

# NGK IRIDIUM IX® FOR **V-TWIN ENGINES**

Used at the tip of the center electrode of the spark plug, Iridium is a denser metal alloy, 6x to that of platinum; this provides increased service life, improved ignitability and throttle response when compared to a factory nickel plug. Iridium is perfect for increased dependability on long rides.

#### High-grade alumina silicate ceramic

Creates a stronger insulator to reduce dielectric punch-through (caused by the spark exiting through side of ceramic)

#### **Cold-rolled threads**

Prevents cross-threading and damage to cylinder heads

#### 98% pure copper core

Increased heat dissipation for reliable starts, prevents spark plug overheating (see Illustration A)

### **Trivalent** metal plating

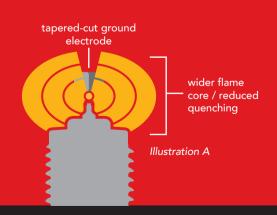
#### **Tapered-cut** ground electrode

reduced quenching



#### HIGHER IGNITABILITY

The quenching effect is where the cooler center and ground electrodes drain the energy of the flame core by way of heat transfer. If quenching is severe, the flame core can be extinguished, causing ignition to fail. NGK Iridium IX® spark plugs are designed to reduce the quenching effect resulting in better ignition performance.







Harley-Davidson Part #	Screamin' Eagle Part #	Screamin' Eagle Stock #	NGK Part #	NGK Stock #
6R12	EX12S, 31600106, 32192-10	32320-91	DCPR7EIX	6046
10R12	EX12P, 31600105, 32186-10	32321-91	DCPR8EIX	6546
5R6A, 5A6A	EVS13P	32327-91	BPR6EIX-11	3903
5R6A, 5A6A	EVS13S, 32189-10	32326-91	BPR5EIX-11	2115
4R5	XL10S	32322-91	BPR6HIX	4085
6R10, 31600012	31600085		CR9EIX	3521
	SH13S	32323-91	BPR5EIX-11	2115

**Note:** This cross chart is for reference only. Please check specific vehicle application and owner's manual. Due to differences in design and material, plugs in cross reference section are not exactly alike.

# **TESTING & MANUFACTURING**

All NGK spark plugs must pass extensive testing procedures and quality checks throughout the manufacturing process to ensure fit and performance.

- Mechanical vibration testing
- Thermal shock testing to -40°F to prevent water splash damage
- Tightest resistor manufacturing process in the industry
- ISO 11565 certified manufacturing facility
- Gap measured with laser precision throughout production process
- Accurately positioned center electrodes with 360° welding process





# POWER SPORTS

SPARK PLUGS / RESISTOR CAPS
RACING CABLES / SPLICER



# **SPARK PLUGS**



NGK is the largest OE supplier and manufacturer of spark plugs. As the leading supplier of OE spark plugs for power sports applications, NGK is trusted by OEMs to keep equipment running at superior performance levels.

## The **NGK** Difference

#### High-grade alumina silicate ceramic

Creates a stronger insulator to reduce dielectric punch-through (caused by spark exiting through side of ceramic)

#### **Cold-rolled threads**

Prevents cross-threading and damage to cylinder heads

#### Trivalent plating

No anti-seize required

#### 98% pure copper core

Increased heat dissipation for reliable starts, prevents spark plug overheating (see illustration A on following page)

#### Special ground electrode designs

Higher ignitability, reduced quenching (see illustration B on following page)

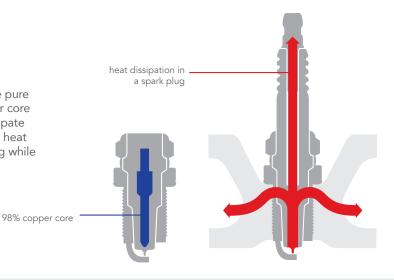


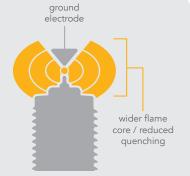


# INCREASED HEAT DISSIPATION

Illustration A

The combination of NGK's high-grade pure alumina ceramic and 98% pure copper core enables the spark plug to quickly dissipate large amounts of heat. This ultra-wide heat range prevents spark plug overheating while providing reliable starts.





#### HIGHER IGNITABILITY

Illustration B

**The quenching effect** is where the cooler center and ground electrodes drain the energy of the flame core by way of heat transfer. If quenching is severe, the flame core can be extinguished, causing ignition to fail. NGK spark plugs are designed to reduce the quenching effect resulting in better ignition performance.

#### **TESTING & MANUFACTURING**

All NGK spark plugs must pass extensive testing procedures and quality checks to ensure fit and performance.

- Mechanical vibration testing
- Thermal shock testing to -40°F to prevent water splash damage
- Tightest resistor manufacturing process in the industry
- Manufactured in our ISO 11565 certified manufacturing facility
- Gap measured with laser precision throughout production process
- Precise 360° welding of ground electrodes to ensure accurate positioning\*

#### **SPARK PLUG MAINTENANCE**

Changing spark plugs regularly helps to ensure more ride time and less repair time. Regular plug replacement prevents fouling and provides the optimal engine performance.

#### Reasons to replace spark plugs more often:



optimal performance



quicker starts



less fouling



better fuel efficiency



less down time



# **RESISTOR CAPS**



NGK offers resistor caps for a wide variety of applications. Many different features are offered to meet the specific demands of each application including: multiple angles and lengths, different thread diameters, resistor or non-resistor and terminal nut or stud style.

### The **NGK** Difference



# RACING CABLES



NGK racing cables come in 50cm and 100cm lengths and may be trimmed to fit specific applications. NGK cables are connected on one side with NGK resistor caps in either straight or 90° configurations. The non-terminated end of the cable will also fit NGK resistor caps for the best fit and performance.



### The **NGK** Difference

98% pure copper cables Maximizes electrical conductivity High strength phenolic resin shell High dielectric strength to reduce voltage leakage or punch-through Silicone jacket Withstands temperatures up to 482° F 5k Ohm ceramic resistor Prevents RFI interference

# **SPLICER**



NGK's water resistant J1 splicer is designed to withstand high temperatures, vibration, and voltage leakage. The splicer is designed to simply twist together for an economical approach to integrating wire and coil. This allows replacement of just the wire instead of wire and coil. J1 splicer is designed to fit a 7mm wire.







# INBOARD, OUTBOARD & PWC

NGK is the world's largest OE supplier and manufacturer of spark plugs.

Known for durability and performance, NGK manufactures OE spark plugs for inboard engines, over 90% of outboard engines and almost 100% of personal water crafts. Specifically designed to reduce quenching; NGK spark plugs provide better ignitability and quicker starts. For reliable performance on the water, trust the brand that OEMs ask for by name.

# The NGK Difference

#### High-grade alumina silicate ceramic

Creates a stronger insulator to reduce dielectric punch-through (caused by spark exiting through side of ceramic)

#### **Cold-rolled threads**

Prevents cross-threading and damage to cylinder heads

#### 98% pure copper core

Increased heat dissipation for reliable starts, prevents spark plug overheating (see Illustration A)



#### Marine-specific resistor

Prevents RFI interference with electronics

#### **Trivalent plating**

Resists corrosion (especially in saltwater environments); no anti-seize required

# **TESTING & MANUFACTURING**

All NGK spark plugs must pass extensive testing procedures and quality checks to ensure fit and performance.

- JIH H 8502 salt spray resistance test for trivalent plating
- Mechanical vibration testing
- Thermal shock testing to -40°F to prevent water splash damage
- Tightest resistor manufacturing process in the industry
- Manufactured in our ISO 11565 certified manufacturing facility
- Gap measured with laser precision throughout production process







# **TOP MARINE CROSS REFERENCES**

Champion Part #	Champion Stock #	NGK Part #	NGK Stock #
L6VC	885M	BUZ8H	7447
L76V	827M	BUHW	2622
L77JC4	821M	B7HS-10	2129
L78C	807M	B7HS	5110
L78V	833M	BUHW-2	5626
L78YC	936M	BP7HS	5111
L82C	811M	B8HS	5510
QC10PEP	958	PZFR6H	7696
QC10PEPB	7919	IZFR6N-E	4757
QC12PEP	956M	IZFR6N-E	4757
QC12PEPA	952M	PZFR6H	7696
QC12PEPB	7953	IZFR6N-E	4757
QL16V	876M	BUHXW-1	5526
QL76V	898M	BUZHW	2147
QL77CC	941M	BR8HS	4322
QL77JC4	828M	BZ7HS-10	3579
QL78C	883M	BR9HS-10	4551
QL78V	838M	BUZHW-2	2173

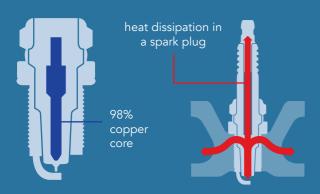
Champion Part #	Champion Stock #	NGK Part #	NGK Stock #
QL78YC	938M	BPZ8H-N-10	4495
QL78YC	938M	BPZ8HS-10	3133
QL82C	931M	BR6HS	3922
QL82YC	932M	BPR7HS	6422
QL86C	933M	BR6HS	3922
QL87YC	934M	BPR6HS	7022
RP10HC	959M	DR6HS	4823
UL77V	831M	BUHXW-1	5526
XC12PEPB	955M	PZFR6F-11	3271
AC-Delco Part #		NGK Part #	NGK Stock #
41-932		PZTR5A-15	7862
41-983		PTR4B-15	5146
41-985		IZTR5B11	1465
MR42LTS		BPR6EFS	3623
MR43LTS		TR5	2238
MR43T		BR6FS	4323
MR44T		YR5	7052

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# **INCREASED HEAT DISSIPATION**

Illustration A

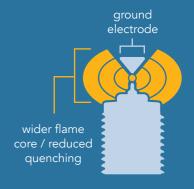
The combination of NGK's high-grade pure alumina ceramic and 98% pure copper core enables the spark plug to quickly dissipate large amounts of heat. This ultra-wide heat range prevents spark plug overheating while providing reliable starts.



#### **HIGHER IGNITABILITY**

Illustration E

The quenching effect is where the cooler center and ground electrodes drain the energy of the flame core by way of heat transfer. If quenching is severe, the flame core can be extinguished, causing ignition to fail. Spark plugs are designed to reduce the quenching effect resulting in better ignition performance.





# NEW APPLICATIONS OUTBOARD & PWC

NGK is the world's largest OE supplier and manufacturer of spark plugs.

MODEL YEAR	ENGINE CLASS/ ENGINE	MODEL	NGK Part #	NGK STOCK #	GAP
OUTBOAR	O - OEM SPA	ARK PLUGS			
HONDA					
	115 HP	BF115D, SERIAL BBHJ-10000001-9999999	ZFR6K-11	94582	.044"
	115 HP	BF115DK1, SERIAL BBHJ-10000001-9999999	ZFR6K-11	94582	.044"
	100 HP	BF100A, SERIAL BBMJ-1000001-9999999	ZFR6K-9E	92566	.036"
MERCURY					
	300 HP	300 PRO XS V8 2B529482 & UP	LKAR7C-9	93961	.036"
	300 HP	300 SEAPRO V8 2B529482 & UP	LKAR7C-9	93961	.036"
	300 HP	300 V8 4-STROKE 2B529482 & UP	LKAR7C-9	93961	.036"
	300 HP	300R V8 1E080500 & UP	LKAR7C-9	93961	.036"
	250 HP	250 PRO XS V8 2B529482 & UP	LKAR7C-9	93961	.036"
	250 HP	250 SEAPRO V8 2B529482 & UP	LKAR7C-9	93961	.036"
	250 HP	250 V8 4-STROKE 2B529482 & UP	LKAR7C-9	93961	.036"
	250 HP	250R V8 1E080500 & UP	LKAR7C-9	93961	.036"
	225 HP	225 PRO XS V8 2B529482 & UP	LKAR7C-9	93961	.036"
	225 HP	225 SEAPRO V8 2B529482 & UP	LKAR7C-9	93961	.036"
	225 HP	225 V6 4-STROKE 2B529482 & UP	LKAR7C-9	93961	.036"
	200 HP	200 PRO XS V8 2B529482 &UP	LKAR7C-9	93961	.036"
	200 HP	200 SEAPRO V6 2B529482 & UP	LKAR7C-9	93961	.036"
	200 HP	200 V6 4-STROKE 2B529482 & UP	LKAR7C-9	93961	.036"
	175 HP	175 PRO XS V6 2B529482 & UP	LKAR7C-9	93961	.036"
	175 HP	175 V6 4-STROKE 2B529482 & UP	LKAR7C-9	93961	.036"
SUZUKI					
	350 HP	DF350A	ILZKR7D8	96412	.032'
TOHATSU					
	150 HP	BFT150A	ZFR6K-11	94582	.044"
	115 HP	BFT115A	ZFR6K-11	94582	.044"
	50 HP	MFS50A	IKR6G8	95064	.032"
	40 HP	MFS40A	IKR6G8	95064	.032"
YAMAHA		<u>'</u>		1	
	90 HP	F90LB	LKR6E-9N	90410	.036"
	90 HP	F90JB	LKR6E-9N	90410	.036"
	90 HP	F90XB	LKR6E-9N	90410	.036"
	75 HP	F75LB	LKR6E-9N	90410	.036"
PWC	70111		2.4.62 6.7	00110	.000
	IER (SEA-DO	00)			
2017-2016	1630	GTX LTD 300 (1630ACE SUPERCHARGED)	KR9C-G	90893	.032"
2018	1630	GTX LTD 300 (1630ACE SUPERCHARGED)	KR9E-G	93226	.032"
2017-2016	1630	RXP-X 300 (1630ACE SUPERCHARGED)	KR9C-G	90893	.032"
2018	1630	RXP-X 300 (1630ACE SUPERCHARGED)	KR9E-G	93226	.032"
2017-2016	1630	RXT-X 300 (1630ACE SUPERCHARGED)	KR9C-G	90893	.032"
2017 2010	1000	TIM A GOO ( TOOGAGE GOT ETTOTIATIOED)	111100-U	00000	.002



# The NGK Difference

#### High-grade alumina silicate ceramic

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#### **Cold-rolled threads**

Prevents cross-threading and damage to cylinder heads

#### 98% pure copper core

Increased heat dissipation for reliable starts, prevents spark plug overheating (see Illustration A)



#### Marine-specific resistor

Prevents RFI interference with electronics

#### **Trivalent plating**

Resists corrosion (especially in saltwater environments); no anti-seize required

## **TOP MARINE CROSS REFERENCES**

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L76V	827M	BUHW	2622
L77JC4	821M	B7HS-10	2129
L78C	807M	B7HS	5110
L78V	833M	BUHW-2	5626
L78YC	936M	BP7HS	5111
L82C	811M	B8HS	5510
QC10PEP	958	PZFR6H	7696
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QC12PEP	956M	IZFR6N-E	4757
QC12PEPA	952M	PZFR6H	7696
QC12PEPB	7953	IZFR6N-E	4757
QL16V	876M	BUHXW-1	5526
QL76V	898M	BUZHW	2147
QL77CC	941M	BR8HS	4322
QL77JC4	828M	BZ7HS-10	3579
QL78C	883M	BR9HS-10	4551
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Champion Part #	Champion Stock #	NGK Part #	NGK Stock #
QL78YC	938M	BPZ8H-N-10	4495
QL78YC	938M	BPZ8HS-10	3133
QL82C	931M	BR6HS	3922
QL82YC	932M	BPR7HS	6422
QL86C	933M	BR6HS	3922
QL87YC	934M	BPR6HS	7022
RP10HC	959M	DR6HS	4823
UL77V	831M	BUHXW-1	5526
XC12PEPB	955M	PZFR6F-11	3271
AC-Delco Part #		NGK Part #	NGK Stock #
41-932		PZTR5A-15	7862
41-983		PTR4B-15	5146
41-985		IZTR5B11	1465
MR42LTS		BPR6EFS	3623
MR43LTS		TR5	2238
MR43T		BR6FS	4323
MR44T		YR5	7052

Note: This cross chart is for reference only. Please check specific vehicle application and owner's manual. Due to differences in design and material, plugs in cross reference section are not exactly alike.





# POWER EQUIPMENT

**SPARK PLUGS / GLOW PLUGS** 



With over 50 years of expertise, NGK Spark Plugs (U.S.A.), Inc.'s family of products are driven by perfection. **Known for OE legacy, NGK Spark Plugs is at the forefront of durability and performance.** 



# **SPARK PLUGS**

NGK's high quality internal resistor keeps engines running efficiently with less wear to the ignition system. Premium NGK components ensure better engine reliability. With proper maintenance, an engine with NGK spark plugs will be more cost-effective long term.

### The **NGK** Difference

#### High-grade alumina silicate ceramic

Creates a stronger insulator to reduce dielectric punch-through (caused by spark exiting through side of ceramic)

#### **Cold-rolled threads**

Prevents cross-threading and damage to cylinder heads

#### 98% pure copper core

Increased heat dissipation for reliable starts, prevents spark plug overheating (see illustration A on following page)

#### Trivalent plating

No anti-seize

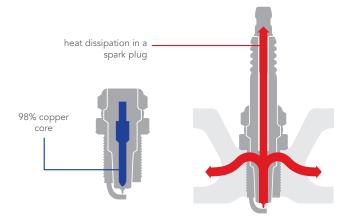




# INCREASED HEAT DISSIPATION

Illustration A

The combination of NGK's high-grade pure alumina ceramic and 98% pure copper core enables the spark plug to quickly dissipate large amounts of heat. This ultra-wide heat range prevents spark plug overheating while providing reliable starts.



#### **TESTING & MANUFACTURING**

All NGK spark plugs must pass extensive testing procedures and quality checks to ensure fit and performance.

- Mechanical vibration testing
- Tightest resistor manufacturing process in the industry
- Manufactured in our ISO 11565 certified manufacturing facility
- Gap measured with laser precision throughout production process



#### **CROSS REFERENCES\* CHAMPION**

Champion Part #	NGK Part #	NGK Stock #	NGK Blister Part #	NGK Blister Stock #
948	DCPR6E	3481	DCPR6E	96530
CJ6	BM7A	6521	BM7A	6746
DJ7Y	BPM6F	5950	BPM6F	6753
DJ8Y	BM6F	6221	BM6F	6720
J19LM	BR2-LM	3841	BR2-LM	6787
QC12YC	BKR5E	7938	BKR5E	6719
RA10HC	DCPR6E	3481	DCPR6E	96530
RA8GHC	DCPR6E	3481	DCPR6E	96530
RC12YC	BKR5E	7938	BKR5E	6719
RCJ6	BPMR7A	4626	BPMR7A	6761
RCJ6Y	BPMR8Y	2218	BPMR8Y	6763
RCJ7Y	BPMR7A	4626	BPMR7A	6761
RCJ8	BMR6A	7421	BMR6A	6749
RCJ8Y	BPMR6Y	5414	BPMR6A	6759
RDJ7J	BM6F	6221	BM6F	6720
RDJ8Y	BPMR6A	6726	BPMR6A	6759
RJ19HX	BR2-LM (Gap to .020")	5798	BR2-LM (Gap to .020")	6787
RJ19LM	BR2-LM	5798	BR2-LM	6787
RJ19LMC	BR2-LM (Gap to .020")	5798	BR2-LM (Gap to .020")	6787

Champion Part #	NGK Part #	NGK Stock #	NGK Blister Part #	NGK Blister Stock #
RJ2YLE	BR2-LM (Gap to .020")	5798	BR2-LM (Gap to .020")	6787
RJ2YXLE	BR2-LM (Gap to .020")	5798	BR2-LM (Gap to .020")	6787
RL82C	BR7HS	4122	BR7HS	1445
RN11YC	BPR5ES	7734	BPR5ES	6773
RN3C	BR8ES	5422	BR8ES (solid)	1463
RY4C	CMR7A	7543	CMR7A	6784
RZ7C	CMR6H	3365	CMR6H	6778
RZ7C	CMR7H	3066	CMR7H	6785
XC12YC	BKR5E	7938	BKR5E	6719
Z9Y	CR5HSB	6535	CR5HSB	6786

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#### **CROSS REFERENCES\*** BOSCH / TORCH

Bosch Part #	NGK Part #	NGK Stock #
USR7AC	CMR5H	7599
WR7AC+	B6HS	7534
WR7BC+	BPR6HS	7022
WS7F	BPMR7A (solid)	6703
WS8E	BM6A (solid)	6021
WSR6F	BPMR7A (solid)	6703

Torch Part #	NGK Part #	NGK Stock #	NGK Blister Part #	NGK Blister Stock #
AC7R	CMR7H	3066	CMR7H	6785
D5RTC	DCPR6E	3481	DCPR6E	96530
DJ7Y	BPM6F	5950	BPM6F	6753
DJ8J	BM6F	6221	BM6F	6720
E6C	BR6HS	3922	BR6HS	1507
E6RC	BR6HS	3922	BR6HS	1507
F5RF	BPR5EY	1233	BPR5ES	6773
F5RTC	BPR5ES (solid)	4006	BPR5ES	6773
F5TC	BP5ES (solid)	2140	BPR5ES	6773
F5TC	BP5ES	7832	BPR5ES	6773

Torch Part #	NGK Part #	NGK Stock #	NGK Blister Part #	NGK Blister Stock #
F6REC4	BPR6ES (solid)	4008	BPR6ES	6775
F6RF	BPR6EY	2489	BPR6ES	6775
F6RTC	BPR6ES (solid)	4008	BPR6ES	6775
F6TC	BP6ES (solid)	4007	BPR6ES	6775
L6RC	BMR6A	7421	BMR6A	6749
L6RTC	BPM6A	7021	BPMR6A	6759
L6RTC	BPMR6A	6726	BPMR6A	6759
L6TC	BPM6A	7021	BPMR6A	6759
L7RTC	BPMR7A	4626	BPMR7A	6761
L7TC	BPM7A	7321	BPMR7A	6761
L8RTC	BPMR8Y	2218	BPMR8Y	6763
L8RTF	BPMR8Y	2218	BPMR8Y	6763
N6C	BM6F	6221	BM6F	6720
N6TC	BPM6F	5950	BPM6F	6753

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# **GLOW PLUGS**

NGK product engineers collaborate closely with original equipment manufacturers to design glow plugs to specifically fit each individual application.

# The **NGK** Difference

Quality metal heating coils Provides after-glow and quicker, heat-up times at cold starts (see Illustration B below) **Inconel alloy metal**Withstands up to 900° F
neat-up temperatures

#### THE "AFTER-GLOW" PRINCIPLE

Illustration B

After-glow helps to keep the combustion chamber at a constant temperature until the engine has reached operating temperature. Without it, there would be a considerable amount of toxic emissions and white and blue smoke from the exhaust. The engine would not run smoothly either, displaying the characteristic of cold-start knocking.

