S SORIE SNITION ACC



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#### **EXPLODED VIEW USL2A-18A SAFETY SECONDARY LEAD**

NOTE: ALL SAFETY-SHIELDED SECONDARY LEAD EXAMPLES ARE SHOWN 18" IN LENGTH.



#### COIL TERMINATION

Consists of volute spring with stainless steel spring cup (STITT Part No. VS/SSC), blind hole drilled stainless steel stud (STITT Part No. ST-1125), 100% alumina ceramic (STITT Part No. ALTOS-1C), and 3/4-20 UNEF-2B Stainless Steel Knurled coupling nut (STITT Part No. SN-75K).

100% Alumina Oxide ( $Al_2O_3$ ) ceramic **ALTOS-1** termination kit. Fits **Altronic** shielded coils **291001S**, **501061S**, **591010S**.

#### **IGNITION CABLE & PROTECTIVE SILICONE SHEATH**

Consists of 7mm, 19 strand, tinned-copper conductor, silicone-jacketed, ignition cable complying with MIL-C-3702 and SAE J-557 HTS specifications (STITT Part No. **757**), and high-temperature, silicone sheath (STITT Part No. **S0-5**).

All STITT Safety Shielded Secondary Leads are available with RFI-Suppressing Ignition Cable (STITT Part No. R757). These type of Shielded Secondary Leads will be designated with the letter "E". Example "ESL2A-18A".



#### SPARK PLUG TERMINATION

Consists of volute spring with stainless steel spring cup (STITT Part No. **VS/SSC**), blind hole drilled stainless steel stud (STITT Part No. **ST-1125**), 100% alumina ceramic (STITT Part No. **BENDOS-1C**), and 3/4-20 UNEF-2B Stainless Steel Knurled coupling nut (STITT Part No. **SN-75K**).

100% Alumina Oxide ( $Al_2O_3$ ) ceramic **BENDOS-1** termination kit. Fits all 2.125" Termination Well Depth (T.W.D.), Aircraft-Style, Spark Plugs (STITT "S-\_-2" and "S-\_\_BEX\_\_-2" series). Also fits Champion RHW series spark plugs.

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#### USL2A-18A

Safety-Shielded Secondary Lead
Used with 2.125" Termination Well Depth Spark Plugs and Altronic shielded coils 291001S, 501061S, 591010S or Dynalco shielded coils ICG-506, IGCI-406 or Murphy Power Ignition shielded coil ITX-230RM.

Part Number With Standard Ignition Cable (STITT Part No. 757)

USL2A - 12A USL2A - 18A USL2A - 24A USL2A - 30A USL2A - 36A

Non-standard lengths are available upon request.

Part Number With RFI-Suppressing Ignition Cable (STITT Part No. R757)

ESL2A - 12A
ESL2A - 18A
ESL2A - 24A
ESL2A - 30A
ESL2A - 36A



#### **USL2LA-18A**

Safety-Shielded Secondary Lead - <u>RIGHT ANGLE AT SPARK PLUG</u>
Used with 2.125" Termination Well Depth Spark Plugs and Altronic shielded coils 291001S, 501061S, 591010S or Dynalco shielded coils ICG-506, IGCI-406 or Murphy Power Ignition shielded coil ITX-230RM.

Part Number With Standard Ignition Cable (STITT Part No. 757)

USL2LA - 12A USL2LA - 18A USL2LA - 24A USL2LA - 30A USL2LA - 36A

Non-standard lengths are available upon request.

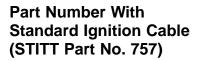
Part Number With RFI-Suppressing Ignition Cable (STITT Part No. R757)

ESL2LA - 12A ESL2LA - 18A ESL2LA - 24A ESL2LA - 30A ESL2LA - 36A



#### **USL2AL-18A**

Safety-Shielded Secondary Lead - <u>RIGHT ANGLE AT COIL</u>
Used with 2.125" Termination Well Depth Spark Plugs and Altronic shielded coils 291001S, 501061S, 591010S or Dynalco shielded coils ICG-506, IGCI-406 or Murphy Power Ignition shielded coil ITX-230RM.



USL2AL - 12A USL2AL - 18A USL2AL - 24A USL2AL - 30A USL2AL - 36A

Non-standard lengths are available upon request.

Part Number With RFI-Suppressing Ignition Cable (STITT Part No. R757)

ESL2AL - 12A
ESL2AL - 18A
ESL2AL - 24A
ESL2AL - 30A
ESL2AL - 36A



Part Number With Standard Ignition Cable (STITT Part No. 757)

USL2LAL - 12A USL2LAL - 18A USL2LAL - 24A USL2LAL - 30A USL2LAL - 36A

Non-standard lengths are available upon request.

Part Number With RFI-Suppressing Ignition Cable (STITT Part No. R757)

ESL2LAL - 12A
ESL2LAL - 18A
ESL2LAL - 24A
ESL2LAL - 30A
FSI 2I AI - 36A



#### USL2B-18A

Safety-Shielded Secondary Lead
Used with 2.125" Termination Well Depth Spark Plugs and Bendix
shielded coils 10-320790-1,10-382040-1.

Part Number With Standard Ignition Cable (STITT Part No. 757)

USL2B - 12A USL2B - 18A USL2B - 24A USL2B - 30A USL2B - 36A

Non-standard lengths are available upon request.

Part Number With RFI-Suppressing Ignition Cable (STITT Part No. R757)

ESL2B - 12A
ESL2B - 18A
ESL2B - 24A
ESL2B - 30A
ESL2B - 36A



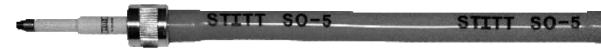
Part Number With Standard Ignition Cable (STITT Part No. 757)

USL2LB - 12A USL2LB - 18A USL2LB - 24A USL2LB - 30A USL2LB - 36A

Non-standard lengths are available upon request.

Part Number With RFI-Suppressing Ignition Cable (STITT Part No. R757)

ESL2LB - 12A ESL2LB - 18A ESL2LB - 24A ESL2LB - 30A ESL2LB - 36A



#### USL2BL-18A

Safety-Shielded Secondary Lead - <u>RIGHT ANGLE AT COIL</u>
Used with 2.125" Termination Well Depth Spark Plugs and Bendix shielded coils 10-320790-1,10-382040-1.



Part Number With Standard Ignition Cable (STITT Part No. 757)

USL2BL - 12A

USL2BL - 18A USL2BL - 24A

USL2BL - 30A

USL2BL - 36A

Non-standard lengths are available upon request.

Part Number With RFI-Suppressing Ignition Cable (STITT Part No. R757)

ESL2BL - 12A ESL2BL - 18A

ESL2BL - 24A

ESL2BL - 30A

ESL2BL - 36A

# USL2LBL-18A Safety-Shielded Secondary Lead - RIGHT ANGLE AT BOTH ENDS Used with 2.125" Termination Well Depth Spark Plugs and Bendix shielded coils 10-320790-1,10-382040-1.

Part Number With Standard Ignition Cable (STITT Part No. 757)

USL2LBL - 12A

USL2LBL - 18A

USL2LBL - 24A

USL2LBL - 30A USL2LBL - 36A

Non-standard lengths are available upon request.

Part Number With RFI-Suppressing Ignition Cable (STITT Part No. R757)

ESL2LBL - 12A

ESL2LBL - 18A ESL2LBL - 24A

ESL2LBL - 30A

ESL2LBL - 36A



#### USL2C-18A

Safety-Shielded Secondary Lead
Used with 2.125" Termination Well Depth Spark Plugs and Fairbanks-Morse shielded coils PPT2477AD, PPT2477AD-L.

Part Number With Standard Ignition Cable (STITT Part No. 757)

USL2C - 12A USL2C - 18A USL2C - 24A USL2C - 30A USL2C - 36A

Non-standard lengths are available upon request.

Part Number With RFI-Suppressing Ignition Cable (STITT Part No. R757)

ESL2C - 12A
ESL2C - 18A
ESL2C - 24A
ESL2C - 30A
ESL2C - 36A



Used with 2.125" Termination Well Depth Spark Plugs and Fairbanks-Morse shielded coils PPT2477AD, PPT2477AD-L.

Part Number With Standard Ignition Cable (STITT Part No. 757)

USL2LC - 12A USL2LC - 18A USL2LC - 24A USL2LC - 30A USL2LC - 36A

Non-standard lengths are available upon request.

Part Number With RFI-Suppressing Ignition Cable (STITT Part No. R757)

ESL2LC - 12A ESL2LC - 18A ESL2LC - 24A ESL2LC - 30A ESL2LC - 36A



STITT SO-5

#### **USL2CL-18A**

Safety-Shielded Secondary Lead - <u>RIGHT ANGLE AT COIL</u>
Used with 2.125" Termination Well Depth Spark Plugs and Fairbanks-Morse shielded coils PPT2477AD, PPT2477AD-L.



Part Number With Standard Ignition Cable (STITT Part No. 757)

USL2CL - 12A USL2CL - 18A USL2CL - 24A USL2CL - 30A USL2CL - 36A

Non-standard lengths are available upon request.

Part Number With RFI-Suppressing Ignition Cable (STITT Part No. R757)

ESL2CL - 12A
ESL2CL - 18A
ESL2CL - 24A
ESL2CL - 30A
ESL2CL - 36A



#### **USL2LCL-18A**

Safety-Shielded Secondary Lead - <u>RIGHT ANGLE AT BOTH ENDS</u>
Used with 2.125" Termination Well Depth Spark Plugs and
Fairbanks-Morse shielded coils PPT2477AD, PPT2477AD-L.



Part Number With Standard Ignition Cable (STITT Part No. 757)

USL2LCL - 12A USL2LCL - 18A USL2LCL - 24A USL2LCL - 30A USL2LCL - 36A

Non-standard lengths are available upon request.

Part Number With RFI-Suppressing Ignition Cable (STITT Part No. R757)

ESL2LCL - 12A
ESL2LCL - 18A
ESL2LCL - 24A
ESL2LCL - 30A
ESL2LCL - 36A



#### USL2E-18A

Safety-Shielded Secondary Lead
Used with 2.125" Termination Well Depth Spark Plugs and Altronic
unshielded coils 291001, 501061, 591010 or Dynalco unshielded coils IGC-290,
IGC-856A or Murphy Power Ignition unshielded coil IT-230.

Part Number With Standard Ignition Cable (STITT Part No. 757)

USL2E - 12A USL2E - 18A USL2E - 24A USL2E - 30A USL2E - 36A

Non-standard lengths are available upon request.

Part Number With Standard Ignition Cable &  $5K\Omega$  Resistor (STITT Part No. 757 & CWR5K)

RSL2E - 12A
RSL2E - 18A
RSL2E - 24A
RSL2E - 30A
RSL2E - 36A

# STITT SO-5 STITT SO-5 E

#### **USL2LE-18A**

Safety-Shielded Secondary Lead - <u>RIGHT ANGLE AT SPARK PLUG</u>
Used with 2.125" Termination Well Depth Spark Plugs and Altronic unshielded coils 291001, 501061, 591010 or Dynalco unshielded coils IGC-290, IGC-856A or Murphy Power Ignition unshielded coil IT-230.

Part Number With Standard Ignition Cable (STITT Part No. 757)

USL2LE - 12A USL2LE - 18A USL2LE - 24A USL2LE - 30A USL2LE - 36A

Non-standard lengths are available upon request.

Part Number With Standard Ignition Cable &  $5K\Omega$  Resistor (STITT Part No. 757 & CWR5K)

RSL2LE - 12A RSL2LE - 18A RSL2LE - 24A RSL2LE - 30A RSL2LE - 36A



Safety-Shielded Secondary Lead
Used with 2.125" Termination Well Depth Spark Plugs and Fairbanks-Morse unshielded coils PPT2477P, PPT2477L.

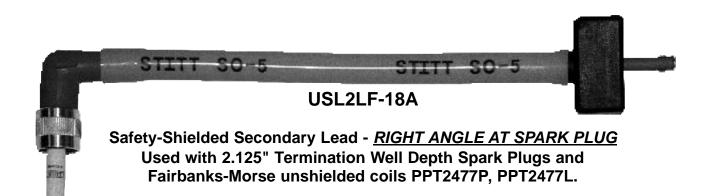
Part Number With Standard Ignition Cable (STITT Part No. 757)

USL2F - 12A USL2F - 18A USL2F - 24A USL2F - 30A USL2F - 36A

Non-standard lengths are available upon request.

Part Number With Standard Ignition Cable &  $5K\Omega$  Resistor (STITT Part No. 757 & CWR5K)

RSL2F - 12A
RSL2F - 18A
RSL2F - 24A
RSL2F - 30A
RSL2F - 36A



Part Number With Standard Ignition Cable (STITT Part No. 757)

USL2LF - 12A USL2LF - 18A USL2LF - 24A USL2LF - 30A USL2LF - 36A

Non-standard lengths are available upon request.

Part Number With Standard Ignition Cable &  $5K\Omega$  Resistor (STITT Part No. 757 & CWR5K)

RSL2LF - 12A
RSL2LF - 18A
RSL2LF - 24A
RSL2LF - 30A
RSL2LF - 36A



USL2G-18A

(STITT Part No.DE-108)
1/2" NPT Thread

Safety-Shielded Secondary Lead
Used with 2.125" Termination Well Depth Spark Plugs and coil box-installed,
unshielded coils.

Note: Lead will include approximately 12" of wire beyond the end of the coil box adapter.

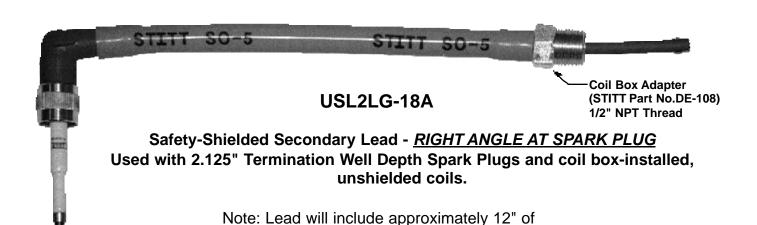
Part Number With Standard Ignition Cable (STITT Part No. 757)

USL2G - 12A USL2G - 18A USL2G - 24A USL2G - 30A USL2G - 36A

Non-standard lengths are available upon request.

Part Number With Standard Ignition Cable &  $5K\Omega$  Resistor (STITT Part No. 757 & CWR5K)

RSL2G - 12A
RSL2G - 18A
RSL2G - 24A
RSL2G - 30A
RSL2G - 36A



wire beyond the end of the coil box adapter.

Part Number With Standard Ignition Cable (STITT Part No. 757)

USL2LG - 12A USL2LG - 18A USL2LG - 24A USL2LG - 30A USL2LG - 36A

Non-standard lengths are available upon request.

Part Number With Standard Ignition Cable &  $5K\Omega$  Resistor (STITT Part No. 757 & CWR5K)

RSL2LG - 12A RSL2LG - 18A RSL2LG - 24A RSL2LG - 30A RSL2LG - 36A

# **USL Leads for Conventional Spark Plugs**

Available with all STITT Teflon boots. Please specify the SPB number needed. See page 15.

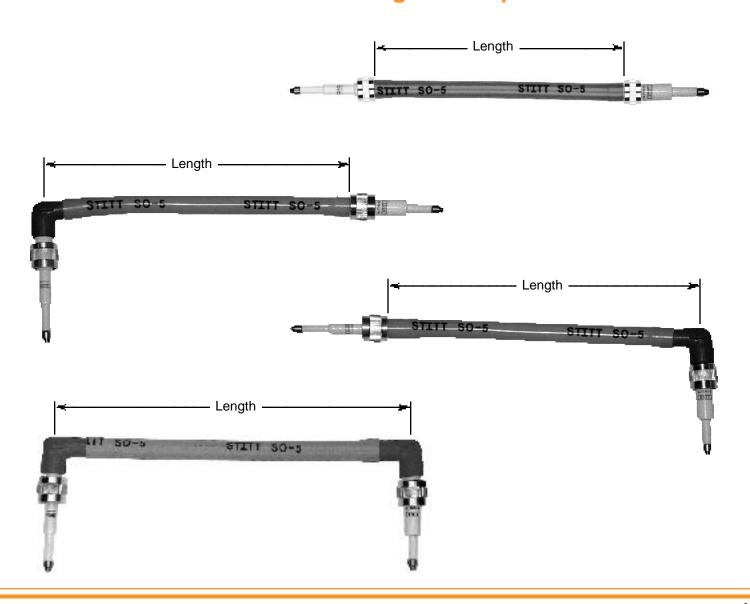
Available with all coil ends specified on pages 2 through 10. Specify coil letter A, B, C, E, F, or G.

Available In both USL Standard Ignition Cable (**STITT #757**) and ESL RFI-Suppressing Ignition Cable (**STITT #R757**) styles. *ESL leads available in coil A, B, and C styles only.* 



**USLE36SPB-18A** 

# **USL Lead Length Examples**



# RSL2 SERIES, 5,000 OHM ( $\Omega$ ) RFI-ATTENUATING, SAFETY-SHIELDED SECONDARY LEADS

Though the ESL2 series Safety-Shielded Secondary leads suppress RFI (Radio Frequency Interference) with the lowest level of energy losses, the fine wire, helically-wound conductor of the R757 ignition cable requires that its terminations be of a style where the ignition cable does not have to be pulled out of or off of the ignition system components to which it is connected.

For RFI elimination when a coil is being used that does not furnish a threaded termination, we find that the R757 ignition cable is too fragile to do the job over the long term.

For those applications using such "unshielded" ignition coils (eg., Altronic 501061, 291001, 591010; Fairbanks-Morse PPT2477P, PPT2477L), we recommend that our RSL2 series of secondary leads be used.

These leads utilize a ceramic, wire-wound resistor with a nominal impedance of 5,000 Ohms. It is designed for high-temperature, high voltage applications. It is fitted into the Bendos-1C ceramic that connects to the spark plug. The use of this resistor allows for the usage of Stitt's standard #757 copper conductor ignition cable. But it furnishes full suppression of spark gap arc-generated RFI.

Of special interest should be the length of this resistor. Its length exceeds by a large margin the flash-over capabilities of other resistors commonly used to attenuate RFI.



STITT CWR5K Resistor attached to ST-1218 stainless steel terminator stud. This assembly fits into the Bendos-1C ceramic.

#### INDUCTIVE PICK-UP SPACER

Many engine operators need to be able to use a timing-light or other inductively-triggered diagnostic gear. This spacer (STITT Part No. IPS) is dimensioned so as to be fitted into any one of our Safety-Shielded Secondary Leads and furnish the easy usage of conventional inductive pick-ups.

This spacer is fabricated from high temperature, black silicone. It can be specified for fitting to any style or length of one of our secondary leads. To order the installation of this spacer, all that is required is the specifying of this device as a part number suffix (for example, USL2A-18AIPS).

When this spacer is specified as part of a secondary lead assembly, it will be fitted into the middle of the lead unless other positioning is specified and agreed upon.



# **STITT 7mm Ignition Cable**

This 7mm, silicone-jacketed, nineteen (19) strands of tinned copper conductor are better tailored for impedance matching to the specifications of virtually all of the common industrial ignition systems. **STITT #757** meets MIL-C-3702 and SAE J-557 HTS specifications.



STITT part no. 757 (Available in 100ft. or 1,000ft. spools)

#### STITT RFI-Suppressing Ignition Cable

Consider this #R757 ignition cable the ultimate in RFI (Radio Frequency Interference) suppressing, 7 millimeter, silicone-insulated ignition cable.

We have evaluated all of those RFI-reduction (either by attenuation or by suppression) ignition cables designed principally for vehicular applications and have not found them durable enough for industrial applications. But the spiral-wound, stainless-steel, suppressing conductor of our new R757 cable, when properly terminated, meets the durability requirements of the continuous-duty, severe service, spark-ignited gas engine.

We recommend that this style ignition cable be used only with termination configurations where there is a screw thread connection at both sides of the secondary circuit. This is because the tensile pull strength of this single strand of fine gauge stainless steel wire does not equal the tensile pull strength of our #757 multi-strand, copper conductor, ignition cable.

With the more conventional, automotive-oriented ignition arrangement, it is typical for an oilfield mechanic to pull the cable termination off the spark plug at the spark plug change interval by yanking on the ignition cable. Though this is not a recommended practice, our copper conductor ignition cable will withstand this disconnection method far longer than any RFI-suppressing cable. With the RFI-suppressing style of cable, a single instance of this yanking can break the conductor.

With that fragility in mind, we recommend that the operator specify our factory assembled, ESL2 series safety-shielded secondary leads. And only when that requirement of RFI suppression is specified. For ESL2 series secondary leads that are available, please see the product listings on pages 2-7.



**STITT** part no. R**757** (Available in 100ft, or 1.000ft, spools)

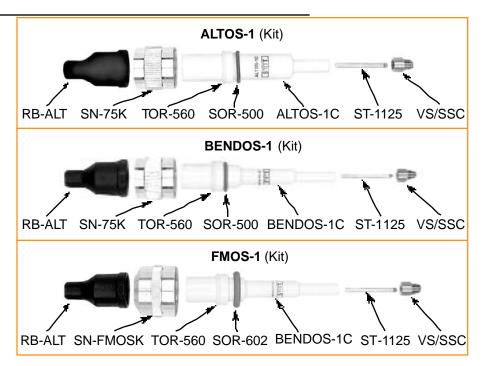
#### Silicone Hose

Our orange 1/2" I.D. silicone hose (**STITT SO-5**) carries a UL Temperature Index Rating of 446° - 500°F which is higher than the rating for Teflon. This hose is used to protect (**STITT #757**) or (**STITT #R757**) ignition wire.



STITT part no. SO-5 (Available in 100ft. rolls)

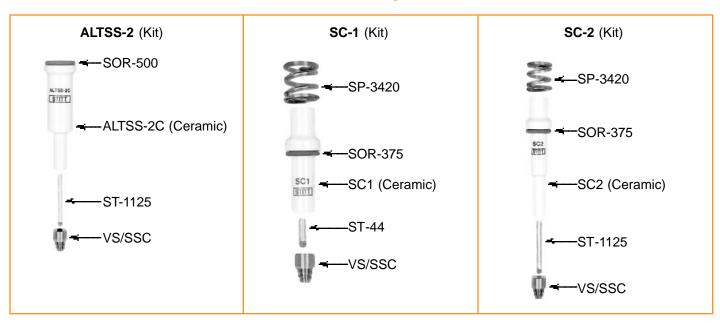
#### Shielded Coil Kits for Unshielded Secondaries



**STITT** Unshielded Coil Kits are made of the highest quality materials...

- The insulators are 96% Alumina Oxide (Al<sub>2</sub>O<sub>3</sub>). The finish is a high temperature (2000°F) nonleaded glaze.
- The top "O" ring (TOR-560) is made of Teflon to facilitate installation.
- 3... The bottom "O" ring (SOR-500) is made of high temperature silicone to assure a quality seal in the spark plug and/or coil well.
- 4... The stud (ST-1125), stainless steel cup and volute spring assembly (VS/SSC) are made of stainless steel to provide for trouble free service.

# **Shielded Secondary Kits and Parts**



ALTSS-2, SC-1 & SC-2 terminals are fabricated from the same material that we use for our spark plug insulators. These terminals assure the highest levels of electrical insulation. Furthermore, these ceramic insulators do not deteriorate over time at the temperatures common to the normal thermal environment of ignition components (at the spark plug crimp, ordinarily 400°F; in the termination well of a conventional, 3/4"-20 aircraft-style spark plug, ordinarily 600°F).

This ceramic material is certifiably superior to any terminal fabricated from a plastic material such as Teflon, which typically begins to deteriorate when subjected to continuous-duty temperatures as low as 250°F. Our alumina ceramic terminals can survive continuous-duty service at temperatures beyond 1000°F without suffering any deterioration in performance. Without melting. Without burning. Without dielectric puncturing.

Individual parts may be ordered separately, see current price list for minimum quantities.

#### **Teflon Boots**

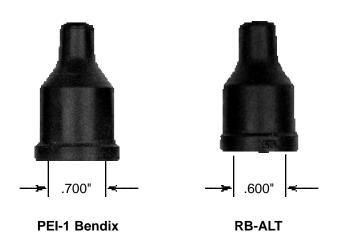
SPB DESIGNATION	FITS MAX. CERAMIC DIA.	FLASHOVER LENGTH MIN.
14(SPB)	.485"	.800"
18(SPB)	.560"	.800"
35(SPB)	.485"	1.000"
36(SPB)	.545"	1.500"
45(SPB)	.385"	1.120"
51(SPB)	.470"	1.180"
78(SPB)	.580"	.800"

<u> </u>	
.560" To Fit SO-5 Silicone Hose	
<u> </u>	

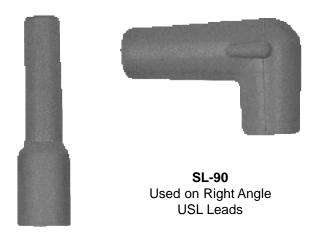
**STITT** Teflon Boots are made from virgin PTFE (Polytetrafluoroethylene) which has the highest UL® service temperature rating of all Teflons with a rating of 356°F (180°C).

® Registered trademark of Underwriters Laboratories.

## **Rubber Boots**



#### **Silicone Boots**



**SB-180**For use with 7mm ignition wire.

# **Caterpillar Boots**



GTCSPB-24A (for 14mm plug) 18CSPB-24A (for 18mm plug) Fits Caterpillar Models G342, G379, G398, and G399.

**GTC33SPB-12A**Fits Caterpillar 3300 Series Engines.



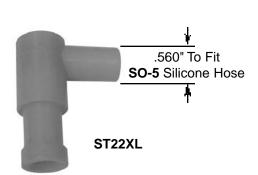
C625 (Boot Only) Fits Caterpillar Models G342, G379, G398, and G399.



C33 (Boot Only)
Fits Caterpillar 3300
Series Engines.

# STITT ST22XL and ST33XL Silicone Boots

The first silicone spark plug boots using solderless Rajah-style terminals. These style connectors offer better suppression of flash-over, over any Teflon spark plug boot. They will withstand higher temperatures than Teflon. Because it eliminates the crimp method of termination common to most automotive silicone boots. They can be used with both solid copper conductor and also resistor ignition cable.

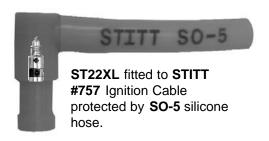






ST33XL

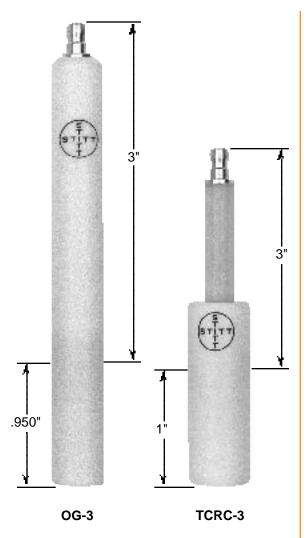
**ST33XL** fitted to **STITT**#757 Ignition Cable
protected by **SO-5** silicone
hose.



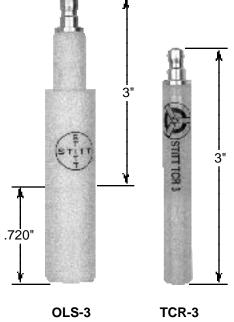


STITT D-199
Rajah-style terminal, included with ST22XL and ST33XL Boots.

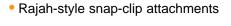
# **Teflon Covered Extension Rods**



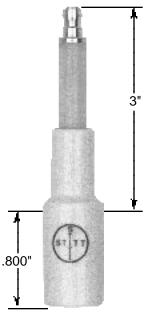
Note: All Extension Rods are shown as 3" examples.



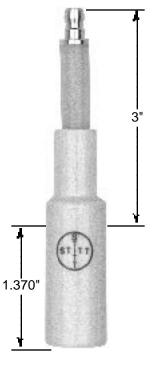
• #8-32 Screw-on attachments



Standard Part Numbers Length						Length
OG-3	TCRC-3	OLS-3	TCR-3	TCRS-3	TCRL-3	3"
OG-4	TCRC-4	OLS-4	TCR-4	TCRS-4	TCRL-4	4"
OG-5	TCRC-5	OLS-5	TCR-5	TCRS-5	TCRL-5	5"
OG-6	TCRC-6	OLS-6	TCR-6	TCRS-6	TCRL-6	6"
OG-8	TCRC-8	OLS-8	TCR-8	TCRS-8	TCRL-8	8"
OG-10	TCRC-10	OLS-10	TCR-10	TCRS-10	TCRL-10	10"
OG-12	TCRC-12	OLS-12	TCR-12	TCRS-12	TCRL-12	12"
OG-14	TCRC-14	OLS14	TCR-14	TCRS-14	TCRL-14	14"
OG-16	TCRC-16	OLS-16	TCR-16	TCRS-16	TCRL-16	16"
OG-18	TCRC-18	OLS-18	TCR-18	TCRS-18	TCRL-18	18"
OG-20	TCRC-20	OLS-20	TCR-20	TCRS-20	TCRL-20	20"
OG-24	TCRC-24	OLS-24	TCR-24	TCRS-24	TCRL-24	24"



TCRS-3



TCRL-3

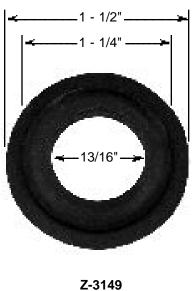
TCRS & TCRL have;

- Alumina Oxide Ceramic Boot
- #8-32 Screw-on Attachment

# **Terminals for Unshielded Secondaries**



#### **Rubber Grommets**



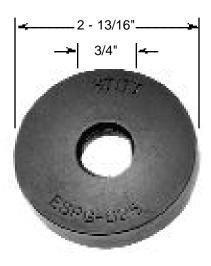
\_1 - 3/4" \_\_\_ 1 - 1/2" -

Z-1107

Made from Buna N Rubber.

- Z-3149 fits our 14mm extended barrel spark plugs.
- Z-1107 fits our 18mm and 7/8" 18 extended barrel spark plugs

# **Caterpillar Grommets**



**ESPG-625** 

ESPG-625, is used with our 14mm extended barrel spark plugs. This grommet fits Caterpillar G342, G379, G398, and G399 Engines.



ESPG-33

ESPG-33, is used with our 14mm extended barrel spark plugs. This grommet fits Caterpillar 3300 Series Engines.

## **Folded Steel Gaskets**







FS-18 (18mm)



FS-78 (7/8" - 18)

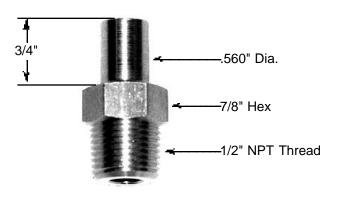
# **Stainless Steel Adapter Nuts**



**DE-101** Stainless Steel



**DE-102** Stainless Steel



**DE-108** Stainless Steel



**DE-109** Stainless Steel

#### **Remote Mount Coil Brackets**



WCB-AT27 For Waukesha "AT" Series Engines

Use to replace valve cover-mounted, Altronic 591012 ignition coils with less expensive ignition coils that will not have to be removed at each spark plug change. To complete the installation, we recommend our one-piece, extended-length, "S-\_\_\_-2" series of spark plugs: specifically, the S-AG18BEX20-2. Connect the coils to the spark plugs using our USL2\_-12A or ESL2\_-12A safety-shielded secondary leads.

Included with each bracket is all mounting hardware required, as well as sealing grommet.



SCB-2400 For Superior "2400" Series Engines and Other Universal Applications

Use to replace Altronic 591012 ignition coils with less expensive ignition coils that will not have to be removed at each spark plug change.

Contact Stitt factory for recommended "S-\_\_\_-2" series spark plugs and "USL" safety-shielded secondary leads.

Included with each bracket is all mounting hardware required, as well as sealing grommet.



ICB-UNIV For Universal Engine Applications

Used to remote mount the Altronic 591012 ignition coil. This makes it possible to use Stitt "S-\_\_\_-2" series spark plugs and "USL" safety-shielded leads.

Included with each bracket is all mounting hardware required, as well as sealing grommet.



CCB-3500 For Caterpillar G3500 Series Engines

Use to replace valve cover-mounted, Altronic 591012 ignition coils with less expensive ignition coils that will not have to be removed at each spark plug change. To complete the installation, we recommend our one-piece, extended-length, "S-\_\_\_-2" series of spark plugs: specifically, the S-2SGA80LLBEX16-2. Connect the coils to the spark plugs using our USL2\_-12A or ESL2\_-12A safety-shielded secondary leads.

Included with each bracket is all mounting hardware required, as well as sealing grommet.

## FI-1 Firing Indicator

#### The Premium Ignition Troubleshooting Tool

- No exposed metal or other electrically conductive material. You cannot get shocked with it. Perfect for the Class1, Group D, Division 2 area.
- Long-life neon bulb flashes brightly when it senses a high voltage impulse.





#### **Magnetic Spark Plug Sockets**

PART NUMBER	HEX SIZE	LENGTH
MS-625	5/8"	3 - 1/2"
MS-812	13/16"	3 - 1/2"
MS-875	7/8"	3 - 1/2"
MSD-875	7/8"	5"
MS-937	15/16"	3 - 1/2"
MS-1000	1"	3 - 1/2"
MSD-1000	1"	5"
MS-1125	1 - 1/8"	3 - 1/2"

For the first time, high quality 1/2" drive sockets that will really hold a heavy industrial spark plug being lowered down a deep well.

- Can be used with any manufacturer's spark plug.
- Holds the spark plug keeps the insulator clean.
- Set screw fixes socket to extension.

## **Hickok Engine Analyzer**

This unit analyzes the secondary and primary circuits of the ignition system. Secondary wave forms along with numerical readings of the secondary demand voltage and spark duration are also displayed. Engine with two spark plugs per cylinder can be analyzed simultaneously with the two capacitive pickups provided. The primary wave form can be analyzed with the attenuated probe that is provided. Data from several engines can be saved and then down loaded into a computer.



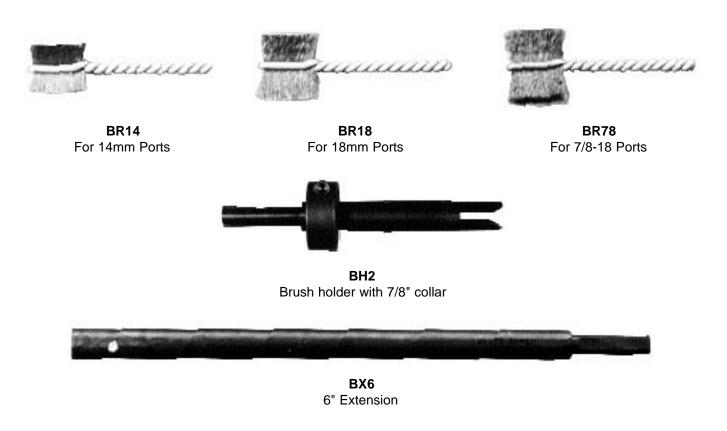
# **Spark Plug Port Clean-Out Brush System**

When a spark plug port gauges as undersize, it will be necessary to try and clean-out the port to verify if the port has been manufactured undersize or has become undersize through the accumulation of operating debris.

The Stitt Spark Plug Port Clean-Out Brush System offers a specialized steel, fine wire brush for the common, industrial engine spark plug port thread sizes (14mm, 18mm, 7/8-18).

The brush must be fitted into our universal holder. For deep spark plug well applications, an extension holder is available that is six (6) inches long. These extensions can be combined for spark plug wells that are deeper than six inches.

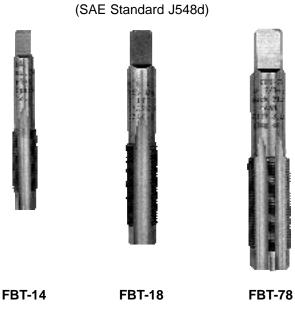
(For specific engine applications, see pages 11 & 12 of the STITT Professional Spark Plug Installation Manual for Integral Compressor Engines, PSIM / 8-99).



# **Ignition Coil Tower Brushes**



#### **Full Bottom Taps**



These are the only tools that will really clean the carbon and other debris that accumulates in the roots of the spark plug port thread. Most importantly, these taps clean all the threads in the port-from the spark plug seat to the fire deck.

#### Go - No Go Gages

(SAE Standard J548d)



**GNG-78** 

These precision, hardened and ground, gauges can tell you if the spark plug ports are good or bad. If the "GO" side of the gauge fails to "GO" into the port, then the port threads are undersize. If the "NO GO" side of the gauge screws into the port, then the port threads are oversize.

#### **Extended-Length Go - No Go Gages**



For the deep spark plug well cylinder head designs, the gauges are only easily used when they are fitted into an extended-length holder. The extended-length holders are available as a gauge set for particular engines. Please consult our recommendation charts (pages 11 & 12 of the *STITT Professional Spark Plug Installation Manual for Integral Compressor Engines*, PSIM / 8-99) for the engine that you are interested in gauging.

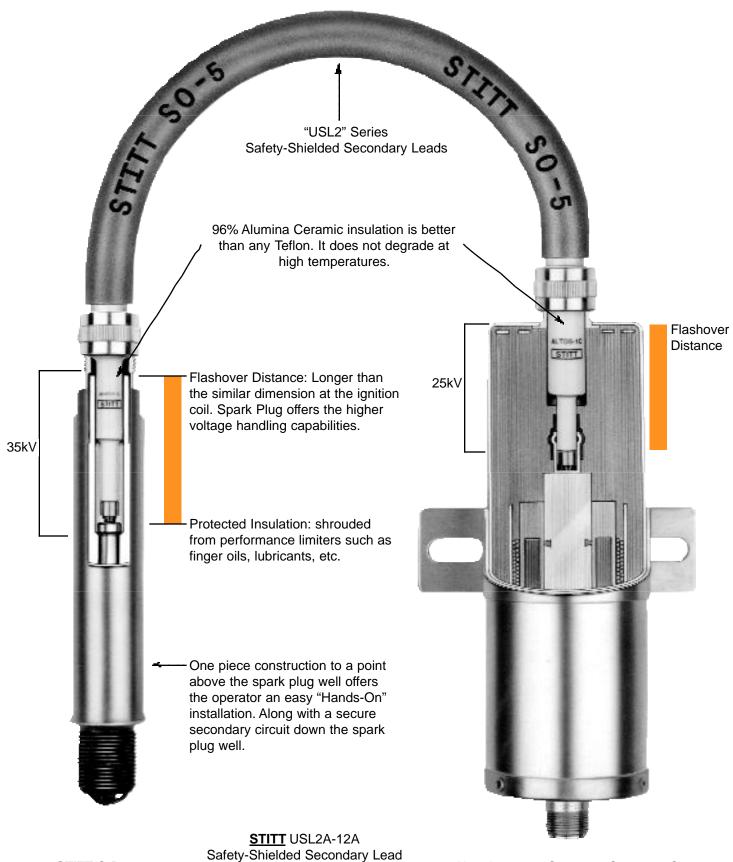
#### **Extended-Length Full Bottoming Taps**



Years of operating debris can accumulate in a spark plug port to such an extent that a clean-out brush cannot remove enough to restore the spark plug port dimensions to SAE J548d standards. This is typically the case when thread antiseize compound is so routinely used that it eventually fuses to the cast iron. When this is the situation, the port threads may have to be re-cut.

By hand, on the engine, when the spark plug port is at the bottom of a deep spark plug well, the tap must be fitted into an extended-length holder. The standard, extended-length holders are sized for the majority of deep spark plug well cylinder heads that are in service. Special lengths can be made available on request. Please consult our recommendation charts (pages 11 & 12 of the *STITT Professional Spark Plug Installation Manual for Integral Compressor Engines*, PSIM / 8-99) for the engine that you are interested in tapping.

# The Ultimate Performance for Class1, Group D, Division 2 Locations



STITT S-R707-2 Spark Plug

Altronic 291001S, 591001S, 591010S Ignition Coil

# **IGNITION ACCESSORIES**

