



## PAN HEAD®

- Extreme Duty Replacement Valves
- Valves Guides
- Valves Seals
- Valves Springs kit



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



HDO7					
Exhaust					
Head Dia.	Overall Length	Stem Dia.	Coating	Tip Length	Groove
1.750"	3.830"	.3764"	Black nitride	.200"	Single
Note					
<ul style="list-style-type: none"> <li>• 25° back angle tulip</li> <li>• 3/8" stem</li> </ul>					

## AV&V Extreme Duty Manganese Bronze Valve Guides

- 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
Stock replacement				
.5660"	.375"	Std	1.900"	<b>VG5300</b>
.5670"	.375"	.001"	1.900"	<b>VG5301</b>
.5680"	.375"	.002"	1.900"	<b>VG5302</b>
.5690"	.375"	.003"	1.900"	<b>VG5303</b>
.5700"	.375"	.004"	1.900"	<b>VG5304</b>
.5710"	.375"	.005"	1.900"	<b>VG5305</b>
.5720"	.375"	.006"	1.900"	<b>VG5306</b>
.5740"	.375"	.008"	1.900"	<b>VG5308</b>
.5760"	.375"	.010"	1.900"	<b>VG5310</b>
.5810"	.375"	.015"	1.900"	<b>VG5315</b>
.5910"	.375"	.025"	1.900"	<b>VG5325</b>

- Pan Head® 1200 (1948-79)

## AV&V Universal Valve Guides (3/8 valves)



O.D.	I.D.	Overall Length	Intake & Exhaust
Universal Repair guides			
.740"	.375"	2.700"	UVG375
<ul style="list-style-type: none"> <li>Maganese bronze alloy</li> <li>Ready to be machined</li> </ul>			

## AV&V Valve Seals



O.E. Style Seals		K375562
Description		
Stem Dia.	Seal section O.D.	<ul style="list-style-type: none"> <li>Pan Head® (1948-1979)</li> </ul>
.375"	.562"	
Note		
<ul style="list-style-type: none"> <li>O.E. Style metal clad seal</li> </ul>		

PAN HEAD

# AV&V High Performance Valve Spring kit



**VSK470**

- Manufactured from ultra clean high silicon & vanadium alloy wire.
- CNC machined tight fit locks.
- Light weight 1.375" chromoly top retainers; for better clearance inside rocker covers.



## SPRINGS - S470-4

Max. Recommended Lift	Seat Pressure		Open Pressure (lbs@mm)
.470"	155lb @ 1.375"		300lb @ .980"
Coil Bind Height	O.D.	I.D.	Type
.850"	1.640"	1.010"	Double springs

## RETAINER - R530-4

Alloy	Traitement	Notes
4140 Chromoly steel	Black Oxyde	Angle 15°

## LOWER COLLAR - LSC530-4

Thickness	O.D.	I.D.	Alloy
.055" / .180"	1.495"	.755"	Heat treated steel

## VALVE LOCKS - VL375-8

Tapper	Notes
Jumbo 15°	OE replacement and AV&V470, AV&V530, VSK590



**VSK530**

- Manufactured from ultra clean high silicon & vanadium alloy wire.
- CNC machined tight fit locks.
- Light weight 1.375" chromoly top retainers; for better clearance inside rocker covers.



## SPRINGS - S530-4

Max. Recommended Lift	Seat Pressure		Open Pressure (lbs@mm)
.530"	155lb @ 1.455"		320b @ 0.980"
Coil Bind Height	O.D.	I.D.	Type
.980"	1.640"	.970"	Double springs

## RETAINER - R530-4

Alloy	Traitement	Notes
4140 Chromoly steel	Black Oxyde	Angle 15°

## LOWER COLLAR - LSC530-4

Thickness	O.D.	I.D.	Alloy
.055" / .180"	1.495"	.755"	Heat treated steel

## VALVE LOCKS - VL375-8

Tapper	Notes
Jumbo 15°	OE replacement and AV&V470, AV&V530, VSK590



**VSK590**

- Manufactured from ultra clean high silicon & vanadium alloy wire.
- CNC machined tight fit locks.
- Light weight 1.375" chromoly top retainers; for better clearance inside rocker covers.



**SPRINGS - S590-4**

Max. Recommended Lift	Seat Pressure		Open Pressure (lbs@mm)
.625"	175lbs @ 1.455"		350lbs @ .980"
Coil Bind Height	O.D.	I.D.	Type
.850"	1.625"	.965"	Double springs

**RETAINER - R530-4**

Alloy	Traitement	Notes
4140 Chromoly steel	Black Oxyde	Angle 15°

**LOWER COLLAR - LSC530-4**

Thickness	O.D.	I.D.	Alloy
.055" / .180"	1.495"	.755"	Heat treated steel

**VALVE LOCKS - VL375-8**

Tapper	Notes
Jumbo 15°	OE replacement and AV&V470, AV&V530, VSK590

**NOTE:** These Pan/Shovel valve springs are not bolt-in items. Always make sure to check the minimum spring spacing and to keep a minimum of .060" before coil bind, at full lift.

Early 1948-1980 heads must be machined to accept AV&V's late style lower collars.

You may need to machine the spring seat with Goodson spring seat cutter #VSS-1680HD and/or use AV&V upper spring collar kit #R530-4 and/or machine the valve seats deeper to get the correct spring spacing.

For reference, on late style Shovel (1980-1984), with a 1.630" valve stem protrusion, the spring spacing is +/- 1.375".

*Curiosity is the  
mother of creativity.*

**AV&V™** is and always has been a pioneer when it comes to technological innovations for the Harley-Davidson® cylinder head components.

Systematic and advanced development are part of our mission to offer you the ultimate valve train components.

With more than 66 valve models, 17 valve guide models and 14 valve spring kits, **AV&V™** offers you the most complete line of high-performance valve train components in the industry.



**High Performance Valvetrain Components Manufacturer**



Phone: 1 450 647-6650 Fax: 1 450 647-1650  
info@av-v.com www.av-v.com