NOLOGY

- Innovation
- Technology
- Performance

Speed Thrills

2004 $2.95

NOLOGY®

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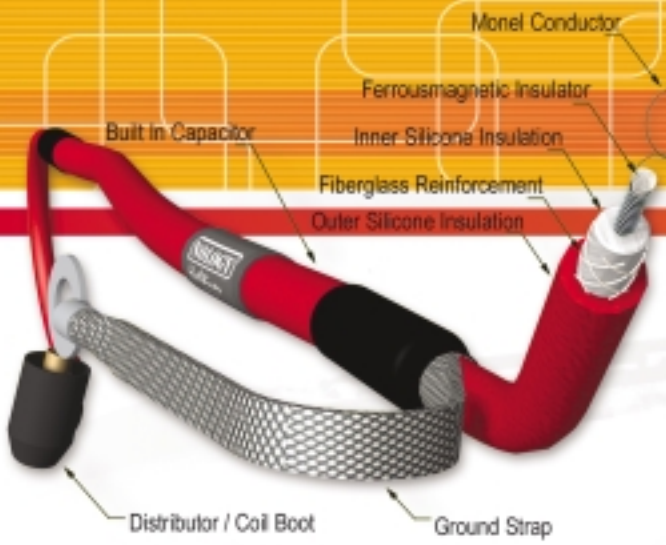
Nology Engineering, Inc.

1945 S. Rancho Santa Fe Rd., San Marcos, CA 92069

Tel. (760) 591-0888 • Fax.(760) 591-0880 • 1-800-NOLOGY1 • http://www.nology.com

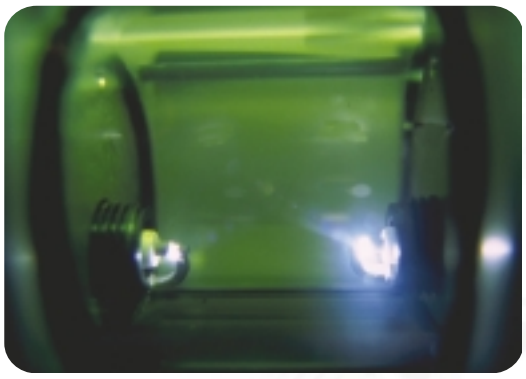
HotWires®



HotWires® create the most powerful spark possible and are the only ignition wires that produce horsepower, assure a cleaner and faster combustion, and extend spark plug life. **How can an ignition wire do this?**

HotWires® are engineered with a special built-in capacitor, exclusive only to **HotWires®**. This revolutionary design allows spark energy to accumulate in the capacitor until the voltage reaches the ionization point. At that split second, the entire power of the stored spark is discharged at once. The resulting spark is up to 300 times more powerful. Combustion is faster and more complete, resulting in increased horsepower and a cleaner burn. Replacing conventional ignition wires with **HotWires®** is the easiest way to increase the performance of any engine. Available for most cars, trucks, motorcycles, go-karts, snowmobiles, personal watercrafts and boats. **HotWires®** can be custom-made to fit nearly any application.

HotWires® create a tremendously powerful plasma discharge that ignites every fuel mixture, rich or lean, much better than a conventional spark. Combustion is more complete, resulting in increased horsepower and lower exhaust emissions. **Installing HotWires® is like installing horsepower.**



Two spark plugs in a pressure chamber, simulating conditions in the combustion chamber. On the right a **HotWires®** spark and on the left a spark from a stock ignition system.

Smog Legal CARB #: D-414-10

US Pat # 6,559,376. International Patents Pending

Please see page 44 for additional information.

HotWires® can be custom-made for virtually any application. **HotWires®** are available in red, black, orange, yellow, blue, purple, or silver.

HotWires® provide:

- Easier starting engine
- Improved acceleration
- Increased horsepower (2% to 5%)
- Increased torque
- Cleaner combustion (less pollution)
- Higher efficiency
- Higher rpm limits
- Lower cycle to cycle variation
- No more spark plug fouling

Coil-on-Plug Conversion Kits

Nology® HotWires® for Cars with Coil-on-Plug Ignition

For years, enthusiasts with cars that are equipped with coil-on-plug ignition systems could not benefit from the incredible performance increase offered by HotWires®.

The wait is over!

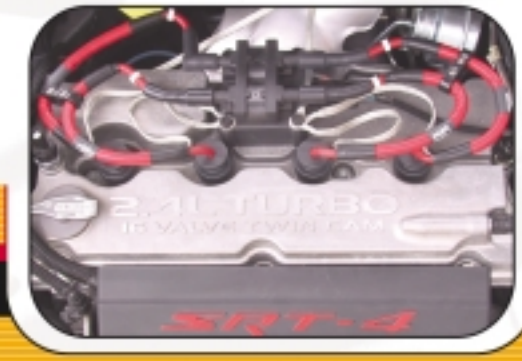
The Nology® HotWires® Coil-on-Plug conversion kit give the same performance increase many have enjoyed for years. The Coil-on-Plug conversion kit relocates the stock ignition coils and allows the installation of HotWires®.

Normal performance increase is about 5 %.

Available for these popular cars:

04 - 02 Acura RSX, RSX Type S
04 - 02 Honda Civic Si
04 - 02 Mazda Protege, MP3
04 - 03 Mitsubishi EVO 8
04 - 03 Nissan Sentra SER SPEC-V

Motorcycle Hotwires



Hotwires® installed on Dodge Neon SRT/4

*Note: When spark plugs with a resistance of less than 0.5 Ohm are used, **HotWires**® will give the biggest performance increase. When using **HotWires**® on highly modified engines (turbo, supercharger, NOS, high compression), spark plug gap should not exceed 0.9 mm (0.035 inch).*

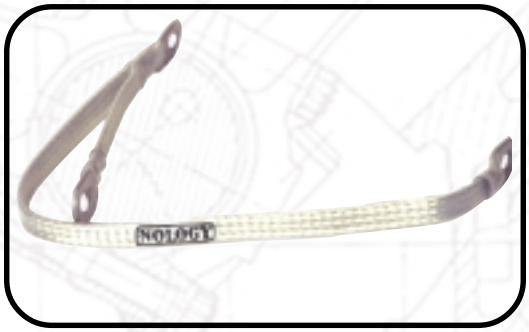
Hotwire Separators

For the cleanest routing and secure installation of **HotWires®**, use Nology's new plug wire **Separators**. These **Separators** are of the highest quality, and are offered in black only.

080 001 022	Separator with 2 holes
080 001 032	Separator with 3 holes
080 001 042	Separator with 4 holes
080 003 052	Set of Separators: 1x2, 1x3, 1x4

Hotwire Ground-Strap

Nology's ultra low impedance, high quality engine ground straps are a must for many of today's cars with electronic engine management systems. These high-tech looking ground straps assure a perfect ground for the engine. A good engine ground is absolutely essential for trouble-free and efficient engine operation, especially on engines with upgraded ignition systems, electronic fuel injection or otherwise modified electronics. Many electrical problems and engine management failures are caused by a bad engine ground. Don't take a chance; install one of our ground straps today.



Acura RSX Type S, Honda Civic Si K-20	021 002 010
Dodge Neon SRT-4	021 003 020
Nissan SPEC V	021 002 030
Mitsubishi EVO 8	021 002 020
Mazda Protégé MP3	021 003 010
Engine Ground-Strap for Acura, Honda	021 011 010
Engine Ground-Strap for Toyota MR2	021 581 010
Engine Ground-Strap for Universal Application	021 001 010

* Call for additional Applications

Automotive

Make / Model / Year		Displ.	Engine	Cylinder		Hotwires	ProFires	PowerCore	Silverstone
ACURA									
4 Cylinder									
04 -02	RSX, RSX Type S, Coil-on-Plug Conversion		K-20	L4		011 014 041	NA		S3F
99 -97	CL	2.2,2.3		L4		011 224 111	NA	PC-10	S3F
01 -90	Integra	1.8	B18	L4		011 014 021	D-10*	PC-10	S3F
01 -90	Integra GSR/ TypeR	1.8	B18	L4		011 224 021	D-10*	PC-10	S3F
89 -86	Integra	1.6	B16	L4		011 014 011		PC-10	S3F
6 Cylinder									
99 -97	CL	3.0		V6		011 226 031			S3F
90 -87	Legend			V6		011 016 011			S3F
* Stock ignitioncoil is installed inside the distributor. Use of ProFire requires modification to distributor cap.									
ALFA ROMEO									
4 Cylinder									
81 -60	All 4 Cylinder Models			L4		011 024 011			S7
89 -81	Spyder	2.0		L4		011 024 021			S7
6 Cylinder									
89 -87	Milano	3.0		V6		011 026 011			S9
93 - 91	164	3.0		V6		011 026 021		PC-10	S9
AUDI									
4 Cylinder									
98 -93	A3	1.6		L4		011 054 071			
98 -93	A4	1.8		L4		011 054 061		PC-10	S5
90 -88	80, 90			L4		011 054 051		PC-10	S5
87 -80	4000			L4		011 054 041			S5
5 Cylinder									
92 -85	80, 90, 100, 200, 4000, 5000			L5		011 055 011			S5
91 - 88	200 Quattro	2.2	20V	L5		011 055 021			S3F
6 Cylinder									
00 -98	A4, A6	2.8		V6		011 056 021			S3F
98 -96	A4, A6	2.8, 2.6		V6		011 056 011			S3F
AUSTIN									
4 Cylinder									
99 -97	Mini 1300	1.0		L4		011 064 031			S5
97 -95	Mini Cooper 1000, 1300	1.0,1.3		L4		011 064 011			S5
BMW									
4 Cylinder									
99 -96	Z3	1.9		L4		011 084 141			S3F
97 -93	318i[1]	1.9	M42	L4		011 084 131		PC-10	S3F
95 -91	318i[2]	1.8	E36, M42	L4		011 084 031			S3F
93 -87	318i[3]	1.8	M40	L4		011 084 121		PC-10	S3F
91 -88	M3	2.3		L4		011 084 061	M70	PC-10	12 5DU
83 -80	320i, iA	2.0		L4		011 084 051			S5
79 -77	320i	2.0		L4		011 084 041			S5
76 -63	2002	2.0		L4		011 084 011	M50	PC-50	S5
[1] Coil Pack (New Body Style), [2] Coil Pack (Old Body Style), [3] Sensor on Cylinder #4									6 Cylinder

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Automotive

Make / Model / Year	Displ.	Engine	Cylinder	Hotwires	ProFires	PowerCore	Silverstone
BMW (continued)							
6 Cylinder							
91 -88 325e, 325i[1]	2.5	M20	L6	011 086 031			S5
87 -86 325e, 325i	2.5		L6	011 086 021			S5
93 -89 535i, 735i[1]	3.5	M30	L6	011 086 041			S5
90 -86 M5, M6	3.5		L6	011 086 061		PC-10	12-5DU
88 -81 535i, 735i	3.5	M30	L6	011 086 141			S5
92 -85 635i	3.5		L6	011 086 051		PC-10	S5
[1] Sensor on Cylinder #6							
BUICK							
6 Cylinder							
87 -78 Regal Turbo, Grand National			V6	011 096 011	NA	PC-10**	CS1K
CADILLAC							
04 -01 Cadillac Escalade, EXT, EXV	5.3, 6.0		V8	014 118 101	NA	NA	S1K
CHEVROLET							
4 Cylinder							
03 -02 Cavalier, Coil Conversion	2.2	Ecotec	L4	011 114 041	NA	NA	
02 -99 Cavalier, LS Coupe	2.2	Non-Ecotec	L4	011 114 031		PC-10	S1K
98 -87 Beretta, Cavalier, Z24	2.2		L4	011 114 011		PC-10	S1K
89 -88 Spectrum Turbo	1.5		L4	011 114 021			S5
6 Cylinder							
03 -01 Camaro	3.4		V6	011 116 031	NA	NA	S1K
98 -95 Camaro	3.8		V6	011 116 011	M70	PC-10	S1K
95 -93 Camaro	3.4		V6	011 116 021	M70	PC-10	S1K
95 -87 Cavalier, Cutlass	2.8, 3.1		V6	011 116 001			S1K
8 Cylinder							
03 -97 Corvette	5.7	LS1	V8	011 118 101	NA	NA	S1K
97 -89 Corvette	5.7	ZR1	V8	011 118 081	NA	NA	S3F
02 -98 Camaro	5.7	LS1	V8	011 118 101	NA	NA	S1K
96 -92 Camaro, Caprice	5.7	LT1	V8	011 118 021	M70	PC-10	S1K
96 -92 Corvette	5.7	LT1	V8	011 118 041	M70	PC-10	S1K
91 -87 Corvette, Camaro	350	L98	V8	011 118 031	M70	PC-10	CS1K
86 -76 Corvette, Camaro	350		V8	011 118 011	M70	PC-10	CS1K
74 -65 Corvette	427		V8	011 118 091			
Truck, SUV							
98 -94 Sonoma Truck	2.2		L4	014 114 011			S1K
00 -96 Blazer, Truck	4.3	Vortec	V6	014 116 061	M70	PC-10	S1K
95 -91 Blazer, Syclone, Typhoon	4.3		V6	014 116 051	M70	PC-10	CS1K
00 -96 Blazer, Truck	350	Vortec	V8	014 118 401	M70	PC-10	S1K
95 -87 Blazer, Truck	350		V8	014 118 301		PC-10	CS1K
00 -96 Blazer, Truck	454	Vortec	V8	014 118 501	M70	PC-10	S1K
97 -94 Suburban, Truck	454	Non Vortec	V8	014 118 111	M70	PC-10	S1K
04 -01 Cadillac Escalade, EXT, EXV	5.3, 6.0		V8	014 118 101	NA	NA	S1K
04 -03 Hummer H2	6.0		V8	014 118 101	NA	NA	S1K
04 -98 Silverado, Taho, Yukon	4.8,5.3, 6.0		V8	014 118 101	NA	NA	S1K
04 -00 Avalanche, Suburban	5.3, 8.0		V8	014 118 101	NA	NA	S1K

Automotive

Make / Model / Year		Displ.	Engine	Cylinder		Hotwires	ProFires	PowerCore	Silverstone
CHRYSLER									
4 Cylinder									
04 -00	PT Cruiser, Turbo	2.4		V4		011 124 001	NA	PC-10**	NA
6 Cylinder									
97 -93	Intrepid	3.5		V6		011 166 001			S3F
98 -96	Town & Country	3.8		V6		011 126 011			S5
CITROEN									
4 Cylinder									
1996	Saxo	1.1, 1.6		L4		011 134 001			
DODGE									
4 Cylinder									
04 -03	Neon SRT	Turbo	DOHC	L4		011 164 041		PC-10**	NA
03 -94	Neon	2.0	SOHC	L4		011 164 011		PC-10**	S3F
03 -94	Neon	2.0	DOHC	L4		011 414 021		PC-10**	S3F
89 -83	Conquest	2.6	Turbo	L4		011 414 061			S6
98 -95	Stratus	2.0, 2.4		L4		011 124 011			S3F
97 -95	Avenger	2.0	Non-Turbo	L4		011 414 021			S3F
97 -95	Avenger	2.0	Turbo	L4		011 414 011		PC-10**	S7
95 -91	Charger, Shadow, Spirit[1]	2.2, 2.5	Turbo[1]	L4		011 164 031			S7
94 -91	Daytona, Lancer, Dart[1]	2.5		L4		011 164 031			S5
94 -90	Spirit, Shadow, LeBaron	2.5	Turbo	L4		011 164 001			S5
90 -85	Omni, Shadow	2.2, 2.5		L4		011 164 021			S5
[1] Flat Distributor Terminal									
6 Cylinder									
98 -95	Caravan			V6		011 126 011			S5
00 -95	Stratus/Avenger	2.5		V6		011 166 031			S3F
8 Cylinder									
01 -92	Dakota/ Durango	5.2, 5.9		V8		014 168 011			S3F
10 Cylinder									
01 -92	Viper	8.0		V10		011 167 011			S3F
Truck, SUV									
01 -94	Truck	8.0		V10		014 167 001			S3F
EAGLE									
4 Cylinder									
97 -95	Talon	2.0	Non-Turbo	L4		011 414 021	NA	PC-10**	S3F
97 -89	Talon	2.0	Turbo	L4		011 414 011	NA	PC-10**	S7
94 -89	Talon	2.0	Non-Turbo	L4		011 414 011	NA	PC-10**	S5
FIAT									
2 Cylinder									
83 -77	Fiat 500 L, R, Type			L2		011 192 011			
4 Cylinder									
83 -77	Spider, 124 Coupe			L4		011 194 011			S7
FORD									
4 Cylinder									
04 -00	Focus	2.0	SOHC	L4		011 204 081	NA	PC-10**	

Automotive

Make / Model / Year		Displ.	Engine	Cylinder	Hotwires	ProFires	PowerCore	Silverstone
FORD (continued)								
04 -00	Focus	2.0	DOHC	L4	011 204 051	NA	PC-10**	
00 -92	Fiesta, Escort	1.6, 1.8			011 204 121		PC-10	S1K
00 -98	Fiesta	1.2,1.4,1.6		L4	011 204 111		PC-10	S1K
99 -97	Escort , ZX2	2.0	DOHC	L4	011 204 041		PC-10	
97 -96	Escort LX			L4	011 204 071		PC-10	S1K
97 -95	Contour	2.0	ZTEC	L4	011 204 061		PC-10	
96 -93	Probe	2.0		L4	011 364 081	M70	PC-10	S3F
94 -91	Escort GT	1.8	DOHC	L4	011 364 101	M70	PC-10	S3F
94 -91	Escort	1.9	SOHC	L4	011 204 021	M70	PC-10	S1K
92 -89	Probe	2.2	Turbo	L4	011 364 091	M70	PC-10	S3F
90 -85	Escort	1.9	SOHC	L4	011 204 031			S1K
6 Cylinder								
89 -83	Mustang, T Bird	2.3	Turbo	L4	011 204 011	M70	PC-10	S2K
01 - 00	Mustang	3.8		V6	011 206 801	NA	NA	S1K
99 -94	Mustang	3.8		V6	011 206 701			S1K
97 -96	Contour	2.5	Duratec	V6	011 206 401			S1K
97 -94	Thunderbird	3.8		V6	011 206 701			S1K
96 -93	Probe GT	2.5		V6	011 366 101		PC-10	S3F
95 -89	Thunderbird SuperCharger	3.8	SC	V6	011 206 601			S2K
94 -92	SHO (Yamaha)	3.0		V6	011 206 301			
93 -89	Thunderbird			V6	011 206 501			S1K
92 -90	Probe	3.0		V6	011 206 101			S1K
8 Cylinder								
99 -98	Cobra	4.6	DOHC	V8	011 208 071	NA	NA	S1K
97 -96	Mustang GT	4.6	SOHC	V8	011 208 041	NA	NA	S1K
97 -96	Mustang GT Cobra	4.6	DOHC	V8	011 208 051	NA	NA	S1K
95 -84	Mustang	5.0		V8	011 208 011	M70	PC-10	CS1K
68 -64	Mustang	289, 302		V8	011 208 021			
93 -91	Thunderbird	5.0		V8	011 208 031			CS1K
Truck, SUV								
92 -86	Aerostar	3.0		V6	014 206 701			S1K
99 -95	Aerostar	3.0		V6	014 206 101		PC-10**	S1K
00 -98	Explorer OHC	4.0		V6	014 206 001			S1K
00 -90	Explorer OHV	4.0		V6	014 206 111		PC-10**	S1K
97 -90	Explorer OHC	4.0		V6	014 206 301		PC-10**	S1K
00 -01	Explorer Sport Trac	4.0		V6	014 206 121		PC-10**	S1K
97 -86	Truck	4.9		V6	014 206 401			
00 -97	F150	4.2		V6	014 206 501			S1K
99 -95	Ranger	3.0		V6	014 206 101			S1K
01 -00	Ranger	3.0		V6	014 206 011			S1K
00 -99	Ranger	4.0		V6	014 206 301			S1K
98 -90	Ranger (O.H.V.)	4.0		V6	014 206 201			S1K
99 -97	F150	4.6	SOHC	V8	014 208 401			S1K
99 -96	Explorer	5.0		V8	014 208 001			S1K
96 -88	Truck	460		V8	014 208 301			CS1K

Automotive

Make / Model / Year		Displ.	Engine	Cylinder	Hotwires	ProFires	PowerCore	Silverstone
FORD (continued)								
95 -84	Truck	302		V8	014 208 101			CS1K
95 -84	Truck	351		V8	014 208 201			CS1K
HONDA								
4 Cylinder								
01 -92	Accord EX	2.2,2.3	VTEC	L4	011 224 111	D-10*	PC-10	S3F
97 -90	Accord DX, LX	2.2,2.3	Non-VTEC	L4	011 224 071	D-10*	PC-10	S3F
90 -88	Accord Model S Only	2.2	12V, LX1	L4	011 224 091	D-10*		S3F
87 -84	Accord, Civic, CRX, Prelude			L4	011 224 011			S5
04 -02	Civic Si Coil-on-Plug Conversion		K-20	L4	011 014 041	NA	NA	S3F
00 -96	Civic	1.6	SOHC	L4	011 224 031	D-10*	PC-10	S3F
00 -92	Civic Si	1.5,1.6	SOHC VTEC	L4	011 224 021	D-10*	PC-10	S3F
00 -99	Civic Si	1.6	DOHC VTEC	L4	011 014 021	D-10*	PC-10	S3F
96 -92	Civic EX/VX/HX	1.5,1.6	VTEC	L4	011 224 031	D-10*	PC-10	S3F
95 -88	Civic CX/DX/LX, CRX	1.5,1.6	Non-VTEC	L4	011 224 021	D-10*	PC-10	S3F
99 -98	CRV	2.0		L4	011 014 021		PC-10	S3F
97 -93	delSol VTEC	1.6	DOHC	L4	011 014 021		PC-10	S3F
95 -92	delSol S	1.5,1.6	Non-VTEC	L4	011 014 021		PC-10	S3F
95 -92	delSol Si VTEC	1.6	SOHC	L4	011 224 031		PC-10	S3F
01 -93	Prelude SR-V	2.2	VTEC	L4	011 224 051		PC-10	S3F
97 -92	Prelude SE/Si/SR	2.2,2.3	Non-VTEC	L4	011 224 071		PC-10	S3F
91 -88	Prelude S/Si/SE	2.0		L4	011 224 041		PC-10	S3F
6 Cylinder								
99 -98	Accord	3.0	VTEC	V6	011 226 031			S3F
97 -95	Accord EX	2.7		V6	011 226 021			S3F
HUMMER								
8 Cylinder								
03 -	Hummer H2	6.0		V8	014 118 101	NA	NA	S1K
HYUNDAI								
4 Cylinder								
03 -96	Accent	1.5		L4	011 234 031		PC-10	S3F
03 -92	Elantra	1.6, 1.8	DOHC	L4	011 234 011		PC-10	S3F
03 -92	Sonata	2.0	DOHC	L4	011 414 011		PC-10	S3F
03 -97	Tiburon	2.0	DOHC	L4	011 234 021		PC-10	S3F
6 Cylinder								
03 -02	Tiburon , Santa Fe	2.7	DOHC	V6	011 236 011			S3F
INFINITI								
4 Cylinder								
00 -99	G20	2.0	16V	L4	011 424 121	M70	PC-10	S3F
ISUZU								
4 Cylinder								
93 -92	Impulse (coil pack)	1.6	Turbo	L4	011 254 011			S3F
93 -89	Impulse, I-Mark, Stylus		DOHC	L4	011 254 021			S3F
93 -86	Rodeo, Trooper II	2.3,2.6		L4	014 254 031			S5

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Make / Model / Year		Displ.	Engine	Cylinder		Hotwires	ProFires	PowerCore	Silverstone
ISUZU (continued)									
Truck, SUV									
6 Cylinder									
95 -93	Trooper, Rodeo	3.2		V6		014 256 011			S3F
92 -89	Rodeo, Trooper II	3.1, 2.8		V6		014 256 001			CS1K
JAGUAR									
6 Cylinder									
95 -88	XKS, XJ6	4.0		L6		011 266 021			S7
87 -60	XKE, XKS	4.2		L6		011 266 011			S7
81 -74	XJS	5.3, 6.0		V12		011 269 011			S7
JEEP									
4 Cylinder									
96 -84	Cherokee/Wrangler	2.5		L4		014 274 011	M70	PC-10	S3F
6 Cylinder									
98 -90	Cherokee/Wrangler	4.0		L6		014 276 021	M70	PC-10	S3F
90 -87	Cherokee/Wrangler	4.0		L6		014 276 031	M70	PC-10	S3F
90 -75	Cherokee/Wrangler	4.2		L6		014 276 011	M70	PC-10	S3F
8 Cylinder									
98 -93	Grand Cherokee	5.2, 5.9		V8		014 278 101	M70	PC-10	S3F
90 -72	J, CJ 304, 360, 401			V8		014 278 201			
97 -93	Truck 318			V8		014 278 301			
LANCIA									
4 Cylinder									
	Delta Integrale EVO II			L4		011 314 011			S3F
	Delta Integral EVOII		Type II	L4		011 314 031			S3F
LAND ROVER									
8 Cylinder									
96 -94	Discovery	4.0		V8		014 638 001			S5
97 -95	Range Rover	4.2		V8		014 508 021			S5
94 -85	Range Rover	3.5, 3.9		V8		014 508 011			S5
LEXUS									
6 Cylinder									
96 -92	SC300	3.0		V6		011 326 011			S3F
LOTUS									
4 Cylinder									
92	Elan Turbo	1.6	DOHC	L4		011 254 011			S3F
00 -90	Elise WC			L4		011 344 041			S3F
00 -90	Esprit		Turbo	L4		011 344 021			S3F
00 -90	MGF/Elise			L4		011 344 051			S3F
90 -85	Esprit		Turbo	L4		011 344 031			S3F
MASERATI									
6 Cylinder									
90 -87	Biturbo, Spyder	2.8	E. F. I.	V6		011 356 021		PC-10	S7

Automotive

Make / Model / Year		Displ.	Engine	Cylinder	Hotwires	ProFires	PowerCore	Silverstone
MAZDA								
4 Cylinder								
04 -02	Prodege, MP3 Coil-on-Plug Converstion			L4	011 364 221	NA	NA	S3F
94 -88	323	1.6		L4	011 364 061		PC-10	S5
89 -88	323	1.6	Turbo	L4	011 364 071	M70	PC-10	S3F
97 -93	626, MX6	2.0		L4	011 364 081		PC-10	S3F
96 -92	MX3	1.6		L4	011 364 051	M70	PC-10	S3F
00 -90	Miata	1.6,1.8		L4	011 364 041			S3F
94 -90	Protégé	1.8	DOHC	L4	011 364 101	M70	PC-10	S3F
94 -90	Protégé	1.8	SOHC	L4	011 364 111	M70	PC-10	S3F
Rotary								
03	RX8		Rotary		011 364 241			
96 -93	RX7 Turbo		Rotary		011 364 031		PC-10**	
92 -86	RX7, RX7 Turbo		Rotary		011 364 021		PC-10**	
85 -78	RX7		Rotary		011 364 011			
6 Cylinder								
96 -93	626, MX6	2.5		V6	011 366 101			S3F
95 -92	MX3	1.8		V6	011 366 201			S3F
MERCEDES BENZ								
4 Cylinder								
96 -95	C180 & C220			L4	011 374 041			S3F
95 -84	190E	2.3	8V	L4	011 374 021	M70	PC-10	S1K
90 -84	190E	2.3	16V	L4	011 374 031			S1K
6 Cylinder								
93 -90	300E, 300CE, 300SL	3.0	24V	L6	011 376 031	M70	PC-10	S3F
92 -86	190E, 260E	2.6	12V	L6	011 376 021	M70	PC-10	S1K
92 -86	300E, 300CE, 300SL	3.0	12V	L6	011 376 021	M70	PC-10	S1K
8 Cylinder								
97 -91	400E, 420E, 500S, 500SL		DOHC	V8	011 378 041			S3F
90 -85	380, 420, 500, 560		SOHC	V8	011 378 031			S5
85 -80	380, 500		SOHC	V8	011 378 021	M70	PC-10	S5
80 -72	350, 450, 6.9[1]		SOHC	V8	011 378 001			S5
80 -72	350, 450, 6.9[2]		SOHC	V8	011 378 011			S5
[1] Push-In Distributor Cap, [2] Screw Stud Distributor Cap								
MINI								
4 Cylinder								
04 -02	Mini, Mini Cooper S	1.6		L4	011 064 041	NA	PC-10**	
MITSUBISHI								
4 Cylinder								
04 -03	EVO 8 , Coil-on-Plug Conversion			L4	011 414 191	NA	NA	S3F
99 -95	Eclipse	2.0	Non-Turbo	L4	011 414 021	NA	PC-10**	S3F
99 -89	Eclipse, Galant	2.0	Turbo	L4	011 414 011	NA	PC-10**	S7
99 -96	Eclipse Convertible	2.4	Non-Turbo	L4	011 414 181	NA	PC-10**	S3F
94 -90	Eclipse	1.8	Non-Turbo	L4	011 414 031	NA	PC-10**	S7
94 -89	Eclipse, Galant	2.0	Non-Turbo	L4	011 414 011	NA	PC-10**	S5

Automotive

Make / Model / Year		Displ.	Engine	Cylinder	Hotwires	ProFires	PowerCore	Silverstone
MITSUBISHI (continued)								
98 -95	Galant	2.4	SOHC	L4	011 414 141			S3F
91 -89	Galant	2.0	SOHC	L4	011 414 101			S3F
88 -85	Galant	2.4	SOHC	L4	011 414 101			S3F
99 -96	Lancer Evo 4, Evo 5			L4	011 414 131			S3F
95 -91	Mirage	1.5		L4	011 414 041			S7
95	Mirage	1.8	16V	L4	011 414 091			S3F
92 -89	Mirage	1.6	Turbo	L4	011 414 011			S5
89 -83	Starion	2.6	Turbo	L4	011 414 061			S7
6 Cylinder								
97 -91	3000 GT	3.0	SOHC	V6	011 416 011	NA	NA	S5
94	Galant	2.4	DOHC	V6	011 416 031	NA	NA	S7
01 -00	Eclipse GS	3.0	6G72	V6	011 416 051	NA	NA	S3F
	Eclipse	2.4	Non-Turbo	V6	011 416 061			
NISSAN								
4 Cylinder								
04 -03	Sentra SER SPEC-V, Coil-on-Plug Converstion			L4	011 424 191	NA	NA	S3F
00 -99	Sentra SER	2.0	16V	L4	011 424 121	M70	PC-10	S3F
98 -91	Sentra SER, NX, 200SX	2.0		L4	011 424 021	M70	PC-10	S3F
00 -91	Sentra, NX	1.6		L4	011 424 011	M70	PC-10	S3F
98 -91	240SX, Altima	2.4	DOHC	L4	011 424 051	M70	PC-10	S3F
90 -89	240SX	2.4	SOHC	L4	011 424 041			S3F
97	March			L4	011 424 101			S3F
92 -90	Stanza	2.4		L4	011 424 131			S3F
90	Sentra	1.6		L4	011 424 081			S3F
[1] Single Spark Plug								
Truck, SUV								
01 -98	Frontier	2.4	XE	L4	014 424 011			S3F
96 -90	Truck	2.4	KA24E	L4	014 424 101	M70	PC-10	S5
6 Cylinder								
83 -70	240Z, 260Z, 280Z, 280ZX			L6	011 426 011	M50	PC-50	S5
90 -84	300ZX (exc.Turbo), Maxima			V6	011 426 061			S3F
94 -89	Maxima	3.0		V6	011 426 071			S3F
99 -90	Pathfinder/Truck	3.0, 3.3	VG33E	V6	014 426 101	M70	PC-10	S3F
89 -86	Pathfinder/Truck	3.0		V6	014 426 201		PC-10	S3F
OPEL								
4 Cylinder								
99 -94	Corsa	1.4, 1.6		L4	011 444 031			S3F
97 -93	Astra, Calibra, Vectra[1]	2.0	16V, DOHC	L4	011 444 021			S3F
97 -92	Astra, Calibra, Kadett	2.0	16V, DOHC	L4	011 444 011			S3F
[1] Coil Pack, [2] Old Style Distributor Cap								
PEUGEOT								
4 Cylinder								
1992	106	1.1, 1.0		L4	011 454 001			S3F
	106 Rally, 106 Xsi			L4	011 454 061			S3F
	106 Rally	1.3		L4	011 454 011			S3F

Automotive

Make / Model / Year		Displ.	Engine	Cylinder	Hotwires	ProFires	PowerCore	Silverstone
PEUGEOT (continued)								
	Mi 16			L4	011 454 021			S3F
	205 Gti			L4	011 454 031			S3F
	306XT, 306XSi			L4	011 454 051			S3F
1991	405	1.9	DOHC	L4	011 454 041			S3F
PLYMOUTH								
4 Cylinder								
00 -95	Neon	2.0	SOHC	L4	011 164 011	NA	PC-10**	S3F
00 -94	Neon	2.0	DOHC	L4	011 414 021	NA	PC-10**	S3F
PONTIAC								
4 Cylinder								
04 -02	Sunfire, Coil Converstion	2.2	Ecotec	L4	011 114 041	NA	NA	
02 -99	Sunfire	2.2	Non-Ecotec	L4	011 114 031		PC-10	S1K
97 -95	Sunfire	2.2		L4	011 114 011		PC-10	S2K
6 Cylinder								
97 -95	Firebird	3.8		V6	011 116 021	M70	PC-10	S1K
8 Cylinder								
02 -98	Firebird	5.7	LS1	V8	011 118 101	NA	NA	S3F
97 -93	Firebird	5.7	LT1	V8	011 118 021	M70	PC-10	S1K
92 -87	Firebird	350		V8	011 118 031			CS1K
PORSCHE								
4 Cylinder								
69 -55	356 A, B, C, SC, 912			B4	011 484 011	M50	PC-50	S6
76 -70	914, 912E	1.7, 1.8		B4	011 484 021	M50	PC-50	S7
76 -74	914	2.0		B4	011 484 121	M50	PC-50	S7
82 -80	924	2.0	Turbo	L4	011 484 131			S7
82 -77	924	2.0		L4	011 484 031			S5
89 -83	944, 924S	2.5	8V	L4	011 484 041	M70	PC-10	S5
91 -87	944S, 944S2	2.5,3.0	16V	L4	011 484 051	M70	PC-10	S7
89 -83	944 Turbo, 944 Turbo S	2.5	Turbo	L4	011 484 041	M70	PC-10	S7
96 -93	968	3.0	16V	L4	011 484 061			S7
6 Cylinder								
98 -95	993	3.6	Twin-Plug	B6	011 489 021		PC-10**	
94 -90	911 Carrera C2/C4	3.6	Twin-Plug	B6	011 489 011	M70	PC-10**	S3F
89 -84	911 Carrera	3.2	Motronic	B6	011 486 021	M70	PC-10	S9
83 -73	911 S, SC	2.7, 3.0	CIS	B6	011 486 011	M75	NA	S9
73 -65	911 E, T, S, 914/6	2.0, 2.2, 2.4	Non-CIS	B6	011 486 001	M75	NA	S7
97 -93	930	3.6	Turbo	B6	011 486 031	M75	PC-10	S3F
92 -91	930	3.3	Turbo	B6	011 486 021	M75		S9
89 -75	930	3.0, 3.3	Turbo	B6	011 486 011	M75		S9
8 Cylinder								
95 -89	928S4, GT, GTS	5.4	32V	V8	011 488 041	M70	PC-10**	S5
88 -87	928S4	5.4	32V	V8	011 488 031	M70	PC-10	S5
86 -85	928, 928S	5.0	32V	V8	011 488 021	M70	PC-10	S5
86 -84	928S Euro	4.7	16V	V8	011 488 001	M70	PC-10	S5
84 -77	928, 928S	4.5, 4.7	16V	V8	011 488 011	M70	PC-10	S5

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Automotive

Make / Model / Year			Displ.	Engine	Cylinder		Hotwires	ProFires	PowerCore	Silverstone
RENAULT										
4 Cylinder										
02	-01	Clio RS	2.0		L4		011 494 051			S3F
02	-00	Clio	1.4	R9-R19	L4		011 494 001			S3F
00	-96	Megane, Laguna	2.0	SOHC	L4		011 494 021			S3F
96	-91	Lutecia Clio Williams	2.0	16V	L4		011 494 041			S3F
00	-99	LuteciaRXE Expression	1.6	SOHC	L4		011 494 031			S3F
SAAB										
4 Cylinder										
93	-85	900, 900 Turbo	2.0	16V	L4		011 514 011			S3F
90	-88	9000, 9000 Turbo			L4		011 514 021			S3F
SATURN										
4 Cylinder										
04	-03	Ion , Coil Conversion	2.2	Ecotec	L4		011 114 041	NA	NA	
02	-91	Saturn	1.9	SOHC	L4		011 524 011	NA	PC-10**	S3F
02	-91	Saturn	1.9	DOHC	L4		011 524 021	NA	PC-10**	S3F
SUBARU										
4 Cylinder										
89	-85	GL	1.8	Turbo	L4		011 564 051			S7
00	-99	Impreza	2.5	Non-Turbo	L4		011 564 091			S3F
97	-95	Impreza	1.8, 2.2		L4		011 564 011			S3F
94	-93	Impreza, Legacy	1.8, 2.2		L4		011 564 031			S3F
97	-98	Outback Legacy GT	2.5	Twin Cam	L4		011 564 081			S3F
SUZUKI										
4 Cylinder										
98	-95	Jimny		JA22W	L3		011 573 091			
98	-86	Samurai	1.3	G13	L4		011 574 001			S5
98	-93	Sidekick, X-90	1.6	DOHC	L4		011 574 031	M70	PC-10	S3F
96	-86	Sidekick	1.6	8V	L4		011 574 051			S5
95	-89	Swift GT		DOHC	L4		011 574 011			S5
TOYOTA										
4 Cylinder										
92	-96	Camry	2.2	5SFE	L4		011 584 041			S3F
91	-86	Camry (incl. distributor cap)	2.0	3SFE	L4		011 584 131			S3F
97	-94	Celica ST	1.8	7AFE	L4		011 584 461			S3F
95	-92	Celica GT	2.2	5SFE	L4		011 584 141	M70	PC-10	S3F
94	-91	Celica Turbo		3SGTE	L4		011 584 091	M70	PC-10	S3F
92	-87	Celica, Corolla (incl. distributor cap)	1.6	4AF, 4AFE	L4		011 584 071			S3F
91	-89	Celica		5SFE	L4		011 584 081			S3F
91	-86	Celica (incl. distributor cap)		3SFE	L4		011 584 131			S3F
89	-86	Celica	2.0	3SGELC	L4		011 584 061			S3F
89	-88	Celica All-track	2.0	3SGTE	L4		011 584 421			S3F
78		Celica	2.2	20R	L4		011 584 151			S5

Automotive

Make / Model / Year			Displ.	Engine	Cylinder	Hotwires	ProFires	PowerCore	Silverstone
TOYOTA (continued)									
95	-87	Corolla Levin AE92		4A-GZE	L4	011 584 351			
98	-92	Corolla	1.8	4AFE	L4	011 584 121			S3F
91	-89	Corolla GTS		4AGE	L4	011 584 111			S3F
91	-89	Corolla Levin AE92		4A-GE	L4	011 584 341			
89	-85	Corolla GTS	1.6	4AGE	L4	011 584 011			S3F
82	-71	Corolla	1.2, 1.6	2TC, 3KC	L4	011 584 101			S5
95	-93	MR2 GT (5SFE)	2.2	Non-Turbo	L4	011 584 141			S3F
95	-93	MR2	2.0	Turbo	L4	011 584 051			S3F
92	-91	MR2	2.2	Non-Turbo	L4	011 584 041			S3F
92	-91	MR2	2.0	Turbo	L4	011 584 031			S3F
89	-85	MR2 (4AGE)	1.6	Non-Turbo	L4	011 584 011	M50	PC-50	S3F
89	-88	MR2	1.6	SuperCharger	L4	011 584 021			S3F
92		Paseo	1.5	5EFE	L4	011 584 171			S3F
94	-90	Previa		2TZFE	L4	011 584 191			S3F
94	-82	Tercel			L4	011 584 161			S3F
Truck, SUV									
95		4Runner	2.7	RZN185,3RZ-FE	L4	014 584 501			S5
92	-78	4 Runner, Truck	2.4	22R, 22RE	L4	014 584 101			S5
97		RAV4			L4	014 584 301			S3F
98	-95	Tacoma	2.4, 2.7		L4	014 584 601			S3F
96	-92	Truck	2.4	22RE	L4	014 584 201			S5
6 Cylinder									
88	-83	Cressida	2.8	5MGE	L6	011 586 061			S3F
96	-92	Mark-II		1JZ-GTE	L6	011 586 051			
91	-86	Soarer		1G-GTEU	L6	011 586 071			
98	-93	Supra	3.0	Non-Turbo	L6	011 586 041			S3F
92	-87	Supra	3.0	Turbo	L6	011 586 031			S3F
92	-86	Supra	3.0	Non-Turbo	L6	011 586 021			S3F
86	-82	Supra (5MGE)	2.8	Non-Turbo	L6	011 586 061			S5
93	-92	Camry	3.0	3VZ-FE	V6	011 586 081			S3F
91	-88	Camry	3.0	2VZFE	V6	011 586 011			S3F
93	-88	Landcruiser	4.0	3FE	L6	014 586 201	M70	PC-10	S3F
97	-93	Landcruiser (Japan)	4.5	1FZ-FE	L6	014 586 301			S3F
95	-92	4 Runner, Pick-Up, T100	3.0	3VZE	V6	014 586 101	M70	PC-10	S3F
91	-88	4 Runner, Pick-Up	3.0	3VZE	V6	014 586 111	M70	PC-10	S3F
VAUXHALL									
4 Cylinder									
1995		Corsa	1.2, 1.4		L4	011 594 001			
97	-88	Astra, Calibra, Cavalier[1]	2.0	16V, DOHC	L4	011 594 011			S3F
97	-93	Calibra[2]	2.0	16V, DOHC	L4	011 594 021			S3F

[1] Distributor, [2] Coil Pack

Automotive

Make / Model / Year		Displ.	Engine	Cylinder	Hotwires	ProFires	PowerCore	Silverstone
VOLKSWAGEN								
4 Cylinder								
All	Type 1, Type 3			B4	011 604 011	M50	PC-50	S6
All	Type 2, Type 4			B4	011 604 021	M50	PC-50	
01 -98	Beetle	2.0		L4	011 604 201		PC-10	S3F
98 -93	Golf, Jetta	1.8	8V	L4	011 604 091		PC-10	S5
92 -84	Golf, Jetta[1] , Corrado	1.8	8V	L4	011 604 041	M70	PC-10	S5
00 -90	GTI, Golf III, Jetta	2.0	8V	L4	011 604 051		PC-10	S3F
00 -86	GTI, Jetta	2.0	16V, DOHC	L4	011 604 101		PC-10	S3F
84 -75	Rabbit, Golf [2]			L4	011 604 031		PC-50	
94 -91	Polo G40	1.3		L4	011 604 061			
90	Vanagon	2.1		L4	011 604 081			S7
[1] New Style Distributor Cap, [2] Old Style Distributor Cap								
6 Cylinder								
01 -93	VR6[1]	2.8		V6	011 606 101	NA	NA	S3F
1992	VR6[2]	2.8		V6	011 606 111	NA	NA	S3F
[1] Without Distributor, [2] With Distributor								
VOLVO								
5 Cylinder								
97 -93	850, 850 Turbo	2.4		L5	011 615 011	D-10	PC-10	S3F
6 Cylinder								
91 -86	760, 780			V6	011 616 101			S1K

HotWires can be custom made to fit nearly any application.
HotWires are available in Red, Black, Orange, Yellow, Blue, Purple & Silver

When ordering HotWires in colors other than Red, replace the last digit of the Part # (1) with: 2=Black, 3=Orange, 4=Yellow, 6= Blue, 7=Purple, 8=Silver

**** Vehicle has more than one ignition coil and requires one PowerCore per ignition coil.**

Motorcycle Applications

Motorcycles

Make / Model / Year		Displ.	Engine	Cylinder	Hotwires	ProFires	PowerCore	Silverstone
APRILLA								
00 -98	Mille 1000		RSV	V4	012 144 001			
BMW								
	BMW Boxer		Carb.	B2	012 022 102			S5
99 -95	R1100RT		EFI	B2	012 022 402			S3F
99 -98	R850R/R1100RS, RG		EFI	B2	012 022 202			S3F
95 -86	K75		EFI	L3	012 023 012			12-5DU
97 -84	K1000, K1100		EFI	L4	012 024 012			12-5DU
DUCATI								
97 -88	750/900SS			V2	012 042 101	PFC-30S	PC-30**	12-5DU
97 -88	851/916			V2	012 042 401			12-5DU
	888			V2	012 042 501			12-5DU
HARLEY- DAVIDSON (Made To Fit Stock Coils)								
98 -94	Buell			V2	012 052 402	PFC-30D[3]	PC-30	12-5DU
99 -98	Buell X1			V2	012 052 412	PFC-30D[3]	PC-30	12-5DU
00 -99	Buell Cyclone			V2	012 052 422	PFC-30D[3]	PC-30	12-5DU
02 -99	FXD, FXDL, FXDWG		TwinCam	V2	012 052 132	PFC-30D[3]	PC-30	
98 -82	FXR, Center Mount Coil			V2	012 052 202	PFC-30D[3]	PC-30	S5
02 -99	Road King, Electra Glide, FLTR		TwinCam	V2	012 052 112	PFC-30D[3]	PC-30	
98 -92	Road King, Dresser			V2	012 052 102	PFC-30D[3]	PC-30	S5
02 -98	Softail		TwinCam	V2	012 052 132	PFC-30D[3]	PC-30	
99 -84	Softail, Dyna Glide, Rear Mount Coil			V2	012 052 302	PFC-30D[3]	PC-30	S5
02 -98	Sportster 1200 Sport		Twin-Plug	V2	012 054 012	PFC-30D[3]	PC-30	12-5DU
98 -79	Sportster, 883/1200			V2	012 052 102	PFC-30D[3]	PC-30	12-5DU
HARLEY- DAVIDSON (Universal - To Fit Stock Coils)90° and straight coil connectors included								
2 HotWires 90° Plug Boot - 23" Long				V2	012 052 012	PFC-30D[3]	PC-30	
2 HotWires 180° Plug Boot - 23" Long				V2	012 052 022	PFC-30D[3]	PC-30	
[3] Dual fire only. For single fire use two PFC-30S coils. Use only with the following ignitions: Dyna 2000, Compufire, Elite 1, Power Arc II, RevTech Digital, Crane HI-4, V-Thunder, Screaming Eagle and stock Harley-Davidson.								
HONDA								
01 -00	RC51			V2	012 062 011		PC-30**	
01 -98	Super Hawk			V2	012 062 001		PC-30**	
98 -92	CBR600 F2/F3			L4	012 064 021	PFC-30D	PC-30**	
97 -92	CBR900RR			L4	012 064 102	PFC-30D	PC-30**	
01 -00	X-11			L4	012 064 031		PC-30**	
90 -84	V4, V45, V65, VFR			V4	012 064 302		PC-30**	
91 -88	Hawk			V2	012 064 201		PC-30**	
02 -01	VTX 1800			V2	012 064 071		PC-30**	
00 -99	Shadow Aero			L4	012 064 041		PC-30**	
98 -97	Valkyrie			B6	012 066 602		PC-30**	
00 -88	Goldwing			B6	012 066 302		PC-30**	
82 -79	CBX			L6	012 066 502		PC-30**	12-5DU
02 -96	CR 250, 125, 80			L1	012 061 011	PFC-03S		
INDIAN								
02 -01	Scout			V2	012 052 201			
02 -01	Chief			V2	012 052 301			

Motorcycles

Make / Model / Year		Displ.	Engine	Cylinder	Hotwires	ProFires	PowerCore	Silverstone
KAWASAKI								
99 -98	1500A			V2	012 074 121	PFC-30D	PC-30**	
00 -96	Vulcan, Classic			V2	012 074 111	PFC-30D	PC-30**	
98 -96	800B			V2	012 072 021	PFC-30D	PC-30**	
97 -90	ZX6, ZX7, ZX9, ZX11			L4	012 074 102	PFC-30D	PC-30**	
89 -84	Ninja 900			L4	012 074 302		PC-30**	
85 -73	Z1, KZ1000, J Model			L4	012 074 201		PC-50**	
	GPZ, GPX			L4	012 074 401		PC-50**	
99 -90	EX-250/500			L2	012 072 011		PC-30	
1998	KLX 300R			L1	012 071 011			
02 -96	KX 250, 125, 80			L1	012 071 021	PFC-03S		
SUZUKI								
98 -97	TL 1000/TL 1000R			V2	012 112 012		PC-30	
97 -92	GSXR750W, GSXR1100W			L4	012 114 102	PFC-30D	PC-30**	
91 -85	GSXR750, GSXR1100			L4	012 114 002		PC-30**	
00 -99	SV650			V2	012 114 021		PC-30**	
02 -96	RM 250, 125, 80			L1	012 111 011	PFC-03S		
TRIUMPH								
98 -95	Triumph 3 Cylinder			L3	012 123 102			
98 -95	Triumph 4 Cylinder			L4	012 124 102			
YAMAHA								
97 -84	FJ1100, FJ1200			L4	012 134 102		PC-30**	
97 -86	FZR400, FZR600, FZR1000			L4	012 134 202		PC-30**	
97 -86	FZ750, FZR750			L4	012 134 001		PC-30**	
98 -97	Royal Star			V4	012 134 011			
99 -85	V-MAX			V4	012 134 301			
99 -98	YZF 1000R1			L4	012 134 402		PC-30**	
99	YZ400F/WR400F			L1	012 131 001			
02 -96	YZ 250, 125, 80			L1	012 131 011	PFC-03S		
DIRT BIKES, SNOWMOBILE (Universal)								
	1 HotWire, 90° Plug Boot - 23"				012 001 101			
	1 HotWire, 90° Plug Boot - 23"			Digital Ignition	012 001 031			
	1 HotWire, 180° Plug Boot - 23"				012 001 201			
	1 HotWire, 180° Plug Boot - 23"			Digital Ignition	012 001 041			
JR.DRAGSTER, GO-KART								
	1 HotWire - Briggs & Stratton, 18"				013 001 102			
	1 HotWire - Ground at Coil Side, 23"				013 001 202			
PERSONAL WATERCRAFT (Universal)								
	1 HotWire - 30", with Splice				015 001 021			
	1 HotWire - 30", with Splice		Digital Ignition		015 001 041			
OUTBOARD								
	Mercury Outboard, Fresh Water			V6	016 036 102			
	Mercury Outboard, Salt Water			V6	016 036 202			

** Vehicle has more than one ignition coil and requires one PowerCore per coil.

For applications not listed in this application guide, please refer to price list or call!
HotWires can be custom made to fit nearly any application.SMOG LEGAL: CARB D-414-10
When ordering HotWires in colors other than Red, replace the last digit of the Part # (1) with: 2=Black, 3=Orange, 4=Yellow, 6= Blue, 7=Purple, 8=Silver

THE INTELLIGENCE OF SPEED®

NOLOGY

HotWires®
Frequently Asked Questions

Q: ***How can HotWires® be so good? They look like conventional ignition wires, except for the ground wire. and the heavy insulation.***
A: **HotWires®** are not just ignition wires, they're more like a complete ignition system. **HotWires®** have a capacitor built into the section closest to the spark plug. This creates the most powerful spark possible. Look at it like a CD ignition system for each spark plug.

Q: ***Doesn't a spark that hot, melt a hole in the piston?***
A: No. A spark can never be too hot. All the thermal energy (heat) from the spark is absorbed by the fuel/air mixture, where it initiates combustion. Thermal energy (heat) created by the combustion, is converted to kinetic energy (piston travel). Since the **HotWires®** spark improves the combustion efficiency, more of the thermal energy is converted to kinetic energy and the exhaust temperature is actually lower.

Q: ***Why does an engine benefit from a "hotter" spark?***
A: When the spark occurs all the thermal energy (heat) is transferred to the fuel/air mixture, where it initiates combustion. A hotter spark will transfer more thermal energy and therefore accelerates flame front propagation. The fuel is used more efficiently and engine performance increases.

Q: ***Doesn't a spark that hot, melt the spark plug?***
A: No. All the thermal energy from the plasma (spark) is absorbed by the fuel/air mixture, and the spark duration too short for a significant thermal transfer to take place at the spark plug electrodes. Not only is the temperature a factor, but also the time the temperature is present.

Q: ***Doesn't a spark that powerful, accelerate spark plug wear?***
A: No. The spark duration is so short, electrode erosion is decreased. It is not the power of the spark that is primarily responsible for spark plug wear, but the length of time the spark is present (spark duration). So, a shorter spark duration results in less spark plug erosion (electrode wear).

Q: ***Can a spark be too powerful and actually push away the fuel/air molecules, preventing ignition?***
A: No.This would be like saying, "the campfire is so hot it pushes all the wooden logs away". It is not actually the "spark" that ignites the fuel/air mixture, but the temperature of the plasma that is generated between the spark plug electrodes. The **HotWires®** spark is so hot that instantaneous and complete combustion takes place.

Q: ***Why do I even need a hotter spark? Isn't the spark of my ignition system sufficient to ignite the fuel/air mixture?***
A: Yes it is sufficient, if you are satisfied with the performance and efficiency of your engine. But any improvement in flame front propagation will improve combustion and therefore increase engine performance and efficiency.

Q: ***A spark, is a spark, is a spark, isn't it?***
A: No.The hotter the spark the easier ignition occurs and the sooner combustion is completed. A spark made by a flint, the spark of a ignition system, a lightning bolt, a spark is a spark is a spark? You decide! A match, a blow torch or a napalm bomb. What will completely burn, (ignite), a one acre parcel of forest quicker?

Q: ***What about other plug wires, especially those thick 8mm wires. Which one is the best?***
A: The thickness of the wire has absolutely no effect on the power of the spark. Thicker wires only have more insulation, primarily for looks. The conductor on the inside of the wire is no different from most other wires. If changing to a thick wire would make the spark more powerful, we would all change the wiring in our house to make the lights brighter.

Q: ***What about plug wire resistance? Isn't lower better?***
A: In general yes. But only if you are talking about using plug wires with 1,000 Ohm resistance instead of 10,000 Ohm resistance. However, using plug wires with 100 Ohm resistance instead of 1,000 Ohm is not significant enough to increase performance.

Q: ***Why is a short duration spark better than a long duration spark? If the spark duration is long am I not guaranteed ignition?***
A: No, just because the spark duration is long doesn't guarantee ignition. A weak spark will be weak regardless of the duration and if ignition doesn't take place at the exact time (ignition timing) performance suffers. The ultra powerful, short duration spark of **HotWires®** guarantees exact ignition timing and complete and efficient combustion, every time.

Q: ***Why is a long duration spark weaker then the ultra-short-duration spark made by* HotWires®?**
A: Consider a long duration spark that releases 100% of the energy over a long period of time. At any point along this timeline only a fraction of the energy is available. In other words, the energy is stretched out over a long period of time. Now take the same 100% of energy and release it all at once. This is the **HotWires®** spark. A good analogy would be if we were to burn 1,000 gallons of gasoline (100% of the energy) over a long period of time (days), or blow it up, all at once, in a gigantic explosion lasting only 1 second. The energy released is the same, but the latter is much more powerful.

Q: ***Isn't there any benefit to a long duration spark?***
A: No. A long duration spark is a complete waste of energy. At 7500 rpm the spark of a conventional ignition system, with a duration of 3 milliseconds, will take 135 degrees of crankshaft rotation to finish. That means there is a spark between the spark plug electrodes long after TDC.A complete waist of energy. However, if ignition has not been initiated 10 or 15 degrees after the optimum ignition timing, performance suffers greatly. The **HotWires®** spark needs less than one degree of crankshaft rotation to complete. With a spark duration that short ignition timing is much more precise and spark power is increased substantially. Flame front propagation is much quicker and combustion more complete, resulting in increased horsepower and a cleaner burn.

Q: ***What about a multi-spark ignition system?***
A: Most people are not aware that there is no multi-spark at higher engine rpm. There just isn't any time for multiple sparks. So what are multispark ignition systems good for? Maybe it's just a sales gimmick! If the first spark is powerful enough to initiate combustion, multiple sparks are not necessary. By the way, if a multi-spark ignition system generates 6 sparks, which one of the sparks would you want to be the one to ignite the mixture? # 2 or # 4 or maybe # 1?

Q: ***Do I have to use non-resistor spark plugs together with* HotWires®*, and what will happen if I use resistor spark plugs?***
A: To take full advantage of the performance gain possible when using **HotWires®**, non-resistor spark plugs are best. If for any reason resistor spark plugs must be used, performance gain is less, because the resistor is impeding the spark, however, performance will still increase.

Q: ***Why do car manufacturers recommend resistor spark plugs, aren't they needed to suppress radio interference***
A: There are many reasons for OEM's to use resistor plugs. One reasons is actually emissions. Since the resistor is a obstacle it forces the spark voltage to be higher, assuring combustion in a lean mixture. Also resistor plugs are MUCH cheaper to produce.You will never find resistor plugs in serious race cars, yet these cars use some of the most sophisticated engine management systems and data acquisition systems. But these cars have no EMI problem. Why? Because the resistor in the plug is NOT needed to suppress EMI. The spark happens inside the combustion chamber and is completely shielded by the metal cylinder head. No EMI can escape the combustion chamber.

Q: ***Do I have to change ignition timing after installing* HotWires®?**
A: Some engines need less timing advance. Mostly engines with a large cylinder bore diameter, or inefficient combustion chambers. This is the direct result of much faster and improved combustion.

Q: ***What about fuel mixture setting?***
A: If you're looking for performance, fuel flow can be increased. The **HotWires®** spark is so hot even the added fuel will be ignited, which increases performance. If you're looking for economy, fuel flow can be decreased. Even this lean fuel/air mixture will be ignited reliably.

Q: ***Are there situations where I absolutely have to change jetting?***
A: Yes. Because a hot spark will burn the fuel/air mixture in the combustion chamber more completely, and since some engines run lean to begin with, rejetting could be necessary.

Q: ***How come with other ignition systems I don't have to make so many additional changes to my engine, such as timing and jetting?***
A: Because **HotWires®** is the only ignition system that influences the combustion process positively. Other ignition systems that don't require changes to perimeter settings probably don't do anything more than your stock ignition system.

Q: ***What about on modern computer controlled engines where timing or fuel flow can not be adjusted?***
A: The computer collects all the data and makes the necessary adjustments automatically.

Q: ***What if I have a "hotter" chip in my computer with more timing advance?***
A: If the timing is too advanced from the stock setting, and the engine is not equipped with a knock sensor, caution should be taken so the engine does not experience detonation. In some cases timing has to be returned to the stock setting.

Q: ***Do I need to use spark plugs with a different heatrange when I use* HotWires®?**
A: No. Spark plug heatrange stays the same.

Q ***Won't a "hotter" spark plug make a hotter spark?***
A: No. A hotter, or colder spark plug refers only to the ability of the spark plug to dissipate heat.

Q: ***Will HotWires® cause interference (EMI) with my radio or engine management system?***
A: No. HotWires are manufactured using spiral-core technology, which prevents substantial amounts of EMI. Only low quality aftermarket stereos, or badly installed stereos (wiring) could be a problem. However, there are thousands upon thousands of satisfied users without any EMI problems what-so-ever.

Q: ***Why do car manufacturers recommend resistor spark plugs and high-resistence plug wires , aren't they needed to suppress interference (EMI) with my radio or engine management system?***
A There are some EMI issues, but only ONE resistor is needed on the secondary side of the ignition system. The resistor could be in the spark plug, or in the plug wire (not in both). Most US cars use resistor plugs and carbon core wires (resistence is too high and causes performance loose). European cars NEVER use carbon wires. They use solid or spiral core wires with resistors in the plug or in the plug wire connectors. HotWires use spiral core technology and sometimes we add resistive distributor connectors. No resistor plugs are needed.There are many reasons for OEM's to use resistor plugs. One reasons is actually emissions. Since the resistor is an obstacle it forces the spark voltage to be higher, assuring combustion in a lean mixture. Also resistor plugs are MUCH cheaper to produce.You will never find resistor plugs in serious race cars, yet these cars use some of the most sophisticated engine management systems and data acquisition systems. But these cars have no EMI problem. Why? Because the resistor in the plug is NOT needed to suppress EMI. The spark happens inside the combustion chamber where he is completely shielded by the metal cylinder head. No EMI can escape the combustion chamber and the spiral core wire is taking care of the "ringing" that may find its way back to the coil etc.

Spark Plugs

For increased horsepower and cleaner combustion, use **Silverstone**™, the best spark plugs in the world. **Silverstone**™ spark plugs are especially designed for the increased demands of modern high performance engines. Silver is the best electrical and thermal conductor of any metal and therefore the best material to use for the center electrode. The large diameter silver center electrode in **Silverstone**™ increases spark carrying ability and with it spark power up to 137%.

Silver is extremely resistant to erosion, guaranteeing a virtually unchanged electrode gap for the life of the spark plug. This greatly extends change intervals. Silver offers the best thermal conductivity giving **Silverstone**™ a much wider heat-range.

To prevent plug fouling, optimum operating temperature is reached shortly after start-up, yet under full throttle, when things really start to get hot, heat is dissipated rapidly. **Silverstone**™ is the right spark plug for any application.

A multi-rib current leakage barrier prevents arching over on the outside of the high quality, black aluminum oxide insulator. **Silverstone**™ spark plugs, manufactured without a suppressor resistor, are first choice for the performance-oriented consumer. If it is a racing plug you are looking for or a dependable and efficient spark plug for everyday street use, **Silverstone**™ is the one for you. **Silverstone**™ outperforms all other spark plugs and delivers the most powerful spark.

STOP

...playing around with spark plugs that feature electrodes made from iridium, platinum, copper or gold and get serious with silver electrodes! **Silver is the best electrical and thermal conductor of any metal**. This makes **Silverstone**™ the best spark plugs in the world. Period!

Please see page 48 for additional information

Spark Plug Tray™

Storing spark plugs when they are not installed, or storing them in a particular order has never been this easy. Simply place spark plugs in the tray and they are safely stored until future use. Holds 8 spark plugs.

090 001 029 Storage tray for spark plugs

- Silver Center Electrode
- Increased Horsepower
- Long-Lasting
- Top-Quality Materials
- Up to 137% More Spark Power
- Cleaner Combustion
- Race-Proven Design
- Outperforms All Other Spark Plugs

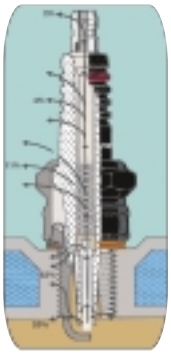
Properties of Materials

Material	Thermal Conductivity W/(m·K)	Electrical Conductivity MS/m
Silver	**407**	**66**
Copper	384	57
Gold	310	45
Iridium	147	18
Platinum	70	10
Nickel	59	10



Silverstone™ Heatrange

What is the Spark Plug Heat-range?



The heat-range identifies if a spark plug is " hot" or "cold". Some times a "hot" spark plug is mistakenly thought to be a performance spark plug. However, just the opposite is true.

"Hot" or a "cold" just identifies the spark plug's ability to dissipate heat.

A "cold" spark plug dissipates heat easily, making racing and performance spark plugs usually "cold" spark plugs. The "colder" the spark plug the more heat can be created in the combustion chamber without overheating the spark plug. The spark plug heat-range should be lower than the pre-ignition zone.

A "hot" spark plug does not dissipates heat easily, making the spark plugs for everyday use usually "hot" spark plugs. Short distance driving, where the engine rarely reaches optimum operating temperature, makes the use of "hot" spark plugs essential. The spark plug heat-range should be higher than the cold fouling zone, where the spark plug never gets hot enough to "clean" itself. At lower temperatures, residues from fuel and oil are not burnt away, which could lead to misfire.

A "cold" spark plug is for Highway driving and racing.
A "hot" spark plug is for prolonged idling, short distance driving and city travel.

ITEM#	TYPE	SIZE (hot 4... 8 cold)	HEATRANGE
120 001 010	S1K	-14 mm, 0.7" reach, tapered seat, 5/8 hex	4-6
120 001 020	S2K	-14 mm, 0.7" reach, tapered seat, 5/8 hex	6-8
120 001 030	S3F	-14 mm, 3/4" reach, gasket, 5/8 hex	5-8
120 001 040	S5	-14 mm, 3/4" reach, gasket, 13/16 hex	5
120 001 050	S6	-14 mm, 1/2" reach, gasket, 13/16 hex	5-7
120 001 060	S7	-14 mm, 3/4" reach, gasket, 13/16 hex	6
120 001 070	S9	-14 mm, 3/4" reach, gasket, 13/16 hex	8
120 001 080	CS1K	-14 mm, 0.46" reach, tapered seat, 5/8 hex	4-6
120 001 090	CS2K	-14 mm, 0.46" reach, tapered seat, 5/8 hex	6-8

(Heat-Range rating is equivalent to NGK's [hot/4.....8/cold])

S1K
S2K

CS1K
CS2K

S3F

S5
S7
S9

S6

Chuck Rayburn, National Record-Holder NHRA B/Stock Automatic,
'71 Dodge Challenger 440 six-pack, 1/4 mile ET of 10.33 and 127.2 mph.
"My HotWires, ProFire M80 and Silverstone plugs worked perfect....Thank You, Nology!"

Spark Plug Applicatons

Plug Specifications and Cross Reference

	Bosch	NGK	Auto-Lite	Champion	Nippon-Denso	Split-Fire	A.C.
SILVERSTONE S1K 14 mm .708" reach 5/8" hex tapered Non-Resistor	H9DC H8DC H7DC H9DCO H8DCO HR8DCX HR10HCO	TR5, SR5 TR5VX SR5-VX BPR6EFS TR4-2	103, 104 5164 5243 2544 764	RS9YC RS12YC RS15LYC RS14LYC BN9Y DJ7Y	T20EP-U T22EP-U T20EPR-U T16EX-U T16NR-11	SF10D SF10D6 SF514D	42LTS 43LTS 44LTS 44NTSE
SILVERSTONE S2K 14 mm .708" reach 5/8" hex tapered Non-Resistor	H6DC H5DC H6DCO	R5724-8 R5724-8 R5724-9	474 473 472 2543	RS10LC RS9YC S59YC			
SILVERSTONE CS1K 14 mm .460" reach 5/8" hex tapered Non-Resistor	H8BPX H9BPX H10BPX HR8BCX HR9BCX HR10BC R5674-7	UR4, 7R45 UR5, UR55 YR5, YR55 UR5VX YR5VX BPR6FX	25, 24, 23,665, 664,145 685,135 134,13, 12	RV97C RV12YC RV15YC4 RV8C RV8C6 RV15YC6	T20PR-U T16PR-U T20P-U	SF2E SF2E6 SF13C SF14E	43TS R43TS R44TS 4407 438T
SILVERSTONE CS2K 14 mm .460" reach 5/8" hex tapered Non-Resistor	HR6BP HR6BP HR5BP HR6BC HR5BC	R5673-8 R5673-9 R5674-8 R5674-9	133 132 131	V57C V59C V4C V57YC		SF2C SF13A	42TS R42TS 436T
SILVERSTONE S3F 14 mm 3/4" reach 5/8" hex gasket Non-Resistor	FR10DCX FR7DCX FR5DTC F6DSR F8DC F6DP	BCPR5ES BCPRSEY-11 PFR6A BKR6EK ZFR5F-11 PZFR6F PZFR6F BKR5EKU	3934 3933 3932 3911 3910 3924 3923 3922 5184	RC14YC RC12YC RC9YC4 RC9MC4 RC12LYC C61YC C57YX C59C C55C C57	Q16R-U Q20PR-U K16PR-U KJ14CR-L PQ16R8 PK20PR-P	SF392D SF392D6	FR1LS FR2LS FR3CLS FR3LS FR5LS

Plug Specifications and Cross Reference

	Bosch	NGK	Auto-Lite	Champion	Nippon-Denso	Split-Fire	A.C.
SILVERSTONE S5 14 mm 3/4" reach 13/16" hex gasket Non-Resistor	W10CC W8CC W10DC W8DC WR8DPX WR9DP	B4ES B5ES BP5ES BP4ES BPR5ES	56, 55 56 405,404 393,4263 4056,4265 925,945	N14YC N12YC RN5C N5C N11YC N88	W14E W16ESL-1 W20ESU W20ESRL	SF40D SF405F SF426E SF6E SF6F6	43N 44XL R46XL S44XL R42XLS
SILVERSTONE S6 14 mm 1/2" reach 13/16" hex gasket Non-Resistor	W8AC W5AC W7BC W7EC WR9FP W8AP	BP5HS BP8HS BP9HS B8HS B8HV BR8HS R5670-8	295,303 75, 74, 73,86 85,414 411,275 273,996 4093 847	J12YC RJ6C J8C L82YC RL95YC L78C L86C L82C XJ10Y	W14M-U W22MR-U W22MP-U W24S-U W20P-U W24FS-U	SF8E SF8E6 SF8G6 SF263D SF265F	44S R47S B44S CR43S R45SX M41FF S45F
SILVERSTONE S7 14 mm 3/4" reach 13/16" hex gasket Non-Resistor	W7CC W6CC W7DC W6DC WR6DP0 WR7DTC	BP6ES BP7ES B6ES B7EV B7EVX BR7ES	53, 63 64 403, 4055 4055, 4054 4253, 4263	N9YC RN9YC4 N4C QN3 N67C	W22ES-U W24ESR-U W22ES-L W24EP-U W22EX-U	SF6C SF6D SF409C SF425C SF426C	S41FR S41XL 440XLS
SILVERSTONE S9 14 mm 3/4" reach 13/16" hex gasket Non-Resistor	W5CC W4CC W3CC W3DP0 WR3CTC WR4DPO	BP8ES BP9ES B8ES B9ES B8EV B9EV	52, 51, 62 402, 4252 2526, 2626 4053, 4052 4063, 4062	N3C N2C	W27ES-U W29ES-U W29-ES-V W29ESR-V W29ES-ZU	SF5C SF259D SF263D SF405B SF405C SF405D	436XLS R41CXL M40FF S400XL

Spark Plug Diagnosis

1. Optimal Spark Plug Appearance

The ceramic center is gray to light-brown The electrode gap is correct. The heat-range is correct.

2. Soot Deposit (**Velvet-like, dull black soot deposits.**)

Cause: Air/Fuel Mixture too rich; Air cleaner dirty; Short distance driving and engine does not reach operating temperature; Wrong heat-range, spark plug is too cold; Can cause missfire.

Repairs: Correct problem. Install new spark plugs.

3. Oil Deposits (**Wet oil film or deposits.**)

Cause: Oil reaches the combustion chamber; Oil level too high; Cylinder worn out; Piston rings or valve guides bad; Will cause missfire.

Repairs: Replace worn out parts. Install new spark plugs.

4. Badly Eroded Electrodes (**Abnormal wear.**)

Cause: Corrosive gasoline additives; Heavy pinging or ignition knock; Ignition timing too much advanced; Thermal overload; Will cause missfire.

Repairs: Stop using additive. Perform Tune-up. Install new spark plugs.

5. Molten Electrode (**Severe wear.**)

Cause: Thermal overload caused by knocking from over-advanced ignition timing, or from carbon deposits in the combustion chamber (glowing hot spots); Spark plug loose; Low grade gasoline; Will cause missfire. Could lead to catastrophic engine failure.

Repairs: Perform Tune-up. Torque spark plugs. Install new spark plugs.

6. Overglazing (**Spark plug looks "glazed".**)

Cause: Gasoline additives; High thermal load from loose spark plug; Wrong heat-range; Can cause missfire.

Repairs: Perform Tune-up. Torque spark plugs. Install new spark plugs of correct heat-range.

7. Molten Center Electrode (**Severely damaged center electrode.**)

Cause: Possibly wrong heat-range (too hot); Thermal overload caused by knocking by too much ignition advance, or from carbon deposits in the combustion chamber (glowing hot spots); Low-grade gasoline; Sparkplug loose; Will cause missfire. Could lead to catastrophic engine failure.

Repairs: Perform Tune-up. Torque spark plugs. Install new spark plugs of correct heat-range.

8. Deposits (**Brownish, cinder-like deposits.**)

Cause: Gasoline additives, or oil additives; Can cause missfire.

Repairs: Install new spark plugs of correct heat-range.

9. Ceramic Center Shattered (**Visible damage, or hairline crack.**)

Cause: Mechanically damaged, probably was dropped; Putting pressure on electrode during gapping; Shock load caused by knocking; Will cause missfire. Could lead to catastrophic engine failure.

Repairs: Install new spark plugs of correct heat-range.

10. Center Electrode Erosion (**Normal wear.**)

Cause: Spark plug not replace as scheduled, but shows normal wear. May cause missfire.

Repairs: Install new spark plugs of correct heat-range.

Attention: All examples are only applicable to 4-stroke engine.

Spark Plug Torque Recomendations

Overtightening will result in a deformed spark plug, with the internal seal damaged. A spark plug damaged this way can lead to premature spark plug failure and even engine damage. Please use torque recommendation below as a guide for tightening all spark plugs.

Spark Plug Thread Size	With Torque Wrench	Without Torque Wrench	With Torque Wrench	Without Torque Wrench
GASKET TYPE:				
10 mm	8-12 lb. ft.	1/4 Turn	8-12 lb. ft.	1/4 Turn
12 mm	10-18 lb. ft.	1/4 Turn	10-18 lb. ft.	1/4 Turn
14 mm	26-30 lb. ft.	1/2 to 5/8 Turn	18-22 lb. ft.	3/8 to 1/2 Turn
18 mm	32-38 lb. ft.	1/2 to 5/8 Turn	28-34 lb. ft.	3/8 to 1/2 Turn
TAPERED SEAT:				
14 mm	7-15 lbs. ft.	1/16 Turn	7-15 lb. ft.	1/16 Turn
18 mm	15-20 lb. ft.	1/16 Turn	15-20 lb. ft.	1/16 Turn

ATTENTION:

1. Before installing any spark plug, always apply antiseize to threads. This assures easy removal of the spark plug and prevents corrosion and seizing.

2. For best high voltage insulation, to prevent arcing-over on the outside of the aluminum oxide insulator and to repel moisture, always apply a high-quality silicone grease to the inside of the spark plug boot.

3. To gap spark plugs, always use a spark plug gapping tool. NEVER pry the ground electrode with a screwdriver or similar object.This could permanently damage the ceramic insulator and the center electrode, making the spark plug inoperable and voiding the warranty.

Silverstone™ Frequently Asked Questions

Q: ***Why are* Silverstone™ *spark plugs "the best spark plugs in the world"?***

A: A spark plug has only one function. Deliver a spark to the combustion chamber to initiate combustion. A hotter spark means improved combustion. If the metal used for the center electrode is a poor electrical conductor, such as platinum or nickel-alloy, some of the energy is lost and the spark is weaker. A weaker spark could mean lost performance. Silver is by far the best electrical conductor of any metal. Using a, large diameter silver center electrode, like the one in **Silverstone™**, can mean up to 137% more spark power and therefore increased engine performance. **Silverstone™** spark plugs out-perform all other spark plugs and deliver the most powerful spark. That's why **Silverstone™** spark plugs are the best spark plugs in the world.

Q: ***Aren't platinum spark plugs the best?***

A: No. As a matter of fact, platinum is one of the worst conductors. The reason why platinum spark plugs are used is for longevity only. Platinum spark plugs can last up to 100,000 miles. If you are looking for longevity, platinum is for you. If you are looking for performance, choose silver.

Q: ***Isn't copper a good conductor?***

A: Yes, but not the best. Silver is the best. Also, the electrodes of spark plugs with so called "copper electrodes" are not solid copper, they are copper core. The electrode is usually made out of nickel-alloy, with a copper core. This only benefits heat dissipation, not performance.

Q: ***Doesn't a silver electrode melt?***

A: No. Just like conventional spark plugs, **Silverstone™** spark plugs are available in different heat ranges. If the correct heatrange is chosen, thermal problems won't arise.

Q: ***Why is heatrange so important?***

A: A spark plug that is too cold won't reach optimum operating temperature and could experience carbon build-up or fouling. A spark plug that is too hot can overheat and melt the electrode.

Q: ***Won't a "hotter" spark plug make a hotter spark?***

A: No. A hotter, or colder spark plug refers only to the ability of the spark plug to dissipate heat. A colder spark plug dissipates heat faster than a hotter spark plug.

Q: ***Do I need to change spark plug heatrange when I use* Silverstone™*?***

A: No. Spark plug heatrange stays the same.

Q: ***I noticed that Silverstone™ spark plugs are only available in a few heatranges?***

A: Yes, that's correct. Silver is also the best thermal conductor of any metal. In managing the ever changing combustion chamber temperatures, caused by different engine and load conditions, silver is unsurpassed. To prevent plug fouling, optimum operating temperature is reached shortly after start up, yet under full throttle, heat is dissipated rapidly. **Silverstone™** spark plugs provide the widest heatrange latitude and therefore cover all heatranges with fewer models.

Q: ***The* Silverstone™ *spark plugs recommended for my engine look like they are a much hotter heatrange than the spark plugs I normally use?***

A: Because the thermal conductivity of silver is so much better than that of any other metal, the physical appearance of **Silverstone™** spark plugs will be different.

Q: ***Isn't a split electrode or a fine wire electrode better?***

A: It depends on the application. Since the ionization voltage with split electrodes or fine wire electrodes is lower, they are perfect for older vehicles with weak ignition systems. But since spark voltage is lower, they are not desired for performance applications. In addition, electrical energy travels on the outside of a conductor and not through the middle as commonly assumed, and since a large diameter center electrode offers a larger surface area, spark carrying ability is increased when the center electrode has a large diameter. To put it simply, you can't fit a big spark through a tiny electrode.

Q: ***Is there a noticeable improvement if I use* Silverstone™*, and if yes, why?***

A: Yes. The large diameter silver center electrode increases **Silverstone's** spark carrying ability, together with spark power, up to 137%.

Q: ***Are there any other reasons why* Silverstone™ *spark plugs are superior?***

A: Yes. **Silverstone™** spark plugs are manufactured to highest quality standards and are made exclusively out of top grade materials. This gives **Silverstone™** spark plugs high reliability and very good high voltage insulation.

Q: ***How long will* Silverstone™ *spark plugs last?***

A: **Silverstone™** spark plugs will last about three times as long as conventional spark plugs. Silver is a precious metal and therefore extremely resistant to erosion, guaranteeing a virtually unchanged electrode gap for the life of the spark plug.

Q: ***What about spark plug gap?***

A: The spark plug gap is the same as the one recommended by the manufacture of the engine in which **Silverstone™** is to be used, unless the **Silverstone™** spark plugs are used together with HotWires. In that case use the spark plugs as they come (pregapped to 0.8mm). To gap spark plugs always use a spark plug gapping tool. Never pry the ground electrode with a screwdriver or similar object. This could permanently damage the spark plug and voiding the warranty.

Q: ***Why do I need resistor plugs?***

A: You don't always need to use resistor spark plugs. True, some electronic engine management systems are more sensitive to RFI. However, most engines will not experience any problems with non-resistor spark plugs, especially if there is some resistance in the spark plug cap or the wires.

Q: ***So non-resistor spark plugs are better for performance?***

A: Yes. If you are looking for performance you want to use non-resistor spark plugs. A resistor is exactly what the word implies. When the spark crosses the point of resistance some of the spark energy is lost. A resistor is like an electronic obstacle and could be the cause for a weak spark. Non-resistor spark plugs deliver a more powerful spark.

Q: ***Why do car manufacturers recommend resistor spark plugs.***

One reasons is actually emissions. Since the resistor is an obstacle it forces the spark voltage to be higher, assuring combustion in a lean mixture. Also resistor plugs are MUCH cheaper to produce. You will never find resistor plugs in serious race cars, yet these cars use some of the most sophisticated engine management and data acquisition systems. But these cars have no EMI problems. Why? The spark happens inside the combustion chamber where he is completely shielded by the metal cylinder head. No EMI can escape the combustion chamber.

Q: ***How tight should spark plugs be?***

A: This is a very important point. Most of the time spark plugs are too tight, (over torqued). This will result in a deformed spark plug, with the internal seal damaged. A spark plug damaged this way can lead to premature spark plug failure and even engine damage. For proper torque values, please check with the spark plug manufacturer.



Nology Model: Miss Lori Ann Photographer: BruinKev Photography

ProFire™

Ignition Coils

Automotive

ProFire™ high performance ignition coils are on the cutting edge of technology and feature the most impressive performance data. In order to supply the energy needed for trouble-free high performance and high rpm operation, they were especially designed to have the quickest rise-time with substantial energy reserves. The available spark voltage is in excess of 45,000 Volts over the entire rpm range, with spark energy being equally impressive. The energy storage capability and power reserves of **ProFire™** coils are extra high. **ProFire™** coils will deliver just the kind of spark you need for maximum performance. When the best is just good enough, use **ProFire™** coils. (CARB OE # D-414-11)

M - Coils

151 991 500	PFC-M50, electronic or points ignition (3.0 Ohm)
151 991 600	PFC-M60, electronic or points ignition, racing only (2.5 Ohm)
151 991 700	PFC-M70, electronic ignition (0.6-1.0 Ohm)
151 991 750	PFC-M75 CDI ignition (MSD-6, Crane Hi-6) replaces MSD Blaster 2, Crane PS91
151 991 800	PFC-M80, CDI ignition (MSD7, Crane Hi-6/7) replaces MSD ProCoil, Crane PS92, Mallory #28880

U.S Patent No. D395658

D - Coils

151 001 100	PFC-D10, electronic ignition (0.5 Ohm)
151 002 200	PFC-D20 - Dual Outlet, electronic and CD ignition (0.55 Ohm)
151 004 400	PFC-D40 - 4-Outlet, electronic ignition

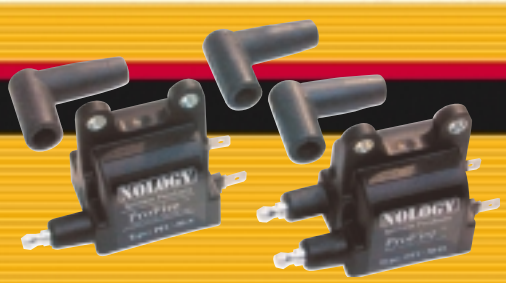
D-20

D-10

D-40

Small coils for coil-on-plug or coil-near-plug applications (super high performance)

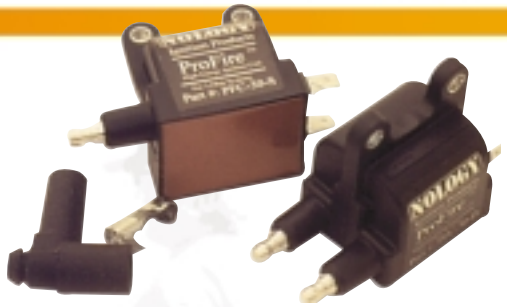
152 001 130	ProFire PFC-03S (0.3 Ohm) single outlet CDI ignition
152 001 140	ProFire PFC-03D (0.3 Ohm) dual outlet CDI ignition
152 001 060	ProFire PFC-06S (0.6 Ohm) single outlet electronic ignition
152 001 070	ProFire PFC-06D (0.6 Ohm) dual outlet electronic ignition



06S/D, 03S/D

Ignition Coils

Motorcycles



ProFire™ for motorcycles are the smallest coils available. Despite their size, the energy output and voltage are extra high. **ProFire**™ coils are available with single or dual high tension towers.

152 001 130	ProFire PFC-03S (0.3 Ohm) single high tension tower For 2-Stroke Bikes (CD Ignition)
152 001 140	ProFire PFC-03D (0.3 Ohm) dual high tension tower For 2-Stroke Bikes (CD Ignition)
152 001 060	ProFire PFC-06S (0.6 Ohm) single high tension tower (Current Limited Electronic Ignition)
152 001 070	ProFire PFC-06D (0.6 Ohm) dual high tension tower (Current Limited Electronic Ignition)
152 051 300	ProFire PFC-30-S (3.0 Ohm System) single high tension tower (Electronic Ignition - 2.4 Ohm Actual)
152 051 350	ProFire PFC-30D (3.0 Ohm System) dual high tension tower (Electronic Ignition - 2.4 Ohm Actual)

Custom Harley-Davidson® Builders Listen Up!

ProFire™ coils for Harley-Davidson® motorcycles are so small you can hide them anywhere. And if you've been holding off converting your Harley to single-fire ignition because the two coils needed take up too much space and are too heavy! **Wait no more!** Two **ProFire**™ coils are as big as one standard coil. ATTENTION: Use only with the following ignitions: Dyna 2000, Compufire Elite-1, RevTech Digital, Crane HI-4, Power Arc II, Screaming Eagle & Stock Harley-Davidson®.

152 051 300	ProFire PFC-30-S (3.0 Ohm System) single high tension tower (Electronic Ignition - 2.4 Ohm Actual)
152 051 350	ProFire PFC-30-D (3.0 Ohm System) dual high tension tower (Electronic Ignition - 2.4 Ohm Actual)

- Maximum Spark Voltage
- Shortest rise time
- Extra high power reserve
- Smog legal

PowerCore™

Ignition Coil Amplifier

The **PowerCore™** ignition coil amplifier increases the ignition coil output performance of **any** inductive ignition system by up to 50%. This hotter, more powerful spark ignites every fuel/air mixture much quicker, more reliably and more efficiently. This increases horsepower and torque, and decreases fuel consumption and emissions. Coil rise and saturation time is much shorter.

This technology is truly revolutionary and is the most economical way to step-up the power of any electronic or points inductive ignition system. **PowerCore™** is absolutely essential for high compression and/or high rpm engines, and all lean burn applications. For maximum horsepower and high rpm reliability, use **PowerCore™**. Available for cars, trucks and motorcycles.

The PowerCore™ Technology

Think of it as a supercharger for the coil. A supercharged engine (same displacement), makes a lot more power. Same is true for the **PowerCore™** coil amplifier. The coil size stays the same, but the energy that is stored in the **PowerCore™** is supplied to the coil, resulting in added spark energy and higher possible spark voltage. Just like the supercharger, who accelerates engine rpm climbing rate, the **PowerCore™** accelerates coil saturation time.

Available for electronic or points inductive ignition systems only. Smog Legal **CARB No. D-414-11**

What does Nology's **PowerCore™** has to offer in three words or less? More power, quicker!

Nology Model: Ariel Rose Photographer: Rick Anthony

Many PowerCore applications are now Plug-and-Play. Please call for application.

MORE POWER, QUICKER

PowerCore™ provide:

- Hotter, more powerful spark
- Reliable high-rpm operation
- Increased horsepower & torque
- Smog legal

Do NOT use PowerCore on CD Ignitions

PC-10
For ignition systems with active current limiting and all automotive applications Model Year 1990 and newer.

160 001 061	PC-10 Red
160 001 062	PC-10 Black

PC-30
For ignition systems without active current limiting and most automotive applications Model Year 1990 and older. with 2.5 to 3 Ohm ignition coils.

160 001 301	PC-30 Red
160 001 302	PC-30 Black

PC-50
For all ignition systems with points.

160 001 501	PC-50 Red
160 001 502	PC-50 Black

Plug-n-Play Audi A6

Plug-n-Play for:

160 056 012	2003 - 2000 Audi S4, 2.7 Liter V6 Twin Turbo
160 056 011	2002 - 1996 Audi A4/A6, 2.8 Liter V6 Non-Turbo
160 604 011	2000 - 1996 Audi A4/ VW Golf, Jetta, Passat, 1.8 L Turbo

Please check Application Guide for the correct PowerCore for your vehicle.

PowerCore™ for Harley-Davidson

Don't be left behind. Join the long list of Harley-Davidson Drag-racers who are winning races using the **PowerCore™** coil amplifiers. More Top-Fuel races are won using **PowerCore™** and **HotWires®** than in any other motorsport.

PC-30
For street driving and 3 Ohm ignition coils.

160 001 301	PC-30 Red
160 001 302	PC-30 Black

PC-30S
For Harley-Davidson Drag-Racing

160 001 351	PC-30S Red
160 001 352	PC-30S Black

PC-50
For points ignition systems.

160 001 501	PC-50 Red
160 001 502	PC-50 Black

Bill Furr, National Champion - ADBA
Top Fuel Harley (1/4 mile @ 6.797 / 205.65 mph)
ADBA Pro fuel Harley (1/4 mile @7.248)

ProFire™

Ignition Module

If you're looking for a high-power ignition module, **ProFire™** is the one for you. This high performance ignition module will really light up your cylinders. **ProFire™** can support systems up to 60,000 volts and has a switching current that is equally impressive. Cutting-edge technology makes **ProFire™** very efficient with virtually no energy losses. This is great news for race cars, where a weak ignition system can cause misfires. The ProFire Ignition Module from Nology is absolutely essential for high compression, and/or high revving engines

Most OEM ignition modules have a relatively low current limit and sometimes do not have active current limited circuitry. This precludes the use of a low-Ohm high performance ignition coil. If a low-Ohm high performance ignition coil is used anyway, the OEM ignition module could be destroyed.

The ProFire ignition module has an increased current limit and also has advanced active current limited circuitry. What this means is that even if a low Ohm high performance coil is used, the module can handle it. The higher primary current increases the secondary energy (spark energy) considerably.

ProFire™ Ignition Modules:

200 001 148	PFM 1A, Universal 1 Channel Module (triggered by 5 Volt square-wave)
200 002 148	PFM 2A, Universal 2 Channel Module (triggered by 5 Volt square-wave)
200 003 148	PFM 3A, Universal 3 Channel Module (triggered by 5 Volt square-wave)
200 001 132	PFM 1H, 1 Channel Module Honda: Civic, Accord, Prelude / Acura: Integra

200 221 132 **High-performance Ignition Kit for Honda: Civic, Accord, Prelude / Acura: Integra**

Replaces Stock Ignition Module mounted inside the Distributor. Converts the ignition system from internal ignition module to an external ignition Module.

Kit Includes:

200 001 132	High-Ampere Ignition Module	151 001 100	ProFire Ignition Coil D-10
201 221 132	Wiring Harness	201 221 060	Distributor Cap

See for Distributor Cap Applications next page

200 011 133 **High-performance Ignition Kit for Acura: Integra GSR – B18**

Replaces Stock Ignition Module mounted inside the Distributor. Converts the ignition system from internal ignition module to an external ignition Module.

Kit Includes:

200 001 132	High-Ampere Ignition Module,
201 221 132	Wiring Harness
151 001 100	ProFire Ignition Coil D-10
201 221 070	Distributor Cap

See for Distributor Cap Applications next page

* Some cars may require separate Installation Kit and/or Wiring Harness. Please call!

High manufacturing standards guarantee exact timing and unsurpassed reliability

- High Current Ignition Module
- High Voltage Capability
- Increased Performance
- Unsurpassed Reliability



200 601 148 **High-performance Ignition Kit for Volkswagen Golf/Jetta**
Replaces Stock Ignition Module/Coil Unit.

Kit Includes:

200 001 148	High-Ampere Ignition Module
201 601 148	Wiring Harness
151 001 100	ProFire Ignition Coil D-10

ProFire™ Ignition Module Wiring Harness / Installation Kit and Connectors:

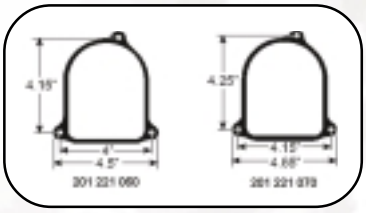
201 991 148	Universal Wiring Harness for PFM 1A, 1 Channel Module
201 992 148	Universal Wiring Harness for PFM 2A, 2 Channel Module
201 993 148	Universal Wiring Harness for PFM 3A, 3 Channel Module
202 007 001	7-Position Connector, Terminals and Seals for ProFire Ignition Module.

Some cars may require custom Installation Kit and/or Wiring Harness. Please call!

Distributor Cap®

Performance For Honda & Acura

Everything you need to convert your stock Honda or Acura Internal-Coil ignition system into an External-Coil high-performance ignition system except the ignition coil. For maximum performance increase can be used with the Nology ProFire Coil M-70 and the Nology external high-performance Ignition Module ProFire PFM-1H. (Both Sold Separately) Can be used with stock Honda and Acura ignition module.



- •Increased HP
- •Better throttle response
- •Increased torque
- •Higher RPM Limit

201 221 060 Replaces Stock Distributor Cap Honda/Acura. Fits the following

97 -92	Integra	LS, RS, GS	1.6, 1.7, 1.9	(with TEC cap)
97 -92	Accord	DX, LX	1.6, 1.8, 2.0, 2.2	(with TEC cap)
97 -96	Civic	DX, EX	1.2, 1.3, 1.5, 1.6	(with TEC cap)
95 -92	Civic	ALL	1.2, 1.3, 1.5, 1.6	(with TEC cap)
97 -92	Del Sol	ALL	1.5, 1.6, 1.8 VTEC	(with TEC cap)
97 -92	Prelude	ALL	1.8, 2.0, 2.2, 2.3	(with TEC cap)

201 221 070 Replaces Stock Distributor Cap Acura Integra.
Fits the following

94 -00	Acura	GSR	B18	(with TEC cap)

Each kit includes:

- •High-Performance Distributor Cap
- •Low-Resistance Coil Wire
- •All Connectors Needed
- •Ignition Rotor
- •Wiring harness and hardware for Ignition Coil (coil sold separately)

Sequential Shift Light

Never Over-rev Your Engine Again

The Nology Sequential Shift Light (SSL) is a highly accurate, microprocessor controlled shift light, which can be easily adjusted using the "increase" and "decrease" buttons.

The SSL can be used with most 2, 4, 6, or 8 cylinder engines, including Direct Ignition and Waste Spark systems that use points, electronic ignition, or have an ECU Tach output. It can also be used with most capacitive discharge ignitions (CDI) with a Tach output.

The Sequential Shift Light has a small (40x16x13mm) remote LED module incorporating 4 LEDs that light up sequentially as the engine approaches redline. The shift point being indicated by the 4th (red) LED.

Mount the SSL on the dash or on the A-pillar, or anywhere you like. Never over-rev your engine again and miss a shift.

Shift Light Part # 460 001 011

Technical Specifications:

Microprocessor:	4 MHz RISC based
Dimensions:	82x40x22mm
Weight (approx.):	<120g
RPM Range:	
2 Cyl:	1,000 to 20,000 RPM
4Cyl:	1,000 to 20,000 RPM
6 Cyl:	1,000 to 12,000 RPM
8 Cyl:	1,000 to 10,000 RPM
Temperature Range:	-25 to +85 (degrees Celsius)
Operating Voltage:	9 - 16V
Accuracy:	+/- 10RPM @ 6kRPM
LED Brightness:	350mcd each

Nology Model: Ariel Rose Photographer: Rick Anthony

PDA-Dyno™ & OBD II Scan Tool

Put A Dyno In The Palm Of Your Hand

Just sync the **PDA-Dyno**™ software onto your PDA, connect the interface cable to your OBD II connector under the dash, and you have a dyno in the palm of your hand.

Measure:
- Horsepower and Torque
- 0 to 60 times (and other speed combinations)
- 1/4 mile time and speed
- Fuel Economy (MPG)

Never again pay for dyno-time and make every road your personal drag-strip.

Check and clear Diagnostic Trouble Codes, turn off the pesky Check Engine Light and view/record all OBD II supplied sensor data in real time.

Lets say you want to upgrade your engine and you would like to know if that new trick air cleaner really gives you more power. Do a baseline run and record the horsepower and torque, together with airflow data. Now install the new air cleaner and make another run (damn this is hard work). Now compare the data. More horsepower from more airflow - the air cleaner worked. Do the same test in a 0 to 60, or ¼ mile run. Faster time and speed - the air cleaner worked. Get it?

Use the OBD II Scan Tool function to clear Diagnostic Trouble Codes (DTC) and to turn off the "Check Engine" light. Yes the one that came on right after you did all those cool engine mods. Perfect for when you have to get the car smogged.

Displays all generic OBD II data and supports protocols:
SAE J1850 (VPW,PWM); ISO 91412 (ISO); ISO 14230 (KWP 2000, EOBD II).

Additional Features

The **PDA-Dyno**™ also turns your PDA into a Data Acquisition System. Record all data during a road race, or record your gas mileage (mpg) for a specific trip (if supported). A standard 8 MB PDA can hold hours of driving data (depending on free memory space).

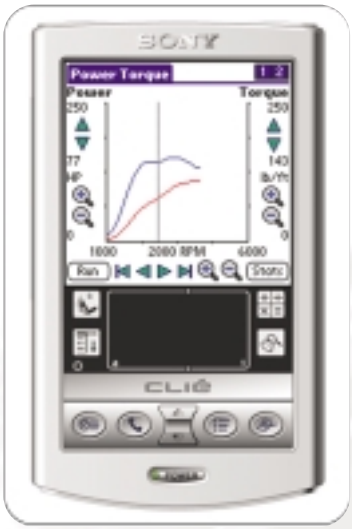
Worldwide Patents Pending

PDA-Dyno™ & OBD II Scan Tool

Display and Record:

- General Engine and Vehicle Information
- Diagnostic Trouble Codes (DTC)
- Displays real time sensor data.
- Display following sensor types: (not all sensors are supported by all vehicles).
  Load Value • Vehicle Speed • Coolant Temperature
  Ignition Timing • Engine RPM • Fuel Trim • Mass Air Flow
  Intake Air Temperature • Throttle Position • Fuel Pressure
  Intake Manifold Pressure • Oxygen Sensors.

(supports most cars model year 1996 and newer). Worldwide Patents Pending



Box Includes:

OBD II Interface Box
OBD II Interface Cable
PDA HotSync Cable
Software CD (includes manual)

PDA not included.
Must be purchased separately.

440 001 011	Palm III, VII, VIIx	
440 001 021	Palm V, Vx	
440 001 031	Palm m100, m105	
440 001 041	Palm m125,m130,m500,m505,m515,i705, Tungsten, Zire 71	
440 001 051	Sony CLIÉ Series N	(N770,N760,N750,N710,N700, N615, N610, N600)
	Series S	(S500, S360, S320, S300)
440 001 071	Sony CLIÉ Series:	TG50, T400/415/425, T600//615/625/650/665 SJ 20/22/30/33, SL 10, NR70/70V, NZ90 NX 60/70V/73V/80V
440 001 061	Handspring Visor (all versions, except Edge)	
440 001 081	Handspring Treo Organizers and Smartphones	
call	Kyocera Smartphone, Kyocera 7135, Kyocera 7100 , Samsung i300/i330	
441 001 011	PDA Magnetic Windshield Mounting Kit	

The Nology G-Dyno™ Series

Automotive Performance Computers & Data Acquisition System with Accelerometer and GPS

Following the great success of or **PDA-Dyno**™ & OBD II Scan Tool and at the request of our customers for a similar product for older and non-OBD II cars, Nology developed the **G-Dyno**™ and **G-Dyno**™ Plus with GPS.

Think about all the data you would like to have to find a quicker way around the racetrack, or to make your car go faster. Find out if all the improvements to your engine resulted in more horsepower. Discover what power your car really puts to the road or find a quicker way around the racetrack. The Nology **G-Dyno**™ Plus with GPS is guarantied to take seconds off your laptime.

The Nology **G-Dyno**™ Series of performance computers and data acquisition systems can do it all, for a fraction other data acquisition systems cost.

G-DYNO™ Automotive Performance Computer & Accelerometer

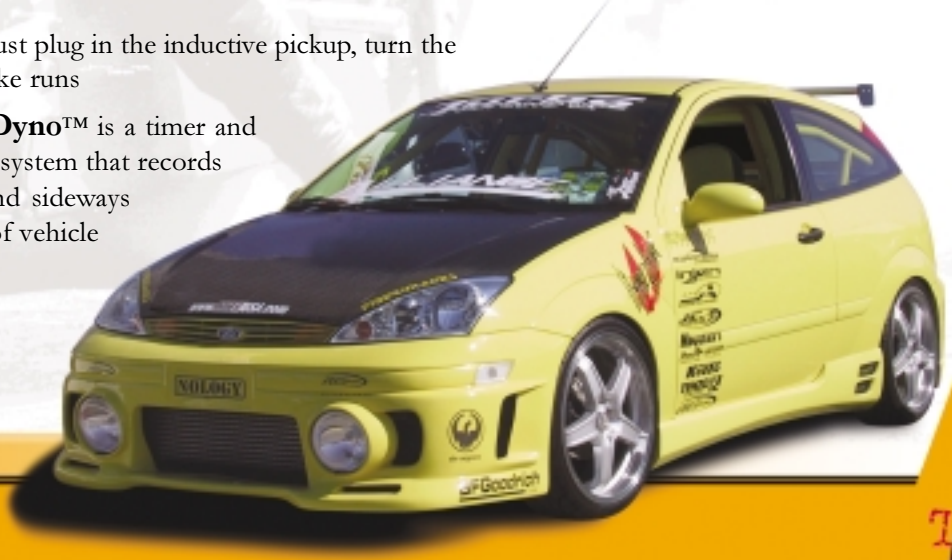
The Nology **G-Dyno**™ is a powerful automotive performance computer. Use it to measure horsepower and torque, 0 to 60 time, ¼ mile time and speed, cornering forces, handling and braking efficiency and so much more. Use the **G-Dyno**™ to tune your engine, set up the suspension for best handling, check braking performance and check the tires for grip.

The **G-Dyno**™ allows anyone to get accurate dyno results, any time. All you'll need is a flat road.

The **G-Dyno**™ is a digital data logger and performance computer utilizing a two axis accelerometer. Use it to measures the entire performance of a vehicle. The **G-Dyno**™ records the data from one or more runs. The data is then loaded into the PC for evaluation. Use the powerful analyzing software to process and graphically display the data.

No assembly required: just plug in the inductive pickup, turn the **G-Dyno**™ on, and make runs

How does it work? **G-Dyno**™ is a timer and precision accelerometer system that records hundreds of forward and sideways (lateral) measurements of vehicle movement.



Speed Thrills

The Nology G-Dyno™ Series

G-DYNO™ Automotive Performance Computer & Accelerometer

Never again pay for dyno-time and make every road your personal drag-strip.

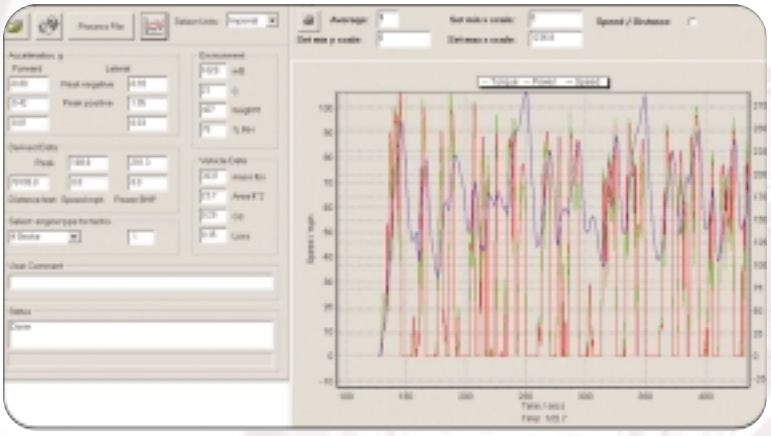
Horsepower and Torque:
From acceleration and time, power and torque can be calculated. The user supplies the car's weight, gear ratios, tire sizes and some other variables, the rest is pure physics.

This is not a power estimating program! **G-Dyno™** measures the power of your engine directly by making precise measurements.

Cornering:
G-Dyno™ measures lateral (sideways) acceleration. By collecting data on the track, you can see the g force your car handled in cornering, or by driving a constant radius you can compare front / rear handling setups, check the results of adjustments toe in/out, camber and caster. Measure the maximum g forces and find out which brand of tire is best.

Braking:
G-Dyno™ is also invaluable for braking measurements –after all with that extra power our HotWires supply you need to be sure you can stop. By measuring the deceleration, **G-Dyno™** can show braking effectiveness at various speeds and conditions.

PC Software:
Upload the collected data to your PC and graph out for easy analyzing. The PC Software is designed to be flexible and simple to use.



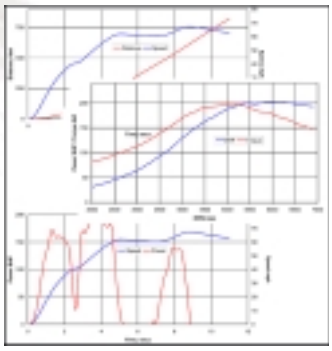
- 450 001 011 G-Dyno
- 451 001 021 Inductive Clamp

The Nology G-Dyno™ Plus

Automotive Performance Computer & Data Acquisition System with Accelerometer

The Nology **G-Dyno™ Plus** is a powerful 11 Channel data acquisition system and performance computer, utilizing a high-precision two-axis accelerometer to measure acceleration, braking and cornering. In addition, record 11 other signals for later evaluation. For instance, record the throttle position or brake pedal pressure to see when you're on the gas or when and how hard you brake.

Think about all the data you would like to have to find a quicker way around the racetrack, or make your car go faster. The Nology **G-Dyno™ Plus** can do it all, for a fraction other data acquisition systems cost.



Use it to measures the entire performance of a vehicle. Measure horsepower and torque, 0 to 60 time, ¼ mile time and speed, cornering forces, handling and braking efficiency and so much more. Use the **G-Dyno™ Plus** to tune your engine, setup the suspension for best handling, check braking performance and check tire grip.

Use the powerful PC analyzing software to process and graphically display the data.

Data logging with the G-Dyno™ Plus:

- 7 channels of 8 bit analog data, for example: air/fuel ratio, throttle position, brake pedal pressure, temp sensors, oil pressure, knock sensor etc. All recorded at 12.5 samples per second. Easily set for different signal levels. Factory preset inputs: 1 channel - 12V range, 3 channels - 5 V range and 3 channels - 2.5V range.
- 4 channels of digital data, for example: injector pulses, speed sensors, gear sensors, lap counter etc. Recorded at 100 samples per second.
- Tach input – can use inductive ignition clamp.
- Optional wireless input: Replace 2 analog inputs with data from separate RF transmitter with a 30 ft range.
- All wiring by screw terminal block, for ease of installation and removal.
- On / off by push button with audible confirm.
- 24 hour life from 2 AA cells (data logging, without GPS). 2 hours with GPS.
- Comes complete with software (Win 95/98/2000/XP), serial data cable and 16MB MMC.

Measure:

- X/Y acceleration 100 samples per second.
- 0-60 mph / 0-100 kmph timing.
- 30-50, 50-70 or any other speed combo.
- Standing 1/8 or ¼ mile times and speeds.
- 60 mph - 0 or any other braking times and distance.
- Horsepower and Torque - real road horsepower.
- Before / after tests show if those modifications really are making any difference!
- Peak and average cornering G's
- Measure tire effectiveness
- Record data from 11 other sensors

The high-precision two-axis accelerometer is accurate to 0.005 g with a resolution to 0.01g. The small battery powered **G-Dyno™ Plus** data logger stores data on a standard MMC card, allowing up to 3 hours of recording on the included 16MB card. (128MB cards 12 hour storage).

PC Software:

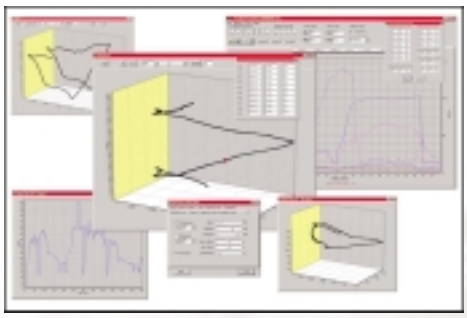
- PC software to download logged data, create text and spreadsheet (Excel) files.

Accessories:

- MMC/CF/SD/SM USB interface card reader.
- MMC memory 16, 64, or 128MB.
- Inductive RPM clamp.
- 12 Volt DC Power Supply
- GPS receive **(See following section)**

The Nology G-Dyno™ Plus GPS

Add a high-performance GPS receiver to the already powerful **G-Dyno™ Plus** data acquisition system and end up with a unique combination of INS (Inertial Navigational Systems), high-performance GPS and a powerful data logging system, all with a 3D flexible graphics display function.



This is one of the most powerful combinations found in a data acquisition system for motor racing.

The **G-Dyno™ Plus** with GPS measures the entire performance of a vehicle continuously from the INS and GPS data, and automatically maps the racetrack as you drive! It records the speed, distance, horsepower, torque, cornering G's, braking G's and more, against time and track position. It can do measurements of power and torque in one gear, or power and speed / time through the gears. Braking time / distance can also be measured easily. Cornering and handling forces can be measured at the same time.
The data is displayed as a 3D-plot, road / track position against time, or full 3D position with altitude! You can "drive" the track with the animated data display, zoom in on areas to fine-tune your car and driving. All parameters of the graph can be altered and saved with our powerful chart editing tools. The supplied PC software generates text and .csv files (Excel), so you can easily read and use the data in other applications.

The high-performance custom SirfStar 2 GPS receiver can be used separately with almost any SatNav software.

Discover what power your car really puts to the road and find a quicker way around the track. The Nology G-Dyno™ Plus with GPS is guarantied to take seconds off your laptime.

Automatically map the racecourse, display speed, horsepower and all logged data from one of the 11 channels against track position and time. Tune your vehicle and driving for any racetrack.

GPS Receiver:

- 12 Channels "All-In-View" Tracking
- Cold/Warm/Hot Start Time: 45/38/8 seconds
- Reacquisition Time: 0.1 seconds
- Accurate 1PPS Output Signal Aligned with GPS Timing
- Trickle Power Enabled for Power Saving
- Multi-path Mitigation Hardware
- Superior Sensitivity for Urban Canyon Environment
- On-board RTCM SC-104 DGPS and WASS Demodulator
- SiRFstarII Architecture
- Red / green fix available indicator LED.
- Field Software Upgrade Supported
- Fully water-proof
- Rubberized magnetic base for mounting on car
- Visual GPS software for PC and Winfast pocket PC software included.

Features:

- All features are the same as the Nology **G-Dyno™ Plus** except for the addition of GPS data.
- Full GPS data.(RMC,GSA,GGA,VTG,GSV,GLL messages)
- 24 hour life from 2 AA cells (data logging, without GPS). 2 hours with GPS.

GPS Receiver

GPS Clamp

- 450 001 021 G-Dyno Plus
- 451 001 011 GPS Receiver
- 451 001 021 Inductive Clamp
- 451 001 03112 Volt DC Power Supply

DC Converter

Power Formulas

Not-Hot®

Keep Your Engine Cool, Even in Extreme Heat!

Not-Hot® is a liquid coolant system additive and when mixed with water or antifreeze can lower coolant temperatures up to 30°F. **Not-Hot**® softens deposits until completely dissolved and prevents new scale build-up. It also contains additives to prevent bacterial growth and eliminates water surface tension, which improves heat transfer. **Not-Hot**® is completely harmless to all materials found in cooling systems and contains 12 corrosion inhibitors in a biodegradable, long-life formulation. **Not-Hot**® is fully compatible with any radiator antifreeze. On trips across the desert or when stuck in traffic, race-proven **Not-Hot**® can prevent overheating.

- Improves heat transfer
- Lowers engine temperature
- Race-proven
- Lubricates water pump

190 001 511 Not-Hot 12 ounces

PowerTrip®

Super Engine Oil Treatment

PowerTrip® coats the metal and forms a complex bond that is a durable friction barrier. It offers maximum protection for high performance engines and reduces friction. A 5% gain in horsepower and a 5% to 7% increase in fuel mileage is possible. **PowerTrip**® combines extreme pressure agents, friction modifiers, anti-wear additives and corrosion inhibitors in just the right formulation to guarantee boundary lubrication and hydrodynamic separation together with lower friction, even under the most extreme engine conditions. **PowerTrip**® is fully compatible with any engine lubricant. This race-proven super engine oil treatment is guaranteed to put any engine on a **PowerTrip**®.

- Maximum Protection
- Increased Performance
- IncreasedFuel Economy
- Lower Friction

190 001 521 PowerTrip 12 ounces

PowerBoost®

Gasoline Additive for Cleaner Performance

PowerBoost® contains cleaning agents, solvents and enzymes that will remove deposits on pistons, combustion chambers, valves and catalytic converters restoring engine performance and lowering emissions. **PowerBoost**® is a catalyst that improves fuel/air mixture formation, which together with the cleaning of fuel injectors and the restoration of injector spray patterns, assures excellent fuel atomization. A homogeneous fuel/air mixture has the same effect as a higher octane fuel. Continued use prevents reformation of deposits assuring prolonged efficient and low polluting engine operation. **PowerBoost**® increases fuel efficiency and engine performance, and lowers exhaust emissions. It is completely harmless to catalytic converters and oxygen sensors, and is EPA approved.

This race-proven gasoline additive delivers a **PowerBoost**®.

- Increases fuel economy
- Cleans injectors
- Increases performance
- Removes deposits

190 001 531 PowerBoost 12 ounces

Speed Thrills

Promotional Materials

Wear our "colors" and show your competition that you mean business! Caps are black with a red NOLOGY® logo. T Shirts are available in many sizes and designs. Decals are available in red, black and yellow. License plate frames come in black with white, yellow or silver logo.

100 011 092	Baseball Cap - NOLOGY
100 011 220	Jacket - Speed Thrills (specify size)
100 011 100	Polo Shirt - NOLOGY (specify size)
100 011 079	T-shirt - Speed Thrills (specify size)
100 011 300	Titanium Chronograph
100 011 069	T-shirt - Fukenmovin, car (specify size)
100 011 062	T-shirt - Fukenmovin, motorcycle (specify size)
100 011 010	T-shirt - Nology Top Fuel Dragster (specify size)
100 011 180	License Plate Frame - Speed Thrills
100 011 030	Decals
100 051 011	SpeedThrills Keychain

Titanium Chronograph

What's the formula for going fast? More power, or less weight! For more power, get our HotWires, for less weight, get the Nology Titanium Chronograph.

The Nology Titanium Chronograph is so light, it won't slow you down. The Chronograph has a high precision quartz movement and is waterproof to 150 feet. The stop watch function keeps track of 10th seconds, seconds and minutes, as well as split timing.

The watch case, the watch band and the watch band clasp are all made out of solid titanium.

- Solid Titanium
- Super Light
- Accurate Quartz Movement
- Waterproof to 150 Feet
- Stop Watch Function

Display to Demonstrate HotWires® Performance

This countertop unit is the perfect sales tool for **HotWires®**

300 001 750	ID-2 (90 Volt Japan)
300 001 610	ID-2 (110 Volt USA)
300 001 620	ID-2 (220 Volt Europe)
300 001 630	ID-2 (12 Volt DC)

Complete Description of the Technology and the Influence on Engine Performance and Emissions

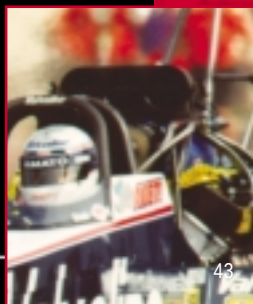
The Nology Ignition Concept

Nology Engineering is rewriting the book on ignition systems and judging by the success of their products, they know what they are talking about. At the 1992 Slick 50 Nations in Houston, one of their products was installed on the Jack Clark owned Top-Fuel dragster when driver Mike Dunn ran the sport's then fastest speed of 297.12 mph. Since then, the list of people using Nology's ignition products has grown to be as impressive as the success that these same people are having using the Nology products. "Big Daddy" Don Garlits, for example, was there right from the beginning and has been rewarded with several runs close to 300 mph (298 mph and 299 mph, respectively). Joe Amato has had two of the quickest runs ever at 4.751 sec. and 4.757 sec., and at the 1993 Winter Nationals in Pomona, Cory Mac completed an unbelievable three runs back-to-back at 300.60 mph, 301.50 mph and 302.21 mph. Jack Clark's Taco Bell Dragster at 304 mph, as well as Kenny Bernstein in the Budweiser car at 306 mph, are the newest additions to the impressive results that are proof positive that at Nology Engineering, they know what they are talking about.

What's the secret to their success? The secret lies in their unconventional approach to designing ignition systems. Other ignition system manufacturers boast of their system's long spark duration. They'll tell you that their system has the longest spark duration, usually one to three milliseconds. When looking over the sales brochure for one of Nology's ignition systems, you also find a claim for spark duration, the shortest spark duration in the business. What do they know at Nology that other manufacturers don't?

Anyone who had physics in college knows the formula for power. In this case we're referring to ignition spark power. Power equals work divided by time (P=W/t). Thus, to get more power, you need to do the same amount of work in less time. Sounds simple enough! Manufacturers of conventional ignition systems though, want you to believe that it is possible to increase the power of ignition systems by lengthening the spark duration. This is not true! Lengthening the spark duration actually reduces spark power, as we already know (P=W/t).

Joe Amato, driver of the Valvoline Top Fuel Dragster, making history using Nology ignition



Two spark plugs in a pressure chamber, simulating conditions in the combustion chamber. On the right a **HotWires**® spark and on the left a spark from a stock ignition system.

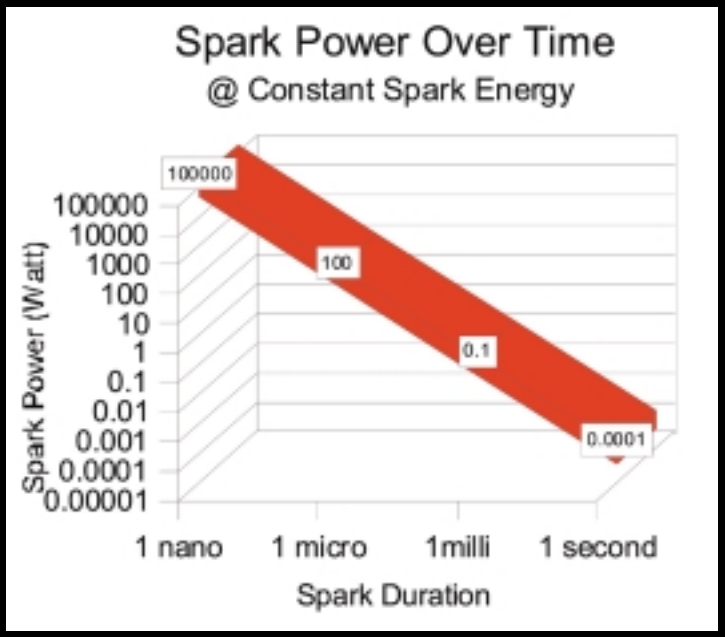
Smog Legal CARB #: D-414-10
US Pat # 6,559,376. International Patents Pending

Which spark is more powerful? Decide for yourself!

Let's look at the process of igniting the mixture in the combustion chamber. The coil is charged up until the voltage at the spark plug electrodes reaches the ionization point. When the ionization point is reached, the electrical energy jumps the spark plug gap, creating a spark. If the spark is powerful enough, the fuel mixture in the combustion chamber is ignited. The faster the process of igniting the fuel, the faster the flame front growth and the more powerful the igniting spark, the more complete the combustion. With this in mind, one has to wonder what a long spark duration is good for? A good analogy would be if we were to burn 1,000 gallons of gasoline over a long period (days), or blow it up all at once in a gigantic explosion lasting only 1 second (P=W/t). The energy released is the same, but the latter is much more powerful.

By obeying the laws of physics and applying them to their ignition systems, Nology is able to build ignition systems with truly impressive performance data. Their claims are backed up by the success that their systems are having on the racing circuits.

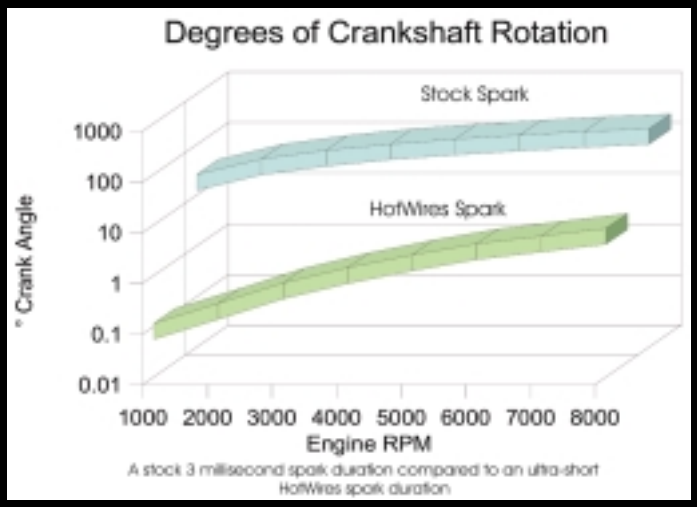
We also find when running an engine at 7500 rpm or more there is no time for a long spark duration. First, the engine manufacturer recommends a precise ignition timing, but the spark has a long duration? That doesn't sound right. You don't want the spark to ignite the fuel mixture sometime during its duration, but at a precise moment, namely the recommended ignition timing. Secondly, if the spark is powerful enough to begin with, you don't need a long duration, only a big enough spark lasting a few nanoseconds. Furthermore, at 7500 rpm the spark of a conventional ignition system with a duration of 3 milliseconds will take 135 degrees of crankshaft rotation to complete.Not a very precise ignition timing, and a lot of wasted energy. Nology's ignition system spark duration needs less than one degree of crankshaft rotation to complete.



This graph clearly shows the decrease in power,when spark duration is increased

With a spark duration that short, the ignition timing is much more precise and spark power is increased substantially. Flame front growth is much quicker and combustion more complete resulting in increased horsepower and a cleaner burn. And because an ultra powerful spark can ignite more fuel, you can raise fuel flow, increasing horsepower even more.

To summarize, Nology's ideology on ignition systems is easy...get the job done quickly and with a big bang. It seems to work.



A stock 3 millisecond spark duration compared to an ultra-short HotWires spark duration

Performance & Emissions

Nology Engineering developed HotWires for performance or emissions-oriented applications. A high energy ignition system is absolutely essential when attempting to reduce emissions or when building a high performance engine.

Television news and headline stores are filled with reports on global warming, ozone depletion and the need for more fuel-efficient, less polluting automobiles. Lawmakers and environmental groups try to force car manufacturers to build ultra low emission vehicles known as ULEVs in order to eliminate poor fuel efficiency and air pollution. ULEVs could come with gasoline-powered engines equipped with new fuel-saving and pollution-reducing technology, or with engines able to operate on alternative fuels. Some scientists and engineers assert that alternative fuels are not the solution of choice for many reasons. A big issue is the need for a fuel distribution network. Using alternative fuels increases fuel consumption, greatly reducing the driving range between fill-ups and emissions from such an engine can be just as harmful as those of gasoline engines. There are also fundamental safety concerns carrying some alternative fuels on passenger cars. That leaves us with gasoline powered ULEVs. Here we are confronted with a different problem. Car manufacturers claim that they are having a tough time working to meet future emission standards for gasoline-powered engines using existing technology. The engines in ULEV's have to operate ultra lean to be less polluting and more fuel-efficient. Such a lean fuel mixture is difficult to ignite using conventional ignition systems.

HotWires surpass conventional ignition systems by a wide margin. They generate a high power, ultra short spark that can ignite even lean fuel mixtures. Using HotWires results in an easier starting, smoother running and less polluting engine. Life expectancy of the engine is increased. A substantial increase in power is possible. A reduction in fuel consumption and exhaust emissions is always observed. HotWires can be installed in cars, trucks, motorcycles or boats of any year as a retrofit device or as original equipment.

TEST DATA INDICATES:

1. Decreased exhaust gas temperature (EGT)
2. Decreased cycle to cycle variation (S)
3. Decreased fuel consumption (BSFC)
4. Increased combustion pressure (P_{max})
5. Faster combustion (crank angle @ P_{max})

Superflow Engine Cycle Analysis (ECA)

Test	StockIgnition	HotWires Ignition	Change%
EGT 4500 rpm	1274	1241	-2.6
S (standard deviation)	48.8	43.8	-9.5
BSFC	841	813	-3.3
P_{max} {psi}	873	931	+6.6
CA @ P_{max}	10.4	8.8	-1.6°

Many engine and car manufacturers have tried to lean out the fuel mixture of gasoline and alternative fuel engines in order to improve exhaust emissions and fuel consumption. They found that it is not possible to consistently ignite a gas mixture with more than 15% to 20% air surplus using conventional ignition systems. The ignition energy and power of such systems are not high enough to initiate combustion.

After years of thorough research, Nology Engineering has confirmed the possibility of igniting lean mixtures with a very short, high energy spark. The development of HotWires was based on these test results. HotWires are capable of igniting lean mixtures with up to 40% air surplus. Consequently, fuel consumption and exhaust emissions are drastically reduced without adversely affecting the operation of the engine. HotWires is the only ignition system that has a substantial influence on the combustion process. Independent test results show decreased fuel consumption, decrease of all harmful exhaust emissions and increased horsepower. HotWires solve the emission problem at the source.

Engineers have taken modern race cars to the cutting edge of technology in the search for more horsepower. Fuel systems have progressed from carburetors to fuel injections, exhaust manifolds made way to highly tuned exhaust headers, induction is aided by turbochargers or compressors and multi-valve design are standard. It seems that engineers have forgotten the ignition system as a source for more horsepower. Modern ignition systems have improved more in their reliability than in performance.

The HotWires high energy ignition system is revolutionary in design and characteristics and is extremely powerful. Independent tests confirm, HotWires increase horsepower. Unlike conventional ignition systems, HotWires discharge a very high energy spark within an ultra short pulse of only a few nanoseconds. This high energy discharge mode is maintained throughout the full rpm range. HotWires is the only ignition system that has a significant influence on the entire combustion cycle. HotWires enhance the flame front growth and decrease the cycle-to-cycle variation, resulting in a faster and more stabilized burn. This combustion enhancement results in more horsepower.

HotWires show an increase of 8 horsepower on this Small Block Chevy

Horsepower Test on Superflow Dyno

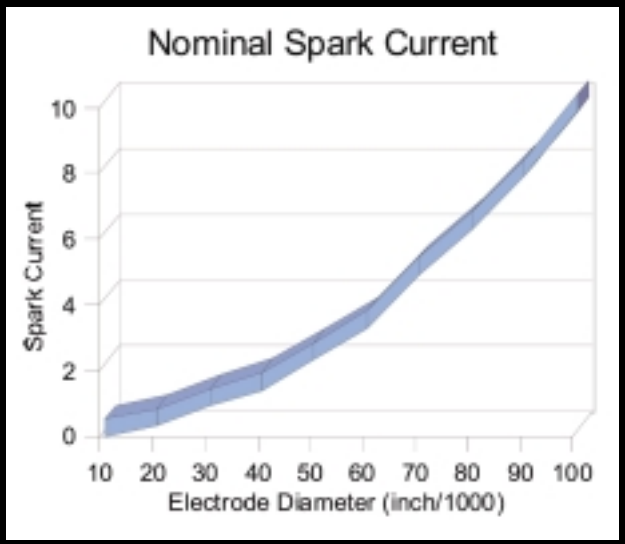
RPM	StockWires	HotWires	IncreaseHP
4500	305.7	308.3	2.6
5000	337.9	342.4	4.5
5500	351.4	359.2	7.8
5750	350.5	358.6	8.1

A Better Spark Plug

Spark plugs are the subject of much controversy. In comparison to internal combustion engines and their management systems, spark plug design has hardly been improved. Malfunctions still occur, but they are not as noticeable anymore mainly because of improved ambient conditions. At least one of the three most important spark plug properties has to be sacrificed in order to increase or emphasize one of these characteristics: efficiency, durability and heatrange.

For high performance or racing applications, an efficient spark plug is needed. Such a spark plug operates optimally only within a narrow heatrange without any consideration for durability. This is not a good spark plug for everyday street use, as a wide heatrange is essential to assure good drive- ability under all temperature conditions. Heatrange latitude of standard low-cost spark plugs for passenger cars has improved, but with major trade-offs. They are designed to offer a wide heatrange only, without any consideration for efficiency. The ignition system has to compensate for low spark plug efficiency and wide spark plug gap caused by wear. Original equipment spark plugs offer a wide heatrange and high durability to increase spark plug change intervals. These are the least efficient spark plugs. In order to reduce wear, erosion resistant materials and suppressor resistors are used which considerably sacrifices spark plug efficiency. The correct relationship between efficiency, durability and heatrange is important and has to be considered over the entire life of the spark plug. A functional combination of these properties is possible and is only a matter of technology and materials used.

When reading spark plug advertisements one can get the impression that small diameter center electrodes, uniquely shaped electrodes or built-in resistors are best. Think again!
A **Resistor** is exactly what the word implies. When the spark crosses the point of resistance, much of the spark energy is lost. A resistor is like an electronic obstacle and could be the cause for a weak spark. Due to manufacturing tolerances and lack of quality control, even non-resistor spark plugs often have a resistance of 10, 100 or even 1000 ohm. Always check spark plugs for resistance before use. Using spark plugs that have resistance due to manufacturing tolerances, internal damage or by design will weaken the spark, which could result in lost horsepower and poor fuel efficiency.



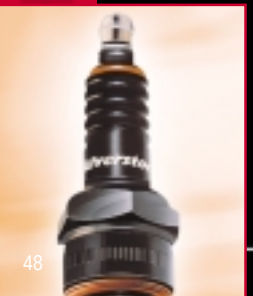
What about electrode shape? Spark plug manufacturers will tell you that a small diameter center electrode makes it easier for the spark to jump the electrode gap. This is true, but what they are not saying is that such a spark is also weaker, since it takes a lower voltage to jump the gap. A spark jumps the electrode gap when the voltage at the electrodes reaches the ionization point. Since the ionization point (voltage needed to jump the gap) is lower when a small diameter center electrode is utilized, spark voltage is also lower. Exactly what a performance-oriented consumer doesn't want. Also, a spark that tries to squeeze itself through a small diameter center electrode is slowed down and stretched out and, therefore, weakened even more. And finally, the electrical energy carrying ability is reduced when the electrode diameter is smaller. Small diameter or uniquely shaped electrodes could be beneficial if the ignition system is weak, but modern ignition systems are all powerful enough to supply the voltage needed to create a spark across the electrode gap of a conventional electrode design, even in high compression engines.

Silverstone™ was especially designed for the increased demands of modern high performance engines and is the only spark plug that optimally incorporates all desirable properties. The most important decision when building spark plugs is what materials to use. Not the electrode shape. The more than 80-year-old original design is still the most successful and widely used. Silver is the best electrical and thermal conductor of any metal and, therefore, the best material for the center electrode. In managing the ever changing combustion chamber temperatures caused by different engine and load conditions, silver is unsurpassed. To prevent plug fouling, optimum operating temperature is reached shortly after start-up; yet under full throttle when things really start to get hot, heat is dissipated rapidly. Silver provides the widest heatrange latitude. As the best electrical conductor, silver assures that the spark encounters the least resistance and no spark energy is lost. Unlike conventional electrode materials, silver delivers even the most powerful spark without any energy loss and therefore guarantees combustion initiation. The solid silver, large diameter center electrode in **Silverstone™** increases spark carrying ability and with it spark power up to 137%. Silver is extremely resistant to erosion, guaranteeing a virtually unchanged electrode gap for the life of the spark plug. This greatly extends change intervals.

Silverstone™ non-resistor spark plugs are guaranteed to be without internal resistance, making them first choice for the performance-oriented consumer. **Silverstone™** is the most efficient, durable and thermally adaptable spark plug available. Unlike other high performance spark plugs, **Silverstone™** is technologically unrestricted to any one application. Silver spark plugs outperform all other spark plugs and deliver the most powerful spark.

Properties of Materials

Material	Thermal Conductivity W/(m·K)	Electrical Conductivity MS/m
Silver	**407**	**66**
Copper	384	57
Gold	310	45
Iridium	147	18
Platinum	70	10
Nickel	59	10

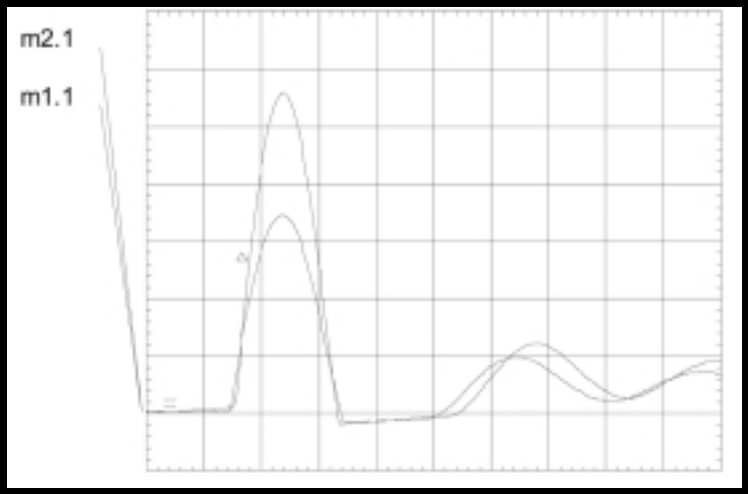


Increasing the Performance of an Inductive Ignition System

Trying to upgrade an ignition system can be confusing and expensive. Every coil and ignition system manufacturer claims that their products are the best and will give the biggest performance increase. Nology is no exception. But there is one important difference...Nology's **PowerCore**™ ignition coil amplifier really delivers and because no additional electronic control unit or high performance ignition coil is necessary, it is the most economical way to step up the power of any electronic or points inductive ignition system. The **PowerCore**™ ignition coil amplifier is so effective, simply connecting **PowerCore**™ to the primary side of the ignition coil increases ignition coil energy output and available spark voltage by up to 50% without adversely effecting the coil's rpm limit.

Most performance and racing ignition coils increase only the theoretically available spark voltage or spark energy and sometimes only the coil's rpm limit, never all three. However, increasing a coil's theoretically available maximum spark voltage can actually hurt performance. A coil designed to generate a high spark voltage is generally very "slow", consequently, a high voltage ignition coil is generally not a high rpm coil. To generate a high secondary voltage, coil saturation time has to be increased, but since a longer saturation time is not available, considering the rpm modern engines rev and the fact that when not fully saturated a coil operates outside the range where most efficient, available spark voltage can actually be lower. Racing coils are designed to work with the short saturation time available at high engine rpm. That's why most high rpm racing coils feature a lower theoretically available spark voltage. This tradeoff is accepted because it is more important that a competition coil is capable of generating a spark at high engine speeds, even if such a spark is weak, than a more powerful spark that could only be generated up to a much lower rpm range.

In contrast, Nology's **PowerCore**™ ignition coil amplifier always increases available spark voltage, spark energy and the rpm limit of the ignition coil. This never before available technology is truly revolutionary. By perfectly matching the inductance, oscillation frequency, resistance and magnetic field density of the **PowerCore**™ to the ignition coil, the efficiency of the ignition coil is increased tremendously. Coil rise and saturation time is much shorter. This raises the coil's rpm limit substantially. Even though the saturation time is shorter, the theoretically available maximum spark voltage is much higher as a result of the coil's much increased primary voltage. The higher primary energy supplied by the **PowerCore**™ coil amplifier also increases the secondary energy (spark energy) considerably. This hotter, more powerful spark ignites every fuel/air mixture much quicker, more reliably and more efficiently. Therefore, increasing horsepower and torque whereas fuel consumption and emissions are decreased. **PowerCore**™ is absolutely essential for high compression and/or high revving engines and all lean-burn applications.



"m1.1" shows voltage of a stock ignition and "m2.1" shows the same ignition system with the PowerCore connected. Peak voltage has increased 167 volts to 268 volts (60%). A similar increase can be measured for primary and secondary current!

Choosing a High Performance Ignition Coil

Which coil would you rather have? One that generates the highest spark voltage, or one that generates the highest spark energy? If you said the highest spark energy, you are right. Here is why! How much voltage a coil can generate is no indication as to how high the spark voltage really is. The spark voltage can only go as high as is needed to jump the spark plug electrode gap, never higher. That means if the spark plug gap is wider or the compression higher, more voltage is required to jump the electrode gap. Close the electrode gap and the voltage will be lower. Leave the electrode gap the same but change the coil to a high voltage coil, and the spark voltage will be exactly the same. Most engines require from 8 K volts (steady speed highway cruising) to 25 K volts (hard acceleration). Rarely is there a requirement for more than 25 K volts. So why buy a coil that can generate 60 K volts? It is the energy that is important, not the voltage. Higher spark energy assures faster combustion and increased probability for combustion initiation. Energy, not voltage, ignites the fuel. There is another negative aspect to high voltage coils. In order to be able to generate a theoretical high spark voltage, the coils end up having a long saturation time, detrimental for high rpm applications.

The design of Nology's line of **ProFire™** ignition coils was based on that general principal. **ProFire™** coils deliver the highest possible spark energy and offer the fastest saturation time for high rpm engines. This is achieved by utilization of the most efficient turning ratio and laminated E-core material, and by choosing just the right amount of inductance. By using this high efficient laminated material for the E-core design, high magnetic field strength and energy can be generated while overall coil temperature stays low. This high energy gets transferred to the secondary side where the optimum turning ratio between the primary and secondary side of the coil guarantees maximum spark energy.

If you are looking for a high performance ignition coil that has a short rise time for high rpm applications and generates a spark that carries maximum energy, take a look at Nology's line of **ProFire™** ignition coils. Unlike most ignition coils, **ProFire™** coils are designed for specific applications. Two coils are available for points ignitions and two for electronic ignitions. There is one coil for medium-powered CDIs and then there is the M80 for high output racing CDIs. The M80 is considered by many to be the most powerful coil available.

Magazine Editorials: What They Say

Turbo: "The 2.3 liter four cylinder pushes out 190 horses to the wheels with only minor modifications; upgraded air flow meter, Nology HotWires, a DTM lightened flywheel and DTM exhaust system. Factory horsepower is rated at 192 horses at the flywheel."

Corvette Fever: "The Nology ignition whipped up the big drums on the Dynojet to the tune of 11 more horsepower."

Alfa Owners, Project 164: "Upon starting the car with the newly installed Nology HotWires, there was a noticeable difference, even in just the cold idle performance - it seemed smoother and less laborious. Under partthrottle driving, the motor felt more willing to rev and in need of less throttle for the same amount of acceleration. "

Drag Racing: "For years I have been testing the NOLOGY Spark Plug Cables, the only cable that radically reprocessed the coil's output to the plug."

Drag Racing Monthly: "A moderately injected nitrous 350 delivered an extra 18 hp and a 500-inch ProStock style motor made between 8-40 hp more depending on where it was in the rpm band".

Muscle Mustang & Fast Fords: "After all the testing was completed we saw an average of six more horsepower in the usable rpm range."

Turbo: "To our surprise, 20-70 mph times were reduced by an average of three-tenths."

Popular Hot Rodding: "Firing the plugs through Nology HotWires, the spark intensity was dramatically increased."

Trucking: "These were previously back-to-back tested against three of the top brands of conventional competition plug cables and showed 7, 10 and 13 horsepower increase on what were nominally 175, 300 and 350 horsepower engines."

Grassroots Motorsports: "These products all worked well on our stock Honda Civic test vehicle. On 30-60 mph acceleration tests, the Nology equipped car showed an average of .28 seconds improvement over the stock setup."

Super Chevy: "The best torque increase amounted to 8 ft lbs, while peak power went up by 7.5 horsepower. The Nology HotWires appear to have the ability to step up a stock ignition to that of a race system..and a race system beyond that."

European Car: "Better low-end pull, better throttle response, better driveability and improved mileage all from a set of wires, plugs and ignition coil amplifier."

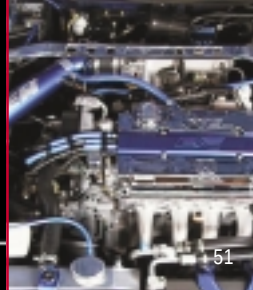
Hot Rod Bikes: "With peak power the best yet at 52.3 hp. More importantly, average power is a whopping 47.1 horsepower, compared to stock at 40.9 horsepower."

Dirt Bike: "Nology HotWires are one of the least expensive part of any kind that make a performance difference you can feel."

Biker: "It starts pulling right off idle and continues to over 100 mph. That's saying a lot, considering the big load I pack around. The first chance I get I'm gonna put the Crane Single Fire Hi 4 ignition system on board along with a set of Nology HotWires."

Thunder Alley: "Many riders I talked to are skeptical when you tell them they can get horsepower increases from something as mundane as plug wires. But the Nology HotWires do exactly that."

American Iron Magazine: "The results were amazing. Simply by replacing the spark plug wires our maximum horsepower climbed 11% from 47.0 to 52.3, and the torque jumped 8% from 58.8 ft-lb to 63.6."



Sport Compact Car: "The greatest increase in power was measured at the torque peak of 4600 rpm a difference of three hp was recorded. At 3200 rpm, a five lb-ft difference in torque was noted".

Fast Car: "Even when tested with a high-output multi-spark ignition the Nology HotWires still added measurably to the test engines output. In this test (small block Chevy) torque improved 8 lb-ft, and peak power rose by 7.5 bhp".

High Performance Mopar: "The Challenger launches pretty smoothly, only lifting the wheels 2-3 inches"

Hot Boat: "You can't light a fire without a spark".

All Chevy: "As for the wires, Nology's HotWires line works like eight separate amplifiers".

Motoring: "Power and torque outputs received an even bigger boost in the all critical midrange. This would translate into greater driveability, fuel economy and better overall acceleration".

Hot Rod: "Full-throttle testing extracted an extra 7.3 horsepower and 7.8 ft-lbs of torque from the 320 hp engine".

The Truth About Weak Ignitions: Also known as, "Do I really need to spend $145 on spark plug wires?" "we replaced the stock plugs and wires with Nology HotWires and Beru Silverstone plugs. Sure enough, that combination produced the results that we had been expecting..."

Testimonials

Just thought I would drop you a line to tell you we Won the AHDRA TopFuel national championship with your products Thanks — Steve Moore

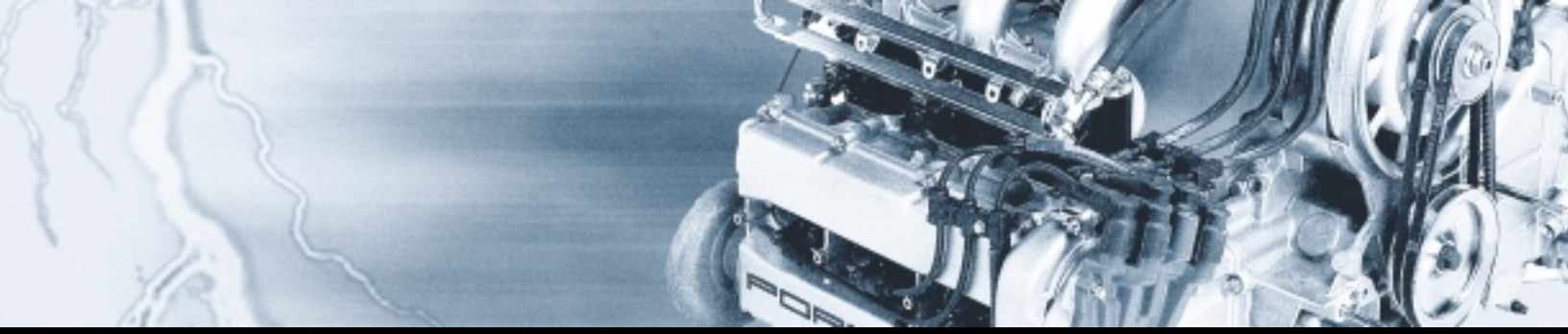
I currently carry your HotWires with my business and I recently became extremely interested in trying them out on my 2000 Honda Civic. I currently have an air/fuel ratio gauge installed on my car and it seems to work very well. Well, I installed your wires and then tested them out. It seemed to me that the seat of the pants feel was greatly increased, it seemed as though my car required less effort to do the same task, which initially indicated a performance boost, then I began to monitor my air/fuel gauge and it indicated that at full throttle, the ratio was more into the stochiometric range than it has ever been at full throttle. Usually the LED lights on the gauge would be fully into the rich side indicating an amount of usable gas still remained after combustion and now indicates that after the installation of your wires, I am getting a more complete burn of the usable gas and that tells me that the emissions should be lower now and the top end should be a little easier to win over.

Just wanted to drop a line to you guys to tell you what a great product you have produced and how proud I am to sell such a quality product with my business.

Thanks a million!! – Scott Marshall, President/Sales SqueezePerformance.com, San Antonio, Texas

In light of the number of inquiries, I'll post this here rather than individually... Apparently Nology was awaiting feedback from me on the first set of 164 wires before making the wires available to the masses. As long as they've waited this long, I suggested they wait a few days longer and I'll give them some specific suggestions on reducing the length of some of the wires. Otherwise, the wires will be available for the V6 164 with a part# 011 026 011.

Incidentally, I can now verify that these wires can reduce emissions output. Due to an exhaust leak ahead of the cat', I was putting put hydrocarbon emissions of 350PPM with the stock wires; 173PPM immediately after swapping in (only) the HotWires this is still too high, but it did allow me to pass inspection until I get the exhaust leak fixed. – Brad Anesi



Definitely the most technologically advanced components in the industry!! I am thoroughly impressed with the appearance and function of your Hot Wires and ProFire Coil. I own a nitrous injected '93 5.0L Mustang that I drag race in spare time. Nology gets the job done! – Ryan Skaggs Meineke, Bartonsville, IL

I'm impressed with the approach but by adding a cap into the spark plug wire does this not create a delay in the spark as the charge builds up causing a delay in the timing. As far as the spark plugs go, please send the price for six for a 4.0 liter JEEP Cherokee 1988. – Mark Franklin

I bought a set of Nology wires about 2 months ago. The wires are fantastic and it feels as though I have MORE horsepower than some of my buddies who have installed aftermarket ignition systems. – Nology, still the best

I just read your ad in the December issue of Excellence. (with Excellence, you scour each issue three times: first time to look at the pictures, second time to read the ads, third time to read the articles).

I have been a customer of Engines Builder's Supply ever since they moved to Sparks, Nevada from California; and Jon (EBS owner) and I have become good friends since the move. Thus' it was wariness in an unknown product and trust in a friend that I spent the money for Nology wires, coil and Silverstone plugs only a couple months after installing a new O.E.M. wire set and coil on my '77 911S.

Simply put, I could not believe the difference that Nology wires and coil made in the performance of my engine. I could actually feel the difference before and after! I have approx. 15,000 miles on a major overhaul of my 2.7 liter engine. Aside from the usual wear items replaced, I changed to SC cams, RSR flywheel, RS pressure plate, SSI heat exchangers and Bursh exhaust. Jon supplied flow matched injectors for the FI system.

Following the overhaul I had a roughness that I traced to the ignition system but was unable to completely tune out. I ended up replacing the ignition wires and coil, but the problem still wasn't completely resolved. Then Jon became a distributor for Nology.

The very first time I fired the engine after installing your products I detected a change. I don't know how to explain it or why it occurs, but I can detect a "sharpness" or "snap" or "crack" in the exhaust note that it was not there before installing the Nology products. Due to out altitude in Reno, our normally aspirated engines run out of air long before they run out of cams! The Nology products substantially increases my useable power on the upper end of the rpm range.

Oh, and for me most important! As soon as I installed the Nology products the roughness that had been present since the rebuild was gone. The engine starts quicker in sub freezing temperature, and passes emissions tests without any adjustments from normal driving settings (I run no emission controls on the engine). – Carl McLelland

Recently, I performed an ignition upgrade on my 1979 635Csi. Prior to the Nology tech session, I hadn't given an ignition upgrade any thought. But afterwards, I was sold on the idea. I decided to speak to several people regarding the products that are widely available. Most answers kept coming back to what most have used for years, an MSD system. Some of these are even programmable. The Nology representative had provided us with a fantastic amount of information that, in my opinion, and after weighing all the information that I had, titled the Nology ignition system in my favor. In addition to street use, the Nology system is successfully being used in racing applications where other old stand by systems, were once used. This was a big factor in my decision. Most of the answers I received regarding the MSD type ignition system dealt with the familiarity of the systems, not that it was necessarily any better, "It's just what everybody has used for so long," was what it seemed to boil down to. Everybody used to use bias ply tires once upon a time as well. Change can be good! Once in awhile we must embrace it.

Testimonials...

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So off to Nology I went. I purchased the wires, coil, and Silverstone spark plugs. Consensus opinion from whom I spoke to, said that for best results, I should definitely look at the upgrade as a system. I agreed. For my application, we had to custom cut the wires in their shop, no problem. They were nice enough to do it the same day. The result was an absolute increase in performance. I can feel the increase all through the RPM range. The car pulls much smoother, quicker, and to a higher RPM level than before. I figured having an older style ignition system updated to a performance system that I'd feel some difference, well, I felt a lot difference! They claim a 5-7% increase for application, about 10-15 stallions in my case, It sure feels that way. Later, I plan to re dyno the car to confirm my results. In addition, the exhaust note has a growl as well, as fuel is more thoroughly burned. As expected the engine does run cooler and mpg has improved. I drove to the S.F. Bay Area and back and used approximately 1/8 less gasoline than usual, that' about a 2 mpg improvement. I expect the emissions have improved as well.

I would suggest that anyone who is looking from additional performance, especially on the earlier sedans, coupes, and any '02, that you consider an upgrade to your current old style ignition system. Based on my experience, I would recommend the Nology system. See you in the rear view mirror. – Mark Robbins

Definitely the most technologically advanced components in the industry!! I am thoroughly impressed with the appearance and function. "Your wires are undoubtably the best wires that I have seen to date. You guys have definitely come up with a real winner here. I can honestly say that this is a revolutionary step in ignition technology. Anyway, keep those brain cells working on even better stuff (if possible). Thank you for your time. P.S. If you have any catalogs lying around, we would appreciate a copy or two. Thanks again." — Casey Fayette, North Dakota

"Thank you very much for an excellent product. I recently installed your wires on my '87 Saab 900 SPG with 175,00 miles on it and I gained 50 to 90 mpg per tank. My question is regarding these wires for motorcycles. Is there the same performance improvement on a bike which I saw on my car. and what is the price for everything which is recommenced. I have a '96 Harley-Davidson FLHTCI (the fuel injected model). I was also wondering if there is a price break which can be given if several units are purchased. I will soon be a member of the Antioc Motor Corps which contains 17 motorcycles. I think that if there is an equal performance increase on my bike and car that I would probably have several people interested. Thank you very much for your help." Gary Moore, Ohio

"You're website info is making me reconsider everything that I have "learned" about plugs & wires! I need NOLOGY!" Nixy J. Morales.

NOLOGY® PERFORMANCE PRODUCTS

WARRANTY

All parts sold or manufactured by Nology are warranted to be free from defects in material and workmanship under normal use and service. The warranty period, and extent of same, is controlled by the documents furnished with each product, and begins on the date of shipment. Due to the extreme demand on racing and performance products, they are sold without any warranty. A Nology authorized reseller shall extend this warranty, on new and unused products, to end user customers only, but have no authority to extend a greater or different warranty on behalf of Nology.

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LIMITED LIFETIME WARRANTY
HotWires

Nology warrants all HotWires, ProFire and PowerCore products to the original purchaser against material or factory workmanship defects when used on private vehicles under normal operating conditions, for as long as the original purchaser owns the vehicle on which the Product was originally installed. The warranty does not apply to alterations or misuse which result in failure and does not cover commercial, racing or industrial applications. This warranty does not in any way extend to consequential damages due to a defective part or material, accidents, driver negligence, incorrect installation and/or application. Nology assumes no responsibility for diagnosis, removal and/or installation labor, loss of vehicle use, loss of time, inconvenience or any other consequential expenses. If warranty is required, return the Product with the original invoice to the Nology dealer from which it was purchased or to Nology for verification under this warranty. A completed warranty card must be on file with Nology. All returns must be authorized in advance and accompanied by a return authorization number. Freight must be prepaid by customer. If product is found to be defective it will be repaired free of charge or exchanged, at Nology's sole discretion. Repairs or exchanges will not be issued if merchandise has been damaged or abused. The warranties herein are in lieu of any other expressed or implied warranties, including any implied warranty of merchantability or fitness, and any other obligation on the part of Nology, or selling dealers. This warranty gives you specific rights and you may also have other rights which vary from state to state.

This Limited Lifetime Warranty is in accordance with the Magnuson-Moss Warranty Act of 1975.

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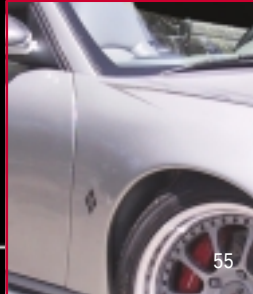

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Nology Engineering, Inc.
1945 S. Rancho Santa Fe Rd., San Marcos, CA 92069
Tel. (760) 591-0888 • Fax.(760) 591-0880
http://www.nology.com