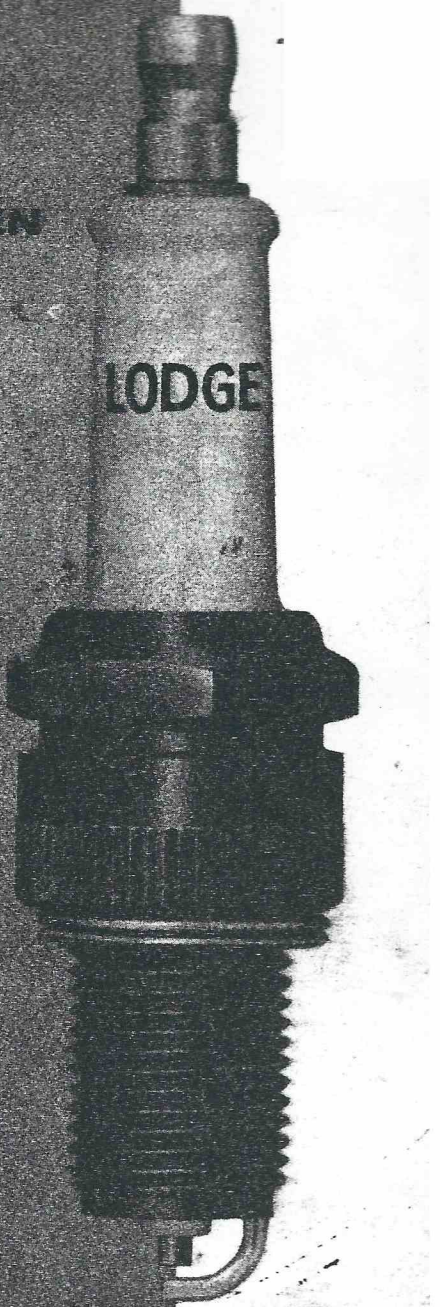
LODGE

RECOMMENDATIONS
RECOMMANDATIONS
EMPFEHLUNGSTABELLEN
RECOMENDACION

MOTOR CYCLES

SCOOTERS and MOPEDS

GO-KARTS



1971 INTERNATIONAL SPARK PLUG MANUAL

COMPARISON CHART

LISTE DE COMPARAISON / VERGLEICHSLISTE / TABLA DE COMPARACION

EXTENDED NOSE PLUGS

THREAD Size	Reach	Heat value	LODGE	APPROXIMATE EQUIVALENT HEAT RANGE Champion	A.C.	Autolite	Beru	Bosch	K.L.G	Marelli	N.G.K
14mm	3/8"	HOT	BBANY	J18Y, J14Y	46S, 45S	A82		W75T6	FS35P		
			BANY	J12Y, J13Y	44S	A52		W95T6	FS45P		BP4
		COLD	CANY	J10Y, J11Y,	43S	AT42, A42		W145T6, W175T6	FS55P		BP6
14mm	1/2"	HOT	CNY	UL12Y, L92Y, L95Y	44FS	AE52		W145T7, W145T35	F55P		BP4H
			HNY	L87Y	43FS	AE32		W175T7	F65P	CW8NP	BP6HS
		COLD	2HNY	L82Y, UL82Y	42FS	AE22		W200T35, W225T7 W200T7, W225T35	F85P		BP7HS
14mm	3/4"	HOT	BLNY	N14Y	45XLS	AG52		W145T30	FE45P		BP5ES
			CLNY	UN12Y, N11Y, N12Y	44XLS	AG42		W160T30, W175T30	FE55P	CW225LP	BP6ES
			HLNY	N10Y, N9Y	43XLS	AG32		W225T30 W200T30, W200T27	FE65P	CW230LPS	BP7ES
			2HLNY	N64Y, N6Y, N7Y	42XLS	AG22		W230T30, W215P21 W225T27, W225T28 W215T28, W215T30	FE125P	CW240LP CW8LP	BP8ES
			3HLNY	N63Y	41XLS	AG12		W235P21, W240T28	FE135P		BP9ES
		COLD	4HLNY	N62Y				W240T21, W250P21	FE145P	CW9LP	
			5HLNY	N60Y				W300T30	FE155P		
	TAPER		2HTY	UBL13Y, BL7Y, BL9Y	42TS	AF22		WA200T40	FT85P		BP7FS
18mm	TAPER SEAT	HOT	BTNY	F14Y	85TS	BF82		MA125T7	MT45P		AP4F
			CTNY	F11Y	84TS	BF42		MA145T7	MT55P	CM3TP	AP6F
		COLD	HTNY	F9Y	83TS	BF32		MA175T7	MT65P		

STANDARD PLUGS

10mm	1/2"	HOT							T30		
	5/8" Hex								T70		
		COLD	2HL10	Z10, Z8		PE3		U200T1	T90		C7HW, C7HS, C9H
12mm	1/2"	HOT	HB12			HE3			TW270		D8H
			H12	P7		HE2, HE1			TW275		D8HS, D9H, D10H
		COLD	2H12						TW280		D12H
14mm	3/8"	HOT		UJ12	48	A11, AT10	95/14/5	W95T3	FS20	CW3C	B2
			BAN	J11	46, C46, 47 C47, 46-5	A9, AT8		W125T3	FS30		B4
			CAN	J8	45, C45, VF9	A7, AT6	145/14/5	W145T3	FS50	CW4C	B6
				J7	44, C44 44-5, 44-5V	A5, AT4	175/14/5	W175T3	FS70	CW5C	
			HAN	J6	43, C43, 43COM	A3, AT3	225/14/5	W225T3	FS75	CW6C	B7
			HAN/M	J6J					FS75H		
		COLD	3HAN	J2, J4	42	AT2			FS100	CW7C	B10
			3HAN/M	J4J					FS100H		
14mm	7/16"	HOT	CSN	H10	45L	AL7, ATL8		W125T4	FA50		
		COLD		H8	43L	AL4, ATL3			FA70		
14mm	1/2"	HOT	BN	L14	46FF,		95/14	W95T1	F20	CW50N	B4H
			CN	L10, L90	45F, 45FF	AE6	145/14	W125T1	F50	CW150N	
			HBN	L88	44F, 44FF	AE4	175/14	W145T1	F70	CW175N	B6HS
			HN	L7, L85, L86	43F, 43FF, 43F0	AE3	225/14	W175T1	F75	CW225N	B7HS
			2HN	L5, L81	42F	AE2	240/14	W225T1, W240T1	F80	CW240N	B8HS
		COLD	3HN	L4, L78	41F		260/14	W260T1	F100	CW260N, CW275N	B9HS
									F220		
14mm	3/4"	HOT	BL14	N21		AG9	95/14/3		FE20	CW50L	B4E
				N18	47XL	AG7		W95T2	FE30	CW100L	B5ES
			CLNH	N8	46XL, 46N	AG5	175/14/3	W125T2	FE50	CW150L	B6ES
			HBLN	N5, N6, N84	45XL, 45N	AG4		W145T2	FE70	CW200L	B7ES
			HLN	N4, N88	44XL, 44N	AG3	225/14/3	W160T2 W175T2	FE75	CW225L	B8ES
			2HLN	N3	43XL, 43N	AG2	240/14/3	W225T2, W240T2 W240T17	FE80	CW240L	B9ES
		COLD	3HLN		42XL		260/14/3	W260T2, W270T17	FE100	CW275L	B10ES
									FE220		
18mm	1/2" 7/8" Hex	HOT	3BL	D21	88	BT9		M45T1			
			BBL, BV	8COM, D16	87	BT8	95/18	M95T1	M30	CM100A	
			CV	7COM, D14, K13	C85H	BT6	145/18	M145T1	M50	CM150A	
			HBV	D10, UK10	83COM, C83H	BT4	175/18	M175T1	M60	CM200A	A6
		COLD	HV	D9, K9	C82	BT3	225/18	M225T1	M75	CM225A	A7
			2HV	D6, K7, UK7		BT2	240/18	M240T1	M80		
	1/2"		C3	8COM	C85H	BZ8	145/18	MA145T1			
18mm	TAPER SEAT		CTN18	860, 870	85T	BTF6	145/18K	MA145T1, MA95T1	TMT50		A4F

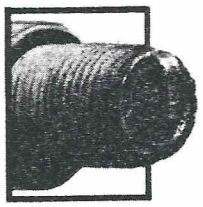
DISCONTINUED PLUGS AND THEIR REPLACEMENTS

DISCONTINUED	2HAN	2HAN/Mar	BLN	C1	HN18	3H12	4H12	5H12	H1	CANB
REPLACEMENT	3HAN	3HAN/Mar	BL14	C3	HV	HB12	H12	2H12	HV	HBANB

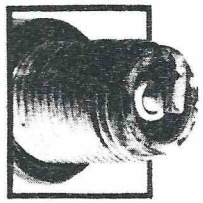
CHOOSING THE RIGHT PLUG

PLUG SELECTION

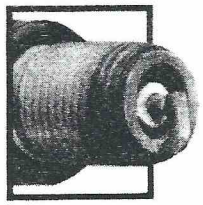
The nose of a spark plug is subjected to extremely high temperatures and to oil and carbon fouling. Under these conditions, the nose of the plug insulator must be sufficiently hot to burn off the deposits which would otherwise adversely affect the efficiency of the plug but, at the same time, not so hot as to cause self-ignition.
Plugs are therefore designed to operate in varying heat ranges to suit different motors and motoring conditions.
Thus, a hot, or high compression engine should be fitted with spark plugs designed to rapidly dissipate the heat to which they are exposed. Such plugs are called cold-running. Conversely, in a cool engine, "hot running" plugs, designed to retain sufficient heat to burn away fouling deposits, should be fitted.



TOO COLD
Oil glistening on the insulator, thick deposit.



NORMAL
Light brown or grey coloured deposit on insulator. Greyish deposit on body.



TOO HOT
Absence of deposit, bleached appearance to insulator.

METRIC GAP EQUIVALENTS

Inches	·018	·020	·022	·024	·025	·028	·030	·032	·035
mm	·44	·50	·55	·60	·65	·70	·75	·80	·90

INSTALLATION

1 Make quite sure before you fit plugs that they are the correct type for the engine as quoted in the LODGE recommendation lists, or as determined by procedure described under plug selection if abnormal conditions apply.
2 LODGE plugs are normally supplied with spark-gaps between the central and earth electrodes set at ·025"—·028" (·65—·70 mm), with the following exceptions:—

	Inches	mm
⅜" reach types	·028—·032	·70—·80
10/12 mm types	·019—·022	·50—·60
BLNY, BBANY, BANY, CANY	·032—·035	·80—·90

A slightly wider gap is permissible where a sports or other high-output coil is used.
Where the engine manufacturers recommend a different gap from the LODGE setting, it is important that the appropriate adjustment be made before fitting.
When adjusting the gap, never move or lever on the centre firing point, but move only the side, or earth electrodes.
To ensure maximum efficiency and long life, care should be taken to see that the gap setting is maintained within the prescribed limits.
3 See that each plug is fitted with its external seating-washer, and that the body threads are quite clean.
4 Tighten each plug firmly, but do not over-tighten. All that is required is a gas-tight joint. If you use the strength that you can comfortably exert with your hands and wrists only, using a normal spanner and/or tommy bar, nothing more is needed.
Over-tightening will cause damage. Where a torque-spanner is available, the tightening figures given below should not be exceeded.

TIGHTENING TORQUE

Thread size	lb/ft	(m/kg)
10 mm/12 mm	10	(1·4)
14 mm	14	(1·9)
18 mm	25	(3·5)
18 mm Taper Seat	17	(2·4)

SYMBOL EXPLANATION

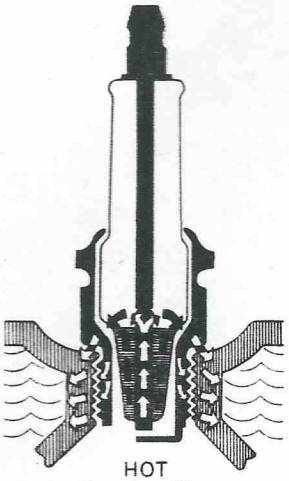
The code letters designated to each plug describe it precisely, individual letters referring to individual aspects of the spark plug.
The meaning of these code letters is shown below:
Initial or prefix letters BB, B, C, HB, H, 2H & 3H refer to the heat value of the plug—see comparison chart.
Subsequent letters or number denote:—

A ⅜" thread reach
'B' Suffix or final letter —BANTAM TYPE
'C' Suffix or final letter —COMPACT TYPE
L ¾" thread reach
N Non Detachable
P Platinum type
R Racing type
S 7/16" thread reach
T Taper seat
V 18 mm heavy duty
Y Extended nose type
10 10 mm thread diameter
12 12 mm thread diameter

GAP SETTING AND REPLACEMENT

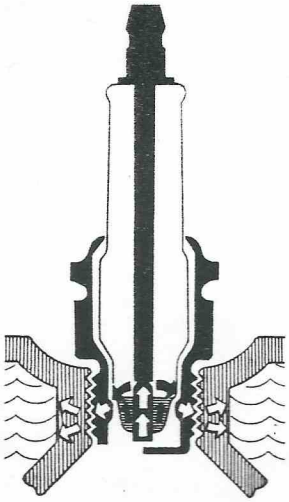
Incorrect setting of the gap between the electrodes can result in misfiring, loss of power, early fouling and poor idling. Plugs are normally supplied with a general setting which will not necessarily be correct for all engines. Electrodes gaps should therefore be correctly set to the gap recommended by the engine manufacturer before initial installation, by bending the earth electrode only.
Electrical erosion of the electrodes gradually increases the gaps in service, and every spark contributes to this. The plugs should therefore be removed periodically and the gaps checked and reset as necessary. Electrode erosion can be compensated by resetting of the gaps only a limited number of times.
As the clean edges of the electrodes are eroded away a higher voltage is required to provide a satisfactory spark and the plug becomes progressively less efficient. Plugs should be replaced after approximately 12,000 miles (19,000 km) if full efficiency is to be maintained.

HEAT RANGE



HOT
Running Plug

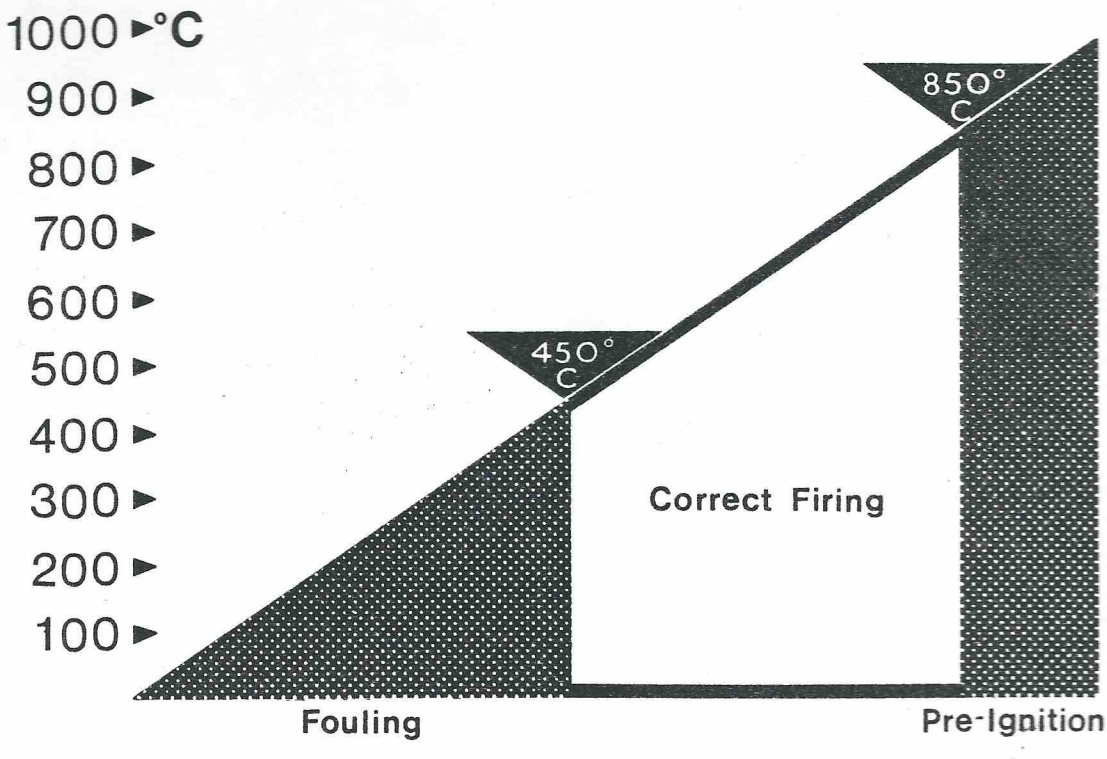
COLD
Running Plug



The design of a spark plug is complicated by the wide variation in operating conditions in different engines. A plug may be subjected at times to deposits of oil and carbon and at other times to extreme heat. Under these conditions, the nose of the insulator must be sufficiently hot to burn-off the oil and carbon fouling, but not so hot as to cause self-ignition.

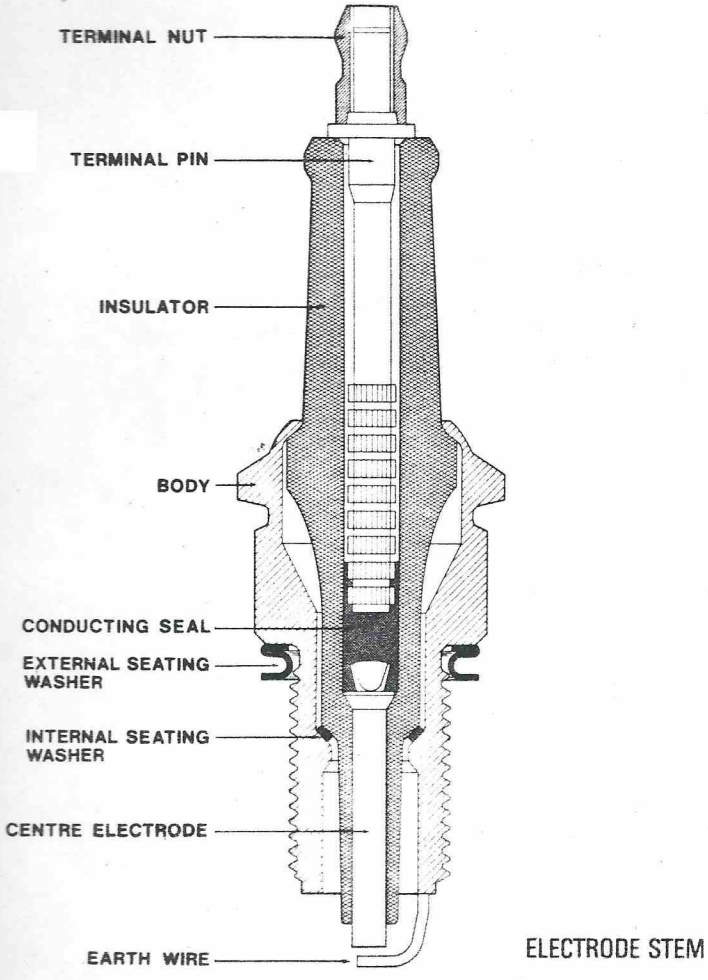
Self-ignition can occur at or about the same time as the spark, in which case it is called auto-ignition; if it occurs earlier than the spark it is called pre-ignition. Continued running after switching off is called after-firing or running-on. Any of these forms of self-ignition can, however, be caused by hot spots other than plugs. This can easily be checked by temporarily fitting a very cold-running plug; if the cold running plug ends the trouble it is obviously caused by the plugs and a different grade is required; if self-ignition still occurs, the cause will be found elsewhere.

Of the many features of design that control insulator temperature, the most important is the insulator nose length. The drawings below show the difference between "hot" and "cold" plugs. A cold running plug has a short insulator nose, permitting a faster dissipation of heat. Thus in a high compression, hot running engine the plug can operate within its correct temperature range, and self-ignition due to overheating is avoided. A hot running plug has a long insulator nose, providing a long path for the dissipation of heat. This means that the plug nose is maintained at a temperature high enough to burn off deposits of oil and carbon.



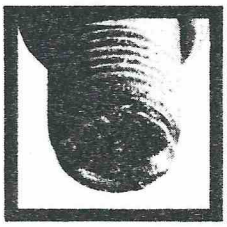
TROUBLE–RECOGNITION AND CURE

To save space under "Cause" and "Cure" it is assumed that the plugs are of the type recommended for the engine unless otherwise stated, and that all other aspects of the ignition system, such as coil, condenser, contact breakers, insulation of H.T. leads, etc, have been checked and proved satisfactory.



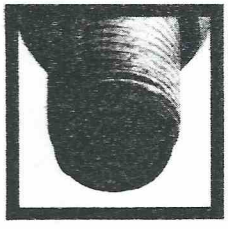
FAULT

Oiled Insulator



Wet oil—possibly black—covers the insulator and may have bridged the gap.

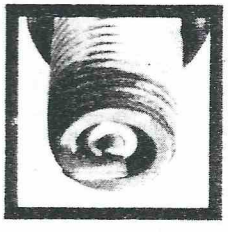
Sooted Insulator



The insulator nose, and mouth of the body, are covered with soft, black carbon—similar to lamp-black.

Dry Fouled Insulator The insulator nose, electrodes and mouth of th body are dirty and to some extent encrusted.

Overheated Insulator



The insulator nose is clean and dry, with a bleached white look possibly stained with coloured "blisters". The mouth of the plug body is dry and grey, streaked with a yellowish tinge. The barrel may be "blued" by heat.

Top of Insulator Broken

Difficult Starting

Misfiring: (a) At low speeds.

(b) At high speeds.

CORONA DISCHARGE AND FLASHOVER

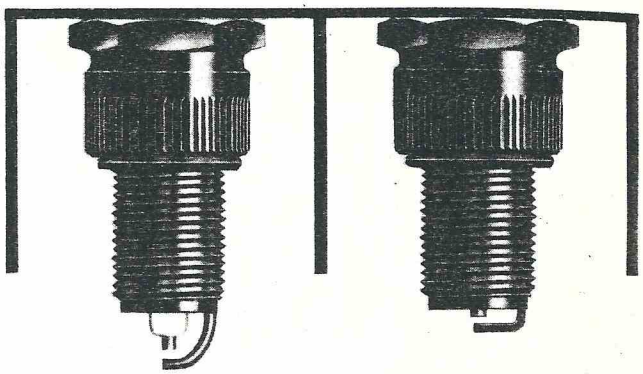
Corona Discharge: This is a blue glow which appears around the plug insulator. It is more obvious in plugs that employ alumina based insulators and is caused by an intense electric field. This discharge has no effect on ignition performance and should not be confused with flashover.
Flashover: This is generally caused by grit and moisture on the plug insulator.

CAUSE	CURE
Certain: Oil is passing the pistons and rings and being thrown on the plug. **Probable:** Cylinder bores, pistons and rings are worn to a degree that calls for action.	A re-bore and new pistons and rings are needed. As an interim measure, plugs with lower heat rating than that recommended can be fitted (e.g., BN instead of CN).
Probable: Too much oil in petrol/oil mixture in 2-stroke petrol systems.	Reduce oil/petrol mixture to correct proportions.
Possible: In some engines, over-filling the sump with oil can produce the same effect.	If the dip-stick shows oil above the "full" mark, drain some oil from the sump.
Possible: Plug of much too high a heat value fitted.	Fit correct heat value plug.
Certain: The trouble is due to over-rich mixture. **Probable:** The choke is sticking and does not fully open when released on the dashboard.	Adjustment of choke mechanism.
Probable: The choke is being used for too long after engine has warmed up.	Close choke as soon as engine will run without it.
Probable: The slow running adjustment of the carburettor needs attention.	Adjustment of slow-running system.
Possible: The carburettor is flooding or maintaining too high a level in the float chamber.	Adjustment or renewal of float mechanism.
Possible: Plug of too high a heat value fitted.	Fit correct heat value plug.
Certain: Accumulation of products of combustion on insulation, due to too long an interval between cleaning.	Clean, adjust and refit plugs.
Probable: (All plugs over-heating.) Weak mixture, caused by restriction of fuel supply.	Check over fuel supply from tank to engine. Attention to fuel pump, possible leaky joints in pipe-line, and possibly choked jet in carburettor.
Probable: (One plug over-heating.) Weak mixture, caused by:	
(1) leak in induction manifold gasket.	Fit new gasket.
(2) leaking cylinder head gasket.	Fit new gasket.
(3) sticking valve or tappets out of adjustment.	Valves must be freed and/or tappets adjusted.
Possible: (All plugs over-heating.) Weak mixture caused by too small a main jet in carburettor.	Fit correct jet.
Possible: (All plugs over-heating.) It is possible that a motor-cycle or car has been fitted by a previous owner with special high compression pistons and/or high compression head. This makes the recommended type of plug no longer suitable for the engine.	Fit new plugs with a higher heat rating (e.g. HBLN instead of CLNH).
Possible: Plug of too low a heat value fitted.	Fit correct heat value plug.
Possible: Ignition badly out of adjustment which will show itself in engine performance.	Reset ignition timing.
Certain: Insulator has received a knock, possibly through the spanner slipping in fitting to, or removing from the engine.	A new plug of the correct type.
Certain: (Assuming battery, ignition and fuel systems O.K.) Gaps too wide and/or insulation fouled due, probably, to too long a period since last service.	Clean plug(s). Reset gap(s).
Certain: (Assuming carburettor correctly set.) Gaps too narrow.	Clean plug(s). Reset gap(s).
Possible: Gaps too wide.	Clean plug(s). Reset gap(s).
Possible: Plugs over-heating.	See against "Overheated Insulator".

EXTENDED NOSE PLUGS

Modern driving conditions often result in cars capable of high performance running at low speed. This allows combustion deposits to build up on the spark plug insulators because of the lower engine temperatures and, when the high performance can be used, cause the engine to misfire.

Extended nose plugs are designed so that the insulator tip, or 'Nose', is extended beyond the base of the plug body. The firing point of the plug is then penetrating deep in the mixture and subsequent flame in the combustion chamber. This promotes better and more even firing under light loads.



Extended Nose Type *Normal Type*

A typical extended nose plug is illustrated here. At wide throttle openings the incoming charge cools the extended insulator nose more effectively than with plugs of conventional design. These plugs should only be used in engines for which they are specifically recommended as the position of the inlet valve relative to the plug controls the effectiveness of the cooling, and the engine must accommodate the extra projection without danger of contact with piston or valves.

THREAD Size	Reach	Heat value	LODGE	APPROXIMATE EQUIVALENT HEAT RANGE							
				Champion	A.C.	Autolite	Beru	Bosch	K.L.G	Marelli	N.G.K.
14mm	3/8"	HOT	BBANY	J18Y, J14Y	46S, 45S	A82		W75T6	FS35P		
		COLD	BANY	J12Y, J13Y	44S	A52		W95T6	FS45P		BP4
			CANY	J10Y, J11Y,	43S	AT42, A42		W145T6, W175T6	FS55P		BP6
14mm	1/2"	HOT	CNY	UL12Y, L92Y, L95Y	44FS	AE52		W145T7, W145T35	F55P		BP4H
			HNY	L87Y	43FS	AE32		W175T7	F65P	CW8NP	BP6HS
		COLD	2HNY	L82Y, UL82Y	42FS	AE22		W200T35, W225T7 W200T7, W225T35	F85P		BP7HS
14mm	3/4"	HOT	BLNY	N14Y	45XLS	AG52		W145T30	FE45P		BP5ES
			CLNY	UN12Y, N11Y, N12Y	44XLS	AG42		W160T30, W175T30	FE55P	CW225LP	BP6ES
			HLNY	N10Y, N9Y	43XLS	AG32		W225T30 W200T30, W200T27	FE65P	CW230LPS	BP7ES
			2HLNY	N64Y, N6Y, N7Y	42XLS	AG22		W230T30, W215P21 W225T27, W225T28 W215T28, W215T30	FE125P	CW240LP CW8LP	BP8ES
			3HLNY	N63Y	41XLS	AG12		W235P21, W240T28	FE135P		BP9ES
		COLD	4HLNY	N62Y				W240T21, W250P21	FE145P	CW9LP	
			5HLNY	N60Y				W300T30	FE155P		
	TAPER		2HTY	UBL13Y, BL7Y, BL9Y	42TS	AF22		WA200T40	FT85P		BP7FS
18mm	TAPER SEAT	HOT	BTNY	F14Y	85TS	BF82		MA125T7	MT45P		AP4F
		COLD	CTNY	F11Y	84TS	BF42		MA145T7	MT55P	CM3TP	AP6F
			HTNY	F9Y	83TS	BF32		MA175T7	MT65P		

SPORTS PLUGS

When the power of an engine is increased by tuning, it will require a colder running plug due to the increase in combustion temperature. For most normal conversions 2HLNY should be satisfactory. The application of colder types will depend on additional tuning and driving conditions.

SPORTS PLUG CROSS REFERENCE		
Thread Dia. & Reach	LODGE	CHAMPION
14 mm 3/4" (19 mm)	**2HLNY**	N64Y, N6Y
	3HLNY	N63Y
	4HLNY	N62Y
	5HLNY	N60Y

The following notes are intended for guidance to application according to the "Stage" of tuning employed:

TUNE	COMPRESSION RATIO	RECOMMENDED PLUG
Stage 1	9:1	HLNY
Stage 2	9:5 to 10	2HLNY
Stage 3	10 and higher	3HLNY
	,, ,, ,,	4HLNY depending
		5HLNY on racing conditions

For racing (production car events, etc.) 5HLNY or 4HLNY are recommended: 5HLNY being the most likely choice due to the wide operating range.
N.B. These notes are based on experience with B.M.C. "A" Series engines.

Application in ALL engines depends mainly on compression ratio and power output achieved according to the state of tune, and essentially on experience under competitive conditions.

RACING PLUGS

Unusually wide flexibility

The exceptionally wide heat range of LODGE Racing Plugs is achieved by combining a high-conductivity centre electrode with "Sintox" insulation. "Sintox" has a thermal conductivity 20 times greater than ordinary porcelain. This more efficient heat dissipation makes it possible to expose the insulator to the combustion flame, thereby preventing carbon deposit by 'burning-off'. Moreover, 'Sintox' possesses outstanding resistance to the effects of intense heat, shock and blows, and is impervious to attack by fuel deposits.

Compression ratio and warming-up

In many cases where engines have a compression ratio of no more than 8·5:1 it is possible for LODGE racing plugs to be used for starting, warming up and racing. Above this compression ratio, hotter plugs should be used to start and warm up the engine and the racing plug fitted to the warm engine immediately before the start of the race.

Choice of correct type

It is absolutely essential that correct carburation of the engine be established before carrying out a plug check.

The correct type of racing plug for use in a particular engine, for a specific event, can be chosen by examining the plugs after a period of full throttle, full power running. The engine should be held at full power for at least 30 seconds. The ignition should then be switched off and neutral gear selected so that the engine will not be turned over by the transmission. The appearance of the plugs will then indicate their heat condition at maximum duty. Ideally, the insulator of the plugs should be discoloured to a light brown. The centre electrode should be shiny black, except at the actual point where the H.T. current has jumped to the earth point. This portion should be normal colour.

The earth point and the body should also be shiny black.

If the insulator is covered with a wet, black deposit it would indicate that too hard a plug is being used. If the original pink "Sintox" insulator nose has turned whitish and minute brown pinpoints have appeared, this indicates that the plug is too soft. A reason why it is essential to establish correct carburation before a plug check is that a weak mixture gives the plug an appearance very similar to that given by too soft a plug. An over-rich mixture is indicated by a dry, black, sooty deposit.

Requests for advice should always be accompanied by the following information:

1. make & type of engine
2. details of plug thread (Dia. & Reach)
3. compression ratio
4. maximum engine revs.
5. type of fuel
6. type of event
7. experience with any other plugs used

Important additional safeguards

It is suggested that LODGE rubber waterproof covers be fitted to ensure complete weather protection. They will also keep the insulator free of damp and thus prevent any tendency to "tracking" which might otherwise be experienced.

Elbow types—90° connection
(for 10 mm and 14 mm plugs) **R90**

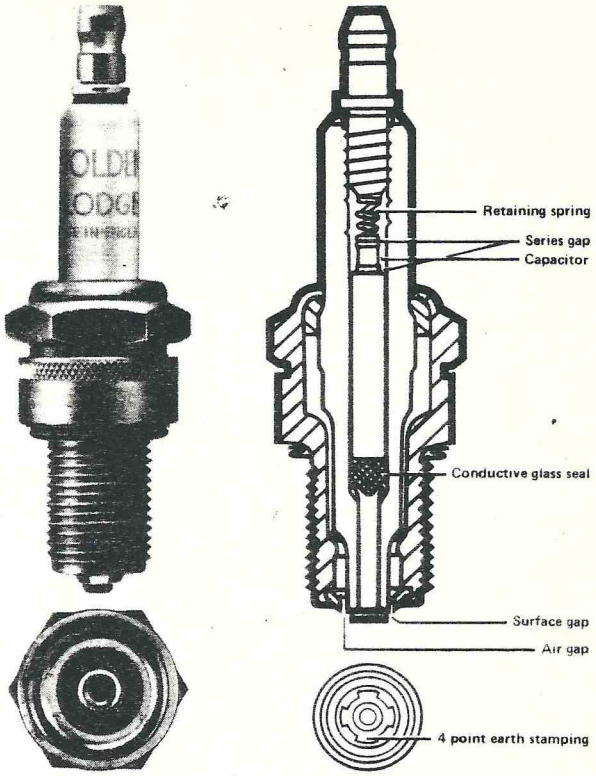
Gap Size.

The gap is factory set at 0·012" to 0·015" on all racing plugs with the exception of types R47 & RL47 which are set at 0·015" to 0·018". Any increase of these settings may result in misfiring at maximum duty due to the spark tracking over the insulator nose instead of jumping the gap.

LODGE		Plug	APPROXIMATE EQUIVALENT HEAT RANGE				
			Champion	Autolite	Bosch	KLG	NGK
Thread Diameter 10 mm Reach 12·5 mm (½") Hexagon ·710"	HOT	**10 R49**	—	—	—	—	—
		10 R50	—	—	—	—	—
	COLD	**10 R51**	—	—	—	—	—
Thread Diameter 10 mm Reach 18 mm (·710") Hexagon ·710"	HOT	**10 RL47**	G63	—	U24OT17	—	—
		10 RL49	G61	—	U27OT17	—	—
		10 RL50	G59R	PG603	U31OT17	—	—
		10 RL51	G56R	PG403	U34OT17	—	—
	COLD	**10 RL52**	G54R	PG203	U37OT17	—	—
Thread Diameter 14 mm Reach 12·5 mm (½") Hexagon ·812"	HOT	**R47**	L62R	AE23	W24OT16	—	B8HN
		R49	L60R	AE903	W27OT16	F265	B9HN
		R50	L57R, L87R	AE603	W31OT16	F275	B10HN
		R51	L54R, L84R	AE403	W34OT16	F285	B11HN
	COLD	**R53**	L83R	AE203	W37OT16	F295	B12HN
Thread Diameter 14 mm Reach 18 mm (·710") Hexagon ·812"	HOT	**RL47**	N62R	AG23	W24OT17	—	B8EN
		RL49	N60R, N83R	AG903	W27OT17	FE265	B9EN
		RL50	N57R	AG603	W31OT17	FE275	B10EN
		RL51	N54R, N81R	AG403	W34OT17	FE285	B11EN
	COLD	**RL52**	N52R	AG203	W37OT17	FE295	B12EN

GOLDEN LODGE

The design of the Golden Lodge spark plug is the result of many years of research by Lodge development engineers.
The name "Golden Lodge" is derived from its electroplated gold finish which has a particularly high resistance to corrosion. It incorporates a specially-designed, low voltage electrode formation coupled with a high frequency converter. The HF converter consists of a capacitor coupled with a series gap, both being incorporated into the centre electrode of the plug; Golden Lodge plugs have a spark gap of unique design providing a small air gap coupled with a surface gap.
These innovations mean that the plug sparks at a lower voltage than a conventional plug and there is less erosion of the electrodes, giving longer plug life. Golden Lodge plugs have a wider heat range than normal plugs and are particularly suitable for the varying conditions in today's city traffic, and fast inter-city roads.



REPLACEMENT GUIDE

Thread		Golden Lodge	AC	Autolite	Bosch	Champion	KLG	Marchal	Marelli	NGK	Standard Lodge
Size	Reach										
14MM	⅜"	HA	44S, 45, C45 VF9, 44, C44 44-5, 44-5V 43, C43, 43COM	A42, AT42 A7, AT6 A5, AT4 A3, AT3	W145T3 W175T3 W225T3	J10Y, J11Y J12Y, J13Y J8, J7, J6 UJ6, UJ8 UJ10Y, UJ12Y	FS50, FS70 FS75, FS55P	35C 36C	CW175P CW175JC	B6, B7	CAN HAN CANY
14MM	½"	H	43FS, 43FO 45F, 45FF 44F, 44FF 43F, 43FF	AE52, AE32 AE6, AE4 AE3	W145TI, W175TI W145T7, W175T35 W190MIIS, W200T35 W225TI, W225T7 W225T35, W200PI	UL12Y, L92Y L95Y, L87Y L10, L90, L7 L85, L86, L88	F50, F55P F70, F65P F75	37S, 36 35/36 35 35B-35P	CW150N CW175N CW225N	B6H, B4H	CN HBN HN CNY
14MM	½"	2H	42FS 42F	AE22 AE2	W240TI W240PIIS W240SIIS	L82Y, UL82Y L5, L81	F80 F85P	34S	CW240N	B7H, B7HZ B8H	2HN 2HNY
14MM	¾"	HL	44X LS 43X LS 46XL, 46N 45XL, 45N 44XL, 44N	AG42, AG32 AG5, AG4 AG3, AG2	W160T30, W175T30 W200T36, W200T30 W200T27, W225T30 W145T2, W225T2 W190T25, W190P2 W215T28, W215T29 W215P21, W225T25	UN12Y, N11Y N10Y, N9Y N8, N5 N6, N4 N84, N88	FE50, FE55P FE70, FE65P FE75	36HS 35HS	CW150L CW200L CW225LV	B6E, BP6E B7E, B8E	CLNH HBLN HLN CLNY HLNY
14MM	¾"	2HL	42XLS 43XL 43N	AG22	W230T30, W235P21 W235T28, W240T2 W240T17, W240T28	N64Y N6Y N7Y, N3	FE80 FE125P FE135P	HF34F, HF34 HFS34, 34HS H(F)34R	CW250L CW240L	B9E	2HLN 2HLNY 3HLNY
18MM	½"	H18	C85H, 83COM C83H, C82	BT6, BT4 BT3, BZ8	M145TI M175TI M225TI	7COM, D14 D10, UK10 D9, K9 K13	M50 M60 M75	19 20CEL	CM150A CM200A	A6 A7	CV.C3 HBV HV
18MM	Taper-seat	HT18	84TS 83TS 85T	BF42 BF32 BTF6	MA145T7, MA145TI MA175T7, MA175TI MA225TI	F11Y, F9Y 860, 870	M55P M65P		CM4T CM3TP	A6F AP6F A7F	CTNY HTNY

MOTOR CYCLES

MAKE & MODEL	PLUG
ADLER	
M100, M125, M150	**2HN**
MB150, M200, MB200	**2HN**
MB201, M2011, M250, MB250	**2HN**
AEREO CAPRONI	
Capriolo 75 c.c. Sport	**2HN**
Capriolo 75, 150, 215	**HBN**
AERMACCHI	
175 c.c. Ala, Bianci, Chimera	**HLN**
Ala Rossa Sport, Ala D'or	**HLN**
250 c.c. Ala D'or 4T	**2HLN**
250 c.c. Ala Azzurra	**HLN**
250 c.c. Ala Verde, Chimera	**HLN**
Corsaro 150	**HN**
Zeffiro 125 & 150 ½" Reach	**HN**
Zeffiro 125 & 150 ¾" Reach	**HLN**
Monsone 125	**HN**
125U, C, M, N, S	**HN**
250 c.c. 2 Cyl.	**HN**
Autocarro MB1	**HN**
Montofurgoncino MB8	**HN**
AJAX	
98 c.c. N.S.U. Eng	**HBV**
250 c.c. Model 14	**HLN**
350 c.c. Model 8	**HLN**
650 c.c. Model Twin 31	**HLN**
A.J.S.	
248 c.c. Model 14, Tourist 14CSR	**2HLN**
248 c.c. Model 14CS, Scrambles	**3HLN**
250 c.c. Model 14	**HLN**
347 c.c. Model 16, Trials, 16 Sceptre	**2HLN**
348 c.c. Model 8, Light	**2HLN**
349 c.c. Model 7R Racer (Gap ·016") (·40 mm)	**on request**
489 c.c. Model 18	**2HLN**
497 c.c. Model 18CS, Scrambles	**3HLN**
350 c.c. Models 16M, 16MS to 1950	**HN**
350 c.c. Models 16M, 16MS from 1951	**HLN**
350 c.c. Comp. Models 16 16MC, 16MCS from 1949	**HLN**
18 Statesman, Experts 16C, 33	**HLN**
350 c.c. Model 8	**HLN**

MAKE & MODEL	PLUG
A.J.S./Cont. . . .	
500 c.c. Models 18 & 18S to 1950	**HN**
500 c.c. Models 18 & 18S from 1951	**HLN**
500 c.c. Comp. Models 18C & 18CS from 1949	**HLN**
500 c.c. Model 20 Twin	**2HLN**
592 c.c. Model 30	**2HLN**
650 c.c. Twin Model 31, 31 Swift, 33CSR	**HLN**
Other O.H.V. Models 14mm	**HN**
Other S.V. Models 14mm	**CN**
O.H.V. Models 18mm	**HBV**
14CSR	**2HLN**
ALDBERT	
16OT, 175T	**HBN**
160S	**2HN**
ALLSTATE (SEARS)	
125 c.c. 810-94150, 810-94151, 810-94190, 810-94191	**CN**
175 c.c. 810-94160-61, 810-94170-71	**CN**
250 c.c. 810-94180-1-2, 810-94220	**CN**
250 c.c. 810-94200-1, 810-9422	**HN**
250 c.c. 810-8952, 810-9409, 810-9439	**CN**
250 c.c. 810-8951	**2HN**
AMBASSADOR	
Models with Zundapp Engs.	**HN**
Other Models see Villiers	—
A.M.C. ENGINES (ENGLAND)	**HBLN**
A.M.C. (FRANCE)	
125, 150, 175 O.H.V.	**HN**
150, 175, 250 Sport	**2HN**
ANZANI	
242 c.c. Twin 2-stroke	**HN**
150 c.c. and 200 c.c.	**HN**
322 c.c. Twin 2-stroke	**HN**
ARIEL	
Leader TS Twin, Arrow	**HLN**
197 c.c. L.H. Colt	**HLN**
347 c.c. 'N.H.' Red Hunter to 1955	**HN**

MAKE & MODEL	PLUG
ARIEL/Cont. . . .	
347 c.c. 'N.H.' Red Hunter from 1956	**HLN**
497 c.c. 'V.H.' Red Hunter to 1952	**CN**
347 c.c. 'H.T.3' Red Hunter from 1957	**HLN**
497 c.c. 'V.H.' Red Hunter H.T. and H.S.* 1953-58	**HLN**
497 c.c. 'K.H.' Red Hunter Twin Cyl. to 1952	**CN**
498 c.c. 'K.H.' Red Hunter 1953-58	**HLN**
497 c.c. 'K.H.A.' Twin Cyl. with Alloy Head	**HLN**
498 c.c. H.T. and HS*	**HLN**
498 c.c. 'K.G.' Fieldmaster	**HLN**
598 c.c. s.v. 1936-51	**CN**
598 c.c. s.v. 1952-54	**CLNH**
598 c.c. s.v. with Alloy Head, 1955-56 model VB	**HLN**
600 c.c. o.h.c. 4 Cyl. 1934-36	**HN**
640 c.c. F.H. Huntmaster Twin	**HN**
997 c.c. Square Four to 1952	**CN**
997 c.c. Square Four 4G, 1953-58	**HLN**
O.H.V. Single Cyl. Models 18 mm plug	**HV**
Pixie	**2HL10**
Arrow Super Sport	**HLN**
Golden Arrow, Arrow 200	**HLN**
BENELLI	
1950, 250 c.c. and 500 c.c Normal	**HBV**
1950, 250 c.c. Sport	**2HV**
Leoncino 125 c.c. Letizia 98 c.c	**HN**
Two-stroke requiring 18 mm plug	**HBV**
Model 125S	**2HN**
Leonessa 250 c.c.	**2HLN**
BIANCHI	
125 and 250 c.c.	**CAN**
250 c.c. Sports model	**HAN**
500 c.c.	**HBV**
71 c.c. Gardina, 125 c.c. Mendola	**HN**
Bernina 123 c.c., Tonale 175 c.c.	**HN**
48 c.c. Aquilotto Normale	**HN**
48 c.c. Falco Sports	**2HN**

*For competitions apply for special recommendations.

All Spark Plug Gaps should be set at ·020" (·50 mm) unless otherwise stated

MAKE & MODEL	PLUG
B.M.W.	
R24, R25, R25/1, R25/2, R25/3, R26, R27, R50, R50S, R51, R52/2, R51/3, R60, R66, R67, R67/1, R67/2, R67/3, R68, R69, R69S	2HN
R4, R11, R16	HBV
R2, R3, R6, R12, R20, R23, R25, R35, R36, R37, R61, R71, R75	HN
BRIDGESTONE	
(All gaps ·030" (·75 mm) except racing plug)	
C204-BSHMS, C206-BS7S, C207-BS7D	CAN
C208-BS90STD, C209-BS90T, C210-BS90M, C302-BS90SP, C308-BS90D, C309-BS90T, C310-BS90M, C312-BS90SP	2HN
C301-BS60SP	3HAN
C300-BS50SP	HAN
C305-BS175DT, C306-BS175HS, C320-BS350GTR	2HN
C304-BS100 Racer	
C307-BS175 Racer, BS90R	R50
90 Deluxe	2HN
90 Sports, 175 Dual Twin, 175 Hurricane Twin, 350GTR	3HN
B.S.A.	
A7, A10GF	HN
A7SS, A10RGS, A10RR, A10SR	HLN
A50, A50C, A50CC, A65, A65LC, A65R, A65T	HLN
A50W, A65H, A65FS, A65L, A65SS	2HLN
A75 Rocket 3	2HLN
B25 Starfire	2HLN
B31, B33	HN
B32 Cast Iron Head	HN
B32 Alloy Head	HLN
B32GS, B40	HBLN
B34 Cast Iron Head	HN
B34 Alloy Head	HBLN
B34GS Clubmans Competition	on request
Road Use	2HLN
Scrambler	2HLN
Gold Star Racer Competition (Gap ·016") (·40 mm)	on request
Road Use	2HLN
B40SS90, Victor B44R, B44SS	HLN
Victor B44ET, B44GP, B44VS	HLN
C10L	CLNH
C12	HN
C15, C15T	HBLN
C15S, C25	2HLN
C15SS80	HLN
Bantam Models	
D1 to 1954	CN
D1 1954 onward	HN
D3, D5, D7	HN
B10, D14/4, D14/4S, Bantam 175, Bushman	HLN
K1 Beagle	2HL10
M21 Cast Iron Head	CN
M21 Alloy Head	CLNH
M33	HN

MAKE & MODEL	PLUG
BUCKER	
TZ 175, Ilona II	HN
TZ 200, Ilona I—to 1952	2HN
TZ 200, Ilona I—1953 on	2HV
TZ 125, TR, 125H	2HN
Mofa	HBV
BULTACO	
200, Sherpa 'N', Sherpa 'S', Sherpa 'T', Matador	HLNY
Compera, 155 c.c. Mercurio	HN
Compera 175 c.c.	HLNY
Tralla 102	2HN
Metralla 62	HLN
Senior 200	HBLN
Junior 74 c.c.	2HN
250	HLN
BUYDENS	
175 c.c. two-stroke (Y dral engine)	2HN
250 c.c. (Ilo M2 × 125 engine)	2HN
CECCATO	
125 and 175 Tourer, 200 c.c. Sport	HBN
100 Lusso, 175 Sport	2HN
75 and 125 Super Sport	3HN
CSEPEL	
100 and 125 c.c., 250 and 350 c.c.	CN
C.Z.	
125, 175 Roadster	HN
D.K.W.	
18 mm	HBV
RT3, RT100, RT125, NZ350	HN
RT200VS, RT127, RT200/2, RT250/2, RT350	2HN
DOUGLAS	
150 c.c.	BV
250 c.c. 14 mm	CN
350 c.c. Mark V, Dragonfly	HN
350 c.c. Comp. Model	HN
350 c.c., 80 plus, 90 plus	2HN
DUCATI	
Puma, Cadet 125, 250 Monza	HN
100 Sport, 200 Elite, 200 Super—Sport, 200 Grand Sport, 250 c.c.	2HN
55E, 55R, M55	HN
T50, T3, 65T, 65TL, 65TS, 65S	HBN
98T, 98TL	HN
98S	2HN
125T	HN
125TV, 160 Monza Junior, 250 Mk.III	2HN
125S	3HN
175T	HN
175S, Cruiser Muletto, 175 Silverstone Super	2HN
350 Mk.111	HLN
DURKOPP	
MF100	BV
M125, MD150, MD200	HAN
E.M.C.	
350 c.c. 'Split-Single' two stroke	HLN
250 c.c. E.M.C.-Puch, Touring	HN

MAKE & MODEL	PLUG
E.M.C./Cont. . . .	
125 c.c. E.M.C.-Puch, Racing model— Recommendation on request according to tune and fuel.	
EXCELSIOR	
122 c.c. Villiers eng. Universal 18 mm plug	HBV
122 c.c. Villiers eng. Universal & Condor	HN
147 c.c. Villiers eng. Pioneer Courier & Condex	HN
148 c.c. Excelsior eng. Courier & Convoy	HLN
197 c.c. Villiers eng. Roadmaster & Autocrat	2HN
244 c.c. and 246 c.c. Excelsior eng. Talisman Twin and Talisman Sports	HLN
Super Talisman Twin	HLN
FICHTEL & SACHS	
Sachs 150, 175	HBV
Sachs 100	CV
Sachs 50	HN
Famo 98—14 mm heads	CN
Famo 98—18 mm heads	BV or BBL
Famo 98 M50	CV
SM91	HV
Stamo 98, 120, 160, 250, 300, 360	CV
FLANDRIA	
125, 175, 200, 250 c.c.	HN
F.N.	
M60, M67, M80	HBV
M90	BV or BBL
Model 20 and Series III Luxus	HN
M86 Super Sport and Lightweight M22	2HV
450 c.c. model	HBV
250 Twin	HN
FRANCIS BARNETT	
175 c.c. model 79 Light Cruiser	HLN
122 c.c. Villiers eng. Snipe and Merlin J48, K48 and L51	HBV
122 c.c. Villiers eng. Merlin and Kestrel N51, 052, 53, 57, 59, 61, 63, 66 and 69	HBN
197 c.c. Villiers eng. Falcon 054, 55, 58, 60, 62, 64, 65, 67, 70 and 72	2HN
147 c.c. Villiers eng. Kestrel and Plover 69, 73 and 78	2HN
225 c.c. Villiers eng. Cruiser 68, 71 and 75	2HN
249 c.c. A.M.C. eng. Cruiser 80	HLN
Falcon, Villiers 10E engine	2HN
Falcon Model 87 (199 c.c. A.M.C.)	HLN
Cruiser Model 84 (249 c.c. A.M.C.)	HLN
Trials Model 85 (249 c.c. A.M.C.)	HLN
Plover Model 86	HLN
Fulmar	HLN
New 150 Model 96 (149 c.c. A.M.C. 15T)	HLN

All Spark Plug Gaps should be set at ·020" (·50 mm) unless otherwise stated

MAKE & MODEL	PLUG
FRANCIS BARNETT/Cont. . . .	
Plover Model 95 (149 c.c. A.M.C. 15T)	**HLN**
Fulmar Model 88 (149 c.c. A.M.C. 15T)	**HLN**
Sports Fulmar Model 90 (149 c.c. A.M.C. 15T)	**HLN**
Cruiser Twin Model 89 (250 c.c. Villiers 4T Twin)	**2HN**
Sports Cruiser Twin Model 91 (250 c.c. Villiers 4T Twin)	**HLN**
Trials Model 92 (246 c.c. Villiers 32A)	**HLN**
Scrambler 82 (A.M.C. Eng.)	**2HLN**
GARELLI	
50 c.c., 98 c.c.	**2HN**
KL100	**HN**
Monza, Rekord, Cross, Minibike	**2HLN**
Baby Mosquito, Minibat, Junior Turismo	**HN**
GEIER	
125 c.c. and 175 c.c.	**HN**
150 c.c.	**2HV**
100K (Ilo FM100 engine)	**HBV**
100K (Famo 98 engine)	**BV or BBL**
100K, VM100 (Famo 98 M50 engine)	**CV**
200 (Ilo M200 engine)—	
up to 1952	**HN**
1953 on	**2HV**
GILERA	
124 c.c., 125 c.c., 150 c.c., B300, 175 c.c., Jubilee 500 V.T. Mercurio—	
½" reach	**HN**
¾" reach	**HLN**
250, 500 Standard	**HBV**
500 Sports	**HAN**
G150 Sports, Cast Iron Head	**HN**
G150 Sports, Alloy Head	**HBLN**
B300 Short Reach	**HN**
B300 Long Reach	**2HLN**
98 c.c. Long Reach	**HLN**
GILLET	
125 c.c. Utilitaire; 150 c.c. Standard	**HN**
250 c.c., two-stroke	**CN**
250 c.c., four-stroke	**HN**
300 c.c.	**CN**
350 and 500 c.c.	**HBV**
125 c.c. two-stroke	**HBN**
GNOME ET RHONE	
350 c.c., o.h.v., 800 c.c.	**CV**
R3, R4, 125 c.c.	**2HN**
L53, 175 c.c.	**HN**
R1, R2	**HN**
GORICKE-WERKE	
Go 98 (Famo 98 engine)	**BV**
Go 98 (Famo 98 M50 engine)	**CV**
Go 100K, Go 100TN	**HBV**
Go 125K	**2HN**
Go 150	**HV**
Go 175	**2HN**
Also see engine make.	
GREEVES	
Recommendations on request	

MAKE & MODEL	PLUG
HARLEY-DAVIDSON	
Model K	**2HN**
Model S, 125 c.c.	**CSN**
1952 models requiring 14 mm plugs	**CN**
E, EL, ES, F, FL, FS, requiring 14 mm plugs	**HAN**
E, EL, F, FL, requiring 18 mm plugs—	
Front	**HBV**
Rear	**HBV**
FLHF, FLH, FL	**HAN**
G, GA, WL, U, UL	**CV**
14 mm	**CSN**
18 mm	**HBV**
HECKER	
K125, K175K	**HN**
HERCULES	
Corvette	**HAN**
200 R	**HV**
Prior, 47 c.c., 215, 216, 217, 218	**HBN**
312, 314, 322	**CN**
317, 321, (I lo M200 engine) 1952	**2HN**
317, 321, (I lo M200 engine) 1953	**2HV**
313, 320	**2HV**
316	**CV**
315	**HBV**
350, S204, S35/4, K125, K125/7	**CN**
S5, 500, S125	**CV**
MF2 (Famo 98 engine)	**BV**
MF2 (Famo 98 M50 engine)	**CV**
H.M.W.	**CN**
HOFFMAN	
MF 10/98 (Famo 98 engine)	**BV or BBL**
MF 10/98 (Famo 98 M50 engine)	**CV**
175 Krad, MR 125, HWL 125	**2HN**
MHF 125	**HN**
MR 120-2 Krad	**HBV**
Gouveneur 250 and 300 c.c.	**2HN**
200 (Ilo M200 engine)—	
1952	**2HN**
1953	**2HV**
HONDA	
CB450 (450 c.c.)	**2HLN**
CB 350 (350 c.c.)	**2HLN**
CB250 (250 c.c.)	**2HLN**
300 c.c. C77, CS77, CA77, CAS77, CB77—	
10 mm Heads	**2HL10**
12 mm Heads	**H12**
250 c.c. C72, CS72, CA72, CAS72, CB72, Super Sport, CL72—	
10 mm Heads	**2HL10**
12 mm Heads	**H12**
175 c.c. CB175, CD175, 160 c.c. CB160—	
10 mm Heads	**2HL10**
12 mm Heads	**H12**
150 c.c. C95, CA95—	
10 mm Heads	**2HL10**
12 mm Heads	**H12**
125 c.c. C92, CS92, CB92 Super Sport, CB125, 125SS—	
10 mm Heads	**2HL10**

MAKE & MODEL	PLUG
HONDA/Cont. . . .	
12 mm Heads	**H12**
90 c.c. C200, CT200, Super 90, C90	**H12**
CD90, CM90, CE90, CM91, CS125 Twin	**H12**
65 c.c. S65, C65	**2HL10**
55 c.c. CD105, C105, C115	**2HL10**
50 c.c. C100, C102, C110, C111, C114, P50, PC50	**2HL10**
50 c.c. C50, CT50, CZ50, CZ50M, SS50, ST50	**2HL10**
HOREX	
Resident 250 and 350	**3HLN**
Rebell 50	**HN**
Rebell 100	**HV**
1954-55, Imperator, Regina 250, 350, 400	**2HLN**
1951-53, Imperator	**2HN**
1952-53, Regina	**HN**
1952-53, Regina Sport	**3HN**
1948-51 SB.35 Regina	**2HLN**
S2, S3	**HBV**
HUMMELL	
Sitta 100, 120	**HBV**
Sitta 125	**HN**
Sitta 150	**HV**
Sitta 200-1952	**2HN**
Sitta 200-1953	**HV**
HUSQVARNA	
Apollo, two-stroke	**CV**
170SV, 180SV, 190SV, 25SV, 30SV, 31SV, 35SV, 50SV, 61SV, 110SV, 112SV, 120SV, 130SV, 36SV, 40SV	**CV**
30TV, 50TV, 50TVA, 50TVB 50TVX	**CV**
35TV, 110TV, 112TV, 120 c.c., 175 c.c.	**HBV**
Silverpilen A5	**HBLN**
INDIAN	
Arrow, Scout, Chief 74", Blackhawk, Chief 80"	**HAN**
Brave, Pinto G1, Scooter SC1, Pathfinder G2, Mohawk G80, Trials G3C, Forty-Five G15	**HBLN**
Woodsman, Arrow G2CS, Westerner G80CS, Typhoon G80TCS, Apache G12CS-CSR	**2HLN**
Apache ¾" Reach	**2HLN**
Apache ½" Reach	**2HN**
Trailblazer, Tomahawk, Fire Arrow, Fire Arrow Hound	**HN**
I.L.O.	
F48	**HN**
F60 Famo, F60H, F60R, 80, 33/80, 33/100	**BV or BBL**
FM48	**BV or BBL**
FM100, FM100V, FM100KV, FM120V, FK120V, FM100/120	**HBV**
FP50, G50	**HBN**
L200V	**BV**
LSU100	**HBV**
LE145, LE175, LE200 (BK)	**CV**
LE2 × 200 (BK), LE250G3R, LE250DS	**HBV**

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MAKE & MODEL	PLUG
I.L.O./Cont. . . .	
LEGR200	CV
LEGR2 × 200, LEGR250, LEGR2 × 250	HBV
M125V, M175, M175V	HN
M200—1952	2HN
M200—1953	2HV
M200V, MG200V	2HV
M250, M2 × 125	2HN
MG100, MG125, MG125E, MG124EF, MG125VF	HN
MG125ER, MG125E/H, MG125EL, MG125V, MG150V	HBV
MG150, MG175, MG175F, MG175S, MG175T, MG175TF, MG175V	HN
MGDV200, MGT200, MGT250	HBV
MSL123	BV or BBL
MSL145	CV
ISO	2HN
ITOM	
Tauor Sports	CN
JAMES	
98 c.c. Villiers eng. Comet, Commodore, Comet, MK.II, Comet De Luxe and Comet 100	HBN
122 c.c. Villiers eng. Cadet Comp. and Cadet Mk.II	HBN
147 c.c. Villiers eng. Cadet and Cadet 150	2HN
149 c.c. A.M.C. eng. Flying Cadet	HLN
172 c.c. A.M.C. eng. Cavalier	HLN
197 c.c. Villiers eng. Captain, Captain Comp., Colonel, Commando, Cotswold, Captain 200, Commando 200 and Cotswold 200	2HN
224 c.c. Villiers eng. Colonel and Colonel 225	2HN
249 c.c. A.M.C. eng. Commodore, Cavalier	HLN
249 c.c. A.M.C. eng. Commodore Scrambler	RL50
249 c.c. A.M.C. eng. Commodore Trials	2HLN
250 c.c. Villiers Twin New 150, Model M16,	2HN
149 c.c. A.M.C. 15T eng.	HLN
Captain Model L20, 199 c.c. A.M.C. 20T eng.	HLN
Captain from Sept. 1959 on, 199 c.c. A.M.C. eng.	HLN
Captain Model L20S, 199 c.c. A.M.C. 20S eng.	HLN
Sports Super Swift Model M125S, 250 c.c. Villiers 4T Twin-eng.	HN
Trials Commando Model M25T, 246 c.c. Villiers 32A eng.	HN
Cotswold Scrambler Model M25RS, 247 c.c., Villiers Starmaker	RL50

MAKE & MODEL	PLUG
J.A.P.	
S.V. to 1350 c.c. except 500 c.c. Twin	CV
O.H.V. models, 14 mm	HN
O.H.V. models, 18 mm	HBV
JAWA-CZ	
500 c.c.	CAN
1954 on 90 c.c., 125 c.c., 150 c.c.	HN
175 c.c.	HN
200 c.c., 250 c.c., 350 c.c.	HN
Other 14 mm Models	CN
KAWASAKI	
85J1, 85J1T, 85J1TR, 125B8	HAN
125CL, 125B8M, 50B8S, 175F1TR, 175F1, 175F2, 250A1, 250A1SS, 350A7, Avenger	HN
650W1, Commander	2HN
	HLN
MAICO	
M125, M126, M150, M151, M153, M175, M175-1, M200	HN
M175-S11, M200-S11, MB200, M250-S	2HN
Blizzard M250-S1, M250-S11, M277-S	HN
Taifun-350 and -400	2HN
Mobil MB-151, MB-175	HBN
Mobil MB-200	2HN
Maicoletta-175, -250, -277	2HN
Wiesel-50	HN
F100 (Famo 98 engine)	BV
F100 (Famo 98 M50 engine)	CV
Typhoon Scrambler	2HN
MASERATI	
125/T2, 124TV22, L160T4, 75/T2	HN
250/T4	HBLN
MATCHLESS	
1964 on G3C Maestro, G3C Trials	HLN
1964 on G80 Major, G12 Majestic	HLN
1964 on G15, G15CS, G15CSR, P11A	2HLNY
G3 Mercury, G12 CSR Monarch	2HLN
G2 CSR Monitor Super Sports	2HLN
S.V. Models 14 mm	CN
1946 350 c.c.	CN
1946 500 c.c.	HN
1947-49 All models Cast Iron Heads	HN
1950-64 All models Alloy Heads except Scramblers and Racer	HBLN

MAKE & MODEL	PLUG
M.M.	
51AS, 54A, CTS Spinta	2HLN
51AS Spinta	3HLN
500VL, CT, 51A	HLN
Motocarro	2HN
47D	2HN
47A, 47C	HBN
47AS	3HN
MONDIAL	
48, 125, 160, 175	HN
MONTESSA	
D51	CN
Brio 80 Sports 125 c.c.	2HN
Brio 80, 125 c.c.	HN
Brio 90, 125 c.c.	2HN
Impala Sport	2HN
MORINI	
125T & S, 175T, Briscola	2HN
175 GT, 48 4T	2HLN
175 Settebello, Re Bello	3HLN
MOTOBECANE	
Velomoteur	CN
S.V. 14 mm	CN
Other models 14 mm	HN
350 c.c. 2 Cyl. long reach	2HLN
MOTO-GUZZI	
Galleto-Airone N	CAN
Airone Sports, Falcone	2HN
Astoree, Super Alce	CAN
Aldette Egretta Airone PE205S, V, GTV	HBV
Alce GTW, moto chassis R.3 wheeler	HV
Zigolo, Cardellino	HN
Lodola, Stornello	HBLN
Galetto 175	CLNH
MOTO-MORINI	
125 c.c., 175 c.c.	HLN
Gyromat	HBLN
SA, S5, F2, 3M, 3MK, 3MV, 4MP	2HN
3M/SS, 3CV, 4MP/V, 4MP/S, 4MP/SV	3HN
M.V. AUGUSTA	
83 c.c., 99 c.c.	2HN
125T, 150T	HBN
125S, 150S, 175, CS	2HN
175CST, L	CLNH
235 c.c.	HLN
NORMAN	
Anzani Engs.	HN
Others—See Villiers Engs.	
NORTON	
All S.V. 18 mm	2HV
Model 16H, 500 c.c. s.v.	HBLN
Big Four 596 c.c. s.v.	HBLN
Model 18 490 c.c. o.h.v.—30, 40 Cast Iron	HN
30, 40 Alloy	2HLN
ES2, 88, 7, Cast Iron	HN
ES2, 88, 7, 99 Alloy	HBLN
19R, 19S, 50, 77, 500T	HBLN
650 Dominator, 650 Mercury	HLN
1964-on, all models except Atlas	HLN
Atlas 750 c.c., Commando, P11A	2HLNY

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MAKE & MODEL	PLUG
N.S.U.	
25 10SL	HN
Fox, Super Fox 125 c.c., Super Lux 200 c.c., Max 250 c.c., Super Max 250 c.c., 300 (OHC)	HN
PANTHER	
60, 65, 70, 75, 100, 100S and 120S	HBN
Stroud, Mk.II and Mk.III	HBN
10/3, 10/4, 25, 35, 45, 50, 120	HN
PARILLA	
125, 150	HN
125S, 175S, 250S	2HN
98, 250T	HN
250C	2HLN
PEUGEOT	
150 c.c., P155, P156	HBN
175 c.c.	CN
250 c.c. 2 cyl. 256	HN
175 c.c. 176 Grand Sport	2HLN
PUCH	
60 c.c., 125 c.c., 175 c.c., 250 c.c.	HN
RABENEICK	
LM100E (Famo 98 engine)	BV or BBL
LM100E (Famo 98 engine)	CV
KM100	HBV
SM125, SM175	HN
SM150	2HV
SM500	HBN
Binetta (47 c.c. Sachs engine)	HN
Also see Ilo Engines	
ROYAL ENFIELD	
350 c.c. Clipper and C	
248 c.c. Clipper and Crusader and J2 500 c.c. 248 c.c.	
Olympic	HN
Continental, Continental GT	2HN
Ensign, P.E. Prince	CN
350 c.c. Bullet, 500 c.c. Bullet—	
½" reach	HN
¾" reach	HBLN
Meteor Minor Sports	HBLN
Super Meteor, Meteor Minor ½" reach	HN
½" reach	HBLN
700 c.c. Meteor Twin, 500 c.c. Twin ½" reach	HN
700 c.c. Constellation	HBLN
Trials Works Replica	HN
249 c.c. Turbo Twin	2HN
736 c.c. Interceptor	HLN
SAROLEA	
Simoun	2HN
Model AS, 350 c.c. s.v.	CN
T. Shoco, 500 c.c.	CV
B35, 50BL, Sports and Vedette, 350 c.c. o.h.v.	2HN

MAKE & MODEL	PLUG
SAROLEA/Cont. . . .	
T6 Tourist, 50T6, 50TL6	CN
S6 Super Sport 50, SL6, 600 c.c., o.h.v. & s.v.	HBN
50LW Bluebird, 125 c.c.	HN
SUZUKI	
50 c.c. M15, M15D	3HAN
M12 Super Sport	3HAN
80 c.c. K10, K11 Sport	3HAN
125 c.c. 531	3HAN
125/150 c.c., 530/532	3HAN
250 c.c. T10 Twin	3HAN
T20	3HN
AS50, A100, T200, T500	3HN
All other models	3HAN
TANDON	
Anzani Eng.	HN
Others—See Villiers Engs.	
TRIUMPH	
150 c.c. Terrier, T20, T20C, T20T, T20SL, Tiger Cub	
T20SH, TR20, Trials Cub	HN
TS20 Scrambler	2HN
3T, 5T Speed Twin, 6T Thunderbird and TR5 Trophy, Cast Iron	HN
TR5 Trophy Alloy, TR5A, 6T Alloy	HLN
T100, T110 Cast Iron	2HN
T100, T110 Alloy, 21, 5TA, T100A, Bonneville, T120R, TR7A	HLN
Other O.H.V. models 14 mm	HN
S.V. models 14 mm except TRW	CN
Tiger 90	HLN
T150 Trident	2HLN
TR6, T120 to 1968	HLN
TR6, T120 1968 on	2HLN
Saint 650 c.c.	2HLN
Grand Prix and T120C racing models—Recommendations on request according to tune and fue	
VELOCETTE	
150 T.P. 25 c.c. 2 stroke	HN
M.O.V. 250 c.c. o.h.v.	HN
K.S.S. 350 c.c. Mark II	HBLN
M.A.C. 350 c.c. Cast Iron Head	HN
M.A.C. 350 c.c. Alloy	HBLN
M.S.S. 500 c.c. Cast Iron Head	2HN
M.S.S. 500 c.c. Alloy	HBLN
Viper Sports, Viper Clubman, Venom Special, Venom Sports (.025") (.65 mm)	HLN
Viper, Special, Venom Clubman, Venom Endurance, 350 Scrambler, 500 Scrambler and Vee-line models	2HLN
LE, Valiant, Vogue (.025") (.65 mm)	2HL10
Viceroy	HBLN
Venom Thruxton	2HLN

MAKE & MODEL	PLUG
VILLIERS ENGINES	
75 c.c. Mk. 7	BN
75 c.c. Mk. 7/1	CN
98 c.c. Junior	CN
98 c.c. Mk. 1F	HN
98 c.c. Mk. 2F	HN
98 c.c. Mk. 4F	HN
98 c.c. Mk. 6F	HN
122 c.c. Mk. 10D	HN
122 c.c. Mk. 11D Comp.	HN
122 c.c. Mk. 12D	HN
122 c.c. Mk. 13D	HN
122 c.c. Mk. 8D, 9D	HN
147 c.c. Mk. 8C	CV
147 c.c. Mk. 24C	HBV
147 c.c. (Mk. 24C) Invalid Carriage	HBV
147 c.c. (Mk. 26C) Invalid Carriage	HBV
147 c.c. Mk. 29C	2HN
147 c.c. Mk. 30C Fan cooled	2HN
148 c.c. Mk. 31C	2HN
148 c.c. Mk. 12C	CB3
172 c.c. Sports	CB3
173 c.c. Mk. 2L, 3L	2HN
197 c.c. Mk. 6E	2HN
197 c.c. Mk. 7E	2HN
197 c.c. Mk. 8E, 10E, 11E	2HN
197 c.c. Mk. 9E and 35F, 45F	2HN
225 c.c. Mk. 1H	2HN
246 c.c. Mk. 2H	HN
246 c.c. Mk. 31A, 32A, 31A/3S, 31A/4S	2HN
246 c.c. Mk. 33A, 34A, 36A	2HLN
249 c.c. Mk. 2T Twin, 35A, 37A	2HN
249 c.c. Mk. 14A, 17A, 18A	CB3
324 c.c. Mk. 3T Twin 4T Twin	2HN
353 c.c. Mk. 28B	2HN
VINCENT (HRD)	
Black Shadow	HBLN
Rapide	CLNH
Comet, Meteor, Lightning, Prince Knight, Victor	HBLN
Grey Flash 500 c.c.	2HLN
YAMAHA	
Standard YE, YDS-1, YL-1E, YA-5, YA-6	HN
YA-1	CAN
YA2-3, MF2K, MF3D, MJ-2, U-5, YF1, YG-1, MG-1T, YA-6, YG-1K, YDT-1, YL-1, YGS-1, YL2, YL2-C, YCS-1, YJ1, U7, YG-1TK, YG-1SF, YDS-1)	2HN
YD3, YM-2C, YR-1, YJ-2, YDS-3, YM-1, YDS-2	
YDS-5, YDS-3C, YDS-6	2HN
YASI	R49
TDI Racer	RL50
ZUNDAPP	
18 mm	HBV
KS50, KS75, KS100, 600/601 and 601 Sport	2HN
K500, DBK200, 250	CN
DB200, 201, 202, Norma	
Luxus, Komfort, Elastic	HAN
200, 200S, Combinette	HN

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SCOOTERS and MOPEDS

MAKE & MODEL	PLUG
A.B.G.	**CN**
ACHILLES	
Lido	**HBN**
AGUSTA	**HN**
A.J.W.	
48 c.c.	**HN**
ALBATROSS	
Scooter 225 c.c.	**2HN**
Scooter 250 c.c.	**HN**
ALCYON	
Models 20, 22, 23Z	**HBN**
Model 21 125 c.c. (A.M.C. Eng.)	**HN**
Model 19 175 c.c. (A.M.C. Eng.)	**HN**
250 c.c. O.H.V. (A.M.C. Eng.)	**2HN**
98 c.c. Cyclomoteur (V.A.P. Eng.)	**CN**
175 c.c. (Surchar Eng.)	**2HN**
350 & 550 c.c. Models	**2HN**
Velomoteurs 62 & 63	**CN**
S.V. Models using 18 mm Plugs	**CV**
ALMA	
125 c.c. & 175 c.c.	**CN**
ALPINO	
98 c.c.	**HN**
48 c.c. Models F, T, R	**HN**
75 c.c. & 125 c.c. Scooters	**HN**
75 c.c. & 200 c.c.	**HLN**
A.M.C.	
Mustang	**2HN**
A.M.I.	
Scooter	**HBV**
A.M.O.	**BAN**
AMSTEL	**HN**
ANKER	
Ankermatic	**HN**
APOLLO MOTORETTE	
Motorette 80 c.c.	**CN**
55L, 58L	**CN**
68F, 68F2, X1	**CN**
Z1, Z3, Z5	**CN**
Z7, Z9, Z11	**CN**
Biet	**BV**
Mopeds Z & X	**CN**
ARDITO	
48, 75	**CN**
AUBIER-DUNE	
100 125 c.c.	**CN**
AUTOMOTO	
49 c.c., 100 c.c.	**CN**
125 c.c. Sports	**CN**

MAKE & MODEL	PLUG
AUTOPED	**CN**
AUTOVAP	
Moped	**CN**
AVADA	**HBN**
AVARDS	**HBN**
BANTAMOTO	**CLNH**
BATAVUS	**HBN**
BENELLI	
49 c.c. G.T. Moped	**2HLN**
49 c.c. Scooter & Leoncino 4T	**2HLN**
52 c.c. Scooterino	**2HLN**
BERINI	
M35, M35S	**2HN**
M36	**2HN**
M23	**CN**
M19, M21, M22	**HBN**
26 c.c. & 32 c.c.	**HN**
BERNADET	
Scooter	**HN**
BIANCHI	
45 Aguilotto	**CN**
Falco	**HN**
78 c.c. Scooter	**HN**
Berina 125 c.c. Scooter	**HN**
Orsetto 50 c.c.	**2HN**
BINETTA	**HN**
BINZ	
47 c.c. Scooter	**CN**
BOND	
P1, P2, P3, P4 Scooter	**2HN**
BOWN	
98 c.c., Moped 50	**HN**
BREDA	
65	**CN**
BRIERN	
175 c.c.	**HN**
BRITAX	
48 c.c. Cucciolo	**HN**
B.S.A.	
Dandy 70 c.c.	**HN**
Sunbeam B1, 175 c.c.	**2HN**
Sunbeam B2, B2S, 250 c.c. (Gap ·025") (·65 mm)	**HN**
Beagle	**2HL10**
CAPITANO	
Moped	**2HN**
CAPRI	
50, 70, 80, 98	**HN**
100, 125, 150	**HN**

MAKE & MODEL	PLUG
CAPRIOLO	
124	**HN**
75 Normal	**HN**
75 Sport	**2HN**
Centro 50	**HBN**
Caprilo	**2HN**
CAPRONI	
Vizzola Cavilux, Cavimax	**2HN**
CARNIELLI	
48, 65, 125 c.c.	**HN**
CAZENAVE	
48 c.c.	**CN***
CACCATO	
48 Romeo, 75, 98	**HBN**
CENTRO	
49 c.c., 75 c.c.	**HN**
CIMATTI	**HBN**
CLAEYS	
Majestic	**2HN**
Vedette	**CN**
CLUA	
49 c.c.	**HN**
COMET	
BP40	**CN**
63 c.c.	**CLNH**
CORGI	**HBLN**
CSEPEL	
100 c.c.	**CN**
CYCLEMASTER	**CN**
CYCLEMATE	**CN**
CYCLEX	**CN**
CYCLONETTE	**CN**
CYRUS	**HBN**
DAYTON	
Albatross	**2HN**
Flamenco, Continental	**HN**
DELIUS	
YM100S-K	**HBV**
Cityfix (Famo 98M50 Eng.)	**CV**
Cityfix (Famo 98)	**BV**
Elitex Standard (Lutz M58 Eng.)	**BN**
VM150	**CV**
DEMM	
49 c.c. Moped	**HN**
DERBI	
Scooter	**HN**
DERNY	
48 c.c. & 65 c.c.	**CN**
DIESALLA	
Moped	**CN**

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MAKE & MODEL	PLUG
D.K.R.	
148	HBN
173, 197	2HN
Dove, Pegasus, Defiant	HN
Manx, Capella	HN
D.K.W.	
Hobby 74 c.c. & 50 c.c.	HN
D.M.W.	
Bambi	HN
DOT-VIVI	
Moped, Racer	HN
Scooterette	HN
DUCATI	
55E, Puma de Luxe	HN
250 Daytona, 200 Super Sport	2HN
200 Gran Turismo, 80 c.c., 48 c.c.	2HN
DUCBOCK	HN
DUNLET	
49 c.c. Moped	CN
DUNKLEY	
Whippet, Sports, Popular, S65	CN
DURKOPP	
Diana, Diana Sports	2HN
Durkopp	2HN
Dianette Moped	HN
E.M.C.	
125 c.c.	CN
EMPO	HBN
EXCELSIOR	
Autobyk 14 mm, Monarch	HBLN
Scutabyke	HN
Golden V	2HN
Minor	HBN
EYSINK	HBN
FERBEDO	HN
FITCHEL-SACHS	
47 c.c. Mopeds	HN
Sachs 50/3LKH, 50/3, 50/4LKH	2HN
Sachs 100/3A, 175, 200	HBV
FITMOTOR	CN
FLANDRIA	
Majestic, King, Sporta	2HN
Vedette, Velocette	CN
FLINK	CN
F.N.	
T52, 49 c.c.	HN
125T, 50 Scooter	HN
FONGERS	HBN
FUCHS	CN
FURETTO	
Scooter	CN

MAKE & MODEL	PLUG
GALETTO	CN
GARELLI	
70 c.c., 95 c.c., 94 c.c.	HN
Monaco, Como	HN
38 c.c., 49 c.c.	CN
Garellino	CN
GAZELLE	HBN
GENIAL	
Lucifer	CN
GERMAAN	HBN
GILERA	
49 c.c., G50 Scooter	HN
GILLET	
Rene 100	CN
125 c.c. Scooter	CN
GIMA	
125 c.c. & 175 c.c.	HN
GNOME & RHONE	
125 c.c.	2HN
GOGGO (GLAS)	
125, 150, 14 mm	2HN
125, 150, 18 mm	HBV
200, 200 Luxus	HBV
Goggo 123 c.c. (MG125V Eng.)	HBV
Goggo 147 c.c. (MG150V Eng.)	HBV
Goggo 198 c.c. (MG200V Eng.)	2HV
GORICKE	HN
GUILLER	
48 c.c. & Scooter	CN
GUZZI	
65 c.c.	CAN
49 c.c. Dingo	HBN
HALLEIN (H.M.W.)	
MW 50 c.c. MW 75 c.c.	HN
75E, 75G	HN
50N3SG	2HN
50N3, 50NS, 50H	CN
HEINKEL	
125 c.c. Scooter	HN
150 c.c., 174 c.c. Tourist	HN
Perle 49 c.c. Moped	2HN
HERCULES	
Grey Wolf 49 c.c.	HN
Corvette	HN
Her-cu-Motor Mk.1 & Mk.II	CN
HERVO	HBN
HOFMANN	
Vespa	HN
HONDA	
50 c.c. Models	2HL10
HUSQVARNA	
Novelette	CN
50 c.c. HVA	HN

MAKE & MODEL	PLUG
ILO	
48 c.c.	HN
I.S.O.	
Isomoto..Milano	2HN
ITOM	
Astor Competition	HN
Astor Super Sports	HN
Astor	CN
50 c.c. Junior, Esperia	CN
JAMES	
A.M.C. Engines	HBLN
JAWA	
Robot 99 c.c.	CN
Cezeta 172 c.c.	CN
550 49 c.c., 555	HN
05, Manet	HN
M20, Tartan 125	HN
JAWETTA	HN
J.B. MOTORS	
48 c.c.	CN
JEANETTE	
Scooter	CN
JONGHI	
100 c.c., 125 c.c.	CN
JUNCKER	HBN
KERRY	
Capitano	2HN
KIEFT	
215 (K50) 40 c.c.	CN
Prior 200 c.c.	HBV
KREIDLER	
All Models	2HN
K.T.M.	
Rotax Motor	HN
LAVALETTE	
40 c.c., 60 c.c.	HN
100 c.c., 125 c.c.	HN
LAMBRETTA	
1946-47 Model A	CN
1948-51 Models, B, C, 4C	HN
1952 on Models D, FD, LD, E	2HN
1952 on Models LDA, LDB & Moped	2HN
TV175, TV200	HLN
All Models 1959 on	HLN
LAVERDA	
75T	CN
75S, 200 c.c., 60 c.c. Scooter	HN
LEOPARD	HN
LE POULAIN	CN
LEVIS	
80 c.c.	HN

All Spark Plug Gaps should be set at ·020" (·50 mm) unless otherwise stated

MAKE & MODEL	PLUG
LOCOMOTIEF	
B8, B9	HBN
B10, B11, B12	CN
Sachs Motor	HBN
Berini M23 Motor	CN
LUTZ	CN
MAGNEET	HBN
MAGNET DEBON	
50 c.c., 100 c.c.	CN
125 c.c. & Scooter	CN
MAICO	
Diesel Moped	HN
Maicomobil, Maicoletta	2HN
MALAGUTI	HN
MANURHIN	
74 c.c.	HN
MARS	
Sachs 50 c.c.	HN
Stella 175	HBV
98S, 48J (Famo 98 Eng.)	BV
98S, 38J (Famo 98 M50 Eng.)	CV
M.A.S.	
175 Zenith	HBN
125 Stella Alpina	HBN
175 Sport	2HN
125 S	HLN
MERCURY	
Mercette 48 c.c.	CN
Whipple 60	CN
Hermes 49 c.c., Dolphin, Pippen	HN
MESSERSCHMITT	
Kabinen Scooter	HBV
MINARELLI	
Kapitano	2HN
48 c.c., 75 c.c.	HN
MI-VAL	HN
MONARK	
M50, M55, M57	BAN
M10, M20, M40, M41, M42	CN
M45 (JB), M56, M56F	CN
M24, M31, M32, M33, M34	HN
M34F, M35, M36, M38	HN
M60, M61, M62	HN
MOSQUITO	
38, 48, BMG, 49	CN
MOTOBECANE	
Mobylette, Moby Scooter 125 c.c. (Gap ·016") (·40 mm)	HN
D45, Mobymatic, Standamatic (Gap ·016") (·40 mm)	HN
Luxamatic, All 49 c.c. Models (Gap ·016") (·40 mm)	HN
1·5 H.P., 2·5 H.P. (Gap ·016") (·40 mm)	HN
Z22, Z23, Z46, Z56 (Gap ·016") (·40 mm)	HN
L4C, 147 c.c. (Gap. ·016") (·40 mm)	HBLN
Cady (Gap ·016") (·40 mm)	CNY

MAKE & MODEL	PLUG
MOTOBI	
48, 98, 125	HBLN
MOTOM	
48 c.c.	CN
MUSTANG	CN
M.V.	
425 (13M) 4M	HN
Chicco 150 c.c.	HBLN
Autobyk 14 mm	HN
NORMAN	
98 c.c. xF	HN
Nippy & Lido (Villiers Eng.)	2HN
Nippy & Lido (Mi-Val Eng.)	HN
Nippy & Lido (Sachs Eng.)	HN
Nippy & Lido (Motobecane Eng.) (Gap ·016" ·40 mm)	HN
N.S.U.	
Prima 150 c.c., 175 c.c.	2HN
Quickly, Quick 50	HN
Lambretta	2HN
N.S.V.	
50 c.c. Nanni	CN
N.V.	
Automoped, Mopedscooter	CN
70 Hobby	HN
80 Progress	HBV
OSCAR	
125 c.c.	HN
197 c.c.	2HN
PACHANCHO	CN
PALOMA	
49 c.c.Minor, Dasi, Pal	HN
PANTHER	
Princess	HN
PARILLA	
48 c.c.	CN
125 c.c.	HBLN
150 c.c.	2HLN
PEUGEOT	
Scooter S57C, 125 c.c.	HN
49 c.c., Bimba, Leopard	CN
PHANOMEN	
Bob, 100 c.c., Ahoi, 125 c.c.	CV
Model 71, 123 c.c.	HBV
Model 72, 98 c.c.	CV
Model 78, 173 c.c.	2HN
PHILLIPS	
Rex Eng.	HN
Motobecane Eng. (Gap ·016") (·40 mm)	HN
Villiers Eng.	2HN
PIATTI	HN
PIROTTA	
43 c.c., 49 c.c., 75 c.c.	CN
PONETTE	CN

MAKE & MODEL	PLUG
PUCH	
Scooter & Moped	HN
RALEIGH	
Moped Mk.1	2HN
Roma, Wisp	HN
Supermatic, Ultramatic	HN
Automatic Runabout	HN
R.A.P.	HN
REX	
RM31, RM34, RM40	CN
RM50, Luxus	CN
504 VII, Standard	HN
Luxus VI, Luxus VIII, X, XX, 17	HN
RIEDEL	
R100	HBN
TR 150 c.c.	HBN
Scooter 150 c.c.	HN
RHOR	
Rolletta	HBV
ROTAX	
125	HN
ROYAL ENFIELD	
Fantabulus	2HN
ROYAL NORD	HBN
RUMI	
Tiposport 125 c.c.	2HLN
Little Ant, Standard	HBLN
Squirrel	HBLN
200 c.c. G.T.	2HLN
SAFARI	HN
S.E.R.	
49 c.c. Moped	CN
SERWA	
Cyclemotor	CN
SIMPLEX	
11, 12, M23	CN
S7, S8, S9, S14	HBN
SOLIFER	
Super Sport	HN
SOLEX	BN
SPARTA	HBN
SUPERIA	HBN
SUZUKI	
Suzy 50	3HAN
Suzy Mk.II	2HN
TALBOT	
Moped	CN
TEAGLE	
49 c.c.	CN
TERROT	
100 c.c. & 125 c.c. Scooters	HN
48 c.c.	CN
VM 53	HN

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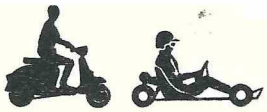

MAKE & MODEL	PLUG
TESTI	**HBN**
TORPEDO	
48 c.c. Moped	**CN**
TRIUMPH	
Tigress TS11. (Gap ·025") (·65 mm)	**2HN**
Tigress TW2. TW2S. 250 c.c. (Gap ·025") (·65 mm)	**HN**
Tina 100 c.c. Short Reach (Gap ·030") (·75 mm)	**HN**
Tina 100 c.c. Long Reach	**HBLN**
T10 Automatic	**HBLN**
T.W.N.	
Fips	**CN**
Contessa & Tessy	**2HN**
TYPHOON	**HBN**
UNION	
Sachs Eng.	**HBN**
Pluvier M23	**CN**

MAKE & MODEL	PLUG
V.A.P.	**CN**
VELOCETTE	
Viceroy 250 c.c.	**2HLN**
VESPA	
Grand Sports Models 1M, 2M, 3M, 4M	**HBLN**
VS5, 160GS, Messerschmitt, 180SS	**HBLN**
All other 125 c.c. & 150 c.c. Models	**HN**
90, 90SS, Vespino	**2HN**
Sportique, Primavera	**HN**
Ciao Moped	**CN**
98 c.c.	**CN**
VICOPED	
38 c.c.	**CN**
Lyx 48 c.c.	**CN**

MAKE & MODEL	PLUG
VICTORIA	
Vicky 1, 2	**CN**
Vicky 3,4	**HN**
Tory, Nicky, Peggy	**HN**
Precosia, Avanti-K	**HN**
VINCENT	
Firefly	**CN**
YAMAHA	
MJ2 (Gap ·025") (·65 mm)	**2HN**
MF2K, U5, U7	**2HN**
U5A, U7A	**2HN**
YDRAL	
125 c.c., 175 c.c.	**HN**
ZUNDAPP	
KS75	**3HN**
Bella 150, Bella 200	**HN**
Falconette	**HBN**

All Spark Plug Gaps should be set at ·020" (·50 mm) unless otherwise stated.

GO-KARTS

MAKE & MODEL	PLUG
ASPERA	
AH58, AH81	**HAN**
BRIGGS & STRATTON	
6BS	**HAN**
BULTACO	
125, 175	**R51**
CLINTON	
A40, E65, A400, A490, GK590, 990	**CAN**
CONTINENTAL	
AU85	**HAN**
GUAZZONI	
Guazzoni	**RL51**
GARELLI	
70-90 c.c.m.	**R49**
38-49 c.c.m.	**HN**
HOMELITE	
All models	**3HAN**
KOHLER	
K91	**HAN**

MAKE & MODEL	PLUG
KONIG	
K91	**R51**
LAUSON	
H25	**HAN**
LAVALETTE	
Lavalette	**2HN**
LIBERIA	
Liberia	**HAN**
MONTESA	
100, 125	**R51**
PEUGEOT	
BB	**2HN**
POWER PRODUCTS	
AH.51, AH.82	**3HAN**
AH.61 (Bushing engine)	**3HAN**
AH.61 (Std. & Super engines)	**3HN**
AH.58—$\frac{3}{8}$" reach	**3HAN**
Other $\frac{1}{2}$" reach models	**3HN**
RUMI	
100, 125 c.c. TT	**2HLN**

MAKE & MODEL	PLUG
SOLO	
Solo	**3HAN**
STANDON	
XM-82	**2HLN**
XM-62	**3HAN**
STIHL	
Stihl	**2HN**
VAP	
Vap	**2HN**
VILLIERS	
Villiers	**3HN**
WEST BEND	
390	**HBN**
510, 580, 580V5, 645, 700, 700V5	**3HAN**
610, 820, 61001, 61002, 82001, 82002	**3HN**
WISCONSIN	
Wisconsin	**HAN**
YDRAL	
Ydral	**HN**
ZURCHER	
Zurcher	**HN**

LODGE

RECOMMENDED
RETAIL
PRICE LIST

STANDARD PLUGS

THREAD SIZE	THREAD REACH	HEAT VALUE	TYPE	RETAIL
10MM	1/2"		2HL10	£0.30
12MM	1/2"	HOT	HB12	
			H12	
		COLD	2H12	
14MM	3/8"	HOT	BAN	
			CAN	
			HAN	
		COLD	3HAN	
14MM	1/2"	HOT	BN	
			CN	
			HBN	
			HN	
			2HN	
		COLD	3HN	
14MM	3/4"	HOT	BL14	
			CLNH	
			HBLN	
			HLN	
			2HLN	
		COLD	3HLN	
18MM	1/2"	HOT	BBL	
			CV	
			C3	
		COLD	HV	
18MM	3/4"		CB3	

EXTENDED NOSE PLUGS

THREAD SIZE	THREAD REACH	HEAT VALUE	TYPE	RETAIL
14MM	3/8"	HOT	BBANY	£0.30
			BANY	
		COLD	CANY	
14MM	1/2"	HOT	CNY	
			HNY	
		COLD	2HNY	
14MM	3/4"	HOT	BLNY	
			CLNY	
			HLNY	
			2HLNY	
			3HLNY	
			4HLNY	
		COLD	5HLNY	
14MM	1/2" TAPER		2HTY	
18MM	1/2" TAPER SEAT	HOT	BTNY	
			CTNY	
		COLD	HTNY	

Platinum Pointed Plugs	
HNP, CLNP, HLNP	£1.50
Racing Plugs	
R49, R50, R51, R53, RL49, RL50, RL51	
10R49, 10R50, 10R51, 10R53	£1.25
10RL47, 10RL50, 10RL52, 10RL53, 10RL54	
R47, RL47 (Platinum Pointed)	£1.50
Radio Screened Plugs	
14mm—SR14, SRL14	£1.00
14mm—Platinum SRL14PC	£2.10
18mm—SR1, SR2	£1.00
C2/90— screened elbow type plug cover complete with fittings for use with screened plugs	£1.25
Heater Plugs	
D18—1.2V, SMO5—12V	
12R4/3—Ballast Resistor	£1.10
Plug Covers	
Waterproof rubber R90	£0.25
M90X suppressed	£0.17
Plug Spanner	
LPS	£0.70

PLUG SELECTION

The nose of a spark plug is often subjected to extremely high temperatures and at other times to oil and carbon fouling. Under these conditions, the nose of the plug insulator must be sufficiently hot to burn off deposits which would otherwise adversely affect the efficiency of the plug and, at the same time, not so hot as to cause self-ignition.

Plugs are therefore designed to operate in varying heat ranges to suit different motors and motoring conditions. Thus a hot, or high compression engine should be fitted with spark plugs designed to rapidly dissipate the heat to which they are exposed. Such plugs are called cool-running.. Conversely, in a cool engine, 'hot running' plugs, designed to retain sufficient heat to burn away fouling deposits, should be fitted.

POPULAR BRITISH SPARK PLUG EQUIVALENTS

LODGE	CAN	HAN	CN	*HNY	HN	CLNH	*CLNY	HBLN	HLN	*HLNY	*2HLNY
CHAMPION	J8	J5, J6	L10 L96	L87Y	L7 L85 L86	N8	N11Y N12Y UN12Y	N5 N6 N84	N4 N88	N10Y N9Y	N6Y N7Y N64Y
AUTOLITE	A7 AT6	A3 AT3	AE6	AE32	AE3	AG5	AG42	AG4	AG3	AG32	AG22
KLG	FS50	FS75	F50	F65P	F75	FE50	FE55P	FE70	FE75	FE65P	FE125P

* extended nose types

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SERVICE: PUTNEY VALE · LONDON SW15 Tel: 01-452 8333

Ref. No. L9469/1

Popular spark plug equivalents

LODGE	CHAMPION	AUTOLITE	KLG
CAN	J8	A7, AT6	FS50
HAN	J6	A3, AT3	FS75
CN	L10, L90	AE6	F50
HBN	L88	AE4	F70
HN	L7, L85, L86	AE3	F75
*CNY	UL12Y, L92Y L95Y	AE52	F55P
*HNY	L87Y	AE32	F65P
CLNH	N8	AG5	FE50
*CLNY	N11Y, UN12Y N12Y	AG42	FE55P
HBLN	N6, N5, N84	AG4	FE70
HLN	N4, N88	AG3	FE75
*HLNY	N9Y, N10Y	AG32	FE65P
*2HLNY	N6Y, N64Y N7Y	AG22	FE125P

* Extended Nose Types

SMITHS INDUSTRIES LIMITED

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