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DO NOT USE NEAR FLAMMABLE PRODUCTS

TIPS ARE HOT - DO NOT TOUCH

SOME BARRELS ARE EXTREMELY HOT - DO NOT TOUCH

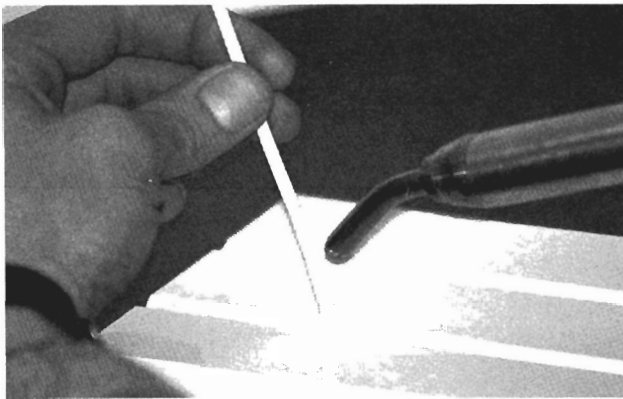


Thermoplastic Welding

It is possible to weld thermoplastic material--plastic that can be softened or shaped by heat with a Seelye electric hot air welder. This lightweight, hand-held equipment makes it easy for even the inexperienced user to develop the "feel" for welding plastic and to do it economically and with speed after only a few hours of study and practice. Whether

fabricating thermoplastic stock or repairing various types of plastic parts, hot air welding is usually performed on plastics with a minimum thickness of 1/16 inch or more. The bond achieved, depending on the type of weld, is generally as strong (90%) as the original material.

User-Friendly Hot Air Welding



Seelye Hot Air Welding Equipment is specially designed for extensive hand-held use without causing the operator fatigue. The equipment is light and very maneuverable. It can be moved easily from one project work area to another. All that is needed is a concentrated effort to learn about the use of the equipment.

Welding Safety

After following Seelye's step-by-step instructions, as well as those issued by manufacturers of the plastic materials, you will be welding. Hot air welding is safe because there is no flame, spark, or smoke involved. Special venting, hoods and ducting are not required. Observe these simple precautions:

1. Never attempt to perform hot air welding with a flammable gas.
2. To avoid burning out the heating element, always remember **AIR FLOW FIRST and AIR FLOW LAST**. Start the air flow before the heating element. Set the air flow between 4 to 6 PSI (*depending on which welder is being used*) to prolong the life of the element. Air pressure minimum settings vary depending on welder model.
3. **Never touch metal parts on the welding gun until they have cooled.**
4. Always use a pliers to change the tip on a welding gun. (**DO NOT OVERTIGHTEN**)
5. Disconnect the electricity to the gun but **continue the air flow**. The gun will cool faster and the electric heating element will last longer.
6. Do not put the welder in a vise to change heating elements.
7. Keep away from children.



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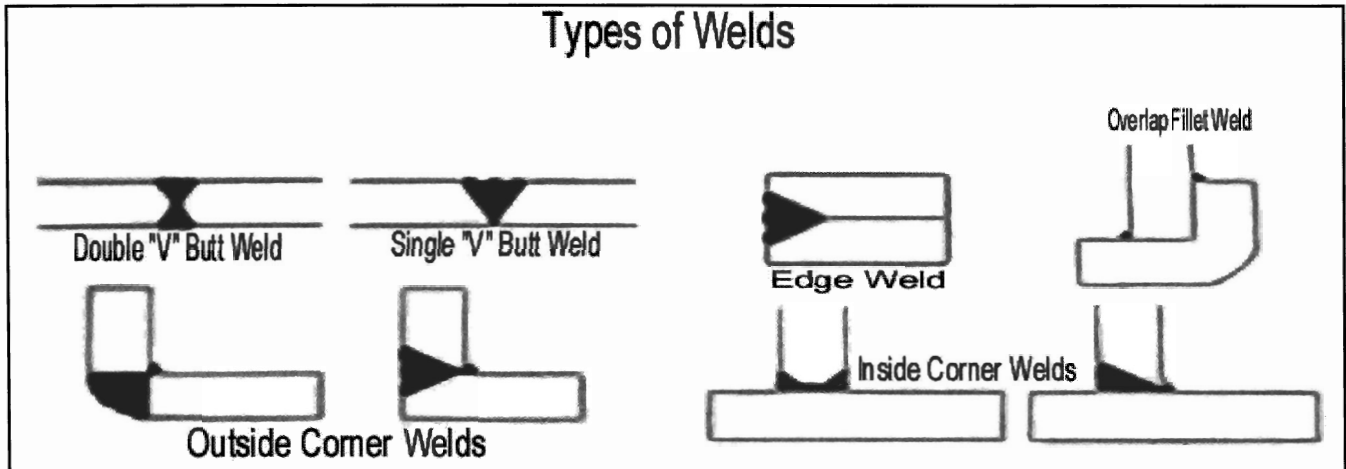
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Standard Weld Identification

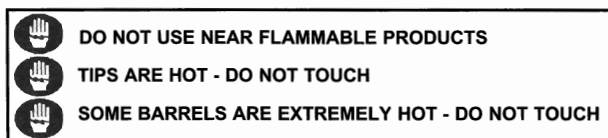
Basically, the same types of welds are performed in hot air welding as in metal welding. These consist of butt welds, fillet welds, lap-joints, edge welds, and corner welds. See the diagram of each type of weld.



Setting Up the Welding Equipment

1. Connect your Seelye Gun to a clean, dry air supply (compressed air) or an inert gas.
 - Round Tip for small area.
 - Automatic Feed Tip for speed and larger areas.
2. Your Seelye Welder can be plugged into any 110 volt A.C. outlet. A ground is provided and should be used. Now that you have your air supply flowing, plug into the electrical source and allow the welder to warm up for several minutes before starting to weld.

See page 18 for other special purpose tips.
3. Be sure to select the proper welding tip:
 - Tacking Tip for fitting up the work. No rod or strip is required.
4. Always use a pliers to install and remove tips. **Do not overtighten.**



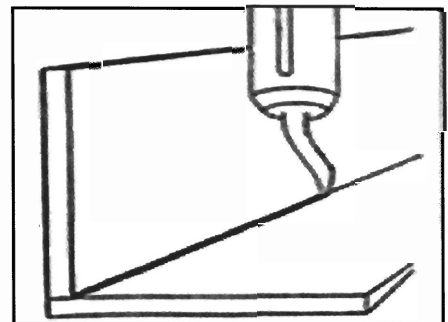
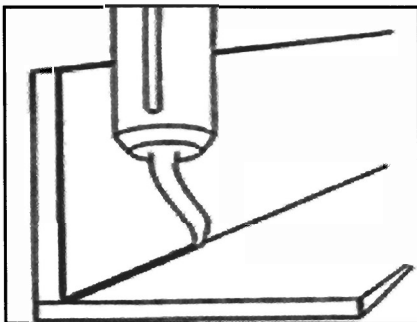
Step-By-Step Welding Procedure

1. Prepare Materials for the Type of Weld

- A.** Determine whether the type of weld being performed requires a beveled edge. See diagrams on the Types of Welds Chart, page 3.
- B.** If beveling is required, perform the beveling with a grinder and/or table saw. Bevel a 60 degree angle.
- C.** Clean dust and dirt from materials to be welded. To remove oily substance, use Methyl Ethyl Ketone (MEK). Be sure materials to be welded are dry before starting to tack weld.

2. Tack Welding for Work Fit Up

- A.** After you have installed the Seelye Tacking Tip, start the air flow, plug in the electrical source, and allow the welding tip to heat for several minutes.
- B.** While the tip is heating, line up pieces to be welded. By this stage, you should have prepared the plastic pieces carefully, made the necessary bevels, if required, and cleaned and dried the pieces to be welded.
- C.** No rod or strip is required for tack welding with hot air. Apply the hot Tacking Tip to the area or seam where the plastic pieces are to be joined, moving the tip along both pieces at the same time, until the plastic fuses (joins) at that point.
- D.** Do enough tack welds to hold the weight of the pieces together. With large pieces, it maybe necessary to draw the Tacking Tip along the entire seam, fusing the work continuously. This will hold the work together properly for accurate permanent bonding, which will be performed during the next phase of work.
- E.** Avoid overheating the tack points. This causes the plastic material to discolor, char, or warp. If you are not satisfied with the welds, or the work is not properly fitted, start over. Tack welds are easy to break. Before doing a new tack weld, grind the tack points down to smooth edges.



3. Permanent Welding with Hot Air

- A.** Before starting the permanent weld, be sure to select the right type of welding rod (or strip). It must be the same type of plastic as the materials you will be bonding together. Usually the manufacturer of the plastic material will label the plastic type for easy identification. If you do not know what type of plastic you are welding, refer to a burn test chart to identify the material you are going to weld. (Call factory)

Permanent Welding with Hot Air (continued)

B. For maximum welding economy, select a rod diameter size close to the thickness size of the base material. For base material thickness greater than $\frac{3}{16}$ ", more than one rod will be necessary. Example: To weld, fill the beveled area between two base material sheets of $\frac{1}{4}$ " thickness, three beads of $\frac{5}{32}$ " rod will be required. (See page 6 for chart)

C. Select the proper welding temperature and air flow setting. (See page 6 for chart)

D. Install the proper Round Tip for permanent welding. Allow the Round Tip to heat properly. If you change the Tacking Tip to the Round Tip while the welding gun is hot, be sure to unscrew the Tacking Tip and screw in the Round Tip using a pliers. Do not overtighten; it should be snug only.

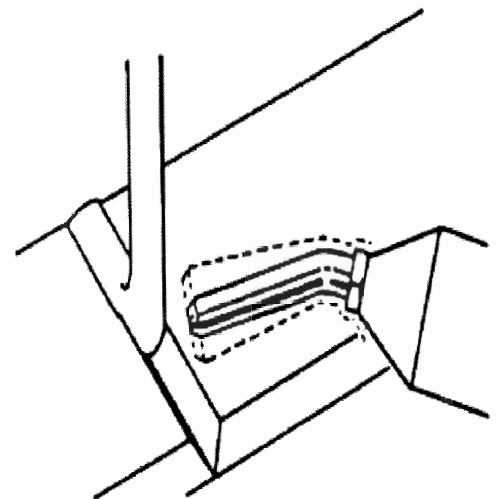
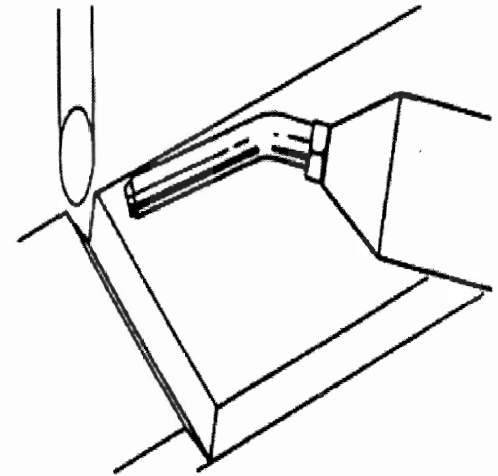
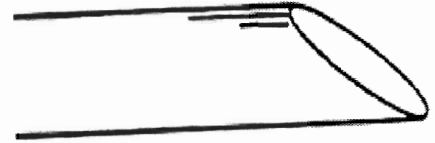
E. Cut the end of the rod at a 60 degree angle. Hold the cut end of the rod just above the weld starting point. Apply heat to the rod end and the base material seam at the same time until both are tacky. Press the tacky end of the rod down into the tacky starting point of the base materials. Only the surface of the rod and base materials will be tacky, but will bond properly. The rod will continue to hold its basic shape, for the most part, throughout the welding work.

F. Continue the weld, holding the rod at a 90 degree angle directly above the weld seam, press firmly and evenly down into the weld joint as you apply heat in the direction of the weld seam with a short fanning motion (see illustration). As the rod and base material become tacky, if you are welding at the proper temperature, a loop will form where the rod joins the base materials and small beads will form on either side of the completed weld.

G. At the end of the weld, cut the rod with a knife or pliers at a 30 degree angle. Cut the end of the new rod at a 60 degree angle to continue.

There should be no charring, discoloration, or warping if proper heat is applied. There should be no stretching of the welding rod. This will weaken the rod bond and can be avoided by taking care to press directly down on the rod rather than pushing the rod along the direction of the weld seam.

A few hours of practice welding will give the "feel" for maintaining the right even pressure on the rod straight down into the weld area.



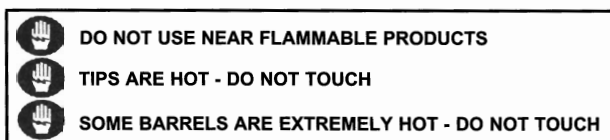
Rod Sizing Chart

<u>Base Material Thickness</u>	<u>Welding Rod Size</u>
1/16"	1/8" diameter
1/8"	1/8" diameter
3/16"	3/16" diameter
1/4"	3/16" diameter or 3 beads of 5/32"
For thicknesses greater than 1/4", use multiple beads to fill. The three rod diameters are 1/8", 5/32", and 3/16".	
	5/32" or 3/16" diameter

Standard Welding Temperature Chart

<u>Plastic Type</u>	<u>Temp. (F. degrees)</u>
Polypropylene (PP)	572
Polyethylene (PE)	
High Density Polyethylene (HDPE)	572
Low Density Polyethylene (LOPE)	518
Acrylonitrile Butadiene Styrene (ABS)	662
Polyvinyl Chloride (PVC)	572
Chlorinated Polyvinyl (CPVC)	597
Polycarbonate (PC)	662
Polyurethane (TPUR)	572-662

*Normal air pressure settings are between 4 to 6 PSI for most thermoplastic materials. Temperature may vary depending on atmosphere and welding speed. Temperature is measured 1/8" from the end of the #5 Round Tip. Most thermoplastics are weldable. If not listed above, please consult factory.

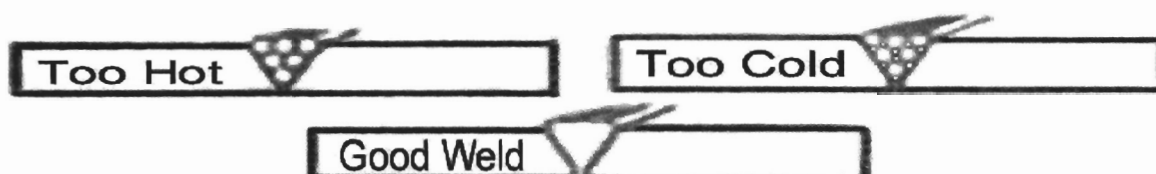


4. Weld Quality Analysis

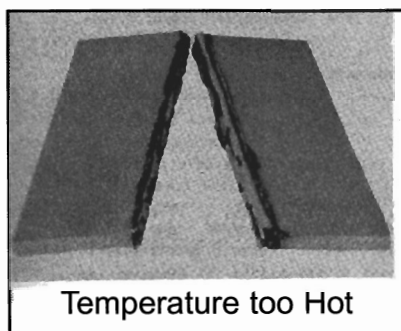
A. Check the quality of your weld. You can tell much more about the quality of the weld by its appearance. The Weld Quality Analysis Chart below shows what a good, permanent weld looks like.

B. If you require less heat, increase air pressure. Do not go below 4 PSI.

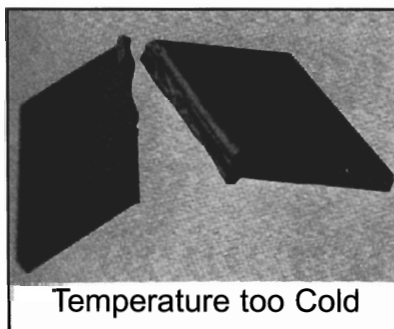
Weld Quality Analysis Chart



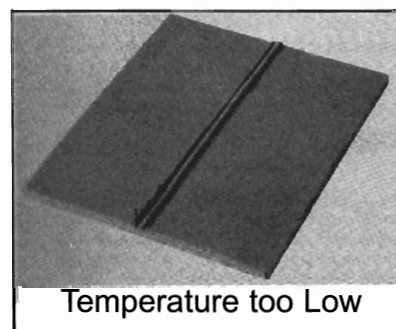
Samples of Bad Welds



Temperature too Hot



Temperature too Cold



Temperature too Low

High Speed Welding

Either the rod or strip is fed through a special high speed welding tip containing a feeding channel, which makes it unnecessary for the weldor to hold the rod or strip in hand while welding is performed. A person performing high speed welding, moving the welder at proper speed, can join approximately 2 feet of Polyvinyl Chloride, Polyethylene, or Polypropylene in a minute. Seams, joints, or repair areas can be as strong or stronger than the

original, or base material, welded (90% or better, depending on the type of weld applied).

When performing high speed welding, remove welding rod from feeder tube immediately when weld is complete. Always clean the rod feeder tube with feeder tube brush before and after completion of weld.





SI-2001FC

The 2001FC Welder Kit comes with a standard 500 watt 120 volt Element, Pressure Switch, Infinite Heat Control, Perforated Nose Cone and Inner Barrel for disbursement of fumes and cooler barrel, Air Filter, Gauge, Tacking Tip, #9A Automatic Speed Tip, Carrying Case and Welder Guide Book. This welder has a temperature range from ambient to approximately 1600 degrees F. The 2001FC can weld any thermoplastic from Polypropylene to PVC to UHMW. *(also available, 400 or 650 watt element)*



SI-2001FCP

The 2001FCP Portawelder comes with a standard 500 watt 120 volt Element, Infinite Heat Control, Perforated Nose Cone and Inner Barrel for disbursement of fumes and cooler barrel, Tacking Tip, #9A Automatic Speed Tip, Compressor, Carrying Case and Welder Guide Book.

Like the 2001FC, this welder has a temperature range from ambient to approximately 1600 degrees F. The 2001FCP can weld any thermoplastic from Polypropylene to PVC to UHMW. *(also available, 400 or 650 watt elements)*

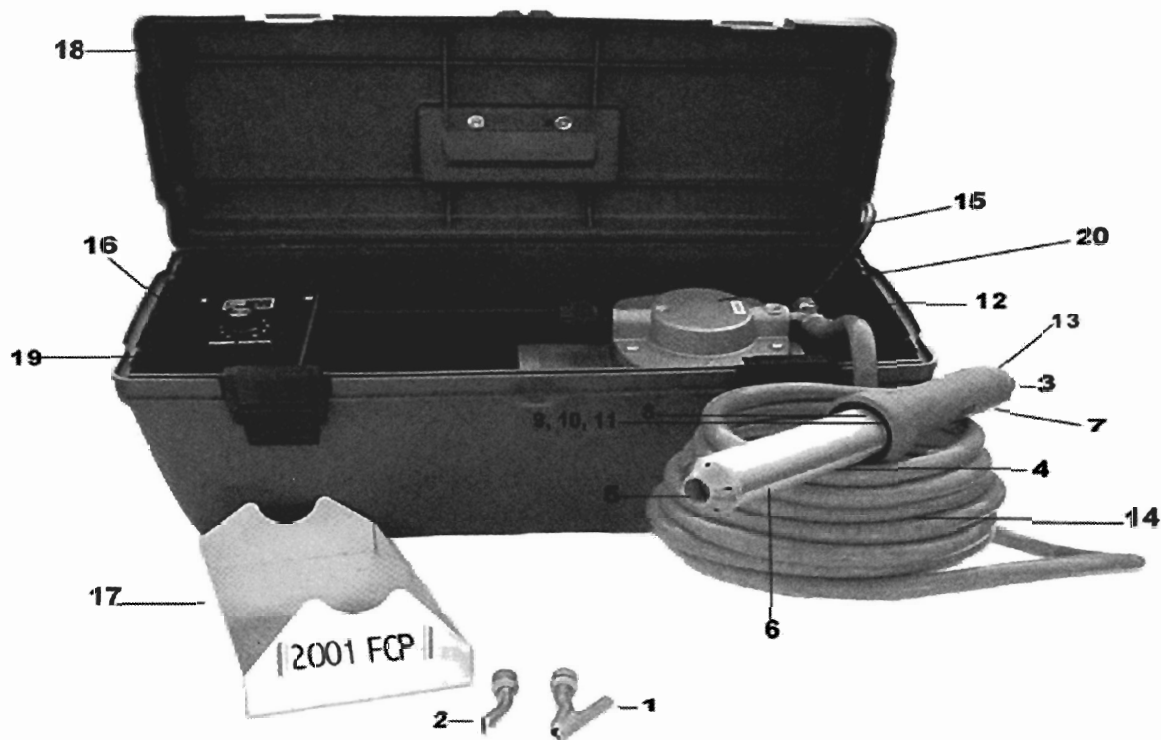
****This welder is available UL/CNL Listed.***



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No.	Description	Part No.
1	Automatic Speed Tip	270-11025
2	Tacking Tip	270-11011
3	Handle	270-11034
4	Outer Jacket	270-11037
5	Inner Barrel	270-11035
6	Element (500 w)	270-11061
7	Handle Screw	270-11046
8	Snap Ring	270-11038
9	Alignment Ring	270-11039
10	Ground Terminal	270-11042

No.	Description	Part No.
11	Ground Cable	270-11043
12	Brass Tee & Nut	270-11094
13	Aluminum Adapter	270-11044
14	Hose	270-11050
15	Electrical Cord	270-11048
16	Controls	960-09686
17	Tray	270-11056
18	Carrying Case	270-11056
19	Pressure Switch	960-09630
20	Compressor	270-11059

*The 2001FC includes everything listed above except the Compressor. For a complete parts list on the 2001FC please contact your local distributor.



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SI-1005

The Model 63 SI-1005 Welder comes with a standard 500 watt 120 volt Element, Air Filter, Gauge, Regulator, Round Tip, Tray and Welder Guide Book. The SI-1005 is considered one of Seelye's work-horse welders. This is an ideal welder for small repairs or first-time users.

(also available with a 400 or 650 or a 500 w 240 v watt element)



SI-1002

The Model 63 SI-1002 Welder Kit comes with a standard 500 watt 120 volt Element, Air Filter, Gauge, Regulator, Round Tips, Tacking Tip, Tray, Carrying Case and Welder Guide Book. The SI-1002 is ideal for first time users and small repair jobs.

(also available with a 400 or 650 watt or a 500 w 240 volt element)

***This welder is available UL/CNL Listed.**



SI-1167

The Model 63 SI-1167 Portawelder comes with a standard 500 watt 120 volt Element, Round Tip, Tacking Tip, Tray, Compressor, Carrying Case and Welder Guide Book. A benefit of this welder is that it can be taken to any jobsite.

(Also available with a 400 or 650 watt element)

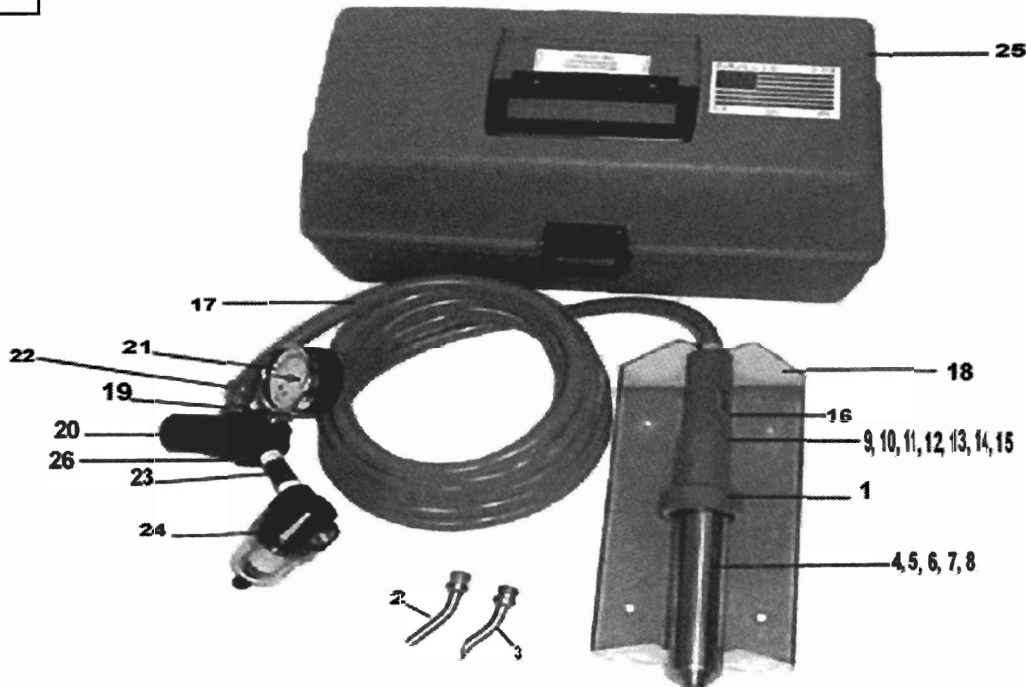


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SI-1002



No.	Description	Part No.
1	Handle	270-11034
2	Round Tip	270-11012
3	Tacking Tip	270-11011
4	Inner Tube	270-11035
5	Outer Jacket	270-11037
6	Snap Ring	270-11038
7	Alignment Ring	270-11039
8	Element (500 w)	270-11061
9	Pin Terminal	270-11040
10	Teflon Insulator	270-11041
11	Ground Terminal	270-11042
12	Cable Lock	270-11043
13	Aluminum Adapter	270-11044

No.	Description	Part No.
14	O-Ring	270-11045
15	Ground Screw	270-11047
16	Handle Screw	270-11046
17	Hose	270-11050
18	Tray	270-11056
19	Brass Tee	270-11052
20	Regulator	270-11053
21	Pressure Gauge	270-11055
22	Hose Clamp	270-11051
23	1/4" NPT Nipple	960-09680
24	Filter Assembly	800-05025
25	Carrying Case	270-11057
26	Electrical Cord	270-11048

*The SI-1005 contains everything listed above, except the Tacking Tip and the Carrying Case. The SI-1167 contains everything listed above, plus a Compressor.



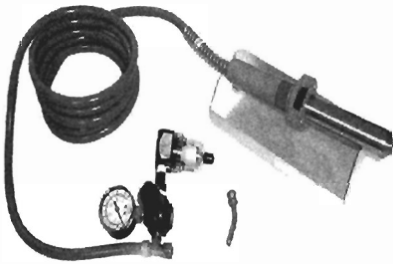
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SI-1188

The SI-1188 Superwelder comes with a 575 watt 120 volt Element, Temperature Control on the Handle, Gauge, Regulator, Air Filter, Round Tip, Tray, and Welder Guide Book. This welder is considered one of Seelye's production welders and is good for users who want more control over the temperature. The SI-1188 ranges from ambient to approximately 900 degrees F.



SI-1189

The SI-1189 Superwelder Kit comes with a 575 watt 120 volt Element, Temperature Control on the Handle, Gauge, Regulator, Air Filter, Round Tip, Tacking Tip, Tray, Carrying Case, and Welder Guide Book. This production welder allows users to have more control over the temperature.



SI-1193

The SI-1193 Superwelder Portawelder comes with a 575 watt 120 volt Element, Temperature Control on the Handle, Round Tip, Tacking Tip, Tray, Compressor, Carrying Case, and Welder Guide Book. Like the SI-1188 and the SI-1189, the SI-1193 is also a production welder. This unit allows the user to take this welder to any jobsite that has 110 volt electricity.



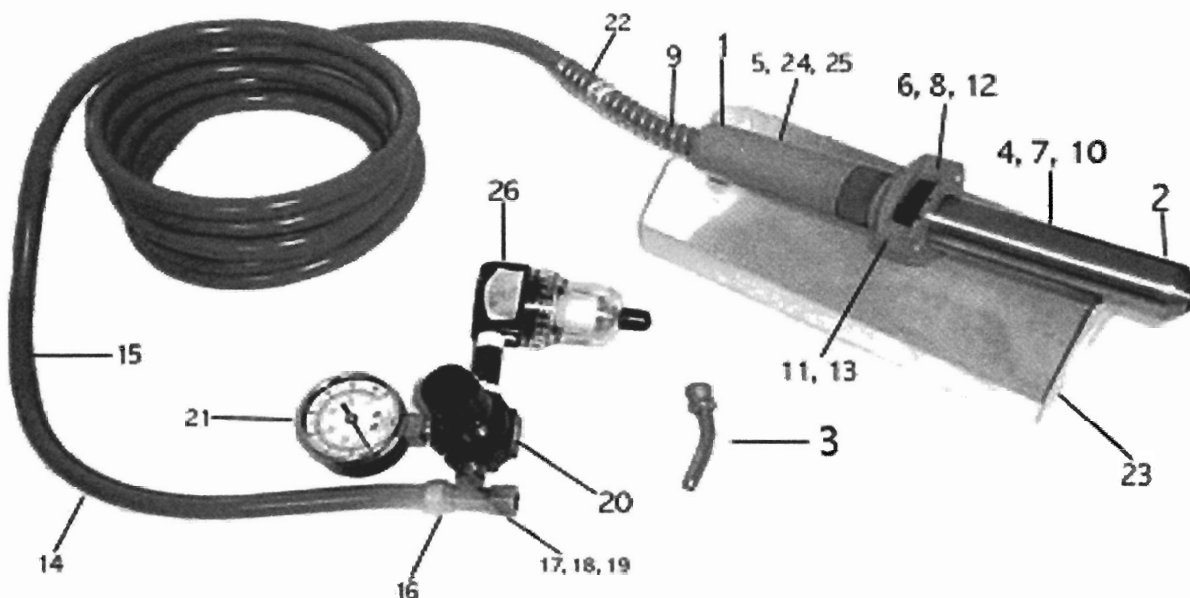
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SI-1188

No.	Description	Part No.
1	Handle	270-11902
2	Element Housing	270-11999
3	#5 Round Tip	270-11012
4	Element (575 w)	270-11900K
5	CRT Control Board	270-11901
6	Switch Ring	270-11904
7	Washer	270-11916
	Spring	270-11914
8	Teflon Bushing	270-11906
9	Cable Lock	270-11907
10	O-Ring	270-11908
11	Handle Cap	270-11909
12	Gear Pin	270-11910
13	Cap Screws	270-11911

No.	Description	Part No.
14	Hose	270-11050
15	Electrical Cord	270-11048
16	Hose Clamp	270-11051
17	Tee	270-11052
18	Tee Nut	270-11094
19	Cord O-Ring	270-11071
20	Regulator	270-11053
21	Gauge	270-11055
22	Spring	270-11920
23	Tray	270-11056
24	Connectors	270-11240
25	Ground Connector	270-11238
26	Air Filter	800-05025

*The SI-1189 comes with everything listed, plus a Round Tip and Carrying Case. The SI-1193 comes with everything a SI-1189 comes with, plus a Compressor. For a complete parts list on the SI-1189 or SI-1193 contact your local dist.



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SI-1196K

The Guardian Welder Kit comes with a standard 400 watt 120 volt Element, Air Filter, Gauge, Regulator, Patented "Cool to the Touch" Barrel, Tacking Tip, Round Tip, Tray, Carrying Case and Welder Guide Book. The 96K is ideal for small repair jobs or first-time users who want extra safety features.

(also available with a 300 watt element)



SI-1196G

The Guardian Welder comes with a standard 400 watt 120 volt Element, Air Filter, Pressure Switch, Indicator Light, On & Off Switch, Pressure Gauge, Variable Heat Control, Patented "Cool to the Touch" Barrel, Tacking Tip, Round Tip, Tray, Carrying Case and Welder Guide Book. The SI-1196G is the welder for people who demand all the safety features.

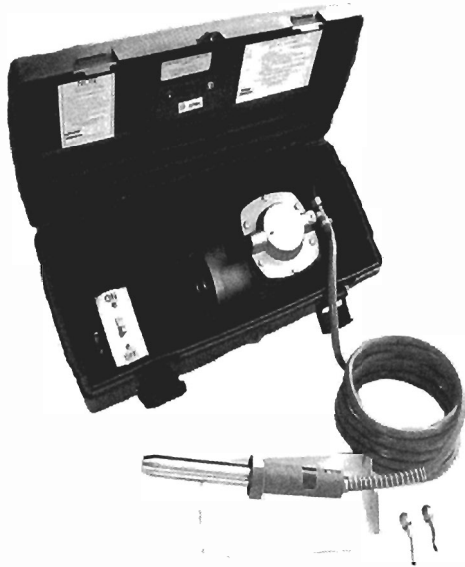
(also available with a 300 watt element)



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SI-1196P

The Guardian Portawelder Kit comes with a standard 300 watt 120 volt Element, Patented "Cool to the Touch" Barrel, Tacking Tip, Round Tip, Tray, Compressor, Carrying Case and Welder Guide Book. This handy, self-contained unit makes any job on-site easy.

(also available with a 400 watt element)



SI-1196GP

The Guardian Portawelder comes with a standard 300 watt 120 volt Element, Variable Heat Control, On & Off Switch, Indicator Light, Patented "Cool to the Touch" Barrel, Tacking Tip, Round Tip, Tray, Compressor, Carrying Case and Welder Guide Book. The 1196GP is ideal for users who want control over their temperature, all the safety features and are able to take it anywhere the job requires.

(also available with a 400 watt element)



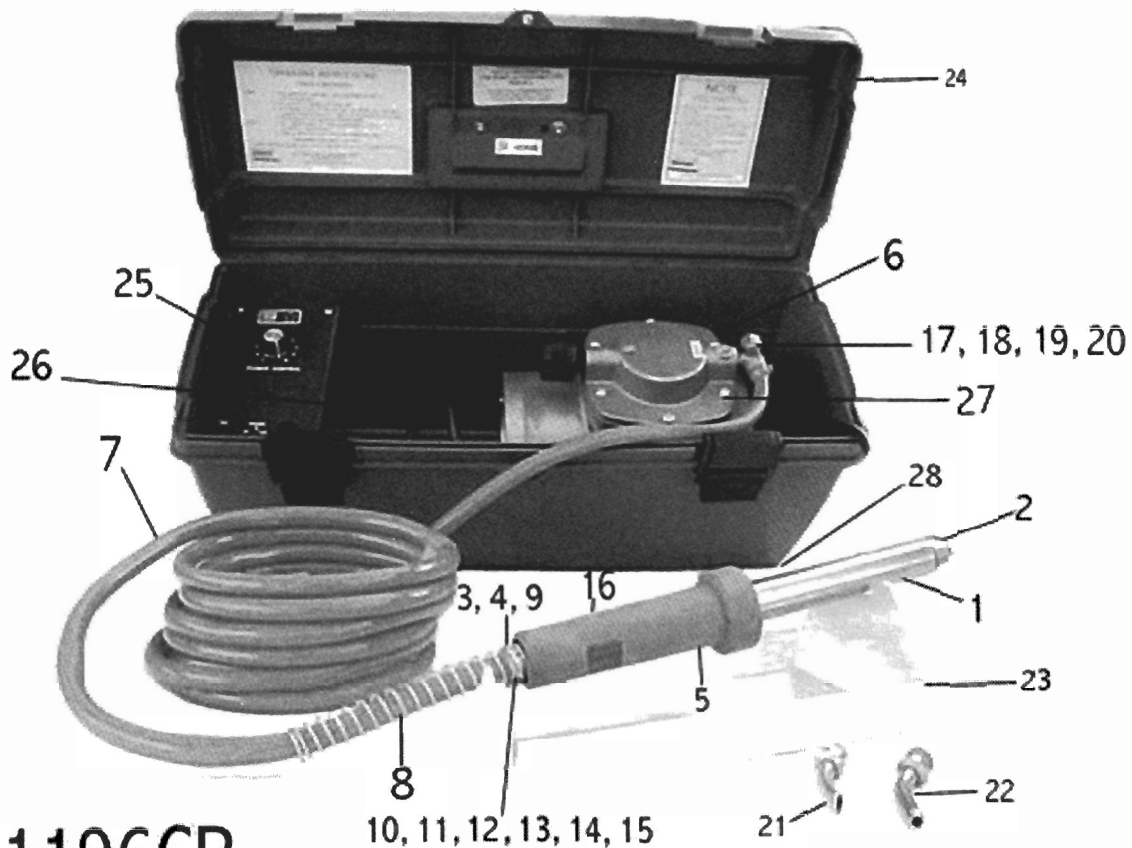
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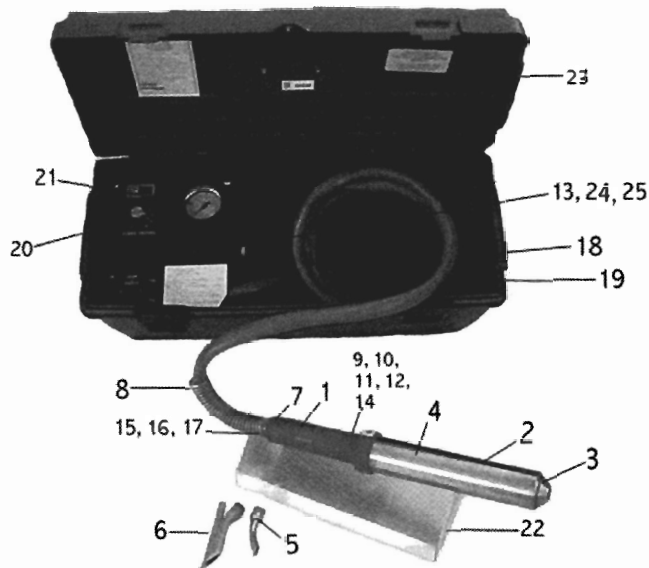


SI-1196GP

No.	Description	Part No.
1	Outer Tube	960-09605
2	Inner Tube	960-09601
3	O-Ring	270-11045
4	Aluminum Spacer	960-09610
5	Handle	270-11034
6	20' Cord	270-11048
7	Vinyl Hose	270-11050
8	Spring	270-11920
9	Clamp	270-11051
10	Aluminum Adapter	270-11326
11	Cable Lock	270-11043
12	Ground Terminal	270-11330
13	Set Screw	270-11328
14	1/4" Connectors	632-77085

No.	Description	Part No.
15	Element (300 w)	270-11336
16	Handle Screw	960-09635
17	Brass Tee	270-11052
18	Clamp	270-11051
19	Cord O-Ring	270-11071
20	Brass Nut	270-11094
21	#4 Tacking Tip	270-11011
22	#5 Round Tip	270-11012
23	Tray	270-11056
24	Carrying Case	270-11076
25	Controls	960-09686
26	8' Power Cord	270-11049
27	Compressor	270-11059
28	Rubber Cushion	270-11222

*Please contact your local distributor for a complete parts list on the SI-96K, SI-96G and SI-96P.

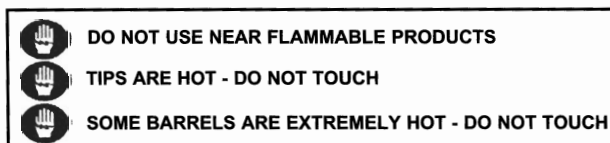


SI-1197CH

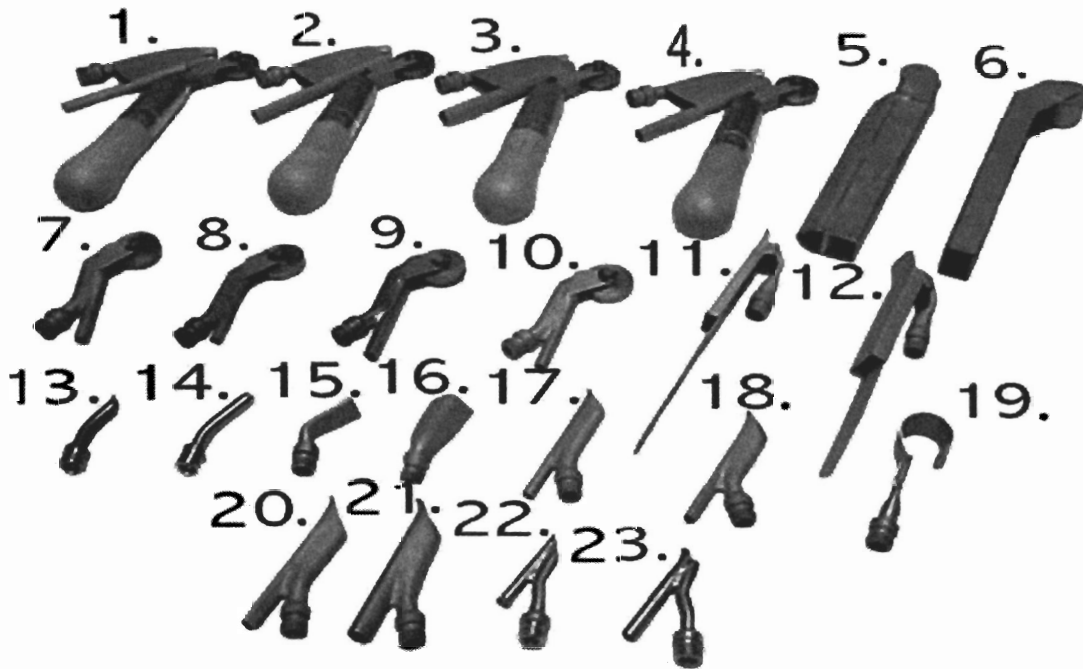
The 97CH with Controlled Heat comes with an 800 watt 120 volt Element, Patented "Cool to the Touch" Barrel, Pressure Switch, Indicator Light, On & Off Switch, Pressure Gauge, Air Regulator, Air Filter, Infinite Heat Settings, Tacking Tip, #10 Automatic Speed Tip, Tray, Carrying Case and Welder Guide Book. This welder ranges from ambient to approximately 1600 degrees F. Like the 2001FC and the 2001FCP, the 97CH can weld everything from Polypropylene to PVC to UHMW.

No.	Description	Part No.
1	Handle	632-77025
2	Outer Barrel	632-77010
3	Inner Barrel	632-77005
4	Element (800 w)	270-11078
5	#4 Tacking Tip	270-11011
6	#10 Automatic Tip	270-11018
7	Handle Screw	270-11046
8	Spring	632-77040
9	Snap Ring	270-11038
10	Alignment Ring	270-11039
11	Ground Terminal	270-11042
12	Cable Lock	270-11043
13	Nylon Tee & Nut	960-09688

No.	Description	Part No.
14	Ground Screw	270-11047
15	Push-On Connector	280-19259
16	Tab Connector	632-77030
17	Aluminum Adapter	632-77045
18	Electric Cord	632-77035
19	Hose	632-77050
20	Control	960-09686
21	Gauge	270-11055
22	Tray	270-11056
23	Carrying Case	270-11076
24	Pressure Switch	960-09630
25	Air Filter	800-05025



Welding Tips

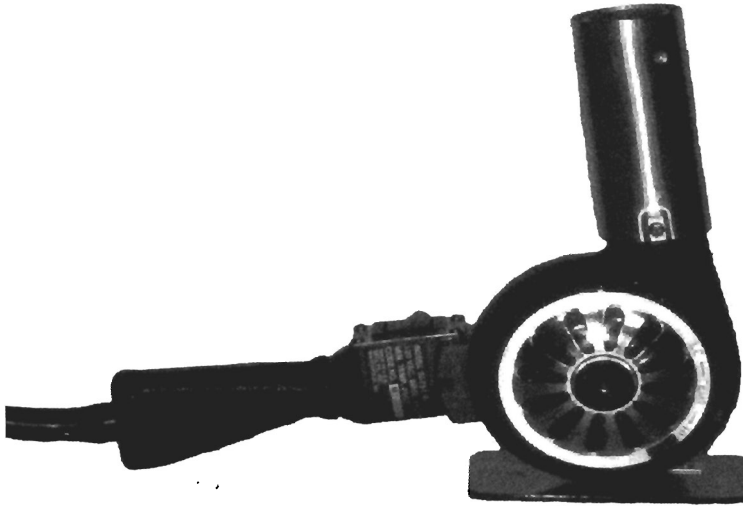


1. **#50RH** Round Automatic Speed Tip with Roller & Handle for 1/8" & 5/32"
2. **#50RTH** Triangle Automatic Speed Tip with Roller & Handle for 1/8" & 5/32"
3. **#60RTH** Triangle Automatic Speed Tip with Roller & Handle for 3/16"
4. **#60RH** Round Automatic Speed Tip with Roller & Handle for 3/16"
5. **#6R** Strip Feeder Tip for Triangular Flexible PVC Strips
6. **#6G** Strip Feeder Tip for Flat Flexible PVC Strips
7. **#50R** Round Automatic Speed Tip with Roller for 3/16"
8. **#40R** Round Automatic Speed Tip with Roller for 1/8" & 5/32"
9. **#30RT** Triangle Automatic Speed Tip with Roller for 3/16"
10. **#40RT** Triangle Automatic Speed Tip with Roller for 1/8" & 5/32"
11. **#15** Strip or Ribbon Automatic Speed Tip
12. **#17** Ribbon Automatic Speed Tip for 3/4"
13. **#4** Tacking Tip (no rod used)
14. **#5** Round Tip (any size rod)
15. **#7** Flat Tip for Flexible Strip or Ribbon Rod
16. **#8** "V" Tip for Corner Welding with Flexible Strip or Ribbon
17. **#11** Triangle Automatic Speed Tip for 1/8" & 5/32"
18. **#13** Round/Triangular Automatic Speed Tip for 3/16"
19. **#12** Shrink Tubing Tip for Heat Shrinking Plastic Tubing
20. **#9** Round Automatic Speed Tip for 1/8" & 5/32" (old style)
21. **#10** Round Automatic Speed Tip for 3/16" (old style)
22. **#9A** Round Automatic Speed Tip for 1/8" & 5/32" (new style)
23. **#10A** Round Automatic Speed Tip for 3/16" (new style)



Heat Guns

Models SI-1164, SI-1165, SI-1166



Heavy-duty, industrial-quality heat gun with temperature and power ratings up to 1000 degrees F (538 degrees C), and up to 1740 watts (120v). The air flow rating is 23 CFM at 3,000 FPM. A universal motor, diecast aluminum housing, reinforced mica-insulated ceramic

heating element, and externally replaceable carbon brushes make this heat gun a rugged, reliable source of flameless heat, whether you are working with freezer coils, plastic laminates, circuit boards, PVC, fiberglass, or heat-shrinkable materials.

- A variety of heat gun tips available upon request.

Model No.	Approx. Temp. Nozzle	Volts	Amps	Watts
SI-1164	300 deg. F - 500 deg. F (149 deg. C - 260 deg. C)	120	12	1440
SI-1165	500 deg. F - 750 deg. F (260 deg. C - 399 deg. C)	120	14	1680
SI-1166	750 deg. F - 1000 deg. F (399 deg. C - 538 deg. C)	120	14.5	1740

- Overall dimensions: 10" L x 5.25" W x 9.5 H
- Nozzle opening diameter - 1.188"
- Net weight 3.7 lbs.
- Shipping weight 5 lbs.
- Cord length - 6 ft.
- Other heat guns available upon request.

DO NOT USE NEAR FLAMMABLE PRODUCTS



Heat Guns Models SI-6003, SI-6004



SI-6003

This heat gun with temperature settings of 570 degree and 1050 degree F (299 degrees and 565 degrees C) and airflow of 15 CFM at 3650 FPM meets the requirements of most materials.

Features include a DC permanent magnet motor that is compatible with all electrical frequencies. The compact, ergonomically

designed Lexan housing, enclosed ceramic heating element and wrap around air intake assures you of a lightweight (1lb. 10 oz.), easy-to-use source of flameless heat whether you are working with shrinkable packaging materials, bending plastics/laminates or activating adhesives.

SI-6004

This easy-to-use heat gun offers all the features that the model SI-6003 does, plus variable temperature control that allows the user to dial in any temperature from ambient to 1050 degrees F (565 degrees C). The airflow rating is 15 CFM at 2650 FPM. Its' thermostatic control maintains the pre-selected temperature and prevents heat back-up or overheating when airflow is restricted.

The Supervisor Temperature Lock-In feature allows pre-setting of temperature and sealing of access opening to assure compliance with pre-set temperature.

- A variety of heat gun tips available upon request.

Model No.	Approx. Temp.	Nozzle	Volts	Amps	Watts	HZ
SI-6003	570 deg. F - 1050 deg. F (299 deg. C - 565 deg. C)		120	6, 12	750, 1500	50-400
SI-6004	1050 deg. F (565 deg. C)		120	12 max.	1500 max.	50-400

- Overall dimensions: 8.25" W x 7.3 H
- Nozzle opening diameter - 1.3"
- Net weight 1 lb. 10 oz.
- Shipping weight 2 lbs.
- Cord length - 6 ft.
- Other heat guns available upon request.



Heat Guns Models SI-6005



SI-6005

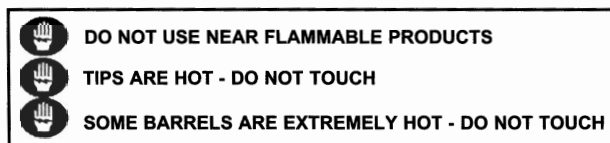
This lightweight, low-cost heat gun features two heat settings: 500 degrees F (260 deg. C) and 1000 degrees F (538 deg. C). The airflow rating is 8 CFM at 1020 FPM. This model is ideal for automotive applications.

- A variety of heat gun tips available upon request.

Model No.	Approx. Temp. Nozzle	Volts	Amps	Watts
SI-6005	500 deg. F, 1000 deg. F (260 deg. C, 538 deg. C)	120	10	1200

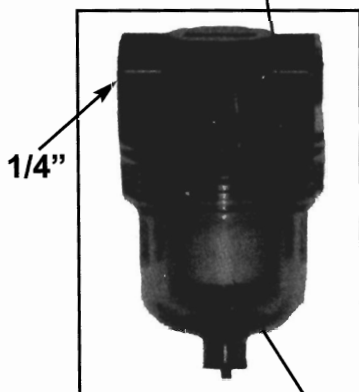
- Overall dimensions: 8.25" L x 3.125" W x 7.125 H
- Net weight 1 lb.

- Other heat guns available upon request.

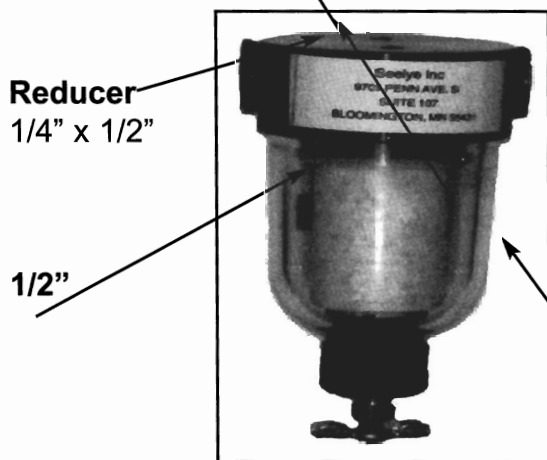




Air Filter Installation



SI-5025
Nylon Bowl



25' Minimum

Provide These Performance Features:

- Protect welder elements
- Eliminate unnecessary downtime
- Up to 93% removal of 0.1 micron oil, water, dirt
- Continuous coalescing and draining liquids
- Fit 1/4" air filters
- Pressure rated at 150 PSI
- Clear polycarbonate bowl
- Manual drain valve included
- Microfibre Filter Cartridge included

Description:

The SI-5050 and SI-5025 filter assemblies are high efficiency coalescing filters designed specifically for plastic welding equipment. Each assembly comes complete with a filter cartridge and is ready to install in the manufacturer's equipment.

Filter Cartridge Grade Selection:

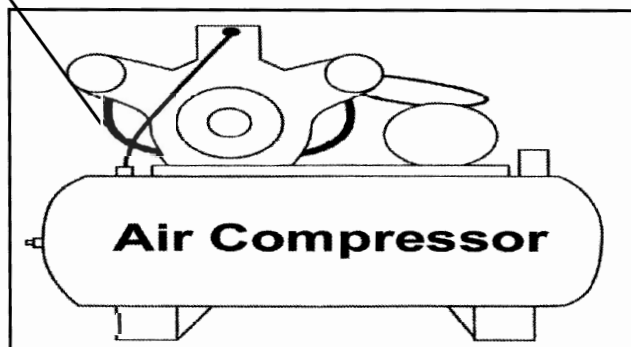
Grade DX (93% filtration efficiency at 0.1 micron) is recommended where moderate to large quantities of solid and liquid contaminants are expected. Grade DX alone will handle the vast majority of compressed air requirements.

SI-5050

Polycarbonate

SI-6050

Aluminum Bowl



*Pictures are for illustration purposes only - not actual size.



Principal Specifications

	SI-5025	SI-5050	SI-6050
Maximum Pressure	150 PSI	150 PSI	250 PSI
Maximum Temperature	180 deg. F (82 deg. C)	180 deg. F (82 deg. C)	250 deg. F
Inlet and Outlet Ports	1/4" NPT	1/2" NPT	
Mounting Holes (1)	None	1/4" - 20	
Maximum Flow at 100 PSI			
Grade DX	22 SCFM	45 SCFM	
Materials of Construction			
Head	Nylon	Black Anodized Aluminum	
Bowl	Nylon	Polycarbonate (2)	Aluminum
Tie Rod	None	Cadmium Plated Steel	
Internals	Nylon	Nylon	
Seal	Buna	Buna	
Weight	0.5 lb. (0.2 kg)	1.1 lb. (0.5 kg)	

(1) Mounting brackets available for most models. See Parts and Accessories section below.

(2) Materials: Polycarbonate (use with non-detergent mineral-based oils).

Ordering Information

	SI-5025	SI-5050
Filter assembly, complete with Grade Filter Cartridge	SI-5025-DX	SI-5050-DX
Replacement Filter Cartridges (box of 3)	SI-7025-DX	SI-7050-DX

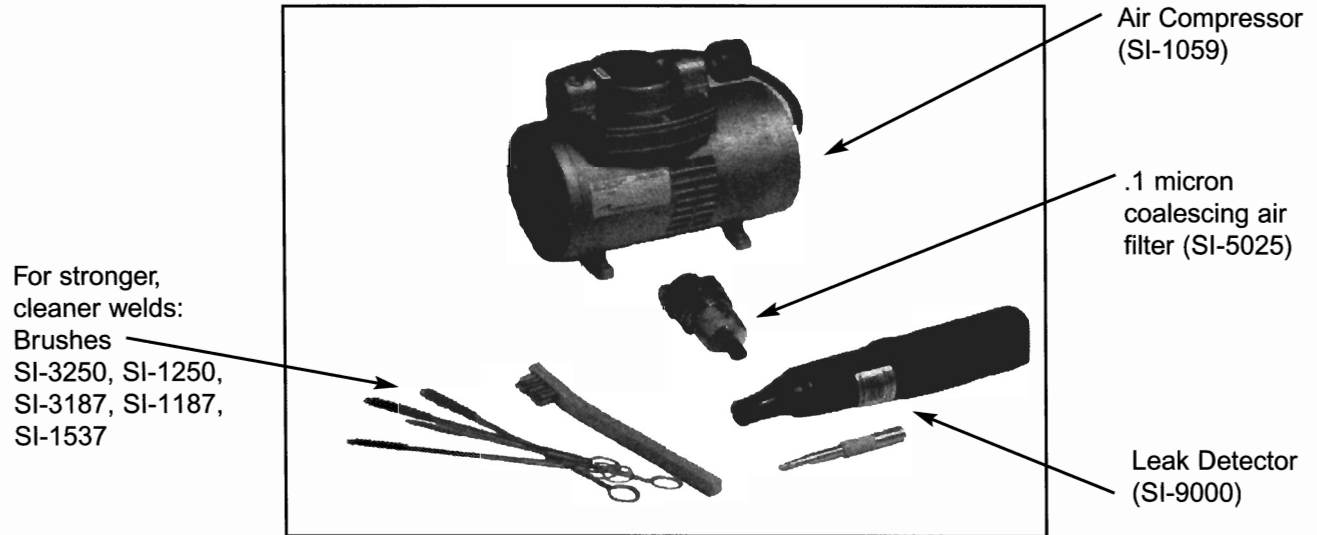
Parts and Accessories

	SI-5025	SI-5050
Mounting Bracket	N/A	SI-11038
Bowl Guard	N/A	SI-92089
Replacement Seal Set	SI-22084	SI-22082
Push Button Drain Valve (Buna)	N/A	SI-20-125
Constant Bleed Drain Valve, Adjustable	Consult Factory	SI-20-127



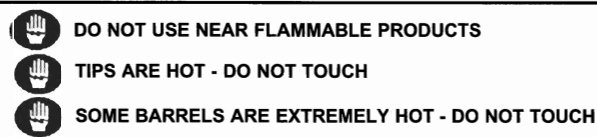
Thermoplastic Welding Accessories

Will add life to your equipment and ease to your task



Optional Thermoplastic Equipment

Item No.	Stock No.	Description	Shipping Weight
SI-9000	800-9000	Leak detector, high frequency generator: Hand-held detector will detect pin-hole leaks through plastic up to 1" thick indicated by a bright spark.	Less than 1 lb.
SI-3250	800-03250	.250 dia. stainless steel brush for heavy-duty welder tip barrel cleaning for 3/16" and triangular tips.	.5 oz.
SI-1250	800-01250	.250 dia. brass brush for everyday barrel cleaning with no wear for 3/16" and triangular tips.	.5 oz.
SI-3187	800-03187	.187 dia. stainless steel brush for heavy-duty welder tip barrel cleaning for 1/8" and 5/32" tips.	.5 oz.
SI-1187	800-01187	.187 brass brush for everyday barrel cleaning with no wear for 1/8" and 5/32" tips.	.5 oz.
SI-1537	800-01537	7-1/4" wood handle brush with 3 x 7 rows of stainless steel wire for cleaning welder tip ends.	1 oz.
SI-1059	270-11059	Vac/pres compressor flow at 115 VCFM 1.73 LPM 48.99 Maximum continuous pressure 15 PSI 115/60 1/8 HP.	13 lbs.





Thermoplastic Welding Products Guide



2001 FC & 2001FCP

Model 63 Series

Super Welder Series

Guardian Series

1197CH

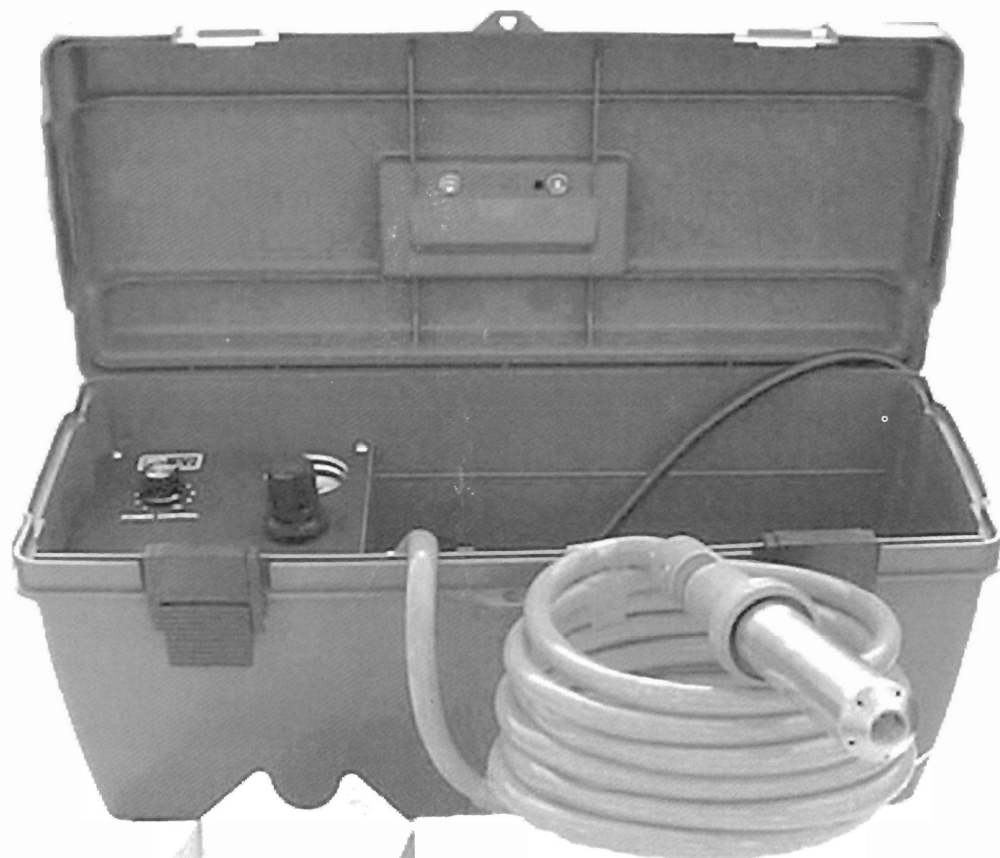
Guide No.

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REV. 6-02



Thermoplastic Welding Products Guide



| 2001 FC |



2001 FC & 2001FCP

Model 63 Series

Super Welder Series

Guardian Series

1197CH

Guide No.

4

REV. 6-02



Applications

Use the Seelye welders for these and other thermoplastic applications.



Boats	Gaskets	PVC Fencing
Fan Housings	Conduit Fittings	Drums
Scrubbers	Pail	DWV Pipes
Ductwork	Flues	Plenums
Screens	Displays	Pipe Fittings
Chick Hatchery Boxes	Pipes	Tanks
Dampers	Drains	Storage Tanks
Waste Canisters	Sinks	Dippers
Pans	Stands	Filter Housings
Etching Tanks	Beams	Slide Gates
Grills	R.V.s	Hangers
Vanes	Vents	Lines
Fixtures	Faucets	Hoods
Trays	Stack Caps	Blower Housings
Etching Machines	Manifolds	Louvers
Frames	Valves	Bumpers

DO NOT USE NEAR FLAMMABLE PRODUCTS * TIPS GET EXTREMELY HOT - DO NOT TOUCH



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Email: seelyeinc@aol.com





Most Common Weldable Thermoplastic Materials

HDPE

(High Density Polyethylene)

High density polyethylene welds very well and is the most common form. Other densities include low, medium, high, and ultra high molecular weight (UHMW). The low density is much softer and more flexible and also welds well. You can weld a higher density with a lower density rod, but you cannot weld a lower density with a higher density rod. If you identify a polyethylene with the burn test and you think it is high density but it will not weld, it is either ultra high or a cross link material. The UHMW requires a special welder, rod, and tip for proper welding. The cross link is a thermoset and is not weldable.

CPVC

(Chlorinated Polyvinyl Chloride)

CPVC will produce a good weld if you sand or scrape both the rod and the surface to be welded to remove the coat of plasticizer that leaches from the CPVC material. (Removing it with chemicals either softens the material or leaves a residue.) More heat must also be concentrated on the substrate when hand welding CPVC. If an automatic feed tip is used, be sure it is the #9 or #10 type tip to achieve the proper pre-heat on the substrate. Be careful to guard against scorching, which will weaken the weld considerably.

TPUR

(Thermoplastic Polyurethane)

TPUR produces a strong weld once the material has cured, but will pull loose immediately after welding. To determine the proper cure time, weld a short bead and test the strength by pulling up on the tail of the rod every five minutes.

PP

(Polypropylene)

PP rod will easily separate from the substrate in the "wetted" or melted state and must be held in place until the clear color on the surface turns back to its original appearance. Also, the rod will not soften all the way through and will remain stiff, making welding in and out of corners and around outside corners difficult. If multiple welds are run, such as in the corner of a tank, relieve stress in the areas by heating the weld and the tank walls on either side of the weld and then cool it slowly by covering it. This process is called "annealing" and will add years to the life of your weld.

PVC

(Polyvinyl Chloride)

Scorching or discoloration of PVC will weaken the weld. To avoid this problem, either reduce the power or heat by increasing the air flow, or increase your welding speed. If backwelding pipe fittings, never attempt to weld over cement; first remove cement by either grinding or by other means.

PVDF

(Polyvinylidene Fluoride)

PVDF welds by hand or automatic feed tip at approximately 890 degrees F and is very strong. All welds of PVDF will provide good performance for many years if annealed. After welding, heat the weld and the substrate around it and allow to cool slowly by covering it.

ABS

(Acrylonitrile Butadiene Styrene)

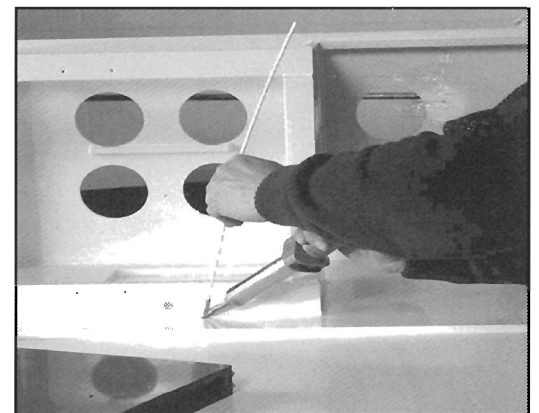
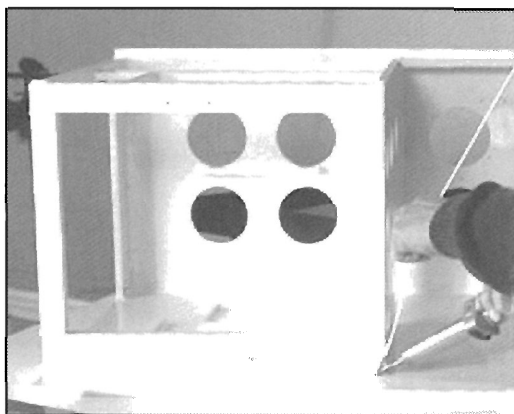
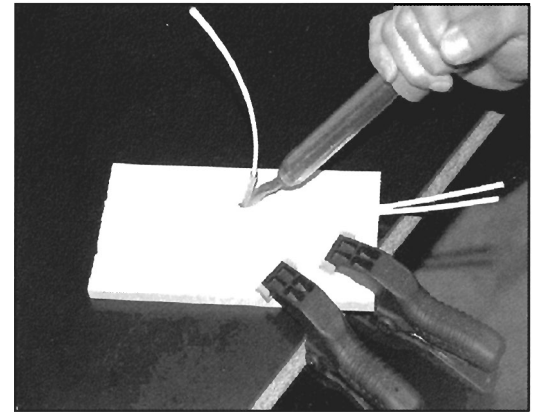
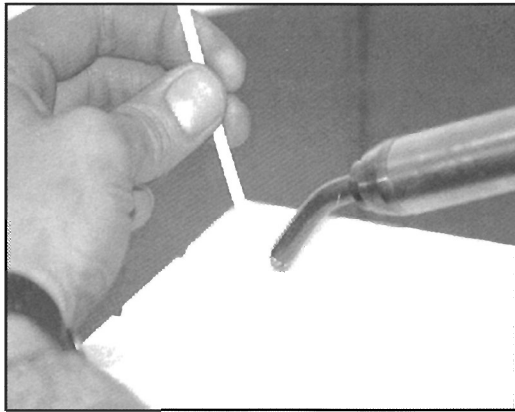
ABS has a good esthetic value and can be finished by sanding and painting.



DO NOT USE NEAR FLAMMABLE PRODUCTS

TIPS ARE HOT - DO NOT TOUCH

SOME BARRELS ARE EXTREMELY HOT - DO NOT TOUCH



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