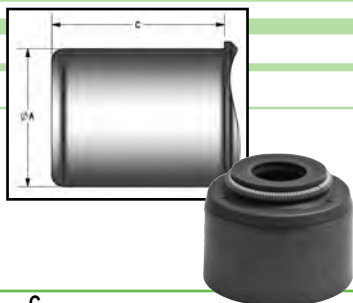




## Solid Viton Seals With Metal Jacket & Choker Spring

16 Per Package

| Stem Dia. | OAL    | Seal OD | A      | C      | MSRP    | Order No. | Replaces |
|-----------|--------|---------|--------|--------|---------|-----------|----------|
| 7.0mm     | 0.510" | 0.665"  | 0.560" | 0.375" | \$50.25 | 71028     | HV-7MM   |
| .312"     | 0.412" | 0.566"  | 0.420" | 0.275" | 25.73   | 71010     | HVS-421  |
| .312"     | 0.514" | 0.671"  | 0.530" | 0.330" | 50.25   | 71045     | HVS-531  |
| .375"     | 0.516" | 0.661"  | 0.562" | 0.210" | 29.37   | 71011     |          |

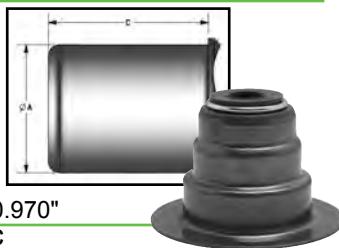


## Solid Viton Seals With Metal Jacket & Integral Spring Base

16 Per Package

• Spring Shoulder Diameter: 0.970"

| Stem Dia. | OAL    | Seal OD | A      | C      | MSRP  | Order No. | Replaces |
|-----------|--------|---------|--------|--------|-------|-----------|----------|
| 7.0mm     | 0.974" | 1.457"  | 0.560" | 0.700" | 36.94 | 71030     | HV-7MMOE |



## OE Style Seals Solid Teflon With Metal Jacket

16 Per Package

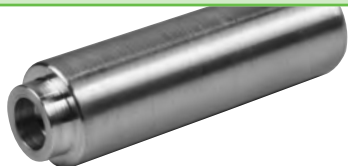
| Stem Dia. | OAL    | Seal OD | A      | D      | MSRP    | Order No. | Replaces   |
|-----------|--------|---------|--------|--------|---------|-----------|------------|
| .312"     | 0.385" | 0.565"  | 0.420" | 0.315" | \$29.37 | 71032     | HSS-420    |
| .312"     | 0.375" | 0.630"  | 0.530" | 0.295" | 29.37   | 71033     | HSS-530312 |
| .343"     | 0.375" | 0.630"  | 0.530" | 0.365" | 29.37   | 71034     | HSS-530341 |
| .375"     | 0.375" | 0.660"  | 0.562" | 0.315" | 29.37   | 71035     | HSS-562    |
| .375"     | 0.400" | 0.720"  | 0.625" | 0.310" | 29.37   | 71036     | HSS-625    |



## Aluminum Seal Drivers

• A must-have tool for installing valve seals

| Seal Size | Order No. | Seal Size  | Order No. |
|-----------|-----------|------------|-----------|
| 6.0mm     | VSD-6MM   | 11/32"     | VSD-343   |
| 7.0mm     | VSD-7MM   | 3/8"       | VSD-375   |
| 5/16"     | VSD-312   | Jobber ea. | \$24.99   |



## 6061-T6 Aluminum Seal Drivers

These installation tools for OE style seals are manufactured from high strength 6061-T6 Aluminum for increased durability when compared to plastic installers.

| Application            | Color | Fits Seal Up To | Order No. | Replaces |
|------------------------|-------|-----------------|-----------|----------|
| Evolution (5/16" Stem) | Red   | 0.575"          | 20-20830  | VSD-R    |
| Pan/Shovelhead 74"     | Black | 0.673"          | 20-20833  | VSD-B    |
| Ironhead Sportster     | White | 0.638"          | 20-20832  | VSD-W    |
| Shovelhead 80"         | Blue  | 0.728"          | 20-20831  |          |
| Jobber ea.             |       |                 |           | \$7.27   |



## Valve Seat Inserts

- For Harley-Davidson®
- Easy to machine
- Effectively dissipate heat for consistent valve sealing
- Hardness increases during engine break-in
- Radiused for easy installation
- **Some dimensions may have changed slightly - Be sure to confirm the new dimensions will fit your application**



### Replacement Valve Seats For Shovel Head 1200 & 1340

| Application | OD     | ID     | Thickness | MSRP    | Order No. | Replaces |
|-------------|--------|--------|-----------|---------|-----------|----------|
| Exhaust     | 1.944" | 1.575" | .400"     | \$10.12 | 10-HC493  | HVS-1944 |
| Intake      | 2.135" | 1.750" | .400"     | 10.12   | 10-HC542  | HVS-2135 |

### Overize Seats For Shovel, Evolution & Twin Cam - machining required

| Application | OD     | ID     | Thickness | MSRP    | Order No. | Replaces |
|-------------|--------|--------|-----------|---------|-----------|----------|
| Exhaust     | 1.630" | 1.180" | .385"     | \$10.12 | 10-HC414  | HVS-1630 |
| Exhaust     | 1.757" | 1.410" | .430"     | 10.12   | 10-HC447  | HVS-1757 |
| Exhaust     | 1.882" | 1.530" | .410"     | 10.12   | 10-HC478  | HVS-1882 |
| Exhaust     | 2.008" | 1.610" | .440"     | 10.12   | 10-HC510  | HVS-2008 |
| Exhaust     | 2.040" | 1.700" | .425"     | 10.12   | 10-HC518  | HVS-2040 |
| Exhaust     | 2.070" | 1.610" | .460"     | 10.12   | 10-HC526  | HVS-2070 |
| Exhaust     | 2.132" | 1.800" | .460"     | 10.12   | 10-HC541  | HVS-2132 |
| Exhaust     | 2.163" | 1.750" | .455"     | 9.99    | 10-HC549  | HVS-2163 |

### For Iron Head Sportster

| Application | OD     | ID     | Thickness | MSRP    | Order No. | Replaces  |
|-------------|--------|--------|-----------|---------|-----------|-----------|
| Exhaust     | 1.757" | 1.371" | .315"     | \$10.12 | 10-HC446  | HVS-1757S |
| Intake      | 2.068" | 1.750" | .315"     | 10.12   | 10-HC525  | HVS-2068  |

### Universal Repair Seat

| Application | OD     | ID     | Thickness | MSRP    | Order No. | Replaces |
|-------------|--------|--------|-----------|---------|-----------|----------|
| Powdered    | 1.339" | 1.024" | .375"     | \$10.12 | 10-SC340  | MVS-42   |
| Metal       | 1.693" | 1.299" | .434"     | 10.12   | 10-SC430  | MVS-58   |
| Exhaust     | 1.820" | 1.375" | .450"     | 10.12   | 10-HC462  | HVS-1820 |
| Exhaust     | 1.945" | 1.375" | .440"     | 10.12   | 10-HC494  | HVS-1945 |
| Exhaust     | 2.257" | 1.550" | .500"     | 10.12   | 10-HC573  | HVS-2257 |

### Nickel Chrome Valve Seats on Page 14

**tech tips** When installing seats preheat head to 400° and freeze the seat for easier installation. Press fit .006" to .008".

## .421" Valve Seal Cutter

- Evo/Twin Cam
- Will shorten and re-chamfer the guide top, increasing seal-to-retainer clearance for higher lift camshafts
- Can also be used to modify .530" guides to .421" guides
- Guide OD: .421" • Pilot Size: .312"
- Use with HVS-421 seal (above)
- Order No. **VSC-420312**  
Jobber \$97.29



... another satisfied customer

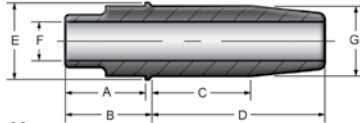
"Absolutely amazing! You have to have the most courteous and friendly people working there. Always a pleasure to order from Goodson. A lot of companies could learn from your staff. To top it off, the supplies are top notch and ship very quickly."

- Dan Degenhardt, Degenhardt Garage, Coon Valley, WI, Goodson Customer since 1999



## Guide Driver for Reduced Diameter Top Valve Guides

The guide top fits into the groove between the driver and the bushing to center and drive the guide into place. Puts pressure on the step top of the guide, not the seal area. Required for installing 20-2120 & 20-2130 series guides (below).  
Order No. **VGD-315420**  
Jobber \$42.99



## Evolution, Twin-Cam & Evo Sportster With 5/16" (.312") Valves

• Use with 71010 (0.420") Viton Seals or 71032 OE Style Seals

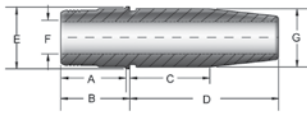
| Intake |       |       |        |       |        |        | Manganese Bronze | Cast Iron | Replaces  |
|--------|-------|-------|--------|-------|--------|--------|------------------|-----------|-----------|
| A      | B     | C     | D      | E     | F      | G      |                  |           |           |
| .650"  | .700" | .800" | 1.400" | .615" | .3098" | .5620" | 20-2120M         | 20-2120C  |           |
|        |       |       |        |       |        | .5630" | 20-2121M         | 20-2121C  | HVG-5600S |
|        |       |       |        |       |        | .5640" | 20-2122M         | 20-2122C  | HVG-5601S |
|        |       |       |        |       |        | .5720" | 20-2129M         | 20-2129C  |           |

| Exhaust |       |        |        |       |        |        | Manganese Bronze | Cast Iron | Replaces  |
|---------|-------|--------|--------|-------|--------|--------|------------------|-----------|-----------|
| A       | B     | C      | D      | E     | F      | G      |                  |           |           |
| .650"   | .700" | 1.150" | 1.450" | .615" | .3098" | .5620" | 20-2130M         | 20-2130C  |           |
|         |       |        |        |       |        | .5630" | 20-2131M         | 20-2131C  | HVG-5700S |
|         |       |        |        |       |        | .5640" | 20-2132M         | 20-2132C  | HVG-5701S |
|         |       |        |        |       |        | .5720" | 20-2139M         | 20-2139C  |           |

MSRP ea. \$13.12 \$8.83

## Evolution, Twin-Cam & Evo Sportster with 5/16" Valves

• Use with 71045 (0.530") Viton Seals



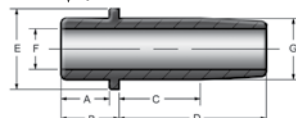
| Intake |       |       |        |       |        |        | Manganese Bronze | Cast Iron | Replaces |
|--------|-------|-------|--------|-------|--------|--------|------------------|-----------|----------|
| A      | B     | C     | D      | E     | F      | G      |                  |           |          |
| .620"  | .665" | .737" | 1.435" | .615" | .3100" | .5620" | 20-20860M        |           | HVG-5600 |
|        |       |       |        |       |        | .5630" | 20-20861M        |           | HVG-5601 |
|        |       |       |        |       |        | .5640" | 20-20862M        |           | HVG-5602 |
|        |       |       |        |       |        | .5720" | 20-20869M        |           |          |

| Exhaust |       |        |        |       |        |        | Manganese Bronze | Cast Iron | Replaces |
|---------|-------|--------|--------|-------|--------|--------|------------------|-----------|----------|
| A       | B     | C      | D      | E     | F      | G      |                  |           |          |
| .620"   | .665" | 1.135" | 1.435" | .615" | .3096" | .5625" | 20-20870M        |           | HVG-5700 |
|         |       |        |        |       |        | .5635" | 20-20871M        |           | HVG-5701 |
|         |       |        |        |       |        | .5645" | 20-20872M        |           | HVG-5702 |
|         |       |        |        |       |        | .5725" | 20-20879M        |           |          |

MSRP ea. \$13.12

## Shovel & Pan Heads

• Use with 71011 Viton Seals or 71035 OE Style Seals

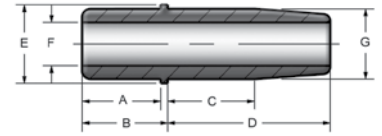


| Intake Or Exhaust |       |       |        |       |        |        | Manganese Bronze | Cast Iron | Replaces  |
|-------------------|-------|-------|--------|-------|--------|--------|------------------|-----------|-----------|
| A                 | B     | C     | D      | E     | F      | G      |                  |           |           |
| .450"             | .540" | .810" | 1.340" | .745" | .3745" | .5650" | 20-2020M         | 20-2020C  |           |
|                   |       |       |        |       |        | .5660" | 20-2021M         | 20-2021C  | HVG-5600S |
|                   |       |       |        |       |        | .5670" | 20-2022M         | 20-2022C  |           |
|                   |       |       |        |       |        | .5680" | 20-2023M         | 20-2023C  |           |
|                   |       |       |        |       |        | .5750" | 20-2029M         | 20-2029C  |           |

MSRP ea. \$13.12 \$8.83

## Twin Cam & Evo Sportster With 7mm Valves

• Use with 71028 (0.562") Viton Seals



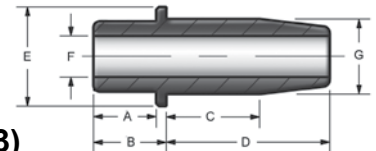
| Intake |       |       |        |       |        |        | Manganese Bronze | Cast Iron | Replaces |
|--------|-------|-------|--------|-------|--------|--------|------------------|-----------|----------|
| A      | B     | C     | D      | E     | F      | G      |                  |           |          |
| .685"  | .735" | .702" | 1.305" | .615" | .2750" | .5620" | 20-20690M        |           | HVG-6600 |
|        |       |       |        |       |        | .5630" | 20-20691M        |           | HVG-6601 |
|        |       |       |        |       |        | .5640" | 20-20692M        |           | HVG-6602 |
|        |       |       |        |       |        | .5720" | 20-20699M        |           |          |

| Exhaust |       |        |        |       |        |        | Manganese Bronze | Cast Iron | Replaces |
|---------|-------|--------|--------|-------|--------|--------|------------------|-----------|----------|
| A       | B     | C      | D      | E     | F      | G      |                  |           |          |
| .650"   | .700" | 1.150" | 1.450" | .615" | .3098" | .5620" | 20-20700M        |           | HVG-6700 |
|         |       |        |        |       |        | .5630" | 20-20701M        |           | HVG-6701 |
|         |       |        |        |       |        | .5640" | 20-20702M        |           | HVG-6702 |
|         |       |        |        |       |        | .5720" | 20-20709M        |           |          |

MSRP ea. \$13.12

## Sportster (1970-1983)

• Use with 71033 (intake) and 71034 (exhaust) OE-Style Seals



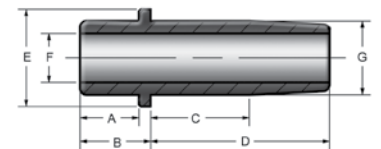
| Intake |       |       |        |       |        |        | Manganese Bronze | Cast Iron | Replaces  |
|--------|-------|-------|--------|-------|--------|--------|------------------|-----------|-----------|
| A      | B     | C     | D      | E     | F      | G      |                  |           |           |
| .470"  | .545" | .700" | 1.225" | .745" | .3085" | .5650" |                  | 20-2320C  | HVG-5100C |
|        |       |       |        |       |        | .5660" |                  | 20-2321C  | HVG-5101G |
|        |       |       |        |       |        | .5670" |                  | 20-2322C  | HVG-5102C |
|        |       |       |        |       |        | .5750" |                  | 20-2329C  |           |

| Exhaust |       |        |        |       |        |        | Manganese Bronze | Cast Iron | Replaces  |
|---------|-------|--------|--------|-------|--------|--------|------------------|-----------|-----------|
| A       | B     | C      | D      | E     | F      | G      |                  |           |           |
| .470"   | .545" | .0600" | 1.225" | .745" | .3375" | .5650" |                  | 20-2330C  | HVG-5200C |
|         |       |        |        |       |        | .5660" |                  | 20-2331C  | HVG-5201C |
|         |       |        |        |       |        | .5670" |                  | 20-2332C  | HVG-5202C |
|         |       |        |        |       |        | .5750" |                  | 20-2339C  |           |

MSRP ea. \$8.83

## Shovel Head 80" (1978-1983)

• Use with 71011 Viton Valve seals or 71036 OE Style Seals



| Intake or Exhaust |       |       |        |       |        |        | Manganese Bronze | Cast Iron | Replaces |
|-------------------|-------|-------|--------|-------|--------|--------|------------------|-----------|----------|
| A                 | B     | C     | D      | E     | F      | G      |                  |           |          |
| .450"             | .540" | .755" | 1.370" | .745" | .3745" | .6250" | 20-2050M         | 20-2050C  | HVG-5400 |
|                   |       |       |        |       |        | .6260" | 20-2051M         | 20-2051C  | HVG-5401 |
|                   |       |       |        |       |        | .6270" | 20-2052M         | 20-2052C  | HVG-5402 |
|                   |       |       |        |       |        | .6500" | 20-50HSM         | 20-50HSC  |          |

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CYLINDER HEAD REBUILDING  
CLEANING, ASSEMBLY & SAFETY  
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V-TWIN & METRIC HARD PARTS



# High Performance Valves

## Black Diamond® Valves for Harley-Davidson® Engines

- **Light and strong with optimum airflow** A combination of stress analysis and flow bench testing for optimally balanced valve mass, strength and airflow characteristics.
- **Stellite tips for rocker applications** for resistance the impact and abrasive wear common in rocker arm systems. This welded stellite can never come loose.
- **Black Diamond™ Valves** One piece forged stainless steel valves impregnated by a special German process to improve wear properties and reduce friction. Provides resistance to corrosion and superior wear.

### tech tips

from the techxperts™

Always check and confirm running clearances when installing new valves.

Some dimensions may have changed slightly. Be sure to confirm the new dimensions will fit your application.



| Application                                 | Type             | Head Diameter    | Stem Diameter | Tulip Radius | Tulip Angle | Overall Length | MSRP     | Black Diamond™ | Replaces     |
|---|------------------|------------------|---------------|--------------|-------------|----------------|----------|----------------|--------------|
| Milwaukee Eight™                            | Intake           | 1.571" (39.90mm) | 0.2347"       | 0.235        | 10°         | 4.015"         | \$37.55  | 20-21012       |              |
|   | Intake           | 1.591" (40.40mm) | 0.2347"       | 0.235        | 10°         | 4.015"         | 37.55    | 20-21015       |              |
|   | Intake           | 1.630" (41.40mm) | 0.2347"       | 0.235        | 10°         | 4.055"         | 37.55    | 20-21013       |              |
|   | Exhaust          | 1.264" (32.11mm) | 0.2342"       | 0.460        | 24°         | 4.050"         | 37.55    | 20-21016       |              |
|   | Exhaust          | 1.284" (32.31mm) | 0.2342"       | 0.460        | 24°         | 4.050"         | 37.55    | 20-21017       |              |
| Pan Head 1948-1965                          | Intake           | 1.750" (44.45mm) | 0.3765"       | 0.234        | 23°         | 3.800"         | 29.81    | 20-4257        |              |
|   | Exhaust          | 1.750" (44.45mm) | 0.3760"       | 0.234        | 29°         | 3.820"         | 25.10    | 20-4195        |              |
| Sportster 1957-1969                         | Intake           | 1.825" (46.36mm) | 0.3090"       | 0.375        | 23°         | 3.562"         | 37.55    | 20-4258        |              |
|   | Exhaust          | 1.570" (39.88mm) | 0.3384"       | 0.236        | 29°         | 3.512"         | 25.10    | 20-4197        |              |
|   | Exhaust          | 1.630" (41.40mm) | 0.3384"       | 0.236        | 29°         | 3.512"         | 37.55    | 20-4197-1      |              |
| Sportster 1970-1983                         | Intake           | 1.935" (49.15mm) | 0.3090"       | 0.256        | 23°         | 3.620"         | 25.10    | 20-4196        |              |
|   | Intake           | 1.950" (49.53mm) | 0.3090"       | 0.256        | 23°         | 3.690"         | 37.55    | 20-4167        |              |
|   | Intake           | 2.000" (50.80mm) | 0.3090"       | 0.256        | 23°         | 3.620"         | 29.81    | 20-4196-1      |              |
|   | Exhaust          | 1.570" (39.88mm) | 0.3384"       | 0.236        | 29°         | 3.512"         | 25.10    | 20-4197        |              |
|   | Exhaust          | 1.630" (41.40mm) | 0.3384"       | 0.236        | 29°         | 3.512"         | 37.55    | 20-4197-1      |              |
|   | Exhaust          | 1.750" (44.45mm) | 0.3384"       | 0.236        | 29°         | 3.620"         | 37.55    | 20-4168        |              |
| Shovelhead 74" 1966-1977                    | Intake           | 1.950" (49.53mm) | 0.3765"       | 0.234        | 23°         | 3.885"         | 25.10    | 20-4194        |              |
|   | Intake           | 2.000" (50.80mm) | 0.3765"       | 0.234        | 23°         | 3.885"         | 29.81    | 20-4256        |              |
|   | Exhaust          | 1.750" (44.45mm) | 0.3760"       | 0.234        | 29°         | 3.810"         | 25.10    | 20-4195        |              |
|   | Exhaust          | 1.780" (45.21mm) | 0.3760"       | 0.234        | 29°         | 3.820"         | 37.55    | 20-4195S       |              |
|   | Exhaust          | 1.812" (46.02mm) | 0.3760"       | 0.234        | 29°         | 3.820"         | 37.55    | 20-4195-1      |              |
| Shovelhead 80" 1978-1983                    | Intake           | 1.950" (49.53mm) | 0.3780"       | 0.234        | 23°         | 3.885"         | 29.81    | 20-4294        |              |
|   | Exhaust          | 1.750" (44.45mm) | 0.3775"       | 0.234        | 29°         | 3.810"         | 29.81    | 20-4295        |              |
| Evolution 1984-1999                         | Intake           | 1.840" (46.74mm) | 0.3100"       | 0.236        | 23°         | 4.445"         | 25.10    | 20-4171        |              |
|   | Intake           | 1.990" (50.55mm) | 0.3108"       | 0.675        | 25°         | 4.440"         | 34.63    | 20-20905       | HBV-1990     |
|   | Intake           | 1.940" (49.28mm) | 0.3108"       | 0.675        | 25°         | 4.440"         | 34.63    | 20-20910       | HBV-1940     |
|   | Intake           | 1.900" (48.26mm) | 0.3108"       | 0.675        | 25°         | 4.440"         | 34.63    | 20-20915       | HBV-1900     |
|   | Intake (Racing)  | 1.900" (48.26mm) | 0.3100"       | 0.344        | 28°         | 4.420"         | 25.10    | 20-4171R       |              |
|   | Intake           | 2.150" (54.61mm) | 0.3108"       | 0.550        | 24°         | 4.480"         | 25.10    | 20-20900       | HCV-2150     |
|   | Exhaust          | 1.615" (41.02mm) | 0.3096"       | 0.236        | 29°         | 4.525"         | 25.10    | 20-4170        |              |
|   | Exhaust (Racing) | 1.630" (41.40mm) | 0.3096"       | 0.500        | 40°         | 4.525"         | 25.10    | 20-4170R       |              |
|   | Exhaust          | 1.650" (41.91mm) | 0.3106"       | 0.750        | 25°         | 4.515"         | 34.63    | 20-20920       | HBV-1650     |
|   | Exhaust          | 1.610" (40.89mm) | 0.3106"       | 0.750        | 25°         | 4.510"         | 34.63    | 20-20925       | HBV-1610D    |
|   | Exhaust          | 1.585" (40.26mm) | 0.3106"       | 0.750        | 25°         | 4.505"         | 34.63    | 20-20930       | HBV-1585     |
| Evo Sportster Conversion                    | Intake           | 1.715" (43.56mm) | 0.3100"       | 0.236        | 23°         | 4.550"         | 37.55    | 20-2010        |              |
|   | Exhaust          | 1.480" (37.59mm) | 0.3096"       | 0.500        | 40°         | 4.625"         | 37.55    | 20-2012        |              |
| Twin Cam 88"-103" 2005-2017                 | Intake           | 1.805" (45.85mm) | 0.2760"       | 0.413        | 1.700°R     | 4.420"         | 29.81    | 20-20322       |              |
|   | Intake           | 1.900" (48.26mm) | 0.2760"       | 0.344        | 28°         | 4.420"         | 29.81    | 20-20323R      |              |
|   | Exhaust          | 1.575" (40.00mm) | 0.2755"       | 0.354        | 22°         | 4.520"         | 29.81    | 20-20325       |              |
|   | Exhaust          | 1.630" (41.40mm) | 0.2755"       | 0.500        | 34°         | 4.520"         | 29.81    | 20-20326R      |              |
| Buell® XB9™ 2003-2007                       | Intake           | 1.805" (45.85mm) | 0.2760"       | 0.344        | 28°         | 4.525"         | 54.10    | 20-20260       |              |
|   | Intake           | 1.900" (48.26mm) | 0.2760"       | 0.344        | 28°         | 4.500"         | 54.10    | 20-20262       |              |
|   | Exhaust          | 1.575" (40.00mm) | 0.2755"       | 0.500        | 34°         | 4.610"         | 54.10    | 20-20265       |              |
|   | Exhaust          | 1.615" (41.02mm) | 0.2755"       | 0.500        | 34°         | 4.590"         | 54.10    | 20-20266       |              |
| Twin Cam, Sportster & Buell® Triple Groove  | Intake           | 1.980" (50.29mm) | 0.2757"       | 0.290        | 25°         | 4.455"         | 34.31    | 20-20935       | HBV-1980-7TG |
|   | Intake           | 1.900" (48.26mm) | 0.2757"       | 0.475        | 24°         | 4.455"         | 34.31    | 20-20940       | HBV-1900-7TG |
|   | Exhaust          | 1.610" (40.89mm) | 0.2755"       | 0.595        | 25°         | 4.545"         | 34.31    | 20-20945       | HBV-1610-7TG |
|   | Exhaust          | 1.575" (40.05mm) | 0.2755"       | 0.595        | 25°         | 4.560"         | 34.31    | 20-20950       | HBV-1575-7TG |
| Evo, Big Twin & Twin Cam                    | Intake           | 2.020" (51.31mm) | 0.3108"       | 0.670        | 25°         | 4.440"         | 34.31    | 20-20990       | HBV-2020A    |
|   | Exhaust          | 1.700" (43.18mm) | 0.3106"       | 0.600        | 25°         | 4.535"         | 34.31    | 20-20960       | HBV-1700A    |
| S&S®, Screaming Eagle & Ultima® SE® / JIMS® | Intake           | 2.020" (51.31mm) | 0.3108"       | 0.645        | 25°         | 4.510"         | 34.31    | 20-20965       | HBV-2020S    |
| Exhaust                                     | 1.610" (40.89mm) | 0.3106"          | 0.750         | 25°          | 4.565"      | 34.31          | 20-20970 | HBV-1610S      |              |
| Exhaust                                     | 2.100" (53.34mm) | 0.3108"          | 0.560         | 24°          | 4.475"      | 34.31          | 20-20955 | HBV-2100       |              |

CYLINDER HEAD REBUILDING  
CLEANING, ASSEMBLY & SAFETY  
SHORT BLOCK REBUILDING  
CRANKSHAFT/FLYWHEEL GRINDING  
MISCELLANEOUS TOOLS & SUPPLIES  
BRAKE SERVICE TOOLING  
MEASURING TOOLS  
V-TWIN & METRIC HARD PARTS

new  
new  
new

### Panhead 1948-1965 Valve Spring Kit

- OE Replacement
- Springs are heat-treated and shot peened for long life
- Kits include 4 Retainers, 4 Springs and 4 Keepers and 4 Basewashers

| Max Lift | Installed Height | Seat Pressure | Open Pressure | @ Lift | MSRP     | Order No. |
|----------|------------------|---------------|---------------|--------|----------|-----------|
| .415"    | 1.375"           | 129 lbs.      | 272 lbs.      | .415"  | \$121.95 | 20-20430  |



20-20430

### Shovelhead™ 74" 1966-1977 Valve Spring Kit

- Springs heat-treated and shot peened for long life
- Kits include 4 Retainers, 4 Springs and 4 Keepers and 4 Basewashers

| Max Lift | Installed Height | Seat Pressure | Open Pressure | @ Lift | MSRP     | Order No. |
|----------|------------------|---------------|---------------|--------|----------|-----------|
| .600"    | 1.510"           | 152 lbs.      | 387 lbs.      | .600"  | \$142.97 | 20-2110   |

**Lightweight Racing Spring Kit** 7075-T6 Retainers offset 0.070" for taller installed height. Basewashers are counter-bored to accept a 0.665" OD seal.

| Max Lift | Installed Height | Seat Pressure | Open Pressure | @ Lift | MSRP     | Order No. |
|----------|------------------|---------------|---------------|--------|----------|-----------|
| .600"    | 1.510"           | 152 lbs.      | 387 lbs.      | .600"  | \$142.97 | 20-20450  |

**Lightweight Racing Spring Kit** Steel Retainers

| Max Lift | Installed Height | Seat Pressure | Open Pressure | @ Lift | MSRP     | Order No. |
|----------|------------------|---------------|---------------|--------|----------|-----------|
| .415"    | 1.375"           | 129 lbs.      | 272 lbs.      | .415"  | \$121.95 | 20-20435  |

**OE Replacement** Steel Retainers, Keepers & Basewashers



20-2110

20-20450

20-20435

### Evolution™ 1984-1999 Valve Spring Kit

- Springs heat-treated and shot peened for long life
- Kits include 4 Retainers, 4 Springs and 4 Keepers and 4 Basewashers

| Max Lift | Installed Height | Seat Pressure | Open Pressure | @ Lift | MSRP     | Order No. |
|----------|------------------|---------------|---------------|--------|----------|-----------|
| .600"    | 1.810"           | 175 lbs.      | 380 lbs.      | .600"  | \$142.97 | 20-20132  |

**Lightweight Racing Spring Kit** Steel Retainers, Keepers & Basewashers

| Max Lift | Installed Height | Seat Pressure | Open Pressure | @ Lift | MSRP     | Order No. |
|----------|------------------|---------------|---------------|--------|----------|-----------|
| .655"    | 1.860"           | 185 lbs.      | 450 lbs.      | .655"  | \$206.05 | 20-20081  |

**Lightweight Racing Spring Kit** Steel Retainers, Keepers & Basewashers

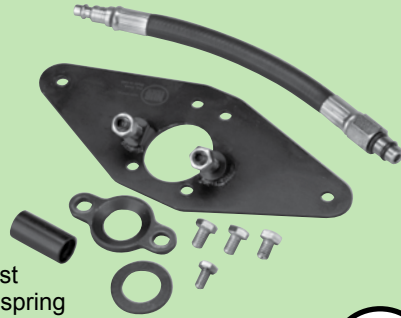
20-20132

20-20081



### V-Twin On-the-Engine Valve Spring Compressor

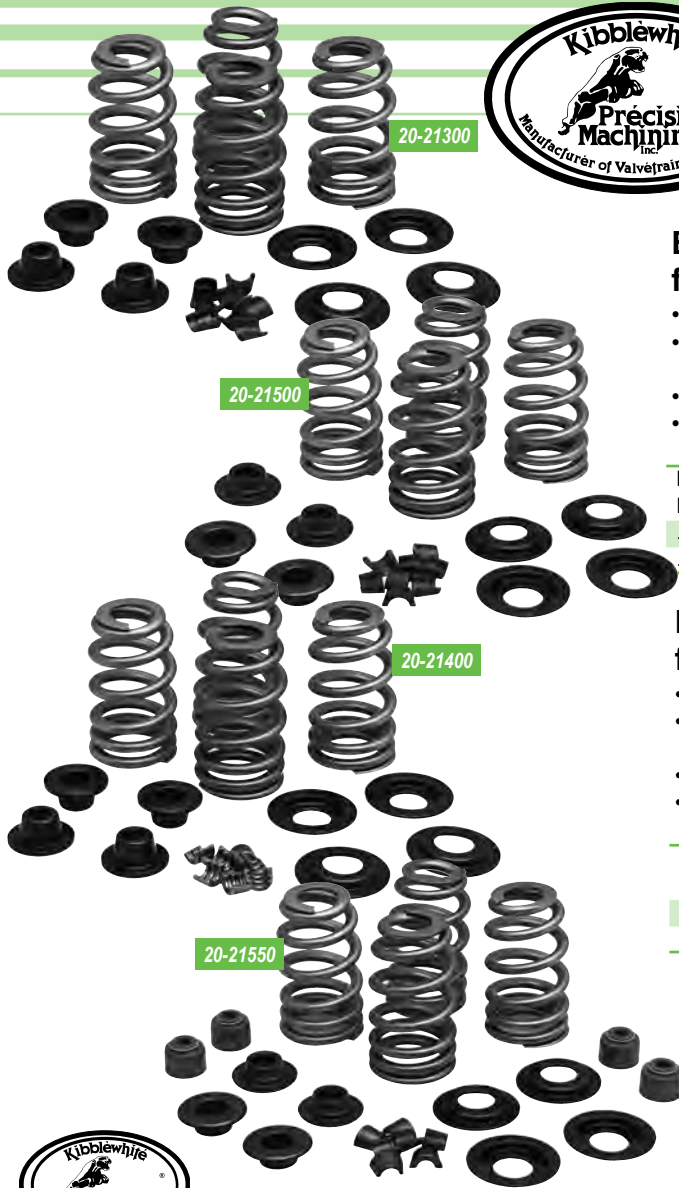
Replace broken valve springs, install high performance valve springs, remove and replace valve guide seals all without disassembling the bike – just remove the gas tank and get to work. Use on Sportster, Evolution, Twin-Cam and most aftermarket V-Twins. Kit includes valve spring compressor, adaptor for compressing beehive springs, valve seal driver/installer and head pressurizing hose. Order No. **CF-HDIF** Jobber \$164.99





**Some dimensions may have changed slightly. Be sure to confirm the new dimensions will fit your application**

CYLINDER HEAD REBUILDING  
CLEANING, ASSEMBLY & SAFETY  
SHORT BLOCK REBUILDING  
CRANKSHAFT/ FLYWHEEL GRINDING  
MISCELLANEOUS TOOLS & SUPPLIES  
BRAKE SERVICE TOOLING  
MEASURING TOOLS  
V-TWIN & METRIC HARD PARTS



**Beehive Valve Spring Sets for 5/16" (.312") Valves**

- 9° taper on .660" lift kits
- Advanced spring design with special attention to cam and spring harmonics, stress, mass and operating RPM
- Premium grade, super clean ground chrome silicon wire
- Kits include 4 Retainers, 4 Springs and 4 Keepers and 4 Basewashers

| Max Lift | Installed Height | Seat Pressure | Open Pressure | @ Lift | MSRP     | Order No. | Replaces  |
|----------|------------------|---------------|---------------|--------|----------|-----------|-----------|
| .610"    | 1.860"           | 175 lbs.      | 400 lbs.      | .610"  | \$168.17 | 20-21300  | HVS-6000S |
| .660"    | 1.860"           | 178 lbs.      | 371 lbs.      | .660"  | \$168.17 | 20-21500  | HVS-6500S |

**Beehive Valve Spring Sets for 7mm Valves**

- 9° taper on .660" lift kits
- Advanced spring design with special attention to cam and spring harmonics, stress, mass and operating RPM
- Premium grade, super clean ground chrome silicon wire
- Kits include 4 Retainers, 4 Springs and 4 Keepers and 4 Basewashers

| Max Lift | Installed Height | Seat Pressure | Open Pressure | @ Lift | MSRP     | Order No. | Replaces     |
|----------|------------------|---------------|---------------|--------|----------|-----------|--------------|
| .610"    | 1.860"           | 175 lbs.      | 400 lbs.      | .610"  | \$168.17 | 20-21400  | HVS-6000-7SG |
| .660"    | 1.860"           | 178 lbs.      | 371 lbs.      | .660"  | \$168.17 | 20-21550  | HVS-6500-7SG |



**Don't see what you're looking for? Goodson can special order virtually anything in the Kibblewhite Precision Machining catalog.**

**Compression Release Valves**

- 2 per pack
- 10 x 1.0mm thread
- High temperature resistant knobs
- Shorter thread sections makes installation easier with less drilling required than with OE-style



| Application    | Length | Thread | Jobber  | Order No. |
|----------------|--------|--------|---------|-----------|
| Evolution      | 1.400" | .350"L | \$42.99 | 20-21250  |
| Twin Cam       | 1.730" | .350"L | 42.99   | 20-21255  |
| OE Replacement | 1.750" | .500"L | 42.99   | 20-21260  |



**Pan/Shovel Spring Seat Cutting Tool**

- Convert Pan & early Shovels to late style Shovel easily to attain higher lift
- Spacer stops the cutter at the correct height for uniform spring spacing
- Use with lower spring collars or stock late-style lower spring collars (1980-1984) • OD: 1.680" • ID: 0.750"

| Description              | Jobber  | Order No.  |
|--------------------------|---------|------------|
| Spring Seat Cutting Tool | \$92.99 | VSS-1680HD |
| .375" Spring Pad Pilot   | 28.99   | VP-375     |

**Keeper Installation Tools**

*Best Keeper Tool on the Market!*

- Spring-loaded plunger
- For single & multi-groove keepers
- Reaches keeper grooves located farther from the valve tip • Ideal for use with **CF-500** (p. 39) and **PSB-5000** (p. 38)



| Size                      | Jobber  | Order No. |
|---------------------------|---------|-----------|
| 4mm / .1563"              | \$79.99 | VKI-4     |
| 5mm / .2031"              | 79.99   | VKI-5     |
| 6mm / .2344"              | 79.99   | VKI-6     |
| 7mm / .2812"              | 79.99   | VKI-7     |
| 8mm / .3125"              | 79.99   | VKI-8     |
| Replacement Rubber Sleeve | 6.99    | VKI-56    |

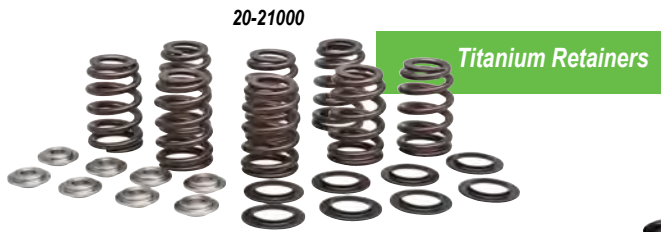
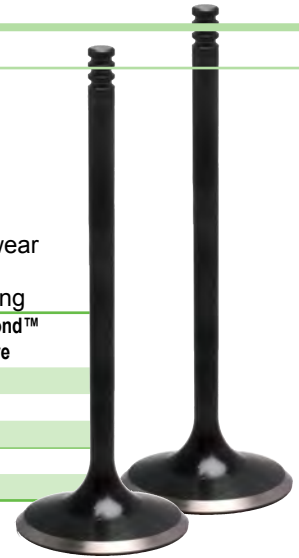


MEASURING TOOLS V-TWIN & METRIC HARD PARTS  
 BRAKE SERVICE TOOLING  
 MISCELLANEOUS TOOLS & SUPPLIES FLYWHEEL GRINDING  
 CRANKSHAFT/ REBUILDING SHORT BLOCK REBUILDING  
 CLEANING, ASSEMBLY & SAFETY REBUILDING  
 CYLINDER HEAD REBUILDING

## Black Diamond™ Replacement Valves for Milwaukee-Eight™ Heads

- Black Nitroleg Stems
- One-piece forged stainless steel valves impregnated by a special German process to improve wear properties and reduce friction
- Provide resistance to corrosion and wear superior to hard chromium and electrolysis nickel plating

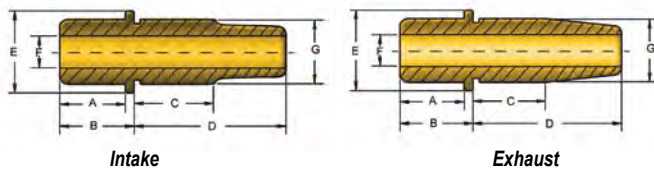
| Type    | Head Diameter    | Stem Dia. | Tulip Radius | Tulip Angle | Overall Length | MSRP    | Black Diamond™ Triple Groove |
|---------|------------------|-----------|--------------|-------------|----------------|---------|------------------------------|
| Intake  | 1.571" (39.90mm) | 0.2347"   | 0.235"       | 10°         | 4.015"         | \$37.55 | 20-21012                     |
| Intake  | 1.591" (40.40mm) | 0.2347"   | 0.235"       | 10°         | 4.015"         | 37.55   | 20-21015                     |
| Intake  | 1.630" (41.40mm) | 0.2347"   | 0.235"       | 10°         | 4.055"         | 37.55   | 20-21013                     |
| Exhaust | 1.264" (32.11mm) | 0.2342"   | 0.460"       | 24°         | 4.050"         | 37.55   | 20-21016                     |
| Exhaust | 1.284" (32.61mm) | 0.2342"   | 0.460"       | 24°         | 4.050"         | 37.55   | 20-21017                     |



## Milwaukee-Eight™ Beehive Valve Spring Kits

- Advanced spring design with special attention to cam and spring harmonics, stress, mass and operating RPM
- Premium-grade, super clean ground chrome silicon wire
- Heat-treated and shot peened for long life
- Kits include 8 Retainers, 8 Springs and 8 Basewashers
- Kit 20-21200 does NOT require Basewashers, it is compatible with OE seals or Order No. 71046 (below)

| Max Lift | Installed Height | Seat Pressure | Open Pressure | @ Lift | MSRP     | Order No. |
|----------|------------------|---------------|---------------|--------|----------|-----------|
| .465"    | 1.410"           | 80 lbs.       | 212 lbs.      | .465"  | \$313.38 | 20-21000  |
| .465"    | 1.410"           | 80 lbs.       | 212 lbs.      | .465"  | 250.70   | 20-21050  |
| .550"    | 1.550"           | 104 lbs.      | 230 lbs.      | .550"  | 398.05   | 20-21200  |



## Milwaukee-Eight™ Manganese Bronze Valve Guides

- Use with 6mm seals (71046 or OE)

| Intake   |       |       |        |       |        |        | Manganese Bronze | Cast Iron |
|----------|-------|-------|--------|-------|--------|--------|------------------|-----------|
| A        | B     | C     | D      | E     | F      | G      |                  |           |
| .480"    | .545" | .540" | 1.110" | .600" | .2347" | .4750" | 20-21020M        | 20-21020C |
|          |       |       |        |       |        | .4760" | 20-21021M        | 20-21021C |
|          |       |       |        |       |        | .4770" | 20-21022M        | 20-21022C |
|          |       |       |        |       |        | .4850" | 20-21029M        | 20-21029C |
| Exhaust  |       |       |        |       |        |        | Manganese Bronze | Cast Iron |
| A        | B     | C     | D      | E     | F      | G      |                  |           |
| .480"    | .545" | .600" | 1.110" | .600" | .2342" | .4750" | 20-21030M        | 20-21030C |
|          |       |       |        |       |        | .4760" | 20-21031M        | 20-21031C |
|          |       |       |        |       |        | .4770" | 20-21032M        | 20-21032C |
|          |       |       |        |       |        | .4850" | 20-21039M        | 20-21039C |
| MSRP ea. |       |       |        |       |        |        | \$13.12          | \$8.83    |



## Milwaukee-Eight™ Tophat Valve Seal

- Designed to fit Milwaukee-Eight™ Valve Guides
- 6.0mm Stem Diameter
- 0.712" Overall Length • 1.170" Seal OD
- For intake and exhaust • 16 pack
- Order No. 71046 MSRP \$16.12

