

SPORTSTER®



AV&V Black & Chrome Tulip Extreme Duty Valves (5/16 stem)

These superb valves feature the highest flow level on the market. They are one piece forged from a racing grade stainless steel alloy.

Each valve has a bearing quality hardened tip to prevent premature wear with high-lift cams.

AV&V's 5/16 stem valves also features a 45° angle below the lock groove to facilitate valve seal installation.

Each valve is heat treated with a special process and their stems centerless grinded to a micro finish for longer life.





High Flo	w Valves		AVI	480				
Exhaust								
Head Dia.	Overall Lenght	Stem Dia.	Coating	Tip Length	Groove			
1.480"	4.640"	.3106"	Black nitride	.200"	Single			
	Note							

- 25° back angle tulip
- Sportster® 883 to 1200 conversion
- Seats must be machined deeper and their I.D. bored
- 5/16" stem





High Flow Valves			AVI	485			
Exhaust							
Head Dia.	Overall Lenght	Overall Lenght Stem Dia. Coating Tip Length G					
1.485" 4.560" .3106" Black nitride .200" Single							
Note							

- 25° back angle tulip
- Sportster® 1200 and Buell®
- Also good as stock replacement
- 5/16" stem





High Flow Valves			AVI	580			
Exhaust							
Head Dia.	Overall Lenght	Stem Dia.	Coating	Tip Length	Groove		
1.580"							
Note							

- 25° back angle tulip
- Sportster® 1200, Buell® (fits Thunderstorm)
- 5/16" stem





High Flow Valves			AVI7	20B			
Intake							
Head Dia.	Overall Lenght	Stem Dia.	Stem Dia. Coating Tip Length Groove				
1.720"							
Note							

- 23° back angle tulip
- Sportster® 1200 and Buell®
- Also good as stock replacement
- 5/16" stem







High Flow Valves			AVI	770			
Intake							
Head Dia.	Overall Lenght	Stem Dia.	Coating	Tip Length	Groove		
1.770"	4.480"	.3108"	Black nitride	.200"	Single		
Note							

- 23° back angle tulip 1200 Sportster® & Buell®
- .050" oversize valve 5/16" stem





High Flow Valves			AV	1813			
Intake							
Head Dia.	Overall Lenght	nt Stem Dia. Coating Tip Length Groo					
1.812" 4.485" .3108" Chrome .200" Single							
Note							

- 24° back angle tulip
- Sportster 1200® and Buell® 5/16" stem





High Flow Valves			AV	185 1		
Intake						
Head Dia.	Overall Lenght	Stem Dia.	Coating	Tip Length	Groove	
1.851"						
Note						

- 24° back angle tulip Sportster® 1200 and Buell® Oversize valve
- 5/16" stem





High Flo	w Valves		AVI	720	
Intake					
Head Dia.	Overall Lenght	Stem Dia.	Coating	Tip Length	Groove
1.720"	4.560"	.3108"	Black nitride	.200"	Single
			loto		

- 22° back angle tulip
- Sportster® 883 to 1200 conversion
- Seats must be machined deeper and their I.D. bored
- 5/16" stem

AV&V Black & Chrome Tulip Extreme Duty Valves (7mm stem)

These superb valves feature the highest flow level on the market. They are one piece forged from a racing grade stainless steel alloy.

Each valve has a bearing quality hardened tip to prevent premature wear with high-lift cams.

Each valve is heat treated with a special process and their stems centerless grinded to a micro finish for longer life.





High Flow Valves			AVI48	5-7TGB			
Exhaust							
Head Dia.	Overall Lenght	Stem Dia.	Coating	Tip Length	Groove		
1.485"	4.680" .2755" Black nitride .085" Triple						
Note							

- 23° back angle tulip
- Sportster® 883 to 1200 conversion
- 7MM stem





High Flow Valves			AVI576	5-7TGB		
Exhaust						
Head Dia.	Overall Lenght	Stem Dia. Coating Tip Length Gro				
1.575"	4.620"	.2755"	Black nitride	.085"	Triple	
		N	loto			

- 25° back angle tulip
- 1200 Sportster®, Buell XB9® et XB12®
- Also good as stock replacement
- 7MM stem





High Flow Valves			AVI725	5-7TGB			
Intake							
Head Dia.	Overall Lenght	Stem Dia.	Coating	Tip Length	Groove		
1.725" 4.580" .2757" Black nitride .085" Triple							
Note							

- 23° back angle tulip
- Sportster® 883 to 1200 conversion (2004 and up)
- 7MM stem





High Flow Valves			AVI8II	-7TGB			
Intake							
Head Dia.	Overall Lenght	Stem Dia.	Stem Dia. Coating Tip Length Groove				
1.810" 4.480" .2757" Black nitride .085" Triple							
Note							

- 24° back angle tulip
- 1200 Sportster[®], Buell XB9[®] and XB12[®]
- Also good as stock replacement
- 7MM stem







High Flo	w Valves	AVI85I-7TGB			
		Int	ake		
Head Dia.	Overall Lenght	Stem Dia.	Coating	Tip Length	Groove
1.851"	4.520"	.2757"	Black nitride	.085"	Triple
		1	VIOTA		

- 24° back angle tulip
- 1200 Sportster®, Buell XB9® et XB12®
- .040" Oversize valves
- 7MM stem

AV&V Extreme Duty Replacement Valves

These superb valves are one piece forged from a racing grade stainless steel alloy.

The stems are centerless grinded to a micro finish for longer life.

Our liquid nitriding process creates a valve that is smoother and stronger than traditional O.E.M. or replacement valves.





		AVI	355		
		Exh	aust		
Head Dia.	Overall Lenght	Stem Dia.	Coating	Tip Length	Groove
1.355"	4.635"	.3106"	Black nitride	.200"	Single
NI. L.					

- 23° back angle tulip
- Sportster® 883
- 5/16" stem





AVI485						
		Exh	aust			
Head Dia.	Overall Lenght	Stem Dia.	Coating	Tip Length	Groove	
1.485"	4.560"	.3106"	Black nitride	.200"	Single	
		N	lote			

- 25° back angle tulip
- Sportster® 1200 and Buell®
- 5/16" stem

AV&V Extreme Duty Replacement Valves

These superb valves are one piece forged from a racing grade stainless steel alloy.

Our liquid nitriding process creates a valve that is smoother and stronger than traditional O.E.M. or replacement valves.

The stems are centerless grinded to a micro finish for longer life.

AV&V™ Extreme Duty 5/16" valves also feature a 45° angle below the lock groove to facilitate valve seal installation.





		AVI!	590		
		Int	ake		
Head Dia.	Overall Lenght	Stem Dia.	Coating	Tip Length	Groove
1.590"	4.550"	.3108"	Black nitride	.200"	Single
		١	lote		

- 23° back angle tulip
- Sportster® 883
- 5/16" stem





High Flo	w Valves	AVI720B			
		Int	ake		
Head Dia.	Overall Lenght	Stem Dia.	Coating	Tip Length	Groove
1.720"	4.480"	.3108"	Black nitride	.200"	Single
		N	Jote		

- 23 ° back angle tulip
- 5/16" stem
- Sportster® 1200 and Buell®





High Flo	w Valves	AVI576-7TGB			
		Exh	aust		
Head Dia.	Overall Lenght	Stem Dia.	Coating	Tip Length	Groove
1.575"	4.620"	.2755"	Black nitride	.085"	Triple
		N	lote		

- 25° back angle tulip
- 1200 Sportster®, Buell XB9® and XB12®
- 7MM stem





High Flo	w Valves	AVI8II-7TGB				
		Int	ake			
Head Dia.	Overall Lenght	Stem Dia.	Coating	Tip Length	Groove	
1.810"	4.480"	.2757"	Black nitride	.085"	Triple	
		N	lote			

- 24° back angle tulip
- 1200 Sportster®, Buell XB9® and XB12®
- 7MM stem

AV&V Extreme Duty Manganese Bronze Valve Guides (5/16 valves)



- AV&V's Manganese bronze valve guides are CNC machined. Our alloy allows you to fit both intake and exhaust valves at tighter clearances for better heat dissipation, quieter running and longer engine life.
- Special Hi-temp. Viton O'rings are used to prevent oil infiltration between guide & head.
- Tapered & radiused nose for easier installation and better air flow.
- Unique Super Grip valve seal section : use either OEM style or viton seals.
- Unfinished I.D. ready to be easily finished with AV&V's Carbide reamers. (see reamers section)



O.D.	I.D.	Oversize	Overall Length	Intake	Exhaust
	ŀ	ligh Lift & High	n Flow applicat	tion	
.5625"	.308"	Std	2.100"	VG5600	VG5700
.5635"	.308"	.001"	2.100"	VG5601	VG5701
.5645"	.308"	.002"	2.100"	VG5602	VG5702
.5655"	.308"	.003"	2.100"	VG5603	VG5703
.5665"	.308"	.004"	2.100"	VG5604	VG5704
.5675"	.308"	.005"	2.100"	VG5605	VG5705
.5685"	.308"	.006"	2.100"	VG5606	VG5706
.5725"	.308"	.010"	2.100"	VG5610	VG5710
.5875"	.308"	.025"	2.100"	VG5625	VG5725

- Use with .531" Viton valve seals (V312531).
- Shorter seal area for high lift application.
- Profiled for optimum airflow.



O.D.	I.D.	Oversize	Overall Length	Intake	Exhaust
	F	ligh Lift & High	n Flow applicat	tion	
.5625"	.308"	Std	2.100"	VG5600S	VG5700S
.5630"	.308"	.0005"	2.100"	VG5600-5S	VG5700-5S
.5635"	.308"	.001"	2.100"	VG5601S	VG5701S

- Same guides as above except for seal diameter.
- Use with .421" Viton valve seals (V312421), or O.E. style valve seals (K312420)

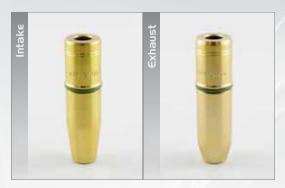


O.D.	I.D.	Oversize	Overall Length	Intake & Exhaust
		Stock re	placement	
.5625"	.308"	Std	2.250"	VG5500
.5635"	.308"	.001"	2.250"	VG5501
.5645"	.308"	.002"	2.250"	VG5502
.5655"	.308"	.003"	2.250"	VG5503
.5665"	.308"	.004"	2.250"	VG5504
.5875"	.308"	.025"	2.250"	VG5525

- Use with .531" O.E. style valve seals (K312530).
- Stock lenght
- Stock replacement

AV&V Extreme Duty Manganese Bronze Valve Guides (7MM valves)

- AV&V's Manganese bronze valve guides are CNC machined. Our alloy allows you to fit both intake and exhaust valves at tighter clearances for better heat dissipation, quieter running and longer engine life.
- Special Hi-temp. Viton O'rings are used to prevent oil infiltration between guide & head.
- Tapered & radiused nose for easier installation and better air flow.
- Unique Super Grip valve seal section : use either OEM style or viton seals.
- Unfinished I.D. ready to be easily finished with AV&V's Carbide reamers. (see reamers section)



O.D.	I.D.	Oversize	Overall Length	Intake	Exhaust
	ŀ	ligh Lift & High	n Flow applicat	tion	
.5625"	.273"	Std	2.040"	VG6600	VG6700
.5635"	.273"	.001"	2.040"	VG6601	VG6701
.5645"	.273"	.002"	2.040"	VG6602	VG6702
.5655"	.273"	.003"	2.040"	VG6603	VG6703
.5665"	.273"	.004"	2.040"	VG6604	VG6704
.5675"	.273"	.005"	2.040"	VG6605	VG6705
.5685"	.273"	.006"	2.040"	VG6606	VG6706
.5725"	.273"	.010"	2.040"	VG6610	VG6710
.5875"	.273"	.025"	2.040"	VG6625	VG6725

- Use with O.E. style Viton valve seals (V7MMOE).
- Profiled for optimum airflow.

AV&V Universal Valve Guides (5/16 and 7MM valves)





Intake & Exhaust	Overall Length	I.D.	O.D.
lepair guides	Universal I		
UVG7MM	2.700"	.273"	.740"
UVG308	2.700"	.308"	.740"

- Maganese bronze alloy
- Ready to be machined





Viton Seals		
Specifi	cations	
Stem Dia.	Seal section O.D.	
.312"	.421"	
Note		

High Temperature viton seal

- For 5/16" valve Twin Cam® / Evo® / Sportster®
- This seal offers more press fit on the guide allowing installation on both Bronze and Cast iron guides.

V312421

We strongly recommend the use of our valve seal driver #VSD312 to install this seal.



Viton Seals		
Specifi	cations	
Stem Dia.	Seal section O.D.	
.312"	.531"	
Note		

High Temperature viton seal

- For 5/16" valve Twin Cam® / Evo® / Sportster®
- This seal offers more press fit on the guide allowing installation on both Bronze and Cast iron guides.

V3I253I

We strongly recommend the use of our valve seal driver #VSD312 to install this seal.

V7MM-I00



Viton Seals Specifications Stem Dia. Seal section O.D. 7MM .562" Note

High Temperature viton seal

- For 7MM valve Twin Cam®, Sportster®
- Replace 7MM O.E. seal when using larger spring & lower collar.
- We strongly recommend the use of our valve seal driver #VSD7MM to install this seal.

V7MM0E-I00



Viton Seals		
Specifications		
Stem Dia.	Seal section O.D.	
7MM	.562"	
Note		
High Temperature viton seal		

- For 7MM valve Twin Cam®, Sportster®
- Replacement for the 7MM O.E. seal.
- The viton and steel sections are bounded together to prevent oil infiltration.



0.E Sty	le Seals		K3I2420
Specif	ications		
Stem Dia.	Seal section O.D.	•	For 5/16" valve, TwinCam®, Evo® and Sportster®
.312"	.421"		
Note			
O.E. Style	metal clad seal		



0.E Style Seals		
Specifications		
Stem Dia.	Seal section O.D.	
.312"	.531"	
Note		

O.E. Style metal clad seal

K3I2530

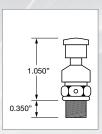
For 5/16" valve, TwinCam, Evo and Sportster

AV&V Compression Release Valves

- AV&V compression release valves are easier to install due to their short thread section.(# JCR10A & JCR10B). You don't need to machine the heads as deep as if you were using O.E.M. style CR'S
- O.E.M. style also available (# JCR10D)

- Ideal for stock replacement
- Also their high-temperature resistant knobs are charcoal colored for a better match with texture black or silver heads.

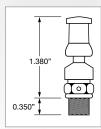




	JCR 10A	
Protrusion	Thread section	Thread
1.050"	.350"	M10x1
Note		

- Mostly Evo's®
- Short protrusion
- Short thread section

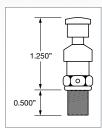




JCR 10B		
Protrusion	Thread section	Thread
1.380"	.350"	M10x1
Note		

- All mostly Twin Cams®
- Short protrusion
- Short thread section





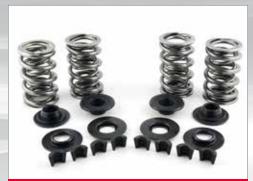
	JCR 10D	
Protrusion	Thread section	Thread
1.250"	.500"	M10x1

Note

- O.E.M. Style
- Long protrusion
- Long thread section

AV&V High Performance Valve Spring kits (5/16 valves)





VSK6005

- Manufactured from ultra clean high silicon/vanadium Kobe alloy wire.
- 1.375" Top retainers for better clearance inside rocker covers.
- Available with chromoly(S) or titanium(T) retainers.



SPRINGS - S600-4			
Max. Recommended Lift	Seat Pi	ressure	Open Pressure (lbs@mm)
.600"	155lbs @ 1.885"		405 LBS @ 1.260"
Coil Bind Height	O.D.	I.D.	Туре
1.080"	1.460"	0.79"	Double springs



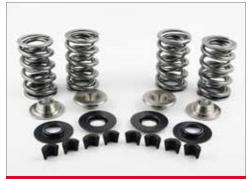
RETAINER - R311CS-4		
Alloy	Traitement	Notes
4140 Chromoly steel	Black Oxyde	Angle 10°



LOWER COLLAR - LSC600-4			
Thickness	O.D.	I.D.	Alloy
.040"	1.418"	.562"	Heat treated steel



VALVE LOCKS - VL311A-8		
Tapper	Notes	
Jumbo 10°		



VSK600T

- Manufactured from ultra clean high silicon/vanadium Kobe alloy wire.
- 1.375" Top retainers for better clearance inside rocker covers.
- Available with chromoly(S) or titanium(T) retainers.



3FKING3 - 3600-4			
Max. Recommended Lift	Seat Pi	ressure	Open Pressure (lbs@mm)
.600"	155lbs @	1.885″	405 LBS @ 1.260"
Coil Bind Height	O.D.	I.D.	Туре
1.080"	1.460"	0.79"	Double springs



RETAINER - R311CT-4		
Alloy	Traitement	Notes
Titanium		Angle 10°



LOWER COLLAR - LSC600-4			
Thickness	O.D.	I.D.	Alloy
.040"	1.418"	.562"	Heat treated steel



VALVE LOCKS - VL311A-8		
Tapper	Notes	
Jumbo 10°		

AV&V High Performance Valve Spring kits (5/16 valves)



VSK650S

- Manufactured from ultra clean high silicon/vanadium Kobe alloy wire.
- 1.375" Top retainers for better clearance inside rocker covers.



SPRINGS - S650-4			
Max. Recommended Lift	Seat Pi	ressure	Open Pressure (lbs@mm)
.650"	185lbs @ 1.860"		460 LBS @ 1.160"
Coil Bind Height	O.D.	I.D.	Туре
1.080"	1.460"	0.79"	Double springs



RETAINER - R311CS-4		
Alloy	Traitement	Notes
4140 Chromoly steel	Black Oxyde	Angle 10°



LOV	VER COLLA	R - LSC600-	4
Thickness	O.D.	I.D.	Alloy
.040"	1.418"	.562"	Heat treated steel



VALVE LOCKS - VL311A-8		
Tapper	Notes	
Jumbo 10°		



VSK650T

- Manufactured from ultra clean high silicon/vanadium Kobe alloy wire.
- 1.375" Top retainers for better clearance inside rocker covers.
- Titanium retainers.



3FKING3 - 3030-4			
Max. Recommended Lift	Seat Pressure		Open Pressure (lbs@mm)
.650"	185lbs @	1.860"	460 LBS @ 1.160"
Coil Bind Height	O.D.	I.D.	Туре
1.080"	1.460"	0.79"	Double springs



RETAINER - R311CT-4		
Alloy	Traitement	Notes
Titanium		Angle 10°



LOWER COLLAR - LSC600-4			
Thickness	O.D.	I.D.	Alloy
.040"	1.418"	.562"	Heat treated steel



VALVE LOCKS - VL311A-8		
Tapper	Notes	
Jumbo 10°		





VSK675T

- Manufactured from ultra clean high silicon/vanadium Kobe alloy wire.
- 1.375" Top retainers for better clearance inside rocker covers.



SPRINGS - S675-4				
Max. Recommended Lift	Seat Pressure		Open Pressure (lbs@mm)	
.675"	185lbs @ 1.860"		460 LBS @ 1.160"	
Coil Bind Height	O.D.	I.D.	Туре	
1.080"	1.460"	0.790"	Double springs	



RETAINER - R311CT-4			
Alloy	Traitement	Notes	
Titanium		Angle 10°	



LOWER COLLAR - LSC600-4			
Thickness	O.D.	I.D.	Alloy
.040"	1.418"	.562"	Heat treated steel



VALVE LOCKS - VL311A-8		
Tapper	Notes	
Jumbo 10°		



VSK6000

- Manufactured from ultra-clean high-silicon Kobe alloy wire, then nano-peened and polished, they are 100% load-sorted to exceed our customers' expectations.
- CNC machined Extreme Duty 9 deg. locks.
- Ultralite Chromoly forged retainers.

NOTE

6000 springs - Small end ID: .650", OD: 1.085" / Large end ID: 1.000", OD: 1.445"

6500 springs - Small end ID: .740", OD: 1.185" /

Large end ID: 1.055", OD: 1.500



SPRINGS - 56000-4				
Max. Recommended Lift	Seat Pressure	Open Pressure (lbs@mm)		
.600"	165lbs @ 1.860"	384 LBS @ 1.250"		
Coil Bind Height	Туре			
1.200"	Beehive springs			



RETAINER - R6000-4			
Alloy	Traitement	Notes	
4140 Chromoly steel	Black Oxyde	Angle 9°	

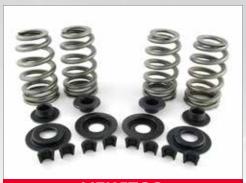


LOWER COLLAR - LSC6000-4			
Thickness	O.D.	I.D.	Alloy
.050"	1.425"	.565"	Heat treated steel

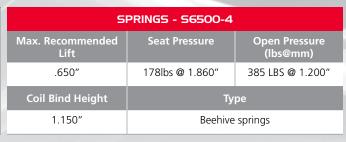


VALVE LOCKS - VL311C-8		
Tapper	Notes	
Angle 9°		

AV&V High Performance Valve Spring kits (5/16 valves)











VSK6500

- Manufactured from ultra-clean high-silicon Kobe alloy wire, then nano-peened and polished, they are 100% load-sorted to exceed our customers' expectations.
- CNC machined Extreme Duty 9 deg. locks.
- Ultralite Chromoly forged retainers.

NOTE

6000 springs - Small end ID: .650", OD: 1.085" / Large end ID: 1.000", OD: 1.445"

6500 springs - Small end ID: .740", OD: 1.185" / Large end ID: 1.055", OD: 1.500



Thickness	O.D.	I.D.	Alloy
.040"	1.485"	.565"	Heat treated steel

LOWER COLLAR - LSC6500-4



VALVE LOCKS - VL311C-8		
Tapper	Notes	
9°		

AV&V High Performance Beehive Valve Spring kits (7MM valves)

(Fit both Single Groove and Triple Groove valves)

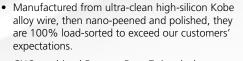




Seat Pressure	Open Pressure (lbs@mm)	
165lbs @ 1.860"	384 LBS @ 1.250"	
Туре		
Beehive springs		
	Ту	



RETAINER - R600075G-4			
Alloy	Traitement	Notes	
4140 Chromely steel	Black Oxyde	Angle 7°	



VSK60007SG

- CNC machined Extreme Duty 7 deg. locks.
- Ultralite Chromoly forged retainers.

6000 springs - Small end ID: .650", OD: 1.085" /

Large end ID: 1.000", OD: 1.445"

6500 springs - Small end ID: .740", OD: 1.185" /

Large end ID: 1.055", OD: 1.500



LOWER COLLAR - LSC6000-4			
Thickness	O.D.	I.D.	Alloy
.050"	1.425"	.565"	Heat treated steel



V	VALVE LOCKS - VL7MMSG		
Tapper	Notes		
Angle 7°	For 7MM single or triple groove valves		
	with Beehive springs		

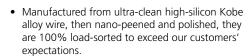




SPRINGS - S6500-4			
Max. Recommended Lift	Seat Pressure	Open Pressure (lbs@mm)	
.650"	178lbs @ 1.860"	385 LBS @ 1.200"	
Coil Bind Height	Туре		
1.150"	Beehive springs		



RETAINER - R6500-4			
Alloy	Traitement	Notes	
4140 Chromoly steel	Black Oxyde	Angle 9°	



- CNC machined Extreme Duty 9 deg. locks.
- Ultralite Chromoly forged retainers.

NOTE

6000 springs - Small end ID: .650", OD: 1.085" /

Large end ID: 1.000", OD: 1.445"

6500 springs - Small end ID: .740", OD: 1.185" /

Large end ID: 1.055", OD: 1.500



LOWER COLLAR - LSC6500-4			
Thickness	O.D.	I.D.	Alloy
.040"	1.485"	.565"	Heat treated steel



VALV	VALVE LOCKS - VL7MMSGC-8		
Tapper	Notes		
Angle 9°			

AV&V Valve Spring Shims

- This Valve Spring Shim allows the engine builder to adjust spring pressure by combining various thickness shims.
- Using the different thickness is of great help when trying to obtain consistent spring pressure across all valves.



Shim	VSS50I5	
Thickness	I.D.	O.D.
.015"	.600"	1.480"

Note

- Perfect Evo®/Twin Cam® fit
- Specily designed for Harley Davidson® heads
- Heat Treated Steel



Shim	V555030	
Thickness	I.D.	O.D.
.030"	.600"	1.480"

Note

- Perfect Evo®/Twin Cam® fit
- Heat Treated Steel



Shim	VSS6022	
Thickness	I.D.	O.D.
.022"	1.010"	1.441"

Note

- Use with Twin Cam® O.E. Style umbrella seals (2005 up)
- Heat Treated Steel