal spring tester

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

QUICK VALVE SPRING REMOVAL TOOL

✓ Remove valve springs quickly and easily
✓ Universal application
✓ Fits both 3/8" and 7/16" rocker studs

Part No.	Quantity	Description
42131	1	Quick spring removal tool fits 3/8" and 7/16" studs

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 SPRING HEIGHT MICROMETER

✓ Place between retainer and cylinder head
✓ Eliminates miscalculations associated with dial calipers and snap gauges

Part No.	Quantity	Description
40173	1	Measures between 1.700" and 2.100"

ORDERING INFORMATION
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ENGINE BUILDING AIDS

LASH CAP PULLER

✓ Removes caps from 5/16", 11/32", and 3/8" valves
✓ Clever and simple to use tool

Part No.	Quantity	Description
41820	1	Universal lash cap puller

SMALL BLOCK CHEVROLET CRANKSHAFT TURNING NUTS

✓ Provides a non slip surface for an open end wrench to rotate the crankshaft
✓ Simple and effective device

Part No.	Quantity	Description
42349	1	Small Block Chevrolet crank turning nut

PISTON RING INSTALLATION PLIERS

✓ Quickest and easiest way to install piston rings
✓ Pliers cover all sizes from 3-7/8" to 4-3/8"

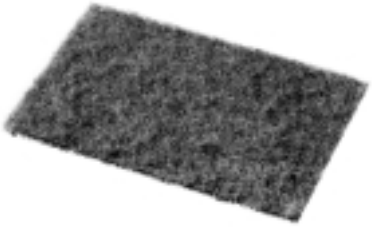
Part No.	Quantity	Description
41836	1	Universal ring installation pliers

ROD BEARING DRILL FIXTURE

✓ The ultimate tool for drilling rod bearings to accept dowel pins
✓ Hand held or clamped in a machinist vise
✓ Hardened drill bushing pilots the drill (included)

Part No.	Quantity	Description
41727	1	Fits SB Chevy (large and small journal) and BB Chevy bearings
41728	1	Fits Federal Mogul P/N 7195CH (2.008") bearings or Clevite P/N CB1663H (2.015") bearings

SCOTCH BRITE



✓ Massage engine bearings, piston skirts and other vital components

Part No.	Quantity	Description
40189	2 pads 6" x 9-1/2"	Scotch Brite - aluminum oxide maroon pads

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

ENGINE BUILDING AIDS

ORDERING INFORMATION
Part number suffix indicates number of pieces or pairs in one packaging unit. To order less pieces or pairs, use part number with -1 suffix and the quantity desired.

PISTON VALVE NOTCH CUTTING TOOL

✓ Highly precise, beautifully crafted tool
✓ Comes with a centering device for proper cut location
✓ Due to the severe use to which these cutters are subjected, we are not able to warranty damaged goods

Part No.	Quantity	Description
40184	1	Valve notch tool, centering device, and flat blade cutter. Use with 7/8" collet

REPLACEMENT VALVE NOTCHING BLADES

✓ Solid carbide cutting blades for above listed tool
✓ Due to the severe use to which these cutters are subjected, we are not able to warranty damaged goods

Part No.	Quantity	Description
40179	1	Flat notch replacement blade
40178	1	Dimpled notch cutting blade

PISTON HOLDING FIXTURE

✓ Convenient tool for racer or engine builder
✓ Comes with a .927" mandrel
✓ Positively holds piston so domes can be HAND worked with a die grinder

Part No.	Quantity	Description
40183	1	Fixture including .927" mandrel
40181	1	.927" (Small Block Chevy) mandrel only
40185	1	.990" (Big Block Chevy) mandrel only
40186	1	.912" (Ford) mandrel only

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

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

CRANK SAVERS

✓ Protect crank journals and keep bearing shells in the rod bore during assembly
✓ Terrific installation tool

Part No.	Quantity	Description
42231	4 pcs.	For 5/16" to 3/8" rod bolts
42232	4 pcs.	For 7/16" rod bolts

ORDERING INFORMATION
Part number suffix indicates number of pieces or pairs in one packaging unit. To order less pieces or pairs, use part number with -1 suffix and the quantity desired.

UNIVERSAL "SAFETY WIRE" BOLT DRILL FIXTURE

- ✓ "Must have" item for professional engine builders
- ✓ Drill 1/16" holes in bolt heads for safety wire installation
- ✓ Use with either hex head, 12 point or allen cap screws from 3/16" to 5/8" shank diameter
- ✓ Two cobalt drills and two hardened drill bushings included
- ✓ Excellent for engines sealed by sanctioning organizations

Part No.	Quantity	Description
42344	1	Bolt drill fixture

SPECIAL DRILL AND TAP FIXTURE FOR HELICOIL REPAIR OF CYLINDER HEAD BOLTS AND MAIN CAP BOLTS

- ✓ Only tool available to guarantee accuracy in head bolt and main bearing bolt Helicoil repair
- ✓ No more guessing about perpendicularity and squareness of repaired hole to deck surface or block
- ✓ Sold with guides for 7/16" bolt repair

Part No.	Quantity	Description
40188	1	Drill and tap fixture

AIR HOLDING PLUGS

- ✓ Plug screws into the spark plug holes and accepts air compressor hose
- ✓ Hold valves closed so spring can be removed without removing the cylinder heads
- ✓ Can also be used with leak down tester 41891 on p.150

Part No.	Quantity	Description
40814	1	Fits 14 mm spark plug hole
40818	1	Fits 18 mm spark plug hole

VALVE SPRING COMPRESSOR TOOLS

- ✓ Sturdy black oxide tools for changing valve springs
- ✓ Use in conjuction with air holding plug above

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

ORDERING INFORMATION
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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

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
41845	1	Cuts 1.375" O.D., .750" I.D. with 11/32" pilot and 5/16" pilot
41825	1	Cuts 1.437" O.D., .625" I.D. with 11/32" pilot
41850	1	Cuts 1.460" 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

CARBURETOR JET STORAGE PLATES

✓ Handy, clever device for jet storage

Part No.	Quantity	Description
42319	1	Fits Holley carburetor jets (capacity: 88)
42346	1	Fits Holley carburetor jets (72) and air bleeds (16)

FUEL INJECTION PILL STORAGE PLATE

✓ Clever storage device for injection pills

Part No.	Quantity	Description
42323	1	Fits Enderle type pills (capacity: 42)

ORDERING INFORMATION
Part number suffix indicates number of pieces or pairs in one packaging unit. To order less pieces or pairs, use part number with -1 suffix and the quantity desired.

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

BRONZE VALVE GUIDE SLEEVE INSTALLATION KITS

✓ Kit consists of boring tool, sleeve driver, spiraling tool, self piloting reamer, trimming tool and cleaning brush

Part No.	Quantity	Description
41815	1 kit	Repair for 5/16" guides
41832	1 kit	Repair for 11/32" guides
41813	1 kit	Repair for 3/8" guides
41890	1	Speed reducer for boring, spiraling and reaming with an electric drill

BRONZE VALVE GUIDE SLEEVE CONVERSION KITS

✓ Convert 11/32" or 3/8" guides to accept 5/16" valves
✓ Kit consists of sleeve driver (no boring necessary) spiraling tool, self piloting reamer, trimming tool and cleaning brush

Part No.	Quantity	Description
41875	1 kit	Conversion kit 3/8" guides for 5/16" valves
41880	1 kit	Conversion kit 11/32" guides for 5/16" valves
41890	1	Speed reducer for boring, spiraling and reaming with an electric drill

ENGINE BUILDING AIDS

ORDERING INFORMATION
Part number suffix indicates number of pieces or pairs in one packaging unit. To order less pieces or pairs, use part number with -1 suffix and the quantity desired.

PROFESSIONAL DEGREE WHEEL / ADJUSTABLE POINTER

✓ Excellent professional degree wheel
✓ Adapter kit alllows engine builder to spin wheel independent of the engine

Part No.	Quantity	Description
41720	1	10" diameter anodized degree wheel only
41721	1	Adapter kit - All Chevrolets
41722	1	Adapter kit - All Fords
41723	1	Deluxe adapter kit - fits all engines
41724	1	Professional quality adjustable pointer

"PRO SERIES" CAMSHAFT INSTALLATION KIT

✓ Most popular cam degreeing accessories available in this one kit
✓ Everything required to correctly install a camshaft in all GM and Ford engines with 7/8" and 27/32" lifter bores

Part No.	Quantity	Description
41730	1	"Pro Series" camshaft installation kit

CAMSHAFT INSTALLATION KIT COMPONENTS (Order parts separately)

Part No.	Quantity	Description
41720	1	10" diameter gold anodized degree wheel
41723	1	Deluxe adapter kit - fits all engines
41724	1	Professional quality fully adjustable pointer
41725	1	Cam check tool

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

CAMSHAFT CHECK TOOL

✓ Check lift, duration, timing and center line of any camshaft with 7/8" and 27/32" lifter bores

Part No.	Quantity	Description
41725	1	Camshaft checking tool

VALVE TRAIN CHECKING SPRINGS

✓ Light tension checking springs
✓ .750" I.D. 3.250" free length. .650" solid height

Part No.	Quantity	Description
42314	Set of 4 pcs.	Valve train checking spring

ORDERING INFORMATION
Part number suffix indicates number of pieces or pairs in one packaging unit. To order less pieces or pairs, use part number with -1 suffix and the quantity desired.

DOUBLE SIDED RING SQUARING TOOLS

✓ Double sided so just three tools cover all bores 4.000" to 4.625"
✓ Easy grabbing with machined groove at center

Part No.	Quantity	Description
40001	1	4.000" to 4.230"
40002	1	4.240" to 4.380"
40003	1	4.500" to 4.625"

CHEVROLET CAMSHAFT INSTALLATION HANDLE

✓ Steel flange bolts directly to camshaft face
✓ Prevents camshaft and bearing damage during installation
✓ Included hardware stores in the aluminum handle

Part No.	Quantity	Description
40099	1	Chevrolet cam installation tool (will not fit BB Gen VI)

CYLINDER HEAD STANDS

✓ Safe and easy method of supporting a cylinder head
✓ Manufactured of cast aluminum

Part No.	Quantity	Description
41750	1 pair of stands	Cylinder head stands

TAPERED PISTON RING COMPRESSORS

✓ Fits inside head studs and block O-rings
✓ CNC machined aluminum with red anodizing

Part No.	Quantity	Description
40005	1	4.000" Rings
40006	1	4.030" Rings
40007	1	4.060" Rings
40008	1	4.155" Rings
40009	1	4.250" Rings
40010	1	4.280" Rings
40011	1	4.310" Rings
40012	1	4.350" Rings
40013	1	4.375" Rings
40015	1	4.500" Rings
40016	1	4.530" Rings
40017	1	4.560" Rings
40018	1	4.600" Rings
40019	1	4.625" Rings

HARLEY DAVIDSON MOTORCYCLE PRODUCTS

HARLEY DAVIDSON MOTORCYCLE PRODUCTS CATALOG

✓ Manley Performance is a major supplier to the Harley Davidson aftermarket
✓ Automotive accounts qualify for discounts on all Harley products: valves, guides, springs, and a host of other commodities

Part No.	Quantity	Description
2001 H	1	Current Harley Davidson catalog
2001 HP	1	Current dealer price list no. 126

MANLEY STAINLESS STEEL VALVES

✓ Stainless steel, swirl polished, performance shapes, chrome stems and hard tips

HARLEY DAVIDSON® 74 and 80 CID 1966-84 SHOVEL HEAD RACE MASTER STAINLESS STEEL VALVES

Part No.	Type	Head Diam.	Stem Diam.	Harley Equivalent
99021-2	Exh.	1.750" stock	.3745" stock	18082-57
99020-2	Int.	1.937" stock	.3765" stock	18074-66

EVOLUTION 80 CID (1984 - UP) RACE MASTER STAINLESS STEEL VALVES

Part No.	Type	Head Diam.	Stem Diam.	Harley Equivalent
99061-2	Exh.	1.615" stock	.3095" stock	18082-83
99060-2	Int.	1.850" stock	.3100" stock	18074-83
99064-2	Int.	1.940" stock	.3100" stock	NONE

MANLEY RACE MASTER VALVE TRAIN COMPONENT KITS

✓ Complete valve train packages that include valves, springs, top collars and valve keys
✓ No machining necessary to install these springs

SHOVEL HEAD 74 and 80 CID STOCK - .495" LIFT (UP TO 1979)

Kit No.	Intake Valve	Exhaust Valve	Valve Outer	Springs Inner	Steel Top Collars	Machined Valve Keys	Lower Collars
99212	99020-2	99021-2	99203-4	99204-4	99253-4	99233-4	99295-4

EVOLUTION 80 CID STOCK - .550" LIFT

Kit No.	Intake Valve	Exhaust Valve	Valve Outer	Springs Inner	Steel Top Collars	Machined Valve Keys
99213	99060-2	99061-2	99206-4	99207-4	99258-4	99296-4

NOTE: When exceeding .550" lift on the Evolution engine, order kit number 99214 which includes titanium top collars.

SPORT COMPACT CATALOG

Manley proudly introduces a new line of high performance components aimed directly at the growing Sport Compact market. We have focused our extensive manufacturing capabilities on the goal of producing superior quality products for the Sport Compact racer and enthusiast.

STAINLESS STEEL VALVES

The standard of the industry since their inception, Manley valves are designed to outflow and outperform all others even in the most severe environments. Manufactured from high temperature materials, these valves feature swirl polished underheads, performance oriented shapes and durable chrome plated stems.

Manley Stainless Steel Valves Feature -

- ✓ Forged Construction
- ✓ Swirl Polished Underhead
- ✓ Fully Machined Combustion Face
- ✓ Hard Tips
- ✓ Compatible With Unleaded Fuels
- ✓ Durable Chrome Plated Stems

Now the Sport Compact racer can boast “I’ve got Manley valves in my engine” the same way Small Block Chevy racers have bragged for 35 years! From Hondas to Nissans to Toyotas, Manley brings the valve technology that racers have learned to expect - superior alloys, exacting tolerances, beautiful machining and spiral polishing, hard chrome stems and wear resistant hard tips.

Enclosed you’ll find an array of shelf stock part numbers for numerous Sport Compact applications. With the advent of our exclusive Gen II program our custom manufacturing ability is nearly limitless and unsurpassed in the industry. Manley manufactured “special blanks” allow the customer to vary their overall length specifications up to .600" (15.25 mm) yet still maintain a hardened tip and keeper groove area. This provides a stronger part and alleviates any need for a wear cap or inserted tip, which can pose problems on many Sport Compact valves due to the short tip length.

STAINLESS STEEL VALVES

ORDERING INFORMATION
Part number suffix indicates number of pieces or pairs in one packaging unit. To order less pieces or pairs, use part number with -1 suffix and the quantity desired.

HONDA / ACURA

RACE MASTER VALVES

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

* See Important Honda Valve Stem Size Information top of page 159 *

Part No.	Type	Head Diam.	Stem Diam.	O/A Length	Tip Length	Underhead Angle/Radius	Margin	Seat Width
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								
11373-8	Exh.	28.0 mm	5.5 mm	102.7 mm	2.5 mm	25° x 11/32"	.065"	.080"
11375-8	Exh.	28.5 mm	5.5 mm	102.7 mm	2.5 mm	25° x 11/32"	.065"	.080"
11377-8	Exh.	29.0 mm	5.5 mm	102.7 mm	2.5 mm	25° x 11/32"	.065"	.080"
11372-8	Int.	33.0 mm	5.5 mm	102.4 mm	2.5 mm	Pro Flo: 22° x 5/16"	.050"	.075"
11374-8	Int.	33.5 mm	5.5 mm	102.4 mm	2.5 mm	Pro Flo: 22° x 5/16"	.050"	.075"
11376-8	Int.	34.0 mm	5.5 mm	102.4 mm	2.5 mm	Pro Flo: 22° x 5/16"	.050"	.075"
HONDA ACCORD 2.2L - SOHC V-TEC 16 VALVE (F22B1) - 1994 - 1997								
11371-8	Exh.	29 mm	5.5 mm	114.25 mm	3.5 mm	25° x 11/32"	.065"	.080"
11379-8	Exh.	30 mm	5.5 mm	114.25 mm	3.5 mm	25° x 11/32"	.065"	.080"
11370-8	Int.	34 mm	5.5 mm	116.00 mm	3.5 mm	Pro Flo: 22° x 5/16"	.050"	.075"
11378-8	Int.	35 mm	5.5 mm	116.00 mm	3.5 mm	Pro Flo: 22° x 5/16"	.050"	.075"
HONDA CIVIC 1.6L - SOHC 16 VALVE (D16Z6-Y5-Y7-Y8) - 1992 - 2000								
11367-8	Exh.	26 mm	5.5 mm	115.95 mm	1.9 mm	25° x 11/32"	.065"	.080"
11369-8	Exh.	27 mm	5.5 mm	115.95 mm	1.9 mm	25° x 11/32"	.065"	.080"
11366-8	Int.	30 mm	5.5 mm	118.60 mm	1.9 mm	Pro Flo: 22° x 5/16"	.050"	.075"
11368-8	Int.	31 mm	5.5 mm	118.60 mm	1.9 mm	Pro Flo: 22° x 5/16"	.050"	.075"
HONDA CIVIC CRX SI 1.6L - SOHC 16 VALVE (D16A6) - 1988 - 1991								
11383-8	Exh.	25 mm	5.5 mm	118.75 mm	4.35 mm	25° x 11/32"	.065"	.080"
11385-8	Exh.	26 mm	5.5 mm	118.75 mm	4.35 mm	25° x 11/32"	.065"	.080"
11384-8	Int.	29 mm	5.5 mm	115.00 mm	4.1 mm	Pro Flo: 22° x 5/16"	.050"	.075"
11386-8	Int.	30 mm	5.5 mm	115.00 mm	4.1 mm	Pro Flo: 22° x 5/16"	.050"	.075"
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	102.7 mm	2.5 mm	25° x 11/32"	.065"	.080"
11375-8	Exh.	28.5 mm	5.5 mm	102.7 mm	2.5 mm	25° x 11/32"	.065"	.080"
11377-8	Exh.	29.0 mm	5.5 mm	102.7 mm	2.5 mm	25° x 11/32"	.065"	.080"
11372-8	Int.	33.0 mm	5.5 mm	102.4 mm	2.5 mm	Pro Flo: 22° x 5/16"	.050"	.075"
11374-8	Int.	33.5 mm	5.5 mm	102.4 mm	2.5 mm	Pro Flo: 22° x 5/16"	.050"	.075"
11376-8	Int.	34.0 mm	5.5 mm	102.4 mm	2.5 mm	Pro Flo: 22° x 5/16"	.050"	.075"
HONDA PRELUDE 2.2L - DOHC V-TEC 16 VALVE (H22A1-A4) - 1993 - 2000								
11393-8	Exh.	30 mm	5.5 mm	107.10 mm	1.9 mm	25° x 11/32"	.065"	.080"
11395-8	Exh.	31 mm	5.5 mm	107.10 mm	1.9 mm	25° x 11/32"	.065"	.080"
11394-8	Int.	35 mm	5.5 mm	106.85 mm	1.9 mm	Pro Flo: 22° x 5/16"	.050"	.075"
11396-8	Int.	36 mm	5.5 mm	106.85 mm	1.9 mm	Pro Flo: 22° x 5/16"	.050"	.075"

ORDERING INFORMATION
Part number suffix indicates number of pieces or pairs in one packaging unit. To order less pieces or pairs, use part number with -1 suffix and the quantity desired.

STAINLESS STEEL VALVES

HONDA / ACURA

RACE MASTER VALVES

*** Important Honda Valve Stem Size Information ***

NOTE: 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 sizes may vary slightly depending on the specific engine.

MAZDA / NISSAN

RACE MASTER VALVES

✓ XH-426 Stainless Exhaust Material
✓ NK-842 Stainless Intake Material
✓ Improved Flow with “Pro Flo” Intake Underheads
✓ Chrome Stems, Swirl Polished and Fully Machined

Part No.	Type	Head Diam.	Stem Diam.	O/A Length	Tip Length	Underhead Angle/Radius	Margin	Seat Width
MAZDA MIATA 1.8L - DOHC 16 VALVE (BP056) - 1990 - 1999								
11101-8	Exh.	28 mm	6 mm	101.52 mm	3.5 mm	25° x 11/32"	.065"	.080"
11103-8	Exh.	29 mm	6 mm	101.52 mm	3.5 mm	25° x 11/32"	.065"	.080"
11102-8	Int.	33 mm	6 mm	101.35 mm	3.5 mm	Pro Flo: 22° x 5/16"	.050"	.075"
11104-8	Int.	34 mm	6 mm	101.35 mm	3.5 mm	Pro Flo: 22° x 5/16"	.050"	.075"
NISSAN 300 ZX 3.0L - DOHC 24 VALVE (VG30D - TURBO VG30DTT) - 1990 - 1996								
11105-12	Exh.	29.5 mm	6 mm	103.65 mm	3.5 mm	25° x 11/32"	.065"	.080"
11107-12	Exh.	30.5 mm	6 mm	103.65 mm	3.5 mm	25° x 11/32"	.065"	.080"
11106-12	Int.	34.0 mm	6 mm	103.13 mm	3.5 mm	Pro Flo: 22° x 5/16"	.050"	.075"
11108-12	Int.	35.0 mm	6 mm	103.13 mm	3.5 mm	Pro Flo: 22° x 5/16"	.050"	.075"
NISSAN SENTRA SE-R 2.0L - DOHC 16 VALVE (SR20DE) - 1991 - 1998								
11109-8	Exh.	30.15 mm	6 mm	102.40 mm	3.5 mm	25° x 11/32"	.065"	.080"
11111-8	Exh.	31.15 mm	6 mm	102.40 mm	3.5 mm	25° x 11/32"	.065"	.080"
11110-8	Int.	34.15 mm	6 mm	101.40 mm	3.5 mm	Pro Flo: 22° x 5/16"	.050"	.075"
11112-8	Int.	35.15 mm	6 mm	101.40 mm	3.5 mm	Pro Flo: 22° x 5/16"	.050"	.075"

*** Important Mazda / Nissan Valve Stem Size Information ***

NOTE: All Manley Performance aftermarket valves for the Mazda / Nissan 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 slightly depending on the specific motor.

STAINLESS STEEL VALVES

ORDERING INFORMATION
Part number suffix indicates number of pieces or pairs in one packaging unit. To order less pieces or pairs, use part number with -1 suffix and the quantity desired.

TOYOTA

RACE MASTER VALVES

- ✓ XH-426 Stainless Exhaust Material
- ✓ NK-842 Stainless Intake Material
- ✓ Improved Flow with “Pro Flo” Intake Underheads
- ✓ Chrome Stems, Swirl Polished and Fully Machined

Part No.	Type	Head Diam.	Stem Diam.	O/A Length	Tip Length	Underhead Angle/Radius	Margin	Seat Width
TOYOTA 4AG (ATLANTIC)								
11113-8	Exh.	27.5 mm	6 mm	99.75 mm	3.5 mm	25° x 11/32"	.065"	.080"
11114-8	Int.	32.0 mm	6 mm	99.60 mm	3.5 mm	Pro Flo: 22° x 5/16"	.050"	.075"
TOYOTA MR2 2.0L - DOHC 16 VALVE (TURBO 3SGTE) - 1990 - 1995								
11115-8	Exh.	29.0 mm	6 mm	99.50 mm	3.5 mm	25° x 11/32"	.065"	.080"
11117-8	Exh.	30.0 mm	6 mm	99.50 mm	3.5 mm	25° x 11/32"	.065"	.080"
11116-8	Int.	33.5 mm	6 mm	100.55 mm	3.5 mm	Pro Flo: 22° x 5/16"	.050"	.075"
11118-8	Int.	34.5 mm	6 mm	100.55 mm	3.5 mm	Pro Flo: 22° x 5/16"	.050"	.075"
TOYOTA SUPRA 3.0L - DOHC 24 VALVE (7MGE - TURBO 7MGTE) - 1986 - 1992								
11119-12	Exh.	27.5 mm	6 mm	98.05 mm	4 mm	25° x 11/32"	.065"	.080"
11121-12	Exh.	28.5 mm	6 mm	98.05 mm	4 mm	25° x 11/32"	.065"	.080"
11120-12	Int.	32.0 mm	6 mm	98.05 mm	4 mm	Pro Flo: 22° x 5/16"	.050"	.075"
11122-12	Int.	33.0 mm	6 mm	98.05 mm	4 mm	Pro Flo: 22° x 5/16"	.050"	.075"
TOYOTA SUPRA 3.0L I/L 6 CYL - DOHC 24 VALVE (2JZGE - 2JZGTE) - 1994 - 1998								
11123-12	Exh.	29.0 mm	6 mm	99.10 mm	3.5 mm	25° x 11/32"	.065"	.080"
11125-12	Exh.	30.0 mm	6 mm	99.10 mm	3.5 mm	25° x 11/32"	.065"	.080"
11124-12	Int.	33.6 mm	6 mm	98.55 mm	3.5 mm	Pro Flo: 22° x 5/16"	.050"	.075"
11126-12	Int.	34.6 mm	6 mm	98.55 mm	3.5 mm	Pro Flo: 22° x 5/16"	.050"	.075"

* Important Toyota Valve Stem Size Information *

NOTE: All Manley Performance aftermarket valves for the Toyota 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 slightly depending on the specific motor.

ORDERING INFORMATION
Part number suffix indicates number of pieces or pairs in one packaging unit. To order less pieces or pairs, use part number with -1 suffix and the quantity desired.

GENERATION II

CUSTOM STAINLESS STEEL VALVES

✓ 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 single groove type and location.
***** Part numbers with asterisks can be reduced 1.500" or 38 mm. All others .800" or 20.32 mm.

PLEASE GIVE US THE OPPORTUNITY TO SERVE YOU!
Gen II valves can be manufactured for virtually any Sport Compact application.

All Gen II custom stainless valve part numbers are priced to include all machining to render a finished valve.
Typical lead times as short as 7 to 10 days.

Part No.	Type	Maximum Head Diameter	Stem Diameter	Maximum Length	Underhead Angle/Radius	Margin	Seat Width	Top of Head	Material
11209-8	Exh.	32 mm	5.5 mm	119.0 mm	25˚ x 11/32"	.065"	.080"	20˚ Dish	XH-426
11233-8*	Exh.	32 mm	5.5 mm	119.0 mm	25˚ x 11/32"	.065"	.080"	20˚ Dish	Inconel
11208-8	Int.	37 mm	5.5 mm	119.0 mm	Pro Flo 22° x 5/16"	.065"	.080"	17˚ Dish	NK-842
11213-8	Exh.	35 mm	6.0 mm	113.5 mm	25˚ x 11/32"	.065"	.080"	20˚ Dish	XH-426
11237-8*	Exh.	35 mm	6.0 mm	113.5 mm	25˚ x 11/32"	.065"	.080"	20˚ Dish	Inconel
11212-8	Int.	39 mm	6.0 mm	113.5 mm	Pro Flo 22° x 5/16"	.065"	.080"	17˚ Dish	NK-842

CUSTOM TITANIUM VALVES

Manley Performance can manufacture lightweight yet extremely durable titanium valves for your Sport Compact application. The same proven technology we utilize for our Winston Cup customers is now available for the Sport Compact racer. We are stocking 5.5mm stem blanks with the moly stem coating in the corrrect location to properly fit Honda / Acura V-Tec applications. Please fill out a valve print or consult your Manley salesman on how to order custom Manley titanium valves. Titanium valves do not come with a hardened tip. Tip protection is required. Order wear cap P/N 42263 to provide tip protection.
Typical lead times as short as 7 to 10 days.

Part No.	Type	Head Diam.	Stem Diam.	Installed Height	O/A Length	Tip Length	Underhead Angle/Radius	Margin	Seat Width
11945-1	Exh.	1.142" 29 mm	.2160" 5.5 mm	Stock	4.043" 102.7 mm	.095"	25° x 11/32"	.065"	.080"
11946-1	Int.	1.339" 34 mm	.2160" 5.5 mm	Stock	4.031" 102.4 mm	.095"	22° x 5/16"	.050"	.075"

Note: 1.) Head diameters are 1 mm larger than stock 2.) Honda V-Tec radius keeper groove.

VALVE SPRINGS/RETAINERS

ORDERING INFORMATION
Part number suffix indicates number of pieces or pairs in one packaging unit. To order less pieces or pairs, use part number with -1 suffix and the quantity desired.

SPORT COMPACT
VALVE SPRINGS

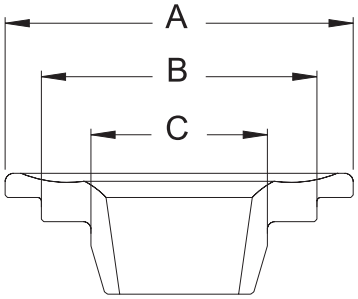
- ✓ Wound from super clean alloy
- ✓ Designed to handle aftermarket camshafts
- ✓ Revs up to 10,000 rpms with Manley titanium retainers

Part No.	Quantity	Application	O.D. / I.D. Outer Inner	Pressures	Coil Bind	Rate (lbs. / in.)	Max. Net Lift	Manley Titanium Retainer
22100-16	16 pcs.	B Series V-Tec Dual Spring	1.175"/.875" .820"/.620"	49 @ 1.350" 155 @ .950"	.805"	252	.480"	23100-16
22110-16	16 pcs.	H22 V-Tec Dual Spring	1.160"/.870" .865"/.660"	89 @ 1.460" 204 @ .950"	.790"	228	.480"	23110-16
22120-16	16 pcs.	B Series Non V-Tec Dual Spring	1.105"/.820" .800"/.627"	56 @ 1.350" 148 @ .950"	.710"	234	.400"	23120-16
22130-24	24 pcs.	Toyota Supra 2JZ 6 cyl. Single Spring	1.045"/.745"	82 @ 1.325" 174 @ .950"	.820"	240	.400"	23130-24

NOTE: Stock installed height on B Series Non V-Tec spring is: Intake - 1.320" / Exhaust - 1.425".

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.	Quantity	Application	Spring	Valve Stem Diameter	Dimensions A	B	C	Step	Height
23000-16	16 pcs.	Fits B18C / B16A / H22	Stock Spring	5.5 mm	1.100"	.830"	.600"	.080"	Stock
23100-16	16 pcs.	Fits B16A / B18C / B17A	Manley 22100	5.5 mm	1.150"	.870"	.610"	.080"	Stock
23110-16	16 pcs.	Fits H22 V-Tec	Manley 22110	5.5 mm	1.150"	.870"	.610"	.080"	+.060"
23120-16	16 pcs.	Fits B18A / B (Non V-Tec)	Manley 22120	6.5 mm	1.100"	.805"	.600"	.080"	Stock
23130-24	24 pcs.	Fits Toyota Supra 2JZ	Manley 22130	6.0 mm	1.050"	.745"	.515"	.100"	Stock

SPORT COMPACT
VALVE SPRING and RETAINER KITS

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

Part No.	Quantity	Application	Max. Net Lift	Spring No.	Retainer No.
26100	1 kit	B Series V-Tec	.480"	22100	23100
26110	1 kit	H22 V-Tec	.480"	22110	23110
26120	1 kit	B Series Non V-Tec	.400"	22120	23120
26130	1 kit	Toyota Supra 2JZ 6 cyl.	.400"	22130	23130

SPORT COMPACT
VALVE LOCKS

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

Part No.	Quantity	Description	Angle	Groove Type	Valve Stem
13010-8	8 pr.	Honda / Acura	7°	Bead Loc®	5.5 mm
13012-8	8 pr.	Nissan	6°	Bead Loc®	6.0 mm
13014-8	8 pr.	Toyota	6°	Bead Loc®	6.0 mm

NOTE: Valve locks are sold in sets of 8 pairs. For 16 valve engines, you must order 2 sets of locks. For 24 valve engines, you must order 3 sets of locks.

SPORT COMPACT
WEAR CAPS

- ✓ 4140 alloy steel
- ✓ Manufactured in our own CNC turning centers
- ✓ Special heat treatment
- ✓ A must have with titanium valves

Part No.	Quantity	Description	Minimum Tip
42263-8	8 pcs.	.2160" stem valves (5.5 mm)	.095"
42264-8	8 pcs.	.2360" stem valves (6.0 mm)	.095"

ORDERING INFORMATION
Part number suffix indicates number of pieces or pairs in one packaging unit. To order less pieces or pairs, use part number with -1 suffix and the quantity desired.

HONDA / ACURA

PRO SERIES "I" BEAM RODS
LIGHTWEIGHT DESIGN

- ✓ Forged from 4340 aircraft quality vacuum degassed material
- ✓ Manufactured in our own CNC machining centers
- ✓ Fully machined to produce the lightest and strongest rod possible
- ✓ Shot peened after machining and 100% magnafluxed
- ✓ Cap fasteners are 3/8" ARP 2000 cap screws

Part No.	Description	Center-to Center	Big End Bore	Big End Width	Pin Diam.	Pin Width	Gram Weight
14310-4	Acura Integra 1.6 (D16 1986-93)	5.394"	1.890"	.892"	.747" (19 mm)	.786"	480
14312-4	Integra 1.8 non V-Tec DOHC (B18A / B18B 1990-up)	5.394"	1.890"	.935"	.826" (21 mm)	.786"	496
14314-4	Integra 1.8 V-Tec DOHC (B18C 1994-up)	5.433"	1.890"	.858"	.826" (21 mm)	.786"	472
14315-4	Honda 1.6 V-Tec DOHC (B16A 1992 -up)	5.290"	1.890"	.935"	.827" (21 mm)	.786"	488
14316-4	Honda 1.6 SOHC (D16 Series 1988-up)	5.394"	1.890"	.892"	.748" (19 mm)	.786"	486
14317-4	Honda Prelude 2.2 V-Tec DOHC (H22 1992-up)	5.636"	2.008"	.935"	.866" (22 mm)	.786"	524

HONDA / ACURA

PRO SERIES "I" BEAM RODS
TURBO TUFF DESIGN

- ✓ Forged from 4340 aircraft quality vacuum degassed material
- ✓ Manufactured in our own CNC machining centers
- ✓ Fully machined to produce the lightest and strongest rod possible
- ✓ 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.

Part No.	Description	Center-to Center	Big End Bore	Big End Width	Pin Diam.	Pin Width	Gram Weight
14410-4	Acura Integra 1.6 (D16 1986-93)	5.394"	1.890"	.892"	.747" (19 mm)	.850"	565
14412-4	Integra 1.8 non V-Tec DOHC (B18A / B18B 1990-up)	5.394"	1.890"	.935"	.826" (21 mm)	.850"	581
14414-4	Integra 1.8 V-Tec DOHC (B18C 1994-up)	5.433"	1.890"	.858"	.826" (21 mm)	.850"	547
14415-4	Honda 1.6 V-Tec DOHC (B16A 1992 -up)	5.290"	1.890"	.935"	.827" (21 mm)	.850"	573
14416-4	Honda 1.6 SOHC (D16 Series 1988-up)	5.394"	1.890"	.892"	.748" (19 mm)	.850"	571
14417-4	Honda Prelude 2.2 V-Tec DOHC (H22 1992-up)	5.636"	2.008"	.935"	.866" (22 mm)	.850"	609

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 66 - 69 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.

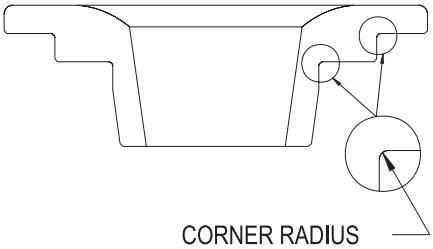
VALVE TRAIN TROUBLE SHOOTING GUIDE

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.

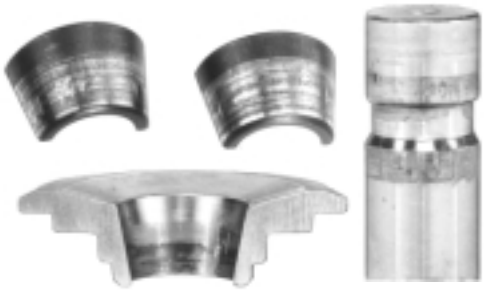
3. RETAINER FIT



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 overstressed 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.

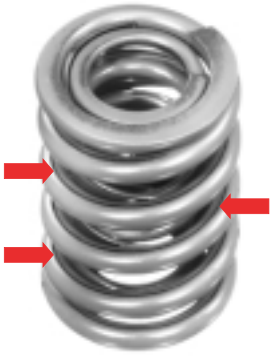
4. VALVE LOCK FIT



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 66 - 69. Also, stiffer pushrods and lighter valves and retainers will be beneficial.

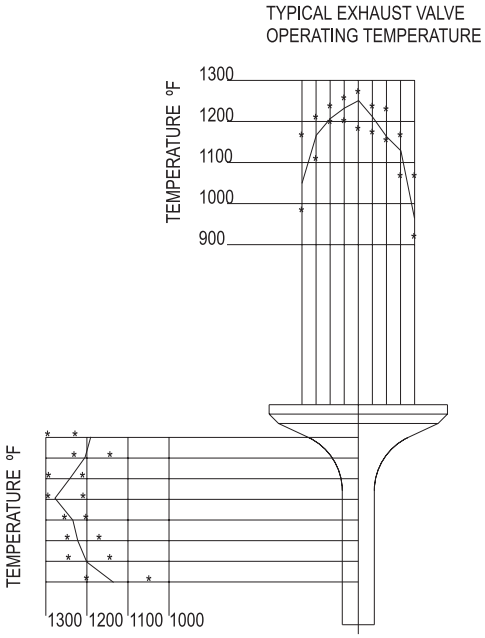
6. SEAT INSERTS

Seat inserts are crucial to the successful control of valve temperature. Valves pass 75% of their heat through their face to the seat and 25% through their stem to the guide. Better thermal conductivity of the seat material is important in allowing the valve to cool itself. Elevated temperatures decrease fatigue life.

Seat concentricity is another important issue. Valve seats distort thermally and mechanically during engine operation, and although the valve does conform to this distortion to a certain extent, the less conformation required by the valve the better. Compression and tensile stresses on the valve as it twists itself around to find the seat will eventually cause problems. Also, a tighter intimacy between the valve and seat will yield a cooler valve and a better sealing engine for more power.

SUGGESTIONS: Pay special attention to seat concentricity. Use beryllium - copper or copper alloy seats for both the intake and the exhaust side for best temperature conductivity.

7. TEMPERATURE PROFILE MAP



Through the use of “temperature check” valves, we have accumulated data on the actual operating temperatures experienced by the valve. These temperatures are not the same as exhaust gas temperatures (EGT’s). Valves typically run 150˚F to 250˚F less than EGT. Valve temperature can vary greatly depending on the type of fuel, combustion chamber design, spark advance, and compression ratio while the EGT remains constant.

The accompanying graphic illustrates normal valve temperatures and exactly where they occur on the valve.

SUGGESTION: The display of elevated temperatures on the valve can be indicative of improper contact with the seat. When valve bounce occurs, seat contact becomes intermittent, disrupting the normal cooling event. Better and constant intimacy between the valve and the seat will lower temperatures, prolong life and improve power. Excellent valve springs improve intimacy and reduce bounce. See pages 66 - 69 of this catalog.

VALVE TRAIN TROUBLE SHOOTING GUIDE

8. 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.