

EDSY^{INC}

HT500/-1/-2 SOLDAPULLT[®]

Hot Tip Desoldering Tool

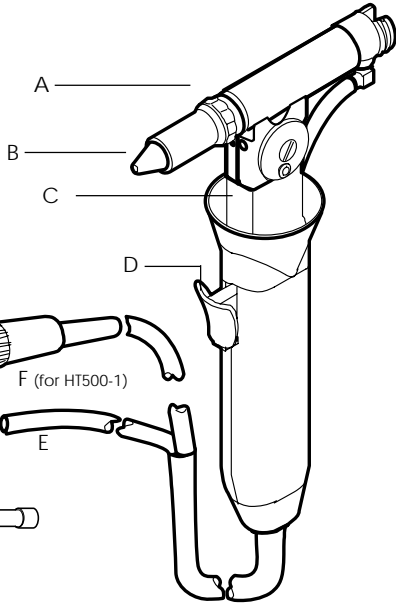
POWER REQUIREMENTS:

- 24V
- VACUUM SOURCE



ESD Safe

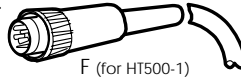
- A) Head Assembly- Includes the primary filtering system and solder debri chamber.
- B) Hot Tip Desoldering Tip- Wide range of desoldering Tips applicable.
- C) Head Shaft- Allows 4-point rotation of Head Assembly.
- D) Trigger- Activates vacuum suction.
- E) Vacuum Hose- Low Static silicone hose. Connects to vacuum source.
- F) Connector- To 24 V controlled output.



(for HT500)



(for HT500-2)



F (for HT500-1)



E

- G) Cleaning Shaft- For cleaning Desoldering Tip orifice: .05 (1.3 mm) and .025 (0.6 mm)



SPECIFICATIONS

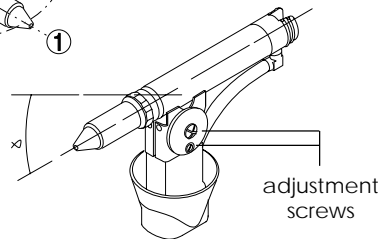
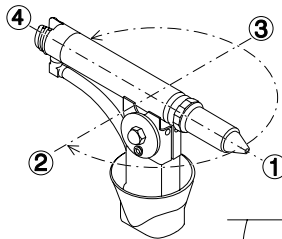
- 24V, 50/60 Hz, 70W
- Weight: 11 ozs. (312 g)
- Temperature range of 400°F to 800°F (205°C-425°C)
- Voltage leakage from tip to ground, less than 2 MV
- Tip to ground resistance, less than 2 ohms
- COMPLIES WITH MIL-S-45743E, DOD-STD-2000-1B, WS-6536E and ESD SPEC, DOD-STD-1686, DOD-HDBK-263
- UL Listed

ADJUSTMENTS

The HT500 Head assembly can be adjusted into varying positions to suit the operator.



While Tool is in the Pod, push handle down and twist handle until it locks into 1 of it's 4 positions. Twisting counter-clockwise will permit a 180° turn. Twisting clockwise will permit a 90° turn.



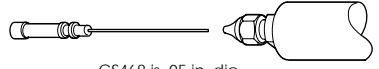
To tilt the Head assembly, loosen (2) Adjustment Screws. Tilt the Head assembly to desired position. Retighten Screws.

Note: Head Assembly does not make a full 360° turn

OPERATION

1. Connect HT500 to 24V power supply and vacuum source.
2. Press trigger to activate vacuum.
3. Always clean the Tip with wet sponge and always re-tin (add fresh solder) during and after each operation.

NOTE: When Tip orifice is blocked, use a correct size Cleaning Shaft while pressing the Trigger to clear the obstruction.

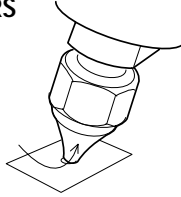


CS468 is .05 in. dia.

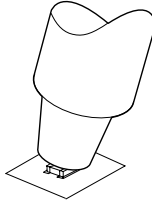
CS468-1 is .025 in. dia.

DESOLDERING POINTERS

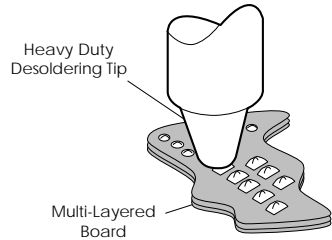
1. When desoldering small holes on flat areas, tilt Tool to allow adequate air flow to lift solder into chamber.



2. When using SMD Tips, heat up the connections by positioning the Tool perpendicularly. When solder melts tilt the Tool and depress trigger. (SMD Tips are recommended for HT500 using external vacuum).

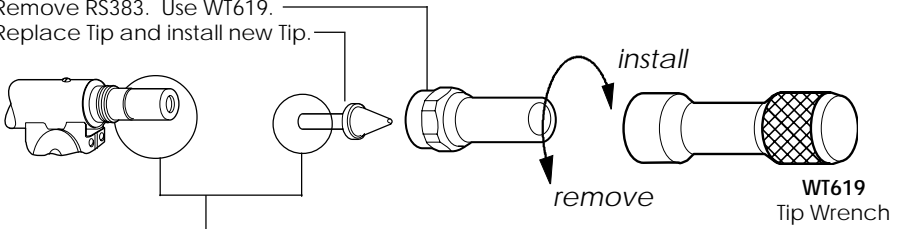


3. Extra-heavy duty desoldering on a multi-layered board is done by using a Heavy Duty Desoldering Tip and a Hi-Heat Soldering Tip simultaneously. Although pre-heating of the circuit board will speed up the process, it is not always necessary.



REPLACING DESOLDERING TIPS

1. Remove RS383. Use WT619.
2. Replace Tip and install new Tip.

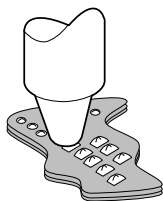


3. Apply **AN112** (in tube) or **AN122** (in syringe) Anti-Seize Compound before assembling.

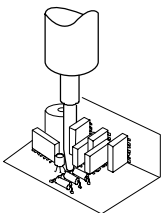
INSPECT DAILY

4. Install **RS383**.

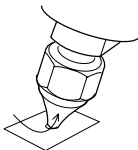
Hot Tip Desoldering Tips Functional dimensions are approx.



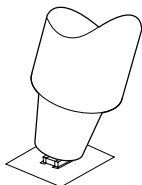
Extra-heavy duty desoldering on a multi-layered board is done by using a **Medium Life Desoldering Tip**.



To reach deep, dense and compact areas, use a Long Funnel tip



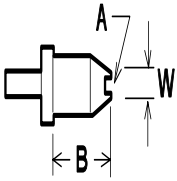
When using a **Replacement Desoldering Tip** to desolder small holes on flat areas, tilt Tool to allow adequate air flow to lift solder into chamber.



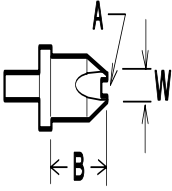
When using **SMD Tips**, heat up the connections by positioning the Tool perpendicularly. When solder melts, tilt the Tool and depress trigger.

DESCRIPTION	PART NO.	HOLE DIAMETER			B			
		in.	in.	mm	in.	in.	mm	
Medium Life (High Heat Transfer)	ZD12	.03	1/32	0.8	.50	1/2	12.7	
	ZD13	.04	3/64	1.0				
	ZD14	.06	1/16	1.5				
	ZD18	.07	5/16	1.8				
	ZD19	.12	1/8	3.2				
	HOLE DIA.							
	Long Life (Low Heat Transfer)	ZD08	.03	1/32	0.8	.44	7/16	11.8
		ZD10	.04	3/64	1.0			
ZD11		.06	1/16	1.5				
	HOLE DIA.							
	Funnel	ZD107	.02	1/64	0.5	.48	31/64	12.2
		ZD112	.03	1/32	0.8			
ZD113		.04	3/64	1.0				
	HOLE DIA.							
	Long Funnel	ZD111	.03	1/32	.08	1.22	17/32	31
		Replacement*	ZD25	.03	1/32	0.8	.39	32/64
ZD26			.04	3/64	1.0			
ZD27	.07		5/16	1.7				
	HOLE DIA.							
	SMD** (FOR ZD505/905 series)	ZD57	.10	7/64	2.5	.55	9/16	13.9
		ZD58	.13	1/8	3.2			
ZD60		.15	5/32	3.8				
ZD61		.25	1/4	4.5				
	HOLE DIA.							

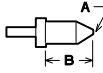
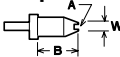
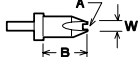
Hot Tip Desoldering Tip



Surface Sweep Tips removes excess solder on pads for flatter surface, prior to SMD remounting.



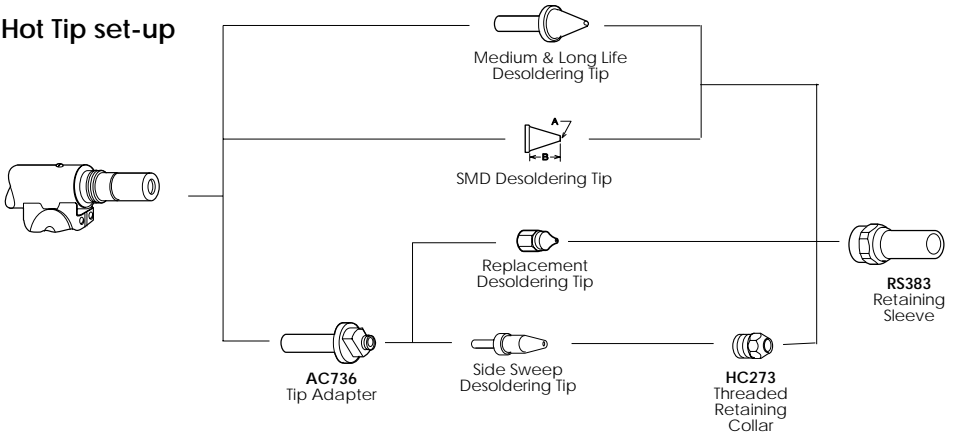
Side Sweep Tips allows removal of solder from the component side of the board.

DESCRIPTION	PART NO.	HOLE DIAMETER			B		
		in.	in.	mm	in.	in.	mm
Economy** 	ZD28	.03	1/32	.08	.30	5/16	7.6
	ZD29	.04	3/64	1.0			
	ZD30	.06	1/16	1.5			
Surface Sweep**  Hole Dia. = .06 in.	ZD70	W					
		in.	in.	mm			
Side Sweep**  Hole Dia. = .06 in.	ZD71	.08	3/32	2.0			

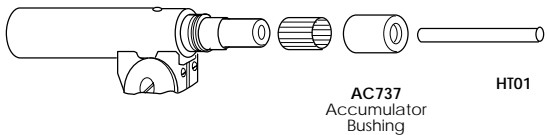
*Tin New Iron Tips at Low Temperature before using.

**Non-Plated Alloy

Hot Tip set-up



Heater Set-up



DAILY MAINTENANCE

- Remove and inspect Tip and Heater Assy.
- Inspect all Filters
- Remove solder debri from Desoldering Head Housing

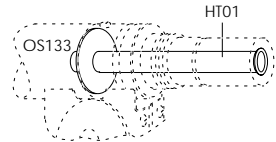
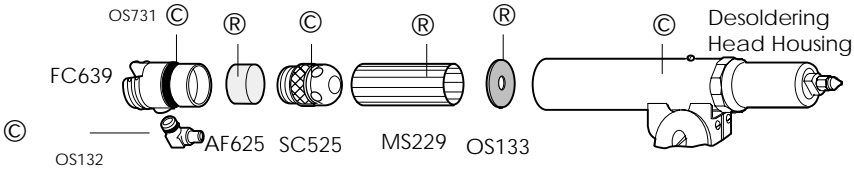
WEEKLY MAINTENANCE

- Inspect Valve Assy.
- Inspect all O-Rings and Seals

TO REPLACE FILTER & O-RING INSIDE DESOLDERING HEAD ASSY.

1. Pull out FC639 from Housing.
2. Unscrew SC525 from FC639 to remove AF625.
3. Insert new AF625 inside SC525 and screw back on.
4. Clean and apply OL111 on OS731 & OS132 O-Ring.

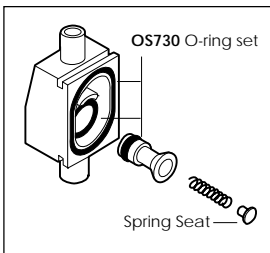
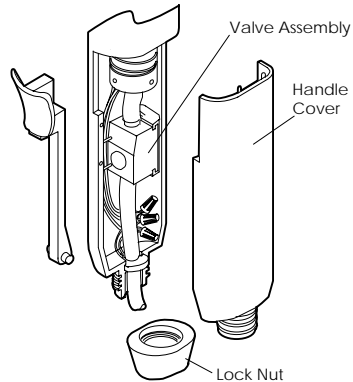
- © - Clean
 ® - Replace



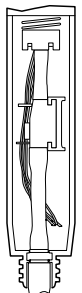
When installing OS133, the HT01 should go thru the OS133.

TO REPLACE O- RINGS INSIDE VALVE ASSEMBLY

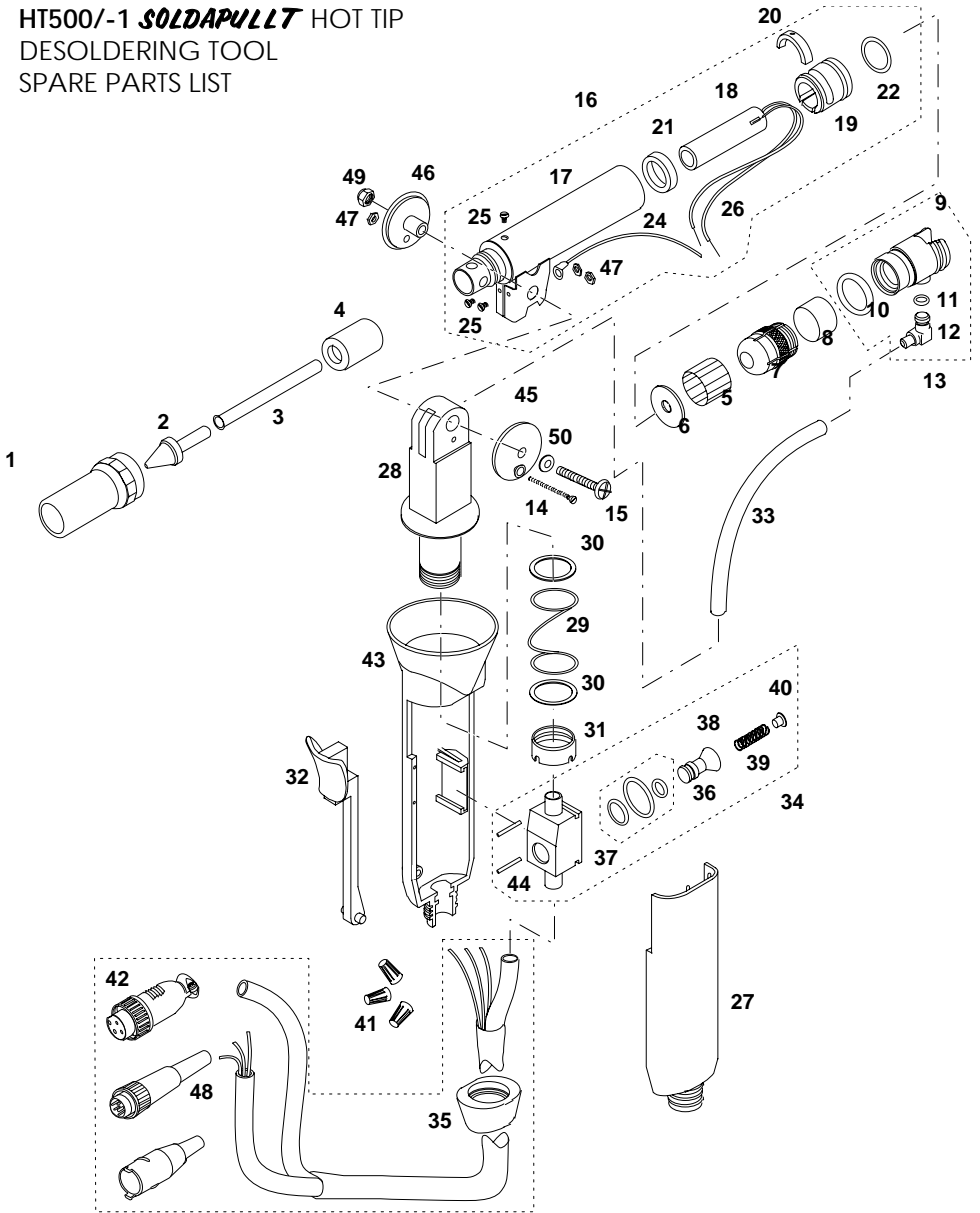
- a) Unscrew Lock Nut at the end of the HT500 Handle.
- b) Remove Handle Cover.
- c) Slide out Valve Assembly while placing your finger over the Spring Seat. BE CAREFUL NOT TO LET THE SPRING AND THE SPRING SEAT SHOOT OUT FROM THE HOUSING
- d) Clean all parts with alcohol only.
- e) Replace OS730 O-Ring Set (set of 3).
- f) Lube new O-rings with OL111 O-Ring Lube.



CAUTION: Make sure the wires are not pinched by Valve Assembly.



HT500/-1 **SOLDAPULLT** HOT TIP
 DESOLDERING TOOL
 SPARE PARTS LIST



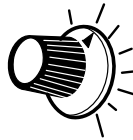
ITEM NO.	PART NO.	DESCRIPTION	QTY REQ'D
1	RS383	Retaining Sleeve	1
2	ZD13	Hot Tip Desoldering Tip	1
3	HT01	Hot Tube	1
4	AC737	Accumulator Bushing	1
5	MS229	Mica Sheet	1
6	OS133	Silicone Washer	1
7	SC525	Solder Cone	1

ITEM NO.	PART NO.	DESCRIPTION	QTY REQ'D
8	AF625	Felt Filter	1
9	SR148	Housing for End Cap	1
10	OS731	O-Ring for End Cap	1
11	OS132	O-Ring for End Cap Elbow Connector	1
12	SR147	Connector for End Cap	1
13	FC639	End Cap	1
14	SR008	Flat Head Slotted Screw for Index Flange	1
15	SR168	Pan Head Phillip Screw for adjusting Desoldering Head Assy.	1
16	HT500H	Desoldering Head Assembly- Repairable by EDSYN Customer Service Dept.	1
17	SR136	Desoldering Head Housing	1
18	SR120	Heater Element	1
19	SR117	Heater Element Bushing (O-Ring included)	1
20	SR118	Retaining Key for Heater Element Bushing	1
21	SR119	Teflon Spacer for Heater Element	1
22	OS731	O-Ring for Heater Bushing	1
24	SR121	Grounding Wire	1
25	SR122	Screw, 2-56 x 1/8 Pan Head Slotted	3
26	SR145	Sleeving, Braided Fiberglass	2
27	SR004	Handle Cover	1
28	SR124	Head Shaft	1
29	SR125	Spring for Head Shaft	1
30	SR126	Washer, Nylon	2
31	SR127	Retaining Nut for Head Shaft	1
32	SR128	Trigger	1
33	HL603	Hose, Low Static Silicone, 3/16" I.D.	5"
34	SR335	Valve Assy.	1
35	SR393	Nut, Retaining, for Handle	1
36	OS730	O-Ring Set (Three O-Rings)	1 set
37	SR129	Valve Housing	1
38	SR130	Poppet (O-Ring Included)	1
39	SR131	Return Spring for Poppet	1
40	SR132	Seat for Return Spring	1
41	SR133	Wire Nuts	3
42		SR134 Hose and Wiring Assembly for HT500	1
		SR565 for HT500-1 SR635 for HT500-2	
43	SR123	Handle Base	1
44	SR143	Wire Guide, Nylon, 3/8" Length	2
45	SR005	Index Flange (Screw Side)	1
46	SR006	Index Flange (Nut Side)	1
47	SR007	Nut, Hex, 2-56 thread	3
48		SR135 Connector for HT500	1
		SR353 for HT500-1 SR633 for HT500-2	
49	SR170	Cap Nut, Hex #8-32 x 5/16"	1
50	SR169	Washer, Flat, 1/16" thick	1

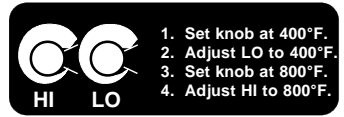
CALIBRATION (for ZD500DX, 505, 905 series only)

AIR MOVEMENT WILL AFFECT THE TEMPERATURE READING.
WORK IN AN AREA WHERE THIS IS MINIMAL.

1. Using a clean Tip, turn on power and set Temperature Control Knob to approx. 500°F (260°C). Allow Tip to warm up.
2. Tin the tip properly and place center of the thermo-couple wire on tip.
3. Apply a small amount of solder on the center of the thermo-couple wire, to form a good contact between the tip and the thermo-couple wire.
4. Set Temperature Control Knob to 400°F (205°C).
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).



Temperature Control Knob



Calibration Pot

THE NAMES LONER, SOLDAPULLT, ATMOSCOPE, AUTO-VAC, IDLE-REST, CROWN, OCTAVAC AND KLATCH ARE REGISTERED TRADEMARKS OF EDSYN, INC.



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

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FORM.613 Rev J