

*Smith Brothers Pushrods*

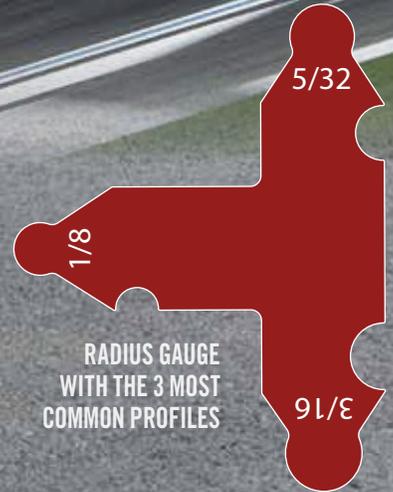


**REDMOND, OREGON**

# WHEN PUSH COMES TO SHOVE...



OVER 90% OF SINGLE SET  
PUSHROD ORDERS SHIP  
WITHIN ONE BUSINESS DAY!



RADIUS GAUGE  
WITH THE 3 MOST  
COMMON PROFILES

## ...LET SMITH BROTHERS PUSHRODS BE A PART OF YOUR SUCCESS!





# TABLE OF CONTENTS

Explanation of terms & measurements . . . . .	2
Graphic explanation of custom part number creation . . . . .	2
Guide to determining custom pushrod part numbers . . . . .	3
One-piece pushrods . . . . .	4-5
Custom pushrods . . . . .	6-9
Tapered pushrods . . . . .	7-8
Aluminum, titanium & solid tool steel pushrods . . . . .	8
Adjustable pushrods . . . . .	9
Length checking pushrods . . . . .	9
Harley Davidson pushrods & fast install kits . . . . .	9
Rocker arm components . . . . .	10-11
Rocker trunnion kits . . . . .	11
Pushrod order form . . . . .	12



# EXPLANATION OF TERMS AND MEASUREMENTS

## OPEN SPRING PRESSURE

There are a few terms used in determining which pushrod would best fit your needs that would be beneficial for you to understand.

One major factor for determining the correct tube diameter and wall thickness is “open spring pressure”. Open spring pressure is the pressure in pounds exerted against the rocker when the valve is in the fully opened position. This pressure is also affected by rocker ratio, lifter type (hydraulic or solid), the angle between the lifter to pushrod and pushrod to rocker and the normal operating RPM of your engine.

Generally we will ask you what your open spring pressure is which you can usually find out from the manufacturer of your valve springs. If they are stock replacement valve springs, you won’t need the spring pressure information. Just let us know they are stock.

## RADIUS OF ENDS

Determining which ball and/or cup you require is also very important. We will quiz you to help us determine what ends you need. Again, if everything you’re using is stock, we can usually determine what you require.

When, as is usual in most cases, after-market lifters and/or rockers are used, the size/type/style of end you need could vary. One way of determining the correct

radius (curve) of end is utilizing a set of gauges called “radius gauges”. Most machine shops have these but very few home hobbyist’s do. One way to determine, on a ball and cup style, whether the ball and cup are the same radius is to take two pushrods that you know are correct and put the ball end of one into the cup end of the other and check the fit. **A complimentary radius gauge with the 3 most common profiles is adhered to the inside back cover of this catalog. Note: your radius may be different.**

In some cases, the best way to get the correct ends for your project is to send us a sample. We will then measure the length and end radius and produce pushrods that are certain to be correct.

## DETERMINING LENGTH

This is one of the hardest measurements to determine. Because of varying valve train geometry, determining the correct length pushrod is a science unto itself.

First, let’s tackle some terminology. There’s overall length, which is the length measured from the extreme end to end. This is from the very end of the ball end to the very end of the other ball end or cup end as the case may be. A couple factors affect this measurement. One being that if the pushrod being measured has oil holes in it then the measurement

could be off by the amount that the machining of the oil hole subtracted from the overall length of the end. This usually doesn’t adversely affect the length depending on the diameter of the hole.

The actual measurement if there were no oil holes in the ends is called the theoretical length. Don’t let this confuse you because the difference is usually very slight. A problem of more significance is when you measure a cup and ball style pushrod. Measuring the overall length of this style can give erroneous information as the cup depth from one manufacturer to another can and does vary by as much as .060 inch. (Read as 60 thousandths of an inch) If you do know the overall length and have a caliper to measure the cup depth then this measurement will work.

The measurement from the bottom of the cup to the end of the ball is called the “effective length”. Knowing this length is more accurate as the cup depth differences won’t be factor. One way to determine effective length is by placing a steel ball (the correct diameter for the cup) into the cup and using a caliper, measure the overall length then subtract the steel ball’s diameter. This will give you the length from the bottom of the cup to the end of the ball.

We’re sure questions will arise so please don’t hesitate to contact us for assistance.

### GRAPHIC EXPLANATION OF CUSTOM PART NUMBER CREATION

<ul style="list-style-type: none"> <li>Non-adjustable (N) or adjustable (A)</li> <li>Heat treated (H) or non-HT (R) or aluminum (A)</li> <li>Tube diameter</li> <li>Wall thickness</li> <li>Oil through (B) or non-oiling (A)</li> <li>Rocker end style</li> <li>Lifter end style</li> </ul> <p><b>NH58A-CB</b></p>	<ul style="list-style-type: none"> <li>Tapered</li> <li>Heat treated (tapered are always heat treated)</li> <li>Tube diameter</li> <li>Wall thickness</li> <li>Single (S) or double (D) taper</li> <li>Oil through (B) or non-oiling (A)</li> <li>Rocker end style</li> <li>Lifter end style</li> </ul> <p><b>TH79SB-BL</b></p>	<ul style="list-style-type: none"> <li>Adjustable</li> <li>Regular Tube (R) non-HT or heat treated (H)</li> <li>Tube diameter</li> <li>Wall thickness</li> <li>Oil through (B) or non-oiling (A)</li> <li>Rocker end style</li> <li>Lifter end style</li> </ul> <p><b>AR34A-AD</b></p>
---	---	--



# GUIDE TO DETERMINING CUSTOM PUSHROD PART NUMBERS

Examples: **NH38A-CB** = 3/8 x .083 Heat Treated 5/32 R Cup & 5/32 R Ball no/oil    **AR54B-AA** = 5/16 x .049 Non-Heat Treated Adjustable 1/8 R Screw & 1/8 R Ball with oil

## PREFIX

### UP TO 400 LBS OPEN SPRING PRESSURE

NR54A**	5/16 x .049 4130 Chromoly Non-Heat Treated
NR54B**	
NR34A	3/8 x .049 4130 Chromoly Non-Heat Treated
NR34B	

### UP TO 500 LBS OPEN SPRING PRESSURE

NH54A	5/16 x .049 4130 Chromoly Heat Treated
NH54B	
NH34A	3/8 x .049 4130 Chromoly Heat Treated
NH34B	

### UP TO 700 LBS OPEN SPRING PRESSURE

NH58A	5/16 x .083 4130 Chromoly Heat Treated
NH58B	
*CN58C2	5/16 x .083 4130 Chromoly 2-PC
NH36A	3/8 x .065 4130 Chromoly Heat Treated
NH36B	
NH76A	7/16 x .065 4130 Chromoly Heat Treated
NH76B	

### OVER 700 LBS OPEN SPRING PRESSURE

NH5116A	5/16 x .116 4130 Chromoly Heat Treated
NH5116B	
*CN5116C2	5/16 x .116 4130 Chromoly 2-PC
NH38A	3/8 x .083 4130 Chromoly Heat Treated
NH38B	
*CN38C2	3/8 x .083 4130 Chromoly 2-PC
NH312A	3/8 x .120 4130 Chromoly Heat Treated
NH312B	
*CN312C2	3/8 x .120 4130 Chromoly 2-PC
NH314A	3/8 x .145 4130 Chromoly Heat Treated
NH314B	
*CN314C2	3/8 x .145 4130 Chromoly 2-PC
NH79A	7/16 x .095 4130 Chromoly Heat Treated
NH79B	
*CN79C2	7/16 x .095 4130 Chromoly 2-PC
NH712A	7/16 x .120 4130 Chromoly Heat Treated
NH712B	
NH716A	7/16 x .165 4130 Chromoly Heat Treated
NH716B	
NH212A	1/2 x .120 4130 Chromoly Heat Treated
NH212B	
NH215A	1/2 x .156 4130 Chromoly Heat Treated
NH215B	
NH218A	1/2 x .188 4130 Chromoly Heat Treated
NH218B	

\*For use w/ guide plates \*\*A=no oil B=w/oil

## SUFFIX Pick 2 (always put the rocker end as first letter)

### 5/16 TUBE ENDS

		w/oil	no oil
A	1/8 R* Ball	X	X
B	5/32 R Ball	X	X
C	5/32 R Cup	X	X
D	3/16 R MW Ball	X	X
E	3/16 R Cup		X
F	5/32 R Ball	0.040	
G	5/32 R Ball	0.030	
H	5/32 R Ball	0.020	
I	3/16 R MW Ball	0.040	
J	11/64 R Ball	X	X
K	1/4 R Ball	X	X
L	5/16 R Ball		X
M	1/2 R Ball		X
N	15/64 R Ball		X
O	9/64 R Cup		X
P	7/32 R Ball	X	X
Q	11/64 R Cup		X
R	11/64 R Cup**		X
S	1/8 R Cup		X
T	13/64 R Cup		X
U	7/64 R Cup		X
V	1/8 R CAD Ball		X
W	9/64 R Ball	X	X
X	13/64 R Ball		X
Y	9/32 R Ball		X
Z	5/32 R Corvair	X	
1	11/128 R Ball		X
2	Flat		X
3	5/16 R Cup		X
4	15/64 R Cup		X

\*R=radius \*\*short cup for Volvo

### 7/16 & 1/2 TUBE ENDS

		w/oil	no oil
A	1/8 R Ball		X
B	5/32 R Ball	X	X
C	5/32 R Cup		X
D	3/16 R MW Ball	X	X
E	3/16 R Cup	X	X
F	5/32 R Ball	0.040	
G	5/32 R TF Cup*		X
H	3/16 R TF Cup*	X	X
I	3/16 R Ball	X	X
J	5/32 R TF Ball*	X	X
K	3/16 R TF Ball*		X
L	5/32 R OSL Ball**	X	
M	9/64 R Cup	X	
N	7/32 R Ball	X	
O	7/32 R Ball		X
P	5/32 R OSL Ball	X	
Q	1/4 R Cup*		X
R	5/16 R Ball*		X
S	5mm R Cup		X
T	5mm R Ball		X
U	5/32 R TF Ball***	X	

\*Top Fuel Ends \*\*OFF-SET Litter End  
\*\*\* Shoulder for 1/2 Tube

### 3/8 TUBE ENDS

		w/oil	no oil
A	1/8 R Ball	X	X
B	5/32 R Ball	X	X
C	5/32 R Cup	X	X
D	3/16 R MW Ball	X	X
E	3/16 R Cup	X	X
F	5/32 R Ball	0.040	
G	5/32 R Ball	0.030	
H	5/32 R Ball	0.020	
I	3/16 R Ball	X	X
J	11/64 R Ball		X
K	1/4 R Ball		X
L	5/16 R Ball	X	X
M	1/2 R Ball		X
N	15/64 R Ball		X
O	9/64 R Cup	X	X
P	7/32 R Ball	X	X
Q	11/64 R Cup		X
R	11/64 R Cup*		X
S	5/32 R Cup	0.040	
T	3/16 R Cup	0.040	
U	1/4 R Cup		X
V	15/64 R Cup	X	X
W	5/16 R Cup		X
X	15/64 R PH Ball**		X
Y	11/64 R MW Ball		X
Z	1/2 R MM Ball***		X
1	9/32 R Cup		X
2	7/32 R Cup		X
3	6mm R Cup	X	
4	29/64 R Ball		X
5	5mm R Cup		X
6	5mm R Ball		X
7	7/16 R Ball		X

\*short cup for Volvo \*\*Harley Pan Head  
\*\*\*Minneapolis Moline

### ADJUSTABLE ENDS

		w/oil	no oil
A	1/8 R Screw	X	X
B	5/32 R Screw	X	X
C	11/64 R Screw		X
D	3/16 R Screw	X	X
E	5/32 R Screw*		X
F	5/32 R Screw**	X	X
G	5/32 R Cup Screw		X
H	Flat Screw		X
I	1/8 R Screw***		X

\*Early Olds \*\*5/16 Hex \*\*\*5/16 thread  
For adjustable rods, change the prefix to AR or AH.

Lengths are to be specified and are not part number specific. On cup & ball style rods, let us know if the length is to the top of the cup (OA)=Overall or to the inside of the cup (EL)=Effective.



# ONE AND TWO PIECE PUSHRODS

## One and two piece pushrods

PART #	DESCRIPTION	RACER NET
581-(Size)	<b>5/16 X .083 One Piece</b> (guideplate compatible) Add Size From 6" To 10" Every .050 Example 581-7850	7.85
581S-(Size)	<b>5/16 X .083 One Piece W/Shaft Rocker Ball 1/end</b> (guideplate compatible) Add Size From 6" To 10" Every .050 Example 581S-7850 (We carry limited sizes pre-made)	8.70
581R-(Size)	<b>5/16 X .083 One Piece W/.040 Oil Restrictor</b> (guideplate compatible) Add Size From 6" To 10" Every .050 Example 581R-7850	10.30
5116-(Size)	<b>5/16 X .116 One Piece W/Shaft Rocker Ball 1/end</b> (guideplate compatible) Add Size From 6" To 10" Every .050 Example 5116-7850	11.15
381-(Size)	<b>3/8 X .083 One Piece</b> (guideplate compatible) Add Size From 7" To 11" Every .050 Example 381-7850	9.60
381S-(Size)	<b>3/8 X .083 One Piece W/Shaft Rocker Ball 1/end</b> (guideplate compatible) Add Size From 7" To 11" Every .050 Example 381S-7850 (We carry limited sizes pre-made)	10.85
381R-(Size)	<b>3/8 X .083 One Piece W/.040 Oil Restrictor</b> (guideplate compatible) Add Size From 7" To 11" Every .050 Example 381R-7850 (Stocked in most popular sizes)	12.50
3121S-(Size)	<b>3/8 X .120 One Piece W/Shaft Rocker Ball 1/end</b> (guideplate compatible) Add Size From 7" To 11" Every .050 Example 3121S-9500 (We carry limited sizes pre-made)	15.10
3141S-(Size)	<b>3/8 X .145 One Piece W/Shaft Rocker Ball 1/end</b> (guideplate compatible) Add Size From 7" To 11" Every .050 Example 3141S-9500 (We carry limited sizes pre-made)	16.60
791GP-(Size)	<b>7/16 X .095 One Piece</b> (guideplate compatible) Add Size To Part Number Example 791GP-9250	18.05
791S-(Size)	<b>7/16 X .095 One Piece W/Shaft Rocker Ball 1/end</b> (Won't work with guideplates) Add Size To Part Number Example 791S-9250 (We carry limited sizes pre-made)	18.05
7121GP-(Size)	<b>7/16 X .120 One Piece</b> (guideplate compatible) Add Size To Part Number Example 7121GP-9250 (We carry limited sizes pre-made)	20.05
7121S-(Size)	<b>7/16 X .120 One Piece W/Shaft Rocker Ball 1/end</b> (Won't work with guideplates) Add Size To Part Number Example 7121S-9250 (We carry limited sizes pre-made)	20.05
7161GP-(Size)	<b>7/16 X .165 One Piece</b> (guideplate compatible) Add Size To Part Number Example 7161GP-9250 (We carry limited sizes pre-made)	22.70

continued next page



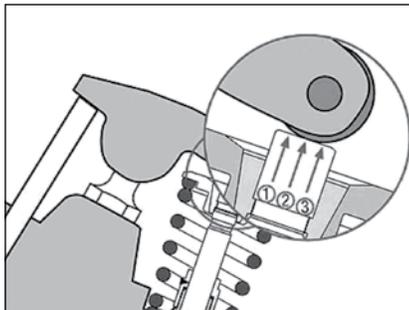
## ONE AND TWO PIECE PUSHRODS

### One and two piece pushrods (continued)

PART #	DESCRIPTION	RACER NET
7161S-(Size)	<b>7/16 X .165 One Piece</b> (Won't work with guideplates) Add Size To Part Number Example 7161S-9250 (We carry limited sizes pre-made)	22.70
12121S-(Size)	<b>1/2 X .120 One Piece</b> (Won't work with guideplates) Add Size To Part Number Example 12121S-9250 (We carry limited sizes pre-made)	24.50
12151S-(Size)	<b>1/2 X .156 One Piece</b> (Won't work with guideplates) Add Size To Part Number Example 12151S-9250 (We carry limited sizes pre-made)	29.45
12181S-(Size)	<b>1/2 X .188 One Piece</b> (Won't work with guideplates) Add Size To Part Number Example 12181S-9250 (We carry limited sizes pre-made)	34.45
9181S-(Size)	<b>9/16 X .188 One Piece</b> (Won't work with guideplates) Add Size To Part Number Example 9181S-9250 (We carry limited sizes pre-made)	40.80

### Custom Length guide plate compatible 2 piece

PART #	DESCRIPTION	OIL HOLE	RACER NET
CN58C2	NA NIT 5/16 X .083 Ball & Ball	Yes	12.85
CN5116C2	NA NIT 5/16 X .116 Ball & Ball	Yes	17.15
CN38C2	NA NIT 3/8 X .083 Ball & Ball	Yes	14.95
CN312C2	NA NIT 3/8 X .120 Ball & Ball	Yes	20.65
CN314C2	NA NIT 3/8 X .145 Ball & Ball	Yes	23.15
CN79C2	NA NIT 7/16 X .095 Ball & Ball	Yes	21.00
CN712C2	NA NIT 7/16 X .120 Ball & Ball	Yes	23.15
CN716C2	NA NIT 7/16 X .165 Ball & Ball	Yes	27.80



- 1-Intake side limit
- 2-Center of stem
- 3-Exhaust side limit

With stud mounted rocker systems, pushrod length can be adjusted to locate the rocker to valve stem contact point. You should try to get the contact point to where it stays in the center third of the valve stem through the full range of travel.



# CUSTOM SMITH BROS. PUSHRODS

## Custom

PART #	DESCRIPTION		OIL HOLE	RACER NET	
<b>REGULAR 4130 for up to 400 lbs open spring pressure</b>					
NR54A	NA REG 5/16 X .049 Ball/Cup & Ball	5/16	No	8.65	
NR54B	NA REG 5/16 X .049 Ball/Cup & Ball		Yes	9.25	
NR34A	NA REG 3/8 X .049 Ball/Cup & Ball	3/8	No	7.80	
NR34B	NA REG 3/8 X .049 Ball/Cup & Ball		Yes	8.40	
<b>HEAT TREATED 4130 for up to 500 lbs open spring pressure</b>					
NH54A	NA HT 5/16 X .049 Ball/Cup & Ball	5/16	No	10.50	
NH54B	NA HT 5/16 X .049 Ball/Cup & Ball		Yes	11.10	
NH34A	NA HT 3/8 X .049 Ball/Cup & Ball	3/8	No	10.40	
NH34B	NA HT 3/8 X .049 Ball/Cup & Ball		Yes	10.90	
<b>HEAT TREATED 4130 FOR UP TO 700 lbs open spring pressure</b>					
NH58A	NA HT 5/16 X .083 Ball/Cup & Ball	5/16	No	11.95	
NH58B	NA HT 5/16 X .083 Ball/Cup & Ball		Yes	12.55	
NH36A	NA HT 3/8 X .065 Ball/Cup & Ball	3/8	No	13.00	
NH36B	NA HT 3/8 X .065 Ball/Cup & Ball		Yes	13.60	
NH76A	NA HT 7/16 X .065 Ball/Cup & Ball	7/16	No	14.40	
NH76B	NA HT 7/16 X .065 Ball/Cup & Ball		Yes	15.00	
<b>HEAT TREATED 4130 Chromoly for extreme spring pressures</b>					
NH5116A	NA HT 5/16 X .116 Ball/Cup & Ball	5/16	No	15.05	
NH5116B	NA HT 5/16 X .116 Ball/Cup & Ball		Yes	15.60	
NH38A	NA HT 3/8 X .083 Ball/Cup & Ball	3/8	No	14.45	
NH38B	NA HT 3/8 X .083 Ball/Cup & Ball		Yes	15.05	
NH312A	NA HT 3/8 X .120 Ball/Cup & Ball		No	16.30	
NH312B	NA HT 3/8 X .120 Ball/Cup & Ball		Yes	16.90	
NH314A	NA HT 3/8 X .145 Ball/Cup & Ball		No	18.10	
NH314B	NA HT 3/8 X .145 Ball/Cup & Ball		Yes	18.70	
NH79A	NA HT 7/16 X .095 Ball/Cup & Ball		7/16	No	17.30
NH79B	NA HT 7/16 X .095 Ball/Cup & Ball			Yes	17.95
NH712A	NA HT 7/16 X .120 Ball/Cup & Ball	7/16	No	19.70	
NH712B	NA HT 7/16 X .120 Ball/Cup & Ball		Yes	20.20	
NH716A	NA HT 7/16 X .165 Ball/Cup & Ball	7/16	No	24.55	
NH716B	NA HT 7/16 X .165 Ball/Cup & Ball		Yes	25.20	
NH212A	NA HT 1/2 X .120 Ball/Cup & Ball	1/2	No	23.05	
NH212B	NA HT 1/2 X .120 Ball/Cup & Ball		Yes	23.65	

continued next page



## CUSTOM SMITH BROS. PUSHRODS (continued)

PART #	DESCRIPTION		OIL HOLE	RACER NET
<b>HEAT TREATED 4130 Chromoly for extreme spring pressures (continued)</b>				
NH215A	NA HT 1/2 X .156 Ball/Cup & Ball		No	24.90
NH215B	NA HT 1/2 X .156 Ball/Cup & Ball	1/2	Yes	25.50
NH218A	NA HT 1/2 X .188 Ball/Cup & Ball		No	34.30
NH218B	NA HT 1/2 X .188 Ball/Cup & Ball		Yes	34.90
NH918A	NA HT 9/16 X .188 Ball/Cup & Ball	9/16	No	34.70
NH918B	NA HT 9/16 X .188 Ball/Cup & Ball		Yes	35.30
NH5818A	NA HT 5/8 X .188 Ball/Cup & Ball	5/8	No	36.00
NH5818B	NA HT 5/8 X .188 Ball/Cup & Ball		Yes	36.60

TAPERED PUSHRODS			OIL HOLE	RACER NET
<b>TAPERED 3/8 Taper to 5/16 Pushrods</b>				
TH38SA	3/8 X .083 Single Taper to 5/16		No	21.60
TH38DA	3/8 X .083 Dual Taper to 5/16	.083	No	21.60
TH38SB	3/8 X .083 Single Taper to 5/16		Yes	22.20
TH38DB	3/8 X .083 Dual Taper to 5/16		Yes	22.20
TH312SA	3/8 X .120 Single Taper to 5/16		No	26.75
TH312DA	3/8 X .120 Dual Taper to 5/16	.120	No	26.75
TH312SB	3/8 X .120 Single Taper to 5/16		Yes	27.35
TH312DB	3/8 X .120 Dual Taper to 5/16		Yes	27.35
TH314SA	3/8 X .145 Single Taper to 5/16		No	29.50
TH314DA	3/8 X .145 Dual Taper to 5/16	.145	No	29.50
TH314SB	3/8 X .145 Single Taper to 5/16		Yes	30.10
TH314DB	3/8 X .145 Dual Taper to 5/16		Yes	30.10

<b>7/16 Taper to 3/8 Pushrods</b>				
TH79SA	7/16 X .095 Single Taper to 3/8		No	27.85
TH79DA	7/16 X .095 Dual Taper to 3/8	.095	No	27.85
TH79SB	7/16 X .095 Single Taper to 3/8		Yes	28.45
TH79DB	7/16 X .095 Dual Taper to 3/8		Yes	28.45
TH712SA	7/16 X .120 Single Taper to 3/8		No	28.80
TH712DA	7/16 X .120 Dual Taper to 3/8	.120	No	28.80
TH712SB	7/16 X .120 Single Taper to 3/8		Yes	29.40
TH712DB	7/16 X .120 Dual Taper to 3/8		Yes	29.40
TH716SA	7/16 X .165 Single Taper to 3/8		No	31.70
TH716DA	7/16 X .165 Dual Taper to 3/8	.165	No	31.70
TH716SB	7/16 X .165 Single Taper to 3/8		Yes	32.30
TH716DB	7/16 X .165 Dual Taper to 3/8		Yes	32.30

*continued next page*

# CUSTOM SMITH BROS. PUSHRODS (continued)

PART #	DESCRIPTION	OIL HOLE	RACER NET
<b>1/2 Taper to 7/16 or 3/8 Pushrods</b>			
TH212SA	1/2 X .120 Single Taper to 7/16 or 3/8	No	29.50
TH212DA	1/2 X .120 Dual Taper to 7/16 or 3/8	No	29.50
TH212SB	1/2 X .120 Single Taper to 7/16 or 3/8	Yes	30.10
TH212DB	1/2 X .120 Dual Taper to 7/16 or 3/8	Yes	30.10
TH215SA	1/2 X .156 Single Taper to 7/16 or 3/8	No	35.05
TH215DA	1/2 X .156 Dual Taper to 7/16 or 3/8	No	35.05
TH215SB	1/2 X .156 Single Taper to 7/16 or 3/8	Yes	35.65
TH215DB	1/2 X .156 Dual Taper to 7/16 or 3/8	Yes	35.65
TH218SA	1/2 X .188 Single Taper to 7/16 or 3/8	No	38.95
TH218DA	1/2 X .188 Dual Taper to 7/16 or 3/8	No	38.95
TH218SB	1/2 X .188 Single Taper to 7/16 or 3/8	Yes	39.55
TH218DB	1/2 X .188 Dual Taper to 7/16 or 3/8	Yes	39.55
<b>9/16 Taper to 1/2 or 7/16 Pushrods</b>			
TH918SA	9/16 X .188 Single Taper to 1/2 or 7/16	No	42.50
TH918DA	9/16 X .188 Dual Taper to 1/2 or 7/16	No	42.50
TH918SB	9/16 X .188 Single Taper to 1/2 or 7/16	Yes	43.10
TH918DB	9/16 X .188 Dual Taper to 1/2 or 7/16	Yes	43.10
<b>5/8 Taper to 1/2 or 7/16 Pushrods</b>			
TH5818SA	5/8 X .188 Single Taper to 1/2 or 7/16	No	46.00
TH5818DA	5/8 X .188 Dual Taper to 1/2 or 7/16	No	46.00
TH5818SB	5/8 X .188 Single Taper to 1/2 or 7/16	Yes	46.60
TH5818DB	5/8 X .188 Dual Taper to 1/2 or 7/16	Yes	46.60
<i>NOTE: We carry a selection of tool steel ends for those applications that may require them. Add \$1.80 per end to the price of the pushrod.</i>			
<b>Aluminum 2024 T-3</b>			
NA56A	NA 5/16 X .058 Ball/Cup & Ball	No	12.40
NA56B	NA 5/16 X .058 Ball/Cup & Ball	Yes	12.95
NA39A	NA 3/8 X .090 Ball/Cup & Ball	No	14.05
NA39B	NA 3/8 X .090 Ball/Cup & Ball	Yes	14.60
<b>Titanium 3AL 2.5V</b>			
NT34A	NA 3/8 X .042 Ball/Cup & Ball	No	37.10
NT34B	NA 3/8 X .042 Ball/Cup & Ball	Yes	37.65
<b>Solid Tool Steel</b>			
TS12-GK	1/2 5/32 R Cup & 3/16 R Ball	No	54.00
TS12-HK	1/2 3/16 R Cup & 3/16 R Ball	No	54.00
TS12ST-GK	1/2 Tapered to 7/16 with 5/32 R Cup & 3/16 R Ball	No	60.00
TS12ST-HK	1/2 Tapered to 7/16 with 3/16 R Cup & 3/16 R Ball	No	60.00



# ADJUSTABLE / HARLEY DAVIDSON

PART #	DESCRIPTION		OIL HOLE	RACER NET
<b>Adjustable</b>				
<b>Regular 4130 Chromoly</b>				
AR54A	Adj Reg 5/16 X .049 Ball & Ball	5/16	No	11.50
AR54B	Adj Reg 5/16 X .049 Ball & Ball		Yes	12.10
AR34A	Adj Reg 3/8 X .049 Ball & Ball	3/8	No	11.20
AR34B	Adj Reg 3/8 X .049 Ball & Ball		Yes	11.90
<b>Heat Treated 4130 Chromoly</b>				
AH34A	Adj HT 3/8 X .049 Ball & Ball	3/8	No	12.90
AH34B	Adj HT 3/8 X .049 Ball & Ball		Yes	13.45
AH36A	Adj HT 3/8 X .065 Ball & Ball		No	19.00
AH36B	Adj HT 3/8 X .065 Ball & Ball		Yes	19.55
AH38A	Adj HT 3/8 X .083 Ball & Ball		No	20.95
AH38B	Adj HT 3/8 X .083 Ball & Ball		Yes	21.55
AH312A	Adj HT 3/8 X .120 Ball & Ball		No	24.05
AH312B	Adj HT 3/8 X .120 Ball & Ball		Yes	24.60
AH314A	Adj HT 3/8 X .145 Ball & Ball		No	31.10
AH314B	Adj HT 3/8 X .145 Ball & Ball		Yes	31.70
AH76A	Adj HT 7/16 X .065 Ball & Ball	7/16	No	20.80
AH76B	Adj HT 7/16 X .065 Ball & Ball		Yes	21.35
AH79A	Adj HT 7/16 X .095 Ball & Ball		No	29.15
AH79B	Adj HT 7/16 X .095 Ball & Ball		Yes	29.80
<b>Adjustable Length Checker Pushrods</b>				
ALC5	5/16 Ball/Cup & Ball		NA	15.50
ALC3	3/8 Ball/Cup & Ball		NA	14.65
LC5A-K	5/16 Aluminum Length Checker Kit 6"–12" Range		No	66.75
<b>Harley Davidson</b>				
<b>Adjustable Pushrods</b>				
AHD36B	Adj HT Harley 3/8 X .065 5/16 X 32 TPI		Yes	19.70
AHD38B	Adj HT Harley 3/8 X .083 3/8 X 24 TPI		Yes	21.25
AHD312B	Adj HT Harley 3/8 X .120 3/8 X 24 TPI		Yes	22.10
AHD314B	Adj HT Harley 3/8 X .145 3/8 X 24 TPI		Yes	22.90
<b>Harley Davidson Tapered Adjustable Pushrods</b>				
AHD79SB-EVO	Adj HT Evo 7/16 X .095 Single Taper 5/16 X 32 TPI		Yes	34.30
AHD79SB-EVO-FI	Adj HT Evo Fast Install 7/16 X .095 Taper 5/16 X 32 TPI		Yes	34.30
AHD79SB-TC	Adj HT Twin Cam 7/16 X .095 Single Taper 5/16 X 32 TPI		Yes	34.30
AHD79SB-TC-FI	Adj HT Twin Cam Fast Install 7/16 X .095 Single Taper 5/16 X 32 TPI		Yes	34.30
AHD712SB	Adj HT Evo 7/16 X .120 Single Taper 3/8 X 24 TPI		Yes	37.80
AHD716SB	Adj HT 7/16 X .165 Single Taper 3/8 X 24 TPI		Yes	45.35
<b>Harley Davidson Fast Install Kits</b>				
AHD313B-TC-KIT	Twin Cam EZ Install Kit 3/8 X .134 7/16 X 20 TPI – Also available for M8		Yes	126.80
PC-BLK-KIT	Harley Pushrod Cover Kit for TC & M8 (Set of 4 Assy), Billet Alum		NA	115.05
AHD79SB-EVOFI-K	Adj HT Evo Fast Install 7/16 X .095 Single Taper 5/16 X 32 TPI		Yes	146.20
AHD79SB-TCFI-K	Adj HT Twin Cam 7/16 X .095 Single Taper 5/16 X 32 TPI		Yes	146.20



## ROCKER ARM COMPONENTS

PART #	DESCRIPTION	OIL HOLE	RACER NET
<b>Rocker Arm Screws</b>			
BAS5516A-125	5/16 x 24 TPI Ball Rocker Screw 5/32 Radius 1.250 Long	No	4.60
BAS9516B-119	5/16 x 24 TPI Ball Rocker Screw 9/64 Radius 1.190 Long	Yes	5.35
BAS538A-125	3/8 X 24 TPI Ball Rocker Screw 5/32 Radius 1.250 Long	No	4.60
BAS538B-125	3/8 X 24 TPI Ball Rocker Screw 5/32 Radius 1.250 Long	Yes	5.35
BAS538A-14	3/8 X 24 TPI Ball Rocker Screw 5/32 Radius 1.400 Long	No	4.60
BAS538A-15	3/8 X 24 TPI Ball Rocker Screw 5/32 Radius 1.500 Long	No	4.60
BAS338A-14	3/8 X 24 TPI Ball Rocker Screw 3/16 Radius 1.400 Long	No	4.60
BAS338B-14	3/8 X 24 TPI Ball Rocker Screw 3/16 Radius 1.400 Long	Yes	5.35
BAS338A-15	3/8 X 24 TPI Ball Rocker Screw 3/16 Radius 1.500 Long	No	4.60
BAS5716A-14	7/16 X 20 TPI Ball Rocker Screw 5/32 Radium 1.400 Long	No	5.05
BAS5716A-15	7/16 X 20 TPI Ball Rocker Screw 5/32 Radius 1.500 Long	No	5.05
BAS3716A-14	7/16 X 20 TPI Ball Rocker Screw 3/16 Radius 1.400 Long	No	5.05
BAS3716B-14	7/16 X 20 TPI Ball Rocker Screw 3/16 Radius 1.400 Long	Yes	5.75
BAS3716CB-1225	7/16 X 20 TPI Ball Rocker Screw 3/16 Radius Cross Drilled 1.225 Long	Yes	11.50
BAS3716CB-13-T	7/16 x 20 TPI Ball Rocker Screw 3/16 Radius Cross Drilled 1.300 Long Tool Steel	Yes	20.15
FERAS	3/16 Radius Ball Rocker Screw 1.400 Long Replacement for original FE Ford	No	7.90
CAS5516B-13	5/16 x 24 TPI Cup Rocker Screw 5/32 Radius 1.300 Long	Yes	9.35
CAS538B-1	3/8 X 24 TPI Cup Rocker Screw 5/32 Radius 1.000 Long	Yes	9.35
CAS538B-125	3/8 X 24 TPI Cup Rocker Screw 5/32 Radius Cup 1.250 Long	Yes	9.35
CAS538B-150	3/8 x 24 TPI Cup Rocker Screw 5/32 Radius Cup 1.500 Long	Yes	9.35



# ROCKER ARM COMPONENTS

PART #	DESCRIPTION	OIL HOLE	RACER NET
<b>Jam Nuts</b>			
ASJN516	5/16 X 24 THD Jam Nut 12-pt		2.15
ASJN38	3/8 X 24 THD Jam Nut 12-pt		2.15
ASJN716	7/16 X 20 THD Jam Nut 12-pt		2.15
<b>Rocker Arm Screw Sets</b>			
BAS538A-125-16	16/ea BAS538A-125 Screws & ASJN38 Nuts	No	91.80
BAS538A-14-16	16/ea BAS538A-14 Screws & ASJN38 Nuts	No	91.80
BAS538A-15-16	16/ea BAS538A-15 Screws & ASJN38 Nuts	No	91.80
BAS338A-14-16	16/ea BAS338A-14 Screws & ASJN38 Nuts	No	91.80
BAS338A-15-16	16/ea BAS338A-15 Screws & ASJN38 Nuts	No	91.80
BAS338B-14-16	16/ea BAS338B-14 Screws & ASJN38 Nuts	Yes	102.00
BAS5716A-14-16	16/ea BAS5716A-14 Screws & ASJN716 Nuts	No	97.90
BAS5716A-15-16	16/ea BAS5716A-15 Screws & ASJN716 Nuts	No	97.90
BAS3716A-14-16	16/ea BAS3716A-14 Screws & ASJN716 Nuts	No	97.90
BAS3716B-14-16	16/ea BAS3716B-14 Screws & ASJN716 Nuts	Yes	107.45
CAS5516B-13-16	16/ea CAS5516B-13 Screws & ASJN516 Nuts	Yes	156.40
CAS538B-1-16	16/ea CAS538B-1 Screws & ASJN38 Nuts	Yes	156.40
CAS538B-125-16	16/ea CAS538B-125 Screws & ASJN38 Nuts	Yes	156.40
CAS538B-150-16	16/ea CAS538B-150 Screws & ASJN38 Nuts	Yes	156.40
<b>Rocker Arm Trunnion Kits</b>			
SBLST-KIT	Chevy LS Rocker Trunnion Kit		191.00
SB24V-KIT	Cummins 24 Valve Trunnion Kit		320.00



# PUSHROD ORDER FORM

The following information is required to determine your specific pushrod needs and to process your order for shipment. In certain applications, a sample pushrod may be required to determine the correct dimensions for both length and end type. Custom pushrods are made to order and may be eligible for up to 50% credit, at our discretion.

Name		Date	
Shipping Address			
City		State	Zip
Work Phone	Home Phone	Fax	
Credit Card Number		Expiration Date	CID # (3 digit code on back of card)
Email Address			

Shipping:  UPS Ground  UPS 3-Day  UPS 2-Day  UPS Next Day  Priority Mail (shipped following day)

Engine (Make, Year, Cu. In.)

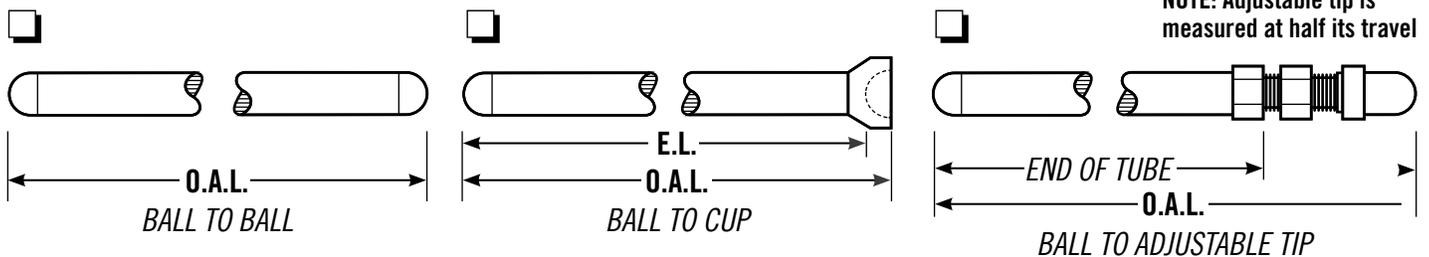
Open Valve Spring Pressure	Rocker Brand / Type	Tube Diameter
Will Guideplates Be Used? <input type="checkbox"/> Yes <input type="checkbox"/> No	Oil Holes In Ends? <input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Straight Wall <input type="checkbox"/> Single Taper <input type="checkbox"/> Double Taper

**Use part number chart on page 2 to determine part number for your application:**

Part # _____	Length _____	<input type="checkbox"/> OA* <input type="checkbox"/> EL**	Qty _____
Part # _____	Length _____	<input type="checkbox"/> OA* <input type="checkbox"/> EL**	Qty _____

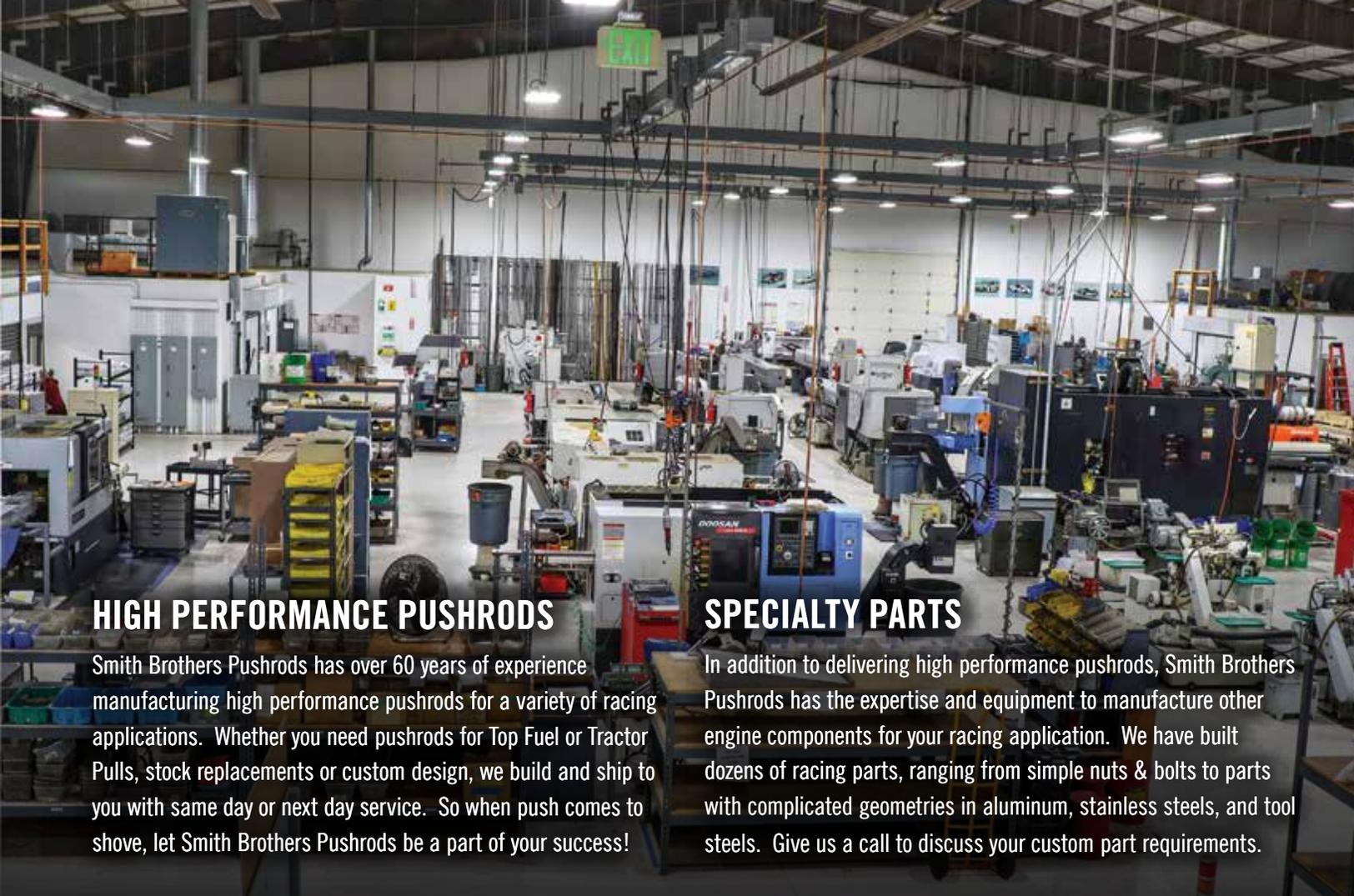
\* OA = Over All (top of cup)  
 \*\* EL = Effective Length (from bottom of cup)

Place "X" in box for your type of pushrod:



Tube diameters are as follows: 5/16 • 3/8 • 7/16 • 1/2 • 9/16 • 5/8 in 4130 Chromoly. Your open spring pressure determines what wall thickness is required. 5/16 and 3/8 2024 T-3 aluminum and 3/8 x.042 titanium are also available.

**SMITH BROTHERS PUSHRODS**  
 800-367-1533 • Fax: 541-389-8840 • Email: smithbrothers@pushrods.net  
 PUSHRODS.NET



## HIGH PERFORMANCE PUSHRODS

Smith Brothers Pushrods has over 60 years of experience manufacturing high performance pushrods for a variety of racing applications. Whether you need pushrods for Top Fuel or Tractor Pulls, stock replacements or custom design, we build and ship to you with same day or next day service. So when push comes to shove, let Smith Brothers Pushrods be a part of your success!

## SPECIALTY PARTS

In addition to delivering high performance pushrods, Smith Brothers Pushrods has the expertise and equipment to manufacture other engine components for your racing application. We have built dozens of racing parts, ranging from simple nuts & bolts to parts with complicated geometries in aluminum, stainless steels, and tool steels. Give us a call to discuss your custom part requirements.

## ORDERING

When placing an order for pushrods, many factors determine the correct pushrod to use. Basic information required at the time of ordering will be, but not limited to, radius of ends, rocker arm and lifter type, open spring pressure, tube diameter, make/model of engine, length and quantity needed. Smith Brothers Pushrods will build the custom pushrods based on the information provided and although we may make suggestions based on our experience, the customer is ultimately responsible to provide the correct information for the order and Smith Brothers Pushrods is in no way responsible for incorrect pushrods unless it is due to a manufacturing error on our part. Orders can be placed by phone, fax or email. Our regular business hours are from 7:00 AM until 5:00 PM (Pacific) Monday-Friday.

## PRICES

Pricing, as reflected in the current price list, is based on common length pushrods. An extra charge will be applied, in cases where the

length is excessive, based on tubing diameter and wall thickness. Further discount is offered for quantity purchases. Inquire at time of order. All prices are subject to change without notice.

## TERMS

All orders are C.O.D., prepaid or credit card unless prior arrangements are made. Any account responsible for a returned check will be placed on C.O.D. money order/cashiers check only and will be charged a \$40.00 returned check fee. Any business open account with an unpaid balance over 30 days will be assessed a 2% finance charge and over 90 days will be placed on C.O.D.

## SHIPPING

Orders will be shipped via ground service unless another shipping method is specified. The carrier has full responsibility for all merchandise once it leaves our facility. We are not responsible for product replacement if your order is mis-routed and delayed. All damage claims must be reported to the carrier at once.

## RETURNS

No returns will be accepted without prior authorization. Any merchandise returned due to manufacturing defect or shipping error will be corrected at no charge. All orders that are custom built are not returnable. All other returns are subject to a 15% restocking fee.

## WARRANTY

Smith Brothers will repair or replace, at our discretion, any item(s) manufactured by our company that is found to be defective in material design or workmanship. The invoice must accompany the merchandise to verify the purchase. We reserve the right to inspect any merchandise returned for misuse, modification or improper installation/application. All merchandise distributed by Smith Brothers is guaranteed in accordance with the manufacturers own terms of warranty. Incidental damage & labor not included in warranty.

# MANUFACTURING THE FINEST PUSHRODS AVAILABLE SINCE 1953

All Smith Brothers products  
are proudly made in the USA.

2895 SW 13th  
Redmond, OR 97756



Whether you need straightwall, tapered, adjustable or one-piece, Smith Brothers will provide them to you with the highest level of customer service.

We have the fastest turnaround time as most orders ship within 24 hours and in many cases orders placed early will often ship the same day!

**Our pushrods maintain the most accurate tolerances and highest quality finishes in the industry.**

- Variety of rocker arm adjusting screws/nuts in stock
- Pushrods available in 1, 2 or 3 piece designs based on application



**1 800 367 1533**

TECH 541 388 8188

FAX 541 389 8840

[WWW.PUSHRODS.NET](http://WWW.PUSHRODS.NET)

