

# **BG IGNITION PRODUCTS**



BG ignition products have been world-renowned for over 75 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 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
<b>Unshielded</b> 	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"
<b>Shielded</b> 	7/8"-18	5/8"	RB312S-1	Medium	5/8"-24	Yes	2-7/16"	7/8"	.015"
	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 . Model BG341-1 has a massive nickel electrode (4 prongs).

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

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

# BG SPARK PLUGS

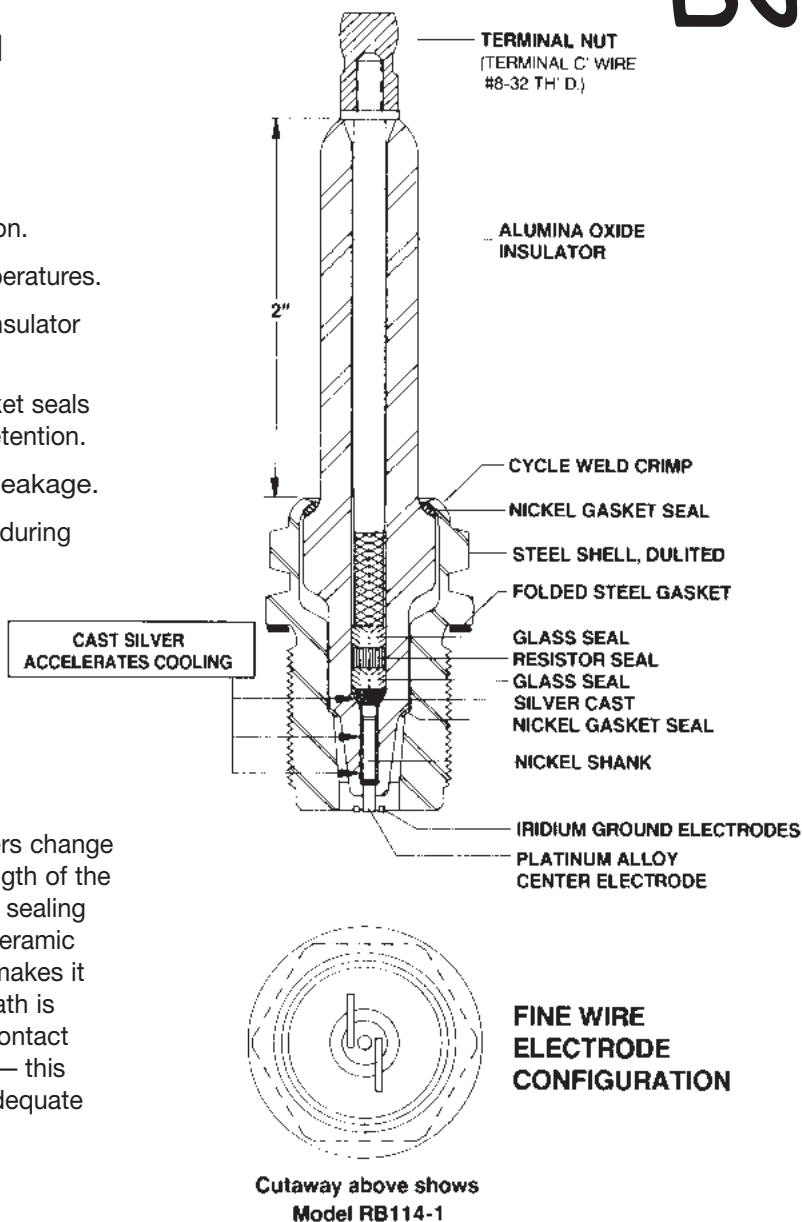
**BG**

## 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.



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	RB777-1	RB777-1				
3600 SERIES	----- CALL FACTORY -----					
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, TCVV	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						
(¾" Reach) G-AW, G-MR, G-MV, JS	RB105-1	RB212-1	RB312S-1	RB118SD	SEE NOTE 1	SEE NOTE 2
(¾" Reach) GMV, GMVA, GMBV	RB105-1	RB212-1		RB118SD	SEE NOTE 1	SEE NOTE 2
(¾" Reach) GMVC, GMVE, GMVG, GMVH	RB105-1	RB212-1		RB118SD	SEE NOTE 1	SEE NOTE 2
(¾" 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
(¾" 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
(¾" 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
(¾" Reach) LS, LSV, KSV Standard ⅞" -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
LU, 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
<b>MEP/Fairbanks Morse</b>						
MEP-6, 8, 10, 12 38FS5-¼	RB485-1	RB485-1		RBH485SD BG341-1	SEE NOTE 1 SEE NOTE 1	SEE NOTE 2 SEE NOTE 2
<b>NORDBERG</b>						
4FG, FSE 96 Natural Gas				BG341-1	SEE NOTE 1	SEE NOTE 2
<b>WAUKESHA</b>						
AT25GL, AT27GL	RB485-1	RB485-1		RBH485SD	SEE NOTE 1	SEE NOTE 2
FC, 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 (¾" -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 -----					
<b>SUPERIOR</b>						
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
<b>WORTHINGTON</b>						
AG, BG, BBG, EEGX, LCE, SDHG		RB212-1	RB312S-1	RB118SD	SEE NOTE 1	SEE NOTE 2
GG, 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 ¾" -20 Shielded Plug with the "FM1" Series Coil Adapters (Page 33) or  
Use the ¾" -24 Shielded Plug with the "FME" Series Coil Adapters (Page 33)

**NOTE 2:** Use the ¾" -20 Shielded Plug with the "M" Series Coil Adapters (Page 35) or  
Use the ¾" -24 Shielded Plug with the "E" Series Coil Adapters (Page 34)



# SPARK PLUG RECONDITIONING SERVICE

**Fast, Dependable Service. . .Everytime.**

1. BG reconditions your industrial precious metal electrode spark plugs using a 20+ step process that includes chemical cleaning, honing, gapping, repainting, new cylinder gasket, and complete testing.
2. On the average, about 10% of the plugs returned are unsuitable for further use due to excessive electrode wear. These, if they are BG plugs, which “fall out” during inspection can be replaced with new plugs.
3. Your cost of reconditioning is just a few dollars per plug (see price publication).
4. Since about 90% of the plugs returned can be reconditioned, users find that their “average plug” cost is reduced substantially.
5. Return plugs to your supplier or direct to factory (prepaid).



## This Spark Plug ran for 18 years!



Year after year BG spark plugs ran in an Ingersoll-Rand PVG engine at the Lower Neches Valley Water Authority in Beaumont, Texas. After 18 years of service, when this spark plug was returned to us for “reconditioning,” it was found suitable for further use!

## Installation Tips

- For best results, install Spark Plugs to the engine manufacturer’s recommended torque. Typical torque values are:

Thread Size	Torque*
7/8" -18	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 the plug threads to prevent thread 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 plug by metal shell part only.
- Use a good quality spark plug boot to maximize plug life.



# ULTIMA BLUE 3000 FIRING INDICATOR

**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 Teflon 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)
21045-14TS	14 X1.25M (METRIC), TAPERED SEAT	INFO. NOT AVAILABLE
21045-18	18 X1.5M (METRIC)	UP TO 17/32"(.531)
21045-18L	18 X1.5M (METRIC), LONG	GREATER THAN 17/32"(.531)
21045-18TS	18 X1.5M (METRIC), TAPERED SEAT	INFO. NOT AVAILABLE
21045-875	7/8-18 UNS-2A	UP TO 5/8"(.625)
21045-875L	7/8-18 UNS-2A, LONG	GREATER THAN 5/8"(.625)



## GAPSETTING 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
<b>ALTRONIC</b>	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
<b>ALTRONIC FLANGE MOUNT</b>	591012	22590-24	23580 (RIGID)
<b>PRECISION (BENDIX)</b>	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
<b>DYNALCO</b>	IGC 506	22232-30	BG293-36
<b>FAIRBANKS MORSE (COLT)</b>	PPT2477 AD, ADL	22231-30	BG294-36
	PPT2477AA	22231-30	22253-36
	PPT2477AB	22231-30	BG298-36

**CALL FOR MORE OPTIONAL LEADS!**

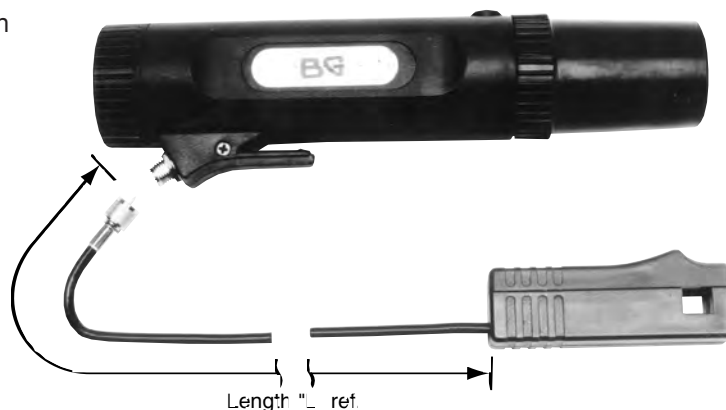
## TIMING LIGHT WITH DETACHABLE PICKUP

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.

[P/N 23320-10 (10'), -20 (20'), -30 (30'), -40 (40')]

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



**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 meggar 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.

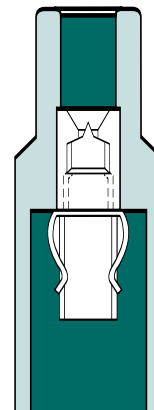
## SPARK PLUG TERMINALS

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)
- Teflon insulator withstands higher temperatures than conventional spark plug connectors.
- Solderless – easy to install.
- 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.



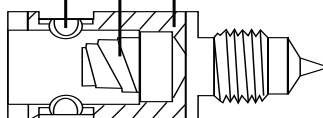
Use BG's 21420 terminals and flash- fighter extensions to reduce voltage loss and enhance the operation of your ignition system.



TERMINAL INSERT, BRASS  
- NICKEL PLATED

VOLUTE SPRING

SPRING CLIP



## SPIKE DS™ P/N 22390

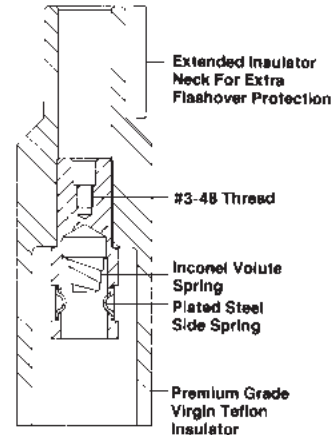
BG's new "Spike DS™" has all the advantages of the "DS" Connector plus the ease of installation of standard Rajah type connectors. The "Spike DS™" may be used with any of the spark plug connectors shown above, or with BG'S "SEAL-ON" Boots for 7mm cable with standard conductor.

# SPARK PLUG TERMINALS

**BG**

**BG's Patented\* 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.
- Teflon 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.

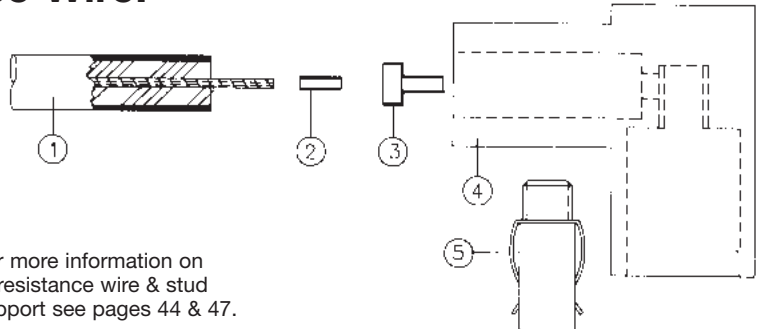


MODEL	APPLICATION
DS-1**	Use with any standard 7mm wire. Stud included with terminal.
DS-ISS**	Use with hi-resistance wire, BG P/N 21825. Stud & stud support included with terminal (See page 43).

\*U.S. Patent 5,332,394 \*\*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 nylon covers.
- Solderless - easy to install.
- Fits all makes of spark plugs. Except large plugs (W10, etc...)
- Low cost.



Part No.  
21416



Part No.  
21459



Part No.  
21418

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



## “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 teflon 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 teflon 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 includes the stud and stud support required to terminate this type of wire (Assembly layout shown on page 49). 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, RB777-1
21519SS	21573SS	21519	21573	RN79G, J6C, RL85G, RL15B, F100, N5C, 42XL, ST447, L82C
21539SS	21645SS	21539	21645	W80N, W85N, D9, D15Y, RD16, D14N***
21594SS	21648SS	21594	21648	W14, W18, W10
21673SS	21676SS	21673	21676	RW80N, RW83F, RW77N, RW78N
21970SS	21984SS	21970	21984	RC501P, RG78PYP
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 21509-9 (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 15.

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



# FLASH-FIGHTER EXTENSIONS

BG

## BG's heavy wall teflon 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	Teflon Insulated Extension	With "Slide Into Place" Boot
21209—	Screw-on	Yes	Yes
21229—	Screw-on	Yes	No
21735—	Snap-on	Yes	Yes
21957—	Snap-on	Yes	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 WPC types,(2" long insulator) add suffix L. (Example: 21209—8L)

**NEW - 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 21419-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.





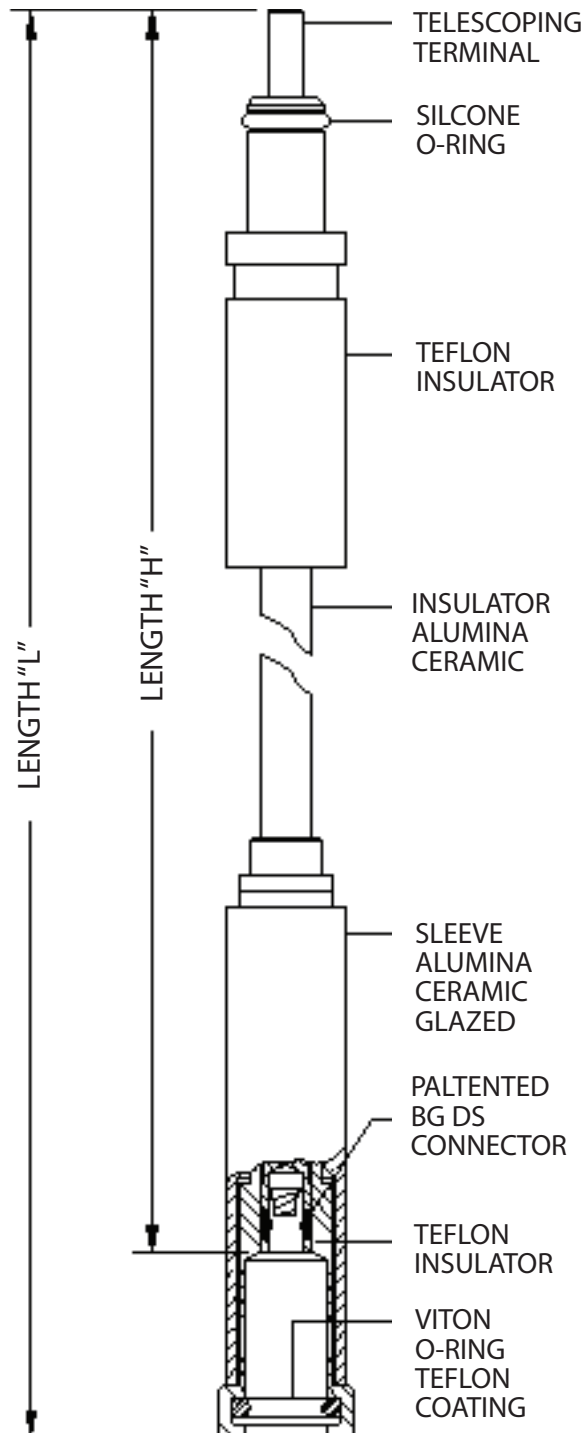
# TELESCOPING ULTIMA SERIES

**Ceramic Seal-On Extensions**  
**Extend Spark Plug Life**  
**In Demanding Application**

Part No.	Approx. Length "H"	Approx. Length "L"
25080-01	7.4"	8.8"
25080-02	7.6"	9.0"
25080-03	9.2"	10.5"
25080-04	10.0"	11.3"
25080-05	11.8"	13.2"
25080-06	12.0"	13.4"
25080-07	13.0"	14.3"
25080-08	13.6"	15.0"
25080-09	14.6"	16.0"

For more information, such as engine applications, and availability, please consult factory.

Call for availability of -03 and -04 options.



**Part No.**  
**25080-01**  
**Shown**

# 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 – teflon extension that incorporates a teflon 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 breakdown due to corona cutting.
- Viton™ “O” Ring increases sealing pressure, yet makes extension easier to install.
- Patented 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

### MODEL

Order P/N 23155 - ☐ ☐

P/N 23625 - ☐ ☐

For 7mm wire with silicone hose

Order P/N 23160 - ☐ ☐ ☐

P/N 23550 - \* ☐ ☐ ☐

### SPECIFY LENGTH “X”

06" 08" 10" 12" 14"  
16" 18" 20"

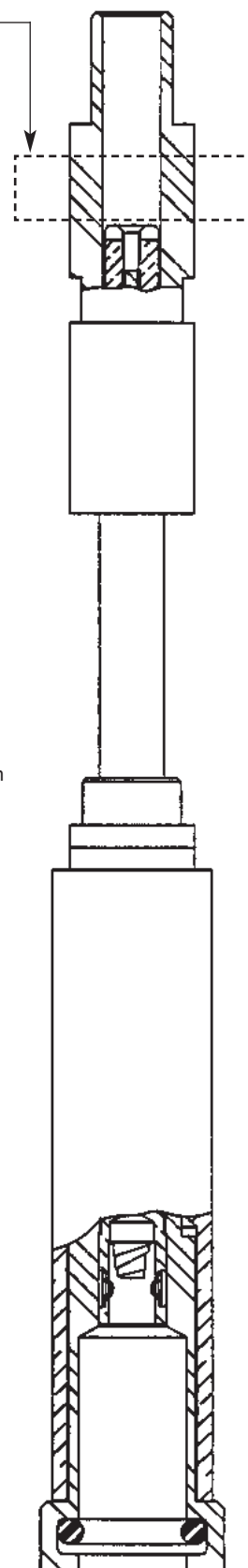
### SPECIFY SPARK PLUG TYPE

<b>A</b>	RM77N, W77N, RW82P, RM79F, D78Y RW80N, RW83F, RW77N, RW78N, RB77WPC ALL UNSHIELDED ATRONIC, RS79N, RB777-1
<b>B</b>	RN79G, J6C, RL85G, RL15B, F100 N5C, 42XL, L82C
<b>C</b>	W80N, W85N, D9, D15Y, D14N
<b>D</b>	W14, W18, W10
<b>E</b>	RB212-1, RB485-1
<b>F</b>	RC501P, RC78PYP

### SPECIFY SUPPORT OPTION

0 OR BLANK	NONE
1	INCLUDE SUPPORT ø 1.59"

Optional Square  
Support



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

Part No.  
23155-  
& 23625-

Part No.  
23160-

# 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 17

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

EXTENSION LENGTH "X"	INCHES
06, 7.25, 08, 10, 12, 14, 16, 18, 20	

SPARK PLUG TYPE	TYPE
RM77N, W77N, RW82P, RM79F, D78Y RW80N, RW83F, RW77N, RW78N, RB77WPC, ALL ATRONIC UNSHIELDED, RS79N, RB777-1	A
RN79G, J6C, RL85G, RL15B, F100, N5C, 42XL, L82C	B
W80N, W85N, D9, D15Y, D14N, RD16	C
W14, W18, W10	D
RB212-1, RB485-1	E
RC501P, RC78PYP	F

COIL TYPE	TYPE
Altronic 291001-S Dynalco 501061-S IGC 506	1
Precision 10-320790-1 (Bendix) 10-382040-1	2
Precision 10-57460-7, -10 (Bendix) 10-372360-7, -10 10-382080-7, -10	3
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



# RESISTORIZED SPARK PLUG CONNECTORS

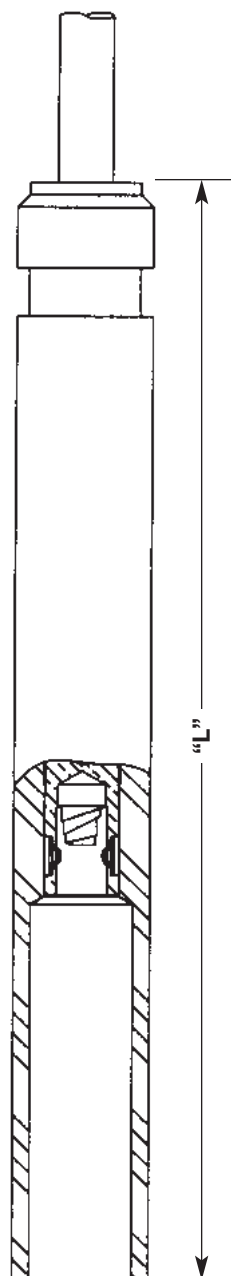


## BG RESISTOR ENHANCES ENGINE OPERATION!

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

### Features

- 10,000 Ohms.
- Seal-On resistor kits fit tightly on the spark plug insulator, extending plug life.
- Models available for use with silicone hose.
- Patented 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 KIT PART NUMBER		LOCATE THE SPARK PLUG USED IN THE CHART BELOW AND ORDER THE CORRESPONDING SEAL-ON RESISTOR KIT.	"L"
Without Hose	With Hose		
23146	23159	RM79F, W77N, RW82P, RM77N, D78Y, RB77WPC, ALL ALTRONIC UNSHIELDED, RS79N, RB777-1	5.9"
25148	25149	RM79F, W77N, RW82P, RM77N, D78Y, RB77WPC, ALL ALTRONIC UNSHIELDED, RS79N, RB777-1	9"
23147	23161	RN79G, J6C, RL85G, RL15B, F100, N5C, 42XL	5.6"
23091	23162	W80N, W85N, D9, D15Y, D14N	5.5"
23148	23163	W14, W18, W10	5.6"
23149	23164	RW80N, RW83F, RW77N, RW78N	6.0"
23151	23166	RC501P, RC78PYP	5.6"
23152	23167	RB212-1, RB485-1	5.8"
23153	23168	RB105-1, RB114-1	6.5"

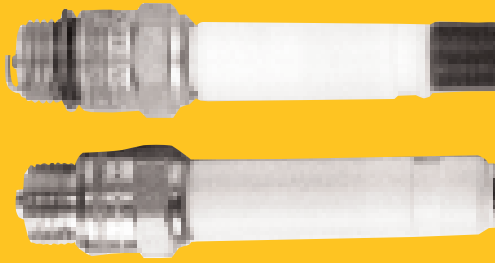
USE WITH OR WITHOUT HOSE	UNIVERSAL RESISTOR KIT	"L"
DS-1RES	USE WITH ANY MODEL SPARK PLUG (EXCEPT W10, W14, W18)	4.9"
DS-1RESW	USE WITH W10, W14, OR W18	4.9"

**Additional kits for Stitt plugs not listed**

**\* Also available: 10" long**



# 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.

### To Order Leads:

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

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.\*\*

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 <sup>③</sup>	21644 <sup>③</sup>
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	DS-1	DS-1
22100SS	—	21459	22118

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

COIL CONNECTOR KITS			
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

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

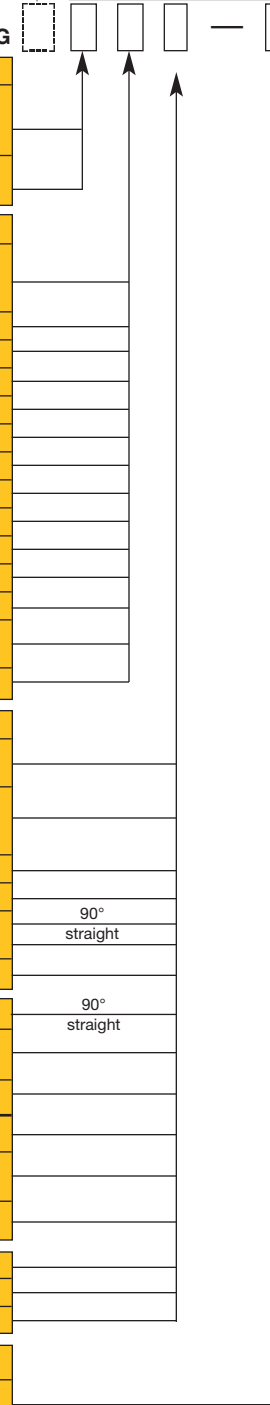
SPARK PLUG CONNECTOR FOR:	TYPE
RM79F, W77N, RW82P, RM77N, RB77WPC, ALL ALTRONIC UNSHIELDED, RB777-1, RS79N	1
RN79G, J6C, RL85G, RL15B, L82C	2
W80N, W85N, D9, D15Y, D14N, RD16	3
W14, W18, W10	4
RW80N, RW83F, RW77N, RW78N	5
RC501P, RC78PYP	6
RB212-1, RB485-1	7
RB105-1, RB114-1	8
ST197	A
ST847	B
ST727	C
R80	D
Universal - fits all models -BG, Stitt and Champion	9
Universal -90°	9N

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

UNSHIELDED COILS BELOW:	TYPE
ALTRONIC, PRECISION (BENDIX) AND DYNALCO	6
COLT PPT2477P AND PPT2477L	6A
COIL TITE TYPES*	
ALTRONIC (ALL)	* 6B
PRECISION (ALL)	* 6C
DYNALCO IGC 856A	
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"	



\*Coil Tite type connectors are shown on page 40.

\*\*Resistorised spark plug connectors are shown on page 19.

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.
- 2** Order factory built leads with 50" of cable and customize lead length on site. When you specify 50" of cable, coil end components are supplied unassembled.
- 3** 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.

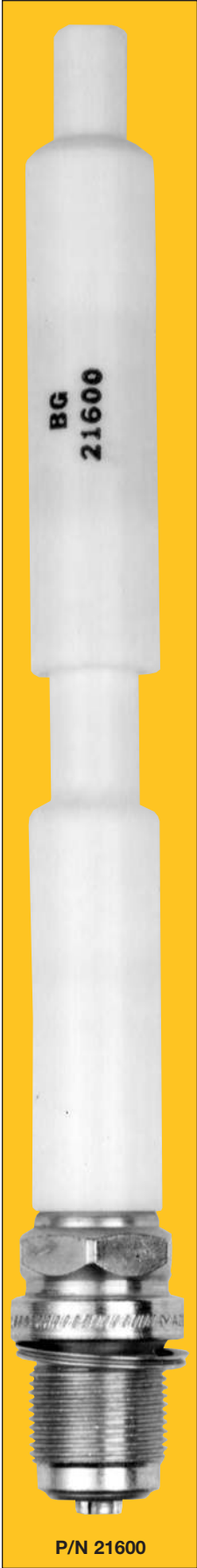
## ONLY BG CAN OFFER YOU ALL THIS IN AN IGNITION LEAD. . .

- 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 teflon for greater dielectric strength.



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

# 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"





## 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

SHIELDED COIL CONNECTOR	TYPE
Altronic 291001-S 501061-S	1
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

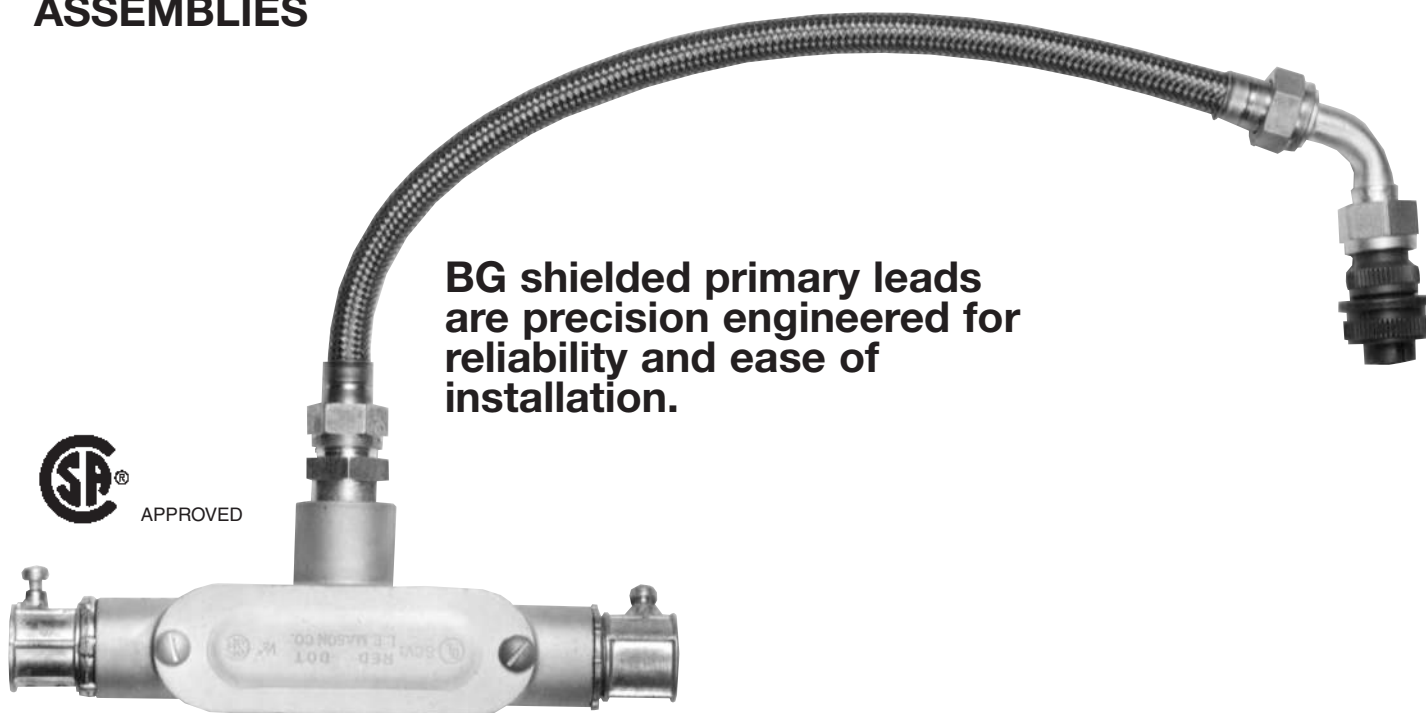
**\*NOTE:**  
If intended for use with Champion W10, W14, or W18 spark plugs, add suffix “W” for larger ID insulator. Not available on Type 4 Flash-Tite Spark Plug Connector.

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 models 21660 and 21800.

P/N FT31-10

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

# PRIMARY LEAD ASSEMBLIES



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

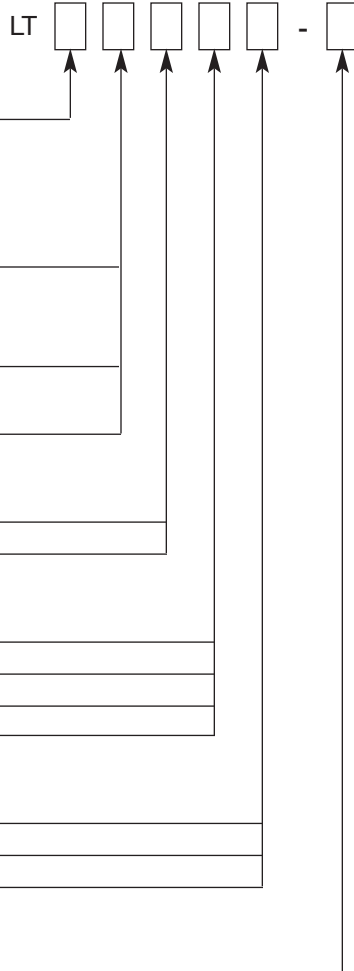
COIL MFR.	COIL MODEL	TYPE
Precision (Bendix)	10-320790-1 10-382040-1 10-382060-1	2
Fairbanks Morse	PPT2477, AA, AC, AD	
Precision (Bendix) UTC (Bosch) Dynalco	10-372385 Series TCL-150 B1 ALL	
Murphy		7

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 teflon liner.
- Wired with AWG #16 wire to MIL-W-16878.
- Connectors are MS3106A types with resilient inserts for maximum moisture resistance.
- BG precision manufactured components insure better connections.
- CSA Approved. Suitable for use in Class 1, Group D, Division 2 locations when used with approved coils and header components.

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

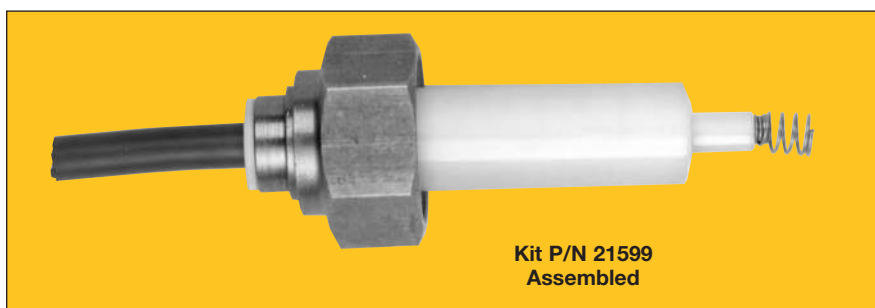
BG now offers primary leads for Bendix 10-57460 type coils. Order part number 21844-XX (specify length in inches). Two leads required per coil.

# EXTENSIONS and ACCESSORIES for 5/8"-24 SHIELDED SPARK PLUGS BG, STITT & CHAMPION

**BG**

Barrel Extension		Terminal Extension		Terminal P/N	Elbow Assembly	
Length	P/N	Length	P/N		Angle	P/N
3½"	M695	3½"	M688C	M531		
4"	M696	4"	M689C			
5"	M812	5"	M813C		90°	21285
8"	M733	8"	M734C		110°	21286
10¾"	M799	10¾"	M800C		150°	21289
12"	M690	12"	M830C			

**TERMINAL KIT P/N 21599 CONNECTS  
UNSHIELDED SECONDARY LEADS TO  
FAIRBANKS MORSE COIL PPT2477AD/ADL**



ORDERING INFORMATION		
Order Kit P/N	Elbow	Application
21599	None	Use with 7mm ignition wire, BG P/N 21570.
21599SS	None	Use with 7mm hi resistance wire (BG P/N 21825). Includes stud & stud support. See page 49.
21627-01	None	Use with 5/16" ID silicone hose (BG P/N 21606) and 7mm ignition wire (BG P/N 21570).
21627-01SS	None	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 49.
21627	90°	Use with 5/16" ID silicone hose (BG P/N 21606) and 7mm ignition wire (BG P/N 21570).
21627SS	90°	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 49.

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



P/N M55-1EC



P/N M55-2S

**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 hottest, most constricted plug wells in lengths up to 18 inches. Compatible with all makes of 3/4"-20 spark plugs. Most popular 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 overhauled at greatly reduced prices.

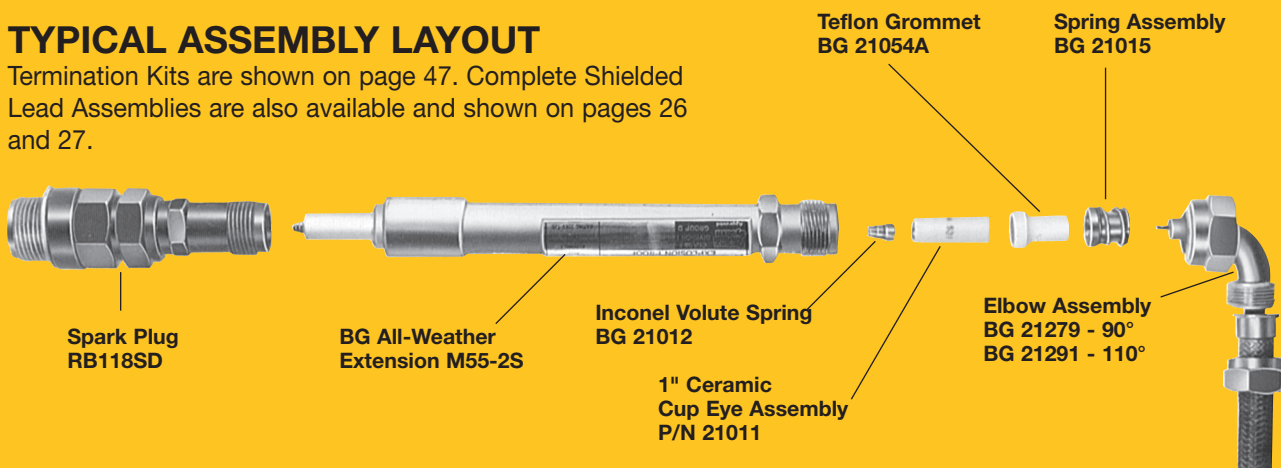
### NOW APPROVED

Most popular models have been approved by the Canadian Standards Association (CSA) for use in Class 1, Group D, Division 2 hazardous locations: M55-2S, M55-2SC, M55-1E, M55-1EC

M100-1EC, M80-2S, M80-2EC, M80-2CS, M100-2S, M100-2CS, M120-1EC, M120-2SC, M180-1EC, M180-2SC.

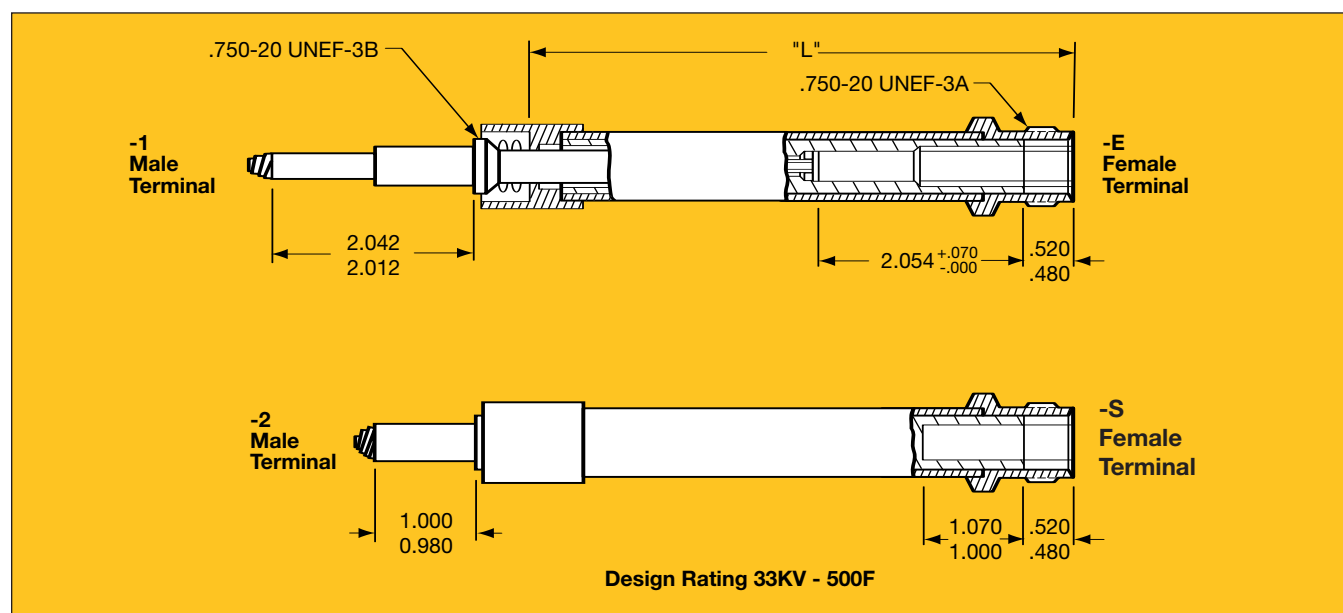
## TYPICAL ASSEMBLY LAYOUT

Termination Kits are shown on page 47. Complete Shielded Lead Assemblies are also available and shown on pages 26 and 27.



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

**BG**



## Designed to meet YOUR application

- Available with either "TEFLON" (for models M55, M80) or "CERAMIC" (all models) 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 21011, 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.

# 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: —————→

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
Fairbanks Morse	PPT2477AD, ADL	4
	Intentionally left blank	8
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"	

HT  BG  P/N  -



# SHIELDED SPARK PLUG LEAD ASSEMBLIES

**BG**

**NOW  APPROVED\***

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

- High quality stainless steel braided conduit with teflon 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 teflon 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**



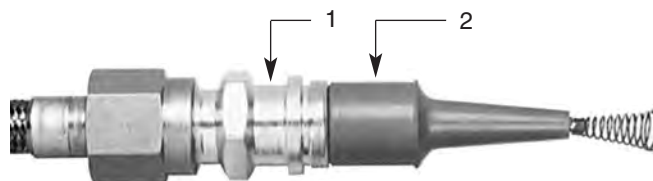
**COIL CONNECTOR TYPE 2**



**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 1, Group D, Division 2 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

LENGTH "X"

**SP APPROVED\*\***

**New patented design meets the stringent safety requirements of testing laboratories for certification in Class I, Group D, Division 2, 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
Fairbanks Morse	PPT2477AD, ADL	4
All	Integral Coils Altronic 591007/591008 Fairbanks Morse PPT2477AB, AC Precision (Bendix) 10-382060	6

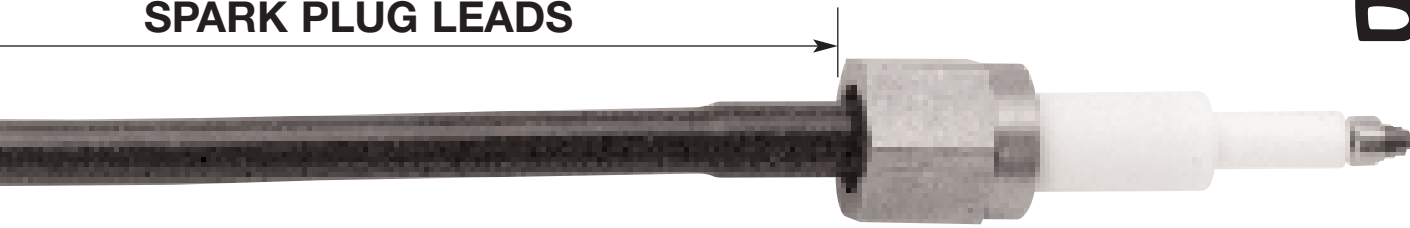
	TYPE	TYPE NUMBER
Elbow Type Required for Spark Plug End	None Required	0
	90°	1
	110°	2

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

LENGTH (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**

**New 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 26 & 27).
- May be used with unshielded spark plugs when used with BG's CETRA™ Series Extensions (see page 32).

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!

- Teflon 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	2
RTM77PP	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 45.

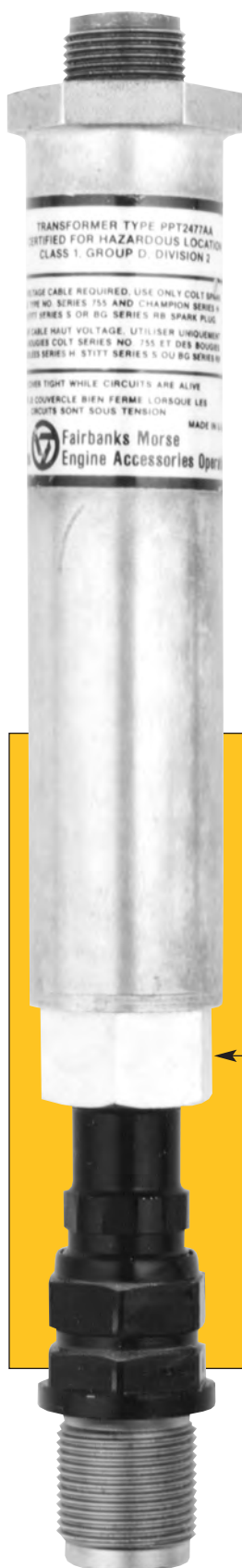
# **“FM” SERIES COIL ADAPTERS FOR INTEGRAL COILS WITH 13/16"-20 FEMALE THREADS**

**BG**

- 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.

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)

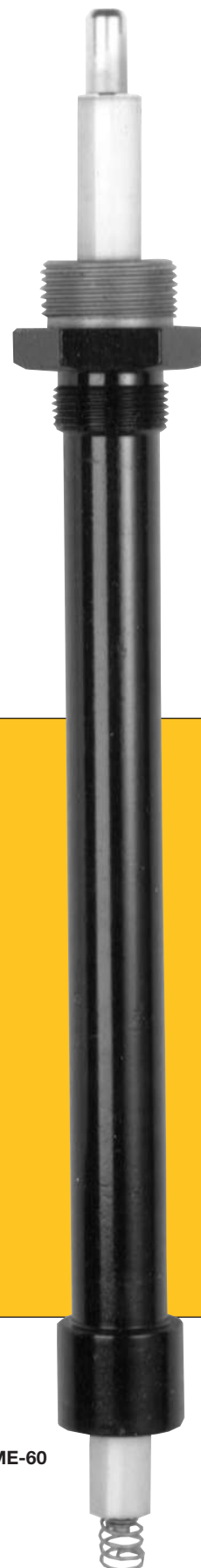


FM1-2C



FM1-1C

FM1-2C Assembled with BG Spark Plug and Fairbanks Morse Integral Coil



FME-60



## 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

### “E” Series Coil Adapters For 5/8"-24 Shielded Spark Plugs

- Designed for engines converted from diesel to natural gas, where space limitations prevent the use of 3/4"-20 type shielded spark plugs.
- Available in a variety of lengths.
- Ceramic insulator.

Coil Adapter Model	Length*	Spare Parts Kit No.
E10	1.00	RE10
E15	1.50	RE15
E30	3.00	RE30
E36.6	3.66	RE36.6
E50	5.00	RE50
E60	6.00	RE60

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



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

# "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 teflon or ceramic insulator. Specify ceramic where temperatures exceed 500°F.
- Rugged stainless steel construction for maximum durability. Spare parts kit available to change insulator assembly when required.
- Most models CSA approved for Class 1, Group D, Division 2 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 standing depth terminal wells shown below.

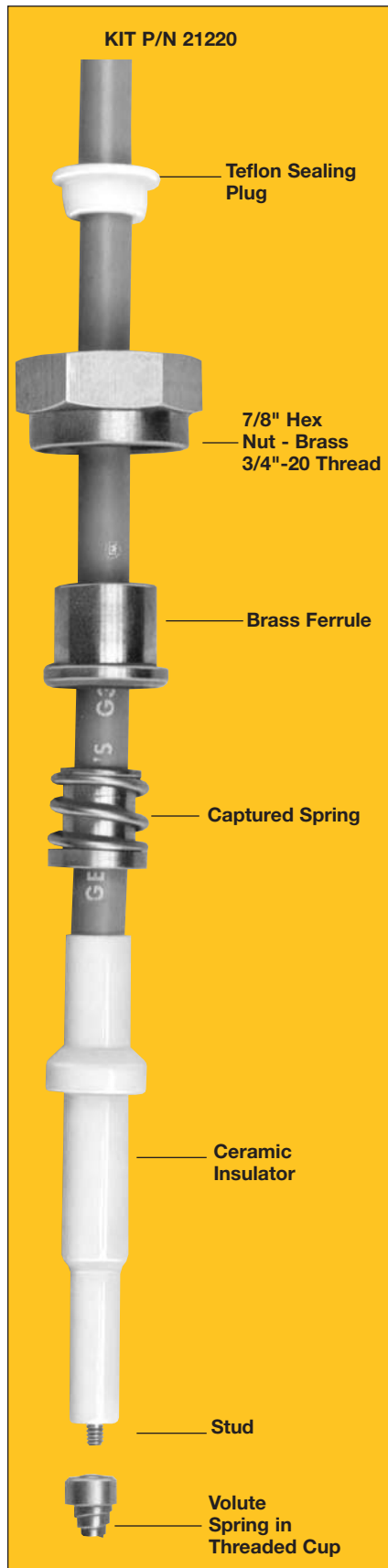


Coil Adapter Model	Length*	Spark Plug Terminal	Insulator	Spare Parts Kit No.
M8-1C	.75	Long	Ceramic	RM8-1C
M8-1T	.75	Long	Teflon	RM8-1T
M8-2C	.75	Standard	Ceramic	RM8-2C
M8-2T	.75	Standard	Teflon	RM8-2T
M15-2C	1.50	Standard	Ceramic	RM15-2C
M28-1C	2.75	Long	Ceramic	RM28-1C
M28-1T	2.75	Long	Teflon	RM28-1T
M28-2C	2.75	Standard	Ceramic	RM28-2C
M28-2T	2.75	Standard	Teflon	RM28-2T
M68-1C	6.32	Long	Ceramic	RM68-1C
M68-1T	6.32	Long	Teflon	RM68-1T
M68-2C	6.32	Standard	Ceramic	RM68-2C
M68-2T	6.32	Standard	Teflon	RM68-2T
M80-1C	8.00	Long	Ceramic	RM80-1C
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)



## TERMINAL KIT P/N 21220 CONNECTS UNSHIELDED SECONDARY LEADS TO PRECISION (BENDIX) COILS 10-320790-1 and 10-382040-1



- Teflon Sealing Plug waterproofs assembly at the Ferrule.
- Ceramic Insulator will not deteriorate under extreme temperatures.
- Volute Spring provides greater spring pressure.
- Complete Assembly Instructions included with each kit.

## TERMINAL KIT P/N 22280 CONNECTS SILICONE HOSE-COVERED LEADS TO PRECISION (BENDIX) COILS 10-320790-1 and 10-382040-1



- 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.

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.



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

**BG**

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

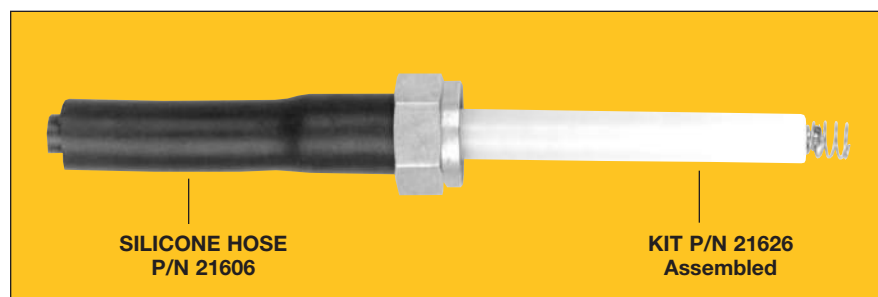
CROSS REFERENCE TO OTHER BENDIX PARTS		
Bendix P/N	Description	BG P/N
10-29774	Spring Assy.	A7820
10-320467	Stud	21200-3
10-320468	Stud	21200-2
10-320638-1	Outer Ferrule	21467
10-320641	Sleeve	21690
10-320678	Stud	21200-1
10-320679	Sleeve	21102
10-320789-X	Lead	HT1100-X
10-320819-X	Lead	HT2100-X
10-320895-1	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
21685	Kit (For 8mm Wire)	Not Shown



## KIT P/N 21626 FOR SILICONE HOSE-COVERED LEADS

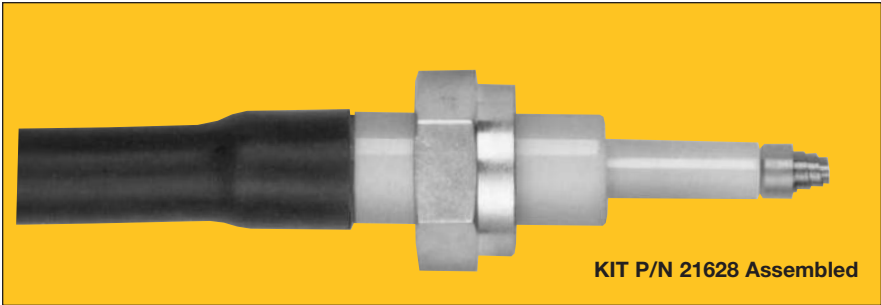
- Silicone Hose protects 7mm wire and extends lead life.
- Waterproof connection reduces downtime.
- Use with either Flash-Tite™, DS™, or “Seal-On” type Spark Plug Connectors shown in this catalog.



**FOR AMERICAN BOSCH (UT)  
OTHER AMERICAN BOSCH ITEMS AVAILABLE UPON REQUEST**

**TERMINAL KIT P/N 21628**

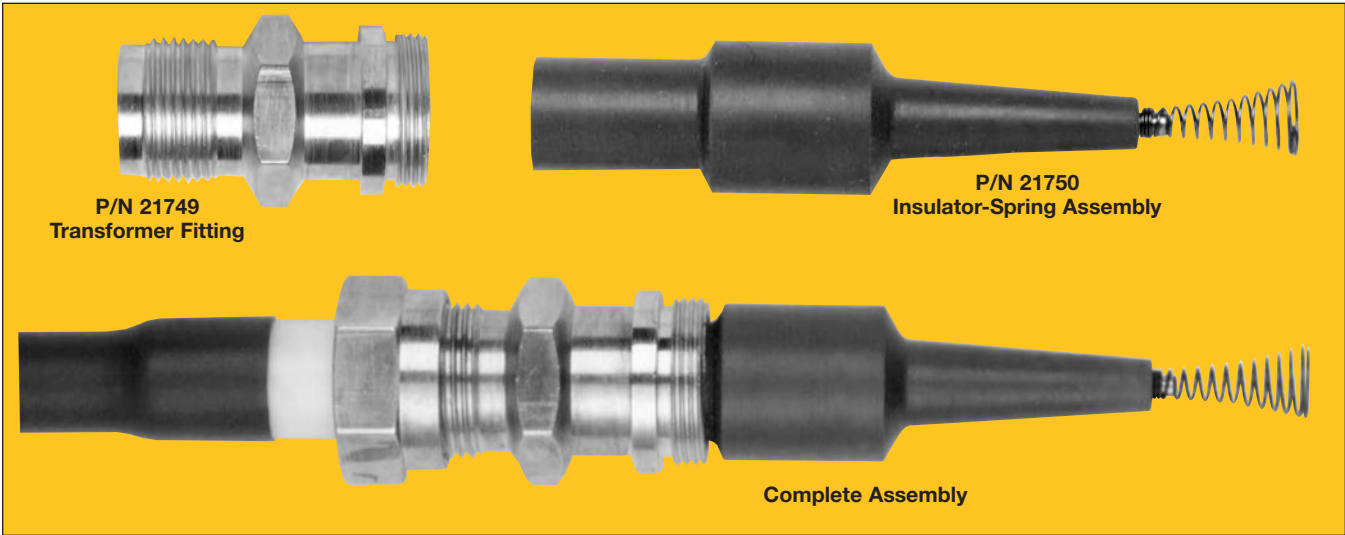
- Composite Ceramic-Teflon Insulator will not deteriorate under extreme conditions.
- Silicone Hose protects 7mm wire and extends lead life.
- Waterproof connection reduces downtime.
- Use with either Flash-Tite™, DS™, or “Seal-On” type Spark Plug Connectors shown in this catalog.



**ORDERING INFORMATION**

P/N	Description	Application
21628	Terminal Kit	Use with AMBAC Coil CLP80F1 and BG Silicone Hose (P/N 21606) and 7mm wire (P/N 21570).

**TRANSFORMER FITTING AND INSULATOR-SPRING ASSEMBLY  
FOR USE WITH KIT P/N 21628**



**SHIELDED LEAD KITS FOR  
FAIRBANKS MORSE PPT2477AD/ADL**

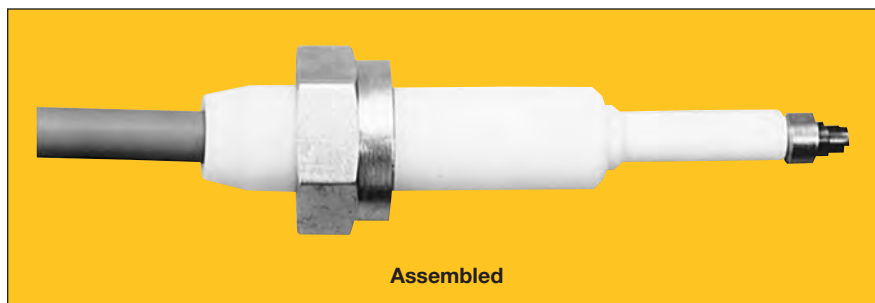


CROSS REFERENCE TO FAIRBANKS MORSE LEAD PART NUMBERS		
FM P/N	Description	BG P/N
A755-XX	Secondary Lead	HT1400-XX
B755-XX	Secondary Lead	HT1401-XX
C755-XX	Secondary Lead	HT1410-XX
US755-XX	Secondary Lead	BG194S
A754-XX	Primary Lead	LT7200-XX
B754-XX	Primary Lead	LT7201-XX
C754-9.5	Primary Lead	LT7210-9.5

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

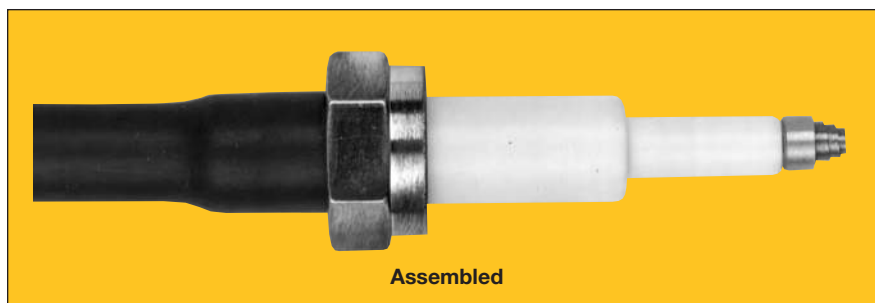
**BG**

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

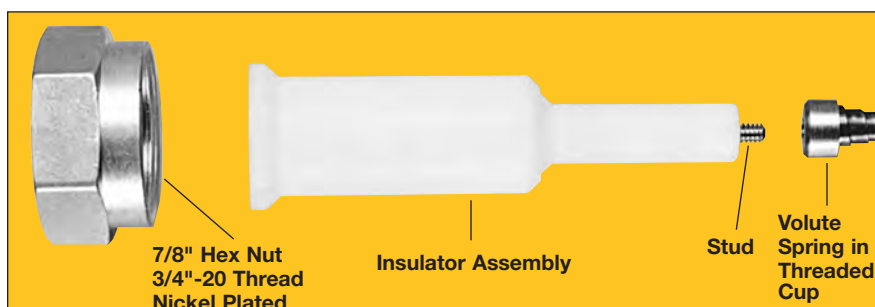


## TERMINAL KIT P/N 21562 CONNECTS SILICONE HOSE-COVERED LEADS TO ALTRONIC SHIELDED COILS

- 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

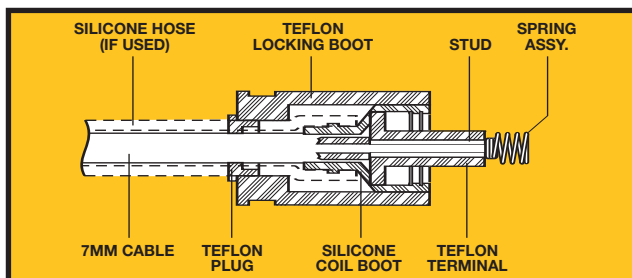


### ORDERING INFORMATION

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.

# COIL-TITE CONNECTOR

- Unique Teflon 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)
<b>Altronic: All Models</b>	22970SS (inc. 21200-04 stud)	22970 (inc. 21200-08 stud)
<b>Precision (Bendix): All Models</b> <b>Dynalco: IGC 856A</b>	23039SS (inc. 21200-08 stud)	23039 (inc. 21200-05S stud)
<b>Dynalco: IGC 290</b>	23041SS (inc. 21200-05S stud)	23041 (inc. 21200-09S stud)

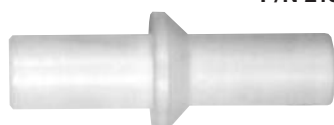
COIL BOX CONNECTORS ORDERING INFORMATION		
PART NO.	LENGTH	DESCRIPTION
21614	1.687"	GROMMET ONLY
21614-01	1.687"	KIT: GROMMET 21614, PLATED NUT 21253-1
21614-02	2.812"	GROMMET ONLY
21614-03	2.812"	KIT: GROMMET 21614-02, PLATED NUT 21253-1
21614-04	2.410"	GROMMET ONLY
21614-05	2.410"	KIT: GROMMET 21614-04,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

## CONNECTING PARTS FOR UNSHIELDED COILS



P/N 21542 Coil Boot

P/N 22063 Coil Boot



P/N 21614 Teflon Grommet for Coil Box



P/N 21541 Terminal



P/N 21682 Terminal



P/N 22064-01 Plated Brass Terminal  
P/N 22064-03 Stainless Steel Terminal



P/N 21861 Coil Cover For Altronic Coils

P/N 22431 Coil Cover For Fairbanks Morse Coils

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

**BG**

- Patented 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).



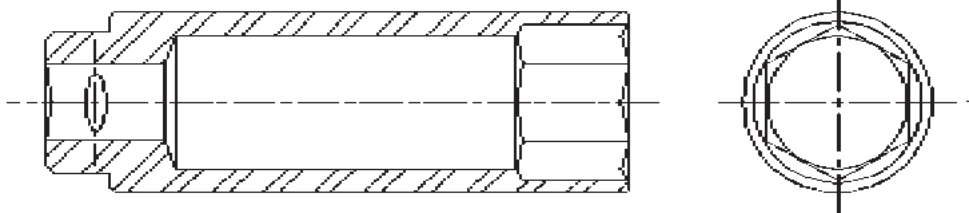
Altronic Coil 591040 shown with BG Connector 22615

## EXTENSION AND BOOT REMOVAL PLIERS P/N 22486

- Facilitates removal.
- Excellent for “hard-to-reach” places.
- Soft jaws won’t damage extensions and boots.

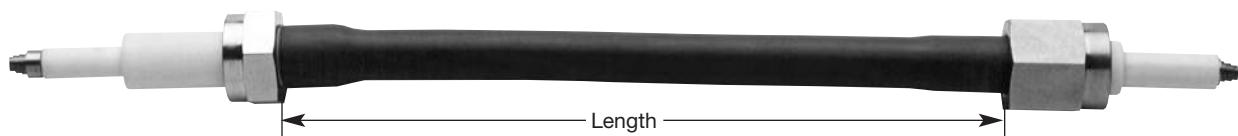


## 7/8” LONG REACH SPARK PLUGS SOCKETS P/N 25381 SHOWN



P/N	Socket Size	Drive	Length	Points
22296-01	7/8"	1/2"	3.2"	6
22297-01	15/16"	1/2"	3.2"	6
25381	7/8"	1/2"	3.7"	6

# 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

TYPE	COIL CONNECTOR
1	Altronic 291001-S 501061-S 591010-S
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!

<b>TYPE 6 CONNECTING HARDWARE FOR 5/8"-24 SHIELDED SPARK PLUG AND SILICONE HOSE</b> KIT P/N 23433, HIGH PERFORMANCE BLACK FRAME SILICONE HOSE OVER 7mm WIRE KIT P/N 25280-01, SEVERE APP., CERAMIC SLEEVE, SILICONE HOSE OVER 7mm WIRE KIT P/N 25280, ECONOMICAL, TEFLON SLEEVE, SILICONE HOSE OVER 7mm WIRE	<b>Type 6</b>
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**Type  
1**

**Type  
2**

**Type  
3**

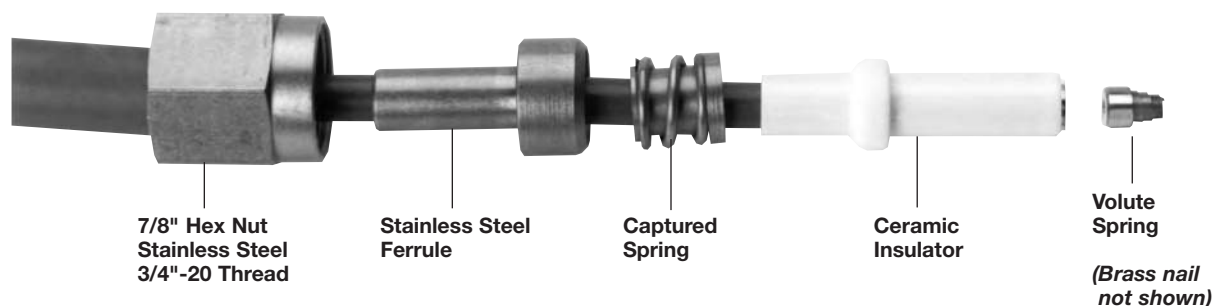
**Type  
4**

**Type  
5**



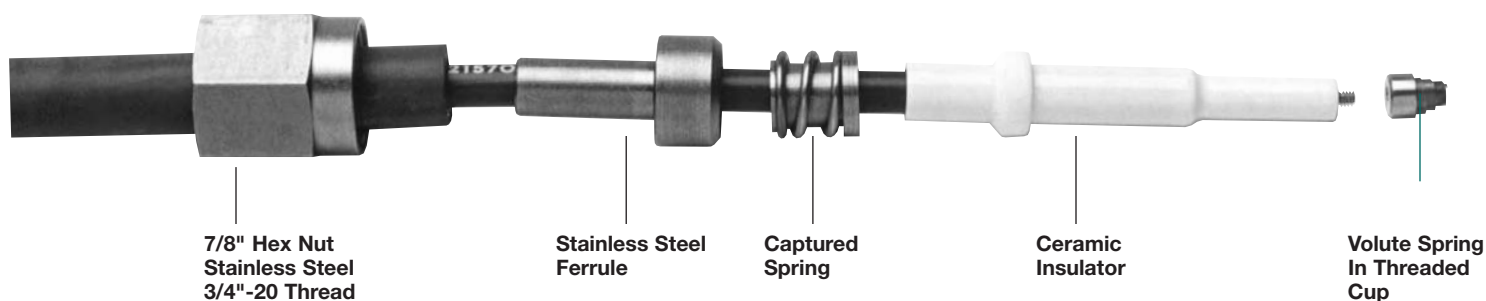
# ALL WEATHER LEADS & KITS FOR SHIELDED SPARK PLUGS

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

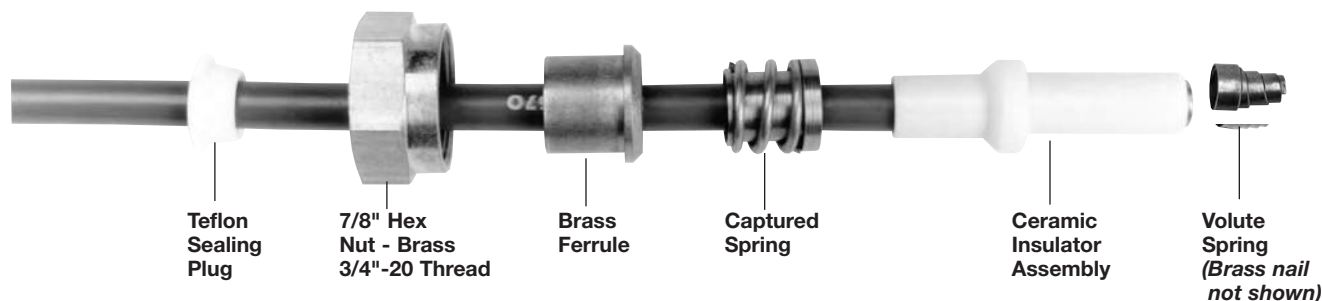


KIT P/N 21625 FOR DEEP WELL 3/4"-20 SHIELDED SPARK PLUG AND SILICONE HOSE

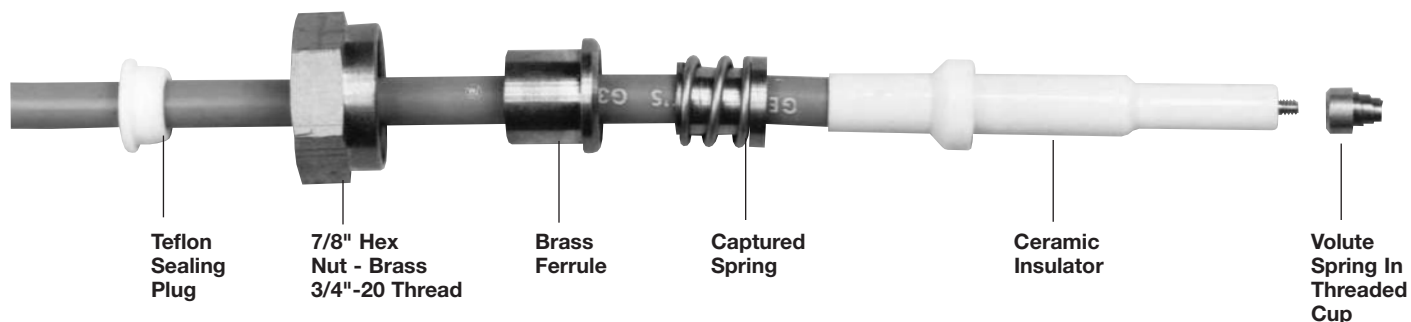
KIT P/N 23023SS FOR DEEP WELL 3/4"-20 SHIELDED SPARK PLUG AND SILICONE HOSE, SILICONE HOSE, AND HIGH RESISTANCE WIRE



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

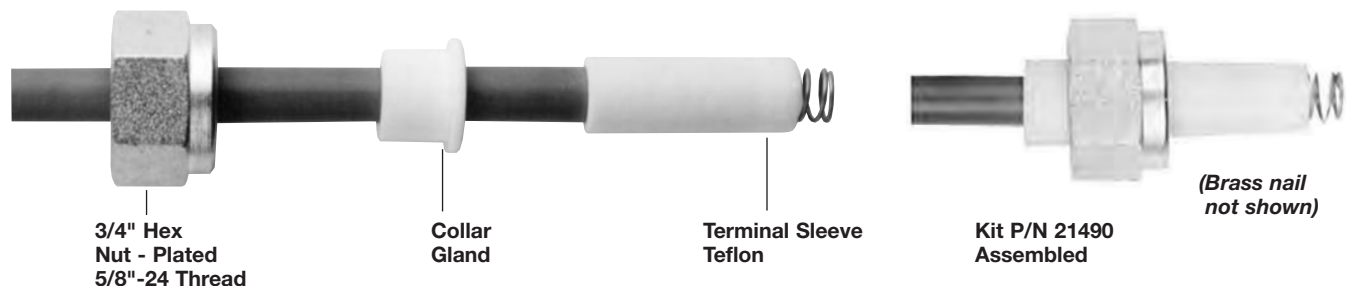


KIT P/N 21220 FOR DEEP WELL 3/4"-20 SHIELDED SPARK PLUG WITH 7MM WIRE ONLY



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

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



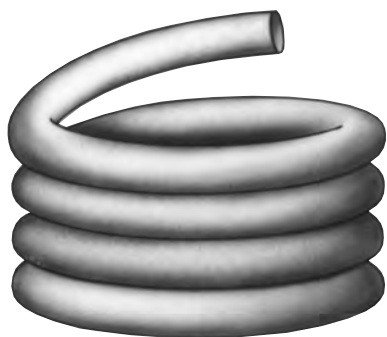
THIS KIT REPLACES CHAMPION P/N 186

# 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 330 ohms/ft. Excellent for RFI sensitive environments. Color red. Available in 100' rolls. Terminate with 21200 series studs and stud support as described on page 47.
25118	7mm Super Cable	Conductor is 16 strands of stainless steel (18 AWG). Insulation is tri-layered hi-temperature PTFE (about 600F) excellent for very severe environments. Cannot be soldered. Color green 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 450-550 ohms/ft. color is black available in 100' rolls.

## 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.

## TERMINATION FERRULE

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



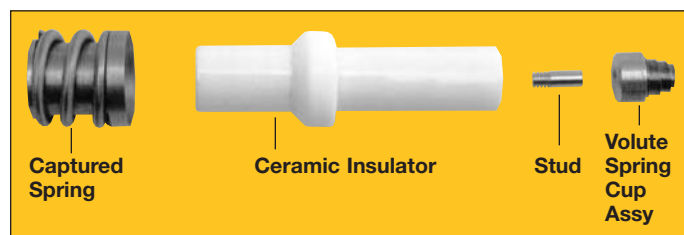
P/N 22571

## PRIMARY WIRE

- 16 Gauge
- High quality
- Optional letter ID
- Temperature rating  
150°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

## 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

**BG**

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



P/N 21144 Captured Spring Assembly



P/N 21143 Ceramic Terminal, 2.054"



P/N 21198 Volute Spring in Threaded Cup

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



P/N 21015 Captured Spring Assembly



P/N 21102 Teflon Terminal, 2.054"



P/N A7820 Spring Assembly

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



P/N 21104 Eyelet Cup



P/N 21012 Volute Spring

## Kit #M2054

P/N 21143	Ceramic Terminal
P/N 21144	Captured Spring
P/N 21104	Eyelet Cup
P/N 21012	Volute Spring

## Kit #M2054-1

P/N 21102	Teflon Terminal
P/N 21015	Captured Spring
P/N 21104	Eyelet Cup
P/N 21012	Volute Spring

## Lead Parts for Spark Plugs With 1" Terminal Wells



P/N 21054 Teflon Grommet



P/N 21398 Ceramic Sleeve-Cup Assy., 1"  
P/N 21053 Teflon Sleeve-Cup Assy., 1"



P/N M531 Ceramic Terminal Sleeve, 1"  
P/N M531-T Teflon Terminal Sleeve, 1"



P/N 21012 Volute Spring



P/N 21032 Brass Nail

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	Teflon Grommet
P/N 21015	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	Teflon Grommet
P/N 21015	Captured Spring Assy.

KIT #21452	Normal Service, Solder-Type
P/N M531-T	Teflon Terminal Sleeve 1"
P/N 21054	Teflon Grommet
P/N 21015	Captured Spring Assy.

KIT #21453	Normal Service, Nail-Type
P/N 21053	Teflon Sleeve-Cup Assy. 1"
P/N 21012	Volute Spring
P/N 21054	Teflon Grommet
P/N 21015	Captured Spring Assy.

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



P/N 21981-1 Ceramic Sleeve Cup Assy.



P/N 21690 Teflon Terminal

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	Teflon Insulator
P/N 21200-4	Stud
P/N 21198	Volute Spring in Threaded Cup
P/N 21015	Captured Spring Assy.

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

## CRIMP TOOLS

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**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.



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**CRIMP TOOL  
Part No. 22019  
for use with  
BG stud support. . .**

This professional crimping tool is specially designed for use with BG stud support part number 21992 described on the following page. The “controlled cycle” feature produces perfect crimps every time.



# STUD SUPPORT



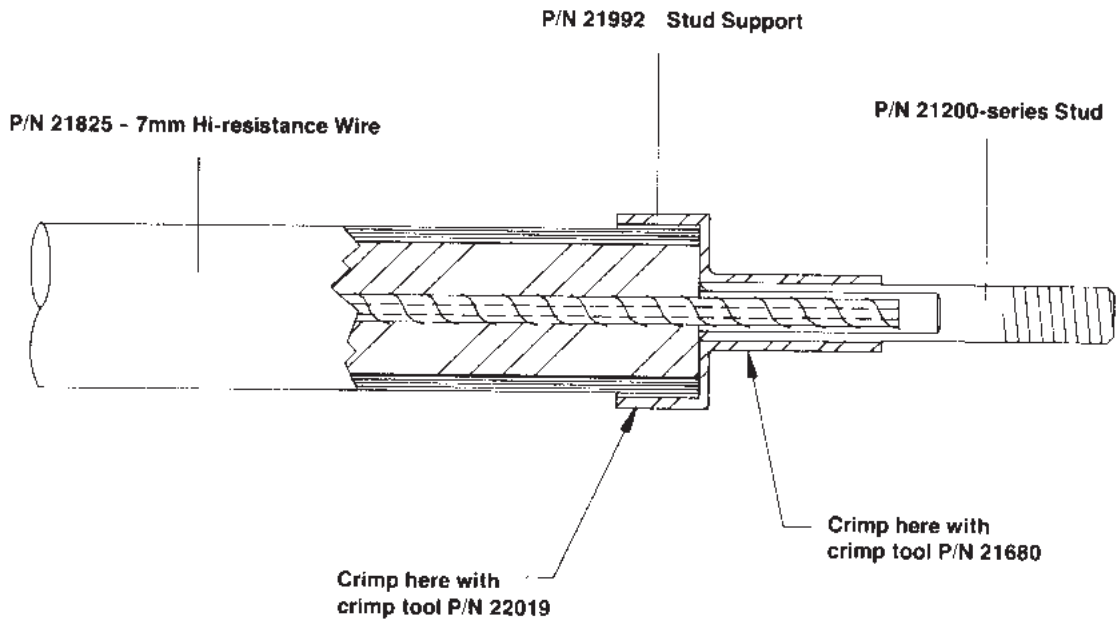
**BG's Stud Support permits the satisfactory usage of high resistance wire in RFI sensitive environments. . .**

Use of Stud Support P/N 21992 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. Spark plug boots and coil connecting kits specifically designed for use with the Stud Support are shown throughout this catalog and are denoted with the part number suffix "SS".



P/N 21992  
Stud Support



## 21200 SERIES STUDS

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



Note: -5 deleted, replaced with -1.

P/N	Length	Hole Depth	Thread Length	Through Hole
21200-1	1-3/32"	7/16"	3/32"	None
21200-2	.289"	3/16"	3/32"	Yes
21200-3	.593"	7/16"	3/32"	None
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 21015 and 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, (Type S6TW), 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, (Type S-10TW), 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 teflon liner



**P/N 21214-01 (Plated)**  
**P/N 21214 (Brass)**  
**P/N 21214-03 (Small Hole,Plated)**  
Hex Nut  
3/4"-20 Thread



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





**P/N 22037 (Plated)  
Adapter  
1 3/16"-18 UNEF x 3/4"-14  
NPT**



**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**



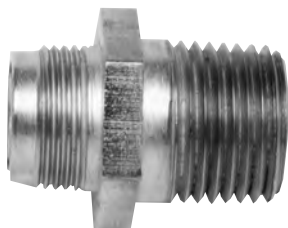
**P/N 21710  
Swag Collar  
Stainless Steel**



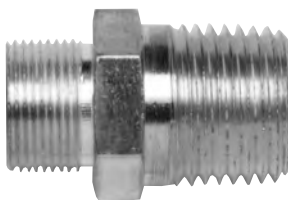
**P/N 21709  
Swage Ferrule  
Insert  
Stainless Steel**

Use the parts shown above with Conduit P/N 21736, (Type S12), 5/8" ID

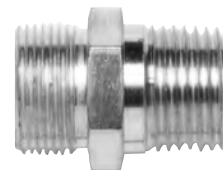
## Adapters



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



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



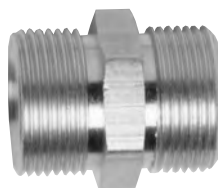
**P/N 21513-1 (Plated)  
P/N 21513-3 (Brass)  
Adapter  
11/16"-24UNEF x 3/8"-18NPT**



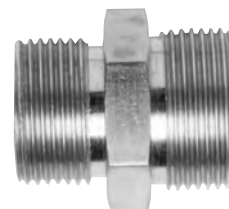
**P/N21512  
Adapter  
11/16"-24 Male  
11/16"-24 Female  
Aluminum**



**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**



# QUALITY LEAD PARTS

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

A possible failure point for wires in conduit is where they penetrate a bulkhead or junction box wall. In vibration prone environments the sharp bend at an adapter may result in abrasions and a short circuit to ground. Now BG introduces a new adapter series that solves the problem. . .

- 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 Teflon grommets at the conduit end where applicable.
- Available with sealing locknuts for straight pipe thread models.

**\* 11/16"-24 UNEF-2A**

**1/2-14 NPT Tapered (locking) thread**

**1/2-14 NPSL**

**1 1/16"-18 UNEF-2A**

**P/N 23068-01**

**Neoprene Grommet**

**P/N 23106**

**Locknut**

**P/N 23083 Grommet (Not Included)**

**P/N 21446 Silicone Grommet (Not Included)**

**P/N 22979**

**Sealing Locknut**

**1/2-14 NPSL Straight pipe thread to accept locknut and sealing locknut**

P/N	Pipe Thread	Back thread	Teflon Grommet*
23106	1/2"-14 NPSL	1 1/16"-18	23083
22979	1/2"-14 NPSL	11/16"-24	21446
23332-01	3/4"-14 NPT	1 3/16"-18	23219
23339-01	1/2"-14 NPT	3/4"-20	21446
23068-01	1/2"-14 NPT	11/16"-24	21446
23337-01	3/8"-14 NPT	11/16"-24	21446
23446	3/4"-14 NPT	11/16"-24	21446
23692-01	3/8"-18 NPT	3/4"-20	21446

\*Grommet not included, order separately

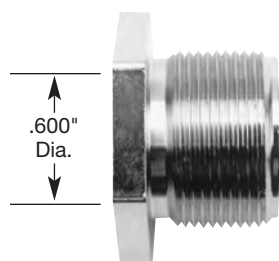
## PIPE THREAD ADAPTER



P/N	Thread
22127	1/2"-14 NPT x 1 3/16"-18 UNEF
22091	3/4"-14 NPT x 1 3/16"-18 UNEF

## QUALITY LEAD PARTS Thru-Bulkhead Assemblies

**BG**



**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	N/A

\*Elbows with 3/4"-20 nuts have a recessed ferrule and are designed to accept Captured Spring 21015 and 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.



**P/N 21446**  
**Sealing Grommet**

**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



# MS CONNECTORS

Now available from stock for immediate delivery. . .

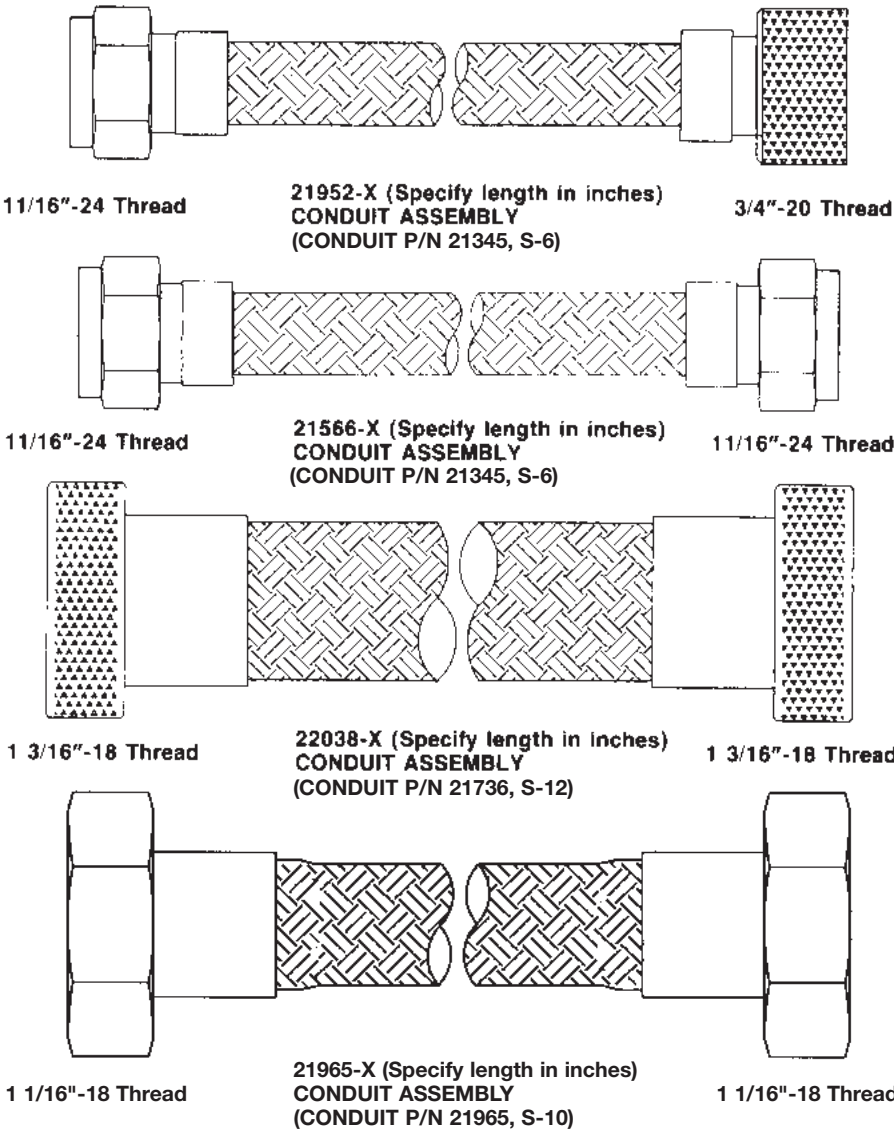
- Resilient inserts resist wear caused by engine vibration.
- Durable field proven design meets the latest performance standards of MIL-C-5015.
- Price competitive.



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
21886-02	MS3106F-20-29P	17	STRAIGHT	1 3/16"-18 UNEF	1 1/4"-18 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

## TURBINE PRODUCTS



**ARP670 Type 1M**



**ARP670 Type 3M**

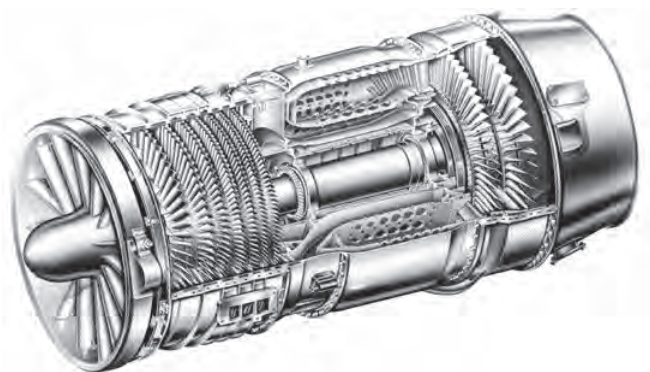


**ARP670 Type 5M**

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.



## BG-made aftermarket leads for GE, Pratt & Whitney, Westinghouse, Allison, 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 Teflon™.  
Standard and custom configurations available.

# TURBINE PRODUCTS

*Other products  
Available!*

*Consult 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
40535		23853-82	LEAD ASSY.
48455		25292-01	LEAD ASSY.
40534		23853-124	LEAD ASSY.
42557		25264-01	LEAD ASSY.
43079		25263-01	LEAD ASSY.
653554		25228-01	LEAD ASSY.
1080274 B	9047505-1 D	25404-46.75	LEAD ASSY.
1080275 B	9047505-2 D	25404-89.50	LEAD ASSY.

ALLISON	
BG P/N	Description
25210-01	LEAD ASSY. T-56
25210-02	LEAD ASSY. T-56
25209	EXCITER KIT
25211	IGNITER KIT

GE EUROPE		
Ref. GE P/N	BG P/N	Description
H3557A001	21278-20	LEAD ASSY.
H3557A002	21278-21	LEAD ASSY.
H3080A001	21280	COUPLING KIT
	21281	COUPLING KIT

AGIP LEADS		
Ref. AGIP P/N	BG P/N	Description
RT074548	21278-25	LEAD ASSY.
RT074651	21278-22	LEAD ASSY.

NUOVO PIGNONE		
Ref. N.P. P/N	BG P/N	Description
RTO74651	21278-22	LEAD ASSY.
RTO74548	21278-25	LEAD ASSY.
RTO74669	21278-23	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

BG



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

<div>BG</div> <div>ELECTRIC FEED THROUGH INTERCHANGE GUIDE</div>	
Auburn Part Number	BG Part Number
F-200-1, F-200-1H, F-210-1H	BG210-1H
F-220-1 F-230-1H	BG230-1H
F-240LL, F-240LLH F-250LL, F-250LLH	BG250LLH
F-300, F-310H	BG310H
F-350H	BG350H

BG Electric Feedthroughs provide a *leakproof electrical connection* through the walls of a variety of pressure vessels.

BG Electric Feedthroughs are *compatible* with currently used refrigerants and phenolic oils.

BG Electric Feedthroughs have a *superior leakage resistance*, tested with a helium leak tester, and a standard acceptance leak rate of <1x10<sup>-6</sup> cc/sec (He).

BG Electric Feedthroughs typical *operating pressures* for are from ambient to 500 PSIG.

BG Electric Feedthroughs have a *greater temperature capability* than similar products... up to 250 deg. F in operation service.

BG Electric Feedthroughs are built with copper conductors and brass nuts for *maximum electrical current carrying ability* and lowest connection losses.

BG Electric Feedthroughs are available in a variety of sizes for most applications.

BG Model	Conductor	Current Rating Amps	Electric Flashover >	Mounting Thread, Hex	Overall Length	Insertion Length	Operating Pressure <sup>1,2</sup>	Brass Nut Installation <sup>3</sup>	Maximum Operating Temp.
BG210-1H	0.25in (6.35mm)	175	10KV	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)
BG230-1H				5/8-18 UNF-2A X .360 LG. 13/16"Hex	4.45 in (113mm)	1.57 in (39.9mm)			
BG250LLH			1/2-14 NPT 7/8" Hex	5.17 in (131.3mm)	1.93 in (49mm)				
BG310H	.375in (9.53mm)	275	12KV	3/4-14 NPT 1-1/8" Hex	5.22 in (132.6mm)	2 in (50.8mm)		10 ft-lb (12.5 N-m)	
BG350H				7/8-14 UNF-2A X .475 Lg. 1-1/8" Hex	5.22 in (132.6mm)	2 in (50.8mm)			

<sup>1</sup> Leak Rate: Test acceptance < 1 X 10<sup>-6</sup> cc/sec (He)

<sup>2</sup> Hydrostatic Pressure test 2500 PSI

<sup>3</sup> Installation Note: Recommended installation torque for brass nuts should not be exceeded. Copper 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.



**THE BG SERVICE CO.,INC.**

1400 ALABAMA AVE.

P.O. BOX 2259

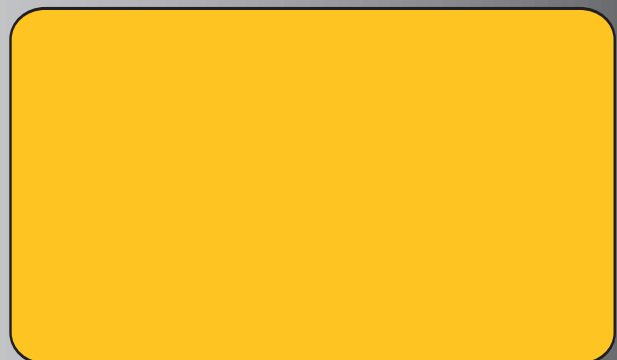
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