NITRO BLACK BEEHIVE SPRINGS

Super Clean Chrome Silicon Vanadium Nickel Alloy

- Beehive shaped design allows a reduced retainer end mass for improved rpm potential
- Every spring goes through a multiple shot peening process to ensure maximum durability and stress relief
- "Heat Set" process and special heat treatment are used to extend spring life and minimize load loss
- Ovate wire shape more evenly distributes mass throughout the wire cross section

Part #	Spring O.D. Bottom	Spring I.D. Bottom	Spring O.D. Top	Spring I.D. Top	Closed Height	Closed Load	Open Height	Open Load	Coil Bind	Max. Lift	Rate	Material Type*	Steel Retainer Number	Titanium Retainer Number
02-1200-16	1.061	0.737	0.960	0.636	1.640	80	1.090	185	1.020	.550	191	Cr-Si-V-Ni	03-1012	
02-1205-16	**1.237**	**0.825**	**1.062**	**0.650**	**1.700**	**110**	**1.175**	**292**	**1.115**	**.575**	**347**	**Cr-Si-V-Ni**	**03-1011**	**03-1794**
													03-1013	
													03-1014	
													03-1015	
02-1201-16	1.292	0.880	1.062	0.650	1.800	135	1.150	330	1.110	.650	300	Cr-Si-V-Ni	03-1011	03-1794
													03-1013	
													03-1014	
													03-1015	
02-1204-16	**1.292**	**0.880**	**1.062**	**0.650**	**1.800**	**105**	**1.200**	**298**	**1.100**	**.625**	**322**	**Cr-Si-V-Ni**	**03-1011**	**03-1794**
													03-1013	
													03-1014	
													03-1015	
02-1203-16	1.412	1.065	1.000	0.650	1.750	123	1.175	284	1.100	.650		Cr-Si-V-Ni		
02-1202-16	1.447	0.999	1.098	0.650	1.880	155	1.280	365	1.210	.600	350	Cr-Si-V-Ni	03-1011	03-1794
													03-1013	
													03-1014	
													03-1015	

*MATERIAL TYPE, Cr-Si-V-Ni = Chrome Silicon Vanadium Nickel Alloy

ENGINE PRO SUPER CLEAN STREET/RACE VALVE SPRINGS

Dual Valve Spring Assemblies

All Engine Pro valve springs are manufactured using the highest quality chrome silicon or high tensile chrome silicon vanadium alloy materials. Our springs are inspected during the manufacturing process to ensure consistent dimensions and overall quality.

- Every spring goes through a multiple shotpeening process for maximum durability and stress relief
- "Heat Set" process and special heat treatment are used to extend spring life and minimize load loss

Part #	Outer Spring O.D.	Outer Spring I.D.	Inner Spring I.D.	Closed Height	Closed Load	Open Height	Open Load	Coil Bind	Max Lift	Rate	Material Type *	Damper	Steel Retainer Number	Titanium Retainer Number
02-1023-16	**1.304**	**0.940**	**0.670**	**1.800**	**151**	**1.150**	**417**	**1.080**	**.650**	**409**	**Cr-Si-V**	**N**		
02-1301-16	**1.385**	**0.995**	**0.711**	**1.850**	**161**	**1.250**	**430**	**1.195**	**.600**	**448**	**Cr-Si**	**N**		
02-1024-16	**1.388**	**1.062**	**0.806**	**1.600**	**117**	**1.100**	**232**	**1.000**	**.600**	**230**	**Cr-Si-V**	**N**	**03-1003**	
02-1010-16	1.440	1.076	0.697	1.700	126	1.150	364	1.055	.550	433	Cr-Si	Y	03-1006	03-1730
02-1003-16	1.445	1.085	0.697	1.750	142	1.150	349	1.055	.600	345	Cr-Si	Y	03-1006	03-1730
02-1004-16	1.445	1.085	0.696	1.750	133	1.150	316	1.055	.600	305	Cr-Si	Y	03-1006	03-1730
02-1300-16	**1.450**	**1.060**	**0.790**	**1.900**	**140**	**1.300**	**358**	**1.120**	**.650**	**363**	**Cr-Si**	**N**	**03-1003**	
02-1011-16	1.460	1.060	0.696	1.850	126	1.250	368	1.150	.625	403	Cr-Si	Y	03-1003	
02-1012-16	1.515	1.115	0.696	1.900	125	1.200	385	1.165	.725	371	Cr-Si	Y		
02-1015-16	1.539	1.125	0.697	1.950	145	1.350	425	1.200	.625	467	Cr-Si	Y	03-1007	
02-1008-16	1.539	1.125	0.731	1.900	206	1.250	520	1.200	.650	483	Cr-Si	Y	03-1007	03-1732
													03-1008	
02-1009-16	1.546	1.134	0.814	1.900	240	1.250	598	1.150	.650	551	Cr-Si-V	N	03-1007	
													03-1009	

*MATERIAL TYPE, Cr-Si = Chrome Silicon Alloy. Cr-Si-V= Chrome Silicon Vanadium Alloy

NEW NUMBERS SHOWN IN BOLD FACE TYPE

ENGINE PRO SUPER CLEAN STREET/RACE VALVE SPRINGS

Single Valve Springs

- Every spring goes through a multiple shotpeening process for maximum durability and stress relief
- "Heat Set" process and special heat treatment are used to extend spring life and minimize load loss

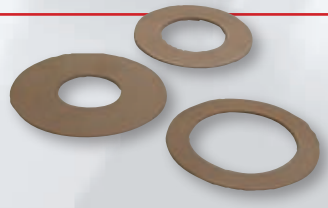
Part #	Spring O.D.	Spring I.D.	Closed Height	Closed Load	Open Height	Open Load	Coil Bind	Max. Lift	Rate	Material Type*	Damper	Steel Retainer Number	Titanium Retainer Number
02-1000-16	1.230	0.876	1.700	91	1.250	233	1.150	.525	316	Cr-Si	Y	03-1000	
												03-1001	
02-1001-16	1.253	0.870	1.700	124	1.210	322	1.160	.490	404	Cr-Si	Y	03-1000	
												03-1001	
02-1002-16	1.259	0.876	1.800	121	1.200	365	1.160	.600	407	Cr-Si	Y	03-1000	
												03-1001	
02-1016-16	1.263	0.880	1.750	150	1.250	367	1.100	.500	434	Cr-Si-V	Y	03-1000	
												03-1001	
02-1019-16	**1.354**	**0.940**	**1.850**	**97**	**1.350**	**312**	**1.280**	**.550**	**430**	**Cr-Si**	**Y**		
02-1017-16	1.437	1.035	1.700	110	1.200	289	1.060	.550	358	Cr-Si	Y		
02-1020-16	**1.463**	**1.080**	**1.900**	**100**	**1.300**	**252**	**1.120**	**.650**	**253**	**Cr-Si**	**Y**	**03-1006**	**03-1730**
02-1021-16	**1.464**	**1.064**	**1.800**	**129**	**1.250**	**305**	**1.135**	**.550**	**320**	**Cr-SI**	**Y**	**03-1002**	
												03-1003	
												03-1005	
												03-1010	
02-1005-16	1.476	1.062	1.800	109	1.300	317	1.140	.525	416	Cr-Si	Y	03-1003	
02-1022-16	**1.494**	**1.080**	**1.650**	**106**	**1.250**	**258**	**1.100**	**.525**	**380**	**Cr-Si**	**Y**	**03-1006**	**03-1730**
02-1018-16	1.500	1.117	1.800	152	1.250	311	1.050	.575	289	Cr-Si-V	Y	03-1004	
												03-1008	
02-1007-16	1.539	1.125	1.900	133	1.400	309	1.170	.625	352	Cr-Si	Y	03-1007	
												03-1008	
02-1014-16	1.548	1.134	1.900	150	1.350	328	1.180	.575	324	Cr-Si	Y	03-1007	
												03-1008	

*MATERIAL TYPE, Cr-Si = Chrome Silicon Alloy. Cr-Si-V= Chrome Silicon Vanadium Alloy

PERFORMANCE HARDENED VALVE SPRING SHIMS

Use of shims corrects assembled height after valve and valve seat reconditioning, assuring proper spring pressure. High quality heat treated material stands up to pounding caused by the extreme lobe design of the latest camshafts.

- Flat, true and dimensionally accurate
- Case hardened
- Smooth stable surface



O.D.	I.D.	PART NUMBER .015 THICKNESS	PART NUMBER .030 THICKNESS	PART NUMBER .060 THICKNESS
1.215	.876	03-1050HP-16	03-3050HP-16	03-6050HP-16
1.246	.814	03-1060HP-16	03-3060HP-16	03-6060HP-16
1.438	.645	03-1135HP-16	03-3135HP-16	03-6135HP-16
1.500	.645	03-1153HP-16	03-3153HP-16	03-6153HP-16
1.634	.643	03-1185SHP-16	03-3185SHP-16	03-6185SHP-16