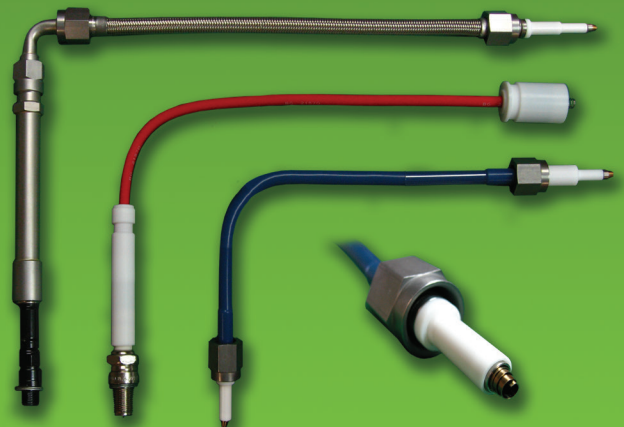
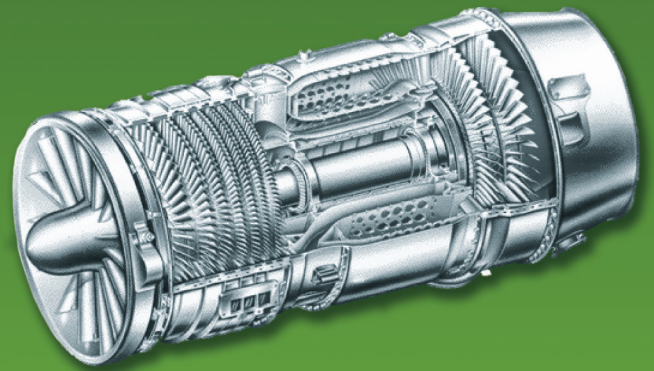


BG Ignition Products







BG Ignition Products have been world-renowned for over 95 years and have a well-established reputation for providing the exceptional reliability so necessary in today's industrial-oilfield applications. BG products are manufactured with exceptional care to extremely precise tolerances to assure maximum consistency in performance and long-term reliability. For additional information contact your nearest BG distributor or factory direct.

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BG'S NEW BLACKJACK™ 5000 SERIES EXTENSIONS & LEADS
PROVIDE GREATLY ENHANCED PERFORMANCE.



- Newly developed and patented glass filled polymer Insulator provides 30% greater dielectric strength and has a maximum service temperature over 50% higher than competitive OEM products.
- Impervious to corona damage: Eliminates dielectric puncture.
- PTFE coated O-ring increases sealing pressure to inhibit flashover & provide for easy installation and removal.
- DS™ Connector uses a double spring and will not loosen like Rajah types.
- Resistorized models available: 2kohm, 6kohm, 10kohm.

SPECIFY EXTENSION MODEL NUMBER BELOW:

Model No.

5 0

Specify Extension Length in Inches:
06", 08", 10", 12", or 14"

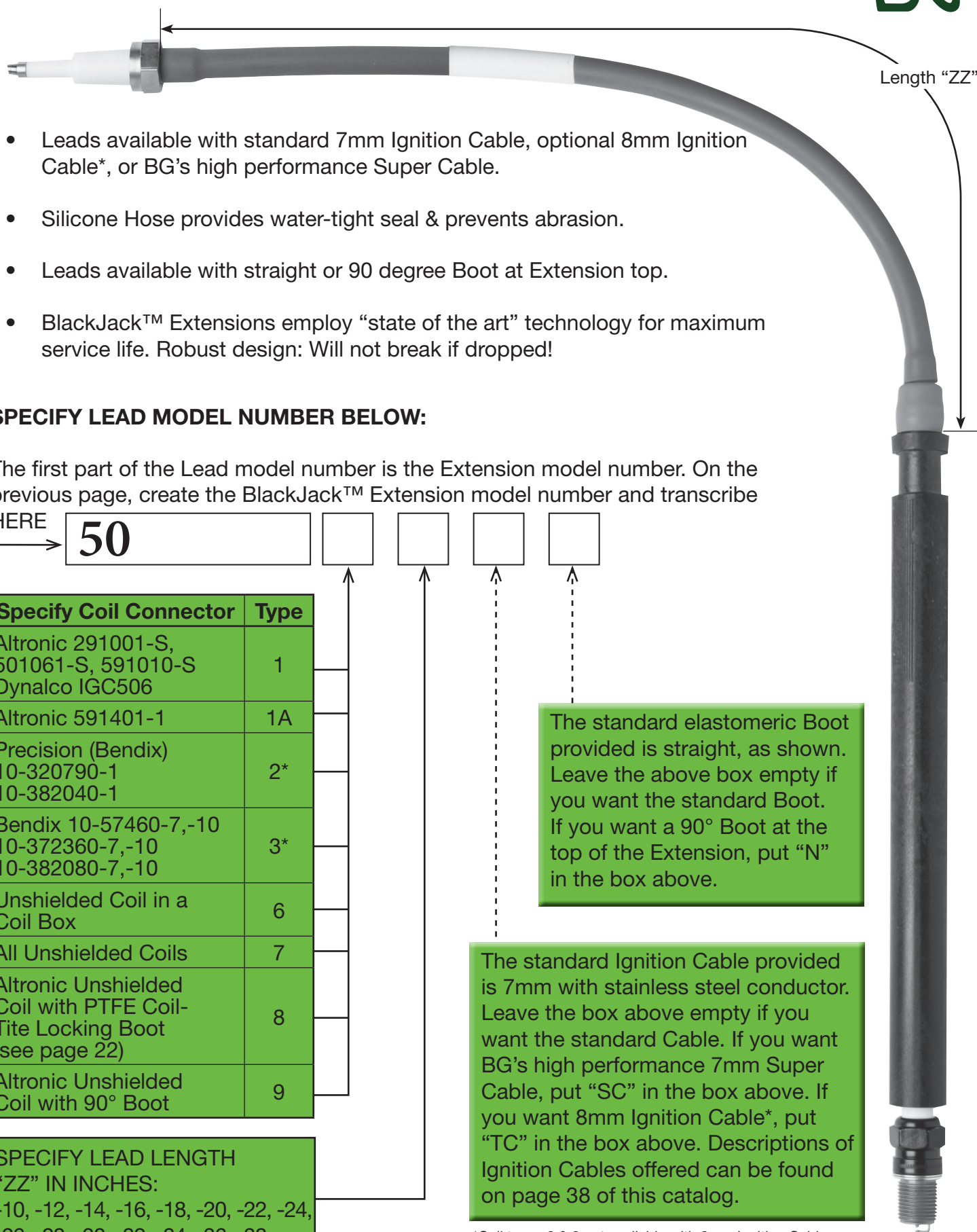
Specify Spark Plug Type	TYPE
RB77WPCC, GI3-X, etc.	A
RN79G, J6C, N5C, GE3-X, etc.	B
W80N, W85N, D9, etc.	C
W14, W18, W10	D
RB212-1, RB485-1	E
RM77N, RW80N, GT3-1, etc.	G

Specify Resistor Type	TYPE
No Resistor Required	NR
2kohm	2R
6kohm	6R
10kohm	10R

PATENTED PRODUCT

BLACKJACK™ 5000 SERIES EXTENSIONS & LEADS

BG



- Leads available with standard 7mm Ignition Cable, optional 8mm Ignition Cable*, or BG's high performance Super Cable.
- Silicone Hose provides water-tight seal & prevents abrasion.
- Leads available with straight or 90 degree Boot at Extension top.
- BlackJack™ Extensions employ "state of the art" technology for maximum service life. Robust design: Will not break if dropped!

SPECIFY LEAD MODEL NUMBER BELOW:

The first part of the Lead model number is the Extension model number. On the previous page, create the BlackJack™ Extension model number and transcribe HERE

→

Specify Coil Connector	Type
Altronic 291001-S, 501061-S, 591010-S Dynalco IGC506	1
Altronic 591401-1	1A
Precision (Bendix) 10-320790-1 10-382040-1	2*
Bendix 10-57460-7,-10 10-372360-7,-10 10-382080-7,-10	3*
Unshielded Coil in a Coil Box	6
All Unshielded Coils	7
Altronic Unshielded Coil with PTFE Coil- Tite Locking Boot (see page 22)	8
Altronic Unshielded Coil with 90° Boot	9

The standard elastomeric Boot provided is straight, as shown. Leave the above box empty if you want the standard Boot. If you want a 90° Boot at the top of the Extension, put "N" in the box above.

The standard Ignition Cable provided is 7mm with stainless steel conductor. Leave the box above empty if you want the standard Cable. If you want BG's high performance 7mm Super Cable, put "SC" in the box above. If you want 8mm Ignition Cable*, put "TC" in the box above. Descriptions of Ignition Cables offered can be found on page 38 of this catalog.

SPECIFY LEAD LENGTH "ZZ" IN INCHES:

-10, -12, -14, -16, -18, -20, -22, -24,
-26, -28, -30, -32, -34, -36, -38

*Coil types 2 & 3 not available with 8mm Ignition Cable.

BLACKJACK™ EXTENSION FOR CATERPILLAR® G3520C & G3600 ENGINES OUTPERFORMS ALL OTHER EXTENSIONS... AND AT LOWER COST!!!

BG's Blackjack™ Extension P/N 25717 Is Experiencing Service Life In Excess Of 7000 Hours With No Field Failures!

- Newly developed and patented glass filled polymer insulator provides 30% greater dielectric strength and has a maximum service temperature over 50% higher than competitive OEM products.
- Impervious to corona damage: eliminates dielectric puncture.

PATENTED PRODUCT

Proprietary elastomeric sealing sleeve eliminates surface arcing at the coil interface.

"Easy-Grip" rib design provides for ease of installation & removal.

Intelli-Shroud™ spark plug terminal reduces corona formation.

Dual PTFE coated O-rings provide better sealing pressure on the spark plug insulator to inhibit flashover.

Deeper spark plug well extends flashover coverage.

ULTIMA SERIES

BG

Ceramic Seal-On Extensions Extend Spark Plug Life In Demanding Applications

Engine laboratory tests have shown that when a tight fitting spark plug boot is used, spark plug life is increased. Now BG introduces a composite ceramic PTFE extension that incorporates a PTFE coated Viton® O-ring for increased sealing pressure. Because the voltage necessary to “flash-over” the plug insulator is increased, spark plugs will operate at larger gaps that previously resulted in plug failure. . .

- High alumina ceramic prevents dielectric break-down due to corona cutting.
- Viton® O-ring increases sealing pressure, yet makes extension easier to install.
- DS™ Connector uses a double spring and will not loosen like Rajah types.
- Model available for use with silicone hose (stud connection).

ORDERING INFORMATION

APPLICATION

For 7mm wire only

For 7mm wire with
silicone hose

MODEL

Order P/N 23155 - ☐ ☐

Order P/N 23160 - ☐ ☐ ☐

P/N 23550* - ☐ ☐ ☐

P/N 25765** - ☐ ☐ ☐

SPECIFY LENGTH “X”

06” 07.25” 08” 10”
12” 14” 16” 18” 20”

SPECIFY SPARK PLUG TYPE

A

RM77N, W77N, RW82P, RM79F, D78Y
RW80N, RW83F, RW77N, RW78N,
RB77WPC, ALL UNSHIELDED ALTRONIC,
RS79N, RB777-X, GI3-X, GT3-1, etc.

B

RN79G, J6C, RL85G, RL15B, F100 N5C,
42XL, L82C, W3DPOR, GE3-X, etc.

C

W80N, W85N, D9, D15Y, D14N, RD16, D6,
D14, RD10

D

W14, W18, W10

E

RB212-1, RB485-1, RB105-1, RB114-1

F

RC501P, RC78PYP, GK3-X

SPECIFY SUPPORT OPTION

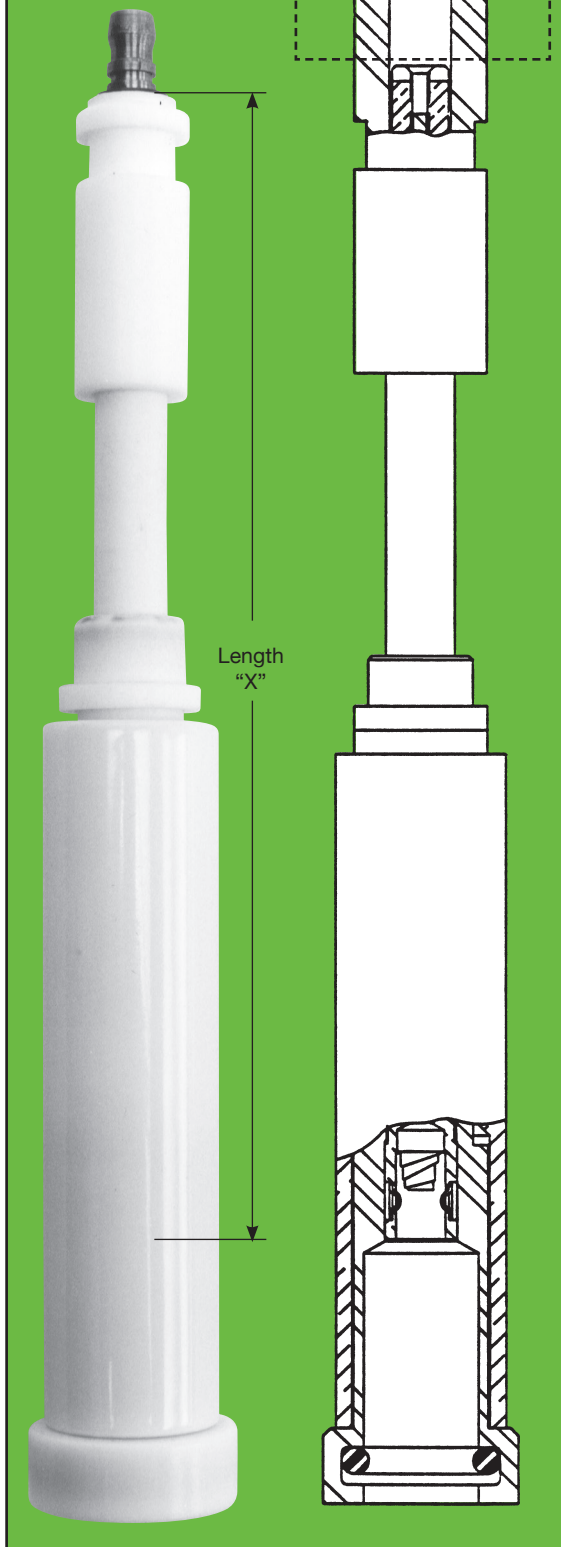
0 or BLANK

NONE

1

INCLUDE SUPPORT Ø 1.59”

Optional Square
Support
P/N 22356-01



Part No.
23155-

Part No.
23160-

*P/N 23550- includes a section with resistors (value from 8,000 to 12,000 OHMS)

**P/N 25765- includes a section with resistors (value from 4,800 to 7,200 OHMS)

ULTIMA SERIES CERAMIC SEAL-ON LEAD ASSEMBLIES

Now BG offers complete lead assemblies that optimize engine performance

HOW TO ORDER

Specify desired conductor, extension length, spark plug type, coil type and hose length.

"TYPE" numbers/letters here:

Support option
see page 7

CONDUCTOR	TYPE
Standard Tinned Copper Conductor	US
High-Resistance Conductor for RFI sensitive environments	USR
Stainless Steel Conductor	USS

EXTENSION LENGTH "X"	INCHES
06, 07.25, 08, 10, 12, 14, 16, 18, 20	

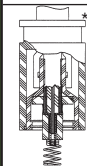
SPARK PLUG TYPE	TYPE
RM77N, W77N, RW82P, RM79F, D78Y RW80N, RW83F, RW77N, RW78N, RB77WPC, GI3-X, ALL ALTRONIC UNSHIELDED, RS79N, RB777-X, etc.	A
RN79G, J6C, RL85G, RL15B, F100, N5C, 42XL, L82C, W3DPOR, GE3-X, etc.	B
W80N, W85N, D9, D15Y, D14N, RD16, D14, D6	C
W14, W18, W10	D
RB212-1, RB485-1, RB105-1, RB114-1	E
RC501P, RC78PYP, GK3-X	F

COIL TYPE	TYPE
Altronic 291001-S	1
501061-S	
Dynalco IGC 506	
Altronic 591401-1	1A
Precision (Bendix) 10-320790-1	2
10-382040-1	
Precision (Bendix) 10-57460-7, -10	3
10-372360-7, -10	
10-382080-7, -10	
Colt Industries PPT2477AD	4
U.T.C. Pulse Gen. CLP80F1	5
Unshielded coil in coil box	6
Std. Connector for unshielded Coil: Altronic, Dynalco, Bendix	7
* "Coil-Tite" connector for unshielded coil: Altronic	8A
Precision (Bendix)	8B
Dynalco IGC856A	8B
Dynalco IGC290	8C

LENGTH OF HOSE	INCHES
Standard Lengths 06"-40" (Coil to top of extension)	

Part No. US12C01-12
Shown with Champion
Spark Plug D15Y

*BG's unique Coil-Tite
Connector improves
safety of unshielded
coil operation



Ultima Lead Assemblies available with 6,000 OHMS resistors (US6C, USR6C, USS6C) and with 10,000 OHMS resistors (USC, USRC, USSC) - PLEASE CALL FACTORY.

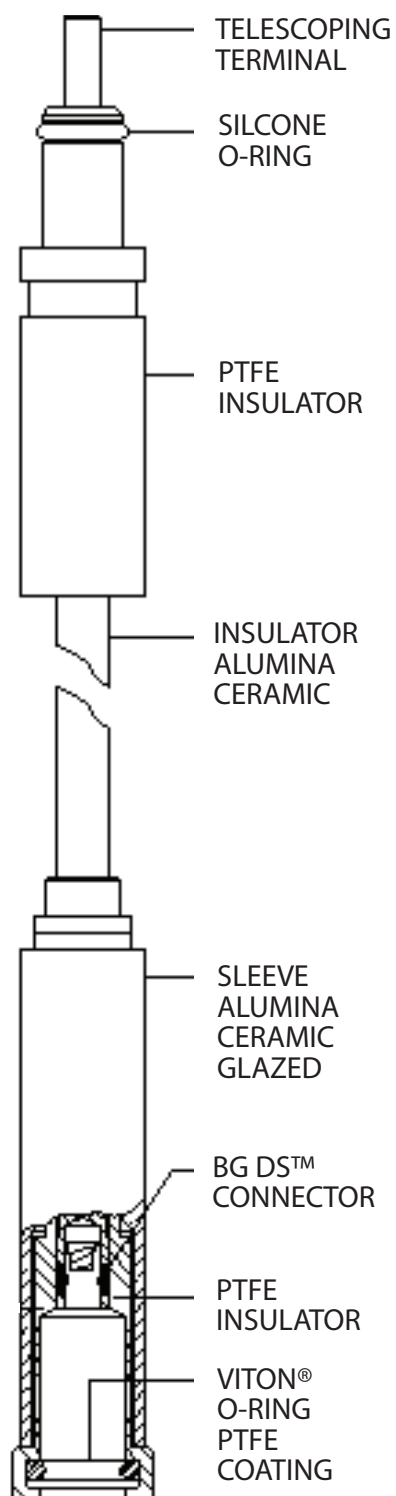
TELESCOPING ULTIMA SERIES



Ceramic Seal-On Extensions Extend Spark Plug Life In Demanding Applications

BG P/N	REF. OEM P/N	ENGINE
25080-01*	WAUKESHA A211797K WAUKESHA A211357X WAUKESHA A211797J	VGF
25080-02	COOPER 656-721-001	2400G
25080-03	CATERPILLAR 123-8641 CATERPILLAR 207-4509	G3600
25080-04	CATERPILLAR 123-4710	G3500
25080-05*	WAUKESHA A211797H WAUKESHA A211357P WAUKESHA A211357U	VHP (1/2" reach)
25080-06	WAUKESHA A211797G	VHP (13/16" reach)
25080-07	WAUKESHA A296064H WAUKESHA A296064F	AT27GL-LR (13/16" reach)
25080-08	WAUKESHA A211357Z WAUKESHA A211357V	AT25GL-LR (13/16" reach)
25080-09*	WAUKESHA A211357Y WAUKESHA A211357T	AT25GL (1/2" reach)
25080-10	WAUKESHA A211797M	APG
25080-11*	WAUKESHA A296064A WAUKESHA A296064G	AT27GL (1/2" reach)
25559	25080-09 for the BG spark plug Model RB485-I	AT25GL
25080-12	WAUKESHA A211797P	VHP (13/16" reach)

*Not for use with Bosch spark plug model 7303.



Part No.
25080-01
Shown

SUPER ULTIMA EXTENSION FOR CATERPILLAR® G3520C AND G3600 SERIES ENGINES

BG's P/N 25935 Extension Includes A Heavy Wall, High Alumina Ceramic Insulator to Maximize Performance....

Design Features Include:



- Special Multi-Ribbed Sealing Grommet Provides Better Seal On The Spark Plug.

- Intelli-Shroud™ Spark Plug Terminal Reduces Corona Formation.



- Deeper Spark Plug Well Extends Flashover Coverage.

- Proprietary Sealing Sleeve Eliminates Surface Arcing At The Coil Interface.

- Heavy Wall, High Alumina Ceramic Insulator Prevents Dielectric Breakdown.

For information on Blackjack™ extension available for this application, see page 6.



FLASH-FIGHTER EXTENSIONS



BG’s heavy wall PTFE insulated extensions prevent ignition problems. . .

- Eliminate failures due to heat fracture of silicone ignition cable.
- Unique “slide into place” boot prolongs spark plug life by keeping plug insulators free of dirt and moisture.
- Highly conductive inner brass rod provides long lasting, vibration resistant, mating threads.
- Designed for use with all makes of spark plugs.
- Use with DS™ Series Connectors or Part No. 21420 to eliminate flashover for a safer and more efficient operation.
- Call factory if support is required.

Models available for screw-on or snap-on type connection...

Model	Connection Type	With “Slide Into Place” Boot
21209—	Screw-on	Yes
21229—	Screw-on	No
21735—	Snap-on	Yes
21957—	Snap-on	No

Specify length in inches after dash —
Example: 21229—6 is 6” long. For MEP engines specify 21209—MEP. If intended for use with Champion W10, W14, or W18 spark plug, add suffix “W”. (Example: 21209—4W)

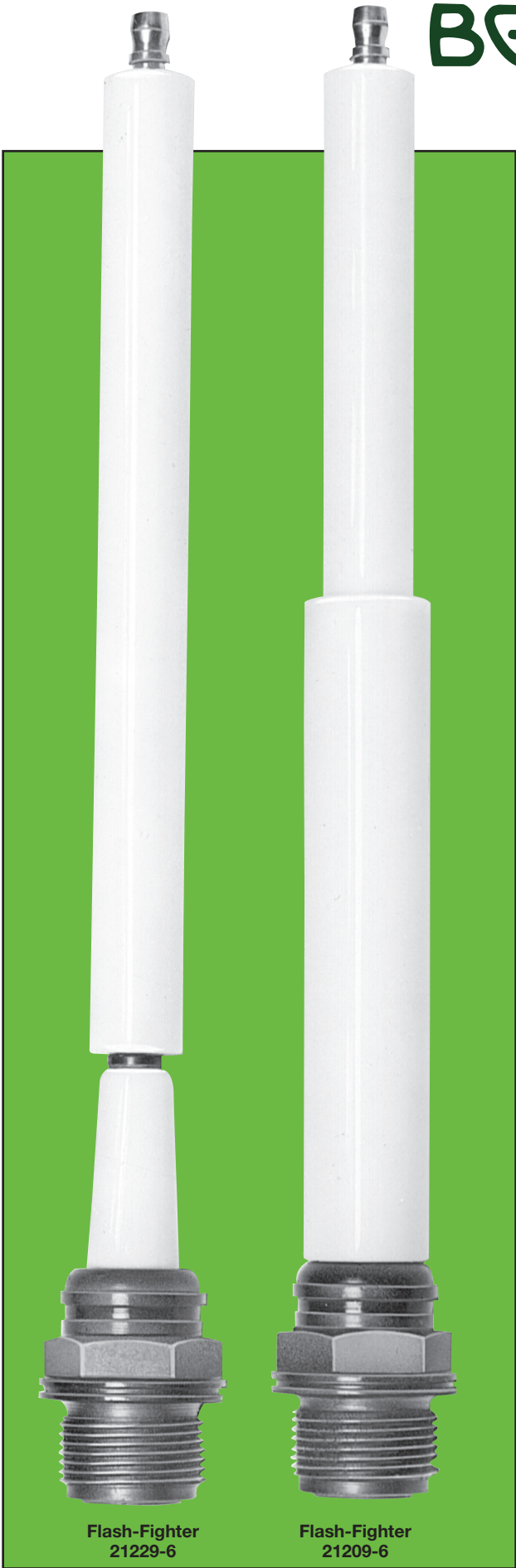
If intended for use with Champion WPCC types, (2” long insulator) add suffix L. (Example: 21209-8L)

Flash-Fighter Extension with Resistors:

There is a new line of screw-on, no boot style (like P/N 21229-) extensions with resistors. The P/N is 25419-XX, where XX stands for the length.

The extension comes in the following lengths: 4”, 6”, 8”, 10”, 12”, 14”, 15”, 16”, 18” 20”, 22”, and 24”.

The resistance value is between 8,000 and 12,000 Ohms. (For 6,000 Ohms nominal value, call factory)



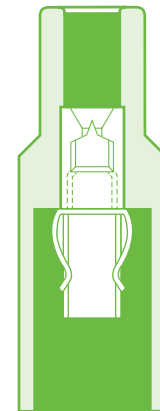
SPARK PLUG TERMINALS

BG's model 21420 spark plug terminal performs better and lasts longer because it withstands higher temperatures. . .

- Universal Type – fits all spark plug models. (except W10, W14, W18)
- PTFE insulator withstands higher temperatures than conventional spark plug connectors.
- Solderless – easy to install. Simply use #2 Phillips head screwdriver to assemble terminal
- Longer skirt length keeps spark plug insulator top clean.
- May be used with 5/16" ID silicone hose.
- Precision engineered for use with BG's Flash-Fighter Extensions. Eliminates flashover for a safer and more efficient operation.



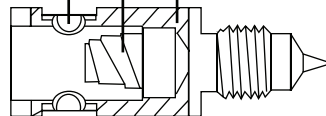
Use BG's 21420 terminals and Flash-Fighter extensions to reduce voltage loss and enhance the operation of your ignition system.



TERMINAL INSERT, BRASS
- NICKEL PLATED

VOLUTE SPRING

SPRING CLIP



SPIKE DS™ P/N 22390

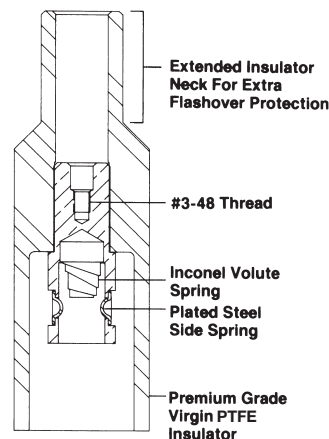
BG's Spike DS™ has all the advantages of the DS™ Connector plus the ease of installation of standard Rajah type connectors. The Spike DS™ may be used with any of the spark plug connectors shown above, or with BG's Seal-On™ Boots for 7mm cable with standard conductor. Use 3/8" flathead screwdriver to assemble.

SPARK PLUG TERMINALS

BG

BG's DS™ Series Connectors
have double spring contact to prevent
circuit breakdown due to arcing. . .

- Unique double spring design will not “loosen” like Rajah type terminals.
- Includes stud and is easier to install – just crimp on stud and screw on connector.
- PTFE insulator withstands higher temperatures than conventional spark plug connectors.
- Universal – fits all spark plug makes and models.
(for W10, W14, W18 See * below)
- May be used with 5/16” ID silicone hose.
- Optional model available for use with high resistance wire.

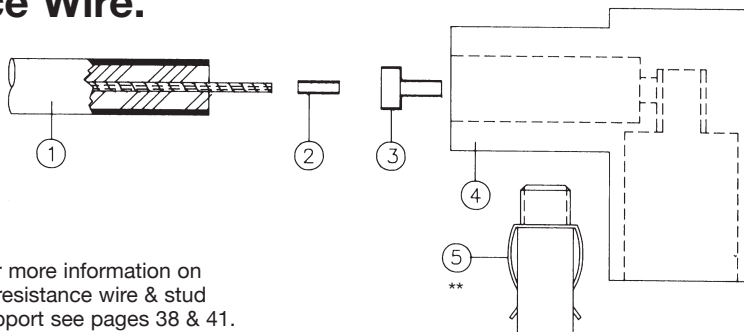


MODEL	APPLICATION
DS-1*	Use with any standard 7mm wire. Stud included with terminal.
DS-1SS*	Use with hi-resistance wire, BG P/N 21825. Stud & stud support included with terminal (See page 41).

*Add suffix “W” to part number when intended for use with W10, W14 or W18 spark plug. (Example: DS-1W)

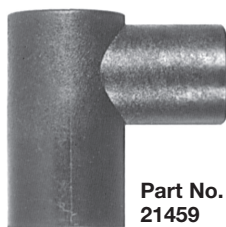
P/N 22100SS – Right Angle Connector Kit For Use With High Resistance Wire.

ITEM #	P/N	ITEM
1	21825	7mm Hi-Resistance Cable (Not Part of Kit)
2	22098	Stud Sleeve
3	21992	Stud Support
4	23763	Connector 90°
5	22099	Terminal



Low cost spark plug terminals for normal service applications.

- Industry-standard type rugged Dupont Zytel® 101 covers.
- Solderless - easy to install.**
- Fits all makes of spark plugs. Except large plugs (W10, etc...)
- Low cost.



Part No.
21459

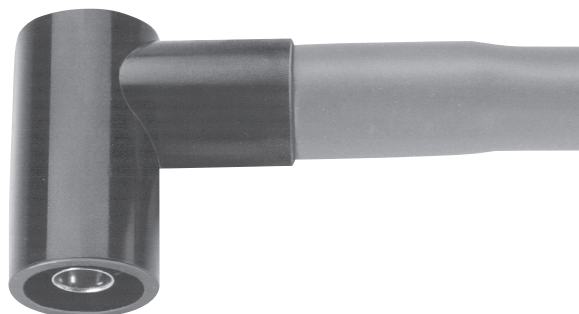


Part No.
21416



Part No.
21418

P/N 22118 Right Angle Connector For Silicone Hose**



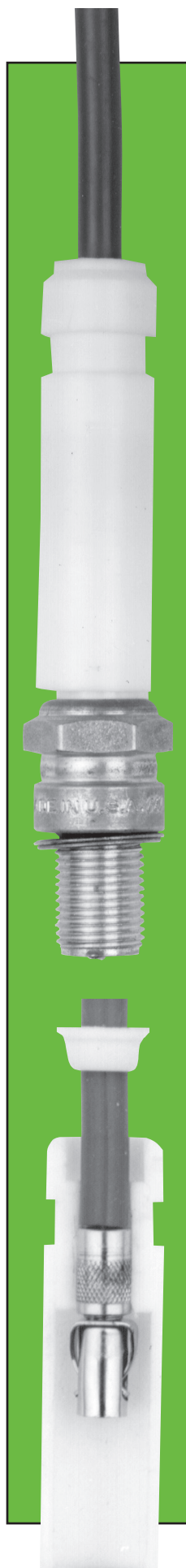
**Simply use #2
Phillips head
screwdriver to
assemble terminal.

SEAL-ON™ SPARK PLUG BOOTS

BG's Seal-On™ Boots prolong spark plug life because they seal out dirt and moisture. . .

Engine laboratory tests have shown that when the Seal-On™ Boot is used, flashover voltage is increased by 8-10KV. Unlike conventional spark plug boots, the BG Seal-On™ Boot is machined from PTFE to specific spark plug dimensions and seals tightly on the spark plug insulator. The boot design incorporates an industry standard type bayonet connector for ease of installation. The kit includes a PTFE grommet that is press fit into the upper end of the assembly so that the boot is sealed top and bottom – at the secondary lead and at the plug insulator. Kits are also available for use with “hi-resistance” wire, which include the stud and stud support required to terminate this type of wire (Assembly layout shown on page 41). Optional Seal-On™ Boot kits are also available for applications where 5/16” ID silicone hose is used. Available with DS™ connector.**

Improves ignition performance in demanding lean burn applications



SEAL-ON BOOT KIT PART NUMBERS				LOCATE THE SPARK PLUG USED IN THE CHART BELOW AND ORDER THE CORRESPONDING SEAL-ON BOOT KIT.
For 7mm Cable With Hi-Resistance Conductor		For 7mm Cable With Standard Conductor ++		
Without Hose	With Hose	Without Hose	With Hose	
21509SS	21644SS	21509*	21644*	RM79F, W77N, RW82P, RM77N, D78Y, RB77WPC, All Unshielded Altronic, RS79N, RB777-X, GI3-X, etc.
21519SS	21573SS	21519	21573	RN79G, J6C, RL85G, RL15B, F100, N5C, 42XL, ST447, L82C, W3DPOR, GE3-X, etc.
21539SS	21645SS	21539	21645	W80N, W85N, D9, D15Y, RD16, D14N, D6, D14, RD10, ***
21594SS	21648SS	21594	21648	W14, W18, W10
21673SS	21676SS	21673	21676	RW80N, RW83F, RW77N, RW78N
21970SS	21984SS	21970+	21984+#	RC501P, RC78PYP, GK3-X
21894SS	21898SS	21894	21898	RB212-1, RB485-1
22448SS	22449SS	22448	22449	RB105-1, RB114-1
21862SS	--	21862	22857	ST197
21892SS	21896SS	21892	21896	ST847
21893SS	21897SS	21893	21897	ST727
22026SS	22027SS	22026	22027	R80

* This model available in 9” length. Specify -9 suffix (I.E. 21509-9)*

** For DS™ type connector specify kit model number with SS suffix.

*** These kits will also “seal-on” on Flash-Fighters shown on Page 11.

+ These models available in 4 1/2” lengths. Specify -4.5 suffix (I.E. 21970-4.5).

++ The kits shown in the columns below may be upgraded to Spike DS™ by ordering P/N 22390.

This model available in 10” length. Specify 25189.

RESISTORIZED SPARK PLUG CONNECTORS

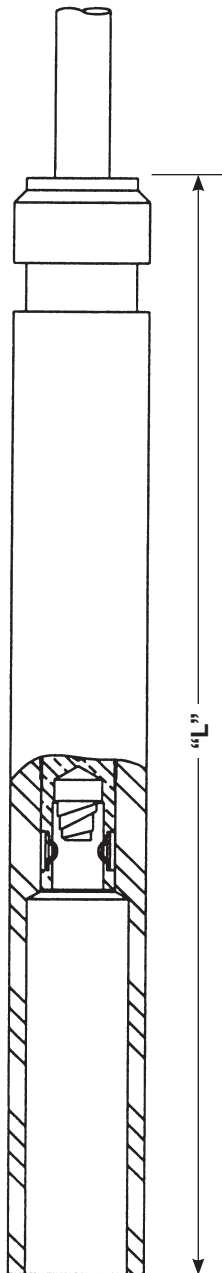


BG RESISTOR ENHANCES ENGINE OPERATION!

BG's Resistorized Spark Plug Connectors
Suppress the RFI that can adversely affect the sophisticated controls on today's engines.

Features

- 10,000 Ohms. (for 6,000 Ohms, call factory)
- Seal-On™ resistor kits fit tightly on the spark plug insulator, extending plug life.
- Models available for use with silicone hose.
- DS™ connector assures excellent electrical contact and trouble-free operation.
- Includes stud for easy assembly.
- Universal resistor kits available that fit any spark plug.

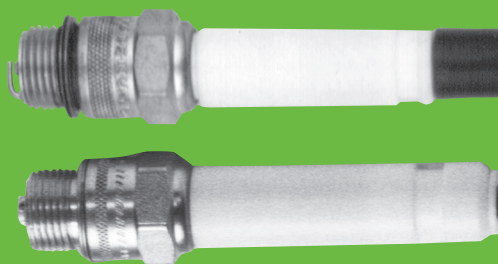


SEAL-ON RESISTOR PART NUMBERS		LOCATE THE SPARK PLUG USED IN THE CHART BELOW AND ORDER THE CORRESPONDING SEAL-ON RESISTOR KIT.	“L”
For 7mm Cable With Standard Conductor			
Without Hose	With Hose		
23146	23159	RM79F, W77N, RW82P, RM77N, D78Y, RB77WPC, ALL ALTRONIC UNSHIELDED, RS79N, RB777-X, GI3-X, etc.	5.9”
25148	25149	RM79F, W77N, RW82P, RM77N, D78Y, RB77WPC, ALL ALTRONIC UNSHIELDED, RS79N, RB777-X, GI3-X, etc.	9”
23147	23161	RN79G, J6C, RL85G, RL15B, F100, N5C, 42XL, L82C, W3DPOR, GE3-X, etc.	5.6”
23091	23162	W80N, W85N, D9, D15Y, D14N, RD16, D6, D14, RD10	5.5”
23091-10	23162-10	W80N, W85N, D9, D15Y, D14N, RD16, D6, D14, RD10	10”
23148	23163	W14, W18, W10	5.6”
23149	23164	RW80N, RW83F, RW77N, RW78N	6”
23151	23166	RC501P, RC78PYP, GK3-X	5.6”
23152	23167	RB212-1, RB485-1	5.8”
23153	23168	RB105-1, RB114-1	6.5”
USE WITH OR WITHOUT HOSE		UNIVERSAL RESISTOR KIT	“L”
DS-1RES		USE WITH ANY MODEL SPARK PLUG (EXCEPT W10, W14, W18)	4.9”
DS-1RESW		USE WITH W10, W14, OR W18	4.9”



Additional kits for Stitt plugs not listed

SPARK PLUG LEADS & KITS



HOW TO ORDER:

To Order Kits:

Identify spark plug/coil connector type from chart at right. Then find the appropriate kit on the same line in the chart below.

KIT PART NUMBERS			
For 7mm Cable With High Resistance Conductor		For 7mm Cable With Standard Conductor	
Without Hose	With Hose	Without Hose	With Hose

SPARK PLUG CONNECTOR KITS			
21509SS	21644SS	21509 ^③	21644 ^③
21519SS	21573SS	21519	21573
21539SS	21645SS	21539	21645
21594SS	21648SS	21594	21648
21673SS	21676SS	21673	21676
21970SS	21984SS	21970	21984
21894SS	21898SS	21894	21898
22448SS	22449SS	22448	22449
21862SS	—	21862	—
21892SS	21896SS	21892	21896
21893SS	21897SS	21893	21897
22026SS	22027SS	22026	22027
DS-1SS	DS-1SS	21420-01	21420-01
22100SS	—	21459	22118

COIL CONNECTOR KITS			
—	—	21220	22280
21254SS	21626SS	21254	21626
21410SS	21562SS	21410	21562
21410SS	21562SS	21410	21562
26426SS	26426SS	26426	26426
21599SS	21627SS 21627-01SS	21599	21627 21627-01
—	—	21678	21628

COIL CONNECTOR KITS			
22256N	22256N	22256N	22256N
22256	22256	22256	22256
22256A	22256A	22256A	22256A
22970SS	22970SS	22970	22970
23039SS	23039SS	23039	23039
23041SS	23041SS	23041	23041

21614-01	21614-01	21614-01	21614-01
—	—	21652-01	21652-02
—	—	22169	—

CABLE & HOSE PART NUMBERS			
21825	21606	21570	21606

To Order Leads:

Identify cable type, spark plug connector type, coil connector type and length from chart below and place type number here:

CABLE	TYPE
7mm – (No silicone hose)	1
7mm – Inside silicone hose	2

SPARK PLUG CONNECTOR FOR:	TYPE
RM79F, W77N, RW82P, D78Y, RM77N, RB77WPC, ALL ALTRONIC UNSHIELDED, RB777-X, RS79N, GI3-X, etc.	1
RM79G, J6C, RL85G, RL15B, W3DPOR, GE3-X, etc.	2
W80N, W85N, D9, D15Y, D14N, RD16	3
W14, W18, W10	4
RW80N, RW83F, RW77N, RW78N	5
RC501P, RC78PYP, GK3-X	6
RB212-1, RB485-1	7
RB105-1, RB114-1	8
ST197	A
ST847	B
ST727	C
R80	D
Universal - fits all models -BG, Stitt and Champion	9
Universal -90°	9N

COIL CONNECTOR FOR:	TYPE
PRECISION 10-382040-1 (BENDIX) 10-320790-1	1
PRECISION 10-382080-XX (BENDIX) 10-57460-XX 10-372360-XX	2
ALTRONIC 291001S, 501061S	3
DYNALCO IGC 506	3
ALTRONIC 591401-1	3A
FAIRBANKS MORSE PPT2477AD	4
UTC CLP80F1	5

UNSHIELDED COILS BELOW:	TYPE
ALTRONIC, PRECISION (BENDIX) AND DYNALCO	6N 6
COLT PPT2477P AND PPT2477L	6A
ALTRONIC (ALL)	* 6B
PRECISION (ALL) DYNALCO IGC 856A	* 6C
DYNALCO IGC 290	* 6D

COIL BOX	TYPE
Integral Coils w/1" -20 Threads	8
UTC TCG90A35	9

SPECIFY LENGTH IN INCHES	
STANDARD LENGTHS ARE 10", 12", 16", 18", 24", 30", 36", 50"	

For RFI sensitive environments, specify resistor option as follows:
1. Add "R" for high resistance, spiral wound conductor.
2. Add "C" for integral 10,000 ohm resistor element in spark plug connector.**
3. Add "RC" for both of the above.**

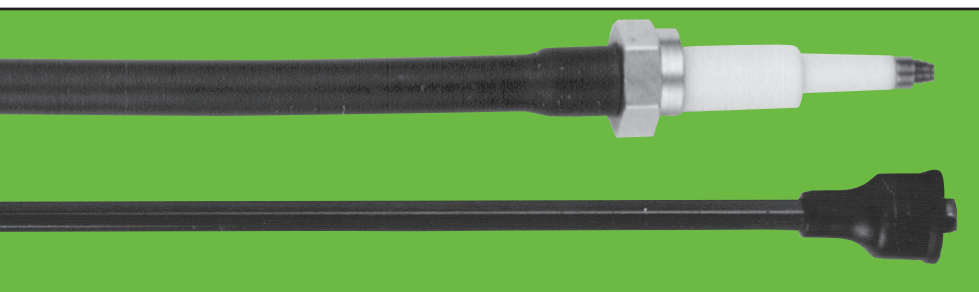
NOTE:
For Plug RTW80N
use 21676SSM

Ordering diagram showing the sequence of selections for a spark plug lead. It starts with 'CABLE' (1 or 2), followed by 'SPARK PLUG CONNECTOR' (1-9N), then 'COIL CONNECTOR' (1-5), then 'UNSHIELDED COILS' (6N-6D), then 'COIL BOX' (7-9), and finally 'LENGTH' (10"-50"). A dashed line indicates a path for RFI sensitive environments, adding 'R', 'C', or 'RC' to the connector type. A note specifies to use 21676SSM for Plug RTW80N.

*Coil Tite type connectors are shown on page 22.

**Resistorised spark plug connectors are shown on page 15.

③ available in 9" length



← 5/16" ID silicone hose lead with Seal-On Boot and connector for ALTRONIC shielded coil.

← Standard 7mm cable lead with Seal-On Boot and connector for unshielded coil.

THE OPTION IS YOURS. . .

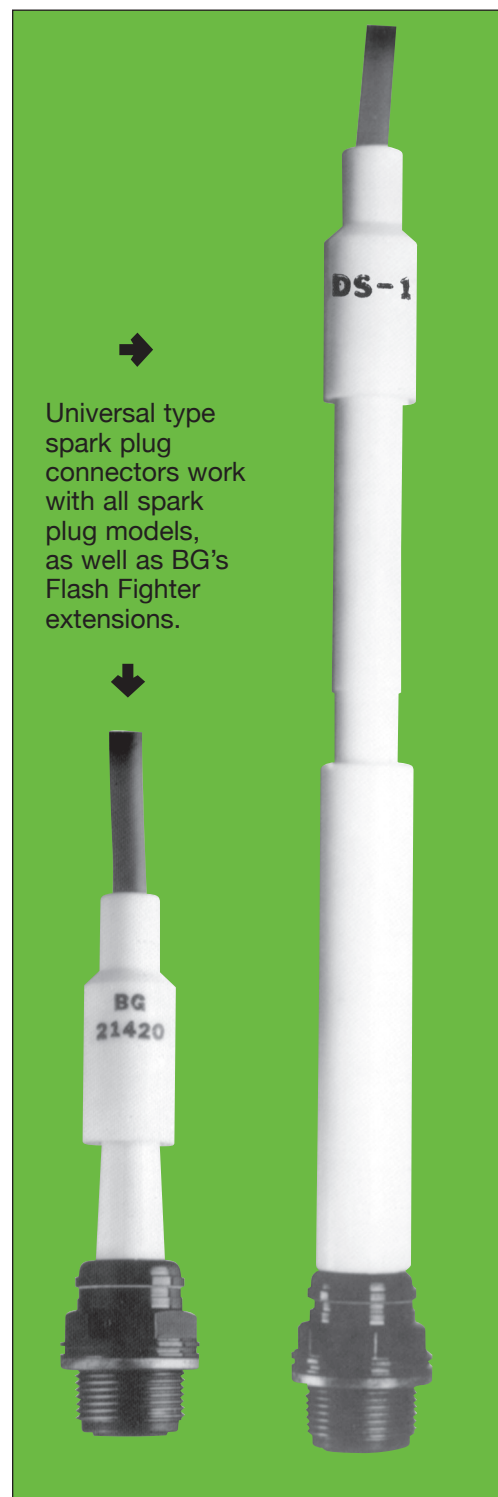
1 Order factory built leads to your specified length. All leads are fabricated from quality BG lead parts in our factory or by authorized BG distributors.

or...

2 Order Kits and build your own leads on site. Use BG 7mm ignition cable P/N 21570 or P/N 21825, and BG silicone hose P/N 21606.

ONLY BG CAN OFFER YOU ALL THIS IN AN IGNITION LEAD. . .

- High quality 7mm ignition cable with optional high-resistance conductor and 5/16" ID silicone hose.
- Unique Seal-On Spark Plug Boot seals out dirt and moisture and prolongs spark plug life; unlike conventional boots, the BG Seal-On Boot is designed to a specific spark plug dimension and seals tightly on the spark plug insulator; flash over voltage is increased 8-10 KV.
- Universal Spark Plug Boots that fit all plug models are also available; ideal for use with BG Flash Fighter Extensions.
- Coil Connectors and Spark Plug Boots manufactured from high temperature virgin PTFE for greater dielectric strength.



Universal type spark plug connectors work with all spark plug models, as well as BG's Flash Fighter extensions.

**OTHER CONFIGURATIONS AVAILABLE
– PLEASE CALL FACTORY –**

FLASH-TITE™
SPARK PLUG CONNECTOR



This unique connector is now widely used in applications where previously only metallic braid shielded leads were accepted. . .

BG's new Flash-Tite Spark Plug Connector is designed for use with 5/16" ID silicone hose, 7mm ignition cable, and the specially designed coil connectors found in this catalog. A Flash-Tite Lead Assembly is safer than a conventional unshielded secondary lead because it prevents disassembly of the lead from the spark plug while the engine is running. . . The coil end of the lead must be disconnected first! Designed for use with unshielded spark plugs, the Flash-Tite Connector is spring-loaded to contain the arc in the event of flashover of the spark plug insulator.

Flash-Tite Lead Assemblies have several major advantages over conventional shielded leads: In the event of spark plug leakage, combustion gases do not become "trapped" inside the lead. Any leakage is vented. Internal condensation of combustion gases is frequently a source of maintenance problems in shielded lead applications. Although the Flash-Tite Connector is vented, it is designed so that rain and moisture cannot enter the lead or the connector. And since there is no metallic cover on a Flash-Tite lead, firing indicators and analyzer pick-ups may be used, simplifying trouble-shooting.

*NOTE: CHAMPION Plug models W10, W14, and W18 require a larger inside diameter than the above. Indicate this by adding the suffix -W to the part number (example: 21600-W). Not available on model 21800.

Spark Plugs with extra long insulators, such as the RB77WPC, require a deeper boot. Indicate this by adding the suffix - L to the part number. Not available on models 21660 and 21800.

P/N 21606
Silicone Hose

P/N 21570
7mm Ignition
Cable

P/N 21200-4
Stud



Flash-Tite Spark Plug Connectors are easy to assemble using P/N 21200-04 stud. (Order separately.) Complete instructions are provided.

Complete Lead Assemblies are also available. . . See the following page.

**AVAILABLE IN THE
FOLLOWING LENGTHS:**

P/N*	Extended Length	Compressed Length
21600	7.825"	6.825"
21620	10.000"	9.000"
21660	6.825"	5.825"
21800	5.315"	4.315"
21940	14.000"	13.000"
22510	17.000"	16.000"
23285	19.000"	18.000"
25386	24.000"	23.000"

P/N 21600

P/N 21800

A unique alternative to metallic secondary ignition leads . . .

- Accepted as a suitable alternative to metallic shielding.
- “Flash-Tite Spark Plug Connector” promotes safer, trouble-free operation. (See opposite page for description.)
- Tough, high-temperature silicone hose protects the ignition cable.
- Does not interfere with timing light or engine analyzer capacitive/inductive pickups.

HOW TO ORDER

Select desired conductor, Flash-Tite Spark Plug Connector, coil connector, and length from chart and place corresponding “TYPE” numbers here:

CONDUCTOR	TYPE
Standard Conductor	FT
High-Resistance Conductor	FTR
Stainless Steel Conductor	FTS

FLASH-TITE SPARK PLUG CONNECTOR	TYPE
7.825 in. overall length	1
10.0 in. overall length	2
6.825 in. overall length	3
5.315 in. overall length	4
14.000 in. overall length	5
17.000 in. overall length	6

COIL CONNECTOR	TYPE
Altronic 291001-S 501061-S	1
Altronic 591401-1	1A
Precision (Bendix) 10-320790-1 10-382040-1	2
Precision (Bendix) 10-57460-7, -10 10-372360-7, -10 10-382080-7, -10	3
Colt Industries PPT2477AD	4
U.T.C. Pulse Gen. CLP80F1	5
Coil Box	6

Std. Connector for unshielded Coil: Altronic, Dynalco, Bendix	7
“Coil-Tite” connector for unshielded coil: Altronic	8A
Precision (Bendix)	8B
Dynalco IGC856A	8B
Dynalco IGC290	8C

LENGTH OF SILICONE HOSE	INCHES
Specify in inches. Standard lengths – 6” to 40”	

-

SEE NOTE

P/N FT31-10

For RFI-Sensitive environments, specify a high resistance conductor.

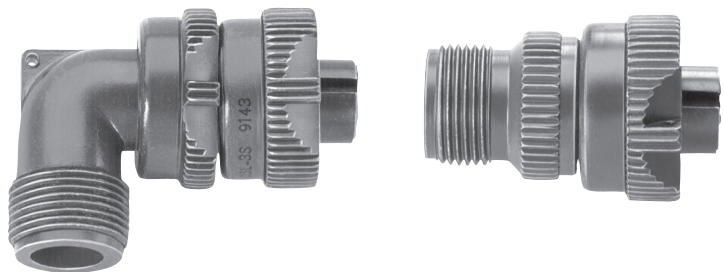
***NOTE:**
If intended for use with Champion W10, W14, or W18 spark plugs, add suffix “W” for larger ID insulator. Not available on Type 4 Flash-Tite Spark Plug Connector.

Spark Plugs with extra long insulators, such as the RB77WPC, require a deeper boot. Indicate this by adding the suffix-L to the part number. Not available on Types 3 and 4 Flash-Tite Spark Plug Connector.

MS CONNECTORS

Now available from stock for immediate delivery. . .

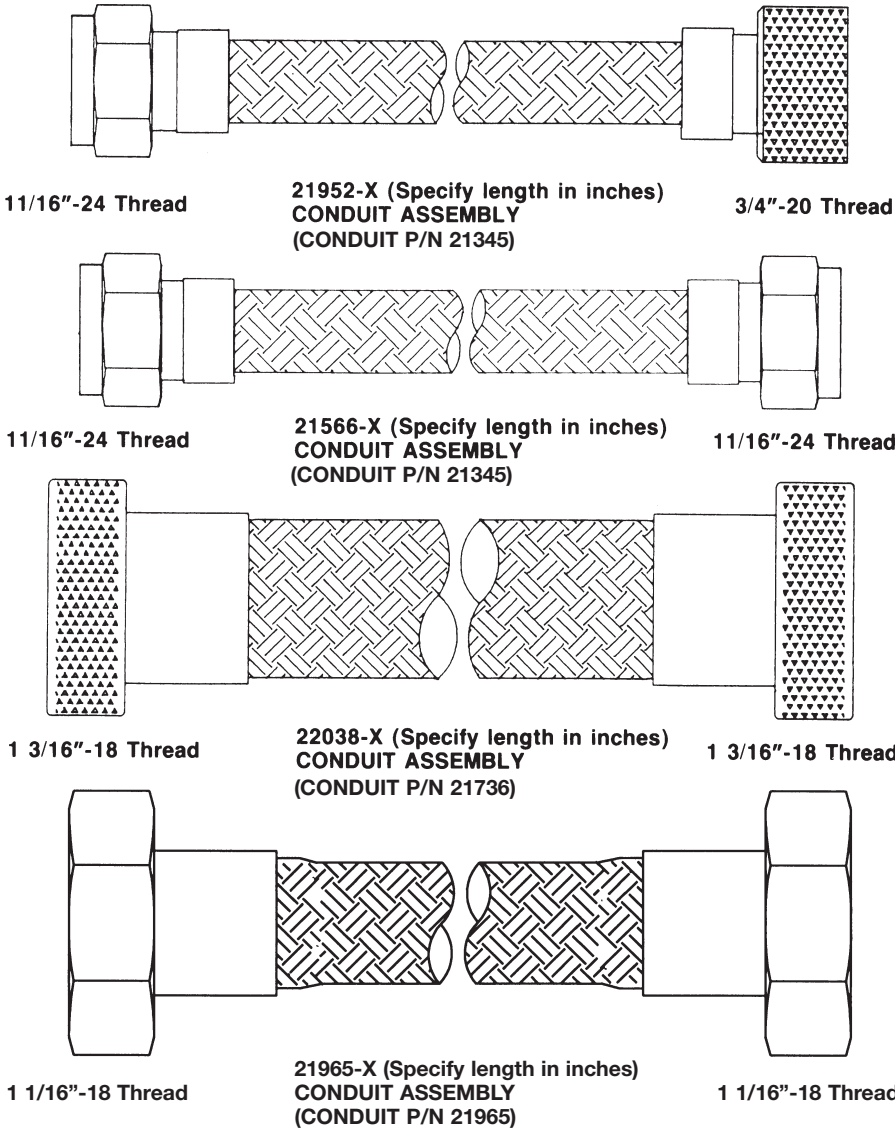
- Resilient inserts resist wear caused by engine vibration.
- Durable field proven design meets the latest performance standards of MIL-C-5015.
- Price competitive.



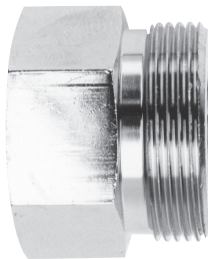
BG#	MS NUMBER	CONTACTS	TYPE	BACKSHELL THREAD	CONNECTOR THREAD
21597-01	MS3106A-10SL-3S	3	STRAIGHT	5/8"-24 UNEF	5/8"-24 UNEF
21597-02	MS3106A-12S-3S	2	STRAIGHT	5/8"-24 UNEF	3/4"-20 UNEF
21597-03	MS3106A-10SL-4S	2	STRAIGHT	5/8"-24 UNEF	5/8"-24 UNEF
21887-01	MS3108A-10SL-3S	3	90° ANGLE	5/8"-24 UNEF	5/8"-24 UNEF

OTHER MS-CONNECTOR MODELS AVAILABLE - CALL FACTORY FOR PRICE AND AVAILABILITY

COMPLETE
CONDUIT
ASSEMBLIES



Adapters



P/N	THREAD
22685	1 3/16"-18 UNEF-2A Male 1 1/16"-18 UNEF-2B Female
22783	1 3/16"-18 UNEF-2A Male 1-20 UNEF-2B Female

PRIMARY LEAD ASSEMBLIES

BG

BG shielded primary leads are precision engineered for reliability and ease of installation.



APPROVED



HEADER END TERMINATION	TYPE
Standard – This lead has elbow, adapter, or 11/16"-24 nut	7
Special – This lead has a 3/4"-20 nut at header end (must be ordered with no adapter, type 0)	9

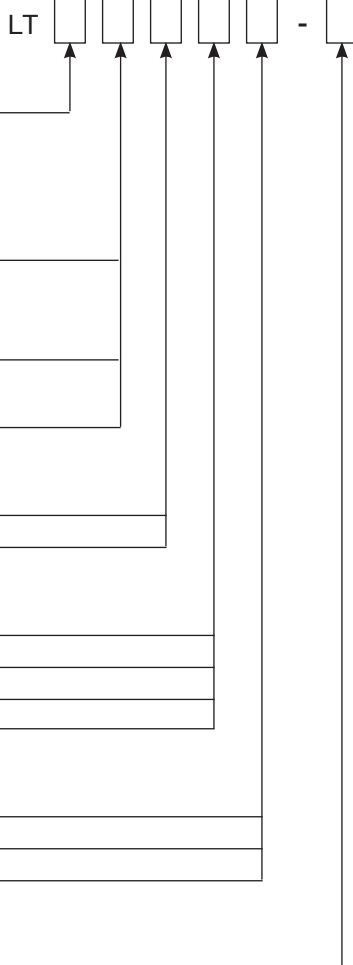
COIL MFR.	COIL MODEL	TYPE
Precision (Bendix)	10-320790-1	2
	10-382040-1	
Fairbanks Morse	PPT2477, AA, AC, AD	
Precision (Bendix)	10-372385 Series	3
UTC (Bosch)	TCL-150 B1	
Dynalco	ALL	
Murphy		7

ELBOW AT HEADER	TYPE
No Elbow	0
90 Degree Elbow	1

ELBOW AT COIL	TYPE
180 Degree Elbow	0
90 Degree Elbow	1
110 Degree Elbow	2
150 Degree Elbow	3

ADAPTER AT HEADER END	TYPE
None	0
1/2" -14 NPT	1
3/8" -18 NPT	2

LENGTH, HEADER TO COIL	INCHES
Specify in inches	



HOW TO ORDER:

Identify header termination, coil, elbows, adapter, and length required from the chart. Place corresponding "type" numbers here.

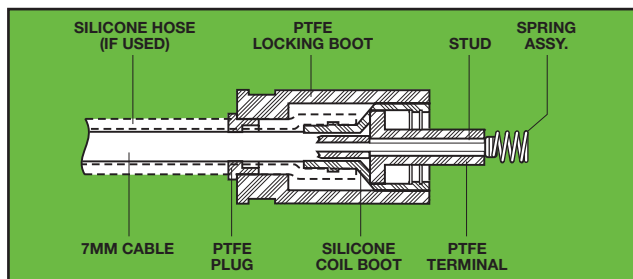
- Conduit is braided stainless steel with PTFE liner.
- Wired with AWG #16 wire.
- Connectors are MS3106A types with resilient inserts for maximum moisture resistance.
- BG precision manufactured components ensure better connections.
- CSA Approved. Suitable for use in Class I, Division 2, Group D locations when used with approved coils and header components.

LEADS NOW AVAILABLE FOR BENDIX 10-57460 COILS. . .

BG now offers primary leads for Bendix 10-57460 type coils. Order part number 21844-XX (specify length in inches). Two leads required per coil.

COIL-TITE CONNECTOR

- Unique PTFE locking boot prevents accidental disconnection at the coil, eliminating the potential of inadvertent “arcing” in hazardous environments.
- Spiral spring provides much improved contact over conventional terminals.
- Uses a crimped stud for ease of assembly (instructions included).
- May be used with silicone hose.
- Version available for use with hi-resistance wire (includes stud support).



ORDERING INFORMATION

COIL TITE KIT PART NUMBERS		
Coil Model	For 7mm cable with hi-resistance conductor (with or without hose)	For 7mm cable with standard conductor (with or without hose)
Altronic: All Models	22970SS (inc. 21200-04 stud)	22970 (inc. 21200-08 stud)
Precision (Bendix): All Models	23039SS (inc. 21200-08 stud)	23039 (inc. 21200-05S stud)
Dynalco: IGC 856A		
Dynalco: IGC 290	23041SS (inc. 21200-05S stud)	23041 (inc. 21200-09S stud)

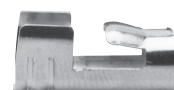
TERMINALS



P/N 21541
7mm Brass



P/N 21682
7mm Steel/Tin Plated



P/N 22064-01
7mm Ni-Plated Brass

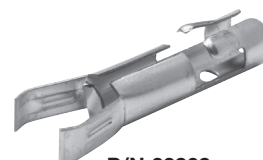
P/N 22064-03
7mm Stainless Steel



P/N 22823 (90°)
7mm Stainless Steel



P/N 22848
8mm Stainless Steel



P/N 22808
7mm and 8mm Brass
(For use with 90° degree coil boot 22946)



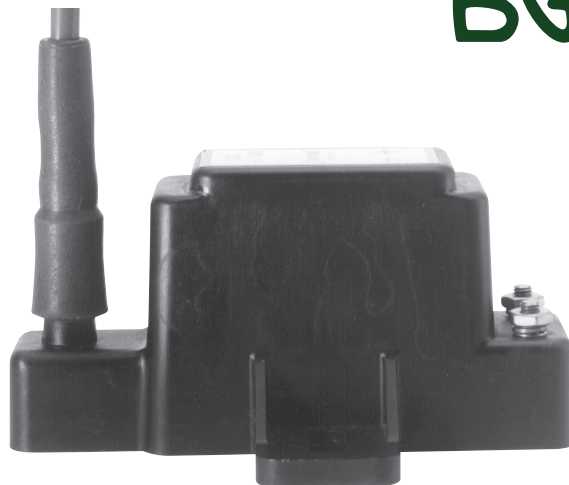
P/N 22978 (90°)
8mm Stainless Steel

P/N 22808-01
7mm and 8mm Ni-Plated Brass
(For use with 90° degree coil boot 22946)

KIT P/N 22615 CONNECTS TO UNSHIELDED COILS WITH TAPERED TOWERS

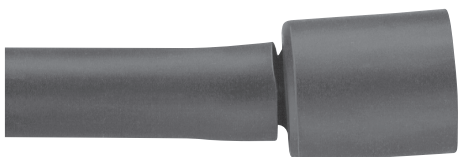
BG

- DS™ connector assures good electrical contact.
- Kit includes stud for easy assembly.
- High quality silicone boot insulator.
- For use with unshielded coils having tapered coil towers such as Altronic 590 060, 591 040, 791 020, 791 030 or Colt/FM PPT2477B. (May also be used with unshielded spark plugs.)
- Silicone boot may also be purchased separately (P/N 21061).



Altronic Coil 591040 shown with BG Connector 22615

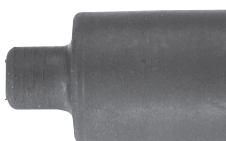
BOOTS FOR UNSHIELDED COILS



P/N 22063 with Hose



P/N 25677 Coil Boot
(Ref. Altronic 502122)

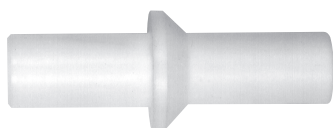


P/N 22063 Coil Boot

COIL BOX CONNECTOR KITS

COIL BOX CONNECTORS ORDERING INFORMATION

PART NO.	LENGTH	DESCRIPTION
21614	1.687"	GROMMET ONLY
21614-01	1.687"	KIT: GROMMET 21614, PLATED NUT 21253-1
21614-02	2.812"	GROMMET ONLY
21614-03	2.812"	KIT: GROMMET 21614-02, PLATED NUT 21253-1
21614-04	2.410"	GROMMET ONLY
21614-05	2.410"	KIT: GROMMET 21614-04, PLATED NUT 21253-1



P/N 21614 PTFE Grommet for Coil Box

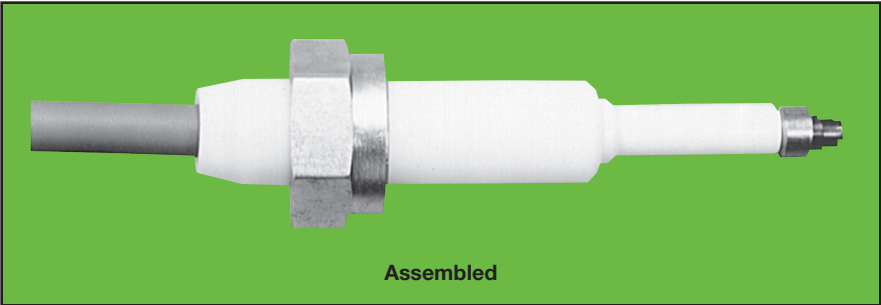
EXTENSION AND BOOT REMOVAL PLIERS P/N 22486

- Facilitates removal.
- Excellent for "hard-to-reach" places.
- Soft jaws won't damage extensions and boots.
- More compact.



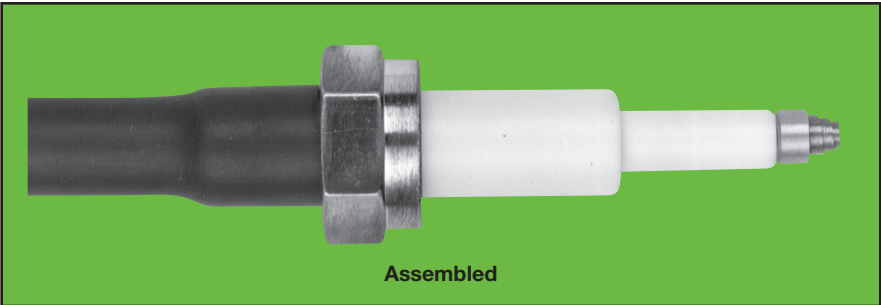
TERMINAL KIT P/N 21410 CONNECTS UNSHIELDED SECONDARY LEADS TO ALTRONIC SHIELDED COILS

- Composite Ceramic-PTFE Insulator will not deteriorate under extreme conditions.
- PTFE Sealing Gland waterproofs the assembly.
- Complete assembly instructions included with each kit.

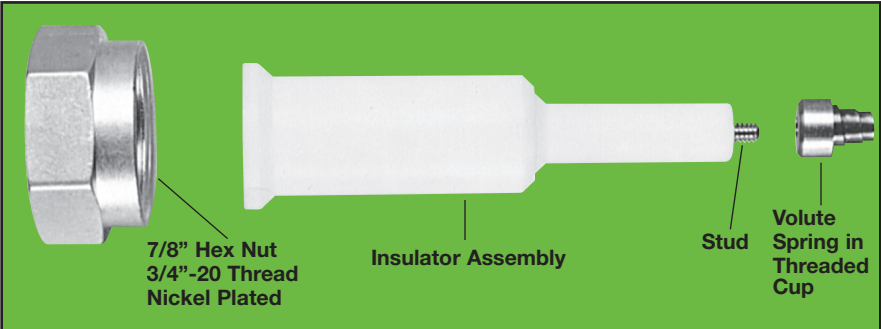


TERMINAL KIT P/N 21562 CONNECTS SILICONE HOSE-COVERED LEADS TO ALTRONIC SHIELDED COILS

- Silicone Hose protects 7mm wire and extends lead life.
- Waterproof connection reduces downtime.
- Use with either Flash-Tite™, DS™, or Seal-On™ type Spark Plug Connectors shown in this catalog.



TERMINAL KIT P/N 21445 CONNECTS SHIELDED SECONDARY LEADS TO ALTRONIC SHIELDED COILS (25651 Kit, Same As 21445 without Hex Nut)



ORDERING INFORMATION

For Coil Model	Order Kit P/N	Application
Any Altronic or Dynalco Shielded Coil	21410	Use with 7mm ignition wire, BG P/N 21570.
	21410SS	Use with 7mm hi resistance wire (BG P/N 21825). Includes stud & stud support. See page 47.
	21562	Use with 5/16" ID silicone hose (BG P/N 21606) and 7mm ignition wire (BG P/N 21570).
	21562SS	Use with 5/16" ID silicone hose (BG P/N 21606) and 7mm hi resistance wire (BG P/N 21825). Includes stud & stud support. See page 47.
	21445	Use with conduit P/N 21345 and swage ferrules P/N 21284-1 & P/N 21344.

TERMINALS AND CONNECTING HARDWARE for PRECISION (BENDIX) COILS 10-57460, 10-372360, and 10-382080, 10-320790-1, and 10-382040-1



PRIMARY FITTINGS		
BG P/N	Description	Replace Bendix P/N
21148-01	Plated Ferrule	10-13895
21473	Sleeve	10-342149
21446	Grommet	10-59445
21465	Terminal	10-102099

- BG PTFE terminals resist higher temperatures.
- Precision engineered waterproof design.
- Hex nut permits easier disassembly of secondary lead than conventional knurled nut.

CROSS REFERENCE TO OTHER BENDIX PARTS		
Bendix P/N	Description	BG P/N
10-29774	Spring Assy.	A7820
10-320467	Stud	21200-3
10-320468	Stud	21200-2
10-320638-1	Outer Ferrule	21467
10-320641	Sleeve	21690
10-320678	Stud	21200-1
10-320679	Sleeve	21102
10-320789-X	Lead	HT1100-X
10-320819-X	Lead	HT2100-X
10-320895-1	Terminal Kit	21220
10-320960-X	Lead	HT1110-X
10-613060	Nut	21464
10-613061	Inner Ferrule	21466
10-613064	Stud	21200-1
10-9571	Knurled Nut	21833

SECONDARY FITTINGS		
BG P/N	Description	Replace Bendix P/N
21253-1	Nut	10-14047
21314	Collar	10-9993 & 10-59445
21252	Spring-Tube	10-85227 & 10-70380
21254	Kit (For 7mm Wire)	All Above



Kit P/N 21220



ORDERING INFORMATION		
For Coil Model	Order Kit P/N	Application
10-320790-1 OR 10-382040-1	21220	Use with 7mm ignition wire, BG P/N 21570. (This kit replaces Bendix P/N 10-320895-1).
	22280	Use with 5/16" ID silicone hose, (BG P/N 21606) and 7mm ignition wire (BG P/N 21570).
10-57460 OR 10-372360 OR 10-382080	21254	Use with 7mm ignition wire, BG P/N 21570. (Replaces Bendix 10-14047, 10-9993, 10-59445, 10-85227, and 10-70380.)
	21254SS	Use with 7mm hi resistance wire (BG P/N 21825). Includes stud & stud support. See page 47.
	21626	Use with 5/16" ID silicone hose (BG P/N 21606) and 7mm ignition wire (BG P/N 21570).
	21626SS	Use with 5/16" ID silicone hose (BG P/N 21606) and 7mm hi resistance wire (BG P/N 21825). Includes stud & stud support. See page 47.

Legacy connecting hardware available for Fairbanks Morse PPT 2477 AD/ADL and for American Bosch (UT) Ignition Systems.

OTHER CONFIGURATIONS AVAILABLE
- PLEASE CALL FACTORY -

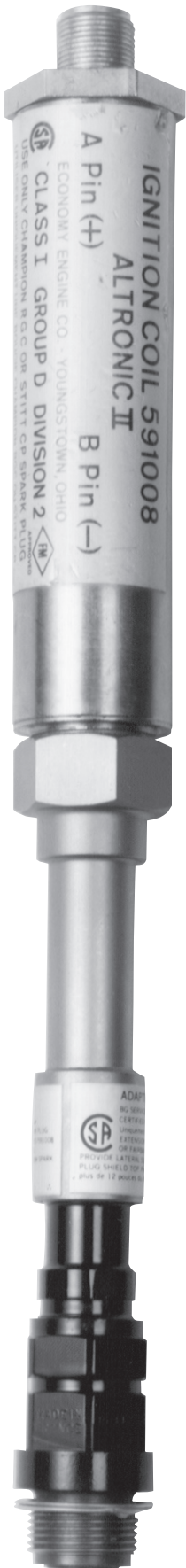
COIL ADAPTER MAXIMIZES THE ADVANTAGE OF YOUR INTEGRAL COIL

Integral Coils eliminate the major source of ignition problems – the secondary lead, and now BG offers a unique Coil Adapter for optimum performance.

- Allows use of standard, proven shielded spark plugs – all makes. No need to use “special” spark plugs.
- Prolongs the life of the integral coil by elevating it away from the heat of the spark plug well.
- Cost-effective because it’s reusable. Unlike “one piece” spark plug-extension assemblies which must be thrown out when the spark plug fails, BG Coil Adapters can be used again and again.

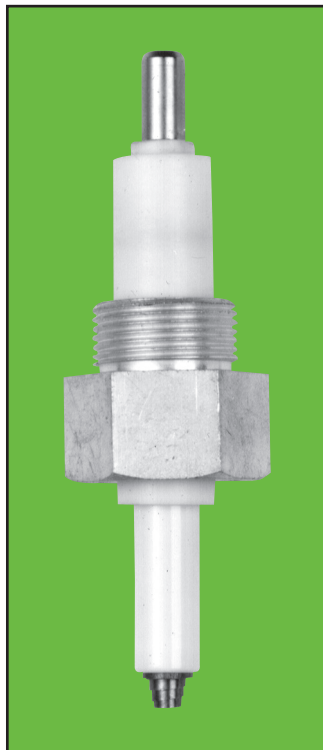
Designed for use with all major integral coils.

- Precision 10-382060
- American Bosch TCL 150 Series
- Altronic 591007/591008
- Fairbanks Morse PPT2477AC, AB



M28-2C Coil Adapter with Altronic Integral Coil and BG Spark Plug RB118SD.

“FM” SERIES COIL ADAPTERS FOR INTEGRAL COILS WITH 13/16”-20 FEMALE THREADS



FM1-2C

- Ceramic-insulated BG adapters permit the use of standard-proven shielded spark plugs.
- Ideal for applications where top-threaded spark plugs are not available or are found unsuitable.
- Available for both 3/4”-20 and 5/8”-24 shielded spark plugs.



FM1-1C

Coil Adapter Model	Length*	Spark Plug Type	Spare Parts Kit No.
FM1-1C	0.13	3/4”-20 Long Terminal	RFM1-1C
FM1-2C	0.13	3/4”-20 Standard Terminal	RFM1-2C
FME-60	6.20	5/8”-24	RFME-60

*Length shown is length added to installed height of spark plug (in inches)

"M" SERIES COIL ADAPTERS FOR 3/4"-20 SHIELDED SPARK PLUGS



Available in a variety of configurations to meet every application.

- Available in a variety of lengths (see chart below).
- Available with standard or long length male terminal.
 - Specify standard male terminal when connecting to 3/4"-20 spark plugs with standard terminal wells; such as, BG RB118SD, RBH485SD, or Champion RHM77N, RHM83N, RHM85G.
 - Specify long male terminal when connecting to 3/4"-20 spark plugs with extended terminal wells; such as Champion RHW77N or RHW80N.
- Available with either PTFE or ceramic insulator. Specify ceramic where temperatures exceed 400°F.
- Rugged stainless steel construction for maximum durability. Spare parts kit available to change insulator assembly when required.
- All models CSA approved for Class I, Division 2 Group D, hazardous locations.
- Proper installation torque: 10-25 ft.-lb.



M28-1C

Coil Adapter with long male terminal for use with 3/4"-20 spark plugs having extended terminal wells; such as Champion RHW77N shown below.



M28-2T

Coil Adapter with standard male terminal for use with 3/4"-20 spark plugs with standard depth terminal wells shown below.



Coil Adapter Model	Length*	Spark Plug Terminal	Insulator	Spare Parts Kit No.
M8-1C	.75	Long	Ceramic	RM8-1C
M8-1T	.75	Long	PTFE	RM8-1T
M8-2C	.75	Standard	Ceramic	RM8-2C
M8-2T	.75	Standard	PTFE	RM8-2T
M15-2C	1.50	Standard	Ceramic	RM15-2C
M28-1C	2.75	Long	Ceramic	RM28-1C
M28-1T	2.75	Long	PTFE	RM28-1T
M28-2C	2.75	Standard	Ceramic	RM28-2C
M28-2T	2.75	Standard	PTFE	RM28-2T
M68-1C	6.32	Long	Ceramic	RM68-1C
M68-1T	6.32	Long	PTFE	RM68-1T
M68-2C	6.32	Standard	Ceramic	RM68-2C
M68-2T	6.32	Standard	PTFE	RM68-2T
M80-1C	8.00	Long	Ceramic	RM80-1C
M80-2C	8.00	Standard	Ceramic	RM80-2C
M90-2C	9.00	Standard	Ceramic	RM90-2C
M108-1C	10.75	Long	Ceramic	RM108-1C
M108-2C	10.75	Standard	Ceramic	RM108-2C
M188-1C	18.75	Long	Ceramic	RM188-1C
M188-2C	18.75	Standard	Ceramic	RM188-2C
M240-2C	24.00	Standard	Ceramic	RM240-2C

*Length shown is length added to installed height of spark plug (in inches)

ALL-WEATHER EXTENSIONS for 3/4"-20 SPARK PLUGS. . . BG, STITT, & CHAMPION



There are only two reasons why more operators use this shielded extension than any other. . .

#1 PERFORMANCE

Unique one-piece design produces a high pressure seal that keeps out dirt and moisture. . . and reduces downtime. Field proven in the hot-test, most constricted plug wells in lengths up to 18 inches. Compatible with all makes of 3/4"-20 spark plugs. All models now CSA approved.

#2 COST

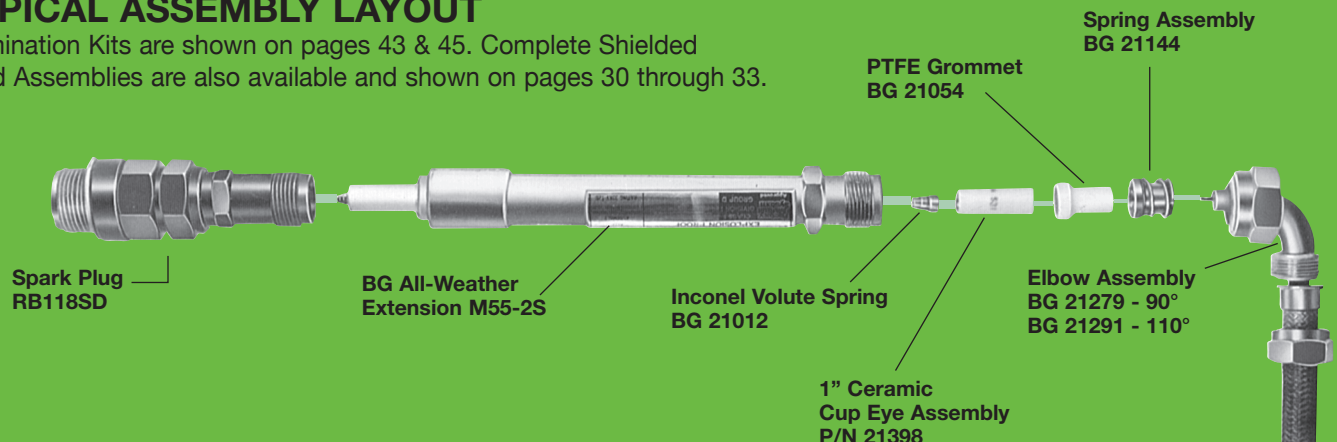
Allows use of standard 3/4" -20 shielded spark plugs rather than the more expensive "extended" plugs offered by some manufacturers. BG's stainless steel all-weather extensions can be used over and over again and even then they are factory overhaulable at greatly reduced prices.



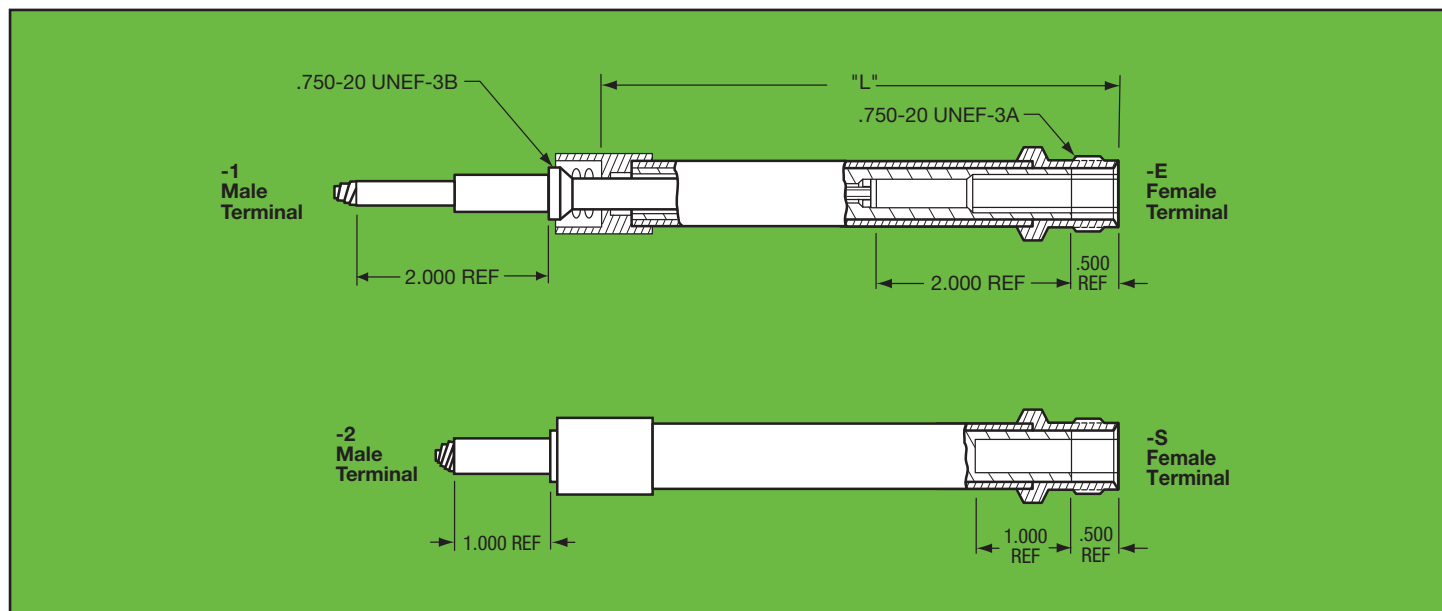
All models have been approved by the Canadian Standards Association (CSA) for use in Class I, Division 2, Group D hazardous locations.

TYPICAL ASSEMBLY LAYOUT

Termination Kits are shown on pages 43 & 45. Complete Shielded Lead Assemblies are also available and shown on pages 30 through 33.



ALL-WEATHER EXTENSIONS for 3/4"-20 SPARK PLUGS. . . BG, STITT & CHAMPION



Designed to meet YOUR application

- Available with either "PTFE" or "CERAMIC" insulator. Temperatures are such in large turbocharged engines that ceramic should be specified. Specify a ceramic insulator by adding suffix "C" to model number. (Example: M55-1EC)
- Available with "LONG" or "STANDARD" male terminal:
 - Specify "LONG" male terminal (—1 Terminal) when connecting to 3/4"-20 spark plugs with extended terminal wells; such as Champion Spark Plug RHW77N or RHW80N.
 - Specify "STANDARD" male terminal (—2 Terminal) when connecting to 3/4"-20 spark plugs with standard terminal wells; such as BG RB118SD, RBH485SD, or Champion RHM77N, RHM83N, RHM85G.
- Available with "EXTENDED" or "STANDARD" female terminal:
 - Specify "EXTENDED" female terminal (—E Terminal) when connecting to leads with long reach terminals; such as BG 21143 or when connecting to coil adapters with long male terminals.
 - Specify "STANDARD" female terminal (—S Terminal) when connecting to leads with standard terminal connectors; such as BG P/N 21398, or when connecting to coil adapters with standard male terminal.
- Some repair components are available - please consult factory for availability.
- Proper installation torque : 10-25 ft.-lb.

Model Number	"L" Length	Male Terminal	Female Terminal
M55 -1E	5.500"	—1	—E
M55 -2E	5.500"	—2	—E
M55 -1S	5.500"	—1	—S
M55 -2S	5.500"	—2	—S
M80 -1E	8.000"	—1	—E
M80 -2E	8.000"	—2	—E
M80 -1S	8.000"	—1	—S
M80 -2S	8.000"	—2	—S
M100 -1E	10.000"	—1	—E
M100 -2E	10.000"	—2	—E
M100 -1S	10.000"	—1	—S
M100 -2S	10.000"	—2	—S
M120 -1E	12.000"	—1	—E
M120 -2E	12.000"	—2	—E
M120 -1S	12.000"	—1	—S
M120 -2S	12.000"	—2	—S
M180 -1E	18.000"	—1	—E
M180 -2E	18.000"	—2	—E
M180 -1S	18.000"	—1	—S
M180 -2S	18.000"	—2	—S
M200 -2S	20.000"	—2	—S
M240 -2S	24.000"	—2	—S

*
*

*Ceramic model only.

For extensions and accessories for 5/8"-24 shielded spark plugs, contact factory.

SHIELDED SPARK PLUG LEAD ASSEMBLIES

LENGTH "X"

HOW TO ORDER:

Identify spark plug (or spark plug extension), coil, elbow, and length required from the charts below and place "TYPE" numbers here: _____

HT BG P/N -

SPARK PLUG (OR SPARK PLUG EXTENSION) TYPE	SPARK PLUG MFG./MODELS	TYPE NUMBER
3/4"-20 Shielding Thread with Standard 1" Terminal Well	BG Models RB118SD, RBH485SD, Champion Models RHM77N, RHL79G, RHN79G, RHB81N, RW83F, RHM83N, RHM85G, RHL89G, RHW79N. Stitt—All "S" series models except those with -2 or -5 suffix.	1
3/4"-20 Shielding Thread with 2" Terminal Well	Champion RHW80N, RHW77N. Stitt—All "S" series models with -2 suffix.	2
5/8"-24 Shielding Thread	BG Models RB27R-1, RB312S, RB485SA, Champion Models EH08, REM77N, REN79G, REW80N, REW82P, REL88B, REM84P, UED88G, REL89G, EW90. Stitt—All "S" series models with -5 suffix.	3

COIL MANUFACTURER	COIL MODEL NO.	TYPE NUMBER
Precision (Bendix)	10-320790-1, 10-382040-1	1
Precision (Bendix)	10-57460, 10-372360, 10-382080	2
Altronic	291001-S, 501061-S, 591010-S	3
Dynalco	IGC 506	3
Altronic	591401-1	3A
Fairbanks Morse	PPT2477AD, ADL	4
United-Technologies Electro-Systems (AMBAC)	CLP80FI	5
	TCG90A35	7
All	Integral Coils Altronic 591007/591008 Fairbanks Morse PPT2477AB, AC Electro-Systems TCL 150 Series Precision (Bendix) 10-382060	6
	Coil Box w/ 11/16"-24 Female	9

	TYPE	TYPE NUMBER
Elbow Type Required for Spark Plug End	None Required	0
	90°	1
	110°	2

	TYPE	TYPE NUMBER
Elbow Type Required for Coil End	None Required	0
	90°	1
	110°	2

LENGTH "X" (INCHES)*	LENGTH X
Specify length in inches. Standard lengths are 10", 12", 16", 18", 22", 24"	

*For CSA approved models, maximum lead length is 42 inches

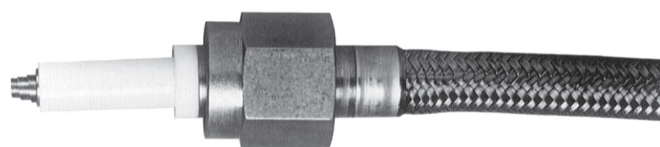
SHIELDED SPARK PLUG LEAD ASSEMBLIES

BG

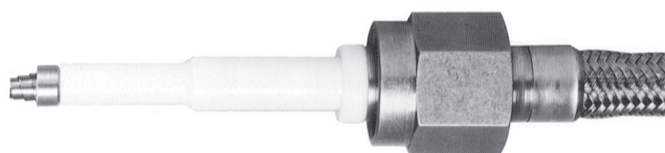


BG's Shielded Spark Plug Leads are Precision Engineered for Safer and More Efficient Engine Operation. . .

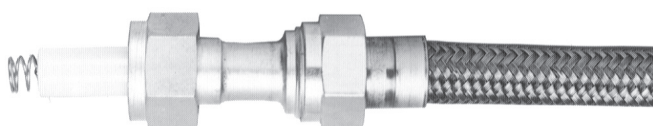
- High quality stainless steel braided conduit with PTFE liner reduces voltage loss and prevents abrasion.
- High quality 7mm ignition cable with a stainless steel conductor eliminates corrosion in the terminations.
- Spark plug and coil connectors are manufactured from high alumina ceramic or virgin PTFE for greater dielectric strength.
- Inconel volute springs and captured springs used wherever design permits for increased spring pressure.
- Precision engineered, BG-manufactured components for better connections.



SPARK PLUG CONNECTOR TYPE 1

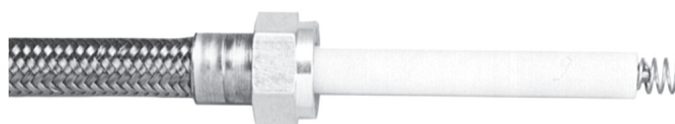


SPARK PLUG CONNECTOR TYPE 2

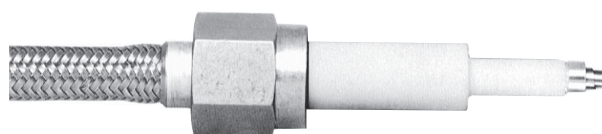


SPARK PLUG CONNECTOR TYPE 3

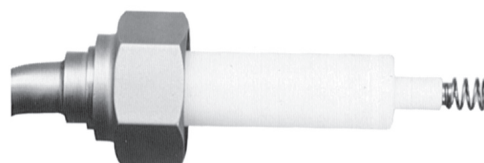
COIL CONNECTOR TYPE 1



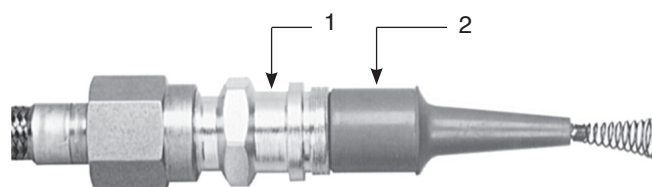
COIL CONNECTOR TYPE 2



COIL CONNECTOR TYPE 3



COIL CONNECTOR TYPE 4



COIL CONNECTOR TYPE 5

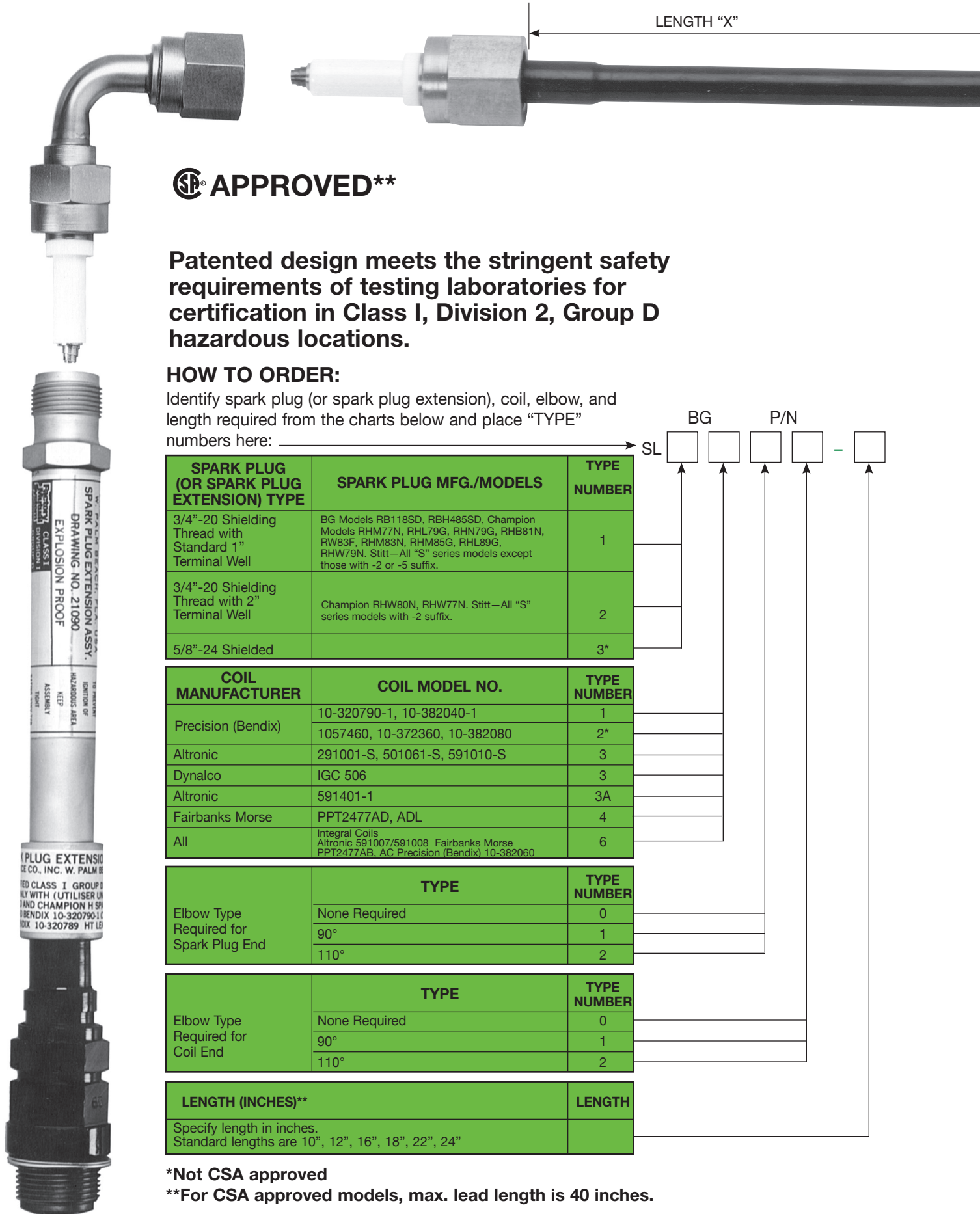
Shown with optional P/N


1) 21749

2) 21750

*Most popular models have been approved by the Canadian Standards Association (CSA) for use in Class I, Division 2, Group D hazardous locations:
HT1100, HT1110, HT1101,
HT1400, HT1401, HT1410,
HT1411, HT2100, HT2110,
HT1300, HT1310, HT1311,
HT2300, HT2310, HT2311,
HT2400, HT2401, HT2410,
HT2411.

CETRA™ SPARK PLUG LEADS



 **APPROVED****

Patented design meets the stringent safety requirements of testing laboratories for certification in Class I, Division 2, Group D hazardous locations.

HOW TO ORDER:
Identify spark plug (or spark plug extension), coil, elbow, and length required from the charts below and place "TYPE" numbers here: _____

SL

BG

P/N

-

SPARK PLUG (OR SPARK PLUG EXTENSION) TYPE	SPARK PLUG MFG./MODELS	TYPE NUMBER
3/4"-20 Shielding Thread with Standard 1" Terminal Well	BG Models RB118SD, RBH485SD, Champion Models RHM77N, RHL79G, RHN79G, RHB81N, RW83F, RHM83N, RHM85G, RHL89G, RHW79N. Stitt—All "S" series models except those with -2 or -5 suffix.	1
3/4"-20 Shielding Thread with 2" Terminal Well	Champion RHW80N, RHW77N. Stitt—All "S" series models with -2 suffix.	2
5/8"-24 Shielded		3*

COIL MANUFACTURER	COIL MODEL NO.	TYPE NUMBER
Precision (Bendix)	10-320790-1, 10-382040-1	1
	1057460, 10-372360, 10-382080	2*
Altronic	291001-S, 501061-S, 591010-S	3
Dynalco	IGC 506	3
Altronic	591401-1	3A
Fairbanks Morse	PPT2477AD, ADL	4
All	Integral Coils Altronic 591007/591008 Fairbanks Morse PPT2477AB, AC Precision (Bendix) 10-382060	6

Elbow Type Required for Spark Plug End	TYPE	TYPE NUMBER
	None Required	0
	90°	1
	110°	2

Elbow Type Required for Coil End	TYPE	TYPE NUMBER
	None Required	0
	90°	1
	110°	2

LENGTH (INCHES)**	LENGTH
Specify length in inches. Standard lengths are 10", 12", 16", 18", 22", 24"	

*Not CSA approved

**For CSA approved models, max. lead length is 40 inches.



COIL CONNECTOR TYPE 3

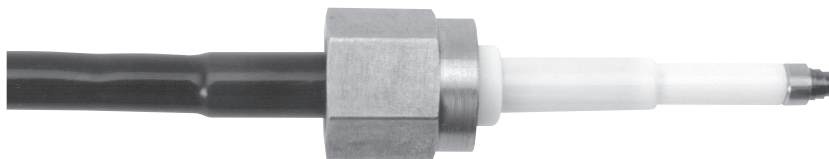
Cetra™ Spark Plug Leads have a non-metallic internal shield that permits use of timing lights, oscilloscopes, and other monitoring devices. . .

FEATURES

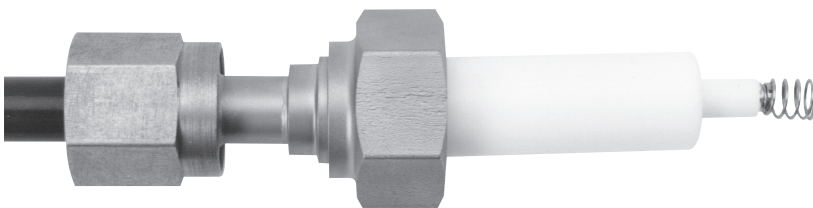
- Monitoring engine performance is faster and easier, resulting in reduced downtime and improved operating efficiency.
- SAFER-Multi-Fault Protection: Two independent insulation layers must be breached for a spark to occur. An internal conductive shield provides a safety path to ground.
- May be used with BG All Weather Extensions (see pages 28 & 29).
- May be used with unshielded spark plugs when used with BG's CETRA™ Series Extensions (see page 34).

Pat. No. 5,625,168

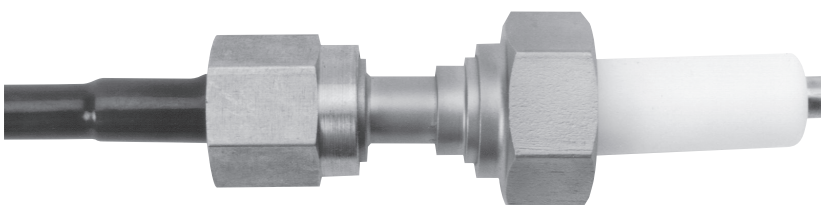
COIL CONNECTOR TYPE 1



COIL CONNECTOR TYPE 4



COIL CONNECTOR TYPE 6



CETRA™ EXTENSIONS PERMIT THE USE OF LOWER COST TOP THREADED SPARK PLUGS WITH BG'S NEW CETRA LEADS. . .

And BG's Unique Cetra™ extensions extend plug life too!



- PTFE coated Viton “O” Ring seals tightly on the spark plug insulator. Because the voltage necessary to “flashover” the spark plug insulator is increased, spark plugs will operate at larger gaps that previously resulted in plug failure.
- Greatly reduces spark plug cost by permitting the use of top threaded spark plugs instead of shielded spark plugs.
- High alumina ceramic insulator prevents dielectric breakdown.
- May be used with Cetra™ leads or conventional shielded leads.

HOW TO ORDER

Select desired length, spark plug, and lead termination and place the corresponding

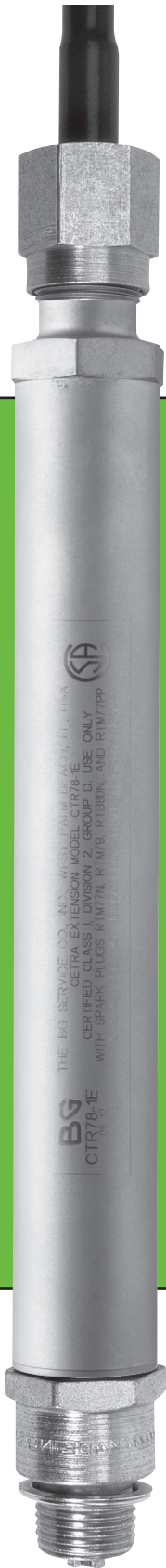
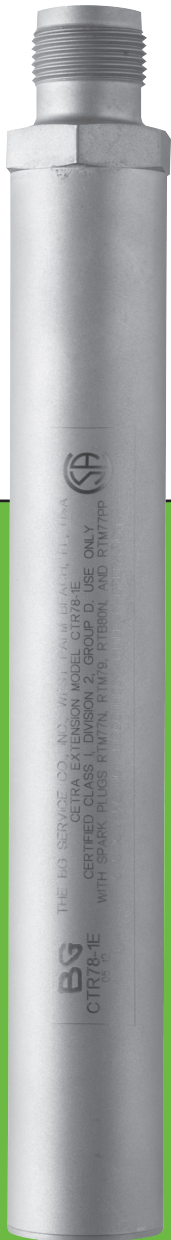
“TYPE” numbers here: P/N → CTR

Extension Length	TYPE
7.75 inches	78
10.25 inches	102
12.25 inches	122
14.25 inches	142

SPARK PLUG MODEL	TYPE
RTM77N, RTM79, ALL TOP THREADED ALTRONIC	1
RTB80N, RTB77WPCC	2
RTM77PP, RTB78N	3

LEAD TERMINATION*	TYPE
Standard length terminal	S
Extended length terminal	E

*Extension has a female terminal on top that accepts spark plug leads with 1" standard male terminals such as P/N's M531, 21011 & 21981-1, or 2" extended male terminals such as 21143 & 21102. See page 39.



MOLDED PARTS: GROMMETS AND BOOTS

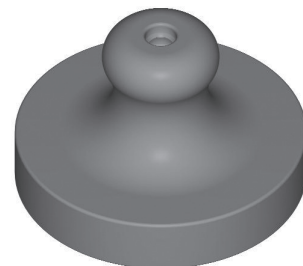
BG



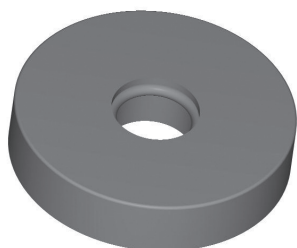
Cummins - BG P/N 26181



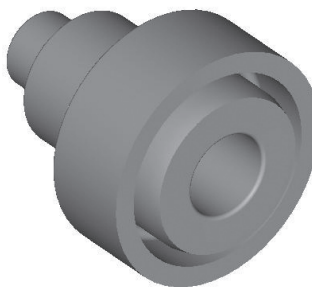
BG P/N 25539



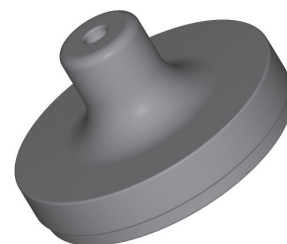
300 CAT - BG P/N 25843



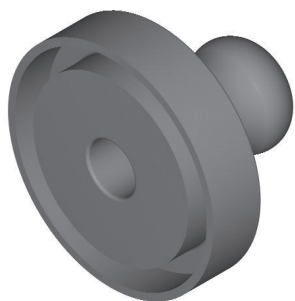
300 CAT - BG P/N 25672



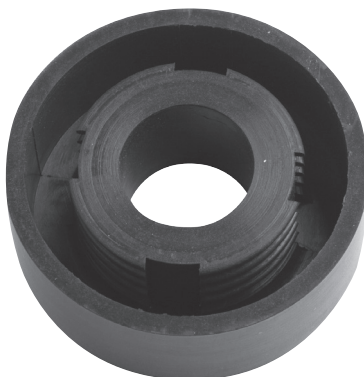
F11 (VSG)
And Waukesha
BG P/N 25923



3400 CAT - BG P/N 25816



3300 CAT - BG P/N 25828



JENBACHER
BG P/N 25538



For Blackjack P/N 25717
and Ultima P/N 25935
BG P/N 25819



BG P/N 22822

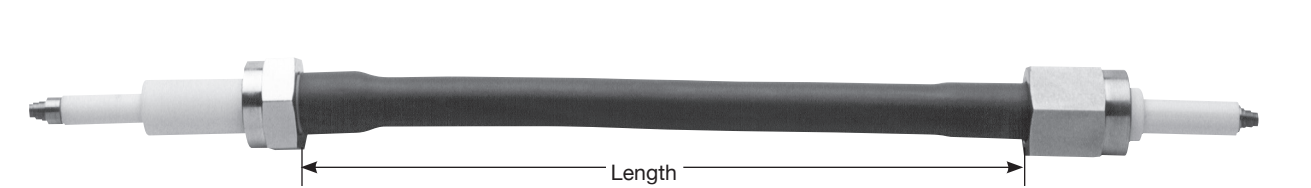


BG P/N 22946



For Cummins
and 14mm Spark Plugs
BG P/N 22504

ALL WEATHER LEADS & KITS FOR SHIELDED SPARK PLUGS



P/N AWH11-10
Lead Assembly

HOW TO ORDER:

To order complete lead assemblies specify cable type, coil type, spark plug connector type and length.
Place the type numbers here:

PART
NUMBER

A **W** -

CABLE TYPE	
Silicone Hose over 7mm wire	H
7mm Wire Only	W
Silicone Hose over 7mm Hi-Resistance Wire	RH
7mm Hi-Resistance Wire	RW

SPECIFY LENGTH IN INCHES
Standard lengths are 10", 12", 16", 18", 24", 30", 36".

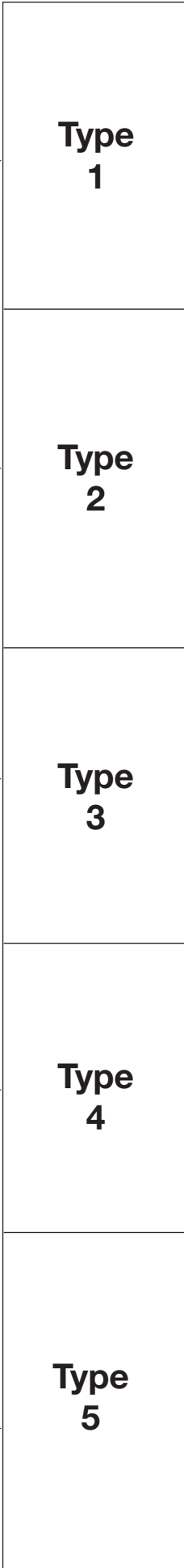
SPARK PLUG CONNECTOR TYPE
AS SHOWN ON OPPOSITE PAGE

All-weather leads w/ 90° spark plug end setup available.
Please call factory.

TYPE	COIL CONNECTOR	
1	Altronic	291001-S 501061-S 591010-S
1A	Altronic	591401-1
2	Precision (Bendix)	10-320790-1 10-382040-1
3	Precision (Bendix)	10-57460-7, -10 10-372360-7, -10 10-382080-7, -10
4	Colt	PPT2477AD/ADL
6	Coil Box	
7	Unshielded Coils	
8	Colt Industries Unshielded Coils	PPT2477P, PPT2477L

Contain "Flashover" within the spark plug by using 3/4"-20 shielded spark plugs with BG's all weather leads!

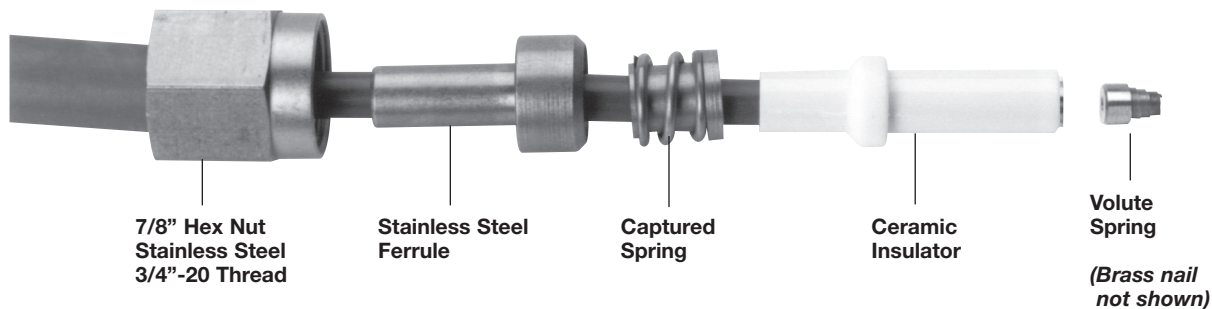
KIT P/N 23433 - Connecting hardware for 5/8"-24 shielded spark plug and silicone hose	Type 6
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ALL WEATHER LEADS & KITS FOR SHIELDED SPARK PLUGS

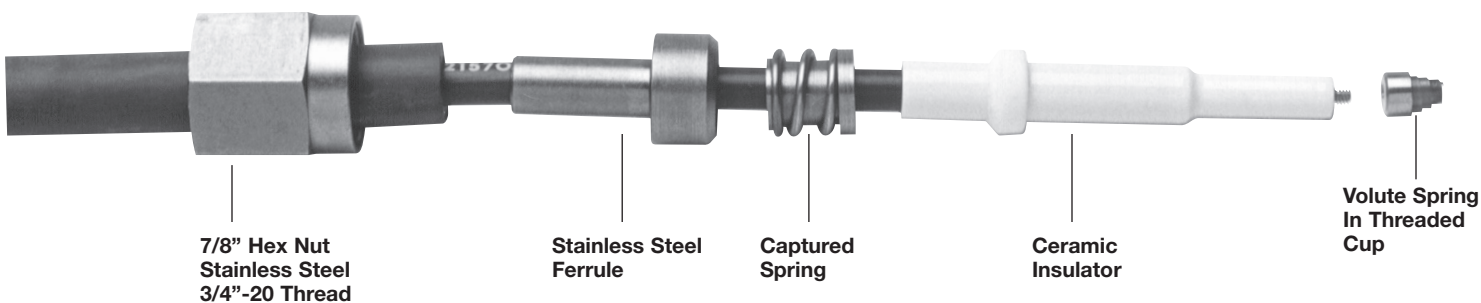


KIT P/N 22455 FOR STANDARD 3/4"-20 SHIELDED SPARK PLUG AND SILICONE HOSE

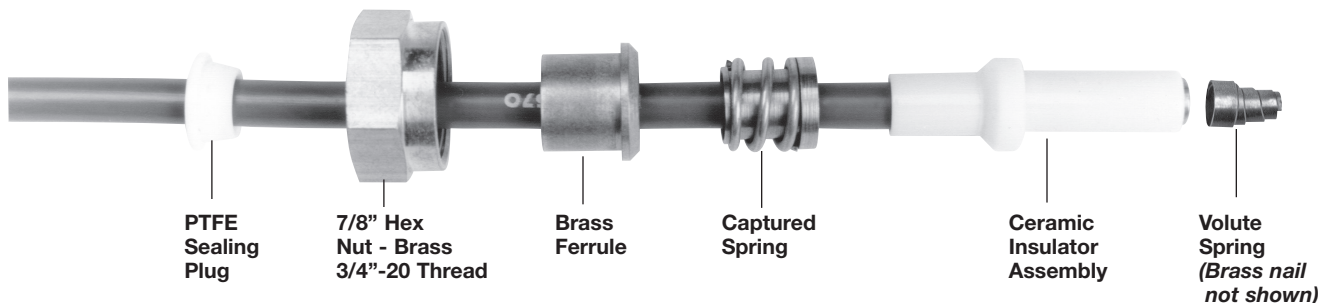


KIT P/N 21625 FOR DEEP WELL 3/4"-20 SHIELDED SPARK PLUG AND SILICONE HOSE

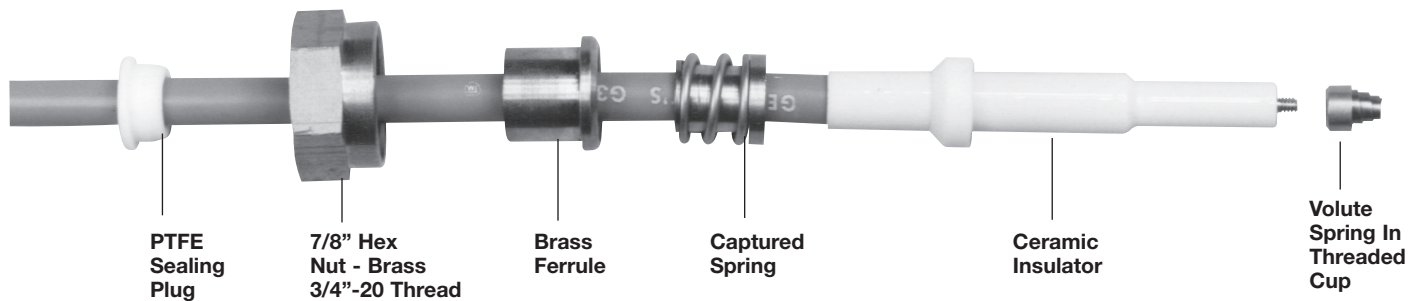
KIT P/N 23023SS FOR DEEP WELL 3/4"-20 SHIELDED SPARK PLUG AND SILICONE HOSE, AND HIGH RESISTANCE WIRE



KIT P/N 21980-2 FOR STANDARD 3/4"-20 SHIELDED SPARK PLUG WITH 7MM WIRE ONLY

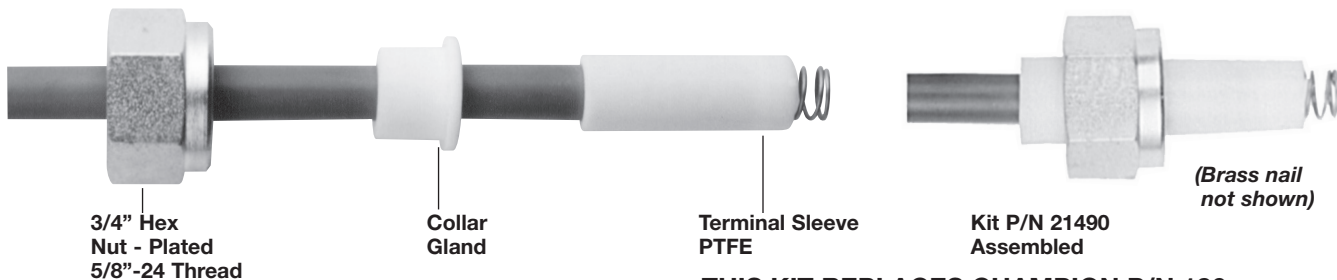


KIT P/N 21220 FOR DEEP WELL 3/4"-20 SHIELDED SPARK PLUG WITH 7MM WIRE ONLY



KIT P/N 21490 FOR 5/8"-24 SHIELDED SPARK PLUG WITH 7MM WIRE ONLY, PTFE SLEEVE

KIT P/N 21490-1 FOR 5/8"-24 SHIELDED SPARK PLUG WITH 7MM WIRE ONLY, CERAMIC SLEEVE (SEVERE APPLICATIONS)



THIS KIT REPLACES CHAMPION P/N 186

HIGH TENSION IGNITION WIRE



Part No.	Type	Construction Details/Application
21570	7mm Standard	Conductor is stranded tinned copper (16 AWG). Insulation is dual-layered hi-temperature silicone rated at 500°F. Solders well. Color red. Available in 100' rolls.
21059	7mm Stainless Steel	Conductor is 7 strands of stainless steel. Insulation is dual-layered hi-temperature silicone rated at 500°F. Excellent for corrosive environments. Cannot be soldered. Color red. Available in 100' rolls.
21825	7mm Suppression	Conductor is a fine monel wire wound around a non conductive inner core. Insulation is dual-layered hi-temperature silicone. Resistance is rated at 200 ohms/ft. minimum. Excellent for RFI sensitive environments. Color red. Available in 100' rolls. Terminate with 21200 series studs and stud support as described on page 41.
25118	7mm Super Cable	Conductor is 16 strands of stainless steel (18 AWG). Insulation is tri-layered hi-temperature PTFE/glass (about 600°F) excellent for very severe environments. Cannot be soldered. Color green. Available in 100' rolls.
22752	8mm Standard	Conductor is 19 strands of tinned copper. Insulation is hi-temperature silicone rated at 500°F. Color blue. Available in 100' rolls.
22936	8mm Suppression	Conductor is a fine chromel wire spiral wrapped type over a non conductive inner wire. Insulation is EPDM rubber. Jacket is high temp silicone rubber. Resistance is rated at 425-475 ohms/ft. color is black available in 100' rolls. Terminate with 21200 series studs and stud support as described on page 41.

PROTECTIVE SILICONE HOSE



Reduce downtime by weather-proofing your secondary leads. . .

Now BG offers 5/16" ID silicone hose that protects 7mm ignition wire and extends lead life. BG's hi-temp silicone hose provides a watertight seal when used in conjunction with the connection kits shown in this catalog. Available in 100' rolls. Specify Part No. 21606.

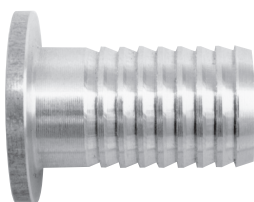
PRIMARY WIRE

- 16 Gauge
- High quality
- Optional letter ID
- Temperature rating
105°C for 21596
125°C for 22071
- Voltage Rating
600 volts
- Available in 100' coils

PART NUMBER	COLOR	LETTER ID
21596-B	BLACK	NONE
21596-R	RED	NONE
21596-W	WHITE	NONE
21596-G	GREEN	NONE
21596-Y	YELLOW	NONE
21596-BN	BROWN	NONE
21596-OR	ORANGE	NONE
21596-BL	BLUE	NONE
22071-16WA	WHITE	A
22071-16WB	WHITE	B
22071-16WC	WHITE	C
22071-16WD	WHITE	D
22071-16WE	WHITE	E
22071-16WF	WHITE	F
22071-16WG	WHITE	G
22071-16WH	WHITE	H
22071-16WJ	WHITE	J
22071-16WK	WHITE	K
22071-16WL	WHITE	L
22071-16WM	WHITE	M
22071-16WN	WHITE	N
22071-16WP	WHITE	P
22071-16WR	WHITE	R
22071-16WS	WHITE	S
22071-16WT	WHITE	T

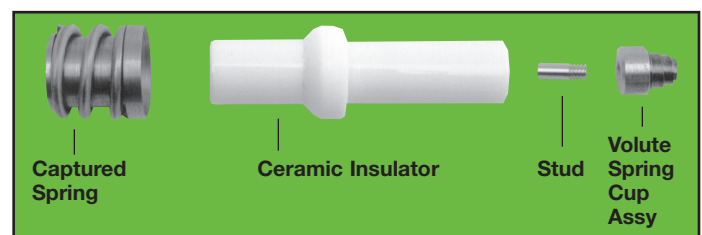
TERMINATION FERRULE

Ferrule 22571 may be used to terminate silicone hose. Use with nuts 21253-01, 21703 and 21214-01.



P/N 22571

KIT P/N 22953 MAKES ASSEMBLY OF IGNITION LEADS FASTER AND EASIER



- Crimped stud terminations eliminates need to flare and bend conductor wires.
- Includes an easy to install volute spring in a threaded cup for maximum spring pressure and better electrical contact.

QUALITY LEAD PARTS REPAIR KITS FOR SHIELDED LEADS

Severe service lead parts for deep well spark plugs. Order individually or specify kit P/N 21250. Kit includes stud 21200-1.



Normal service lead parts for deep well spark plugs. Order individually or specify kit P/N 21255. Kit includes stud 21200-1.



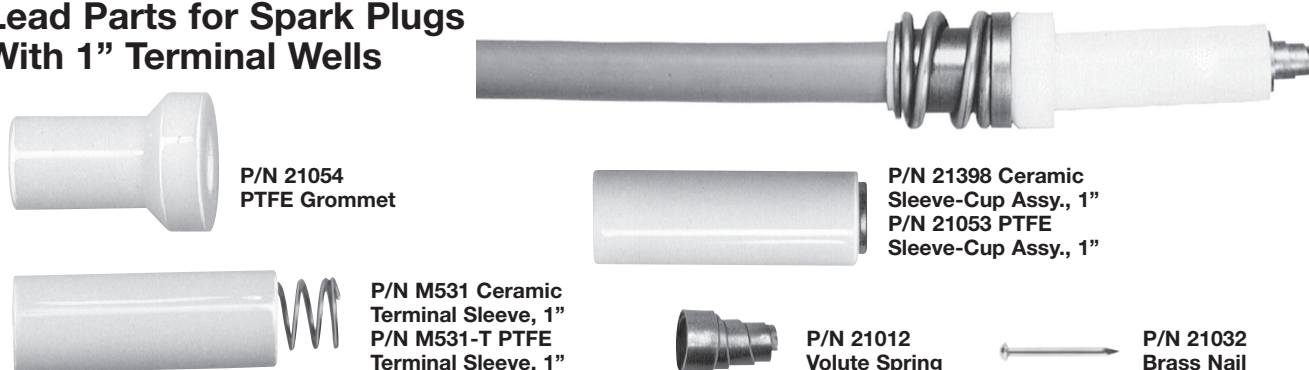
Terminal Kits are available that permit lead assembly by high pressure crimp.



Kit #M2054	
P/N 21143	Ceramic Terminal
P/N 21144	Captured Spring
P/N 21399	Eyelet Cup
P/N 21012	Volute Spring

Kit #M2054-1	
P/N 21102	PTFE Terminal
P/N 21144	Captured Spring
P/N 21399	Eyelet Cup
P/N 21012	Volute Spring

Lead Parts for Spark Plugs With 1" Terminal Wells



Order individually or use the kits below to connect to 3/4"-20 type spark plugs with 1" terminal wells. Kits include P/N 21015 Captured Spring.

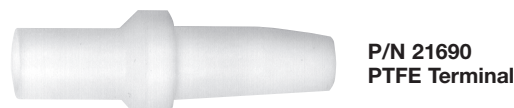
KIT #21450	Severe Service, Solder-Type
P/N M531	Ceramic Terminal Sleeve 1"
P/N 21054	PTFE Grommet
P/N 21144	Captured Spring Assy.

KIT #21451	Severe Service, Nail-Type
P/N 21398	Ceramic Sleeve-Cup Assy. 1"
P/N 21012	Volute Spring
P/N 21054	PTFE Grommet
P/N 21144	Captured Spring Assy.

KIT #21452	Normal Service, Solder-Type
P/N M531-T	PTFE Terminal Sleeve 1"
P/N 21054	PTFE Grommet
P/N 21144	Captured Spring Assy.

KIT #21453	Normal Service, Nail-Type
P/N 21053	PTFE Sleeve-Cup Assy. 1"
P/N 21012	Volute Spring
P/N 21054	PTFE Grommet
P/N 21144	Captured Spring Assy.

The above kits may be used with P/N 21032, Brass Nail.



KIT #22435	Extreme Service w/ Xtra Flashover Protection
21981-1	Ceramic Sleeve Cup Assy.
21012	Volute Spring
21144	Captured Spring Assy.

KIT #21826	Normal Service, Stud Type
P/N 21690	PTFE Insulator
P/N 21200-4	Stud
P/N 21198	Volute Spring in Threaded Cup
P/N 21144	Captured Spring Assy.

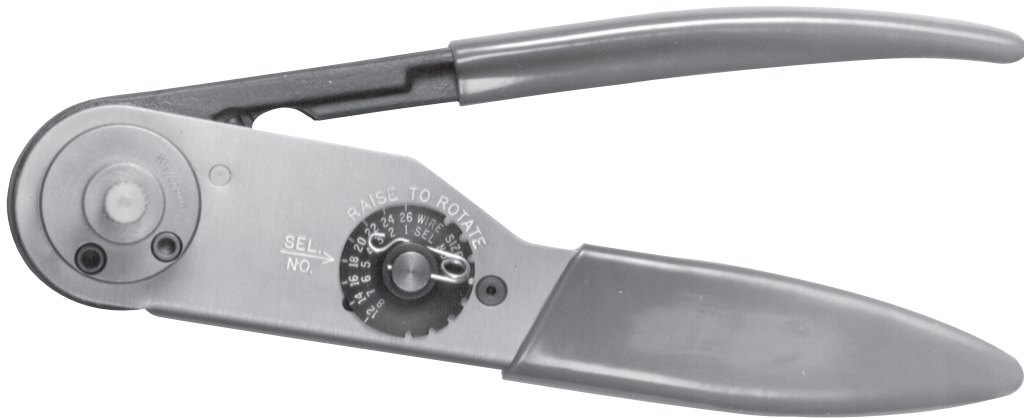
The above kits may be used with P/N 21032, Brass Nail.

CRIMP TOOLS

**CRIMP TOOL
Part No. 21680
is now available for
use with all BG 21200
Series Studs. . .**

This professional crimping tool produces perfect crimp joints every time. It is a “controlled cycle tool” which means that once started, the crimp must be completed before the handle will open again. The depth

of the crimp is pre-set and cannot be exceeded. The tool comes with a “universal locator” which permits precise positioning of the crimp on various length studs.



Note: For large turbine lead contacts, a special crimp tool P/N 25554 is available

**CRIMP TOOL
Part No. 22019
for use with 7mm
BG stud supports. . .**

This professional crimping tool is specially designed for use with BG stud supports described on the following page. The “controlled cycle” feature produces perfect crimps every time.



**Spare Die Sets: P/N 22017 for 7mm stud support
P/N 22956 for 8mm stud support**

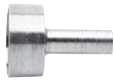
STUD SUPPORT



BG's Stud Supports permit the satisfactory usage of high resistance wire in RFI sensitive environments. . .

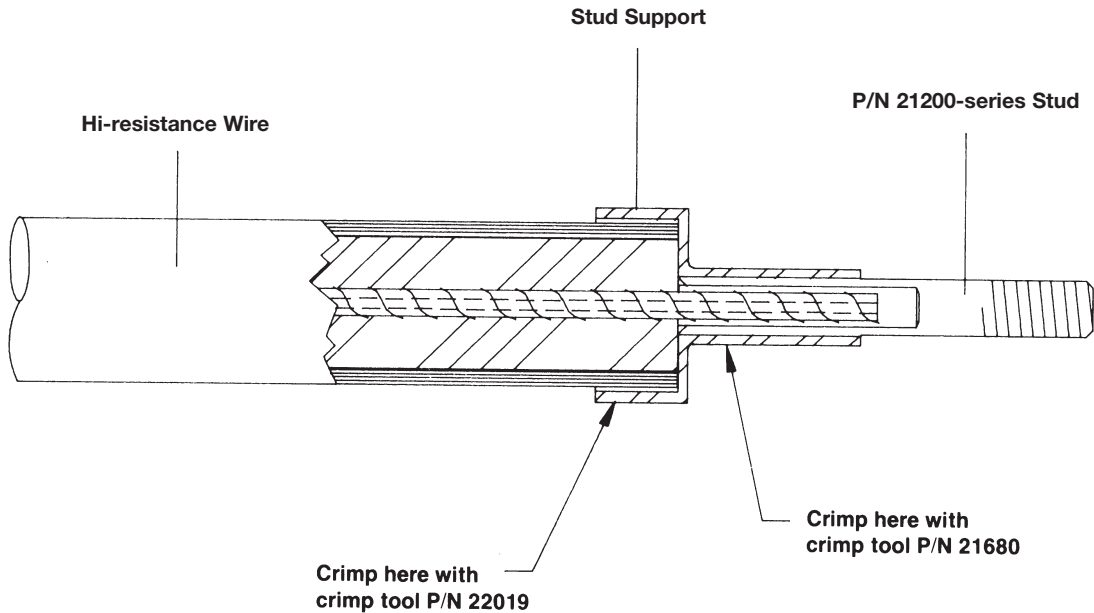
Use of Stud Supports eliminates breakage of fragile high resistance wire during the installation and removal of spark plug leads. The Stud Support accomplishes this by transferring the stress from the stud to the wire insulation. Use of high resistance wire assures optimum system performance by suppressing the "radio noise" that so often interferes with the sophisticated

controls on today's engines. Field installation of the support requires a double crimp using tools P/N 21680 and P/N 22019 with the appropriate dies. Spark plug boots and coil connecting kits specifically designed for use with the Stud Support and 7mm wire are shown throughout this catalog and are denoted with the part number suffix "SS". For 8mm set-ups, please call factory.



P/N 21992
Stud Support
for 7mm wire
P/N 21825

P/N 22931
Stud Support
for 8mm wire
P/N 22936



21200 SERIES STUDS



Note: -5 deleted, replaced with -1.

STUD (Thread #3-48 UNC-2A)

P/N	Length	Hole Depth	Thread Length	Through Hole	Material
21200-1	1-3/32"	7/16"	3/32"	None	Brass, Ni Plated
21200-2	.289"	3/16"	3/32"	Yes	
25859 Ref. 21200-2S	.289"	3/16"	3/32"	None	Stainless
21200-3	.593"	7/16"	3/32"	None	Brass, Ni Plated
21200-4	.500"	5/16"	3/32"	Yes	
21200-6	3.625"	7/16"	3/32"	None	
21200-7	.2892"	7/16"	3/32"	None	
21200-8	.870"	7/16"	3/32"	None	
21200-9	1.385"	7/16"	3/32"	None	

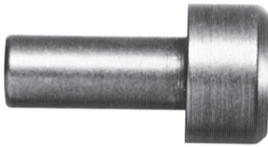
QUALITY LEAD PARTS



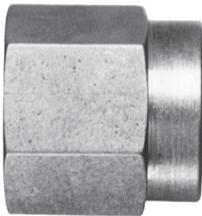
Use the swage ferrules and nut shown here for Class 1, Group D, Division 2 hazardous locations.



P/N 21467
Outer Ferrule,
Stainless Steel



P/N 21466
Inner Ferrule,
Stainless Steel



P/N 21464
3/4"-20 Thread
Stainless Steel

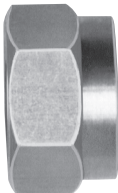
P/N 21466 Inner Ferrule is designed to accept captured spring P/N 21144



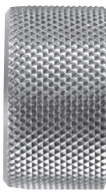
P/N 21284-1
Swage Collar
Stainless Steel



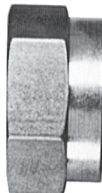
P/N 21344
Swage Ferrule
Insert
Stainless Steel



P/N 21253-1 (Plated)
P/N 21253 (Brass)
Hex Nut
11/16"-24 Thread



P/N 21703
Knurled Nut
3/4"-20 Thread
Stainless Steel



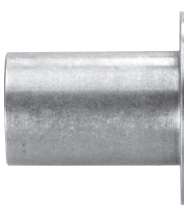
P/N 23234
(Plated Brass)
Hex Nut
3/4"-20 Thread



Use the parts shown with Conduit P/N 21345, 5/16" I.D.



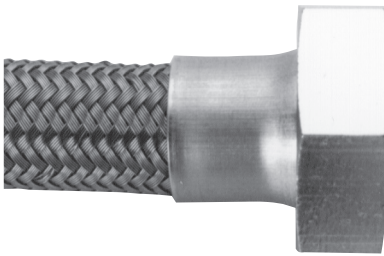
P/N 21964
Swage Collar
Stainless Steel



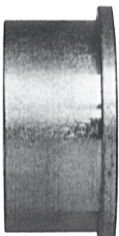
P/N 21963
Swage Ferrule
Insert
Stainless Steel



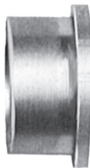
P/N 22058
Nut, 1 3/16" Hex
1 1/16"-18 Thread
Plated



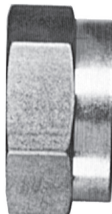
Use the parts shown with Conduit P/N 21968, 1/2" I.D.



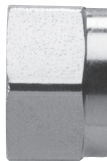
P/N 21346
Brass Ferrule, .921" I.D.
Use with C45 conduit
(mag to header)



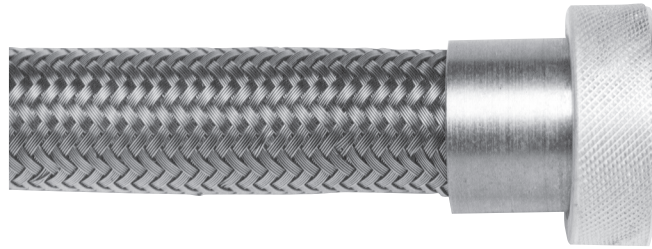
P/N 21148-01
Plated Brass Ferrule
.484" I.D.
Use with 5/16" I.D.
conduit without PTFE liner



P/N 21214-01 (Plated)
P/N 21214 (Brass)
Hex Nut
3/4"-20 Thread



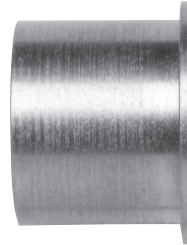
P/N 21277-01 (Plated)
Hex Nut
5/8"-24 Thread
(.510" Thru Hole)



**P/N 21527 (Plated)
P/N 21527-1 (Brass)
Knurled Nut
1-3/16"-18 Thread**



**P/N 22686
Hex Nut (Plated)
1-3/16" - 18 Thread**



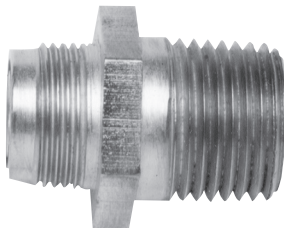
**P/N 21710
Swage Collar
Stainless Steel**



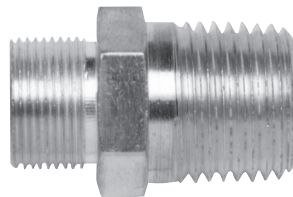
**P/N 21709
Swage Ferrule
Insert
Stainless Steel**

Use the parts shown above with Conduit P/N 21736, 5/8" ID

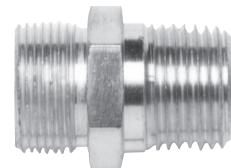
Adapters



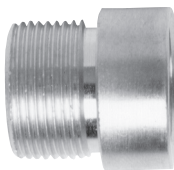
**P/N 21829-1 (Plated)
P/N 21829 (Brass)
Adapter
3/4"-20 UNEF x 1/2"-14 NPT**



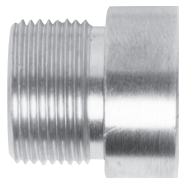
**P/N 21524-1 (Plated)
P/N 21524-2 (Brass)
Adapter
11/16"-24 UNEF x 1/2"-14 NPT**



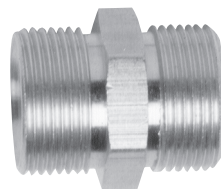
**P/N 21513-1 (Plated)
P/N 21513-3 (Brass)
Adapter
11/16"-24 UNEF x 3/8"-18 NPT**



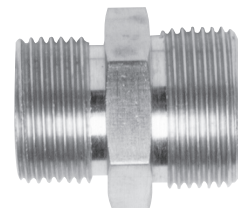
**P/N 21512
Adapter
11/16"-24 Male
11/16"-24 Female
Aluminum**



**P/N 21512-1
Adapter
11/16"-24 Male
5/8"-24 Female
Aluminum**



**P/N 21511
Adapter
11/16"-24 x 11/16"-24
Aluminum**

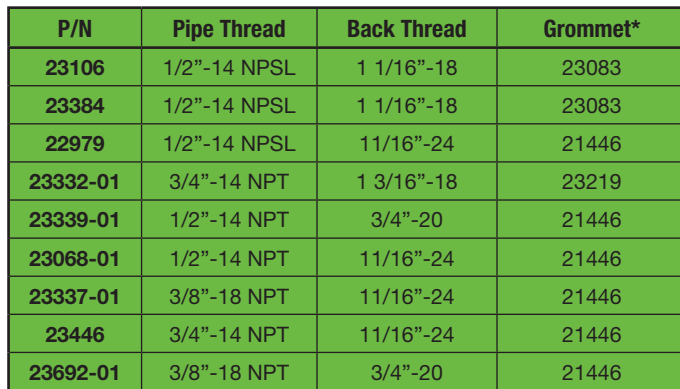


**P/N 21794
Adapter
11/16"-24 x 5/8"-24
Aluminum**

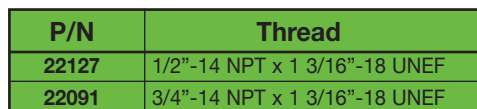
**VARIOUS SWAGING DIES AVAILABLE FOR BG MADE FERRULES
CONSULT FACTORY FOR P/N, PRICING, AND AVAILABILITY**

BG's Pipe Thread Adapter Assemblies provide built-in short circuit protection.

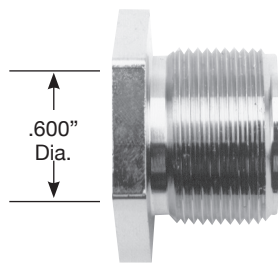
- Captive Neoprene Grommet at pipe thread end prevents abrasions.
- Rugged nickel plated brass prevents corrosion.
- Machined close tolerance threads.
- Recess for 21446 Silicone Grommet or various PTFE grommets at the conduit end where applicable.
- Available with sealing locknuts for straight pipe thread models.



PIPE THREAD ADAPTER



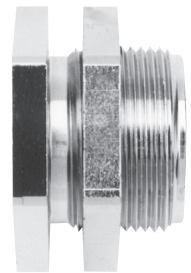
QUALITY LEAD PARTS Thru-Bulkhead Assemblies



P/N 22509
Thru-Bulkhead Shell
Plated
1"-20 UNEF -2A Thread
1 1/4" Hex



P/N 22592
Nut for Thru-
Bulkhead Shell
Plated
1"-20 UNEF -2B Thread
1 1/4" Hex



Assembled

Elbow Assemblies

ANGLE	MODEL NO.	NUT	BACK-THREAD	EQUIVALENT TO CO-OP (Simmonds Precision) P/N
90°	21035*	3/4"-20	11/16"-24	7725
	21285	5/8"-24	11/16"-24	6840 (E-463)
	21303	11/16"-24	11/16"-24	54090 (E-894)
110°	21040*	3/4"-20	11/16"-24	7726
	21286	5/8"-24	11/16"-24	5585 (E-497)
150°	21289	5/8"-24	11/16"-24	54053 (E-511)
	21827*	3/4"-20	11/16"-24	N/A
180° (Straight)	21272	5/8"-24	11/16"-24	54072 (E-762)
	21318	5/8"-24	3/4"-20	N/A
	21347*	3/4"-20	11/16"-24	54077

*Elbows with 3/4"-20 nuts have a recessed ferrule and are designed to accept Captured Spring 21144. When this feature is not desired, please order under the following Model Numbers: E-850 instead of 21035, E-908 instead of 21040, E-911 instead of 21827, and E-869 instead of 21347.



Nickel Plated

Stainless Steel 3/4"-20 Elbows for Class 1, Group D, Division 2 Hazardous Locations

MODEL	ANGLE	NUT	BACKTHREAD
21279	90°	3/4"-20	3/4"-20
21291	110°	3/4"-20	3/4"-20
21457	90°	1"-20	3/4"-20
21476	180°	1"-20	3/4"-20



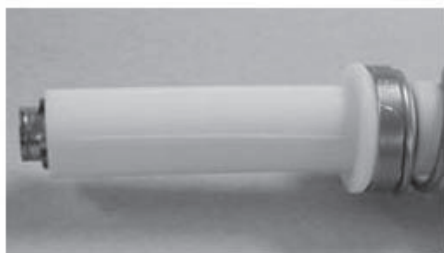
TURBINE PRODUCTS



ARP670 Type 1M



ARP670 Type 3M



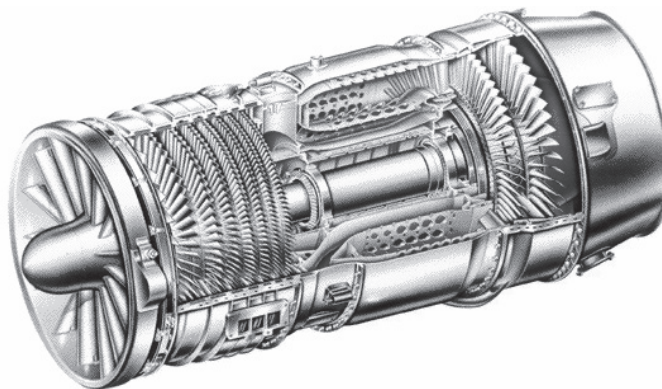
ARP670 Type 5M

BG offers reconditioning services and spare part kits for BG turbine leads.

New models are added regularly.
Consult factory for inquiries.

GE LEADS - 201 SERIES		
Ref. GE P/N	BG P/N	Description
201B222P27	21275-27	LEAD ASSY.
201B222P29	21275-29	LEAD ASSY.
201B222P30	21275-30	LEAD ASSY.
201B222P32	21275-32	LEAD ASSY.
201B222P33	21275-33	LEAD ASSY.
201B222P34	21275-34	LEAD ASSY.
201B222P35	21275-35	LEAD ASSY.
201B222P37	21275-37	LEAD ASSY.
201B222P38	21275-38	LEAD ASSY.
201B222P41	21275-41	LEAD ASSY.
201B222P43	21275-43	LEAD ASSY.

Garrett Lead	
Ref. Champion Aero.	BG P/N
50158-1	26054



BG-made aftermarket leads for GE, Pratt & Whitney, Westinghouse, Garrett, Alstom, etc. Ground Applications

All ARP670 type "M" terminals available.
Type "F" terminals can be custom designed upon request.
Brazed or swaged conduit construction.

100 psi pressure testing available for brazed conduits.
Electric contacts available in standard spring type or exotic materials (tungsten, beryllium-copper, etc.).

Our standard insulation materials are alumina ceramic and premium electrical grade PTFE.
Standard and custom configurations available.

GE LEADS - LM SERIES		
Ref. GE P/N	BG P/N	Description
9600M37P11	23970-12	LEAD ASSY.
9600M37P12	23970-12	LEAD ASSY.
9600M37P13	23970-13	LEAD ASSY.
L24932P01	26120-01	LEAD ASSY.
L24932P02	25135-02	LEAD ASSY.

TURBINE PRODUCTS

Other products Available!

Consult Factory!

*For high temperature versions exceeding GE specifications of 500° F, call factory.

GE LEADS - 354-SERIES					
Ref. GE P/N	BG P/N	Description	Ref. GE P/N	BG P/N	Description
354A1513P001	23600-01	LEAD ASSY.	354A1513P102	25361-02	LEAD ASSY.
354A1513P002	23600-02	LEAD ASSY.	354A1513P103	25361-03	LEAD ASSY.
354A1513P003	23600-03	LEAD ASSY.	354A1513P104	25361-04	LEAD ASSY.
354A1513P004	23600-04	LEAD ASSY.	354A1513P105	25361-05	LEAD ASSY.
354A1513P005	23600-05	LEAD ASSY.	354A1513P130	25362-30	LEAD ASSY.
354A1513P010	23870-10	LEAD ASSY.	354A1513P131	25362-31	LEAD ASSY.
354A1513P011	23870-11	LEAD ASSY.	354A1513P132	25362-32	LEAD ASSY.
354A1513P012	23870-12	LEAD ASSY.	354A1513P133	25362-33	LEAD ASSY.
354A1513P013	23870-13	LEAD ASSY.	354A1513P134	25362-34	LEAD ASSY.
354A1513P014	23870-14	LEAD ASSY.	354A1513P110	25363-10	LEAD ASSY.
354A1513P030	23605-30	LEAD ASSY.	354A1513P111	25363-11	LEAD ASSY.
354A1513P031	23605-31	LEAD ASSY.	354A1513P112	25363-12	LEAD ASSY.
354A1513P032	23605-32	LEAD ASSY.	354A1513P113	25363-13	LEAD ASSY.
354A1513P033	23605-33	LEAD ASSY.	354A1513P114	25363-14	LEAD ASSY.
354A1513P034	23605-34	LEAD ASSY.	354A1513P150	25364-50	LEAD ASSY.
354A1513P050	25035-50	LEAD ASSY.	354A1513P151	25364-51	LEAD ASSY.
354A1513P051	25035-51	LEAD ASSY.	354A1513P152	25364-52	LEAD ASSY.
354A1513P052	25035-52	LEAD ASSY.	354A1513P153	25364-53	LEAD ASSY.
354A1513P053	25035-53	LEAD ASSY.	KITS FOR 354A1513	25220	END KIT
354A1513P101	25361-01	LEAD ASSY.		25200-T	END KIT

PRATT & WHITNEY			
Ref. OEM P/N	Ref. UNISON P/N	BG P/N	Description
368158	40535	23853-82	LEAD ASSY.
713091	48455	25292-01	LEAD ASSY.
368159	40534	23853-124	LEAD ASSY.
	42557	25264-01	LEAD ASSY.
589359	43079	25263-01	LEAD ASSY.
653554	43546	25228-01	LEAD ASSY.
1080274 B	9047505-1 D	25404-46.75	LEAD ASSY.
1080275 B	9047505-2 D	25404-89.50	LEAD ASSY.

ALSTOM / GE LEADS		
Ref. Alstom P/N	BG P/N	Description
91350216G001	26150-01	LEAD ASSY.
91350216G002	26150-02	LEAD ASSY.
91350216G003	26150-03	LEAD ASSY.
91350216G004	26150-04	LEAD ASSY.
91350216G005	26150-05	LEAD ASSY.
91350216G006	26150-06	LEAD ASSY.
91350216G007	26150-07	LEAD ASSY.
91350216G008	26150-08	LEAD ASSY.
91350216G009	26150-09	LEAD ASSY.
91350216G0010	26150-010	LEAD ASSY.
91350216G0011	26150-011	LEAD ASSY.
91350216G0012	26150-012	LEAD ASSY.
91350216G0013	26150-013	LEAD ASSY.
91350216G0014	26150-014	LEAD ASSY.

NUOVO PIGNONE		
Ref. N.P. P/N	BG P/N	Description
RTO74548	21278-25	LEAD ASSY.
RTO74669	21278-23	LEAD ASSY.
RTO74600	25560-29	IGNITER LEAD ASSY.
RTO74601	25560-30	IGNITER LEAD ASSY.
RTO74511	25560-32	IGNITER LEAD ASSY.
RTO74512	25560-34	IGNITER LEAD ASSY.
RTO74513	25560-35	IGNITER LEAD ASSY.
RTO74514	25560-37	IGNITER LEAD ASSY.
RTO74515	25560-38	IGNITER LEAD ASSY.
RTO74533	25560-43	IGNITER LEAD ASSY.
RTO74534	25560-44	IGNITER LEAD ASSY.

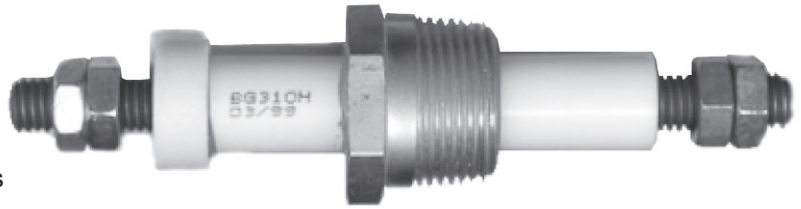
GE LEADS - 311 SERIES*		
Ref. GE P/N	BG P/N	Description
311A5802P1	21160-01	LEAD ASSY.
311A5802P10	21160-10	LEAD ASSY.
311A5802P11	21160-11	LEAD ASSY.
311A5802P12	21160-12	LEAD ASSY.
311A5802P13	21160-13	LEAD ASSY.
311A5802P2	21160-02	LEAD ASSY.
311A5802P3	21160-03	LEAD ASSY.
311A5802P5	21160-05	LEAD ASSY.
311A5802P6	21160-06	LEAD ASSY.
311A5802P7	21160-07	LEAD ASSY.
311A5802P8	21160-08	LEAD ASSY.
311A5802P4	21263	END KIT
311A5802P9	21500	END KIT

GE TERMINAL EXTENSIONS		
Ref. GE P/N	BG P/N	Description
239A5669 PT1	21265-06	TERM. EXTENSION
158A3479 PT14	21265-03	TERM. EXTENSION
158A3479 PT15	21265-08	TERM. EXTENSION
158A3479 PT16	21265-09	TERM. EXTENSION
158A3479 PT17	21265-10	TERM. EXTENSION
158A3479 PT18	21265-14	TERM. EXTENSION
158A3479 PT19	21265-16	TERM. EXTENSION
158A3479 PT20	21265-17	TERM. EXTENSION
158A3479 PT21	21265-07	TERM. EXTENSION
158A3479 PT22	21265-15	TERM. EXTENSION
158A3479 PT23	21265-02	TERM. EXTENSION
158A3479 PT24	21265-05	TERM. EXTENSION
158A3479 PT25	21265-04	TERM. EXTENSION
158A3479 PT26	21265-11	TERM. EXTENSION
158A3479 PT27	21265-12	TERM. EXTENSION
158A3479 PT28	21265-01	TERM. EXTENSION
158A3479 PT30	21265-18	TERM. EXTENSION
219B6771 PT1	21265-01	TERM. EXTENSION
219B6771 PT2	21265-06	TERM. EXTENSION

ELECTRIC FEEDTHROUGHS

Used as terminals and overloads in...

- Semi-Hermetic Air Conditioning Compressors
- Semi-Hermetic Refrigeration Compressors
- Explosion Proof Electric Motors
- Electromagnets
- Vacuum Furnaces
- Electric Steam Generators
- Autoclaves
- Oil & Gas Filled Transformers and Switching Equipment
- Centrifugal and Submersible Pumps



BG ELECTRIC FEEDTHROUGH INTERCHANGE GUIDE	
Auburn Part Number	BG Part Number
F-200-1, F-200-1H, F-210-1H	BG210-1H
F-220-1H	BG220-1H
F-230-1H	BG230-1H
F-240LL, F-240LLH F-250LL, F-250LLH	BG250LLH
F-300, F-310H	BG310H
F-350H	BG350H
N/A	BG350B
F-610	BG610
F-630	BG630
F-650	BG650

Characteristics:

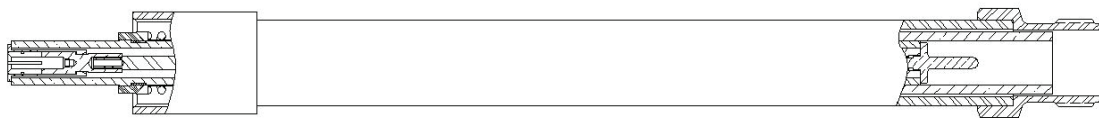
- Provide a leakproof electrical connection through the walls of a variety of pressure vessels.
- Are compatible with currently used refrigerants and phenolic oils.
- Have a superior leakage resistance, tested with a helium leak tester, and a standard acceptance leak rate of $<1 \times 10^{-6}$ cc/sec (He).
- Typical operating pressures are from 0 PSIA to 500 PSIG.
- Have a greater temperature capability than similar products... up to 250 deg. F.
- Are built with copper conductors (brass for BG220-1H and BG350B) and brass nuts for maximum electrical current carrying ability and lowest connection losses.

BG Model	Conductor	Current Rating Amps	Electric Flashover >	Mounting Thread, Hex	Overall Length	Insertion Length	Operating Pressure ^{1,2}	Brass Nut Installation ³	Maximum Operating Temp.
BG210-1H	.250 in. (6.35 mm)	175	10kV DC	3/8-18 PTF- SAE Short, 13/16" Hex	4.45 in (113mm)	1.57 in (39.9mm)	500 PSIG (3445Kpa)	40 in-lb (4.5 N-m)	250° F (121° C)
BG220-1H		105		5/8-18 UNF-2A X .360 LG. 13/16"Hex					
BG230-1H		175	14kV DC	1/2-14 NPT 7/8" Hex	5.17 in (131.3mm)	1.93 in (49mm)			
BG250LLH									
BG310-H	.375 in. (9.53 mm)	275	12kV DC	3/4-14 NPT 1-1/8" Hex	5.22 in (132.6mm)	2 in (50.8mm)		10 ft-lb (13.5 N-m)	
BG350-H				7/8-14 UNF-2A X .475 Lg. 1-1/8" Hex					
BG350-B		175							
BG610	.625 in. (15.88 mm)	750	10kV DC	1-11 1/2 NPT 1-3/8" Hex	5.91 in (150.1mm)	2.12 in (53.8mm)		50 ft-lb (67.8 N-m)	
BG630				1 5/16 - 12 UN-2A 1-3/8" Hex	7.68 in (195.1mm)	2.88 in (73.2mm)			
BG650					5.91 in (150.1mm)	2.12 in (53.8mm)			

¹ Leak Rate: Test acceptance $< 1 \times 10^{-6}$ cc/sec (He)

² Hydrostatic Pressure test 2500 PSI

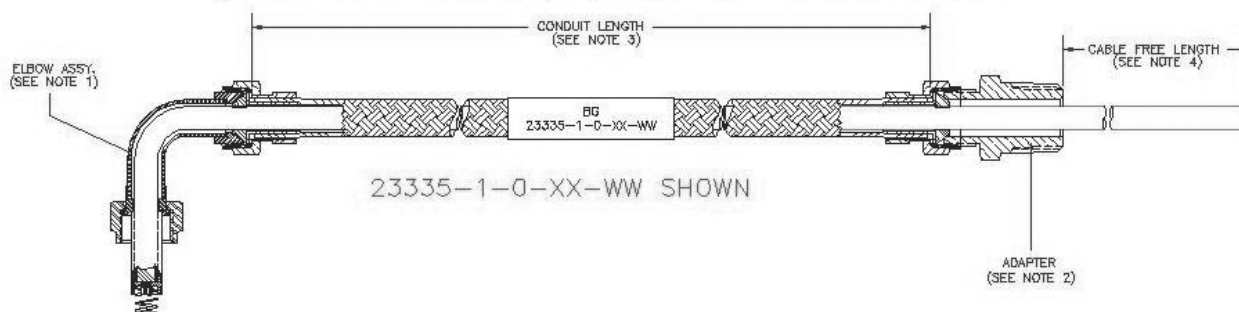
³ Installation Note: Recommended installation torque for brass nuts should not be exceeded. Electrode threads will be damaged. BG recommends the use of two wrenches when connecting to our feedthroughs. There are two brass nuts on each end that must be tightened against one another.



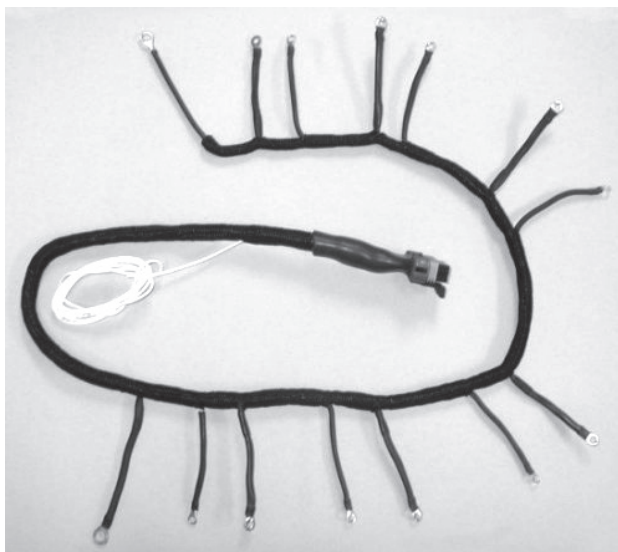
SHIELDED TURBINE EXTENSION P/N 25775 REF. CHAMPION P/N SE-8E

BG P/N 23335-Z-Y-XX-WW

- NOTES:
1. DRAWING DASH NUMBER 1st SUFFIX (-Z) INDICATES ELBOW TYPE:
 "0" DENOTES 21272, 180° ELBOW
 "1" DENOTES 21285, 90° ELBOW
 "2" DENOTES 21286, 110° ELBOW
 "3" DENOTES 21289, 150° ELBOW
 2. DRAWING DASH NUMBER 2nd SUFFIX (-Y) INDICATES ADAPTER TYPE:
 "0" DENOTES 21524-01, 1/2-14 NPT ADAPTER
 "1" DENOTES 21513-01, 3/8-18 NPT ADAPTER
 "2" DENOTES 22979, 1/2-14 NPSL ADAPTER ASSY.
 3. DRAWING DASH NUMBER 3rd SUFFIX (-XX) IS EQUAL TO CONDUIT LENGTH IN INCHES.
 4. DRAWING DASH NUMBER 4th SUFFIX (-WW) IS EQUAL TO CABLE FREE LENGTH IN INCHES.



BURNER, BOILER, DRYER, FLARESTACK & OVEN LEADS W/ SILICONE OR PTFE INSULATED CABLE MANY MODELS AVAILABLE



NYLON BRAIDED HARNESSES



BG SPARK PLUGS

**BG’s Iridium Electrode Spark Plugs
Are Designed To Run Cooler, Last Longer,
For Today’s Clean Burn Engines. . .**


- Iridium electrodes resist erosion at high temperatures.
- Exceptional performance under the most demanding operating conditions.
- Models available to meet the requirements of most industrial engines.

**Consistent long-term performance
has established BG’s reputation for
engineering excellence.**



Plug Type	Thread Size	Thread Reach	Model	Heat Range	Shielding Thread	Resistor	Installed Height	Hex Size	Std. Gap
Unshielded 	7/8"-18	5/8"	RB212-1	Medium	–	Yes	2-11/32"	15/16"	.015"
	7/8"-18	5/8"	RB105-1	Cold	–	Yes	3-7/16"	15/16"	.015"
	7/8"-18	1"	RB114-1	Cold	–	Yes	3-1/16"	15/16"	.015"
	18mm	1/2"	RB485-1	Medium	–	Yes	2-15/32"	7/8"	.015"
Shielded 	7/8"-18	5/8"	RB118SD	Cold	3/4"-20	Yes	2-3/32"	15/16"	.015"
	18mm	1/2"	RBH485SD	Cold	3/4"-20	Yes	2-1/4"	7/8"	.015"
	18mm	13/16"	BG341-1	Medium	3/4"-20	Yes	2-1/2"	7/8"	.014"

All models have two iridium ground electrodes except for one.
 Model BG341-1 has a massive nickel electrode (3 prongs).
 Model RB777 -1 and -2 have one iridium “J” electrode.

Plug Type	Thread Size	Thread Reach	Model	Heat Range	Shielding Thread	Resistor	Installed Height	Hex Size	Std. Gap
Unshielded 	18mm	13/16"	RB777-1	Cold	–	Yes	3-17/32"	7/8"	.012"
	18mm	13/16"	RB777-2	Cold	–	Yes	3-17/32"	7/8"	.012"
	18mm	13/16"	RB778-1	Cold	–	Yes	3-17/32"	7/8"	.012"
	18mm	13/16"	RB778-2	Cold	–	Yes	3-17/32"	7/8"	.012"
CALL FACTORY FOR LATEST NEWS ABOUT SPARK PLUGS									

The models listed above have electrodes fitted with iridium discs held in place by a double retention system.
 The design also utilizes a monolithic resistor set-up.

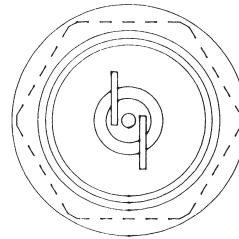
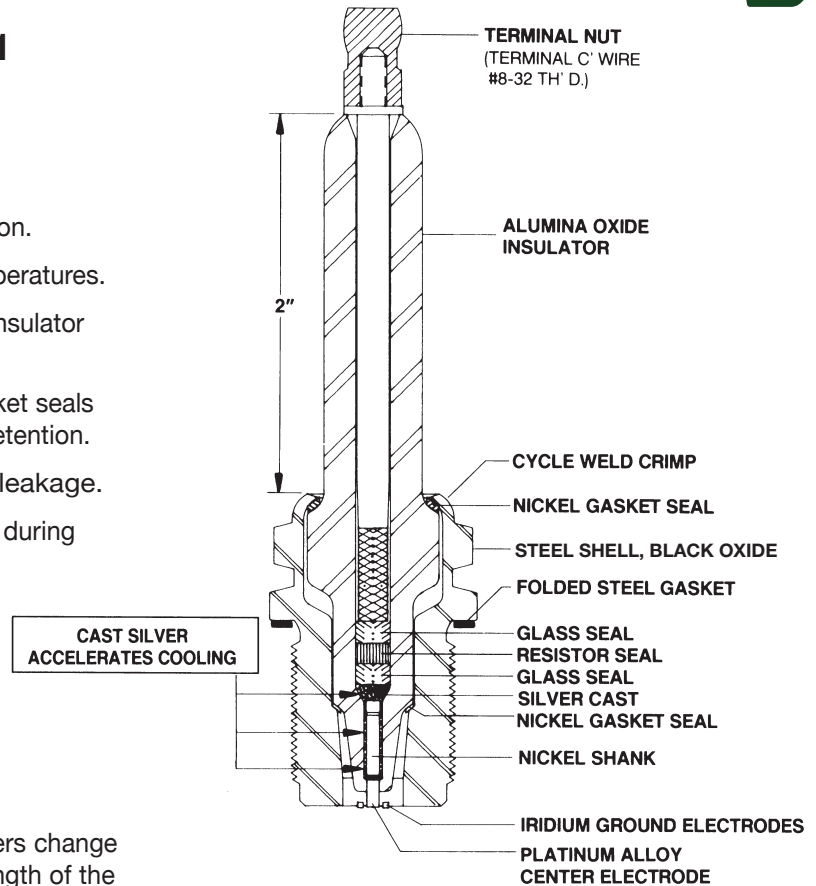
BG SPARK PLUGS

Models RB105-1 And RB114-1 Have Long Insulators For Extra Flashover Protection

- 2" insulator provides extra flashover protection.
- Iridium electrodes resist erosion at high temperatures.
- High temperature non-conductive glaze on insulator resists flashover.
- Extra thick cycle weld crimp over nickel gasket seals for zero gas leakage and assured insulator retention.
- Conductive glass seal assures zero gas leakage.
- Folded steel gasket prevents plug loosening during operation.

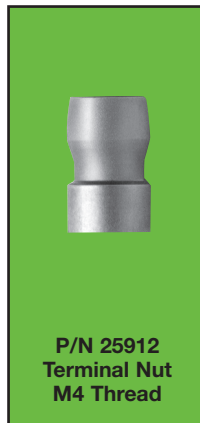
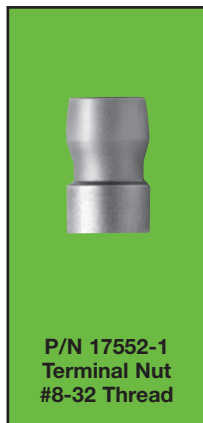
A unique cooling process is why BG plugs last longer. . .

The foremost way that spark plug manufacturers change heat range of a spark plug is to change the length of the ceramic nose — the length measured from the sealing gasket downward to the firing end. A shorter ceramic nose makes the spark plug “colder,” but also makes it more prone to fouling because the electrical path is shortened. Only BG uses cast silver in direct contact with the ceramic insulator to facilitate cooling — this allows BG to offer “colder” spark plugs with adequate nose lengths to prevent fouling.



**FINE WIRE
ELECTRODE
CONFIGURATION**

Cutaway above shows
Model RB114-1



SPARK PLUG GASKETS		
Part No.	Size	Material
A506	14mm	Solid Copper
A4808	7/8"-18	Solid Copper
21001	7/8"-18	Folded Steel
21367	For top threaded S.P.	Solid Copper
21430	14mm	Folded Steel
21435	18mm	Folded Steel

All new BG spark plugs include a gasket. The ability of a spark plug to seal gas leakage and conduct heat depends upon the condition of the gasket. When reinstalling spark plugs, always use a new gasket.

SPARK PLUG SELECTION CHART

IF THE ENGINE HEAD WAS RE-WORKED, OR IF A PRE-COMBUSTION CHAMBER WAS INSTALLED, VERIFY PLUG SIZE.

ENGINE MODEL	UNSHIELDED		SHIELDED		INTEGRAL COIL TYPE	
	SEVERE SERVICE	NORMAL SERVICE	5/8"-24 SHIELD	3/4"-20 SHIELD	13/16"-20 THREAD	1"-20 THREAD
AJAX (Cooper Penjax)						
CMA, EA22, 6½" x 8", EA30 7¼" x 8"	RB212-1	RB212-1	RB312S-1	RB118SD	SEE NOTE 1	SEE NOTE 2
CMA, 7½" x 10", 8½" x 10", C40, C42 8½" x 10"	RB212-1	RB212-1	RB312S-1	RB118SD	SEE NOTE 1	SEE NOTE 2
E42 8½" x 10", WL, EA15 5" x 6½"	RB212-1	RB212-1	RB312S-1	RB118SD	SEE NOTE 1	SEE NOTE 2
DP60, DPC60, DPC120 9½" x 12"	RB105-1	RB212-1	RB312S-1	RB118SD	SEE NOTE 1	SEE NOTE 2
DP80, DPC80, DP160, DPC160 11" x 14"	RB105-1	RB212-1	RB312S-1	RB118SD	SEE NOTE 1	SEE NOTE 2
DP80A, DPC80A, DP160, DPC160A 11" x 14"	RB212-1	RB212-1	RB312S-1	RB118SD	SEE NOTE 1	SEE NOTE 2
DP115, DPC115A, DP230, DPC230 13¼" x 16"	RB212-1	RB212-1	RB312S-1	RB118SD	SEE NOTE 1	SEE NOTE 2
DP300, DPC300, 15" x 16", DPC600, DPC360, DPC540	RB212-1	RB212-1	RB312S-1	RB118SD	SEE NOTE 1	SEE NOTE 2
E15 5¼" x 8", C30, E30, 7½" x 10"	RB212-1	RB212-1	RB312S-1	RB118SD	SEE NOTE 1	SEE NOTE 2
CATERPILLAR						
3500 SERIES (not for landfill gas engines)	RB777-2	RB777-1	----- CALL FACTORY -----			
3600 SERIES						
CLARK						
MA, HMA, HMB	RB105-1	RB212-1	RB312S-1	RB118SD	SEE NOTE 1	SEE NOTE 2
BA, HBA, HLA, HBA-T, HLA-T	RB105-1	RB212-1	RB312S-1	RB118SD	SEE NOTE 1	SEE NOTE 2
RA, HRA, HSRA, HRA-T, HMAB	RB105-1	RB212-1	RB312S-1	RB118SD	SEE NOTE 1	SEE NOTE 2
TPV, TLA, TLAD, TMB, TRA	RB105-1	RB105-1		RB118SD	SEE NOTE 1	SEE NOTE 2
TCV, TCVA, TCVD, TCVC	RB105-1	RB105-1		RB118SD	SEE NOTE 1	SEE NOTE 2
TVM, VMC, HMC, VRA	RB105-1	RB105-1		RB118SD	SEE NOTE 1	SEE NOTE 2
COOPER-BESSEMER						
(⅝" Reach) G-AW, G-MR, G-MV, JS	RB105-1	RB212-1	RB312S-1	RB118SD	SEE NOTE 1	SEE NOTE 2
(⅝" Reach) GMV, GMVA, GMVB	RB105-1	RB212-1		RB118SD	SEE NOTE 1	SEE NOTE 2
(⅝" Reach) GMVC, GMVE, GMVG, GMVH	RB105-1	RB212-1		RB118SD	SEE NOTE 1	SEE NOTE 2
(⅝" Reach) GMW, GMWA, GMWC, GMWH	RB105-1	RB105-1		RB118SD	SEE NOTE 1	SEE NOTE 2
(1" Reach) GMW, GMWA, GMWC, GMWH	RB114-1	RB114-1			SEE NOTE 1	SEE NOTE 2
(⅝" Reach) GMX, GMXE, GMXH, V250	RB105-1	RB105-1		RB118SD	SEE NOTE 1	SEE NOTE 2
(1" Reach) GMX, GMXE, GMXH, V250, GMVG	RB114-1	RB114-1			SEE NOTE 1	SEE NOTE 2
(⅝" Reach) W-330, Z-330, V275	RB105-1	RB105-1		RB118SD	SEE NOTE 1	SEE NOTE 2
(1" Reach) W-330, Z-330, V275	RB114-1	RB114-1			SEE NOTE 1	SEE NOTE 2
(⅝" Reach) LS, LSV, KSV Standard ⅝" -18	RB105-1	RB105-1		RB118SD	SEE NOTE 1	SEE NOTE 2
ENTERPRISE (Delaval)						
HA6, HV8, HVA8, HV12	RB114-1	RB114-1			SEE NOTE 1	SEE NOTE 2
HVA12, HV16, HVA16, HVA20	RB114-1	RB114-1			SEE NOTE 1	SEE NOTE 2
TDSG-36-6-38 Rear Side Of Head				BG341-1	SEE NOTE 1	SEE NOTE 2
CSG-36, 38; GSM-36, 38				BG341-1	SEE NOTE 1	SEE NOTE 2
INGERSOLL-RAND						
XVG, PVG, JVG, PJVG, SVG, PSVG	RB212-1	RB212-1	RB312S-1	RB118SD	SEE NOTE 1	SEE NOTE 2
KVG, KVGR, PKVG, PVGR, PKVGR	RB212-1	RB212-1	RB312S-1	RB118SD	SEE NOTE 1	SEE NOTE 2
TVS, TVR, SVS, KVT, KVST thru 1977	RB105-1	RB105-1		RB118SD	SEE NOTE 1	SEE NOTE 2
KVSR 1978 on, w/Precomb Chamber	RB114-1	RB114-1			SEE NOTE 1	SEE NOTE 2
KVH, KVR, KVS, PKVR, PKVSR	RB105-1	RB105-1		RB118SD	SEE NOTE 1	SEE NOTE 2
LUFKIN						
HT333, HC333, GSD, GSDH	RB212-1	RB212-1	RB312S-1	RB118SD	SEE NOTE 1	SEE NOTE 2
H795, H1770, H2165	RB105-1	RB212-1	RB312S-1	RB118SD	SEE NOTE 1	SEE NOTE 2
MINNEAPOLIS-MOLINE						
BEU, DU, FEU, GU, GUA	RB105-1	RB212-1	RB312S-1	RB118SD	SEE NOTE 1	SEE NOTE 2
2LU, MEU, NEU, SEU, TAU	RB105-1	RB212-1	RB312S-1	RB118SD	SEE NOTE 1	SEE NOTE 2
TEU, CU, KE, KU, HU	RB105-1	RB212-1	RB312S-1	RB118SD	SEE NOTE 1	SEE NOTE 2
283-4A, 425-6A, 403-4A, 605-6A	RB105-1	RB212-1	RB312S-1	RB118SD	SEE NOTE 1	SEE NOTE 2
206-4A, 165-4A (EU), 220-4	RB485-1	RB485-1		RBH485SD	SEE NOTE 1	SEE NOTE 2
HD220-4A, M220-A4A, 283-4A	RB485-1	RB485-1		RBH485SD	SEE NOTE 1	SEE NOTE 2
336-4A, 403-4A, 425-6A	RB485-1	RB485-1		RBH485SD	SEE NOTE 1	SEE NOTE 2
KD425-6A, HD504-6A	RB485-1	RB485-1		RBH485SD	SEE NOTE 1	SEE NOTE 2
605A-6A, 605B-6A, 800-6A	RB485-1	RB485-1		RBH485SD	SEE NOTE 1	SEE NOTE 2
HD800-6A, HD800A-6A	RB485-1	RB485-1		RBH485SD	SEE NOTE 1	SEE NOTE 2
1210-12A, 1600-12A	RB485-1	RB485-1		RBH485SD	SEE NOTE 1	SEE NOTE 2

SPARK PLUG SELECTION CHART



IF THE ENGINE HEAD WAS RE-WORKED, OR IF A PRE-COMBUSTION CHAMBER WAS INSTALLED, VERIFY PLUG SIZE.

ENGINE MODEL	UNSHIELDED		SHIELDED		INTEGRAL COIL TYPE	
	SEVERE SERVICE	NORMAL SERVICE	5/8"-24 SHIELD	3/4"-20 SHIELD	13/16"-20 THREAD	1"-20 THREAD
MEP/Fairbanks Morse						
MEP-6, 8, 10, 12	RB485-1	RB485-1		RBH485SD	SEE NOTE 1	SEE NOTE 2
38FS5-¼				BG341-1	SEE NOTE 1	SEE NOTE 2
NORDBERG						
4FG, FSE 96 Natural Gas				BG341-1	SEE NOTE 1	SEE NOTE 2
WAUKESHA						
AT25GL, AT27GL	RB485-1	RB485-1		RBH485SD	SEE NOTE 1	SEE NOTE 2
2FC, 180GKB, 190GLB, 195GK	RB485-1	RB485-1		RBH485SD	SEE NOTE 1	SEE NOTE 2
F1197G, F1197GR, F1197GRSI	RB485-1	RB485-1		RBH485SD	SEE NOTE 1	SEE NOTE 2
F1905GR, F1905GRSI, H2BG5G, L3711G	RB485-1	RB485-1		RBH485SD	SEE NOTE 1	SEE NOTE 2
H1077G, H1077GSI (18mm Heads)	RB485-1	RB485-1		RBH485SD	SEE NOTE 1	SEE NOTE 2
L1616G, L1616GSI (18mm Heads)	RB485-1	RB485-1		RBH485SD	SEE NOTE 1	SEE NOTE 2
F2895G, F2895GSI, F3521G, F3521GSI	RB485-1	RB485-1		RBH485SD	SEE NOTE 1	SEE NOTE 2
L5108G, L5108GSI, L5790G, L5790GSI	RB485-1	RB485-1		RBH485SD	SEE NOTE 1	SEE NOTE 2
L7042G, L7042GSI	RB485-1	RB485-1		RBH485SD	SEE NOTE 1	SEE NOTE 2
P9390G, P9390GSI	RB485-1	RB485-1		RBH485SD	SEE NOTE 1	SEE NOTE 2
180GL, 190GL, 195GL	RB485-1	RB485-1		RBH485SD	SEE NOTE 1	SEE NOTE 2
140GK, 140GZ, 185GL, 145GKB (18mm Heads)	RB485-1	RB485-1		RBH485SD	SEE NOTE 1	SEE NOTE 2
WAK, WAKB, WAKC, NK, NKR	RB485-1	RB485-1		RBH485SD	SEE NOTE 1	SEE NOTE 2
LRO, LROR (⅝" -18 Heads)	RB212-1	RB212-1	RB312S-1	RB118SD	SEE NOTE 1	SEE NOTE 2
LRO, VLRO, LRZ (18mm Heads)	RB485-1	RB485-1		RBH485SD	SEE NOTE 1	SEE NOTE 2
F2894G, F2894GR, F2894GRSI	RB485-1	RB485-1		RBH485SD	SEE NOTE 1	SEE NOTE 2
F3520G, L7040G	RB485-1	RB485-1		RBH485SD	SEE NOTE 1	SEE NOTE 2
L5100GR, LT100GRSI, L5788GR, L5788GRSI	RB485-1	RB485-1		RBH485SD	SEE NOTE 1	SEE NOTE 2
BA, BL, BM, BK, BZ, CHK, CHS, CR, CSR	RB485-1	RB485-1		RBH485SD	SEE NOTE 1	SEE NOTE 2
CU, DHK, DK, DKR, DR, DU, EK, EL	RB485-1	RB485-1		RBH485SD	SEE NOTE 1	SEE NOTE 2
FCL, FCS, FL, FLS, FS, GAK	RB485-1	RB485-1		RBH485SD	SEE NOTE 1	SEE NOTE 2
130GS, 130GL, 140GZ, 180G	RB485-1	RB485-1		RBH485SD	SEE NOTE 1	SEE NOTE 2
MK, ML, MS, MZA, SRK, RBR	RB485-1	RB485-1		RBH485SD	SEE NOTE 1	SEE NOTE 2
MZ, MRK, MZR, SRKR	RB212-1	RB212-1	RB312S-1	RB118SD	SEE NOTE 1	SEE NOTE 2
SPLR, WOK, VIK, XAH	RB212-1	RB212-1	RB312S-1	RB118SD	SEE NOTE 1	SEE NOTE 2
7044 GSI	----- CALL FACTORY -----					
GL and GLD Series	----- CALL FACTORY -----					
SUPERIOR						
1979-80 6GTL, 8GTL, 12GTL, 16GTL	RB485-1	RB485-1		RBH485SD	SEE NOTE 1	SEE NOTE 2
1976-80 12SGT, 16SGT	RB485-1	RB485-1		RBH485SD	SEE NOTE 1	SEE NOTE 2
1970-80 12G825, 16G825	RB485-1	RB485-1		RBH485SD	SEE NOTE 1	SEE NOTE 2
6GT510, 8G825, 6G825, 6G510	RB485-1	RB485-1		RBH485SD	SEE NOTE 1	SEE NOTE 2
12GT825, 16GT825, 6GT825	RB485-1	RB485-1		RBH485SD	SEE NOTE 1	SEE NOTE 2
8GT825, 6GX825, 8GX825	RB485-1	RB485-1		RBH485SD	SEE NOTE 1	SEE NOTE 2
12VG825, 12VGT825, 16VG825, 16VGT825	RB105-1	RB212-1	RB312S-1	RB118SD	SEE NOTE 1	SEE NOTE 2
SGTB Clean Burn	RB485-1	RB485-1		RBH485SD	SEE NOTE 1	SEE NOTE 2
2406G, 2408G, 2412G, 2416G	RB485-1	RB485-1		RBH485SD	SEE NOTE 1	SEE NOTE 2
WORTHINGTON						
AG, BG, BBG, EEGX, LCE, SDHG		RB212-1	RB312S-1	RB118SD	SEE NOTE 1	SEE NOTE 2
2GG, CCG, CCGX, DG, DDG, EEG, LFC		RB212-1	RB312S-1	RB118SD	SEE NOTE 1	SEE NOTE 2
LTC, 18X25, 20X25 Horizontal 4 Cycle	RB105-1	RB105-1		RB118SD	SEE NOTE 1	SEE NOTE 2
ML, UTC, SLHC, SLHCA, SLHP	RB105-1	RB105-1		RB118SD	SEE NOTE 1	SEE NOTE 2
SUTC, SEH, SDHG, SDHP	RB105-1	RB105-1		RB118SD	SEE NOTE 1	SEE NOTE 2

NOTE 1: Use the ⅝" -20 Shielded Plug with the "FM1" Series Coil Adapters (Page 26) or Use the ⅝" -24 Shielded Plug with the "FME" Series Coil Adapters (Page 26)

NOTE 2: Use the ⅝" -20 Shielded Plug with the "M" Series Coil Adapters (Page 27) or Use the ⅝" -24 Shielded Plug with the "E" Series Coil Adapters (call factory)

BG IS AN AUTHORIZED DISTRIBUTOR FOR:

DENSO™ IRIDIUM SPARK PLUGS



Denso™ offers spark plugs for severe service industrial and Co Gen applications, with 3 Iridium electrode options for the most demanding applications, including bio-gas. The unique Iridium alloy - developed and patented by Denso™ - offers a high melting point which dramatically improves wear resistance & service life.

BG is an Authorized Denso™ Distributor. A link to the Denso application chart can be found on the BG web site at www.bgservice.com

CHAMPION™ SPARK PLUGS



Champion™ offers a broad range of industrial spark plugs covering most applications. Numerous electrode configurations are available in both semi precious and precious metal, including Iridium 18mm spark plugs with new design and construction enhancements for extended service life.

BG is an Authorized Champion™ Distributor. For specification assistance, contact BG factory.

AUBURN™ IGNITION PRODUCTS



Auburn™ has been a leader in the design and manufacture of industrial igniters, flame rods, and electric feedthroughs. BG is an Authorized Auburn™ Distributor. For specification assistance, contact BG factory.

SPARK PLUG RECONDITIONING SERVICE



BG offers a Reconditioning Service for industrial spark plugs using a 20+ step process that includes chemical cleaning, honing, gapping, painting, new cylinder gasket and complete testing...

On average, 83% of plugs returned are suitable for reconditioning and have sufficient electrode material remaining to achieve the same performance level as a new spark plug. Complete factory testing is performed on each spark plug prior to shipping. Cost savings are substantial. See Frequently Asked Questions below for more details.

FREQUENTLY ASKED QUESTIONS

Question: Do you recondition only BG brand spark plugs?

Answer: No. We also recondition Champion™, Denso™, Caterpillar™, Waukesha™, Bosch™, and Beru™ spark plugs.

Question: How much does it cost?

Answer: That depends on the type of spark plug. For a typical 18mm spark plug with Iridium or Platinum electrodes (Denso G-1, G-3, G-5; Champion RB77WPCC, FB77WPCC; BG RB485-1) the user's cost is less than 25% of the new plug price.

Question: Will I get the same service life out of a reconditioned spark plug as a new spark plug?

Answer: Yes.

Question: Will I get back the same number of spark plugs as I return for reconditioning?

Answer: No. Only spark plugs that pass our factory tests are returned.

Question: Am I invoiced for the spark plugs that you can't recondition?

Answer: No. You are only invoiced for spark plugs that we are able to satisfactorily recondition and return to you.

FREQUENTLY ASKED QUESTIONS
CONTINUED ON NEXT PAGE



Before

After

Champion® model pictured above.

SPARK PLUG RECONDITIONING SERVICE

FREQUENTLY ASKED QUESTIONS CONTINUED

Question: Will I actually be getting back the same plugs that I return or are they mixed with other customers' spark plugs during processing?

Answer: Spark Plug lots are not mixed. You will get back the same plugs you send to us, less those that fail our tests.

Question: How long does it take?

Answer: Normally you can expect that we will ship reconditioned spark plugs to you within 10 business days of receipt.

Question: I'd like to try your service. What do I need to do?

Answer: Contact your BG Distributor/Dealer and ask them to pick up the worn spark plugs. Your BG Distributor/Dealer can provide you with pricing information and will return the reconditioned spark plugs to you, or may request that BG drop ship directly to you.

Question: I don't have a local BG Distributor/Dealer who can take my spark plugs. May I send the worn spark plug directly to BG?

Answer: Yes. Send prepaid to The BG Service Co. Inc.,
1400 Alabama Avenue
West Palm Beach, Florida 33401.
For pricing, call Factory (561) 659-1471
or e-mail us: sales@bgservice.com



SPARK PLUG INSTALLATION TIPS

- For best results, install spark plugs to the engine manufacturers recommended torque. Typical torque values are:

Thread Size	Torque*
7/8"	70-80 ft. lbs.
18mm	38 ft. lbs.
14mm	25 ft. lbs.

*Reduce torque values By 20% when using anti-seize compound.

- Use BG Mica Lubricant (BG Part No. A718) on plug threads to prevent seizure.
- Use BG Hole Conditioning Tool (Part No. 21045-) to clean cylinder threads and gasket seat in one operation.
- Avoid touching plug insulator during installation. Hold spark plug by metal shell only.
- Use a good quality spark plug boot to maximize spark plug life.

ULTIMA BLUE 3000 FIRING INDICATOR Part No. 23070

BG

.....simplifies trouble shooting because
the indicator bulb is brighter!

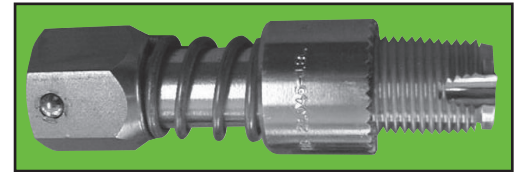
- * Unique BG bulb design flashes brighter and is easier to see.
- * Nickel-plated probe provides maximum sensitivity – even through silicone hose!
- * Premium Grade Virgin PTFE insulation protects operator from shock.
- * Includes pen clip and leather carrying case.
- * Replacement bulbs available.
(P/N 23076)



HOLE CONDITIONING TOOL Part No. 21045-

Use Hole Conditioning Tool to clean
cylinder threads and gasket seat in one operation.

PART NO.	THREAD SIZE	EFFECTIVE REACH
21045-14	14 X1.25M (METRIC)	UP TO 5/8"(.625)
21045-14L	14 X1.25M (METRIC), LONG	GREATER THAN 5/8"(.625)
21045-18	18 X1.5M (METRIC)	UP TO 17/32"(.531)
21045-18L	18 X1.5M (METRIC), LONG	GREATER THAN 17/32"(.531)
21045-875L	7/8-18 UNS-2A, LONG	GREATER THAN 5/8"(.625)



Improved Tool Now Manufactured by BG Service

GAP SETTING TOOL Part No. M678-



BG's professional gapsetting tool is designed to provide gap adjustments without damaging the electrodes. It sets gaps precisely to "go-no go" measurement of $-.001"$, $+.002"$ of the nominal gap. Order with dash number for desired gap; i.e., M678-.015" gap.

MICA LUBRICANT



BG MICA LUBRICANT PREVENTS THREAD SEIZURE

Unlike other anti-seize compounds, Mica Lubricant is non-metallic, non-conductive, safer to use. Facilitates spark plug removal and prevents thread damage.

Part No.	Size
A718	4 Oz. Can
A719	16 Oz. Can
A768	32 Oz. Can

BG's COIL TESTER MAKES TROUBLESHOOTING EASIER. . .

BG's CT300 Coil Tester is a portable instrument designed to check the condition of the primary and secondary windings of a capacitor discharge coil. The unit is powered by four "C" size dry cell alkaline batteries. The primary voltage is adjustable from 0 to 300 volts DC. The spark gap tests the secondary output of a coil at 28 to 30 KV. The basic system includes a set of ignition leads to test unshielded capacitor discharge coils. Optional leads are available to test shielded coils. Complete instructions, including voltage settings for various manufacturers' coils, are provided.

- PORTABLE – Allows on-site troubleshooting.
- COST EFFECTIVE – Pays for itself in "saved" coils and reduced downtime.
- EASY TO USE – Complete instructions provided.
- INCLUDES CABLES*, CARRYING CASE, AND BATTERIES – Optional leads available for shielded coils.



*[Primary lead P/N 22185 and Secondary lead P/N BG296-36 (24157-36)]

OPTIONAL LEADS
REQUIRED TO TEST
SHIELDED COILS
ARE SHOWN HERE →

COIL MFG	COIL MODEL	PRIMARY LEAD P/N	SECONDARY LEAD P/N
ALTRONIC	501 061-S, 591 010-S 291 001-S	22230-30	BG293-36
	591 007, 591 008	22230-30	BG298-36
	591 011A, 591 011B	22230-30	22253-36
ALTRONIC FLANGE MOUNT	591 012 591 018	23590-24	23580 (RIGID)
PRECISION (BENDIX)	10-320790-1, 10-382040-1	22231-30	BG291-36
	10-372385 SERIES	22232-30	USE STD LEAD (BG296-36)
	10-382080-XX 10-57460-XX 10-372360-XX	22236-30	BG292-36
DYNALCO	IGC 506	22232-30	BG293-36
FAIRBANKS MORSE (COLT)	PPT2477 AD, ADL	22231-30	BG294-36
	PPT2477AA	22231-30	22253-36
	PPT2477AB	22231-30	BG298-36

TIMING LIGHT WITH DETACHABLE PICKUP

BG

- Detachable cord for ease of storage and improved cord wear.
- Self-contained (powered by 2 "D" size dry cell batteries).
- Works with magneto or capacitor discharge ignition systems.
- Break and shock resistant plastic housing.
- Additional extension cords are available.



TIMING LIGHT ORDERING INFORMATION	
BG P/N	CORD LENGTH
23230-10	10'
23230-20	20'
23230-30	30'
23230-50	50'

OPTIONAL EXTENSION CORDS	
BG P/N	CORD LENGTH
23320-10	10'
23320-20	20'
23320-30	30'
23320-40	40'

AVAILABLE FROM STOCK FOR IMMEDIATE DELIVERY

PT500 PRIMARY TESTER

BG's PT500 primary tester is a portable instrument designed to check for defective and worn wiring by detecting current leaks to ground. The unit is powered by 4 "C" size dry cell batteries. Output voltage is adjustable from 0-500 volts DC. A voltage drop from the initial setting indicates leakage.

- Checks primary wiring and connectors.
- Performs same function as a megger but is easier to operate.
- Shows shorts to ground that will not appear with an ohmmeter.
- Includes batteries, probe lead, carrying case, and complete instructions.



Stop costly ignition problems before they begin: check your primary wiring & connectors with BG's PT500 primary tester.



THE BG SERVICE CO, INC.

1400 Alabama Ave.

P.O. Box 2259

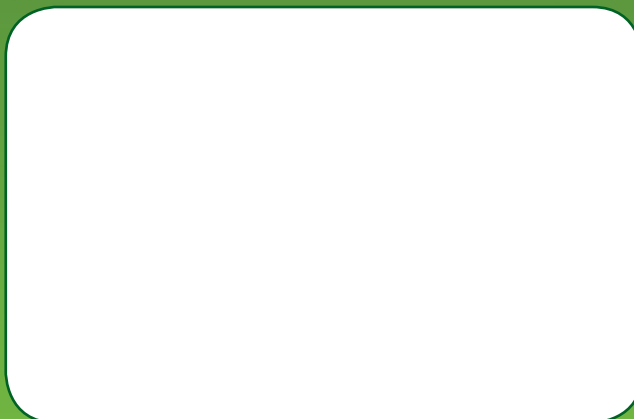
West Palm Beach, Florida 33402

Tel: (561) 659-1471

Fax: (561) 659-1728

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