

# SERIES OF NGK RACING SPARK PLUGS

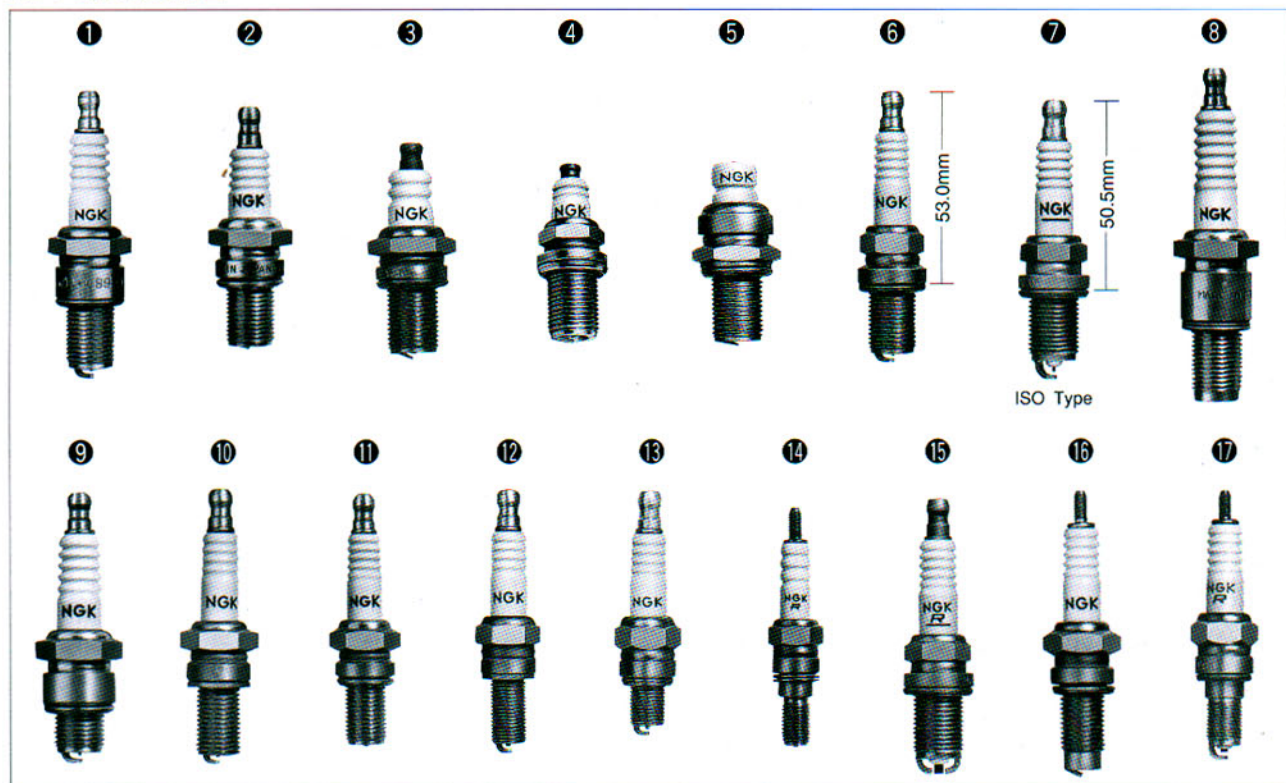
Blue colour indicates resistor plugs.

Thread size (Hexagon size)	Spark plug type	Spark plug number	Heat rating	Firing end appearance	Electrode material	
					Center	Ground
φ 14×19mm (20.8mm)	BP-E	R4304A	7.8,9,10	A ①	Gold Palladium	Nickel Alloy
	B-E	B EGP	8.85,9.95,10,105,11	D ①	Gold Palladium	Platinum
		B EGV	8.85,9.95,10,105,11	B ①	Gold Palladium	Nickel Alloy
		R4118S	7.75,8.85,9.95,10,105,11	B ①	Gold Palladium	Nickel Alloy
		* R4630A	8.85,9.95,10,105,11	C ①	Gold Palladium	Platinum
		R6918B	7.8,9	B ①	Platinum	Nickel Alloy
		R6918C	9	B ①	Platinum	Nickel Alloy
		R6021E	7.75,8.85,9.10,105	B ①	Nickel Alloy	Nickel Alloy
		R6061	7.8,9,10,11	G ①	Nickel Alloy	Nickel Alloy
		R6252E	9.105 Gap0.6	C ①	Nickel Alloy	Nickel Alloy
		R6252K	105 Gap0.8	C ①	Nickel Alloy	Nickel Alloy
		R6254E	9.105 Gap0.6	C ①	Nickel Alloy	Nickel Alloy
		R6254K	105 Gap0.8	C ①	Nickel Alloy	Nickel Alloy
		* R6385 P	7.75,9.10,105,11	C ①	Platinum	Platinum
		R7376	7.8,9,10	C ①	Iridium	Platinum
		Semi surface discharge R5649	9.10,11	E ①	Nickel Alloy	—
		Semi surface discharge R6712	9.10	E ①	Nickel Alloy	—
		Short R5184	9.95,10,105,11	C ②	Gold Palladium	Platinum
		Short R5300A	95,10,105,11	C ⑤	Nickel Alloy	Platinum
		Short R5300N	95,10,105	C ⑤	Platinum	Platinum
		Short R5540F	10,105,11,115	C ③	Nickel Alloy	Platinum
		Short R6179A P	10,105,11	C ②	Platinum	Platinum
φ 14×22mm (20.8mm)		Short R6179C PA	105	C ②	Platinum	Platinum
		R7376B	9.10	C ①	Iridium	Platinum
φ 14×22mm (16.0mm) φ 14×19mm (16.0mm)		Short * R6120A	10,105	C ④	Platinum	Platinum
		Short R7282A	10,105,11	C ④	Iridium	Platinum
		Short * R6120C	105,11 No gasket type	C ④	Platinum	Platinum
		Short * R6120M	10,105 No gasket type	C ④	Platinum	Platinum
		Short R7282	7.8,9,10,105,11	C ④	Iridium	Platinum
		Short R7282C	105,11 No gasket type	C ④	Iridium	Platinum
		Short R7282M	105,11,115	C ④	Iridium	Platinum
		R6888A	8.9,10	F ⑤	Nickel Alloy	Nickel Alloy
		R7112	7.8,9,10,11	A ⑦	Platinum	Nickel Alloy
		R7113	7.8,9,10	A ⑦	Platinum	Nickel Alloy
		R7114	8.9,10	B ⑦	Platinum	Nickel Alloy
		R7115	8.9,10	B ⑦	Platinum	Nickel Alloy
	BK-E (ISO) ※1	R7116	8.9,10	C ⑦	Platinum	Platinum
		R7117	8.9,10,11	C ⑦	Platinum	Platinum
		R7118	8.9,10	D ⑦	Platinum	Platinum
		R7119	7.8,9,10,11	D ⑦	Platinum	Platinum
		R7279	10	D ⑦	Iridium	Platinum
		Semi surface discharge R6601	8.9,10,11	E ⑦	Nickel Alloy	—
		Semi surface discharge R6711	9.10	E ⑦	Nickel Alloy	—
	BCP-E (JIS) BC-E (JIS)	R7232	7.8,9,10,11	A ⑥	Platinum	Nickel Alloy
		R7233	7.8,9,10	A ⑥	Platinum	Nickel Alloy
		R7234	8.9,10	B ⑥	Platinum	Nickel Alloy
		R7235	8.9,10	B ⑥	Platinum	Nickel Alloy
		R7236	8.9,10,11	C ⑥	Platinum	Platinum
		R7237	8.9,10	C ⑥	Platinum	Platinum
		R7238	8.9,10	D ⑥	Platinum	Platinum
		R7239	8.9,10,11	D ⑥	Platinum	Platinum
		Semi surface discharge R5883	9.10,11	E ⑥	Nickel Alloy	—
		Semi surface discharge R6690	9.10,11	E ⑥	Nickel Alloy	—
φ 14×12.7mm (20.8mm)	B-H	R5525	7.8,9,10,11	B ⑨	Gold Palladium	Nickel Alloy
		R5530	8.9,10,11	D ⑨	Gold Palladium	Platinum
φ 14×21.5mm (20.8mm)	Rotary Engine	R6725	9.10,105,11,115	D ⑧	Platinum	Platinum
φ 12×19mm (18.0mm)	D-E	* R216	11,12	C ⑩	Gold Palladium	Nickel Alloy
		* R217	10,11,12	B ⑩	Gold Palladium	Nickel Alloy
φ 12×21mm (18.0mm)	D-Z	R2188	10	C ⑩	Nickel Alloy	Nickel Alloy
φ 12×19mm (16.0mm)	DC-E	Semi surface discharge R2349	9.10,11	E ⑪	Nickel Alloy	—
		R2525	9.10,11	C ⑪	Platinum	Nickel Alloy
φ 10×19mm (16.0mm)	C-E	* R016	8.9,10,11	C ⑫	Nickel Alloy	Nickel Alloy
		* R017	7.8,9,10,11,12	B ⑫	Nickel Alloy	Nickel Alloy
		R0373A	9.10	C ⑫	Iridium	Platinum
		Semi surface discharge R0045G	9.10,11 GAP1.4	E ⑫	Nickel Alloy	—
		Semi surface discharge R0045J	9.10,11,12 GAP1.1	E ⑫	Nickel Alloy	—
		Semi surface discharge R0045Q	10,11 GAP1.1	E ⑫	Nickel Alloy	—
φ 10×19mm Half thread (16.0mm)	C-EH	R0379A	10	C ⑬	Iridium	Platinum
φ 10×12.7mm (16.0mm)	C-H	R0161	9,10,11	B ⑬	Nickel Alloy	Nickel Alloy
φ 8×19.0mm (13.0mm)	E-EH	Semi surface discharge R847	10,11	E ⑭	Nickel Alloy	—

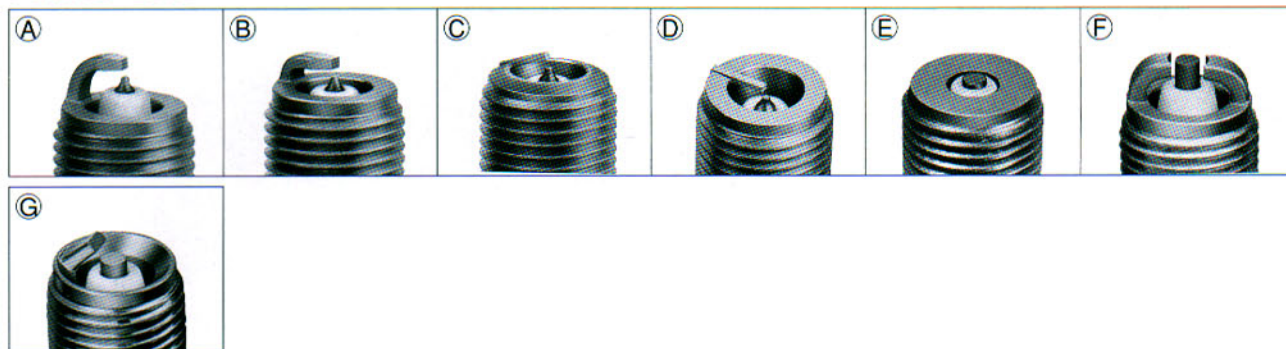
- 1) ISO: The length from gasket to terminal of ISO type spark plugs is 50.5mm which is 2.5mm shorter than BCP-E or BC-E type spark plugs.
- 2) Resistor spark plugs are recommended for cars originally equipped with resistor spark plugs.  
When non-resistor spark plugs are installed in such cars, there is some possibility that the electric devices in the car, such as the audio system or the engine management system, would be affected by noise.
- 3) Marked \* part number will be discontinued when the current stock is over.



## APPEARANCE



## FIRING END



### ⚠ Notice

• Choose appropriate heat range and firing end of racing spark plugs according to engine modification or driving condition.

(Generally, the more a firing position is projected into the combustion chamber, spark plug's ignitability is improved. However, a projected ground electrode tends to be exposed to high-temperature combustion gases and will possibly cause troubles because of over-heating. Therefore, when an engine is modified tougher, non-projected type spark plugs should be installed to keep the firing end's insulator and the ground electrode from exposed to high-temperature combustion gases. Also, colder type spark plugs should be chosen for high-modified engine.)

## ● DISCONTINUED PLUG TYPES

Blue colour indicates resistor plugs.

New part number	Old part number
R7112	R6255, R6255F
R7113	R6326
R7114	R6205
R7115	R6241
R7118	R6206
R7119	R6242
R7232	R5400, R5400F
R7233	R6337
R7234	R5686

New part number	Old part number
R7236	R5830
R7238	R5687
R7282	R6120
R7282A	R6120A
R7282C	R6120C
R7282M	R6120M
R7376	R4630A, R6385-P
R2525	R216, R217
R2349	R2270, R2430
R0373A	R016, R017



# RECOMMENDATION CHART OF NGK RACING SPARK PLUGS



It is essential to use racing spark plugs that fit a specific engine and its conditions of use.



Blue colour indicates resistor plugs.

Manufacturer	Model	Spark plug Number	Racing spark plug IX, VX spark plug
HONDA	Road race	CB1300, X-4, CB1000SF	DPR8EA-9 R2525-10
		CBR1100XX, X11	CR9EHVX-9 R0379A-10, R0373A-10
		VTR1000SP-1	FR9BI-11 R7279-10
		VTR1000F/Fire Storm	DPR9EVX-9 R2525-10
		CBR954RR(Fire Blade)	IMR9A-9H R0379A-10, R0373A-10
		CBR900RR	CR9EH-9 R0379A-10, R0373A-10
		CBR600F4i	IMR9A-9H R0379A-10, R0373A-10
		RVF/RC45	CR9EHVX-9 R0045Q-10
		CBR400RR, CB400SF/R/S	CR8EH-9 R0379A-10, R0373A-10
		NSR250R/SP/SE	BR9ECM BR10ECMVX, R5184-105
		NSR80/50, NS-1	BR8ES BR8EIX
		Z50J	CR6HSA R0161-10, CR8HIX
		NSR500V	R6120M-105 R7282M-105
		RS250R	R6120-105 R7282-105, R7282A-105
		NSR150	B8ES, B9ES BR9EIX
		RS125R	R6385-105P R7376-10, R7282A-105
		NS50R	BR9ES BR9EIX
	Motocross	CRF450	IFR8H11 R7113-8
		XR400R	DPR8Z R2188-10
		CR250R	B8EG BR8EIX, R7376-8
		CR125R	B9EG BR9EIX, R7376-9
	Trial	CR80R/R2	B10EG BR10EIX, R7376-10
		RTL250R	BR6ES BR6EIX
	Enduro	TLM220R	BR8ES BR8EIX
		XR250R('97~)	CR9EH-9 CR9EHIX-9
KAWASAKI	Road race	ZRX1100/II, ZX-9/R, ZX-12R	CR9E R0373A-10
		GPZ900R	DR9EA R2525-10
		NinjaZX-7RR	CR9E R0045J-10
		NinjaZX-6	CR9E R0373A-10
		ZZ-R600/400	CR9E R0373A-10
		ZXR400/R, ZX-6R	CR9EK R0373A-10
	Motocross	KLX300R, KLX250	CR8E CR8EIX
		KX250	B8EVX BR8EIX, R7376-8
		KX125	B9EVX BR9EIX, R7376-9
		KX80/II	R6254K-105 BR10EIX, R7376-10
	Enduro	KDX220R/SR	BR8ES BR8EIX, R7376-8
		TL1000S/R	CR9E CR9EIX, R0373A-10
SUZUKI	Road race	GSX1300R	CR9E CR9EIX, R0373A-10
		GSX-R1000	CR9E R0373A-10, R0045Q-10
		GSX-R750/SP	CR9E R0045Q-10
		GSX-R600, GSX-R400R	CR8EK R0373A-10
		GSX400Impulse/S	CR8E R0373A-10
		RGV250Γ/SP, RGV125Γ	BR9ECM R5184-105
	Motocross	RM250	R6918B-7 ←
		RM125	R6918B-8 ←
		RM80/L	R6918B-9 ←
	Enduro	DR-Z400S	CR8E CR8EIX
		DR250R	CR9E CR9EIX
		RMX250/S	BR9ES BR9EIX
		YZF-R1-R7-R6	CR9E R0373A-10, R0045Q-10
YAMAHA	Road race	YZF1000R	DR8EA R2525-10
		TRX850, TDM850	DPR8EA-9 R2525-10
		YZF750R/SP	CR9E R0045Q-10
		YZF600R	CR9E R0373A-10
		FZR400RR-SP	CR8E R0373A-10
		TZR250SPR	BR8ECM BR10ECMVX, R5184-105
		TZR125	BR9ES BR9EIX
		TZ250	R6179A-105P R6179C-105PA
		TZ125R	R6385-105P R7376-10, R7376B-10
		TZ50	BR9EV BR9EIX
	Motocross	YZF426F	CR8E CR8EIX
		YZ400F	CR8E CR8EIX
		YZ250F	CR8E CR8EIX
		YZ250	B8EG BR8EIX, R7376-8
		YZ125	B9EG BR9EIX, R7376-9
		YZ80/LW	B10EG BR10EIX, R7376-10
	Trial	TY250Z	BP6EV BPR6EIX
		XTZ750/660	DPR8EA-9 DPR8EIX-9
	Enduro	WR250Z	B8EG R4118S-8, BR8EIX
		TT250R/RAID	CR8E CR8EIX
		Serow225S/WE	DR8EA DR8EIX
DUCATI	Road race	996, 916	- R2349-10

※The thread length is longer than the normal type due to setting the detonation counter.



# WATERCRAFTS



Manufacturer	Model		Racing spark plug IX spark plug	
KAWASAKI	440	BR7ES	R6918B- (R6918C-9)	
	550SX	BR8ES		
	650SX	BR7ES		
	650X-2			
	650TS			
	650SC			
	750SX	BR8ES		
	750SXi/Pro			
	750ZXi			
	900STA/STX			
	STS			
	900ZXi	BR9ES		
	1100STX			
	1100Zi			
	1100STX D.I.	PZFR7G-G		←
ULTRA150(～'99.12)	R6918C-9	←		
ULTRA150('00.1～)	BR9ES	R6918C-9		
YAMAHA	MJ650LTD	BR8HS	BR8HIX	
	MJ700LTD	BR8HS	BR8HIX	
	MJ700SJ	B7HS	R5530- BR HIX	
	MJ700TZT			
	MJ700FX			
	MJ700XL			
	MJ700VNR	BR8HS	BR8HIX	
	MJ700RAV			
	MJ700RAW			
	MJ700TX			
	MJ760RZ			
	MJ760RA			
	MJ760GP			
	MJ760VN/LTD			
	MJ760XL			
	MJ800GP			
	MJ800TZ			BR8ES
	MJ1100RA	BR8HS	BR8HIX	
	MJ1100VN			
	MJ1200GP			
	MJ1200XL			
	MJ1200XLL	BR8ES	BR EIX,R7376-	
	SEA-DO	SPX	BR8ES	R7376- BR EIX
		GSX		
GSX-L				
GSX RFI				
GTS				
XP				
XP-L				
HX				
GTi				
GTX				
GTX-L				
SPEEDSTER				
CHALLENGER				
POLARIS	SL750	BPR7ES	R7376- BR EIX	
	SLT750			
	SL780	BPR8ES		

# SNOWMOBILES



Manufacturer	Model		Racing spark plug IX spark plug
YAMAHA	BR250L/T	BR8HS	BR8HIX
	CS340E	BR9ES	R7376- BR EIX
	ET410PT/TR		
	PZ480LT		
	PZ500/ST/LT		
	VX500LT/SXB		
	VX500XTC		
	VX540E II		
	VX600LT/ER		
	VX600XT/XTC		
	VX700ST/SXB		
	SX700R		
	SRX600S	BR10ECS	R7376-
	SRX700S/R/LT	BR9ES	BR EIX,R7376-
	VX700ST/STB		
POLARIS	INDY LITE	BR8ES	R7376- BR EIX
	INDY TRAIL/RMK		
	INDY TRAIL TOURING		
	INDY WIDE TRAK LX		
	INDY 500/EFI		
	INDY 500 XCSP45Th	BR9ES	BR EIX,R7376-
	INDY XLT		
	INDY XLT PMK	BR8ES	R7376- BR EIX
	INDY 440 XCR		
	INDY 600 XCR	BR9ES	BR EIX,R7376-
	INDY 600 XCR SP		
	INDY 700 RMK	BR8ES	R7376- BR EIX
	INDY 700 XCSP		
	INDY 800 RMK	BR7ES	BR EIX,R7376-
	INDY STORM RMK		
SKI-DO	MINI Z	BR9ES	R7376- BR EIX
	FORMULA DX380		
	MXZ440-500-700		
	FORMULA SL500		
	MXZ583	BR10ES	R7376-
	FORMULA III600		
	SUMMIT 600-700	BR9ES	BR EIX

# RACING KARTS



Manufacturer	Model	Racing spark plug
YAMAHA	YZ80SK-125SK	BR EIX,R7376-
	KT100FP/AZ	
ROTAX	DS-DR/DL/E-L	BR EIX,R7376-
	VM95/-XP	
TITAN	RV-1	BR EIX,R7376-
	LL-1	
IAME	PARILLA 100	BR EIX,R7376-
	PARILLA MAG95	
	PARILLA TT37	
	SIRIO RAP95	
	SIRIO TT53	
ITALSISTEM	SIRIO K55	BR EIX,R7376-
	MV21,ML21	
	SV11,SL11	
VORTEX	VR95	BR EIX,R7376-
	VL95	



## INSTALLATION

To install spark plugs in the engine, first tighten them by fingers, then retighten with the right tightening torques as shown below, using a plug wrench.

Either excessive tightness or looseness will cause troubles. Looseness sometimes causes pre-ignition because heat cannot disperse. On the other hand, excessive tightness can damage the threads of both the cylinder head and the spark plug.
























### ●Tightening torques

Spark plug type (thread diameter)	Aluminium cylinder head
Flat seat type (with gasket)	$\phi$ 14mm $25 \sim 30 \text{ N} \cdot \text{m}$ $(2.5 \sim 3.0 \text{ kg} \cdot \text{m})$ $(18.0 \sim 21.6 \text{ lb} \cdot \text{ft})$
	$\phi$ 12mm $15 \sim 20 \text{ N} \cdot \text{m}$ $(1.5 \sim 2.0 \text{ kg} \cdot \text{m})$ $(10.8 \sim 14.5 \text{ lb} \cdot \text{ft})$
	$\phi$ 10mm $10 \sim 12 \text{ N} \cdot \text{m}$ $(1.0 \sim 1.2 \text{ kg} \cdot \text{m})$ $(7.2 \sim 8.7 \text{ lb} \cdot \text{ft})$
	$\phi$ 8mm $8 \sim 10 \text{ N} \cdot \text{m}$ $(0.8 \sim 1.0 \text{ kg} \cdot \text{m})$ $(5.8 \sim 7.2 \text{ lb} \cdot \text{ft})$

### ●Tightening angles

Thread size	New gasket	Used gasket
$\phi$ 14mm (except※)	$\frac{1}{2} \sim \frac{2}{3}$ of a turn ( $180^\circ \sim 240^\circ$ )	$\frac{1}{12}$ of a turn ( $30^\circ$ )
$\phi$ 12mm $\phi$ 10mm	$\frac{1}{2}$ of a turn ( $180^\circ$ )	$\frac{1}{12}$ of a turn ( $30^\circ$ )
$\phi$ 8mm	$\frac{1}{3}$ of a turn( $120^\circ$ )	$\frac{1}{12}$ of a turn( $30^\circ$ )
※ R6469-9 R6918C-9	$\frac{1}{3}$ of a turn ( $120^\circ$ )	$\frac{1}{12}$ of a turn ( $30^\circ$ )

## ■NGK SPARK PLUG COVERS For Racing Spark Plugs

Plug cover number (Colour)	Appearance	Applicable plug type and cable
<b>TRS1225</b> (Blue) *For Honda Racer only		R6120-  , R6120A-  R6120C-  , R6120M-  R7282-  , R7282A-  R7282C-  , R7282M-  $\phi$ 8mm cable
<b>TRS1233A</b> (Red) <b>TRS1233B</b> (Yellow) <b>TRS1233C</b> (Green)		R6120-  , R6120A-  R6120C-  , R6120M-  R7282-  , R7282A-  R7282C-  , R7282M-  $\phi$ 7mm cable
<b>TRS1408F</b> (Blue)		R5300A-  R5300N-  $\phi$ 8mm cable
<b>TRS1409</b> (Red)		R5540F-  $\phi$ 7mm cable



**NGK SPARK PLUG CO., LTD.**  
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