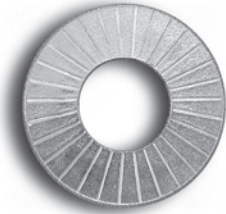


# VSI Valve Spring Inserts

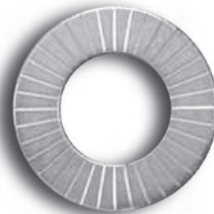
The Original VSI®



*Individually Engineered, Tested, and Proven Superior!*



**.060 Type "A"**  
For Serviceable Springs  
Std. - Copper Color  
HP - Blue, Case Hardened  
**PATENTED SERRATIONS**



**.030 Type "B"**  
For New Springs  
Std. - Silver Color  
HP - Blue, Case Hardened  
**PATENTED SERRATIONS**



**.015 Type "C"**  
For Balancing  
Std. - Black Color  
HP - Blue Tempered  
Spring Steel



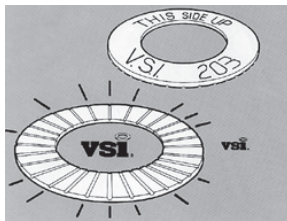
**.060 Cup A500 Series**  
For Step/Flush Spring Pads  
Std. - Copper Color  
HP - Blue, Case Hardened  
Helps Control Spring Walk  
**PATENTED SERRATIONS**

**Remember, Only VSI® Offers The Full Line, Don't Be Fooled By Imitations!**



## Patented Design

For decades, engine builders have been installing VSI inserts/adjusters on all valve jobs. Why? Because they are superior to plain shims. Only VSI has patented heat-retarding serrations. Whether you're a PER or CER (Custom Engine Rebuilder), VSI completes the valve job, building your reputation while doing a complete job for your customer.



**High-Performance Series VSI®** are the preferred valve spring insert when assembling High-Performance cylinder heads. Aluminum heads require the installation of inserts to prevent the valve spring from damaging the aluminum spring seat. Standard shims are unable to handle the stress of racing spring pressures.

Plain shims are NOT designed for the stresses of high valve spring pressure.

**VSI HP Series**  
Corrects & protects. Patented serrations dissipate heat.

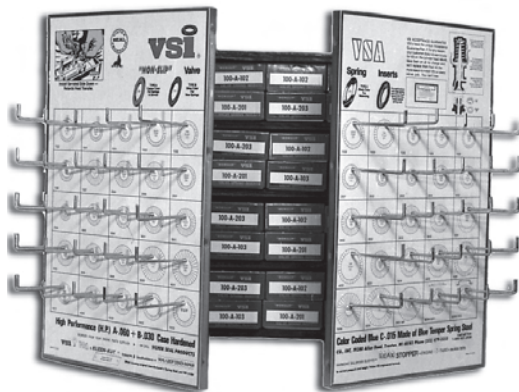
- Patented Heat-Shrinking Serrations.
- Equalizes the Installed Height & Pressure Among Springs.
- Type A (.060) & B (.030) HP Series are Case Hardened.
- Type C (.015) HP Series are Blue Tempered Spring Steel

## Free Cabinet Dispenser

with purchase of 30 box (#20000) or 50 box (#50000) assortment, or order separately (#5000MT)

## 50 Hook Cabinet Dispenser

Easy-To-Store Boxes



24" Wide x 18" High x 4-1/2" Deep

**Part #5000MT**

5 FREE boxes of VSI with every 5000R cabinet.

See Page 2 of Price Sheet.

## 30 Box Assortment

**Part #20000** (30 Boxes Type A & B)

Provides 80% Coverage on Pass. Cars, Trucks, Tractors, & Industrial Engines.

A100	A105	A202	A301	A502
B100	B105	B202	B301	A503
A102	A200	A203	A302	A801
B102	B200	B203	B302	A810
A103	A201	A300	A303	A820
B103	B201	B300	B303	821

## 50 Box Assortment

**Part #50000** (1 Box Ea. - 50 Boxes)

Provides 98% Coverage on Pass. Cars, Trucks, Tractors, & Industrial Engines.

A100	A106	A204	A305	A407
A101	A107	A300	B305	A408
B101	A200	B300	A306	A409
A102	B200	A301	A400	A502
B102	A201	B301	A401	A503
A103	B201	A302	A402	A506
B103	A202	B302	A403	A600
A104	B202	A303	A404	C601HP
A105	A203	B303	A405	A810
B105	B203	A304	A406	821

## Economy-Size Boxes



Save 10%

Add Suffix **RS** to the Part #



# Valve Spring Inserts **VSI**



## VSI "Cup Style" Valve Spring Inserts

Application (Refer to I.D./O.D. for proper fit)	VSI O.D.	Spring Pad O.D.	Spring Pad I.D.	Part #	Type
Same Application as 102 Series	1.542	1.390	1.000	A502(HP)	.060
Same Application as 103 Series	1.640	1.520	1.031	A503(HP)	.060
Same Application as 306 Series	1.650	1.530	0.645	A506(HP)	.060
SB Chevy w/remachined Spring Pad	1.400	1.265	0.821	A505	.060
Crane 1.460 O.D. Spring	1.600	1.475	0.645	A507HP	.060
SB Cylinder Head - Aluminum	1.613	1.470	0.570	A512(HP)	.060
BB Cylinder Head - Aluminum	1.700	1.550	0.570	A514	.060



Outside Cup  
helps  
control  
spring walk

A512/A514  
Style



## VSI "Inside Cup Style" Valve Spring Inserts

Application (Refer to I.D./O.D. for proper fit)	Spring Pad O.D.	Spring Pad I.D.	Part #	Type
Mazda	1.265	0.675	A860	.060
Audi, VW, Dodge	1.280	0.920	A850	.060
Ford, Mercury, Volvo	1.350	0.545	A810	.090
Chrysler 2.6L, Mitsubishi	1.370	0.942	821	.060
Cummins OE#3042745/172034	1.250	0.940	B812	.030



## VSI Special Applications

Application (Refer to I.D./O.D. for proper fit)	Spring Pad O.D.	Spring Pad I.D.	Part #	Type
Detroit Diesel, 92 Series	0.920	0.520	A802	.060
			B802	.030
Toyota	1.170	0.600	A880	.060
Datsun	1.200	0.523	830	.070
Datsun	1.218	0.875	836	.070
Honda	1.250	0.625	B840	.030
Chevrolet, Buick, Cadillac, Pontiac	1.250	0.812	A801	.060
Toyota	1.260	0.590	A881	.060
Toyota	1.335	0.795	883	.050
Chevy Luv	1.355	0.485	805	.070
Chrysler 2.2L, 2.5L	1.360	1.000	A820	.060
			B820	.030
			C820	.015
Toyota	1.385	0.565	882	.070
Ford 351 SVO	1.500	0.562	B603HP	.030
#3309-Diamond H.P. Spring	1.500	0.765	C603HP	.015
			C602HP	.015
Datsun (Set) Outer & Inner	Outer	0.995	831	.070
	Inner	0.490		
Chevy, Chrysler, Ford w/remachined guide	1.640	0.635	A601HP	.060
			B601HP	.030
			C601HP	.015
Caterpillar Md. #D-7 and D-8	1.937	1.250	A600	.060



**We Accept These Major  
Credit Cards**



Note: All 800 Series VSI are Case-Hardened



# VSI Valve Spring Inserts



## VSI Application Chart

AMC (Reference Only)				
Engine	Year	.060	.030	.015
121(2.0L)	1977-79	A201(HP)	B201(HP)	C201(HP)
134(2.2L) F-Head	1950-73	A203(HP)	B203(HP)	C203(HP)
134(2.2L) L-Head	1941-65	A203(HP)	B203(HP)	C203(HP)
151(2.5L) U,H,E,P	1983-96	A201(HP)	B201(HP)	C201(HP)
151(2.5L) Pontiac	1980-83	A201(HP)	B201(HP)	C201(HP)
173(2.8L) Chevrolet	1984-87	A203(HP)	B203(HP)	C203(HP)
196(3.2L) L-Head	1956-65	A101	B101	C101
199(3.3L) OHV	1965-70	A103(HP)	B103(HP)	C103(HP)
225(3.7L)	1966-71	A201(HP)	B201(HP)	C201(HP)
226(3.7L)	1954-65	A300(HP)	B300(HP)	C300(HP)
232(3.8L)	1964-79	A103(HP)	B103(HP)	C103(HP)
258(4.2L)	1971-90	A103(HP)	B103(HP)	C103(HP)
287(4.7L)	1963-66	A302HP	B302(HP)	C302(HP)
290(4.8L)	1966-69	A102(HP)	B102(HP)	C102(HP)
304(5.0L)	1970-83	A102(HP)	B102(HP)	C102(HP)
327(5.4L)	1957-66	A302HP	B302(HP)	C302(HP)
343(5.6L)	1967-69	A102(HP)	B102(HP)	C102(HP)
350(5.7L)	1968-71	A201(HP)	B201(HP)	C201(HP)
360(5.9L) N,P,7(Jeep)	1970-91	A102(HP)	B102(HP)	C102(HP)
390(6.4L)	1968-70	A103(HP)	B103(HP)	C103(HP)
401(6.6L)	1971-76	A103(HP)	B103(HP)	C103(HP)

Audi (Reference Only)				
Engine	Year	A106	B106	C106HP
1471cc(1.5L)	1974	A106	B106	C106HP
1588cc(1.6L)	1975-84	A107(HP)	B107(HP)	C107(HP)
390(6.4L)	1968-70	A103(HP)	B103(HP)	C103(HP)
401(6.6L)	1971-76	A103(HP)	B103(HP)	C103(HP)

Austin (Reference Only)				
Engine	Year	A302HP	B302(HP)	C302(HP)
1798cc(1.8L)	1973-75	A302HP	B302(HP)	C302(HP)

Buick (Reference Only)				
Engine	Year	A801	N/A	N/A
112(1.8L) G,J,O OHC	1982-86	A801	N/A	N/A
121(2.0L) B,P,1 OHV	1983-89	A801	N/A	N/A
151(2.5L) 5,R,U	1980-92	A201(HP)	B201(HP)	C201(HP)
173(2.8L) W,X,Y,Z	1980-90	A201(HP)	B201(HP)	C201(HP)
181(3.0L) E,L	1982-89	A203(HP)	B203(HP)	C203(HP)
196(3.2L)	1978-79	A201(HP)	B201(HP)	C201(HP)
198(3.2L)	1962-63	A201(HP)	B201(HP)	C201(HP)
215(3.5L)	1961-63	A201(HP)	B201(HP)	C201(HP)
225(3.7L)	1964-67	A201(HP)	B201(HP)	C201(HP)
231(3.8L)	1975-97	A201(HP)	B201(HP)	C201(HP)
250(4.1L)	1968-79	A201(HP)	B201(HP)	C201(HP)
252(4.1L)	1980-84	A201(HP)	B201(HP)	C201(HP)
260(4.3L)	1975-76	A303(HP)	B303(HP)	C303(HP)
260(4.3L) Diesel	1982-85	A103(HP)	B103(HP)	C103(HP)
265(4.3L)	1980-81	A203(HP)	B203(HP)	C203(HP)
267(4.4L)	1981-82	A203(HP)	B203(HP)	C203(HP)
300(4.9L)	1964-67	A201(HP)	B201(HP)	C201(HP)
301(4.9L) W,Y	1977-80	A203(HP)	B203(HP)	C203(HP)
305(5.0L)	1977-94	A203(HP)	B203(HP)	C203(HP)
307(5.0L) Y	1980-94	A303(HP)	B303(HP)	C303(HP)
340(5.6L)	1966-67	A201(HP)	B201(HP)	C201(HP)
350(5.7L) H,J,X	1968-74	A201(HP)	B201(HP)	C201(HP)
350(5.7L) H,J,X	1975-77	A203(HP)	B203(HP)	C203(HP)
350(5.7L) H,J,R,X	1977-80	A303(HP)	B303(HP)	C303(HP)
350(5.7L) L	1977-79	A203(HP)	B203(HP)	C203(HP)
350(5.7L) N Diesel	1980-85	A303(HP)	B303(HP)	C303(HP)
364(6.0L) Inner	1957-61	A201(HP)	B201(HP)	C201(HP)
364(6.0L) Outer	1957-61	A100	B100	C100
400(6.6L)	1967-69	A100	B100	C100
401(6.6L) Inner	1959-66	A202(HP)	B202(HP)	C202(HP)
401(6.6L) Outer	1959-66	A100	B100	C100
403(6.6L)	1977-80	A303(HP)	B303(HP)	C303(HP)
425(7.0L) Inner	1963-66	A202(HP)	B202(HP)	C202(HP)
425(7.0L) Outer	1963-66	A100	B100	C100
430(7.1L)	1967-69	A100	B100	C100
455(7.4L)	1970-76	A100	B100	C100

Cadillac (Reference Only)				
Engine	Year	A801	N/A	N/A
112(1.8L) G	1982	A801	N/A	N/A
121(2.0L) 1,B,P	1983-89	A801	N/A	N/A
252(4.1L)	1980-88	A201(HP)	B201(HP)	C201(HP)

Cadillac Cont. (Reference Only)				
Engine	Year	.060	.030	.015
260(4.3L) V6 Diesel	1985	A203(HP)	B203(HP)	C203(HP)
307(5.0L) Y	1980-91	A303(HP)	B303(HP)	C303(HP)
350(5.7L) B,8	1976-80	A303(HP)	B303(HP)	C303(HP)
350(5.7L) N Diesel	1978-85	A303(HP)	B303(HP)	C303(HP)
368(6.0L) 6,9	1980-84	A203(HP)	B203(HP)	C203(HP)
390(6.4L)	1959-63	A203(HP)	B203(HP)	C203(HP)
425(7.0L)	1977-79	A203(HP)	B203(HP)	C203(HP)
429(7.0L)	1964-67	A203(HP)	B203(HP)	C203(HP)
472(7.7L)	1968-74	A203(HP)	B203(HP)	C203(HP)
500(8.0L)	1970-76	A203(HP)	B203(HP)	C203(HP)

Chevrolet (Reference Only)				
Engine	Year	A302HP	B302(HP)	C302(HP)
61(1.0L) Geo	1985-94	A302HP	B302(HP)	C302(HP)
85(1.4L)	1976-77	A302HP	B302(HP)	C302(HP)
98(1.6L) C	1976-88	A302HP	B302(HP)	C302(HP)
111(1.8L) Diesel	1981-86	A801	N/A	N/A
112(1.8L) G	1982	A801	N/A	N/A
121(1.8L) 1,B,P	1983-91	A801	N/A	N/A
140(2.3L)	1971-77	A107(HP)	B107(HP)	C107(HP)
140(2.3L) Corvair	1960	A106	B106	C106HP
145(2.4L)	1961-63	A106	B106	C106HP
151(2.5L)	1977-91	A201(HP)	B201(HP)	C201(HP)
153(2.5L)	1962-70	A203(HP)	B203(HP)	C203(HP)
164(2.7L)	1960-69	A203(HP)	B203(HP)	C203(HP)
173(2.8L) W,X,Y,Z,1	1980-92	A203(HP)	B203(HP)	C203(HP)
194(3.2L)	1962-67	A203(HP)	B203(HP)	C203(HP)
196(3.2L)	1978-81	A201(HP)	B201(HP)	C201(HP)
200(3.3L)	1978-79	A203(HP)	B203(HP)	C203(HP)
229(3.8L)	1980-84	A203(HP)	B203(HP)	C203(HP)
230(3.8L)	1963-70	A203(HP)	B203(HP)	C203(HP)
231(3.8L)	1976-97	A201(HP)	B201(HP)	C201(HP)
235(3.9L)	1950-62	A200(HP)	B200(HP)	C200HP
250(4.1L)	1966-79	A203(HP)	B203(HP)	C203(HP)
262(4.3L) Z	1985-97	A203(HP)	B203(HP)	C203(HP)
265(4.4L)	1955-57	A201(HP)	B201(HP)	C201(HP)
267(4.4L)	1979-82	A203(HP)	B203(HP)	C203(HP)
283(4.6L)	1957-67	A203(HP)	B203(HP)	C203(HP)
302(5.0L)	1967-69	A203(HP)	B203(HP)	C203(HP)
305(5.0L)	1976-97	A203(HP)	B203(HP)	C203(HP)
307(5.0L)	1968-73	A203(HP)	B203(HP)	C203(HP)
327(5.4L)	1962-69	A203(HP)	B203(HP)	C203(HP)
348(5.7L)	1958-61	A200(HP)	B200(HP)	C200HP
350(5.7L)	1967-97	A203(HP)	B203(HP)	C203(HP)
350(5.7L) N Diesel	1980-85	A303(HP)	B303(HP)	C303(HP)
396(6.6L)	1965-70	A303(HP)	B303(HP)	C303(HP)
400(6.6L)	1970-71	A303(HP)	B303(HP)	C303(HP)
400(6.6L) Small Block	1970-76	A203(HP)	B203(HP)	C203(HP)
402(6.6L)	1972	A303(HP)	B303(HP)	C303(HP)
409(6.7L)	1961-65	A103(HP)	B103(HP)	C103(HP)
427(7.0L)	1966-69	A303(HP)	B303(HP)	C303(HP)
454(7.4L)	1970-76	A303(HP)	B303(HP)	C303(HP)

Chevrolet/GMC Truck (Reference Only)				
Engine	Year	A200(HP)	B200(HP)	C200HP
1817cc(1.8L) Chevy Luv	1972-75	A200(HP)	B200(HP)	C200HP
119(1.9L)	1982-85	A801	N/A	N/A
145(2.4L)	1961-63	A106	B106	C106HP
173(2.8L)	1982-94	A203(HP)	B203(HP)	C203(HP)
194(3.2L)	1963-67	A203(HP)	B203(HP)	C203(HP)
229(3.8L)	1980-84	A203(HP)	B203(HP)	C203(HP)
230(3.8L)	1963-69	A203(HP)	B203(HP)	C203(HP)
231(3.8L)	1978-84	A201(HP)	B201(HP)	C201(HP)
235(3.9L)	1941-62	A200(HP)	B200(HP)	C200HP
250(4.1L)	1966-84	A203(HP)	B203(HP)	C203(HP)
261(4.3L)	1954-62	A100	B100	C100
265(4.4L)	1955-57	A201(HP)	B201(HP)	C201(HP)
267(4.4L)	1979-82	A203(HP)	B203(HP)	C203(HP)
283(4.6L)	1957-67	A203(HP)	B203(HP)	C203(HP)
292(4.8L)	1963-91	A203(HP)	B203(HP)	C203(HP)
305(5.0L)	1977-97	A203(HP)	B203(HP)	C203(HP)
305(5.0L) C	1960-75	A403	B403	N/A
327(5.4L)	1962-68	A203(HP)	B203(HP)	C203(HP)
348(5.7L)	1958-65	A200(HP)	B200(HP)	C200HP



# Valve Spring Inserts VSI®



## VSI Application Chart

### Chevrolet/GMC Truck Cont. (Reference Only)

Engine	Year	.060	.030	.015
350(5.7L)	1969-97	A203(HP)	B203(HP)	C203(HP)
366(6.0L)	1966-97	A404	B404	N/A
379(6.2L)	1973-74	A403	B403	N/A
381(6.2L) Diesel C&J	1982-96	A203(HP)	B203(HP)	C203(HP)
396(6.6L)	1968-70	A103(HP)	B103(HP)	C103(HP)
		A404	B404	N/A
400(6.6L) Small Block	1975-80	A203(HP)	B203(HP)	C203(HP)
401(6.6L) M	1966-71	A403	B403	N/A
427(7.0L)	1968-96	A404	B404	N/A
432(7.1L) V6,M	1973-74	A403	B403	N/A
454(7.4L)	1973-97	A203(HP)	B203(HP)	C203(HP)
478(7.8L)	1966-74	A403	B403	N/A
637(10.4L)	1970-72	A404	B404	N/A

### Chrysler (Reference Only)

86(1.4L) J,2,A	1979-84	821	N/A	N/A
98(1.6L) K&Z	1971-90	821	N/A	N/A
105(1.7L)	1978-83	A107(HP)	B107(HP)	C107(HP)
122(2.0L) U	1974-82	821	N/A	N/A
135(2.2L) SOHC	1981-95	A820	B820	C820
156(2.6L) Mits.G54B	1981-89	821	N/A	N/A
170(2.8L)	1960-69	A103(HP)	B103(HP)	C103(HP)
198(3.2L)	1970-74	A103(HP)	B103(HP)	C103(HP)
225(3.7L)	1960-84	A103(HP)	B103(HP)	C103(HP)
230(3.8L)	1951-59	A300(HP)	B300(HP)	C300(HP)
273(4.5L) w/2BBL.	1965-69	A103(HP)	B103(HP)	C103(HP)
273(4.5L) w/4BBL.	1965-69	A102(HP)	B102(HP)	C102(HP)
318(5.2L)	1957-89	A103(HP)	B103(HP)	C103(HP)
340(5.6L)	1968-73	A103(HP)	B103(HP)	C103(HP)
360(5.9L)	1971-80	A102(HP)	B102(HP)	C102(HP)
361(5.9L)	1959-66	A102(HP)	B102(HP)	C102(HP)
		A103(HP)	B103(HP)	C103(HP)
383(6.3L)	1959-66	A102(HP)	B102(HP)	C102(HP)
383(6.3L)	1965-71	A103(HP)	B103(HP)	C103(HP)
400(6.6L)	1972-78	A103(HP)	B103(HP)	C103(HP)
413(6.8L)	1959-65	A102(HP)	B102(HP)	C102(HP)
		A103(HP)	B103(HP)	C103(HP)
426 Wedge Inner	1963-65	A102(HP)	B102(HP)	C102(HP)
426 Wedge Outer	1963-65	A103(HP)	B103(HP)	C103(HP)
440(7.2L)	1966-78	A103(HP)	B103(HP)	C103(HP)

### Dodge Truck (Reference Only)

105(1.7L)	1982-83	A107(HP)	B107(HP)	C107(HP)
122(2.0L)A	1983-88	821	N/A	N/A
156(2.6L)	1978-89	821	N/A	N/A
170(2.8L)	1961-70	A103(HP)	B103(HP)	C103(HP)
198(3.2L)	1970-73	A103(HP)	B103(HP)	C103(HP)
225(3.7L)	1961-91	A103(HP)	B103(HP)	C103(HP)
273(4.5L)	1965-68	A403	B403	N/A
318(5.2L)	1959-94	A403	B403	N/A
360(5.9L)	1970-97	A103(HP)	B103(HP)	C103(HP)
361(5.9L)	1960-77	A103(HP)	B103(HP)	C103(HP)
383(6.3L)	1963-71	A103(HP)	B103(HP)	C103(HP)
413(6.8L)	1960-77	A101	B101	C101
440(7.2L)	1973-79	A403	B403	N/A

### Fiat (Reference Only)

817cc(0.8L)	1968-69	A106	B106	C106HP
843cc(0.8L)	1964-68	A106	B106	C106HP
903cc(0.9L)	1970-73	A106	B106	C106HP
1290cc(1.3L)	1971-81	A106	B106	C106HP
1765cc(1.8L) Inner	1974-81	A204(HP)	B204(HP)	C204(HP)
1765cc(1.8L) Outer	1974-81	A105(HP)	B105(HP)	C105(HP)

### Ford (Reference Only)

98(1.6L) Escort	1981-85	A810	N/A	N/A
116(1.9L) J,K	1985-94	A103(HP)	B103(HP)	C103(HP)
122(2.0L)	1971-74	A105(HP)	B105(HP)	C105(HP)
140(2.3L) OHC	1974-93	A102(HP)	B102(HP)	C102(HP)
144(2.4L)	1960-64	A102(HP)	B102(HP)	C102(HP)
153(2.5L) HSC	1986-90	A103(HP)	B103(HP)	C103(HP)
170(2.8L)	1961-72	A102(HP)	B102(HP)	C102(HP)
171(2.8L)	1974-79	A102(HP)	B102(HP)	C102(HP)
200(3.3L)	1963-83	A102(HP)	B102(HP)	C102(HP)
221(3.6L)	1962-63	A102(HP)	B102(HP)	C102(HP)

### Ford Cont. (Reference Only)

Engine	Year	.060	.030	.015
223(3.7L)	1954-64	A102(HP)	B102(HP)	C102(HP)
232(3.8L)	1982-97	A103(HP)	B103(HP)	C103(HP)
240(4.0L)	1965-72	A102(HP)	B102(HP)	C102(HP)
250(4.1L)	1969-80	A102(HP)	B102(HP)	C102(HP)
255(4.2L)	1980-82	A102(HP)	B102(HP)	C102(HP)
260(4.3L)	1962-65	A102(HP)	B102(HP)	C102(HP)
272(4.5L)	1955-57	A102(HP)	B102(HP)	C102(HP)
289(4.7L)	1963-68	A102(HP)	B102(HP)	C102(HP)
292(4.8L)	1955-62	A102(HP)	B102(HP)	C102(HP)
302(5.0L)	1968-97	A102(HP)	B102(HP)	C102(HP)
312(5.1L)	1956-57	A102(HP)	B102(HP)	C102(HP)
351(5.8L) C,M,W	1970-97	A103(HP)	B103(HP)	C103(HP)
383(6.3L)	1959-60	A403	B403	N/A
390(6.4L)	1961-71	A103(HP)	B103(HP)	C103(HP)
390(6.4L) H/P	1961-62	A306(HP)	B306(HP)	C306(HP)
400(6.6L)	1971-79	A103(HP)	B103(HP)	C103(HP)
406(6.6L) w/single spring	1962	A306(HP)	B306(HP)	C306(HP)
406(6.6L)	1963-65	A103(HP)	B103(HP)	C103(HP)
410(6.7L)	1966-67	A103(HP)	B103(HP)	C103(HP)
427(7.0L)	1963-68	A103(HP)	B103(HP)	C103(HP)
		A104	B104	C104
428(7.0L) C J & S C J	1966-70	A306(HP)	B306(HP)	C306(HP)
429(7.0L)	1968-73	A103(HP)	B103(HP)	C103(HP)
430(7.0L)	1958-65	A403	B403	N/A
460(7.5L)	1972-78	A103(HP)	B103(HP)	C103(HP)

### Ford Truck (Reference Only)

110(1.8L)	1972-79	A300(HP)	B300(HP)	C300(HP)
140(2.3L) OHC	1977-94	A102(HP)	B102(HP)	C102(HP)
144(2.4L)	1961-64	A102(HP)	B102(HP)	C102(HP)
170(2.8L)	1962-72	A102(HP)	B102(HP)	C102(HP)
200(3.3L)	1973-74	A102(HP)	B102(HP)	C102(HP)
215(3.5L)	1952-53	A102(HP)	B102(HP)	C102(HP)
223(3.6L)	1954-64	A102(HP)	B102(HP)	C102(HP)
232(3.8L)	1982-83	A103(HP)	B103(HP)	C103(HP)
240(3.9L)	1965-74	A102(HP)	B102(HP)	C102(HP)
250(4.1L)	1969-74	A102(HP)	B102(HP)	C102(HP)
255(4.2L)	1981-82	A102(HP)	B102(HP)	C102(HP)
262(4.3L)	1961-64	A102(HP)	B102(HP)	C102(HP)
272(4.5L)	1956-58	A102(HP)	B102(HP)	C102(HP)
289(4.7L)	1966-68	A102(HP)	B102(HP)	C102(HP)
292(4.8L)	1958-64	A102(HP)	B102(HP)	C102(HP)
300(4.9L)	1965-96	A103(HP)	B103(HP)	C103(HP)
302(5.0L)	1968-97	A102(HP)	B102(HP)	C102(HP)
330(5.4L)	1964-78	A103(HP)	B103(HP)	C103(HP)
332(5.4L)	1956-63	A103(HP)	B103(HP)	C103(HP)
351(5.8L)	1975-97	A103(HP)	B103(HP)	C103(HP)
352(5.8L)	1965-67	A103(HP)	B103(HP)	C103(HP)
359(5.9L)	1974-78	A103(HP)	B103(HP)	C103(HP)
361(5.9L)	1964-78	A103(HP)	B103(HP)	C103(HP)
389(6.4L)	1975-78	A103(HP)	B103(HP)	C103(HP)
390(6.4L)	1968-76	A103(HP)	B103(HP)	C103(HP)
391(6.4L)	1964-78	A103(HP)	B103(HP)	C103(HP)
400(6.6L)	1977-82	A103(HP)	B103(HP)	C103(HP)
401(6.6L)	1958-75	A103(HP)	B103(HP)	C103(HP)
429(7.0L)	1979-91	A103(HP)	B103(HP)	C103(HP)
460(7.5L)	1973-97	A306(HP)	B306(HP)	C306(HP)
475(7.8L)	1973-79	A103(HP)	B103(HP)	C103(HP)
477(7.9L)	1958-81	A103(HP)	B103(HP)	C103(HP)
534(8.8L)	1958-81	A103(HP)	B103(HP)	C103(HP)

### Honda (Reference Only)

1237cc(1.2L)EB2,EB3	1973-79	A107(HP)	B107(HP)	C107(HP)
1488cc(1.5L)ED3,4,EM1	1975-86	A107(HP)	B107(HP)	C107(HP)
1599cc(1.6L)EF1 Accord	1976-78	A107(HP)	B107(HP)	C107(HP)

### Mazda (Reference Only)

1272cc(1.3L)	1976-79	A107(HP)	B107(HP)	C107(HP)
1415cc(1.4L)	1978-80	A107(HP)	B107(HP)	C107(HP)
1490cc(1.5L)	1977-85	A107(HP)	B107(HP)	C107(HP)
1586cc(1.6L)	1971-77	A203(HP)	B203(HP)	C203(HP)
1796cc(1.8L)	1972-78	A203(HP)	B203(HP)	C203(HP)
1970cc(2.0L)	1979-88	A107(HP)	B107(HP)	C107(HP)



# VSI Valve Spring Inserts



## vsi Application Chart

MG (Reference Only)				
Engine	Year	.060	.030	.015
1798cc(1.8L)	1962-81	A200(HP)	B200(HP)	C200HP

Nissan (Reference Only)				
Engine	Year	.060	.030	.015
1171cc(1.2L) A12	1970-81	A408	B408	N/A
1288cc(1.3L) A13	1973-74	A408	B408	N/A
1397cc(1.4L) A14	1974-82	A408	B408	N/A
1488cc(1.5L) A15	1979-82	A408	B408	N/A
1597cc(1.6L) L16	1969-73	A103(HP)	B103(HP)	C103(HP)
1770cc(1.8L) L18	1972-74	A103(HP)	B103(HP)	C103(HP)
1952cc(2.0L)Z20 Inner	1979-81	A108HP	B108HP	C108HP
1952cc(2.0L)Z20 Outer	1979-81	A103(HP)	B103(HP)	C103(HP)
1952cc(2.0L)L20B Inner	1973-80	A108HP	B108HP	C108HP
1952cc(2.0L)L20B Outer	1973-80	A103(HP)	B103(HP)	C103(HP)
2187cc(2.2L)Z22 Inner	1980-83	A108HP	B108HP	C108HP
2187cc(2.2L)Z22 Outer	1980-83	A103(HP)	B103(HP)	C103(HP)
2393cc(2.4L) L24 Inner	1969-84	A108HP	B108HP	C108HP
2393cc(2.4L) L24 Outer	1969-84	A103(HP)	B103(HP)	C103(HP)
2565cc(2.6L) L26 Inner	1974	A108HP	B108HP	C108HP
2565cc(2.6L) L26 Outer	1974	A103(HP)	B103(HP)	C103(HP)
2753cc(2.8L) L28 Inner	1974-83	A108HP	B108HP	C108HP
2753cc(2.8L) L28 Outer	1974-83	A103(HP)	B103(HP)	C103(HP)

Oldsmobile (Reference Only)				
Engine	Year	.060	.030	.015
112(1.8L) G	1982	A801	N/A	N/A
112(1.8L) J,O OHC	1983-86	A801	N/A	N/A
121(2.0L) B,P,1 OHV	1983-91	A801	N/A	N/A
140(2.3L)	1976-77	A203(HP)	B203(HP)	C203(HP)
151(2.5L) 1,5,9,R,V	1978-92	A201(HP)	B201(HP)	C201(HP)
173(2.8L) W,X,Z	1980-92	A203(HP)	B203(HP)	C203(HP)
181(3.0L) E,L	1982-90	A203(HP)	B203(HP)	C203(HP)
215(3.5L)	1961-63	A303(HP)	B303(HP)	C303(HP)
225(3.7L)	1964-67	A201(HP)	B201(HP)	C201(HP)
231(3.8L)	1975-80	A201(HP)	B201(HP)	C201(HP)
231(3.8L)	1979-80	A203(HP)	B203(HP)	C203(HP)
250(4.1L)	1966-76	A203(HP)	B203(HP)	C203(HP)
252(4.1L)	1980-84	A201(HP)	B201(HP)	C201(HP)
260(4.3L) F,8	1975-82	A303(HP)	B303(HP)	C303(HP)
260(4.3L) Diesel 6 Cyl.	1982-85	A303(HP)	B303(HP)	C303(HP)
260(4.3L) P Diesel 8 Cyl.	1979-00	A303(HP)	B303(HP)	C303(HP)
301(4.9L)	1980-00	A203(HP)	B203(HP)	C203(HP)
305(5.0L)	1977-91	A203(HP)	B203(HP)	C203(HP)
307(5.0L) Y	1980-91	A303(HP)	B303(HP)	C303(HP)
330(5.4L)	1964-67	A303(HP)	B303(HP)	C303(HP)
350(5.7L) G,L,R,X	1968-80	A303(HP)	B303(HP)	C303(HP)
350(5.7L) N Diesel	1978-85	A303(HP)	B303(HP)	C303(HP)
371(7.8L)	1957-60	A303(HP)	B303(HP)	C303(HP)
394(6.5L)	1959-64	A303(HP)	B303(HP)	C303(HP)
400(6.6L)	1965-76	A303(HP)	B303(HP)	C303(HP)
403(6.6L)	1977-79	A303(HP)	B303(HP)	C303(HP)
425(7.0L)	1965-67	A303(HP)	B303(HP)	C303(HP)
455(7.5L)	1968-76	A303(HP)	B303(HP)	C303(HP)

Opel (Reference Only)				
Engine	Year	.060	.030	.015
1817cc(1.8L)	1976-79	A200(HP)	B200(HP)	C200HP
1897cc(1.9L)	1968-75	A200(HP)	B200(HP)	C200HP

Pontiac (Reference Only)				
Engine	Year	.060	.030	.015
98(1.6L) C	1981-93	A302HP	B302(HP)	C302(HP)
111(1.8L) Diesel	1983-86	A801	N/A	N/A
112(1.8L) J,O OHC	1982-86	A801	N/A	N/A
112(1.8L) G	1982	A801	N/A	N/A
121(2.0L) B,P,1 OHV	1983-89	A801	N/A	N/A
140(2.3L)	1973-77	A203(HP)	B203(HP)	C203(HP)
151(2.5L)F,R,U,V,1,2,5,9	1977-94	A201(HP)	B201(HP)	C201(HP)
173(2.8L)L,S,W,X,Z,1,7,9	1980-92	A203(HP)	B203(HP)	C203(HP)
181(3.0L) E,L	1985-90	A203(HP)	B203(HP)	C203(HP)
195(3.2L)	1961-63	A301(HP)	B301(HP)	C301(HP)
215(3.5L)	1961-65	A105(HP)	B105(HP)	C105(HP)
229(3.8L) K,9	1980-83	A203(HP)	B203(HP)	C203(HP)
230(3.8L) OHC w/1BBL.	1966-67	A301(HP)	B301(HP)	C301(HP)
230(3.8L) OHC w/4BBL.	1966-67	A305(HP)	B305(HP)	C305(HP)
231(3.8L) A,B,C,2,3	1976-92	A201(HP)	B201(HP)	C201(HP)
250(4.1L)	1970-76	A203(HP)	B203(HP)	C203(HP)

Pontiac Cont. (Reference Only)				
Engine	Year	.060	.030	.015
250(4.1L) w/1BBL.	1970-74	A103(HP)	B103(HP)	C103(HP)
250(4.1L) OHC w/1BBL.	1968-69	A103(HP)	B103(HP)	C103(HP)
250(4.1L) OHC w/4BBL.	1968-69	A301(HP)	B301(HP)	C301(HP)
252(4.1L)	1982	A201(HP)	B201(HP)	C201(HP)
260(4.3L)	1975-78	A203(HP)	B203(HP)	C203(HP)
260(4.3L) Diesel	1982-85	A203(HP)	B203(HP)	C203(HP)
265(4.3L)	1980-81	A203(HP)	B203(HP)	C203(HP)
301(4.9L) T,W,Y	1977-81	A203(HP)	B203(HP)	C203(HP)
305(5.0L)	1977-91	A203(HP)	B203(HP)	C203(HP)
307(5.0L)	71-72,81	A203(HP)	B203(HP)	C203(HP)
326(5.3L)	1963-67	A301(HP)	B301(HP)	C301(HP)
350(5.7L) L w/2BBL.	1977-79	A100	B100	C100
350(5.7L) L w/4BBL.	1977-79	A303(HP)	B303(HP)	C303(HP)
350(5.7L) N Diesel	1980-85	A303(HP)	B303(HP)	C303(HP)
350(5.7L) P Inner	1968-77	A305(HP)	B305(HP)	C305(HP)
350(5.7L) P Outer	1968-77	A301(HP)	B301(HP)	C301(HP)
350(5.7L) R	1977-80	A303(HP)	B303(HP)	C303(HP)
350(5.7L) X	1975-80	A203(HP)	B203(HP)	C203(HP)
389(6.4L)	1959-66	A301(HP)	B301(HP)	C301(HP)
400(6.6L)	1967-79	A305(HP)	B305(HP)	C305(HP)
403(6.6L)	1977-79	A303(HP)	B303(HP)	C303(HP)
421(6.9L)	1963-66	A301(HP)	B301(HP)	C301(HP)
428(7.0L) Inner	1967-69	A305(HP)	B305(HP)	C305(HP)
428(7.0L) Outer	1967-69	A301(HP)	B301(HP)	C301(HP)
455(7.5L)	1970-76	A305(HP)	B305(HP)	C305(HP)

Subaru (Reference Only)				
Engine	Year	.060	.030	.015
1361cc(1.4L) EA 63	1973-76	A107(HP)	B107(HP)	C107(HP)

Toyota (Reference Only)				
Engine	Year	.060	.030	.015
1166cc(1.2L) 3K,3KC	1968-79	A300(HP)	B300(HP)	C300(HP)
1290cc(1.3L) 4KC,4KE	1980-85	A300(HP)	B300(HP)	C300(HP)
1588cc(1.6L) 2T,2TC	1968-79	A107(HP)	B107(HP)	C107(HP)
1770cc(1.8L) 3TC	1979-83	A107(HP)	B107(HP)	C107(HP)
1838cc(1.8L) Diesel	1983-86	A302HP	B302(HP)	C302(HP)
1858cc(1.9L) 8R,8RC	1969-74	A100	B100	C100
1968cc(2.0L) 18RC	1972-74	A100	B100	C100
1995cc(2.0L) 2SEL	1983-87	A302HP	B302(HP)	C302(HP)
1998cc(2.0L)	1984-88	A302HP	B302(HP)	C302(HP)
2188cc(2.2L) L Diesel	1980-84	A302HP	B302(HP)	C302(HP)
2189cc(2.2L) 20R	1974-83	A302HP	B302(HP)	C302(HP)
2366cc(2.4L) 22R	1981-90	A302HP	B302(HP)	C302(HP)
2367cc(2.4L) 22R Truck	1980-90	A302HP	B302(HP)	C302(HP)
2563cc(2.6L) 4M,4ME	1971-82	A200(HP)	B200(HP)	C200HP
2759cc(2.8L) 5ME,5MGE	1980-84	A200(HP)	B200(HP)	C200HP
3878cc(3.9L) F	1960-75	A302HP	B302(HP)	C302(HP)
4230cc(4.2L) 2F	1975-85	A302HP	B302(HP)	C302(HP)

Triumph (Reference Only)				
Engine	Year	.060	.030	.015
2498cc(2.5L)	1968-76	A106	B106	C106HP
		A107(HP)	B107(HP)	C107(HP)

Volkswagen (Reference Only)				
Engine	Year	.060	.030	.015
1192cc(1.2L)	1942-65	A106	B106	C106HP
1285cc(1.3L)	1966	A105(HP)	B105(HP)	C105(HP)
1493cc(1.5L)	1961-69	A105(HP)	B105(HP)	C105(HP)
1584cc(1.6L)	1966-81	A105(HP)	B105(HP)	C105(HP)
1679cc(1.7L)	1968-81	A105(HP)	B105(HP)	C105(HP)
1780cc(1.8L)	1983-90	A107(HP)	B107(HP)	C107(HP)
1795cc(1.8L)	1974-75	A105(HP)	B105(HP)	C105(HP)
1970cc(2.0L)	1976-83	A107(HP)	B107(HP)	C107(HP)
2144cc(2.2L)	1983-85	A107(HP)	B107(HP)	C107(HP)

Volvo (Reference Only)				
Engine	Year	.060	.030	.015
1780cc(1.8L) B18A,B,D	1962-68	A101	B101	C101
1990cc(2.0L)B20A,B,E,F	1965-75	A101	B101	C101
2127cc(2.1L) B21A,E,F	1976-85	A810	N/A	N/A
2383cc(2.4L) D24,D24T	1981-84	A810	N/A	N/A
2664cc(2.7L) B27,B27F	1976-79	A810	N/A	N/A
2849cc(2.8L) B28F	1980-82	A810	N/A	N/A
2979cc(3.0L)B30A,E,F	1965-75	A101	B101	C101



# Valve Spring Inserts VSI®

Cylinder Head Rebuilding

## VSI Listed By Part #

TYPE A .060 Springs In Service	Type B .030 New Springs	TYPE C .015 Spring Balancing	O.D.	I.D.
A100	B100	C100	1.312	0.954
A101	B101	C101	1.000	0.688
A102(HP)	B102(HP)	C102(HP)	1.360	1.000
A103(HP)	B103(HP)	C103(HP)	1.500	1.031
*	*	C103S	1.500	1.000
A104	B104	C104	1.000	0.765
A105(HP)	B105(HP)	C105(HP)	1.218	0.875
A106	B106	C106HP	1.100	0.719
A107(HP)	B107(HP)	C107(HP)	1.250	0.625
A107S	B107S	C107S	1.250	0.680
A108HP	B108HP	C108HP	0.970	0.445
A109	B109	*	1.440	1.057
A200(HP)	B200(HP)	C200HP	1.360	0.640
A201(HP)	B201(HP)	C201(HP)	1.250	0.875
A202(HP)	B202(HP)	C202(HP)	0.915	0.640
A203(HP)	B203(HP)	C203(HP)	1.250	0.812
A203S	B203S	C203S	1.140	0.812
A204(HP)	B204(HP)	C204(HP)	0.796	0.515
A204S	B204S	C204S	0.760	0.578
A300(HP)	B300(HP)	C300(HP)	1.125	0.719
A301(HP)	B301(HP)	C301(HP)	1.375	0.765
A302HP	B302(HP)	C302(HP)	1.312	0.765
A303(HP)	B303(HP)	C303(HP)	1.480	0.703
A304	B304	*	1.500	1.156
A305(HP)	B305(HP)	C305(HP)	1.437	0.785
A306(HP)	B306(HP)	C306(HP)	1.437	0.645
A306SHP	B306SHP	C306SHP	1.500	0.645
*	B400	*	1.750	0.820
A400S	B400S	*	1.650	1.180
A401	B401	*	1.600	0.820
*	B402	*	1.687	1.281
A403	B403	*	1.375	0.781
A404	B404	*	1.500	0.875
A405	B405	*	1.750	0.890
*	B406	*	1.750	1.328
A407	B407	*	1.156	0.828
A408	B408	*	1.140	0.570
A409	*	*	1.312	0.755
*	B410	*	1.480	0.785
A600	*	*	1.937	1.250
A601HP	B601HP	C601HP	1.640	0.635
*	B602HP	C602HP	1.500	0.765
*	B603HP	C603HP	1.500	0.562

\*N/A

(HP) = Available in High Performance, Add suffix HP to part number, ex.A203HP

## VSI Listed By Outside/Inside Dia.

O.D.	I.D.	TYPE A .060 Springs In Service	Type B .030 New Springs	TYPE C .015 Spring Balancing
0.760	0.578	A204S	B204S	C204S
0.796	0.515	A204(HP)	B204(HP)	C204(HP)
0.915	0.640	A202(HP)	B202(HP)	C202(HP)
0.970	0.445	A108HP	B108HP	C108HP
1.000	0.688	A101	B101	C101
1.000	0.765	A104	B104	C104
1.100	0.719	A106	B106	C106HP
1.125	0.719	A300(HP)	B300(HP)	C300(HP)
1.140	0.570	A408	B408	*
1.140	0.812	A203S	B203S	C203S
1.156	0.828	A407	B407	*
1.218	0.875	A105(HP)	B105(HP)	C105(HP)
1.250	0.625	A107(HP)	B107(HP)	C107(HP)
1.250	0.680	A107S	B107S	C107S
1.250	0.812	A203(HP)	B203(HP)	C203(HP)
1.250	0.875	A201(HP)	B201(HP)	C201(HP)
1.312	0.755	A409	*	*
1.312	0.765	A302HP	B302(HP)	C302(HP)
1.312	0.954	A100	B100	C100
1.360	0.640	A200(HP)	B200(HP)	C200HP
1.360	1.000	A102(HP)	B102(HP)	C102(HP)
1.375	0.765	A301(HP)	B301(HP)	C301(HP)
1.375	0.781	A403	B403	*
1.437	0.645	A306(HP)	B306(HP)	C306(HP)
1.437	0.785	A305(HP)	B305(HP)	C305(HP)
1.440	1.057	A109	B109	*
1.480	0.703	A303(HP)	B303(HP)	C303(HP)
1.480	0.785	*	B410	*
1.500	0.562	*	B603HP	C603HP
1.500	0.645	A306SHP	B306SHP	C306SHP
1.500	0.765	*	B602HP	C602HP
1.500	0.875	A404	B404	*
1.500	1.000	*	*	C103S
1.500	1.031	A103(HP)	B103(HP)	C103(HP)
1.500	1.156	A304	B304	*
1.600	0.820	A401	B401	*
1.640	0.635	A601HP	B601HP	C601HP
1.650	1.180	A400S	B400S	*
1.687	1.281	*	B402	*
1.750	0.820	*	B400	*
1.750	0.890	A405	B405	*
1.750	1.328	*	B406	*
1.937	1.250	A600	*	*

## Box Quantity Legend

### Regular Serrated Steel

Series	Type	Qty.
100 - 200 - 300	A - B - C	100
400 - 500	A - B	50
600 & Specials "S"	A - B - C	25

### A & B High-Perf. Case Hardened; C (HP) Series Blue Tempered Steel

Series	Type	Qty.
100HP - 200HP - 300HP	A - B - C	50
500HP (Cup Style)	A	50
All 600HP Series	A - B - C	25
All 800 Series	A - B	48

### (RS) Rebuilders Bulk Pack - Save 10%

Add "RS" Suffix after Part Number, ex. A102RS

Series	Type	Qty.
100 - 200 - 300 Regular	A - B - C	500
400 - 500 Regular	A - B	250
600 Regular & Specials "S"	A - B - C	125
100HP - 200HP - 300HP	A - B - C	250
500HP Series (Cup Style)	A	250
601HP Series	A - B - C	125
All 800 Series	A - B - C	250