

B SERIES VTEC (B16A / B18C / B17A) - TWIN CAM

Note: These cams use .006" intake (cold), .008" exhaust valve lash (cold).

Description	Part Number	C.I.D. Group	Advertised Duration (.010")		Duration @ .050"		Lobe Lift		Gross Lift		Rec Kit
			Intake	Exhaust	Intake	Exhaust	Intake	Exhaust	Intake	Exhaust	
STOCK CIVIC Si (1999-2000)	Civic Si	Mid	284°	282°	224°	220°	.265"	.244"	.412"	.379"	Stock
STOCK GSR (94-up)	GSR	Mid	290°	292°	236°	224°	.273"	.244"	.423"	.378"	Stock
JDM SPEC CIVIC TYPE R (98-up)	CTR	Mid	294°	305°	240°	232°	.289"	.269"	.447"	.416"	Stock
STAGE 1 Performance oriented street use. CTR+ profile that will work with Type R valve springs. Also works w/mild turbo. RPM Range: 1500 to 8500+.	63401-2	Mid Sec Pri	296° 278° 259°	306° 288° 230°	242° 200° 176°	234° 201° 179°	.290" .214" .141"	.270" .204" .131"	.449" .321" .204"	.418" .306" .190"	84163
STAGE 2 - Forced Induction Special Designed specifically for turbo/blower. Features short duration, low overlap and high valve lift. Requires kit #84161. RPM Range: 1500 to 9500+. Horsepower varies w/boost.	63401T-2	Mid Sec Pri	308° 278° 259°	309° 288° 230°	233° 200° 176°	235° 201° 179°	.301" .214" .141"	.287" .204" .131"	.466" .321" .204"	.445" .306" .190"	84161
STAGE 2 Stock idle lobes (sec/pri) with #63402 VTEC (mid) lobes. Recommend #84163 spring unless stock rev limit. RPM Range: 1800 to 9250+. 18+ hp over B18C.	63402A-2	Mid Sec Pri	311° 278° 259°	308° 288° 230°	255° 200° 176°	248° 201° 179°	.301" .214" .141"	.301" .204" .131"	.466" .321" .204"	.466" .306" .190"	84163
STAGE 2 - 3/4 Race Road/Rally Race and Street/Strip. Requires #84161 kit with rev limiter mod. V-tec & ECU tuning req. RPM Range: 2500 to 9500+. 20+ hp over built B18C.	63402-2	Mid Sec Pri	311° 284° 269°	308° 273° 259°	255° 215° 196°	248° 213° 193°	.301" .243" .181"	.301" .234" .174"	.466" .364" .262"	.466" .351" .252"	84163 or 84161
	63402P-2	Mid Sec Pri	312° 284° 269°	310° 273° 259°	256° 215° 196°	251° 213° 193°	.320" .243" .181"	.318" .234" .174"	.496" .364" .262"	.493" .351" .252"	84163 or 84161
STAGE 3 - Full Race, All Motor / Turbo Drag Race and rough Street/Strip. Requires #84161 kit with modified revs. RPM Range: 1200 to 9750+. 22+ hp over built B18C.	63403-2	Mid Sec Pri	305° 282° 291°	305° 284° 283°	263° 216° 198°	255° 214° 199°	.302" .243" .215"	.302" .234" .203"	.468" .364" .311"	.468" .351" .294"	84163 or 84161
	63403P-2	Mid Sec Pri	318° 282° 291°	314° 284° 283°	268° 216° 198°	256° 214° 199°	.328" .243" .215"	.328" .234" .203"	.508" .364" .311"	.508" .351" .294"	84163 or 84161

Duration figures are taken at the valve. Gross lift calculated by using the following rocker ratios: Mid (VTEC)

- 1.55, Secondary - 1.50, Primary - 1.45.

CUSTOM GRIND - Crower can custom grind cams to your desired specs, also proprietary applications. Part # **00063-2**

ENGINEERED COMPONENT KITS

Part No.	Springs	Retainers	Remarks
84163S	68185-16	87093S-16	Steel retainer intended for high mileage B18C applications
84163	68185-16	87093-16	Titanium retainer intended for race and limited street
84163D	68185-16	87093D-16*	Titanium retainer. B16A w/high lift cams (+.060" inst height). Mach work req.
84161	68188-16	87093-16	Titanium retainer. High pressure spring for rpm over 9500
84161D	68188-16	87093D-16*	Titanium retainer. High press. spring, high lift cams (+.060"). Mach work req.

REMEMBER!

When installing new camshaft please remember that the contact surface of the follower must be free of wear/smooth surface.

ADJUSTABLE SPROCKETS

Crower's new cam sprockets are made from premium 6061-T6 billet aluminum and incorporate a four bolt ARP® fastening system to prevent the slippage found in other brands. The lightweight design (327g) reduces unwanted harmonics which could cause valve train failure. To have the full potential of your cam performance, cam sprockets are required.

STAINLESS STEEL VALVES

Made from the highest grade stainless steel, this Crower valve is a must for high horse-power, high boost and high rpm applications. The exclusive "Pro Flo" head design delivers a significant increase in cylinder head flow figures, while the tip area is hardened to RC50, including past the critical keeper groove area for added strength. Fully CNC machined and swirl polished to insure that you will get the best performance valve available on the market. Choose from standard, 1/2mm, 1mm oversize. Titanium valves also available.

Note: Valve guides may require honing to size. All Crower VTEC valves are 5.5mm stem diameter. Factory guides may vary depending on specific engine.

Spring pressure:

68185-16 Seat: 1.350" @ 49 lbs / Nose: 0.900" @ 186 lbs / Coil bind: 0.805" (No machine work required).

68188-16 Seat: 1.350" @ 82 lbs / Nose: 0.900" @ 224 lbs / Coil bind: 0.765" (No machine work required).

Optional spring:

Note: Crower titanium retainers weigh 7.5 grams vs. 12 grams stock steel. Crower steel retainers weigh 10.5 grams.

***Note: Some machine work on retainer #87093D may be required on the underside of rocker to allow retainer clearance.**

86115-16 Premium steel billet valve keepers (locks) available in standard or +.050" inst ht (#86115X1-16).

86115T-16 Premium titanium billet valve keepers (locks) available in standard installed height. Half the weight of steel.

ACCESSORIES

Part No.	Description
86054BB	Adjustable Cam Sprocket (1 only). All black. 2 required
86054BC	Adjustable Cam Sprocket (1 only). Black & Silver. 2 required
97400I-8	Stainless steel valves - 33 mm head dia (8 only int)
97400E-8	Stainless steel valves - 28 mm head dia (8 only exh)
97401I-8	Stainless steel valves - 33.5 mm head dia (8 only int)
97401E-8	Stainless steel valves - 28.5 mm head dia (8 only exh)
97402I-8	Stainless steel valves - 34 mm head dia (8 only int)

Note: When ordering valves, be sure to specify one set int and one set exh.

Note: When ordering sprockets, be sure to specify two.

Rec 1/2mm over on exh.

○ H22 SERIES VTEC - TWIN CAM FEATURES STRONGER CORE DESIGN

Note: These cams use .006" intake (cold), .008" exhaust valve lash (cold).

Duration figures are taken at the valve.

Complete dyno figures available online at www.crower.com. Gross lift calculated by using the following rocker ratios: Mid Lobe (VTEC) - 1.55, Secondary Lobe - 1.50, Primary Lobe - 1.45.

Honda / Acura

Description	Part Number	C.I.D. Group	Advertised Duration @ .010"		Duration @ .050"		Lobe Lift		Gross Lift		Rec Kit
			Intake	Exhaust	Intake	Exhaust	Intake	Exhaust	Intake	Exhaust	
STOCK Type SH	SH	Mid	288°	308°	231°	234°	.289"	.268"	.448"	.415"	Stock
STOCK JDM TYPE S	JDM	Mid	306°	310°	230°	230°	.303"	.283"	.469"	.438"	Stock
STAGE 1 Proven performer in all motor applications on the street. No ECU mods or aftermarket valve springs required. RPM Range: Idle to 7500+	63421-2	Mid Sec Pri	307° 214° 210°	318° 285° 276°	238° 183° 175°	238° 191° 183°	.296" .215" .179"	.276" .208" .169"	.459" .323" .260"	.428" .312" .245"	Stock
STAGE 2 - Forced Induction Special Excellent for turbo or supercharged applications. Features short duration and high lift. Requires spring #68184-16. RPM Range: Idle to 8000+	63421T-2	Mid Sec Pri	308° 214° 210°	309° 285° 276°	233° 183° 175°	235° 191° 183°	.299" .215" .179"	.289" .208" .169"	.463" .323" .260"	.448" .312" .245"	84167 84167S
STAGE 2 Stock idle lobes (sec/pri) with similar #63422 VTEC (mid) lobes. Recommend #84167 kit unless stock revs. RPM Range: Idle to 8000	63422A-2	Mid Sec Pri	311° 214° 210°	308° 285° 276°	255° 183° 175°	248° 191° 183°	.302" .215" .179"	.301" .208" .169"	.468" .323" .260"	.467" .312" .245"	84167 84167S
STAGE 2 - 3/4 Race - All Motor / Turbo Road/Rally Race and Street/Strip. Most popular profile. Requires #84167 kit. V-tec & ECU tuning recommended. RPM Range: 1000 to 8000+	63422-2	Mid Sec Pri	311° 280° 278°	308° 289° 256°	255° 199° 198°	248° 201° 199°	.302" .216" .196"	.301" .204" .182"	.468" .324" .284"	.467" .306" .263"	84167 84167S
STAGE 2 - 3/4 Race PLUS PERFORMANCE	63422P-2	Mid Sec Pri	312° 280° 278°	310° 289° 256°	256° 199° 198°	257° 201° 199°	.320" .216" .196"	.318" .204" .182"	.496" .324" .284"	.493" .306" .263"	84167 84167S
STAGE 3 - Full Race, All Motor / Turbo Drag Race and rough Street/Strip. Requires #84167 kit. Not for inexperienced tuner. Head Mods, V-tec & ECU tuning req. RPM Range: 1100 to 8200+	63423-2	Mid Sec Pri	305° 267° 262°	305° 269° 254°	263° 216° 198°	255° 210° 193°	.302" .243" .184"	.302" .236" .176"	.468" .365" .267"	.468" .354" .255"	84167 84167S
STAGE 3 - PLUS PERFORMANCE	63423P-2	Mid Sec Pri	318° 267° 262°	314° 269° 254°	268° 216° 198°	256° 210° 193°	.328" .243" .184"	.328" .236" .176"	.508" .365" .267"	.508" .354" .255"	84167 84167S

ENGINEERED COMPONENT KITS

Part No.	Springs	Retainers	Remarks
84167	68184-16	87093D-16	Titanium retainer is +.060" inst. ht. Rocker machining may be required.
84167S	68184-16	87093DS-16	Steel retainer, for daily street use.

Spring pressure:

68184-16 Seat: 1.460" @ 89 lbs / Nose: 0.950" @ 220 lbs / Coil bind: 0.790" (No machine work required).

Optional spring:

Note: Some machine work may be required on the underside of rocker to allow retainer clearance.

86115-16 Premium steel billet valve keepers (locks) available in standard or +.050" inst ht (#86115X1-16).

86115T-16 Premium titanium billet valve keepers (locks) available in standard installed height. Half the weight of steel.

REMEMBER!

When installing new camshaft please remember that the contact surface of the follower must be free of wear/smooth surface.

ADJUSTABLE SPROCKETS

Crower's new cam sprockets are made from premium 6061-T6 billet aluminum and incorporate a four bolt ARP® fastening system to prevent the slippage found in other brands. The lightweight design (327g) reduces unwanted harmonics which could cause valve train failure. To obtain full potential of your cam performance, cam sprockets are required.

STAINLESS STEEL VALVES

Made from the highest grade stainless steel, this new Crower valve is a must for high horsepower, high boost and high rpm applications. The exclusive "Pro Flo" head design delivers a significant increase in cylinder head flow figures, while the tip area is hardened to RC50, including past the critical keeper groove area for added strength. Fully CNC machined and swirl polished to insure that you will get the best performance valve available on the market. Choose from standard, 12 mm, 1 mm and 2 mm oversize. Titanium valves also available. Contact Crower for availability. When ordering sprockets, be sure to specify two.

ACCESSORIES

Part No.	Description
86054H	Adjustable Cam Sprocket (1 only). All black. 2 required
97415I-8	Stainless steel valves - 35 mm head dia (8 only int)
97415E-8	Stainless steel valves - 30 mm head dia (8 only exh)
97416I-8	Stainless steel valves - 35.5 mm head dia (8 only int)
97416E-8	Stainless steel valves - 30.5 mm head dia (8 only exh)
97417I-8	Stainless steel valves - 36 mm head dia (8 only int)
97417E-8	Stainless steel valves - 31 mm head dia (8 only int)
97418I-8	Stainless steel valves - 37 mm head dia (8 only int)

Note: When ordering valves, be sure to specify one set int and one set exh.

Note: When ordering sprockets, be sure to specify two.

Note: Valve guides may require honing to size. All Crower VTEC valves are 5.5mm stem diameter. Factory guides may vary depending on specific engine.

CUSTOM GRIND - Crower can custom grind cams to your desired specs, also proprietary applications. **Part # 00065-2**

RSX-Type S (USDM) & CIVIC-Type R (JDM) - K20A2 VTEC

Note: These cams use .006" intake (cold), .008" exhaust valve lash (cold).

New Improved Cam Core Technology

Description	Part Number	C.I.D. Group	Advertised Duration (.010")		Duration @ .050"		Lobe Lift		Gross Lift 1.75 / 1.75		Rec Kit
			Intake	Exhaust	Intake	Exhaust	Intake	Exhaust	Intake	Exhaust	
ACURA RSX-Type S (2001-up)	Stock	Mid	302°	305°	219°	215°	.276"	.246"	.483"	.431"	
ACURA TSX (2004)	Stock	Mid	310°	302°	210°	212°	.258"	.259"	.451"	.453"	
STAGE 1 Performance oriented street. Hotter than JDM Type R profile. Works with stock springs if no mods to factory rev limiter. RPM Range: Idle to 9000	63451-2	Mid Sec Pri	300° 245° 245°	290° 245° 245°	229° 176° 176°	226° 176° 176°	.274" .173" .173"	.272" .173" .173"	.480" .294" .294"	.476" .294" .294"	Stock or 84164 84164S
STAGE 2 - Forced Induction Special Designed for turbo/supercharger. Features short duration, low overlap and high lift. Requires #84164 kit & ECU mods. RPM Range: Idle to 9500+. Horsepower varies w/boost & mods.	63451T-2	Mid Sec Pri	296° 245° 245°	296° 245° 245°	220° 176° 176°	220° 176° 176°	.297" .173" .173"	.297" .173" .173"	.519" .294" .294"	.519" .294" .294"	84164 84164S
STAGE 2 - 3/4 Race All Motor / Turbo Road/Rally and Street/Strip. Requires #84164 spring kit and compatible ECU upgrade. Slight lope at idle to be expected. RPM Range: 1000 to 9500	63452-2	Mid Sec Pri	304° 250° 250°	300° 250° 250°	234° 180° 180°	228° 180° 180°	.294" .190" .190"	.276" .190" .190"	.514" .323" .323"	.483" .323" .323"	84164 84164S
STAGE 2 - 3/4 Race All Motor / Turbo - Performance Plus	63452P-2	Mid Sec Pri									<i>Call CROWER for specs.</i>
STAGE 3 - Full Race, All Motor / Turbo Drag Race and radical Street/Strip. Requires #84164 spring. Not for inexperienced tuner. Head Mods, V-tec & ECU tuning req. RPM Range: 1200 to 10,000	63453-2	Mid Sec Pri	310° 256° 256°	304° 256° 256°	247° 185° 185°	244° 185° 185°	.303" .207" .207"	.282" .207" .207"	.530" .352" .352"	.494" .352" .352"	84164 84164S
STAGE 3 - Full Race, All Motor / Turbo - Performance Plus	63453P-2	Mid Sec Pri									<i>Call CROWER for specs.</i>
CUSTOM GRIND - Crower can custom grind cams to your desired specs, also proprietary profiles available upon request.	00066-2		<i>Refer to page 7 for camshaft recommendation form</i>								

Note: The above cams will not fit the base RSX or Civic Si (USDM 2001-up) models with the K20A3 engine. Cams for those applications will be available shortly. Duration figures are taken at the cam. Gross lift calculated by using the following rocker ratios: Mid (VTEC) - 1.75, Secondary - 1.7, Primary - 1.7.

ENGINEERED COMPONENT KITS

Part No.	Springs	Retainers	Remarks
84164	68189-16	87094-16	Titanium retainer intended for race and limited street
84164S	68189-16	87094S-16	Steel retainer, for daily street use.

Spring pressure:

68189-16 Seat: 1.590" @ 85 lbs / Nose: 1.110" @ 261 lbs / Coil bind: 1.030" (No machine work required).

Note: Crower titanium retainers weigh 7.5 grams vs. 12 grams stock steel. Crower steel retainers weigh 10.5 grams.

86115-16 Premium steel billet valve keepers (locks) available in standard installed height.

86115T-16 Premium titanium billet valve keepers (locks) available in standard installed height. Half the weight of steel.

REMEMBER!

When installing new camshaft please remember that the contact surface of the follower must be free of wear/smooth surface.

ACCESSORIES

Part No.	Description
97410I-8	Stainless steel valves - 35 mm head dia (8 only int)
97410E-8	Stainless steel valves - 30 mm head dia (8 only exh)
97411I-8	Stainless steel valves - 35.5 mm head dia (8 only int)
97411E-8	Stainless steel valves - 30.5 mm head dia (8 only exh)
97412I-8	Stainless steel valves - 36 mm head dia (8 only int)
97412E-8	Stainless steel valves - 31 mm head dia (8 only ext)

Note: When ordering valves, be sure to specify one set int and one set exh.

STAINLESS STEEL VALVES

Made from the highest grade stainless steel, this new Crower valve is a must for high horsepower, high boost and high rpm applications. The exclusive "Pro Flo" head design delivers a significant increase in cylinder head flow figures, while the tip area is hardened to RC50, including past the critical keeper groove area for added strength. Fully CNC machined and swirl polished to insure that you will get the best performance valve available on the market. Choose from standard, 1/2 mm, 1 mm and 2 mm oversize. Titanium valves also available. Contact Crower for availability.

B18A/B SERIES NON-VTEC - TWIN CAM

Note: These cams use .006" intake (cold), .008" exhaust valve lash (cold).

Honda / Acura

New Improved Cam Core Technology

Description	Part Number	Advertised Duration @ .010"		Duration @ .050"		Lobe Lift		Gross Lift 1.75 / 1.75		Rec Kit
		Intake	Exhaust	Intake	Exhaust	Intake	Exhaust	Intake	Exhaust	
FACTORY OEM SPECS (B18B - LS)	Stock	220° Lobe 265° Valve	222° 267°	185° Lobe 194° Valve	187° 196°	.225"	.217"	.394"	.380"	Stock
STAGE 1 Street use with emphasis on mid range power. Slight lobe at idle. RPM Range: Idle to 7250+	62402-2	245° Lobe 290° Valve	251° 296°	193° Lobe 203° Valve	198° 208°	.238"	.228"	.417"	.399"	Stock
STAGE 2 - Forced Induction Special Turbo Special. Short duration and high lift grind. Requires #84162 kit. RPM Range: 900 to 8000+.	62402T-2	256° Lobe 301° Valve	256° 301°	193° Lobe 203° Valve	193° 203°	.268"	.268"	.469"	.469"	84162 84162S
STAGE 2 Street/Strip package. Most popular N/A profile. Requires #84162 kit. RPM Range: 1000 to 8000+.	62403-2	250° Lobe 295° Valve	250° 295°	211° Lobe 221° Valve	210° 220°	.241"	.235"	.422"	.411"	84162 84162S
STAGE 3 - 3/4 Race Recommended for mostly strip use in N/A applications. Rough idle. RPM Range: 1100 to 8200+	62404-2	263° Lobe 308° Valve	258° 303°	216° Lobe 226° Valve	214° 224°	.254"	.248"	.445"	.434"	84162 84162S
STAGE 3 - Full Race All Motor All out, all motor drag profile. RPM Range: 1500 to 8500+	62405A-2	308° Lobe 353° Valve	305° 350°	230° Lobe 241° Valve	227° 238°	.273"	.268"	.478"	.469"	84162 84162S
CUSTOM GROUND B18A/B CAMS - Special order custom ground profiles available for an additional charge. Proprietary and confidential profiles also available.	00062-2	<i>Refer to page 7 for camshaft recommendation form</i>								

ENGINEERED COMPONENT KITS

Part No.	Springs	Retainers	Remarks
84162	68181-16	87092-16	Titanium retainer. Fits B18A and B18B. For limited street use.
84162S	68181-16	87092S-16	Steel Retainer, for daily street use.

Spring pressure:

68181-16 Seat: 1.400" @ 48 lbs / Nose: 0.950" @ 148 lbs / Coil bind: 0.710" (No machine work required).

Optional spring:

68182-16 Seat: 1.400" @ 70 lbs / Nose: 0.950" @ 202 lbs / Coil bind: 0.800" (No mach work / High pressure design).

Note: Crower titanium retainers weigh 5.5 grams vs. 12 grams stock.

Factory installed height on intake = 1.320", exhaust = 1.425"

REMEMBER!

When installing new camshaft please remember that the contact surface of the follower must be free of wear/smooth surface.

ACCESSORIES

Part No.	Description
86054BB	Adjustable Cam Sprocket (1 only). All black. 2 required
86054BC	Adjustable Cam Sprocket (1 only). Black & Silver. 2 required
974071-8	Stainless steel valves - 31 mm head dia (8 only int)
97407E-8	Stainless steel valves - 28 mm head dia (8 only exh)
974081-8	Stainless steel valves - 31.5 mm head dia (8 only int)
97408E-8	Stainless steel valves - 28.5 mm head dia (8 only exh)

Note: When ordering valves, be sure to specify one set int and one set exh.

Note: When ordering sprockets, be sure to specify two.

MAXI-LITE BILLET RODS

Crower's new Maxi-Lite billet is approximately 100 grams lighter than Crower's standard billet.

STEEL BILLET RODS

100% made in the USA from premium steel billet material, Crower's premium standard steel billet rod (#B93728B-4) is designed for boosted applications in excess of 12 psi or over 100 HP shot of nitrous. Also available in a Maxi-Lite all motor design (ML93728B-4) for added weight reduction and quicker throttle response.



H23 SERIES NON-VTEC - TWIN CAM

Note: These cams use .006" intake (cold), .008" exhaust valve lash (cold).

New Improved Cam Core Technology

Description	Part Number	Advertised Duration (.010")		Duration @ .050"		Lobe Lift		Gross Lift 1.85 / 1.85		Rec Kit
		Intake	Exhaust	Intake	Exhaust	Intake	Exhaust	Intake	Exhaust	
HONDA H23 Prelude Si (1994)	Stock	240°	240°	183°	183°	.224"	.224"	.414"	.414"	Stock
STAGE 1 Street use with emphasis on bottom end and mid range power. Works with stock springs up to factory rev limiter. RPM Range: Idle to 7000+	62481-2	245°	251°	193°	198°	.238"	.228"	.440"	.422"	84177
STAGE 2 - Forced Induction Designed specifically for turbo or supercharger applications. Low duration, high lift profile. Requires Crower spring kit #84177. RPM Range: Idle to 8000+	62481T-2	245°	245°	193°	193°	.238"	.238"	.440"	.440"	84177
STAGE 2 - 3/4 Race Designed for street/strip applications in normally aspirated engines. Requires spring/retainer kit #84177. RPM Range: 1000 to 7800+	62482-2	250°	250°	211°	210°	.241"	.235"	.446"	.435"	84177
STAGE 3 - Full Race Drag Race and radical Street/Strip. Requires #84177 spring kit and compatible ECU upgrade for optimum results. Rough idle. RPM Range: 1100 to 8000+	62483-2	255°	255°	215°	215°	.244"	.244"	.451"	.451"	84177
CUSTOM GRIND - Crower can custom grind cams to your desired specs, also proprietary profiles available upon request.	00061-2	<i>Refer to page 7 for camshaft recommendation form</i>								

Duration figures are taken at the lobe.

ENGINEERED COMPONENT KITS

Part No.	Springs	Retainers	Remarks
84177	68181-16	87092D-16	68929-16 Titanium retainer intended for race and limited street

Spring pressure:

68181-16 Seat: 1.350" @ 56 lbs / Nose: 0.950" @ 148 lbs / Coil bind: 0.710"
(No machine work required).

Note: Crower titanium retainers weigh 7.5 grams vs. 12 grams stock steel.
Crower steel retainers weigh 10.5 grams.

REMEMBER!

When installing new camshaft please remember that the contact surface of the follower must be free of wear/smooth surface.

MAXI-LITE BILLET RODS

Crower's new Maxi-Lite billet is approximately 100 grams lighter than Crower's standard billet.

STEEL BILLET RODS

Crower steel billet rods are made to exacting tolerances on state-of-the-art CNC machining centers. Available for all popular Honda/Acura engine makes, Crower connecting rods are the smart choice if you value your engine block and other internals. Made from premium, steel alloy and features 220,000 p.s.i. bolts for ultimate clamping.



New Improved Cam Core Technology

Description	Part Number	Advertised Duration		Duration @ .050"		Lobe Lift		Gross Lift		Rec Kit
		Intake	Exhaust	Intake	Exhaust	Intake	Exhaust	Intake	Exhaust	
FACTORY OEM SPECS (2001-up Civic EX)	Stock	235°	229°	183°	171°	.199"	.163"	.338" inches 8.58 mm	.310" inches 7.87 mm	Stock
STAGE 1 - Normally Aspirated - Daily Driver Stock idle, excellent street manners. Works with stock valve train. RPM Range: Idle to 7000+	63461	234°	228°	188°	180°	.217"	.190"	.369" inches 9.37 mm	.361" inches 9.17 mm	Stock
STAGE 2 - Boost Special - Street/Strip Turbo or Supercharger Short duration, big lift turns your turbo loose for added HP. Req #84166. RPM Range: Idle to 7500+.	63461T	243°	232°	193°	183°	.237"	.218"	.403" inches 10.23 mm	.414" inches 10.51 mm	84166 84166S
STAGE 2 - Normally Aspirated - 3/4 Race Turbo Hot street/strip profile, slight lobe at idle. #84166 spring kit required. RPM Range: 1500 to 8000+	63462	253°	236°	200°	188°	.227"	.217"	.386" inches 9.80 mm	.412" inches 10.46 mm	84166 84166S
STAGE 2 - Performance Plus - 3/4 Race Turbo RPM Range:	63462P	<i>Call CROWER for specs.</i>								84166 84166S
STAGE 3 - Normally Aspirated - All Motor Drag Profile Not for inexperienced tuner. Head Mods, V-tec & ECU tuning req. Limited street. RPM Range: 1250 to 9000+	63463	261°	253°	208°	200°	.250"	.227"	.425" inches 10.80 mm	.431" inches 10.94 mm	84166 84166S
STAGE 3 - Performance Plus - All Motor Drag Profile RPM Range: 2500 to 9000+	63463P	<i>Call CROWER for specs.</i>								84166 84166S
CUSTOM GROUND D17A2 CAM - Special order custom ground profile available for an additional charge. Proprietary and confidential profiles also available.	00060	<i>Refer to page 7 for camshaft recommendation form</i>								

Note: The above cores will not fit the D17A1 non VTEC cylinder head. No cores available at time of publication. Rocker ratio is 1.7:1 intake and 1.9:1 exhaust.

ENGINEERED COMPONENT KITS

Part No.	Springs	Retainers	Remarks
84166	68180-16	87096-16	High pressure single spring and titanium retainer kit.
84166S	68180-16	87096S-16	Steel Retainer for Daily Street Use.

Spring pressure:

68180-16 Seat: 1.975" @ 58 lbs / Nose: 1.500" @ 154 lbs / Coil bind: 1.320"

(No machine work required).

86115-16 Premium steel billet valve keepers (locks) available in standard or +.050" inst ht (#86115X1-16).

86115T-16 Premium titanium billet valve keepers (locks) available in standard installed height. Half the weight of steel.

REMEMBER!

When installing new camshaft please remember that the contact surface of the follower must be free of wear/smooth surface.

ACCESSORIES

Part No.	Description
97403I-8	Stainless steel valves - 30 mm head dia (8 only int)
97403E-8	Stainless steel valves - 26 mm head dia (8 only exh)
97404I-8	Stainless steel valves - 30.5 mm head dia (8 only int)
97404E-8	Stainless steel valves - 26.5 mm head dia (8 only exh)

STEEL BILLET RODS

100% made in the USA from premium steel billet material, Crower offers two styles of rods for the Honda D17A2 engine. Crower's premium standard steel billet rod (#B93740B-4) is designed for boosted applications in excess of 12 psi or over 100 HP shot of nitrous. Also available in a Maxi-Lite all motor design (ML93740B-4) for added weight reduction and quicker throttle response.

MAXI-LITE BILLET RODS

Crower's new Maxi-Lite billet is approximately 100 grams lighter than Crower's standard billet.

D16Z6 & D16Y8 VTEC - SINGLE CAM

Note: These cams use .006" intake (cold), .008" exhaust valve lash (cold).

New Improved Cam Core Technology

Description	Part Number	Lobe	Advertised Duration (.010")		Duration @ .050"		Lobe Lift		Gross Lift		Rec Kit
			Intake	Exhaust	Intake	Exhaust	Intake	Exhaust	Intake	Exhaust	
STOCK D16Z6 SOHC VTEC (92-95)	Stock	Int Mid / Exh	304°	303°	212°	204°	.246"	.207"	.394"	.373"	Stock
STOCK D16Y8 SOHC VTEC (96-up)	Stock	Int Mid / Exh	288°	292°	218°	204°	.248"	.204"	.397"	.367"	Stock
STOCK REPLACEMENT Similar to stock profile. Excellent for mild turbo and nitrous on the street with no other mods. RPM Range: Idle to 7000+	63440Z 63440Y	Mid Sec Pri	288° 293° 293°	299° - -	220° 197° 197°	207° - -	.243" .205" .205"	.203" - -	.389" .328" .328"	.365" - -	Stock
STAGE 1 Features far more aggressive ramp rates than stock with added duration. Idle lobes remain same as stock. RPM Range: Idle to 7200+	63441Z 63441Y	Mid Sec Pri	292° 293° 293°	302° - -	228° 197° 197°	208° - -	.254" .205" .205"	.214" - -	.406" .328" .328"	.385" - -	84166 84166S
STAGE 2 - Forced Induction Special Designed specifically for turbo or supercharged engines. Short duration reduces overlap, for more cylinder pressure. RPM Range: Idle to 8000+	63441ZT 63441YT	Mid Sec Pri	312° 293° 293°	318° - -	234° 197° 197°	217° - -	.269" .205" .205"	.237" - -	.430" .328" .328"	.427" - -	84166 84166S
STAGE 2 - 3/4 Race Street/Strip. Rough lobe at idle due to increased sec/pri lobe specifications. Most popular all-motor profile. RPM Range: 1000 to 7500+	63442Z 63442Y	Mid Sec Pri	319° 295° 295°	310° - -	235° 204° 204°	223° - -	.270" .205" .205"	.242" - -	.432" .332" .332"	.436" - -	84166 84166S
STAGE 2 - 3/4 Race - Performance Plus	63442ZP 63442YP										84166 84166S
			Call CROWER for specs.								
STAGE 3 - Full Race Race cams. Requires extensive cylinder head modifications. Not for inexperienced tuner. V-tec & ECU tuning req. RPM Range: 1200 to 8000+	63443Z 63443Y	Mid Sec Pri	329° 295° 295°	317° - -	239° 204° 204°	226° - -	.276" .210" .210"	.260" - -	.442" .332" .332"	.468" - -	84166 84166S
CUSTOM GRIND - Crower can custom grind cams to your desired specs, also proprietary applications.	00067		Refer to page 7 for camshaft recommendation form								

Note: Specify "Z" after part number if D16Z6 (92-95) or "Y" after part number if D16Y8 (96-up). All duration figures listed above are specific to the D16Y8.

Gross lift calculated by using the following rocker ratios: Int Mid Lobe (VTEC) - 1.60, Int Sec Lobe - 1.60, Int Pri Lobe - 1.60, Exhaust - 1.80.

ENGINEERED COMPONENT KITS

Part No.	Springs	Retainers	Remarks
84166	68180-16	87096-16	Fits D16Z6 (92-95) and D16Y8 (96-up) cylinder heads
84166S	68180-16	87096S-16	Steel Retainer for Daily Street Use.

Spring pressure:

68180-16 Seat: 1.975" @ 58 lbs / Nose: 1.500" @ 154 lbs / Coil bind: 1.320" (No machine work required).

86115-16 Premium steel billet valve keepers (locks) available in standard or +.050" inst ht (#86115X1-16).

86115T-16 Premium titanium billet valve keepers (locks) available in standard installed height. Half the weight of steel.

ACCESSORIES

Part No.	Description
86054YC	D16Y8 Adjustable Cam Sprocket (1 only). Black & Silver.
86054YB	D16Y8 Adjustable Cam Sprocket (1 only). All Black.
86054ZC	D16Z6 Adjustable Cam Sprocket (1 only). Black & Silver.
86054ZB	D16Z6 Adjustable Cam Sprocket (1 only). All Black.
97403I-8	Stainless steel valves - 30 mm head dia (8 only int)
97403E-8	Stainless steel valves - 26 mm head dia (8 only exh)
97404I-8	Stainless steel valves - 30.5 mm head dia (8 only int)
97404E-8	Stainless steel valves - 26.5 mm head dia (8 only exh)

ADJUSTABLE SPROCKETS

Crower's new cam sprockets are made from premium 6061-T6 billet aluminum and incorporate a four bolt ARP® fastening system to prevent the slippage found in other brands. For the ultimate tuner, Crower sprockets feature 5/16" diameter, 12 point ARP® fasteners with a hardened washer to prevent galling and stripping. The lightweight design (367g) reduces unwanted harmonics which could cause valve train failure.

REMEMBER!

When installing new camshaft please remember that the contact surface of the follower must be free of wear/smooth surface.

Note: When ordering sprockets, Y = D16Y8 (96-up), Z = D16Z6 (92-95).

Note: When ordering valves, be sure to specify one set int and one set exh.