



TWIN CAM®

- High Flow Valves
- Valves Guides
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- Compression Release Valves
- Valves Spring kits
- Valves Spring Shims



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 Flow Valves

AVI585

Exhaust

| Head Dia. | Overall Length | Stem Dia. | Coating | Tip Length | Groove |
|-----------|----------------|-----------|---------------|------------|--------|
| 1.585" | 4.505" | .3106" | Black nitride | .200" | Single |

Note

- 25° back angle tulip
- .020" oversize (TC)
- 5/16" stem



High Flow Valves

AVI610D

Exhaust

| Head Dia. | Overall Length | Stem Dia. | Coating | Tip Length | Groove |
|-----------|----------------|-----------|---------------|------------|--------|
| 1.610" | 4.510" | .3106" | Black nitride | .200" | Single |

Note

- 25° back angle tulip
- Dished valve
- 5/16" stem



High Flow Valves

AVI610S

Exhaust

| Head Dia. | Overall Length | Stem Dia. | Coating | Tip Length | Groove |
|-----------|----------------|-----------|---------------|------------|--------|
| 1.610" | 4.565" | .3106" | Black nitride | .200" | Single |

Note

- 25° back angle tulip
- For use with S&S heads
- 5/16" stem



High Flow Valves

AVI650

Exhaust

| Head Dia. | Overall Length | Stem Dia. | Coating | Tip Length | Groove |
|-----------|----------------|-----------|---------------|------------|--------|
| 1.650" | 4.515" | .3106" | Black nitride | .200" | Single |

Note

- 25° back angle tulip
- Oversize valve for Jims 120" and S/E 110" Heads
- 5/16" stem



| High Flow Valves | | AV700C | | | |
|---|----------------|-----------|---------|------------|--------|
| Exhaust | | | | | |
| Head Dia. | Overall Length | Stem Dia. | Coating | Tip Length | Groove |
| 1.700" | 4.445" | .3106" | Chrome | .200" | Single |
| Note | | | | | |
| <ul style="list-style-type: none"> • 25° back angle tulip • For Merch Heads • 5/16" stem | | | | | |



| High Flow Valves | | AV700A | | | |
|---|----------------|-----------|---------------|------------|--------|
| Exhaust | | | | | |
| Head Dia. | Overall Length | Stem Dia. | Coating | Tip Length | Groove |
| 1.700" | 4.510" | .3106" | Black nitride | .200" | Single |
| Note | | | | | |
| <ul style="list-style-type: none"> • 25° back angle tulip • .235" Tip can be grinded to shorten valve • 5/16" stem | | | | | |



| High Flow Valves | | AV700U | | | |
|--|----------------|-----------|---------------|------------|--------|
| Exhaust | | | | | |
| Head Dia. | Overall Length | Stem Dia. | Coating | Tip Length | Groove |
| 1.700" | 4.655" | .3106" | Black nitride | .200" | Single |
| Note | | | | | |
| <ul style="list-style-type: none"> • 25° back angle tulip • For Ultima Heads • 5/16" stem | | | | | |



| High Flow Valves | | AVI900 | | | |
|--|----------------|-----------|---------------|------------|--------|
| Intake | | | | | |
| Head Dia. | Overall Length | Stem Dia. | Coating | Tip Length | Groove |
| 1.900" | 4.440" | .3108" | Black nitride | .200" | Single |
| Note | | | | | |
| <ul style="list-style-type: none"> • 25° back angle tulip • .055" oversize valve • For use in stock heads • 5/16" stem | | | | | |

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 Flow Valves

AV900S

Intake

| Head Dia. | Overall Length | Stem Dia. | Coating | Tip Length | Groove |
|-----------|----------------|-----------|---------------|------------|--------|
| 1.900" | 4.415" | .3108" | Black nitride | .200" | Single |

Note

- 25° back angle tulip
- .025" shorter and .055" oversize valve
- For use in stock heads
- 5/16" stem



High Flow Valves

AVI940

Intake

| Head Dia. | Overall Length | Stem Dia. | Coating | Tip Length | Groove |
|-----------|----------------|-----------|---------------|------------|--------|
| 1.940" | 4.440" | .3108" | Black nitride | .200" | Single |

Note

- 25° back angle tulip
- Oversize valve larger
- If used in stock heads larger seats must be installed
- 5/16" stem



High Flow Valves

AVI990

Intake

| Head Dia. | Overall Length | Stem Dia. | Coating | Tip Length | Groove |
|-----------|----------------|-----------|---------------|------------|--------|
| 1.990" | 4.440" | .3108" | Black nitride | .200" | Single |

Note

- 25° back angle tulip
- Oversize valve
- If used in stock heads larger seats must be installed
- 5/16" stem



High Flow Valves

AV2020A

Intake

| Head Dia. | Overall Length | Stem Dia. | Coating | Tip Length | Groove |
|-----------|----------------|-----------|---------------|------------|--------|
| 2.020" | 4.440" | .3108" | Black nitride | .200" | Single |

Note

- 25° back angle tulip
- Also good for Merch Heads
- Larger seats could be required
- 5/16" stem


High Flow Valves
AV2020
Intake

| Head Dia. | Overall Length | Stem Dia. | Coating | Tip Length | Groove |
|-----------|----------------|-----------|---------|------------|--------|
| 2.020" | 4.490" | .3108" | Chrome | .200" | Single |

Note

- 25° back angle tulip
- .050" longer than AV2020A
- Larger seats could be required
- 5/16" stem


High Flow Valves
AV2020S
Intake

| Head Dia. | Overall Length | Stem Dia. | Coating | Tip Length | Groove |
|-----------|----------------|-----------|---------------|------------|--------|
| 2.020" | 4.510" | .3108" | Black nitride | .200" | Single |

Note

- 25° back angle tulip
- For use with S&S Heads
- 5/16" stem


High Flow Valves
AV2060LC
Intake

| Head Dia. | Overall Length | Stem Dia. | Coating | Tip Length | Groove |
|-----------|----------------|-----------|---------|------------|--------|
| 2.060" | 4.510" | .3108" | Chrome | .200" | Single |

Note

- 24° back angle tulip
- Used with S&S Heads
- Oversize valve
- 5/16" stem


High Flow Valves
AV2100
Intake

| Head Dia. | Overall Length | Stem Dia. | Coating | Tip Length | Groove |
|-----------|----------------|-----------|---------------|------------|--------|
| 2.100" | 4.475" | .3108" | Black nitride | .200" | Single |

Note

- 24° back angle tulip
- For Jims 120" and S/E 110" Heads
- Oversize valve
- 5/16" stem

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 Flow Valves

AV2100BC (no tip, no groove)

Intake

| Head Dia. | Overall Length | Stem Dia. | Coating | Tip Length | Groove |
|-----------|----------------|-----------|---------|------------|--------|
| 2.100" | 5.700" | .3108" | Chrome | --- | --- |

Note

- 24° back angle tulip
- 5/16" stem heads
- Blank valve (no tip, no groove)
- Bi-metal (can be hardened)



High Flow Valves

AV2100S

Intake

| Head Dia. | Overall Length | Stem Dia. | Coating | Tip Length | Groove |
|-----------|----------------|-----------|---------|------------|--------|
| 2.100" | 4.570" | .3108" | Chrome | .200" | Single |

Note

- 24° back angle tulip
- S&S 124" and 131"
- Oversize valve
- 5/16" stem



High Flow Valves

AV2100U

Intake

| Head Dia. | Overall Length | Stem Dia. | Coating | Tip Length | Groove |
|-----------|----------------|-----------|---------------|------------|--------|
| 2.100" | 4.590" | .3108" | Black nitride | .200" | Single |

Note

- 23° back angle tulip
- For Ultima Heads
- 5/16" stem



High Flow Valves

AV2150

Intake

| Head Dia. | Overall Length | Stem Dia. | Coating | Tip Length | Groove |
|-----------|----------------|-----------|---------|------------|--------|
| 2.150" | 4.480" | .3108" | Chrome | .200" | Single |

Note

- 24° back angle tulip
- Oversize valve for Jims 120" and 131" heads
- 5/16" stem



| High Flow Valves | | AVI700BC (no tip, no groove) | | | |
|--|----------------|------------------------------|---------|------------|--------|
| Exhaust | | | | | |
| Head Dia. | Overall Length | Stem Dia. | Coating | Tip Length | Groove |
| 1.700" | 5.700" | .3106" | Chrome | --- | --- |
| Note | | | | | |
| <ul style="list-style-type: none"> • 25° back angle tulip • 5/16" stem blank valve • Bi-metal (can be hardened) | | | | | |



| High Flow Valves | | AV2200BC (no tip, no groove) | | | |
|--|----------------|------------------------------|---------|------------|--------|
| Intake | | | | | |
| Head Dia. | Overall Length | Stem Dia. | Coating | Tip Length | Groove |
| 2.200" | 5.700" | .3108" | Chrome | --- | --- |
| Note | | | | | |
| <ul style="list-style-type: none"> • 25° back angle tulip • 5/16" stem blank valve • Bi-metal (can be hardened) | | | | | |

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

AV610-7TGB

Exhaust

| Head Dia. | Overall Length | Stem Dia. | Coating | Tip Length | Groove |
|-----------|----------------|-----------|---------------|------------|--------|
| 1.610" | 4.545" | .2755" | Black nitride | .085" | Triple |

Note

- 25° back angle tulip
- .040" oversize valve
- For use in stock heads
- 7MM stem



High Flow Valves

AV610-7TGC

Exhaust

| Head Dia. | Overall Length | Stem Dia. | Coating | Tip Length | Groove |
|-----------|----------------|-----------|---------|------------|--------|
| 1.610" | 4.545" | .2755" | Chrome | .085" | Triple |

Note

- 25° back angle tulip
- .040" oversize valve
- For use in stock heads
- 7MM stem



High Flow Valves

AV850-7TGB

Intake

| Head Dia. | Overall Length | Stem Dia. | Coating | Tip Length | Groove |
|-----------|----------------|-----------|---------------|------------|--------|
| 1.850" | 4.455" | .2757" | Black nitride | .085" | Triple |

Note

- 24° back angle tulip
- .040" oversize valve
- For use in stock heads
- 7MM stem



High Flow Valves

AV850-7TGC

Intake

| Head Dia. | Overall Length | Stem Dia. | Coating | Tip Length | Groove |
|-----------|----------------|-----------|---------|------------|--------|
| 1.850" | 4.455" | .2757" | Chrome | .085" | Triple |

Note

- 24° back angle tulip
- .040" oversize valve
- For use in stock heads
- 7MM stem


High Flow Valves
AV900-7TGB

Intake

| Head Dia. | Overall Length | Stem Dia. | Coating | Tip Length | Groove |
|-----------|----------------|-----------|---------------|------------|--------|
| 1.900" | 4.445" | .2757" | Black nitride | .085" | Triple |

Note

- 24° back angle tulip
- .090" oversize valve
- For use in stock heads
- 7MM stem


High Flow Valves
AV900-7TGC

Intake

| Head Dia. | Overall Length | Stem Dia. | Coating | Tip Length | Groove |
|-----------|----------------|-----------|---------|------------|--------|
| 1.900" | 4.445" | .2757" | Chrome | .085" | Triple |

Note

- 24° back angle tulip
- .090" oversize valve
- For use in stock heads
- 7MM stem


High Flow Valves
AV980-7TGB

Intake

| Head Dia. | Overall Length | Stem Dia. | Coating | Tip Length | Groove |
|-----------|----------------|-----------|---------------|------------|--------|
| 1.980" | 4.455" | .2757" | Black nitride | .085" | Triple |

Note

- 25° back angle tulip
- .170" oversize valve
- If used in stock heads larger seats must be installed
- 7MM stem

AV&V Extreme Duty Replacement Valves 5/16

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 valves also feature a 45° angle below the lock groove to facilitate valve seal installation.



| HD11 | | | | | |
|---|----------------|-----------|---------------|------------|--------|
| Intake | | | | | |
| Head Dia. | Overall Length | Stem Dia. | Coating | Tip Length | Groove |
| 1.845" | 4.440" | .3108" | Black nitride | .200" | Single |
| Note | | | | | |
| <ul style="list-style-type: none"> • 25° back angle tulip • Also good for stock replacement • 5/16" stem Twin Cam® | | | | | |



| HD12 | | | | | |
|---|----------------|-----------|---------------|------------|--------|
| Exhaust | | | | | |
| Head Dia. | Overall Length | Stem Dia. | Coating | Tip Length | Groove |
| 1.570" | 4.525" | .3106" | Black nitride | .200" | Single |
| Note | | | | | |
| <ul style="list-style-type: none"> • 25° back angle tulip • Twin cam® stock replacement • 5/16" stem | | | | | |

AV&V Extreme Duty Replacement Valves 7MM

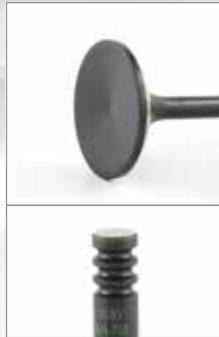


TWIN CAM

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.



| AVI575-7TGB | | | | | |
|---|----------------|-----------|---------------|------------|--------|
| Exhaust | | | | | |
| Head Dia. | Overall Length | Stem Dia. | Coating | Tip Length | Groove |
| 1.575" | 4.560" | .2755" | Black nitride | .085" | Triple |
| Note | | | | | |
| <ul style="list-style-type: none"> • 25° back angle tulip • Twin cam® stock replacement • 7MM stem | | | | | |



| AVI575-7TGC | | | | | |
|---|----------------|-----------|---------|------------|--------|
| Exhaust | | | | | |
| Head Dia. | Overall Length | Stem Dia. | Coating | Tip Length | Groove |
| 1.575" | 4.560" | .2755" | Chrome | .085" | Triple |
| Note | | | | | |
| <ul style="list-style-type: none"> • 25° back angle tulip • Twin cam® stock replacement • 7MM stem | | | | | |



| AVIBIO-7TGB | | | | | |
|---|----------------|-----------|---------------|------------|--------|
| Intake | | | | | |
| Head Dia. | Overall Length | Stem Dia. | Coating | Tip Length | Groove |
| 1.810" | 4.455" | .2757" | Black nitride | .085" | Triple |
| Note | | | | | |
| <ul style="list-style-type: none"> • 25° back angle tulip • Twin cam® stock replacement • 7MM stem | | | | | |



| AVIBIO-7TGC | | | | | |
|---|----------------|-----------|---------|------------|--------|
| Intake | | | | | |
| Head Dia. | Overall Length | Stem Dia. | Coating | Tip Length | Groove |
| 1.810" | 4.455" | .2757" | Chrome | .085" | Triple |
| Note | | | | | |
| <ul style="list-style-type: none"> • 25° back angle tulip • Twin cam® stock replacement • 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 |
|-----------------------------------|-------|----------|----------------|---------------|---------------|
| High Lift & High Flow application | | | | | |
| .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 |
|-----------------------------------|-------|----------|----------------|------------------|------------------|
| High Lift & High Flow application | | | | | |
| .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 replacement | | | | |
| .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 length
- 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 |
|-----------------------------------|-------|----------|----------------|---------------|---------------|
| High Lift & High Flow application | | | | | |
| .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



| O.D. | I.D. | Overall Length | Intake & Exhaust |
|-------------------------|-------|----------------|------------------|
| Universal Repair Guides | | | |
| .740" | .273" | 2.700" | UVG7MM |
| .740" | .308" | 2.700" | UVG308 |
| .735" | .375" | 2.700" | UVG378 |

- Manganese bronze alloy
- Ready to be machined

AV&V Valve Seals



Viton Seals

V3I242I

Specifications

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



Viton Seals

V3I253I

Specifications

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



Viton Seals

V7MM-100

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.



Viton Seals

V7MMOE-100

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.



O.E. Style Seals

K3I242O

Specifications

| | |
|-----------|-------------------|
| Stem Dia. | Seal section O.D. |
| .312" | .421" |

Note

- O.E. Style metal clad seal

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



O.E. Style Seals

K3I253O

Specifications

| | |
|-----------|-------------------|
| Stem Dia. | Seal section O.D. |
| .312" | .531" |

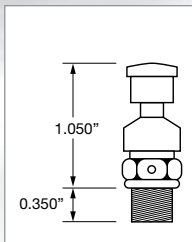
Note

- O.E. Style metal clad seal

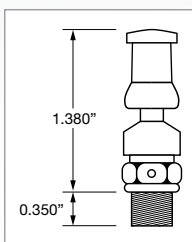
- For 5/16" valve, TwinCam®, Evo® and Sportster®

- 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)

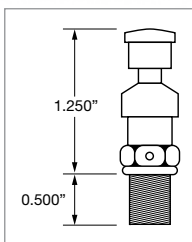
- Ideal for stock replacement
- Also their high-temperature resistant knobs are charcoal colored for a better match with texture black or silver heads.



| JCR 10A | | |
|---|----------------|--------|
| Protrusion | Thread section | Thread |
| 1.050" | .350" | M10x1 |
| Note | | |
| <ul style="list-style-type: none"> • Mostly Evo's® • Short protrusion • Short thread section | | |



| JCR 10B | | |
|---|----------------|--------|
| Protrusion | Thread section | Thread |
| 1.380" | .350" | M10x1 |
| Note | | |
| <ul style="list-style-type: none"> • All mostly Twin Cams® • Short protrusion • Short thread section | | |



| JCR 10D | | |
|--|----------------|--------|
| Protrusion | Thread section | Thread |
| 1.250" | .500" | M10x1 |
| Note | | |
| <ul style="list-style-type: none"> • O.E.M. Style • Long protrusion • Long thread section | | |

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



VSK600S

- 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 Pressure | | Open Pressure (lbs@mm) |
| .600" | 155lbs @ 1.885" | | 405 lbs @ 1.260" |
| Coil Bind Height | O.D. | I.D. | Type |
| 1.080" | 1.460" | 0.790" | 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.



| SPRINGS - S600-4 | | | |
|-----------------------|------------------|--------|------------------------|
| Max. Recommended Lift | Seat Pressure | | Open Pressure (lbs@mm) |
| .600" | 155 lbs @ 1.885" | | 405 lbs @ 1.260" |
| Coil Bind Height | O.D. | I.D. | Type |
| 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° | |


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 Pressure | | Open Pressure (lbs@mm) |
| .650" | 185 lbs @ 1.860" | | 460 lbs @ 1.160" |
| Coil Bind Height | O.D. | I.D. | Type |
| 1.080" | 1.460" | 0.790" | 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° | |


VSK650T

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



| SPRINGS - S650-4 | | | |
|-----------------------|------------------|--------|------------------------|
| Max. Recommended Lift | Seat Pressure | | Open Pressure (lbs@mm) |
| .650" | 185 lbs @ 1.860" | | 460 lbs @ 1.160" |
| Coil Bind Height | O.D. | I.D. | Type |
| 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° | |

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



VSK675T

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



SPRINGS - S675-4

| Max. Recommended Lift | Seat Pressure | Open Pressure (lbs@mm) | |
|-----------------------|------------------|------------------------|----------------|
| .675" | 185 lbs @ 1.860" | 460 lbs @ 1.160" | |
| Coil Bind Height | O.D. | I.D. | Type |
| 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
S6000 springs - Small end ID: .650", OD: 1.085" / Large end ID: 1.000", OD: 1.445"

S6500 springs - Small end ID: .740", OD: 1.185" / Large end ID: 1.055", OD: 1.500"



SPRINGS - S6000-4

| Max. Recommended Lift | Seat Pressure | Open Pressure (lbs@mm) |
|-----------------------|------------------|------------------------|
| .600" | 165 lbs @ 1.860" | 384 lbs @ 1.250" |
| Coil Bind Height | Type | |
| 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° | |


VSK650

- 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

S6000 springs - Small end ID: .650", OD: 1.085" / Large end ID: 1.000", OD: 1.445"

S6500 springs - Small end ID: .740", OD: 1.185" / Large end ID: 1.055", OD: 1.500"


SPRINGS - S6500-4

| Max. Recommended Lift | Seat Pressure | Open Pressure (lbs@mm) |
|-----------------------|-----------------|------------------------|
| .650" | 178lbs @ 1.860" | 385 lbs @ 1.200" |
| Coil Bind Height | Type | |
| 1.150" | Beehive springs | |

RETAINER - R6500-4

| Alloy | Traitement | Notes |
|---------------------|-------------|----------|
| 4140 Chromoly steel | Black Oxyde | Angle 9° |

LOWER COLLAR - LSC6500-4

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

VALVE LOCKS - VL311C-8

| Tapper | Notes |
|----------|-------|
| Angle 9° | |

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

(Fit both Single Groove and Triple Groove valves)



VSK60007SG

- 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 7 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 - S6000-4

| Max. Recommended Lift | Seat Pressure | Open Pressure (lbs@mm) |
|-----------------------|-----------------|------------------------|
| .600" | 165lbs @ 1.860" | 384 lbs @ 1.250" |
| Coil Bind Height | Type | |
| 1.200" | Beehive springs | |

RETAINER - R60007SG-4

| Alloy | Traitement | Notes |
|---------------------|-------------|----------|
| 4140 Chromely steel | Black Oxyde | Angle 7° |

LOWER COLLAR - LSC6000-4

| Thickness | O.D. | I.D. | Alloy |
|-----------|--------|-------|--------------------|
| .050" | 1.425" | .565" | Heat treated steel |

VALVE LOCKS - VL7MMSG

| Tapper | Notes |
|----------|---|
| Angle 7° | For 7MM single or triple groove valves with Beehive springs |



VSK65007SG

- 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

S6000 springs - Small end ID: .650", OD: 1.085" / Large end ID: 1.000", OD: 1.445"

S6500 springs - Small end ID: .740", OD: 1.185" / Large end ID: 1.055", OD: 1.500"



SPRINGS - S6500-4

| Max. Recommended Lift | Seat Pressure | Open Pressure (lbs@mm) |
|-----------------------|-----------------|------------------------|
| .650" | 178lbs @ 1.860" | 385 lbs @ 1.200" |
| Coil Bind Height | Type | |
| 1.150" | Beehive springs | |

RETAINER - R6500-4

| Alloy | Traitement | Notes |
|---------------------|-------------|----------|
| 4140 Chromoly steel | Black Oxyde | Angle 9° |

LOWER COLLAR - LSC6500-4

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

VALVE LOCKS - VL7MMSGC-8

| Tapper | Notes |
|----------|---|
| Angle 9° | For 7MM single or triple groove valves with Beehive springs |

- 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 | | VSS5015 | |
|---|-------|---------|--|
| Thickness | I.D. | O.D. | |
| .015" | .600" | 1.480" | |
| Note | | | |
| <ul style="list-style-type: none"> • Perfect Evo®/Twin Cam® fit • Specily designed for Harley Davidson® heads • Heat Treated Steel | | | |



| Shim | | VSS5030 | |
|--|-------|---------|--|
| Thickness | I.D. | O.D. | |
| .030" | .600" | 1.480" | |
| Note | | | |
| <ul style="list-style-type: none"> • Perfect Evo®/Twin Cam® fit • Heat Treated Steel | | | |



| Shim | | VSS6022 | |
|--|--------|---------|--|
| Thickness | I.D. | O.D. | |
| .022" | 1.010" | 1.441" | |
| Note | | | |
| <ul style="list-style-type: none"> • Use with Twin Cam® O.E. Style umbrella seals (2005 - up) • Heat Treated Steel | | | |

*Curiosity is the
mother of creativity.*

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