

File E55943SP Vol 1 Issued: 1983-08-18 Revised: 2007-07-10

FOLLOW-UP SERVICE PROCEDURE (TYPE R)

UNLISTED COMPONENT

1. COMPONENT - ATTACHMENT PLUGS, FUSELESS (AXUT3)

Manufacturer: SEE ADDENDUM FOR MANUFACTURING LOCATIONS

Applicant: I SHENG ELECTRIC WIRE & CABLE CO LTD

(153371-001) 52 TIN HWU RD

TA GANN VILLAGE GWAI SAN HSIAN

TAOYUAN HSIEN 333 TAIWAN

This Procedure authorizes the above manufacturer to use the marking specified by Underwriters Laboratories Inc.(UL), or any authorized licensee of UL, only on products covered by this Procedure, in accordance with the applicable UL Services Agreement.

The prescribed Mark or Marking shall be used only at the above manufacturing location on such products which comply with this Procedure and any other applicable requirements.

The Procedure contains information for the use of the above named Manufacturer and representatives of Underwriters Laboratories Inc. and is not to be used for any other purpose. It is lent to the Manufacturer with the understanding that it is not to be copied, either wholly or in part, and that it will be returned to Underwriters Laboratories Inc. (UL) or any authorized licensee of UL, upon request.

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Underwriters Laboratories Inc.

Stephen Hewson Senior Vice President

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ADDENDUM TO PAGE 1 ISSUED: 1983-08-18 THORIZATION PAGE REVISED: 2007-07-10 File E55943SP Vol 1 AUTHORIZATION PAGE

LOCATION

(153371-001) I SHENG ELECTRIC WIRE & CABLE CO LTD

52 TIN HWU RD TA GANN VILLAGE GWAI SAN HSIAN

TAOYUAN HSIEN 333 TAIWAN

(628100-001) I SHENG MFG (SONG GANG) FACTORY

TANG XIA YONG RD SONG GANG TOWN BAO'AN SHENZHEN,

GUANGDONG 518105 CHINA

(628100-003) I SHENG ELECTRONICS (KUNSHAN) CO LTD

KUNSHAN DEVELOPMENT ZONE

888 TAI SHAN RD KUNSHAN JIANGSU CHINA

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DESCRIPTION

PRODUCT COVERED:

USU - Unlisted Component - Attachment Plug Caps, Cat. Nos. SP-12, SP-12A, SP-12N, SP-13, SP-13N, SP-14, SP-14N, SP-15, SP-15P, SP-16, SP-16B, SP-17, SP-18, SP-18H, SP-18HN, SP-19, SP-20, SP-20N, SP-30, SP-77, SP-301, SP-301A, SP-302, SP-303, SP-304, SP-305, SP-305A, SP-305B, SP-306, SP-306A, SP-306B, SP-306C, SP-307, SP-307A, SP-308, SP-308A, SP-308C, SP-308D, SP-309A, SP-310, SP-310A, SP-30H, SP-L142, SP-L143, SP-301B, IH-115, SP-71A, SP-74, SP-103, SP-105, SP-143, SP-145.

CNU - Unlisted Component - Attachment Plug Caps, Cat. No. SP-13, SP-13N, SP-14, SP-14N, SP-18H, SP-18HN, SP-19, SP-77, SP-301, SP-301A, SP-305, SP-305A, SP-305B, SP-16B, SP-30H, SP-309, SP-306, SP-306A, SP-306B, SP-306C, SP-307A, SP-307A, SP-308, SP-308A, SP-308C, SP-308D, SP-309A, SP-310, SP-310A, SP-L142, SP-L143, IH-115, SP-301B, SP-71A, SP-74.

NOTE TO THE INSPECTOR:

INSPECTOR SHALL VERIFY that blades described in Figs. 1 through 12 are crimped and soldered unless specifically described as a R/C blade (AXNU2) including manufacturers name and Catalog Number. Inspector shall verify that soldering shall flow through the crimp area and that solder is shiny and smooth, denoting a proper solder joint. This requirement only applies to blades used on No. 18 AWG through No. 10 AWG type flexible cord.

ELECTRICAL RATING:

Cat. No.	Cord AWG	Current, A	Volta V
IH-115, SP-301B	16,14, 12	13,15, 15	125
SP-12, -12N	20, 18, 16	3, 10, 13	125
SP-12A	18, 16	10, 13	125
SP-13, -13N	18	10	125
SP-14, -14N	18, 16	10, 13	125
SP-15, -15P	18	10	125
SP-16, -17	20, 18	3, 10	125
SP-16B	18	7	125
SP-18, -18N	18, 16	10, 13	125
SP-18H, -18HN	16, 14	13, 15	125
SP-19	18	10	125
SP-20, -20N	18, 16	10, 13	125
SP-30	18	10	125
SP-30H	18, 16, 14	10, 13, 15	125
SP-301, SP-301A	18, 16, 14, 12	10, 13, 15, 15	125
SP-77	18, 16	10, 13	125
SP-302	18, 16, 14	10, 13, 15	250
SP303, -304	18, 16, 14	10, 13, 15	125
SP-305	18	10	125
SP-305A	18, 16	10, 13	125
SP-305B	18	10	125
SP-306	14, 12	18, 20	125

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ELECTRICAL RATING (Continued):

Cat. No.	Cord, AWG	Current, A	Volts, V
SP-309	14, 12	18, 20	125
SP-309A	14, 12	18, 20	250
SP-306A	14, 12	18, 20	250
SP-307	14, 12	18, 20	125
SP-307A	14, 12	18, 20	250
SP-308	18, 16, 14	10, 13, 15	125
SP-308A	18, 16, 14	10, 13, 15	125
SP-308C	14, 12	15, 15	125
SP-308D	18, 16, 14, 12	10, 13, 15, 15	125
SP-310	14, 12, 10	18, 25, 30	125
SP-310A	14, 12, 10	18, 25, 30	250
SP-L142	12, 10	20, 20	250
SP-L143	10	30	250
SP-306B	14, 12	18, 20	125
SP-306C	14, 12	18, 20	250
SP-71A	10, 13	18, 16	125
SP-74	10, 13	18, 16	125
SP-103	10/3	30	125/250
SP-105	10/4	30	125/250
SP-143	8/2 - 10/1	40	125/250
SP-145	8/2 - 10/2	40	125/250
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TECHNICAL CONSIDERATIONS:

For use only in Applicant's cord sets and power supply cords where the acceptability is determined by Underwriters Laboratories Inc.

USU - Indicates investigation to United States UL 817, Eleventh Edition.

CNU - Indicates investigation to Canadian National Standard C22.2 No. 21-95, Eighth Edition.

CONDITIONS OF ACCEPTABILITY:

- 1. The devices have been evaluated when molded on the specific conductor size specified in this Procedure.
- 2. Use with any other size cord may require additional evaluation.
- 3. These fittings should be used only within their electrical rating.
- 4. Cat. No. IH-115, SP-301B, SP-301, SP-301A, SP-306B, SP-306C, SP-L142, SP-L143 are also evaluated for outdoor use. For outdoor use, the cord type should be type "W".
- 5. Body material, SEBS/PP, Type 9203 by TSRC CORP (E238027), is not suitable for outdoor application.

CAT. NO. SP-305 - FIG. 11 (R89-8239)

1. Body - R/C Plastic (QMFZ2), molded PVC, Type IS-PVC01 manufactured by I Sheng Electric Wire & Cable Co Ltd; Type HL-30128 manufactured by Huey Lung Plastic Industry Co., Ltd.: Types CF-00128, CF-00228 manufactured by Chyi Feng Plastics Enterprises Co., Ltd; Type A-01310A manufactured by Shin Ho Chemicals Co., Ltd.; Type KJ-94V0 manufactured by Kaiy Jerng Enterprise Co., Ltd. or Type YT-01 manufactured by Yung Tern Industrial Corp., minimum 2.4 mm thick over live parts. Refer to Ill. 6 for dimensional details.

Alternate Body - R/C (QMFZ2), PVC, Type CDT-00128 manufactured by Kuen San Chan Dan Tong Plastic; Type TT-01 manufactured by Dongguan Tai Tung Electric Wire Co., Ltd., Type KT006 manufactured by Kau Tai Plastic Industrial Co Ltd., Type 8080 or 8105 manufactured by Men Wai Plastic (Shenzhen) Co Ltd. (Note - These materials are not suitable for use with HPN cord).

Alternate Body - R/C (QMFZ2), PVC, Type Flex 60G by Pure Friend Business Enterprise Corp. (E174939).

Alternate Body - R/C (QMFZ2), SEBS/PP (Styrene Ethylene Butylene Styrene/Polypropylene), Type 9203 by TSRC CORP (E238027).

Alternate Body - A cord grip is provided, same material as the body, molded on as part of body. Refer to Ill. 6A for dimensional details.

Inner Body - (Optional), totally enclosed by molded body material. Two pieces in construction. See ILL. 4A and ILL. 4B for dimension details.

Alternate Inner Body - R/C Plastic (QMFZ2), Type 131.5 INJ manufactured by Carmel Chemicals Ltd.

2. Cord - Flexible Cord, Listed (ZJCZ/7). See the following table for application details.

Cord Size (AWG)	Cord Type	USL	CNL
18/3	SV, SVO, SVOO, SPT-1, SPT-2, SVT, SVT Shielded, SJT, SJTW, SJTO, SJTOW.	YES	YES
18/3	SVE, SVEO, SVEOO, SJE, SJEW, SJEO, SJEOW	YES	NO

3. Blades - R/C (AXNU2), Solid and Folded, Polarized and Non-polarized, Cat. Nos. 97675, 98661, 98662, 98648, 98673, 98675, 98677 and 98699 manufactured by Gem Machinery Ind., Cat. Nos. KDG-50T, KDG-50P, KDF-50T, KDF-50T-1, KDB-20T and KDB-30T manufactured by Kuo Chie Precision Industrial Co., Cat. Nos. SH-998 and SH-998-1 manufactured by Shian Hwi Enterprise Co., Ltd., suitable for use with the conductor types and sizes, insulation class and curing method as specified in the installation instructions provided with the blade. Blade is secured to conductors using the tools, method and recommended crimp height as specified in the blade installation instruction sheet for the blade employed.

4. Grounding Pin - Tubular, Cat. No. 98475 manufactured by Gem Machinery, formed from 0.7 mm thick, copper alloy, plating optional, overall dimensions: 32.1 mm long including electrical connection with 4.75 mm outer diameter.

Grounding Pin Electrical Connection - Integral tabs, 4.2 mm long, crimped to conductors, crimp length 3.2 mm.

Alternate Grounding Pin - Tubular, Cat. No. KDL 475T manufactured by Kuo Chie Precision Industrial Co., formed from 0.7 mm thick copper alloy, plating optional, overall dimensions: 32.0 mm long including electrical connection with 4.72 mm outer diameter.

Grounding Pin Electrical Connection - Integral tabs, 4.4~mm long, crimped to conductors, crimp length 3.4~mm

Alternate Grounding Pin - Tubular, Cat. No. SH403 manufactured by Shian Hwi Enterprise Co., Ltd., formed from 0.65 mm thick copper alloy, plating optional, overall dimensions: 32.4 mm long including electrical connection with 4.7 mm outer diameter.

Grounding Pin Electrical Connection - Integral tabs, crimped to conductors, crimp length 3.7 mm.

5. Marking - See Section General.

CAT. NO. SP-305A - FIG. 11A

General - Cat. No. SP-305A is identical to SP-305 except alternate body shape and items shown below. Refer to Ill. 1 and Ill. 1B (alternate design) for dimensional details.

 Cord for ILL.1 - Flexible Cord, Listed (ZJCZ/7). See the following table for application details.

Cord Size			
(AWG)	Cord Type	USL	CNL
* 18/3	SV, SVO, SVOO, SPT-1, SPT-2, SVT, SVT Shielded, SJT, SJTW, SJTO, SJTOW,	YES	YES
18/3	SVE, SVEO, SVEOO, SJE, SJEO	Yes	NO
16/3	SPT-2	YES	YES

Cord for ILL.1B - Flexible Cord, Listed (ZJCZ/7). See the following table for application details.

Cord Size			
(AWG)	Cord Type	USL	CNL
18/3	SV, SVO, SVOO, SPT-1, SPT-2, SVT, SVT Shielded, SJT, SJTW, SJTO, SJTOW	YES	YES
18/3	SVE, SVEO, SVEOO,	YES	NO
16/3	SPT-2	YES	YES

CAT. NO. SP-305B - NOT SHOWN

General - Cat. No. SP-305B is identical to SP-305 except shown below:

- 1. Body R/C Plastic (QMFZ2), molded PVC, Type IS-PVC01 manufactured by I Sheng Electric Wire & Cable Co Ltd; Type HL-30128 manufactured by Huey Lung Plastic Industry Co., Ltd.: Types CF-00128, CF-00228 manufactured by Chyi Feng Plastics Enterprises Co., Ltd; Type A-01310A manufactured by Shin Ho Chemicals Co., Ltd.; Type KJ-94V0 manufactured by Kaiy Jerng Enterprise Co., Ltd. or Type YT-01 manufactured by Yung Tern Industrial Corp. minimum 2.4 mm thick over live parts, overall dimensions: 50.0 mm long including strain relief, 21.6 mm wide by 23.9 mm high. Refer to ILL. 1A for dimensional details.
- * Alternate Body R/C (QMFZ2), PVC, Type CDT-00128 manufactured by Kuen San Chan Dan Tong Plastic; Type TT-01 manufactured by Dongguan Tai Tung Electric Wire Co., Ltd., Type KT006 manufactured by Kau Tai Plastic Industrial Co Ltd., Type 8080 or 8105 manufactured by Men Wai Plastic (Shenzhen) Co Ltd. (Note These materials are not suitable for use with HPN cord).

Alternate Body - R/C (QMFZ2), PVC, Type Flex 60G by Pure Friend Business Enterprise Corp. (E174939).

Alternate Body - R/C (QMFZ2), SEBS/PP (Styrene Ethylene Butylene Styrene/Polypropylene), Type 9203 by TSRC CORP (E238027).

Alternate Body - A cord grip is provided, same material as the body, molded on as part of body. Refer to Ill. 6A for dimensional details.

<u>Inner Body</u> - (Optional), ABS manufactured by Chi Mei Corp or Polyamide 66 (PA66) manufactured by Toray Industries Inc. Two pieces in construction. See ILL. 4A and ILL. 4B for dimension details.

Alternate Inner Body - R/C Plastic (QMFZ2), Type 131.5 INJ manufactured by Carmel Chemicals Ltd.

File E55943(SP)
Project 76SC2937A

March 17, 1977

REPORT

ON

UNLISTED COMPONENT - ATTACHMENT PLUG, FUSELESS

For Use In

APPLICANT'S CORD SETS AND POWER SUPPLY CORDS

I-Sheng Plastic Co., Ltd. Taipei, Taiwan

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DESCRIPTION

PRODUCT COVERED:

USU - Unlisted Component - Cord Connector Bodies, Cat. Nos. IH-505, IS-013B, IH-505A, IS-07, -08, -010, -012, -012L, -013, -013L, -013A, -14, -14E, -14A, 14B, -15, -16, 16B, -17, -19, -19L, -020, -033, IS-033A, -034, -036, -037, -037A, -037L, -038, -038A, -039, -039A, -08A, IS-L142, IS-L143, IS-L52, IS-L53, IS-L63, PT-013, PT-114, PT-905A, PT-907A, PT-907B, PT-907C.

CNU - Unlisted Component - Cord Connector Bodies, IH-505, IS-013B, IH-505A, IS-012L, -013, -013A, -013L, -15, -16, 16B, -020, -08A, IS-033A, -034, -036, PT-905A, IS-14B, IS-L142, IS-L143, IS-L52, IS-L53, IS-L63, PT-013 and PT-114.

ELECTRICAL RATING:

Cat. No.	Cord, AWG	Current, A	Volts, V
IH-505, IS-013B, IH-505A	16, 14, 12	13, 15, 15	125
IS-07	18	7	125
IS-08	18	7	125
IS-010	18	10	125 or 250
IS-020	18	10	125 or 250
IS-012	18,16	10,13	125
IS-013, IS-013A	18(see note),	10,	125
	16,14, 12	13,15,15	
IS-14	18,16,14	10,13,15	125 or 250
IS-14E	18,16	10,13	125
IS-14E	18	10	250
IS-14A	18,16,14	10,13,15	125 or 250
IS-14B	14, 12	15,15	125
IS-14B	14, 12	10,10	250
IS-15	18,16,14	10,13,15	125 or 250
IS-16	16, 14, 12	13, 15, 20	125 or 250
IS-16B	16, 14, 12	13, 15, 20	125 or 250
IS-17	18, 16	10, 13	125 or 250
IS-19, IS-19L	18,16,14	10,13,15	125 or 250
IS-023	16, 14, 12	13, 18, 20	125
IS-033	18	7, 10	125
IS-033A	18	10	125
IS-034	18	7, 10	125
IS-036	18, 18, 16, 16, 16	7, 10, 7, 10, 13,	125
IS-037, -038, -038A	18	7, 10	125
IS-08A	18	7, 10	125

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ELECTRICAL RATING (CONTINUED):

Cat. No.	Cord, AWG	Current, A	Volts, V
IS-037A	18	7, 10	125
IS-037L	18	7, 10	125
IS-039, -039A	18	7, 10	125
IS-L142	12, 10	20, 20	250
IS-L143	10	30	250
PT-013	16, 14	13, 15	125
PT-905A	16, 14, 12	13, 15, 15	125
PT-907A, PT- 907B, PT-907C	14, 12	15, 15	125
PT-114	16	13	125
IS-L52	14, 12	18, 20	125
IS-L53	12, 10	20, 30	125
IS-L63	12, 10	20, 30	250
IS-012L	16	13	125
IS-013L	16,14, 12	13,15,15	125

TECHNICAL CONSIDERATIONS: (Not For Field Representative's Use)

For use only in applicant's cord sets and power supply cords where the acceptability is determined by Underwriters Laboratories Inc.

USU - Indicates investigation to United States UL 817, Eleventh Edition.

CNU - Indicates investigation to Canadian National Standard C22.2 No. 21-95, Eighth Edition.

CONDITIONS OF ACCEPTABILITY:

- 1. These devices have been evaluated when molded-on the specific size and type cord specified in this Procedure.
- 2. Use with any other size or type cord will require additional evaluation.
- 3. These devices should be used only within their electrical rating.
- 4. A general-use cord set employing flexible cord having No. 18 or No. 17 AWG conductors shall be provided with overcurrent protection (short circuit and overload protection) rated equal to or less than the ampacity of the flexible cord.
- 5. Model IH-505, IS-013B, IH-505A, IS-L142, IS-L143, PT-905A, PT-907A, PT-907B, PT-907C were also evaluated for outdoor use. For outdoor use, the cord type should be type "W".
- 6. When Cat. No. IS-013 is used with No. 18 AWG flexible cord, a Special Use label must be applied to each product.
- 7. Body material, SEBS/PP, Type 9203 by TSRC CORP (E238027), is not suitable for outdoor application.

CAT. NO. IS-034 - FIG. 10 (R97-2046)

General - The general design, shape, and arrangement shall be as illustrated, except where variations are specifically described.

*1. Body - Shaped as shown, R/C (QMFZ2), PVC, Type IS-PVC01 manufactured by I Sheng Electric Wire & Cable Co Ltd; Types CF-00128, CF-00228 manufactured by Chyi Feng Plastics Enterprises Co., Ltd; Type A-01310A manufactured by Shin Ho Chemicals Co., Ltd; Type YT-01 manufactured by Yung Tern Industrial Corp.; Type KJ-94V0 manufactured by Kaiy Jerng Enterprise Co., Ltd. or Type HL-30128 manufactured by Huey Lung Plastic Industry Co., Ltd., minimum 2.4 mm over live parts, overall dimensions 56.3 mm long-including inner body, 22.0 mm wide by 16.8 mm high. See Ill. 7 for dimensional details.

Alternate Body - R/C (QMFZ2), PVC, Type CDT-00128 manufactured by Kuen San Chan Dan Tong Plastic; Type TT-01 manufactured by Dongguan Tai Tung Electric Wire Co., Ltd., Type KT006 manufactured by Kau Tai Plastic Industrial Co Ltd., Type 8080 or 8105 manufactured by Men Wai Plastic (Shenzhen) Co Ltd. (Note - These materials are not suitable for use with HPN cord).

Alternate Body - R/C (QMFZ2), PVC, Type Flex 60G by Pure Friend Business Enterprise Corp. (E174939).

Alternate Body - R/C (QMFZ2), SEBS/PP (Styrene Ethylene Butylene Styrene/Polypropylene), Type 9203 by TSRC CORP (E238027).

Insert Body - (QMFZ2) Polyamide, Type 66, Nylon, AG-16-662 manufactured by Adell, overall dimensions 26.7 mm long, 16.5 mm wide and 12.5 mm high. Circular openings for contacts measure 3.0 mm in diameter, circular openings for the grounding pin measures 3.8 mm in diameter. See Ill. 8 for dimensional details.

- 2. Line Contacts Formed from 0.6 mm thick copper alloy, recessed 3.5 mm from the face, overall dimensions: 3.0 mm outer diameter, 21.0 mm long including electrical connection. See Ill. 9 for dimensional details.
 - Line Contacts Electrical Connection Integral tabs, crimped to conductor, tab length 3.4 mm, crimp length 3.2 mm.
- 3. Grounding Contact Formed from 0.6 mm thick copper alloy, recessed 3.5 mm from the face, overall dimensions: 4.0 mm outer diameter, 17.6 mm long including electrical connection. See Ill. 10 for dimensional details.

Grounding Contact Electrical Connection - Integral tabs, crimped to conductor, tab length 3.8 mm, crimp length 3.6 mm.

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4. Cord - Flexible Cord, Listed (ZJCZ/7). See the following table for application details.

Cord Size			
(AWG)	Cord Type	USL	CNL
* 18/3	SV, SVO, SVOO, SPT-1, SPT-2, SVT, SVT Shielded, SJT, SJTW, SJTO, SJTOW,	YES	YES
18/3 SVE, SVEO, SVEOO, SJE, SJEO		YES	NO

5. Marking - See Sec. Gen.

CAT. NO. IS-039 - FIG. 11 (R97-2511)

General - The general design, shape, and arrangement shall be as illustrated except where variations are specifically described. Cat. No. IS-039 is identical to Cat. No. IS-034 except for the following.

1. Body - Body is molded at a 90 degree angle right to the cord exit, molded PVC, minimum 2.4 mm over live parts, overall dimensions 40.5 mm long-including insert body, 22.0 mm wide by 16.8 mm high. See Ill. 7A for dimensional details.

CAT. NO. IS-039A

General - The general design, shape, and arrangement shall be as illustrated except where variations are specifically described. Cat. No. IS-039A is identical to Cat. No. IS-034 except for the following.

1. Body - Body is molded at a 90 degree angle left to the cord exit, molded PVC, minimum 2.4 mm over live parts, overall dimensions 40.5 mm long-including insert body, 22.0 mm wide by 16.8 mm high. See Ill. 7B for dimensional details.