



S&S Cam

| VT No. | Year | S&S# | Application | Valve Timing* Intake | Valve Timing* Exhaust | Valve Duration Intake | Valve Duration Exhaust | Valve Lift Shovelpan | Lift @ TDC + Intake | Lift @ TDC + Exhaust | Requirements Spring Spacing | Lifter Type |
|-------------------------------|-------------------------------|-------------|---|-------------------------|--------------------------|--------------------------|---------------------------|-------------------------|------------------------|-------------------------|--------------------------------|-------------|
| N/A 10-5045 | 1970-77 1978-84 | S&S | Engines up to 88" with up +8.5:1. Good low and mid range torque. | 18°/38° | 40°/18° | 236° | 238° | .475"/.453" | .158" | .152" | No Bolt In | Hydraulic |
| 10-5050 10-5051 10-5052 | 1948-69 1970-77 1978-84 | S&S 514 | 80"/84" to 96" engines with 8.5:1 or less CR. Good mid range. | 23°/43° | 43°/23° | 246° | 246° | .514"/.540" | .169" | .169" | Yes | Solid |
| N/A 10-5047 10-5048 | 1948-69 1970-77 1978-84 | S&S 560S | 88" to 103" engines with 9:1 to 10:1 CR. Strong power throughout RPM range. | 20°/55° | 60°/20° | 255° | 260° | .587"/.560" | .168" | .164" | Yes | Solid |

*Note: Timing designation is function of zero lash @ .053" off base circle.
 +Lifts at TDC are measured at the valve and are for reference only. Overlap valve lifts must be checked on assembled motor.
 Minimum valve to valve clearance of .040" is recommended.



Sifton Cam



48-1327



48-0368



48-1208

Sifton Patches.
 VT No. Style
 48-1327 Logo
 48-0368 Handshake
 48-1208 Cam



For Identification check these applications:

1978-86 New Shovelhead and 1977 Low Rider
 1970-77 Alternator Shovelhead

| For 1948-84 Big Twins | | | | | | | | |
|--|--------------|---------|---------|---------|-------|------|-----------|--------|
| VT No. | Year | Cam | Degrees | At .053 | Lift | TDC | Travel to | Free |
| Side Kick Cam is similar to 102 but with more top end power. Requires no head work to install. Do not use with hydraulic tappets. | | | | | | | | |
| — | Late 1948-69 | 103 | Opens | Closes | Total | TDC | Coil Bind | Travel |
| 10-0610 | Late 1970-77 | Inlet | 28° | 57° | .390 | .174 | .420 | .470 |
| 10-0611 | Late 1978-84 | Exhaust | 53° | 27° | .390 | .174 | .420 | .470 |
| Aristocrat Cam shows significant gain over stock, requires no head work to install. Fits 1948-up. Do not use with hydraulic tappets. | | | | | | | | |
| — | 1948-69 | 102 | Opens | Closes | Total | TDC | Coil Bind | Travel |
| 10-0601 | Late 1970-77 | Inlet | 32° | 56° | .412 | .200 | .440 | .490 |
| 10-0602 | 1978-84 | Exhaust | 53 | 28 | .412 | .185 | .440 | .490 |
| Avenger Cam performs best in 86" and 93" cubic inch engines with 4-Speed works well with hydraulic, perform best with solid lifters. | | | | | | | | |
| 10-0603 | 1948-69 | 109 | Opens | Closes | Total | TDC | Coil Bind | Travel |
| 10-0604 | Late 1970-77 | Inlet | 32.5° | 50° | .440 | .211 | .470 | .520 |
| | | Exhaust | 58.5° | 30° | .440 | .200 | .470 | .520 |
| Crusader Cam is a good cam for low end and mid range and is designed to be used with hydraulic lifters. | | | | | | | | |
| — | 1948-69 | 107 | Opens | Closes | Total | TDC | Coil Bind | Travel |
| 10-0668 | Late 1970-77 | Inlet | 29° | 54° | .440 | .193 | .470 | .520 |

| CUBIC INCH CHART | | | | | | | | |
|-------------------|---------|--------|--------|--------|--------|--------|--------|--------|
| Stock 74 Stock 80 | | | | | | | | |
| B O R E | STROKE | 3 1/2" | 3.968" | 4 1/4" | 4 1/2" | 4 5/8" | 4 3/4" | 5.00" |
| | 3 1/16" | 61" | | | | | | |
| | 3 1/8" | 64.8" | 73.7" | 78.7" | 83.4" | 85.7" | 88.0" | 92.8" |
| | 3 1/4" | 67.2" | 76.3" | 81.6" | 86.6" | 89.0" | 91.4" | 96.1" |
| | 3 3/8" | 72.1" | 81.7" | 87.4" | 92.9" | 95.5" | 99.0" | 103.2" |
| | 3 1/2" | 74.6" | 84.7" | 90.7" | 96.1" | 98.8" | 101.5" | 106.8" |
| | 3 5/8" | 79.9" | 90.6" | 97.0" | 102.8" | 103.7" | 108.9" | 114.2" |
| | 3 7/8" | 82.3" | 93.4" | 100.1" | 100" | 108.9" | 111.9" | 117.8" |
| | 4.00" | 87.9" | 99.7" | 106.8" | 113.0" | 116.1" | 119.3" | 125.6" |
| | 4 1/8" | 93.4" | 106.0" | 113.5" | 120.2" | 123.5" | 126.9" | 133.6" |
| 4 1/4" | 99.2" | 112.6" | 120.5" | 127.6" | 131.1" | 134.7" | 141.8" | |

$$\text{Cubic Inch} = \pi r^2 \times \text{Stroke}$$

$$r = 1/2 \text{ of Bore}$$

1 cubic inch = 16.38 cc

1 cubic inch = .0163871 liter