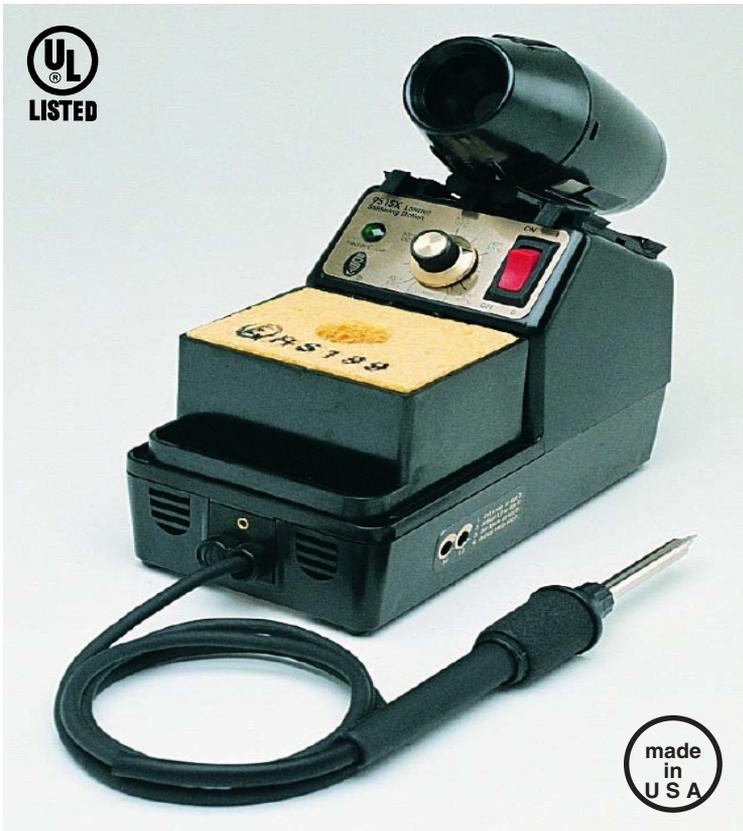# EDSYN INC®

951SX
LONER®
Temperature Controlled
Soldering Station

- COMPLIES WITH MIL-S-45743E, MIL-STD-2000-1B, WS6536E AND ESD SPEC, DOD-STD-1686, DOD-HDBK-263
- UL listed

Instruction manual

Specifications for Model 951SX

Power Requirements	120V, 60 Hz
Power Rating	15W - 220W
Heater Rating	120V, 95W
Temperature Range	400°F-800°F/205°C-427°C
Temperature Regulation	±6°F/±3°C
Tip-to-Ground Voltage Leakage/Resistance	< 2mV/< 2 ohms
Overall Dimension	4.1"W x 8.2"H x 10"D 104 mm x 208 mm x 254 mm
Weight	2.5 lbs/1.1 kg

Contents

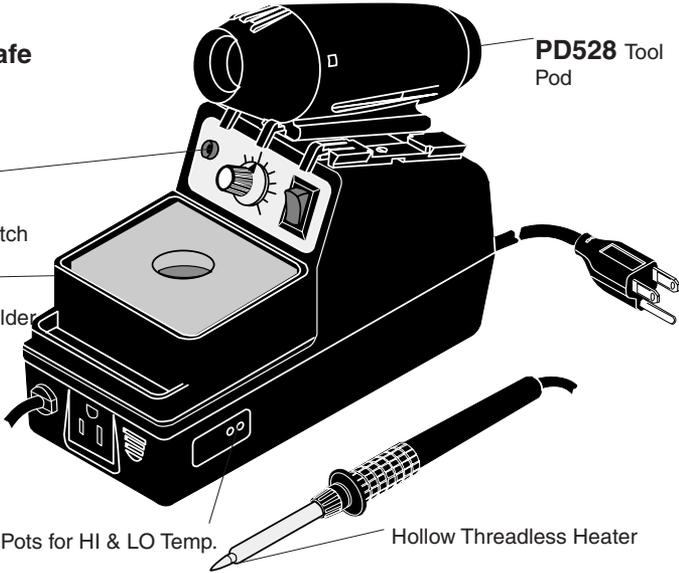|	
951SX includes	1 - LT375 Soldering Tip
PD528	Tool Pod
SH230	Sponge Holder (Includes RS199 Cleaning Sponge, RS243 Leveling Pad, LN230 Liner)
WP556	WIGAPRY Low Static Computer Aid

Static Safe

PD528 Tool Pod

Temp. Regulation Indicator

Power Switch

SH230 Sponge Holder

Calibration Pots for HI & LO Temp.

Hollow Threadless Heater

WARNING:
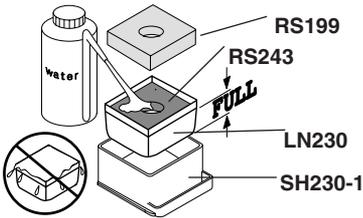*DO NOT HIT OR TAP THE SOLDERING TOOL. THE HEATER ELEMENT WILL BREAK!!!*

MAINTENANCE

• Replace RS199 Cleaning Sponge

1. Fill water only up to the top of the **RS243** Leveling Pad.

2. Depress **RS199** to moisten it completely.

RS199
RS243
water
FULL
LN230
SH230-1

CAUTION:
Over-filling can cause thermal shock to the tip or heating element during tip cleaning.
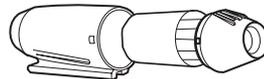
• Replace SC581 Solder Collector

1. Hold the Housing firm and turn Cap counter-clockwise and pull it away from the Housing.

2. Remove used **SC581** and replace with a new one.

3. Reassemble Pod with TOP of the Cap in proper position.
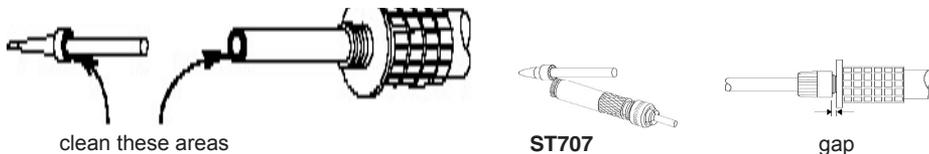
SR042
Thermal Housing

SC581
Solder Collector

SR043
Front Housing

TIP CLEANING

To maintain proper Tip to Ground resistance.

1. Remove Tip from Heater Assembly.
2. Using a **ST707 Soldering Tool Maintenance Brush**, clean Tip and Heater Barrel at surfaces shown.
3. Install the tip and tighten RS372 Retaining Sleeve. Take note of the gap to ensure proper fitting.
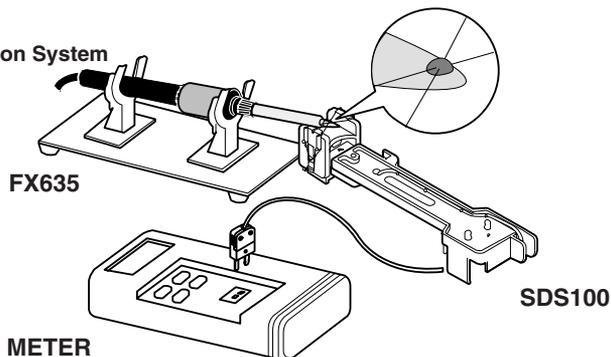

clean these areas   **ST707**   gap

TIP CARE

1. Set desired temperature. Blinking Neon Lamp means Tool is ready.
2. TIN the Tip. (apply solder)
3. Do not rub, bend or reshape the Tip.
4. Always clean the Tip by wiping it against the saturated sponge and always RE-TIN.

TEMPERATURE CALIBRATION

1. Turn on power and set Temperature Control Knob to 400°F (205°C).

2. Using a clean and well tinned Tip, apply a small amount of solder on the Tip, just enough to form a bead on top of the Tip.

3. Place the center of the thermocouple wire of the **SDS100** on top of the bead.

4. Again, apply a small amount of solder on the center of the thermo-couple wire, just enough to embed the center.

5. Adjust LO-Temp. Calibration Pot so the Meter will read 400°F (205°C).

6. Set Temperature Control Knob to 800°F (427°C).

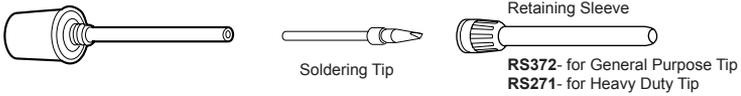**7.** Adjust Hi-Temp. Calibration Pot so the Meter will read 800°F (427°C).

MS412
TemperatureCalibration System

FX635

SDS100

METER

CHANGING TIP

DO NOT USE the soldering tool if soldering tip is loose. This will cause the heater element to break.

1. MAKE SURE YOUR TOOL IS COOL!
2. Turn Retaining Sleeve counter-clockwise to remove.
3. Remove old Soldering Tip.
4. Insert new Tip.
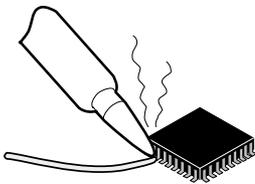5. Install Retaining Sleeve. (should be "finger" tight only.)

Retaining Sleeve

Soldering Tip

RS372- for General Purpose Tip
RS271- for Heavy Duty Tip

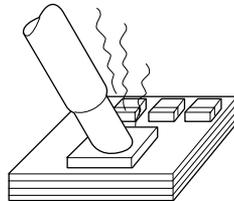| SOLDERING TIPS		A	B
Iron Plated for long life•Nickel and Chrome Plated for optimum heat transfer CONTACT EDSYN FOR MORE SELECTIONS			
LT374	Standard Probe	.03 (0.8 mm)	.48 (12.2 mm)
LT375	Standard Spade	.06 (1.5 mm)	.48 (12.2 mm)
LT392	Extra-Long Needle Point	.02 (0.5 mm)	1.13 (28.8 mm)
LT394	Extra-Long Spade	.07 (2.0 mm)	.93 (23.6 mm)
LT446	SMD Probe	.03 (0.8 mm)	.48 (12.2 mm)
LT337BC	Heavy Duty Terminal Spade	.10 (2.5 mm)	.74 (18.8 mm)
LT223BC	Heavy Duty Fine Spade	.06 (1.5 mm)	1.21 (30.7 mm)
LT222BC	Extra long Needle Point	.04 (1.0 mm)	1.21 (30.7 mm)
LT153BH	Jumbo Spade	.20 (4.9 mm)	.93 (23.6 mm)
LT155BH	Jumbo Angle Spade	.32 (8.3 mm)	.97 (21.1 mm)

SET-UP & REQUIRED ACCESSORIES FOR HEAVY DUTY AND JUMBO TIPS

Apply
AN112 or AN122* Anti-Seize Compound
to Heater and area of Tip contact.

"BC"

HEAVY DUTY TIP   RS271

AC735   JUMBO

TIP   RS351

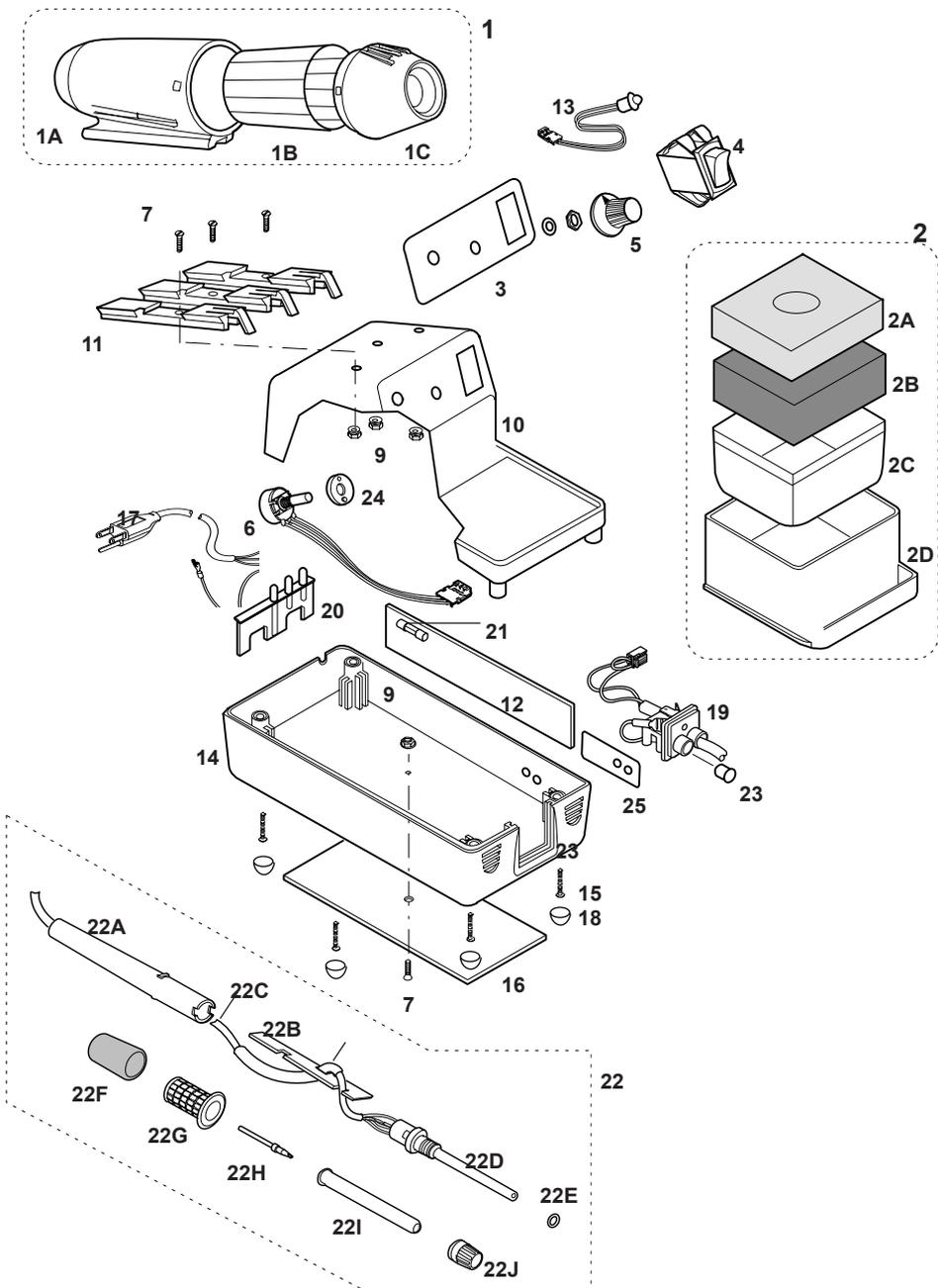*AN122 Anti-Seize Compound comes in syringe dispenser.

Fine point tip for
SMD soldering.

Large and heavy tip for
heavy duty soldering.

951SX LONER® SOLDERING STATION
SPARE PARTS LIST

ITEM NO.	PART NO.	DESCRIPTION	QTY REQ'D
1	**PD528**	Tool Pod	1
1A	**SR042**	Thermal Housing for Tool Pod	1
1B	**SC581**	Solder Collector for Tool Pod	1
1C	**SR043**	Front Housing for Tool Pod	1
2	**SH230**	General Purpose Sponge Holder	1
2A	**RS199**	Cleaning Sponge	1
2B	**RS243**	Leveling Pad for SH230	1
2C	**LN230**	Liner for SH230	1
2D	**SH230-1**	Sponge Holder Tray	1
3	**SR302**	Control Panel Label	1
4	**SR065**	Power Switch, Illuminated	1
5	**SR045**	Knob, Temperature Control	1
6	**SR243**	5K Potentiometer, Temperature Control	1
7	**SR015**	Flat Head Screw- Slotted #6 - 32 x 1/2	4
9	**SR017**	Hex Nut- #6 - 32	4
10	**SR741***	Top Case	1
11	**SR019**	Dove Tail Mount	1
12	**15002W95**	Circuit Board	1
13	**SR573***	LED Assy.	1
14	**SR611**	Bottom Base	1
15	**SR011**	Pan Head Screw- Phillip #6 - 18 x 5/8	5
16	**SR054**	Bottom Weight	1
17	**SR252**	Power Cord Assy.	1
18	**SR251**	Rubber Foot	4
19	**SR037**	A/C Receptacle	1
20	**SR241**	Strain Relief for Power Cord	1
21	**SR249**	Fuse, 250V, 1.6 A (5mm x 20 mm)	1
22	**SR298**	Soldering Tool, Complete Assembly	1
22A	**SR057**	Handle for Tool	1
22B	**SR058**	Cord Strain Relief	1
22C	**SR280**	Tool Cord Assy., Burn Proof	1
22D	**SR060**	Heater Element Assembly Kit (O-Ring (22E) & Collar (22g) Included	1
22E	**SR062**	O-Ring	1
22F	**SR063**	Vinyl Sleeve	1
22G	**SR064**	Collar	1
22H	**LT375**	LONER® Standard Spade Tip	1
22I	**RS382**	Retaining Sleeve	1
22J	**RB386**	Retaining Bushing	1
22K	**SR525**	Silicone Hose, Low Static (sold per foot)	5-1/4"
23	**SR053**	Strain Relief for Tool Cord	1
24	**SR255**	Spacer for Potentiometer	1
25	**SR310**	Label, Calibration Pot, Right Front or Left Rear	1

*Only for stations with SERIAL NUMBERS ENDING WITH 98 & 99, otherwise use SR244 for Top Case and SR246 for LED Assembly

951SX instruction manual

Engineering Dedicated to Suit Your Needs ®

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TIP STYLE ON SOLDERING, DESOLDERING AND HOT AIR TOOLS MAY VARY.

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