

# Champion Racing Spark Plugs

## Electrode Design Details



J-Gap Non-Projected Tip



J-Gap Projected Tip



Fine Wire J-Gap Non-Projected Tip



**J-Gap Non-Projected Tip** This gap style positions the spark approximately 1/16 inch into the combustion chamber. Very cold heat ranges such as C53CX spark plugs have modified (shortened) ground electrodes. This helps expose the spark to the mixture and protects against pre-ignition from an overheated ground electrode.

**J-Gap Projected Tip** This gap style positions the spark an additional 1/8 inch into the chamber and, providing there is sufficient clearance to valves and piston, provides the ultimate in performance. Initiating the flame front closer to the piston top at a given spark has the same effect as advancing the timing. Therefore, maximum timing may be reduced, which helps to reduce detonation and octane requirement and still provides good part throttle response. For normally aspirated engines only; not recommended for turbocharged, supercharged, nitrous oxide or nitro burners.

**Fine Wire J-Gap Non-Projected Tip** Spark plugs with small-diameter center electrodes were originally designed to improve starting and anti-fouling characteristics in small two-stroke engines such as snowmobiles and dirt bikes. The small (fine wire) center electrode requires less voltage to fire the gap. This same characteristic can "band-aid" poor performance at very high rpm, or at part throttle, when mixtures are either too rich or too lean. This happens frequently as racing carburetor calibration is extremely difficult. As programmable fuel injection systems and electronic ignition systems become more available, the use of this configuration will diminish. Standard gap or projected gap types are all that is necessary when fuel/air mixtures and ignition output and timing are correct.

When ordering plugs, add "CH" to the Champion Part No. (for example: CH N6YC)

## Champion Spark Plug price list and replacement part list (price each)

BL57.....use V55C	C59C.....\$4.29	L82C.....\$2.49	N84 or N84G.....use C57
BL60.....use V59C	C61.....\$4.99	N2C.....\$2.49	N86 or N86G.....use C59
C53.....use C53CX	C61YC.....\$4.29	N3C.....\$2.49	N87 or N87G.....use C61
C53C.....use C53CX	C63C.....use C63CX	N4YC.....use RN4YC	N539C.....use C53CX
C53CX.....\$4.99	C63CX.....\$4.99	N6YC.....\$2.59	N541C.....use C57CX
C53VC.....\$4.99	C63YC.....\$4.29	N7YC.....\$2.39	N542C.....use C59CX
C55.....\$4.99	FN507Y.....use C61YC	N57.....use C57CX	RC9YC.....\$2.99
C57.....\$4.99	FN508Y.....use C63YC	N60.....use C59CX	RC12YC.....\$2.49
C57C.....use C57CX	G54V.....\$7.99	N60Y.....use C57YC	RN4YC.....\$2.79
C57CX.....\$4.99	G57C.....\$4.69	N63Y.....use C59YC	RN7YC.....\$2.59
C57YC.....\$4.29	G58.....use G57C	N80.....use C53CX	RV15YC4.....\$3.49
C59.....\$4.99	G59C.....\$4.99	N80G.....use C53CX	V4C.....use V59C
C59C.....use C59CX	G61.....use G59C	N82.....use C55	V55C.....\$3.59
C59CX.....\$4.89	L78C.....\$2.49	N82G.....use C55	V59C.....\$4.29

## Champion Racing Spark Plugs — Heat Range Chart

Plug Series	G Series 10 x 1.0mm Thread 0.750" Reach 5/8" Hex		L Series 14 x 1.25mm Thread 0.472" Reach 13/16" Hex		V Series 14mm Thread 0.460" Reach Conical Seat 5/8" Hex		C Series 14 x 1.25mm Thread 0.750" Reach 5/8" Hex			N Series 14 x 1.25mm Thread 0.750" Reach 13/16" Hex	
	Tip Style	J-Gap Non-projected	Surface Gap	J-Gap Non-projected	J-Gap Non-projected	J-Gap Projected	Fine Wire* J-Gap Non-projected	Cut Back Ground Non-projected	Surface Gap	J-Gap Projected	J-Gap Non-projected
Hot ↑				L82C	RV15YC4	RC12YC				(R)N7YC	
		G59C		L78C		RC9YC				N6YC	
↓ Cold		G57C				C63YC		C63CX		RN4YC	N3C
					V59C	C61YC	C61				N2C
					C59YC	C59YC	C59	C59CX			
					C57YC	C57YC	C57	C57CX			
			G54V		V55C		C55				
								C53CX	C53VC		

\* Fine wire designs may run slightly hotter than standard center electrodes.

## Miscellaneous Ignition Components

### High-Performance Ignition Coils (general use)

These high-output, 12 volt coils are perfect for most 4 and 6 cylinder applications. The **Bosch Blue Coil** has become virtually standard on FF1600 engines because of its reliability. It offers excellent output up to about 7500 RPM on a 4 cylinder engine or with MSD type ignition systems. The **Lucas Sports Coil** offers slightly better high RPM performance. Neither of these coils require a series ignition resistor. Many hard-to-diagnose ignition problems are eventually traced back to a failed coil, so it's a good idea to carry a spare.



Bosch "Blue" Coil (shown at right) .....Part No. 1300 ..... \$59.99  
Lucas Super Energy Sports Coil .....Part No. 1305 ..... \$49.99

### Billet Aluminum Clamp-On Coil Mount



Don't have a flat panel in the engine bay? Mount your ignition coil to a frame or roll cage tube with this sturdy anodized aluminum clamp-on mount. Accepts any ignition coil we sell, as well as most round ignition coils from 2 to 2 1/8 inch diameter or square coils from 2 1/8 to 2 1/4 inch corner-to-corner. Coil is positioned 90 degrees to the frame tube.

Clamp-On Coil Mount for 1.75" tubing .....Part No. 1318-002 ..... \$33.99

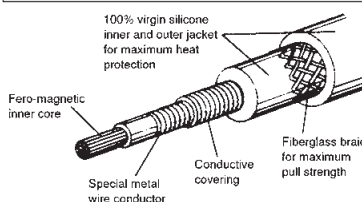
### Pertronix 600 Digital Rev Limiter



The **Pertronix Flame-Thrower Digital Rev Limiter** is designed for use with any 4, 6, or 8 cylinder engine using points, OEM electronic (GM HEI, Ford, Chrysler) or aftermarket inductive type ignition systems including the Ignitor and Ignitor II points replacement systems. (Not compatible with CD ignition systems). Rotary switches allow setting of the RPM limit without chips or jumper wires. A combination of random and sequential spark stealing reduces plug fouling and detonation from unburned fuel.

Pertronix 600 Digital Rev Limiter .....Part No. 1346 ..... \$179.99

### Universal Fit Spark Plug Wire Sets with Spiro-Pro Wire



Spiro-Pro 8mm wire provides up to 10 times the conductivity of standard resistor wire without RFI (radio frequency interference). Two layers of 100% silicone insulation protect up to 600°F (315°C). This set includes the coil wire. One end of each wire must be cut and terminated to fit the application. Standard wire color is blue.

Universal 4 cyl. Spiro-Pro Set with straight plug boots .....Part No. 1310-4-00 ..... \$42.99  
Universal 6 cyl. Spiro-Pro Set with straight plug boots .....Part No. 1310-6-00 ..... \$59.99  
Universal 8 cyl. Spiro-Pro Set with straight plug boots .....Part No. 1310-8-00 ..... \$73.99

### Spark Plug Wire Separators and Boot Protectors

Use our clamp-on **Spark Plug Wire Separators** to prevent inductive cross firing. Blue plastic matches the Spiro-Pro plug wire sets we carry. Fits any 7mm or 8mm plug wires.

Clamp-Style Wire Separators, Blue .....Part No. 1335-001 ..... \$13.49

Woven **Spark Plug Boot Protectors** fit most boots (even 90°) to insulate up to 1200°F. 1200°F Protective Sleeve, sold individually .....Part No. 1311 ..... \$6.99

### MicroDynamics "Softcut" Rev Limiter

The **MicroDynamics DRL 3 Digital Rev Limiter** features "Softcut" technology to eliminate backfiring and reduce drive train stresses. Full Throttle Gear Change circuitry allows shifting without lifting the throttle. This rev limiter can be easily calibrated at the track by holding the engine at half the required RPM — the limiter stores twice that value as the selected limit. The DRL 3 is compatible with points, electronic ignition, and computerized engine management systems. It is NOT compatible with capacitive discharge (CD) ignitions.



MicroDynamics DRL 3 Digital Rev Limiter .....Part No. 1342 ..... \$229.99