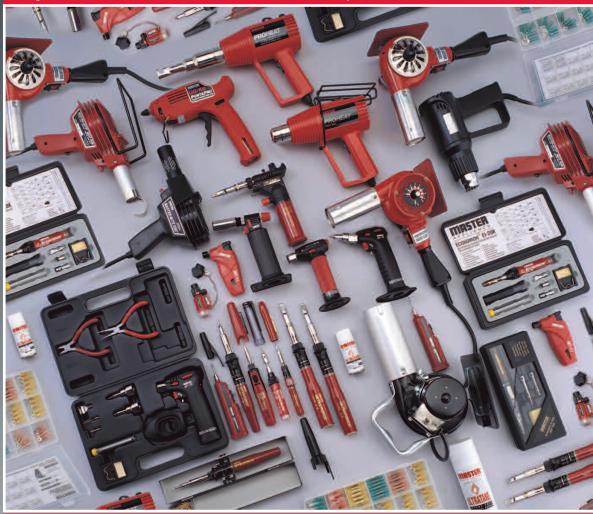
# A P P L I A N C E

Designers and Manufacturers of Heat Tools for Industry



Master Heat Gun<sup>®</sup> Varitemp<sup>®</sup> Proheat<sup>®</sup> Variair<sup>®</sup> Masterflow<sup>®</sup> Master-Mite<sup>®</sup> Ecoheat<sup>®</sup> Ultratorch<sup>®</sup> Ultratip<sup>®</sup> Ultratane<sup>®</sup> Econolron<sup>®</sup> PortaPro<sup>®</sup> Multiseal<sup>™</sup> Solderseal<sup>™</sup> Proseal<sup>™</sup>

# **1958 - 2008** 50 Years of Quality

# www.masterappliance.com

# Master Appliance®

### Table of Contents

### Electric Heat Guns

Master and Varitemp<sup>®</sup> Series Heat Guns, Kits and Accessories The original heavy-duty heat guns with rugged cast aluminum housing and powerful universal motor



Proheat<sup>®</sup> Series Heat Guns, Kits and Accessories Lightweight, durable Lexan<sup>®</sup> plastic housing with built-in stand for hands-free use



Ecoheat<sup>®</sup> Heat Gun, Kit and Accessories Economical two temperature heat gun with resettable thermostat for overheating protection





Masterflow<sup>®</sup> Continuous-Duty Heat Blowers 11 Continuous-duty heat blower with powerful 47 CFM airflow. Suitable for mounting over conveyors or on machinery



Master-Mite<sup>®</sup> and Master-Mite<sup>®</sup> ESD continuous-duty bench-top heating systems 12 Quiet motor with 3.8 CFM airlfow provides a balance of heat and gentle airlfow at the work station



Econolron<sup>®</sup> Butane-Powered Soldering Iron/Heat Tool and Kit Economical soldering iron, flameless hot air tool and torch



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### Master Appliance Corp., Designers and Manufacturers of Heat Tools for Industry

Located near the western shores of Lake Michigan in Racine, Wisconsin, Master invented and introduced the first industrial quality heat gun to the worldwide marketplace in 1958. In 1985, we introduced North America's first butane powered, cordless soldering iron, torch and flameless heat tool, ideal for field use. These professional quality heat tools, and others developed since, have enjoyed worldwide market success. Today our products are used in thousands of facilities, workshops and in the field for drying, welding, shrinking, soldering, desoldering, gluing and for many other common and unique applications, where heat is the need.







Master is continually developing new heat tool products, with enhanced capabilities, making it easier to work with new materials and processes used throughout industry. With 50 years of experience, the Master name stands for extraordinary expertise in heat technology, quality products and unsurpassed service. Whether you're considering a new application, material or process or simply looking to replace an old, tired heat tool, call us for fast professional service.

### Local Availability, Sales, Parts & Service

Master heat tools are sold worldwide through a network of Authorized Stocking Distributors. Trained Sales and Customer Service Representatives, located at our headquarters and throughout the world, insure fast personal service. Contact us for your nearest stocking distributor or sales representative. **Visit our website for up-todate information on products, accessories, parts, warranty and repair service.** 

### Master Appliance Corp.

2420 -18th Street, Racine, WI 53403-2300 U.S.A. Sales/Customer Service: 800-558-9413 Local and International: 262-633-7791 Fax: 262-633-9745 E-mail: sales@masterappliance.com Website: www.masterappliance.com

### Engineering, Design, Research and Development

Master's goal is to provide the most advanced and rugged heat tools in the market, and the best product for your specific application. Our Heat Technology Specialists, using state-of-the art systems, tools and test & measurement equipment, are constantly striving for better heat tool designs that are ergonomic, compact and lightweight or feature heavy-duty, stable bases for mounting or bench-top use.

### Manufacturing

Master Heat<sup>™</sup> Tool products are made with superior, quality materials and the finest craftsmanship. Great designs and expert assembly, in a lean, efficient manufacturing setting, assure our customers maximum product quality, performance and value.

# Master Varitemp<sup>®</sup> VTS Heat Gun

# Deluxe Varitemp Heat Gun with versatile pivoting stand

- Stable, deluxe heavy-duty, pivoting metal stand with non-slip rubber feet
- Exclusive adjustable spring loaded slide handle with ergonomic grip
- Easy selection of multiple pivoting angles for hands-free or hands-on us to providie the best balance and aim
- High temperature and power ratings: Ambient up to 1000°F/540°C at 1740 watts
- Variable temperature control provides easy dial-in temperatures
- Powerful high speed universal motor
- High air flow rating: 23 CFM at 3000 FPM gets the job done fast
- Sturdy die cast aluminum housing is rugged and lightweight
- Double protected heating element housing
- Easily replaceable, reinforced, mica-insulated ceramic heating element
- Externally accessible carbon brush holders for quick replacement
- Three position "OFF-COLD-HOT" rocker switch
- 6 foot, 3-wire grounded cordset made with flexible, oil and sunlight resistant rubber jacket
- UL Listed. Made in USA
- Use to shrink tubing and packaging, bend plastics, cure adhesives, dry and heat parts, strip paint, defrost frozen pipes, heat sensitive materials, solder/desolder and more

se,		
NEW		
	NUMBER OF	® U 120V Models
		3

Pivoting handle and slide grip with removable stand

MASTER VARITEMP® VTS HEAT GUN						
MODEL NO.	DESCRIPTIO	N				
VTS-750	Amb1000°F	Amb540°C	23 CFM	120V		
	60 Hz	14.5A	1740W			
VTS-752	Amb750°F	Amb400°C	23 CFM	220V		
	50 Hz	7A	1680W			
HAS-043K	Replacement heating element for VTS-750					
HAS-014K	Replacement heating element for VTS-752					
35257	Replacement	brush, spring	g and cap	kit (2 each)		

### **Optional Accessories**

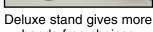
PART NO.	DESCRIPTION
A-160-HG	Shrink attachment for tubing up to 3/4" O.D.
A-170-HG	Shrink attachment for tubing 3/4" to 2" 0.D.
35245	Three popular attachments
30202	Solder preform attachment
51309	3/8" pinpoint attachment
51542	Glass protector attachment
51543	2-1/4" spreader attachment
51544	7/8" reducer attachment

Photos of accessories shown on page 7

#### Specifications

■ Air Volume: 23 CFM ■ Air Velocity: 3000 FPM ■ Motor: Universal ■ Nozzle Opening: 1.2" I.D., 1.5" O.D. ■ Cordset: 6 ft., 3-wire grounded ■ Dimensions: 9" L x 6" W x 12" H . ■ Tool Net Weight: 5 lbs. ■ Shipping Weight Kit: 8 lbs.





**Reflector Attachment** for Heat Shrinking

Ergonomic handle with spring loaded slide grip



Replacement Brush, Spring and Cap Kit (2 each)

hands-free choices



Perfect for bench-top use in manufacturing and repair

# Master & Varitemp<sup>®</sup> Heat Guns

# Professional, heavy-duty, industrial quality, multiple use heat guns

- High temperature and power ratings: up to 1000°F/540°C at 1740 watts
- Varitemp model features variable temperature control which allows user to dial-in a any temperature from ambient to 1000°F/540°C
- High air flow rating: 23 CFM at 3000 FPM gets the job done fast
- Powerful high speed universal motor
- Sturdy die cast aluminum housing is rugged and lightweight
- Double protected heating element housing
- Easily replaceable, reinforced, mica-insulated ceramic heating element
- Externally accessible carbon brush holders for quick replacement
- Three position "OFF-COLD-HOT" rocker switch
- Contoured, well balanced handle
- Non-slip rubber-backed base with 90° rotation
- 6 foot, 3-wire grounded cordset made with flexible, oil and sunlight resistant rubber jacket
- Optional momentary contact safety switch for added safety
- UL Listed. Made in USA
- Use to shrink tubing and packaging, bend plastics, cure adhesives, dry and heat parts, strip paint, defrost frozen pipes, heat sensitive materials, solder/desolder and more

#### Momentary Contact Safety Switch:

An option for Master Heat Gun<sup>®</sup> models. To order add "MC" suffix to model number. Example: HG-501A-MC.

Also, many international voltages/cordsets available upon request.

Contact our Sales Department for appropriate model numbers.

See our website for other parts and repair service information

<b>MASTER HEAT</b>	GUN®						REPLACEMEN	Т
MODEL NO.	DESCRIPTION						ELEMENT	
HG-201A	200-300°F	93-150°C	23 CFM	120V	60 Hz 5A	600W	HAS-042K₀@	) 🚯
HG-301A	300-500°F	150-260°C	23 CFM	120V	60 Hz 12A	1440W	HAS-041K 🖉	D <b>B</b>
HG-501A	500-750°F	260-400°C	23 CFM	120V	60 Hz 14A	1680W	HAS-011K	Յ
HG-501A-D	500-750°F	260-400°C	23 CFM	120V	60 Hz 12A	1440W	HAS-011DK	Ð
HG-751A-C ★	750-1000°F	400-540°C	23 CFM	120V	60 Hz 18A	2160W	HAS-015K	Ð
HG-751B	750-1000°F	400-540°C	23 CFM	120V	60 Hz 14.5A	1740W	HAS-043K	։Ս
HG-202A	200-300°F	93-150°C	23 CFM	220V	50 Hz 3A	600W	HAS-012K	
HG-302A	300-500°F	150-260°C	23 CFM	220V	50 Hz 6A	1440W	HAS-013K	
HG-502A	500-750°F	260-400°C	23 CFM	220V	50 Hz 7A	1680W	HAS-014K	
HG-752A	750-1000°F	400-540°C	23 CFM	220V	50 Hz 9A	1740W	HAS-016K	
MASTER VARIT	EMP <sup>®</sup> HEAT GUI	N					REPLACEMEN	Т
MODEL NO.	DESCRIPTION						ELEMENT	
VT-750C	Amb. to 1000°F	Amb. to 540°C	23 CFM	120V	60 Hz 14.5A	1740W	HAS-043K	"(UL)
VT-752C	Amb. to 750°F	Amb. to 400°C	23 CFM	220V	50 Hz 7A	1680W	HAS-014K	

### Specifications

Air Volume: 23 CFM ■ Air Velocity: 3000 FPM ■ Motor: Universal ■ Nozzle Opening: 1.2"
 I.D., 1.5" O.D. ■ Cordset: 6 ft., 3-wire grounded ■ Dimensions: 9" L x 5.2" W x 10.1" H.
 ■ Tool Net Weight: 3.7 lbs. ■ Shipping Weight Tool: 5 lbs. ■ Shipping Weight Kit: 10 lbs.



NOTE: Users should independently evaluate the suitability of the product for their application.

Replacement Heating Element **\***NEMA 5-20 Plug

# Master & Varitemp<sup>®</sup> Kits & Accessories

# Add versatility to your HG & VT heat gun models



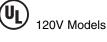
**Master Heat Gun® Kit** 

- Quality attachments are made of heavy-duty stainless steel
- Storage/carrying case protects heat gun and provides ample storage space for attachments
- Kits include a Master Heat Gun® or Varitemp® Heat Gun, A-160-HG shrink attachment, 51543 spreader attachment and 51544 reducer attachment packed in a rugged storage/carrying case



### Varitemp<sup>®</sup> Heat Gun Kit









51544 7/8" Reducer attachment



51309 ★ 3/8" Pinpoint attachment



51013 Molded storage and carrying case for HG & VT Heat Guns only

	MASTER HE	AT GUN® KIT							
	MODEL NO.	DESCRIPTIO	N						
	HG-201AK	200-300°F	93-150°C	23 CFM	120V	60 Hz	5A	600W	" <b>(h) (f)</b>
	HG-301AK	300-500°F	150-260°C	23 CFM	120V	60 Hz	12A	1440W	" <b>Ա 🚯</b>
	HG-501AK	500-750°F	260-400°C	23 CFM	120V	60 Hz	14A	1680W	®
	HG-751BK	750-1000°F	400-540°C	23 CFM	120V	60 Hz	14.5A	1740W	
	MASTER VARITEMP® HEAT GUN KIT								
	MODEL NO.	DESCRIPTIO	N						
	VT-750CK	Amb1000°F	Amb540°C	23 CFM	120V	60 Hz	14.5A	1740W	
1									

### **Optional Accessories**

PART NO.	DESCRIPTION
A-160-HG	Shrink attachment for tubing up to 3/4" O.D.
A-170-HG	Shrink attachment for tubing 3/4" to 2" O.D.
35245	Three popular attachments
30202 *	Solder preform attachment
51013	Molded storage carrying case
51309 *	3/8" pinpoint attachment
51542	Glass protector attachment
51543	2-1/4" spreader attachment
51544	7/8" reducer attachment

NOTE: Users should independently evaluate the suitability of the product for their application.



Thaw Pipes



Solder/Desolder

A-160-HG Shrink attachment for tubing up to 3/4"



A-170-HG Shrink attachment for tubing 3/4" to 2" 0.D.



51542 Glass protector attachment

30202 ★

Solder preform attachment

51543

2-1/4" Spreader

attachment



35245 Three of our most popular attachments

★ Not for use with HG-751B or HG-752A

# Proheat<sup>®</sup> Variair<sup>®</sup> Heat Gun, Kit & Accessories

### Rugged variable air flow, variable temperature heat gun



Optional Accessories for both PH-1300 and PH-1200 Models

PART NO.	DESCRIPTION	PART NO.	DESCRIPTION
35016	3-1/2" spreader attachment	35309	Set of all five attachments
35017	1-3/8" heat shrink attachment	35216	Bench stand
35292	Specialty connector attachment	35026	Nozzle shield
35293	9/16" reducer attachment	35351	Storage/carrying case
35294	5/16" reducer attachment		

#### Specifications

- Air Volume: 6-15 CFM Air Velocity: 1425-3550 FPM Motor: Permanent Magnet
- Nozzle Opening: .88"I.D., 1.31" O.D. Cordset: 6 ft., 3-wire grounded Dimensions: 8.2" L x 3.0" W x 7.3" H ■ Tool Net Weight: 1.6 lbs. ■ Shipping Weight Tool: 2 lbs.
- Shipping Weight Kit: 7 lbs.

NOTE: Users should independently evaluate the

suitability of the product for their application.





Repair

Solder/Desolder

# Proheat<sup>®</sup> Varitemp<sup>®</sup> Heat Gun, Kit & Accessories

Rugged variable temperature heat gun

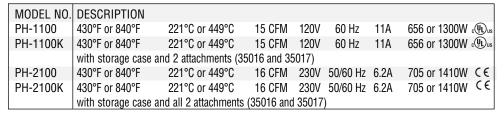


# Proheat<sup>®</sup> Heat Gun, Kit & Accessories

# Rugged dual temperature heat gun

- New 230 Volt CE Certified model available with four cordset options
- Compact, lightweight, easy-to-use
- Balanced ergonomic design prevents operator fatigue
- Two heat settings 430°F or 840°F (221°C or 449°C)
- Base provides built-in stand for hands-free use
- Protective hand/switch guard and hanging loop
- UL Listed or CE Certified, Made in USA
- Use to activate adhesives, bend plastics, dry filler material, shrink tubing and more





### **Optional Accessories**

35016 3-1/2" spreader attachment 35026 Nozzle shield	
35010 35172 Spreader attachment 35020 N022re smeld 35017 1-3/8" heat shrink attachment 35351 Storage/carrying c 35216 Bench stand	ase

#### Specifications

Air Volume: 15 CFM ■ Air Velocity: 3584 FPM (PH-1100), 4000 FPM (PH-2100) ■ Motor: Permanent Magnet ■ Nozzle Opening: .88" I.D., 1.31" O.D.
 Cordset: 6 ft., 3-wire grounded ■ Dimensions: 8.2" L x 3.0" W x 7.3" H ■ Tool Net Weight: 1.6 lbs. ■ Shipping Weight Tool: 2 lbs. ■ Shipping Weight Kit: 7 lbs.

NOTE: Users should independently evaluate the suitability of the product for their application.



Heat Adhesives



Strip Paint



Loosen Bolts



OHEAT

PH-1100

PH-2100

Proheat with rugged storage case and 2 specialty attachments



Replacement Heating Element 120V 35004 220V 35022

# Ecoheat<sup>®</sup> Heat Gun & Kit

# Economical, lightweight, multi-use heat gun



Specifications

■ Air Volume: 7 or 9 CFM ■ Air Velocity: 720 or 1100 FPM ■ Motor: Permanent Magnet ■ Nozzle Opening: 1.2" I.D., 1.35" O.D. ■ Cordset: 6 ft., 3-wire grounded ■ Dimensions: 8.5" L x 3.2" W x 7.7" H ■ Tool Net Weight: 2 lbs. ■ Shipping Weight Tool: 3 lbs. ■ Shipping Weight Kit: 5 lbs.

NOTE: Users should independently evaluate the suitability of the product for their application.

# Masterflow<sup>®</sup> Heat Blower

Heavy-duty, industrial quality, continuous-duty heat blower



Heating Element \*NEMA 5-20 Plug

Kit includes storage case and four specialized nozzle attachments shown left to right:

7/8" reducer, shrink tubing reflector,

1-5/16" spreader and 3-1/8" spreader

#### Specifications

▲ Air Volume: 47 CFM ■ Air Velocity: 2200 FPM ■ Motor: Induction ■ Nozzle Opening: 1.85" I.D., 2.25" O.D. ■ Dimensions: 12" L x 6" W x 9" H, (AH-301 & AH-302, 9" L x 6" W x 9" H) ■ Base Size: 6" x 6" ■ Cordset: 6 ft., 3-wire grounded ■ Net Weight: 6 lbs. ■ Shipping Weight: 8 lbs.

- 3 models produce 300°F, 500°F or 750°F. High temperatures accommodate many heating, drying & shrinking applications
- High air flow: 47 CFM at 2200 FPM gets job done fast
- Brushless induction type motor for quiet, continuous-duty operation
- Easily replaceable, reinforced, mica-insulated heating element
- Rubber-backed stand permits 90° non-slip adjustability
- Use in any position or mount on equipment
- Ergonomic handle for carrying or portable use
- Mount over conveyor line or on machinery
- Use to heat or dry materials, bend plastics, shrink wrap and more

MODEL NO.	DESCE						REPLACEN	/IENT
				10.0A	60 Hz	1200 W	815	c UL us
AH-501	500°F	260°C	120V	14.0A	60 Hz	1680 W	30310	c UL us
AH-751 ★	750°F	400°C	120V	18.0A	60 Hz	2160 W	30312	c UL us
AH-302	300°F	150°C	240V	5.2A	60 Hz	1200 W	816	c UL us
AH-502	500°F	260°C	240V	7.3A	60 Hz	1680 W	30311	c UL us
AH-752	750°F	400°C	240V	9.4A	60 Hz	2160 W	30313	c UL us

# Master-Mite<sup>®</sup> Heat Gun

# Continuous-duty bench-top heating system

- Complete system comes standard with 650°F/343°C heating element, adjustable stand and heat shrink attachment
- Ideal heat & air flow (3.8 CFM), performs benchtop heating jobs without blowing components around the work station
- Quiet-running shaded pole motor, eliminates noisy production areas 3 optional easy-to-change plug-in heating elements available:
- 500°, 650° & 800°F Use to activate adhesive, cure epoxies, dry components, melt
- solder preforms, remove decals, shrink tubing and more

**Optional Replacement Heating Elements** 

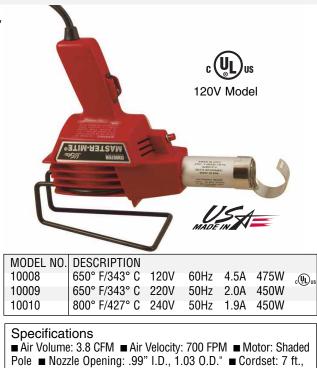
<b>A</b>	PART NO.	DESCR	IPTION			
10	20012	Blue	500°F	260°C	120V	340W
	20013	Silver	650°F	343°C	120V	475W
30201	20014	Black	800°F	427°C	120V	525W
~	20033	Blue	500°F	260°C	220V	400W
See.	20034	Silver	650°F	343°C	220V	450W
	20035	Black	800°F	427°C	220V	500W
40061	20160	Blue	500°F	260°C	240V	400W
	20161	Silver	650°F	343°C	240V	450W
R I	20162	Black	800°F	427°C	240V	500W
	Optional	Access	ories			

### Optional Accessories

40060

50675

PART NO.	DESCRIPTION
30201	Solder preform attachment
40060	Heat shrink attachment
40061	1/4" pinpoint attachment
50675	Bench stand



3-wire grounded	Dimensions: 8.8" L	. x 3.3" W x 7" H 🔳 Net

Weight: 1.7 lbs. Shipping Weight: 3 lbs.

### NOTE: Users should independently evaluate the suitability of the product for their application.

# Master-Mite<sup>®</sup> ESD Heat Gun

# Continuous duty ESD bench-top heating system

- Complete system comes standard with black 800°F/427°C heating element, shrink attachment and adjustable stand
- Totally grounded system with housing surface conductivity 500 ohms square. Conductive housing will not build up or hold a static charge
- Housing helps to shield against EMI & RFI (electromagnetic & radio frequency interference)
- A long-life, quiet-running, maintenance free shaded pole motor
- Low velocity air flow will not blow components around the workstation
- 3 optional interchangeable plug-in heating elements available
- Complete line of attachments available
- Use to activate adhesive, cure epoxies, dry components, melt solder preforms, remove decals, shrink tubing and more

MODEL NO.	DESCRIPTION	J			
10012	800°F/427°C	120V	60Hz	4.5A	525W <sub>®</sub> ው
10014	800°F/427°C	100V	50/60Hz	4.9A	450W

### **Optional Replacement Heating Elements**

PART NO.	DESCH	RIPTION			
20012	Blue	500°F/260°C	120V	340W	
20013	Silver	650°F/343°C	120V	475W	
20014	Black	800°F/427°C	120V	525W	

### **Optional Accessories**

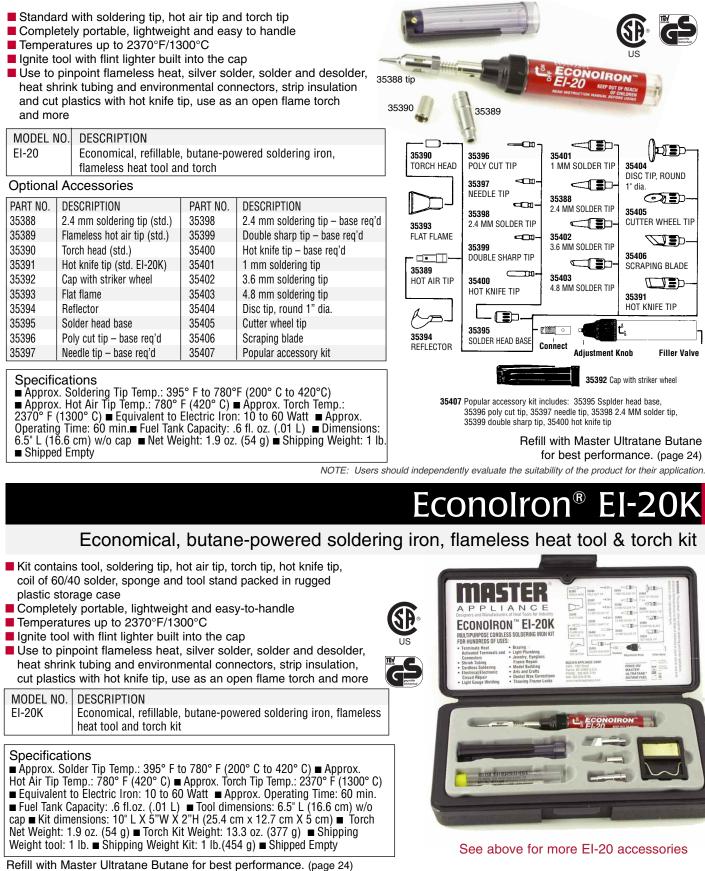
•	
PART NO.	DESCRIPTION
30201	Solder preform attachment
40060	Heat shrink attachment
40061	1/4" pinpoint attachment
50675	Bench stand





# Econolron<sup>®</sup> EI-20

### Economical, butane-powered soldering iron, flameless heat tool & torch



# High Performance Ultratip<sup>®</sup> Technology

# Longer tip life, superior thermal conductivity

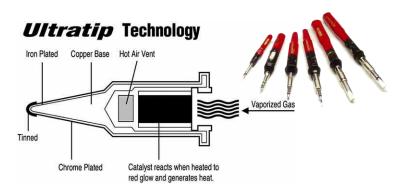
Master Appliance Ultratorch® heat tools feature Ultratip® soldering tips. Ultratip is the long lasting, oxygen-free, copper based, iron and chrome plated soldering tip with a built-in catalyst, tinned with lead-free solder.

Ultratorch heat tools, with Ultratip Technology, are perfect for use with today's lead-free solders. In fact, Ultratip soldering tips have more than double the iron and chrome plating thickness of our competitors' brass based tips, providing higher thermal conductivity and much longer tip life.

### Tips for Lead-Free Hand Soldering

Because hand soldering tends to be done at the end of the line, where the value of a board is at its highest, switching to lead-free solder may have a significant effect on your manufacturing yields, costs and productivity. Simply increasing tip temperature is not the answer because it can cause flux to evaporate before it's had time to activate.

The keys to success here are tip material, tip shape, tip condition, the soldering iron's power output and it's time on the joint.

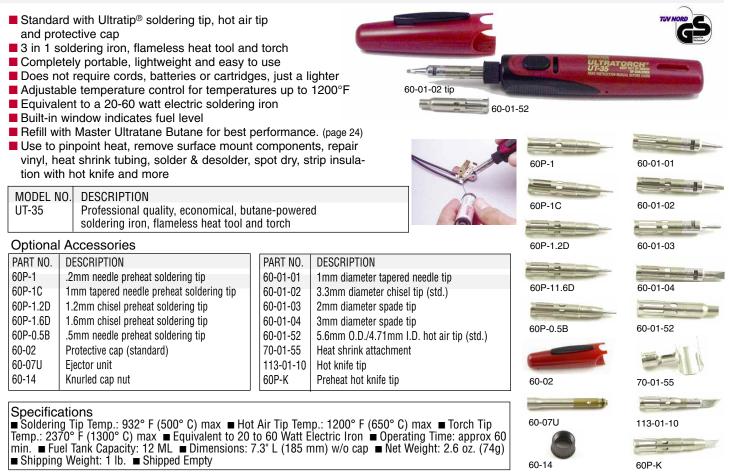


By choosing the tip shape closest to the component you're soldering, and always selecting the largest tip, you'll transfer heat more efficiently at lower settings. We offer a wide selection of tips for your applications.

Since lead-free solder's higher tin content erodes the tip's iron plating faster, Ultratip's thicker iron and chrome plating will significantly extend the tip life. Cleaning your tips often and immediately re-tinning them will also keep them in top condition longer.

# Ultratorch<sup>®</sup> UT-35

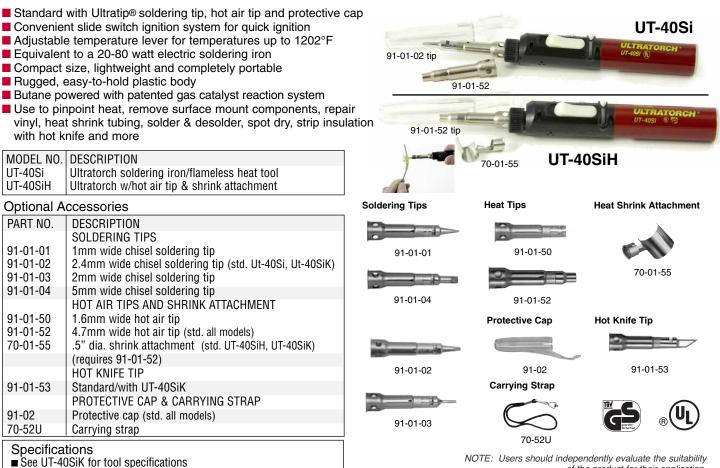
### Economical, butane-powered, 3 in 1 soldering iron, flameless heat tool & torch



Refill with Master Ultratane Butane for best performance. (page 24)

# Ultratorch<sup>®</sup> UT-40Si & UT-40SiH

### Professional guality, economical, self-igniting soldering iron & flameless heat tool



of the product for their application.

# Ultratorch<sup>®</sup> UT-40SiK

Professional guality, economical, self-igniting soldering iron & flameless heat tool kit

- Kit contains Ultratorch, Ultratip<sup>®</sup> soldering tip, hot air tip, hot knife tip, shrink attachment, cap, sponge and stand, packed in a rugged plastic storage/carrying case
- Convenient slide switch ignition system for guick ignition
- Adjustable temperature lever for temperatures up to 1202°F,
- Equivalent to a 20-80 watt electric soldering iron
- Compact size, lightweight and completely portable, features a rugged, easy-to-hold plastic body
- Patented gas catalyst reaction system
- Use to pinpoint heat, remove surface mount components, repair vinyl, heat shrink tubing, solder & desolder, spot dry, strip insulation with hot knife and more

MODEL NO.	DESCRIPTION
UT-40SiK	Ultratorch UT-40SiK Kit

### Specifications

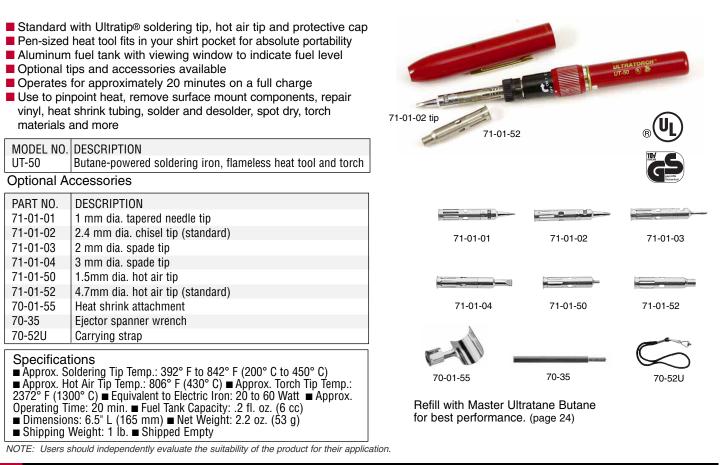
■ Approx. Soldering Tip Temp. 840° F (450° C) ■ Approx. Hot Air Tip Temp.: 1202° F (650° C) ■ Equivalent to Electric Iron: 20 to 80 Watt ■ Approx. Operating Time: 1.3 hrs. ■ Fuel Tank Capacity: .5 fl. oz ■ Dimensions: 8.3" L (208 mm) ■ Tool Net Weight: 2.6 oz. ■ Shipping Weight Tool: 1 lb. ■ Shipping Weight Kit: 2 lbs. ■ Shipped Empty



See above for more UT-40Si accessories. Refill with Master Ultratane Butane for best performance. (page 24)

# Ultratorch<sup>®</sup> UT-50

Professional quality, pen-sized butane-powered soldering iron, flameless heat tool and torch



# Ultratorch<sup>®</sup> UT-100SiEA

Self-igniting butane-powered flameless heat tool with fan assisted airflow

- Eliminates scorching and burning damage to shrink tubing during installation
- Variable temperature 302°F to 572°F (150°C to 300°C) with fan
- Enhanced Air Flow volume is 4 times greater with fan
- Variable temperature 482°F to 932°F (250°C to 500°C) without fan
   Butane-powered and completely portable/cordless, for use where
- no electrical outlets are available
- Built-in battery-powered motor uses 4 standard AA batteries
- Built-in LED light provides lighting in dark locations
- Built-in stand is convenient for safety and hands-free use
- Ideal for terminating shrink tubing and specialty connectors 10mm I.D. or less
- Use with or without enhanced air flow and with or without shrink attachment
- Ergonomic handle makes tool easy to use over an extended period of time
- UL & TUV Listed

MODEL NO.	DESCRIPTION
UT-100SiEA	Butand-powered flameless heat tool with fan assisted airflow

### Specifications

- Approx. Hot Air Temp.with fan: 302° F to 572° F (250°C to 500°C)
   Approx. Hot Air Temp.without fan: 482° F to 932° F (150°C to 300°C)
- Approx. Hot Air Temp.without fan: 482° F to 932° F (150°C to 300°C)
  Approx. Operating Time: 100 min. Fuel Tank Capacity: 1 fl. oz. (28 cc)
- Approx. Operating Time. Too Time. rule Tank capacity. Th. 02. (28 cc) ■ Dimensions:  $10.25^{\circ}$  L (242 mm)  $8.25^{\circ}$  H (242 mm) ■ Hot Air Tip
- Opening: 8mm dia. Net Weight: 11.25 oz. (319 g) Shipping Weight: 1 lb

(453g). ■ Shipped Empty



Built-In

LED

# Ultratorch<sup>®</sup> UT-100 & UT-100-TC

# Butane-powered soldering iron, flameless heat tool and torch

- Triple function soldering iron, flameless heat tool and brazing torch
- Features oxygen-free, copper based Ultratip<sup>®</sup> soldering tips, with thick iron and chrome plating for long life and high thermal conductivity
- Cordless and completely portable, ready-to-use in 30 seconds
- Adjustable temperature control
- Soldering temperature up to 932°F, ideal for use with today's lead-free solder
- Hot air temperature up to 1202°F, perfect for Solderseal™ environmental "heat and seal" connectors
- Torch temperatures up to 2372°F/1260°C
- Sturdy metal tank with fuel viewing window holds enough fuel for 2 hours of operation
- Use to pinpoint heat, remove surface mount components, repair vinyl, heat shrink tubing, solder and desolder, spot dry, torch materials and more
- Optional accessories available and interchangeable between UT-100 & UT100Si. (See page 19)





UT-100-TC **Ultratorch Professional Kit:** 

Includes heat tool, 3 soldering tips, flameless hot air and open flame torch tips, hot knife, solder, wire cutter, needle nose pliers and cap in a rugged storage/carrying case



MODEL NO. DESCRIPTION UT-100-TC Includes Ultratorch, three Ultratip soldering tips: 70-01-01, 70-01-02, 70-01-05, hot air tip: 70-01-52, shrink attachment: 70-01-55, hot knife: 70-01-16, 70-07TU torch ejector, open end wrench, ejector, sponge, cap, solder, wire cutter and needle nose pliers packed in a rugged plastic carrying case UT-100 Includes Ultratorch, Ultratip soldering tip: 70-01-02, hot air tip: 70-01-52, shrink attachment: 70-01-55, 70-07TU torch ejector, open end wrench, ejector, sponge and steel case

See page 19 for more tips & accessories

Refill with Master Ultratane Butane for best performance. (page 24)

#### Specifications

■ Approx. Soldering Tip Temp.: 392° F to 932° F (200° C to 500° C) ■ Approx. Hot Air Tip Temp.: 1112° F (600° C) ■ Approx. Torch Tip Temp. 2372° F (1260° C) ■ Equivalent to Electric Iron: 20 to 80 Watt ■ Approx. Operating Time: 120 min. ■ Fuel Tank Capacity: 1 fl. oz. (28 cc) ■ Tool dimensions: 9.5" L (242 mm) ■ Tool Net Weight: 3.7 oz. (90 g) ■ UT-100 Shipping Weight: 1 lb. ■ UT-100-TC Shipping Weight: 3 lb (131KG) ■ Shipped Empty

NOTE: Users should independently evaluate the suitability of the product for their application.

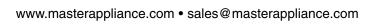
Torch







Flameless Heat



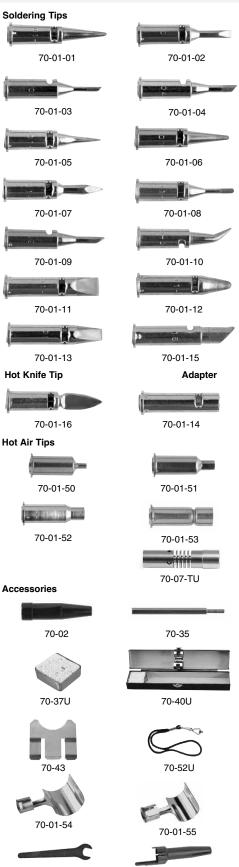
# Ultratorch<sup>®</sup> UT-100 & UT-100Si Tips and Accessories

# For use with UT-100 & UT-100Si Ultratorches

- Oxygen-free, copper based Ultratip® soldering tips have thick iron and chrome plating for long life and high thermal conductivity
- Ultratips are manufactured using a patented process which produces a uniform iron and chrome plating thickness
- Ultratip<sup>®</sup> soldering tips feature leading-edge combustion chamber/exhaust port design
- All tips pre-tinned with lead-free solder
- Optional accessories interchangeable between UT-100 & UT-100Si models

PART NO.	DESCRIPTION SOLDERING TIPS
70-01-01	1mm dia. tapered needle soldering tip (std. UT-100-TC, UT-100Si-TC)
70-01-02	3.3mm dia. chisel soldering tip (std., all models)
70-01-03	2mm dia. spade soldering tip
70-01-04	3mm dia. spade soldering tip
70-01-05	0.5mm dia. tapered needle soldering tip (std. UT-100-TC, UT-100Si-TC)
70-01-06	2mm dia. micro spade soldering tip
70-01-07	0.5mm dia. square tapered pyramid soldering tip
70-01-08	2mm dia. 35° spade soldering tip
70-01-09	3mm dia. 35° spade soldering tip
70-01-10	1mm dia. offset tapered needle soldering tip
70-01-11	8mm dia. high powered chisel soldering tip
70-01-12	3mm dia. high powered round head needle tip
70-01-13	.5mm dia. high powered long tapered chisel tip
70-01-15	7mm dia. 45° spade soldering tip
	HOT KNIFE TIP
70-01-16	Hot knife tip (std. UT-100-TC, UT-100Si-TC)
	HOT AIR TIPS
70-01-50	2.5 O.D./1.59 I.D. (mm) hot air tip
70-01-51	4.25 O.D./3.3 I.D. (mm) hot air tip
70-01-52	5.7 O.D./4.9 I.D. (mm) hot air tip (std. all models)
70-01-53	8.0 O.D./6.9 I.D. (mm) hot air tip
	ACCESSORIES
70-01-54	Large heat shrink attachment
70-01-55	Small heat shrink attachment (std. all models)
70-02	Protective cap (std. UT-100, UT-100-TC)
70-07TU	Ejector, torch (std. UT-100, UT-100-TC)
70-35	Ejector spanner wrench
70-37U	Tip cleaner sponge (std. with UT-100, UT-100SiK)
70-40U	Metal storage box (std. with UT-100, UT-100SiK)
70-43	Tool holder (std. with UT-100, UT-100SiK)
70-52U	Carrying strap
90-02	Protective cap (std. UT-100Si, UT-100Si-TC)
80-40	Open end wrench (std. UT-100Si, UT-100SiK and UT-100Si-TC)
70 01 14	ADAPTER
70-01-14	8.4 tip adapter (4mm dia. x .7 pitch mm)

NOTE: Users should independently evaluate the suitability of the product for their application.



80-40

90-02

# Ultratorch<sup>®</sup> UT-100Si, UT-100SiK & UT-100Si-TC

# Self-igniting butane-powered soldering iron and flameless heat tool

- Dual function soldering iron and flameless heat tool
- Features oxygen-free, copper based Ultratip® soldering tips, with thick iron and chrome plating for long life and high thermal conductivity
- Cordless and completely portable, ready-to-use in 30 seconds
- Self-ignition with push button for fast, easy starting
- Adjustable temperature control

MODEL NO. DESCRIPTION

See page 18 for more accessories

UT-100SiK

UT-100Si

- Soldering temperature up to 932°F, ideal for use with today's lead-free solder
- Hot air temperature up to 1202°F, perfect for Solderseal™ environmental "heat and seal" connectors
- Sturdy metal tank with fuel viewing window holds enough fuel for 2 hours of operation
- Contains everything needed to heat shrink tubing and specialty connectors, remove surface mount components, solder and desolder, repair vinyl, spot dry and cut materials
- Optional accessories available and interchangeable between UT-100 & UT100Si. (See page 19)

UT-100Si-TC Includes Ultratorch, three Ultratip soldering tips:

open end wrench, ejector and cap

rugged plastic carrying case

open end wrench, ejector, sponge, cap, solder, wire cutter and needle nose pliers packed in a



UT-100Si-TC **Ultratorch Professional Kit:** 

Includes heat tool, 3 soldering tips and flameless hot air tip, hot knife, solder, wire cutter, needle nose pliers and cap in a rugged storage/carrying case

### 70-01-01, 70-01-02, 70-01-05, hot air tip: 70-01-52, shrink attachment: 70-01-55, hot knife: 70-01-16, Includes Ultratorch, Ultratip soldering tip: 70-01-02, hot air tip: 70-01-52, shrink attachment: 70-01-55, open end wrench, ejector, sponge and steel case Includes Ultratorch, Ultratip soldering tip: 70-01-02, ULTRATORCH hot air tip: 70-01-52, shrink attachment: 70-01-55, 70-01-02 tip

70-01-52 70-35 80-40

> **UT-100SiK** Ultratorch Kit







70-01-55

Flameless Hot Air

Refill with Master Ultratane Butane for best performance. (page 24)

# Ultratorch<sup>®</sup> UT-200, UT-200A, UT-200Si

# Butane-powered soldering iron/heat tools



### UT-200

- Operates as a soldering iron, flameless heat tool and butane torch
- Standard with Utratip® soldering tip, hot air tip, shrink attachment and protective cap
- Equivalent to 200 watt max. electric soldering iron
- High power (BTU's) makes it perfect for heavy-duty service and maintenance
- Sturdy metal tank holds enough fuel for 2.6 hours of operation at middle temperature setting
- Adjustable temperatures up to 2372°F/1260°C
- Use to pinpoint heat, heat shrink tubing, solder and desolder, strip insulation, terminate specialty connectors, torch materials and more



Over One Hour Run Time

**UT-200A** 



- Operates as a dedicated high powered, heavy-duty soldering iron with special 1.2" (30.7mm) Jumbo Ultratip® soldering tip
- Equivalent to 150-300 watt max. electric soldering iron
- Adjustable temperatures up to 986°F/530°C
- Completely cordless, let's you work almost anywhere
- Quick start up. Reaches full operating temperature within one minute
- Sturdy metal handle and refillable tank holds enough fuel to run 70 minutes at middle temperature setting
- Great for running seams in sheet metal, soldering large connections in the electrical, plumbing, construction, HVAC and metalworking applications



MODEL NO.	DESCRIPTION
UT-200	Butane-powered soldering iron, heat tool and torch
	with soldering tip, hot air tip, shrink attachment and
	protective cap
UT-200A	Butane-powered soldering tool with jumbo tip
UT-200Si	Self-igniting, butane-powered soldering iron/heat tool, with soldering tip, hot air tip, shrink attachment and
	protective cap

#### See page 18 for more accessories

Refill with Master Ultratane Butane for best performance. (page 24)

### Specifications

Approx. Soldering Tip Temp.: 482° F to 986° F (250° C to 530° C)
Approx. Hot Air Tip Temp.: 1004° F (540° C) ■ Approx Torch Temp UT-200 2372°F (1260°C) ■ Fuel Tank Capacity: 2.2 fl. oz. (63 cc)
Dimensions: 11.9" L (300 mm) ■ Net Weight: 9 oz. (186 g)
Shipping Weight: 1 lb. ■ Shipped Empty

NOTE: Users should independently evaluate the suitability of the product for their application.



### UT-200SI

- Operates as a soldering iron and flameless heat tool
- Standard with Utratip® soldering tip, hot air tip, shrink attachment, spanner wrenches and protective cap
- Equivalent to 200 watt max. electric soldering iron
- Adjustable temperatures up to 1004°F/540°C
- Self-ignition with push button for fast, easy starting
- High power (BTU's) makes it perfect for heavy-duty service and maintenance
- Sturdy metal tank holds enough fuel for 2.6 hours of operation at middle temperature setting
- Use to pinpoint heat, heat shrink tubing, solder and desolder, strip insulation, terminate specialty connectors, torch materials and more

# Ultratorch<sup>®</sup> 300Si

# Butane-powered pistol grip soldering iron and flameless heat tool



- Operates as a soldering iron or flameless heat tool
- Standard with Ultratip® soldering tip, hot air tip, shrink attachment and protective cap
- Convenient slide switch ignition system for quick ignition
- Pistol grip design, great for extended use applications
- High performance soldering tip can reach approx. 932°F/500°C
- Built-in window indicates fuel level
- High capacity, can run up to 3-hours on a full tank
- Use to pinpoint heat, heat shrink tubing, solder and desolder, strip insulation, terminate specialty connectors and more

MODEL NO.DESCRIPTIONUT-300SiButane-powered soldering iron and flameless heat tool

#### Specifications

Approx. Soldering Tip Temp.: 932° F (500° C) ■ Approx. Hot Air Tip Temp.: 1112° F (600° C) ■ Equivalent to Electric Iron: 200 Watt max.
Approx. Operating Time: 180 min. ■ Fuel Tank Capacity: 2.7 fl. oz. (80cc) ■ Dimensions: 7.3" H x 6.8" L (186 mm H x 172 mm W)
Net Weight: 9.9 oz. (352 g) ■ Shipping Weight: 1 lb. ■ Shipped Empty

Refill with Master Ultratane Butane for best performance. (page 24)

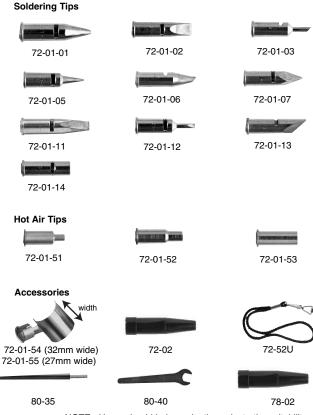
NOTE: Users should independently evaluate the suitability of the product for their application.

# Ultratorch® UT-200, UT-200Si & UT-300Si Tips and Accessories

# For use with UT-200, UT-200Si & UT-300Si Ultratorches

- Oxygen-free, copper based Ultratip® soldering tips have thick iron and chrome plating for long life and high thermal conductivity
- Ultratips are manufactured using a patented process which produces a uniform iron and chrome plating thickness
- Ultratip<sup>®</sup> soldering tips feature leading-edge combustion chamber/exhaust port design
- All tips are pre-tinned with lead-free solder
- Optional accessories interchangeable between UT-200, UT-200Si and UT-300Si models

PART NO.	DESCRIPTION SOLDERING TIPS
72-01-01 72-01-02 72-01-03 72-01-05 72-01-06 72-01-07 72-01-11 72-01-12 72-01-13	3mm dia. tapered needle soldering tip 10mm dia. chisel soldering tip (std. UT-200, UT-200Si) 4mm dia. spade soldering tip 1mm dia. tapered needle soldering tip 4mm dia. micro spade soldering tip 1.5mm dia. tapered pyramid soldering tip 7mm dia. chisel soldering tip (std. UT-300Si) 4mm dia. chisel soldering tip 12.5mm dia. 45° spade soldering tip
	HOT AIR TIPS
72-01-51 72-01-52 72-01-53	5.6 O.D./3.6 I.D. (mm) hot air tip 8.6 O.D./6.6 I.D. (mm) hot air tip (std. all models) 11.5 O.D./9.7I.D. (mm) hot air tip
	ACCESSORIES
72-01-54 72-01-55 72-02 72-52U 80-35 80-40	Heat shrink attachment 32mm wide (std. UT-300Si) Heat shrink attachment 27mm wide (std. UT-200, UT-200Si) Protective cap (std. UT-200, UT-200Si) Carrying strap Ejector spanner wrench (std. UT-200Si) Open end wrench (std. UT-200, UT-200Si)
78-02	Protective cap (std. UT-300Si only)
	ADAPTER
72-01-14	Adapter (5mm dia. x 8mm pitch) tip



NOTE: Users should independently evaluate the suitability of the product for their application.

www.masterappliance.com • sales@masterappliance.com

# Microtorch Model MT-5

# Pocket-sized, refillable, butane-powered microtorch



- Compact pocket size that fits easily into pocket or tool kit
- Quick starting self-igniting piezo electric ignition eliminates the need for lighters or matches
- Flame resists wind and moisture and is perfect for outdoor use
- Adjustable flame height for low and high temperatures up to 2500°F/1300°C blue flame
- Safety lock and attached safety cap prevent unintentional ignition
- Hands-free mode
- Refill with Master Ultratane Butane for best performance. (page 24)
- Meets Consumer Products Safety Commission (CPSC) Child Safety Requirements
- Use to heat and ignite materials, repair glass, shrink tubing, solder and desolder, terminate specialty connectors and more

MODEL NO.	DESCRIPTION
MT-5	Pocket-sized Microtorch

#### Specifications

Approx. Flame Temp. 2500° F ■ Fuel Tank: Plastic, Built-in, Refillable
 Approx. Run Time: 20 min. @ max. setting ■ Dimensions: 2.9" H x 1.3"
 W x .9" D ■ Net Weight: 1.7 oz. ■ Shipping Weight: 1 lb. ■ Shipped Empty

NOTE: Users should independently evaluate the suitability of the product for their application.

# Microtorch Models MT-11 & MT-11K

### Compact palm-sized, self-igniting, butane-powered microtorch & kit



- Built-in self-igniting system with safety lock
- Temperatures up to 2500°F/1300°C
- Compact palm-sized, perfect for tool kits and field service kits
- Adjustable wind-resistant flame
- Replaceable, refillable "fuel cell" (included)
- Meets Consumer Products Safety Commission (CPSC) Child Safety Requirements
- Kit includes microtorch with empty fuel cell and 15/16 oz. can of butane packed in single shipper carton with proper D.O.T. markings
- Ships via ground transportation without hazmat charges
- Use to heat materials, ignite materials, pinpoint torch, shrink tubing, solder and desolder, terminate specialty connectors and more

MODEL NO.	DESCRIPTION
MT-11	Palm-sized Microtorch, shipped without fuel
MT-11K	Microtorch with 15/16 oz. can of butane (10448)
RC-31	Replacement fuel cell 2 pack (see page 24)

#### Specifications

■ Approx. Flame Temp.: 2500° F ■ Approx. Run Time: 20 min. @ max. setting ■ Fuel Tank: Refillable Fuel Cell ■ Dimensions: 4.3" H x 2.5" W x 1" D ■ Net Weight: 2.1 oz. ■ Shipping Weight: 1 lb. ■ Shipping Weight Kit: 2 lbs.

# Microtorch Models MT-51, MT-51B & MT-51H

Hand-held or table-top butane-powered microtorch



# Triggertorch<sup>™</sup> Models MT-76 & MT-76K

Professional quality, hand-held or table-top, butane-powered, self-igniting triggertorch, soldering iron and flameless heat tool

- Gas adjustment wheel provides adjustable, long blue torch flame with temperatures up to 2,500°F/1300°C
- MT-76 includes soldering tip and hot air tip for soldering up to 752°F/400°C and heating up to 932°F/500°C
- Kit includes triggertorch, removable stand, 5" wire cutter, 5" needle nose pliers, soldering tip, hot air tip, shrink attachment, polyfoam cutter, hot knife tip, roll 60/40 solder, and stand with sponge packed in a durable plastic storage/carrying case
- Incorporates "trigger" switch with "pulldown" lock to meet Consumer Products Safety Commission (CPSC) Child Safety Requirements
- "Hands-free" slide lock for continuous use and instant off operation
   Unique shutter lever to easily extinguish ignition flame when using
- soldering or hot air tip attachments
- Ergonomic handle design ensures a non-slip grip
- Removable base for table-top or hand-held use
- Refill with Master Ultratane Butane for best performance (page 24)
- Use to heat parts, ignite materials, melt plastic, shrink tubing, solder & desolder, terminate specialty connectors and more

### MODEL NO. DESCRIPTION

MT-76	Triggertorch with table-top stand, soldering tip (35386)
	& hot air tip (35387)
MT-76K	Triggertorch Kit with table-top stand, soldering tip (35386),
	hot air tip (35387), hot knife tip (35400), shrink attachment
	(35394), polyfoam cutter (35396), 5" wire cutter, 5" needle nose
	pliers, 60/40 solder and sponge packed in a durable plastic case

### Specifications

■ Approx. Flame Temp.: 2500° F ■ Approx. Run Time: Two Hours ■ Fuel Tank: Plastic, Built-in, Refillable ■ Dimensions: 6.5"H x 3.8"W x 1.3"D ■ Tool Weight: 1.0 lb. ■ Net Weight: 8.1oz. ■ Shipping Weight Kit: 2.0 lbs. ■ Shipped Empty



# **General Industrial Torch Model GT-70**

### Self-contained, butane powered, heavy-duty, general industrial torch



- Self-igniting piezo electric ignition is easy to start and eliminates need for lighter
- Durable self-contained, metal fuel tank
- Large fuel capacity, 80 cc tank for 30-minute continuous run time
- Large sized adjustable blue flame accommodates heavy-duty industrial applications with temperatures up to 2500°F/1300°C
- Safety lock prevents unintentional ignition, locks for storage
- Refill with Master Ultratane Butane for best performance
- Meets Consumer Products Safety Commission (CPSC) Child Safety Requirements
- Use to braze with special alloy welding rods, heat and bend thin metals, loosen rusted bolts, pop dents out of metal, shrink and terminate heavy wall adhesive-lined tubing, solder and desolder and more

MODEL NO.	DESCRIPTION
GT-70	General Industrial Torch
Specificati	ONS me Temp · 2500° F. ■ Approx Bun Time: 30 Min . ■ Fuel

■ Approx. Flame Temp.: 2500° F
 ■ Approx. Run Time: 30 Min.
 ■ Fuel Tank: Metal, Built-in, Refillable
 ■ Dimensions: 6.5" H x 5" W x 1.8" D
 ■ Net Weight: 10.6 oz.
 ■ Shipping Weight: 1 lb.
 ■ Shipped Empty

NOTE: Users should independently evaluate the suitability of the product for their application.

# Ultratane<sup>®</sup> Butane

## For use with all Master butane-powered products



NOTE: Users should independently evaluate the suitability of the product for their application.

- Recommended fuel for all Master butane-powered products
- Triple-refined formula reduces clogging of filters
- Special vapor pressure promotes consistent ignition
- Contains no CFC's
- Available in two aerosol cannister sizes:  $5^{1/8}$  oz. (145 gm) and  $^{15/16}$  oz. (26.5 gm) and refillable RC-31 fuel cells
- Model 10448 has proper D.O.T. markings to ship via ground transportation without hazardous material charges
- Model 51773 ships via ground transportation with hazardous material charges

MODEL NO.	DESCRIPTION
51773	5 <sup>1</sup> / <sub>8</sub> oz. (145 gram) canister with universal tip adapter
10448	<sup>15</sup> / <sub>16</sub> oz. (26 gram) canister with universal tip adapter
RC-31	Refillable butane fuel cell. Carded 2 per card
	•

RC-31 Fuel Cell (for use with MT-11)

- RC-31 has proper D.O.T. markings to ship via ground transportation without hazardous material charges
- RC-31 is not considered a cigarette lighter
- RC-31 is a refillable fuel cell to replace pre-childproof lighters
- Refillable with Master Ultratane<sup>®</sup> Butane 51773 and 10448 while mounted in tool

# PortaPro® Glue Gun

# Cordless, butane-powered hotmelt glue gun

Ð

- Completely portable, lets you work almost anywhere
- Industrial power and durability
- One touch, fast piezo ignition
- Reaches operating temperature in less than 4 minutes
- Runs continuously for up to 140 minutes without refueling
- Fuel view window indicates fuel level
- Refill with Master Ultratane Butane for best performance. (page 24)
- Built-in fold away stand
- Unlimited versatility
- Use to bond corrugated materials, chipboard and wood, fasten plastics, light metals, textiles, shock absorbent packaging, capacitors, resistors, soldered parts, electrical potting/staking parts on PC boards and jumper wires, reseal products during packaging, and glue down carpeting

MODEL NO.	DESCRIPTION
GG-100	PortaPro Glue Gun
GG-100K	PortaPro Glue Gun Kit

#### Accessories

PART NO.	DESCRIPTION
35408	Standard general purpose tip
35409	Needle extension tip
35410	Diagonal cut extension tip
35411	Spreader extension tip
35412	12 General purpose glue sticks 12" long x 1/2" dia.
35413	12 Carton closing glue sticks 12" long x 1/2" dia.
35414	12 Woodworking glue sticks 12" long x 1/2" dia.
35454	20 lbs. General purpose glue sticks (approx. 290 sticks)
35455	20 lbs. Carton closing glue sticks (approx. 290 sticks)
35456	20 lbs. Woodworking glue sticks (approx. 290 sticks)

Contact Master Appliance for glue stick specifications



Continuous use operating times up to 140 minutes



Cordless operation is fast and convenient

#### Specifications

■ Operating Temp: Approx. 392°F/200°C ■ Ramp Up Time: 3-4 minutes ■ Recommended Glue Stick: 1/2" ■ Glue Melt Rate: up to 1.9 lbs. per hour ■ Ave. Run Time: Approx. 140 minutes (full tank) ■ Fuel Capacity: 20 ml. ■ Dimensions: 8.4" L x 2.1" W x 8.0" H ■ Tool Net Weight: 14.8 oz. w/o fuel ■ Shipping Weight Tool: 1.8 lbs. ■ Shipping Weight Kit: 3 Ibs. Shipped Empty



### GG-100 PortaPro Glue Gun Includes glue gun, general purpose tip (35408)

and four general purpose 6" glue sticks



### GG-100K PortaPro Glue Gun Kit

includes: glue gun, 4 tips, 8 general purpose 6" long glue sticks & manual packed in a rugged storage case. Case has slot to hold Master Butane (51773 not included)







35411 Spreader Extension Tip 7.6mm(L) x 6.6mm(W) 0.50mm I.D. slo

NOTE: Users should independently evaluate the suitability of the product for their application.

7.8mm long Dia. 3.2mm O.D.

# Micropro<sup>®</sup> AC MP-100 Standby Soldering Iron

### Personal electric soldering iron

- Compact, lightweight, easy-to-use
- Fingertip grip, just two inches from target, is ideal for precise work Standby temperature mode reduces tip temperature during pauses
- between soldering jobs for faster warm-up to full solder temperatures Standby mode significantly extends tip life. (standby temp:
- 290°F/140°C, soldering temp: 1004°F (540°C) Heating element is located in the solder tip for outstanding heat transfer, heat up and recovery times - 14 watts maximum power
- Green/red LED indicators for standby and operating modes
- Perfect for use with today's lead-free solder
- Perfect personal soldering tool for R&D, electronic engineers and repair technicians

MODEL NO MP-100		DESCRIPTION Micropro AC electric standby soldering iron				
Optional A	Optional Accessories					
PART NO.	DESCRIPTION	PART NO.	DESCRIPTION			
35430	.25mm conical tip	35436	Hot knife tip			
35431	.50mm conical tip (std.)	35438	AC/DC power adapter			
35432	1.6mm chisel tip	35439	Adapter cord			
35433	2.4mm chisel tip	35440	Protective cap			
35434	1.0mm bevel tip	35441	Stand/tip removal tool			



application.

#### Specifications

■ Approx. Tip Life: 30,000 cycles (joints) ■ Heater Type: iron-Plated anti-corrosion ■ Solder tool dimensions: (with tip) 6.5" L x .52" W (165mm L x 13.20 mm W), ■ Adapter dimensions: 3" x 1.9" x .1.3" (75mm L x 48mm W x 35mm D) ■ Tool Weight: 1.1 oz. (30 grams) ■ Adapter Weight: 2.7 oz. (76.5 grams) ■ Shipping Weight: 1 lb. (454 grams)

# MicroPro<sup>®</sup> BT-30 Battery Powered Soldering Iron

# Lightweight, compact, completely portable soldering iron

- Standard tool includes 2 Ultratip® soldering tips (1-.5mm conical tip and 1-1.5mm chisel tip), tip removal wrench, and 3 AA Alkaline batteries
- Lightweight and completely portable, equivalent to a 6W electric iron
- Solders approximately 60 minutes continuous duty
- Solders up to 160 joints intermittently with new batteries
- Fast start-up, reaches 361° F (183° C) in 10 seconds
- Total of 8 tips available (2 standard)

2.0mm bevel tip

Top quality, plug-in solder tips incorporate built-in heater (patent pending) Use to solder and desolder micro sized to small sized parts, perfect for field service and repair work

MODEL NO.	DESCRIPTION
BT-30	Micropro battery-powered, portable soldering iron

### **Optional Accessories**

35435

-			
PART NO.	DESCRIPTION	PART NO.	DESCRIPTION
35364	.5mm conical tip (std.)	35366	1.0mm chisel tip
35367	1mm conical tip	35372	1.5 chisel tip (standard)
35370	1.5mm conical tip	35373	Tip remover
35365	.8mm spade tip	35374	Protective cap
35368	1.3mm spade tip	35375	1.5V AA Alkaline
35371	1.8mm spade tip		batteries, package of 4

#### Specifications

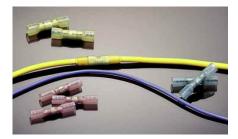
■ Approx. Solder Tip Temp.: 6W (max) 932° F (500° C) ■ Max. Solder Tip Temp.: 1040° F (560° C) ■ Approx. Tip Life: 30,000 cycles (joints) ■ Time to Reach Operating Temp.: 361° F in 10 Sec. (183° C in 10 Sec.) ■ Approx. Temp. Drop When Touching Object: 212° F (100° C) ■ Heater Type: Built-in, plug-in mount-ing, iron-plated anti-corrosion ■ Approx. Run Time: 60 Min. Continuous w/New Pattering = Approx. No. of Solder Links Internet to the Internet. Batteries ■ Approx. No. of Solder Joints, Intermittently: 160 using New Batteries ■ Batteries: 3-1.5V Alkaline, AA ■ Dimensions: 6.8" L x 1.4" W x .8" D (173mm L x 35.5mm W x 20mm D)■ Net Weight: 3.8 oz. w/Batteries (105 grams w/Batteries) ■ Shipping Weight: 1 lb.



# Sealed Electrical Systems

# Environmentally sealed connections create permanent repairs

- Heavy Duty Trucking
- Marine & RV
- Plant Maintenance Departments
- OEM & Automotive Aftermarket
- Heavy Duty Equipment
- Oil Fields & Mining
- Municipalities & Military Bases



**Sealed Electrical Systems** 

Make Permanent Repairs!

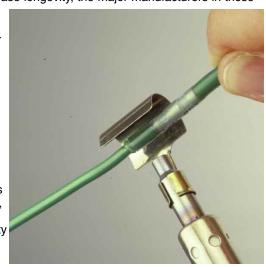
Seal Your Connectons!

The past decade has seen the advent of sweeping technological advances in the automotive, fleet, and marine industries. Many of these advances involve improved electrical systems, controlled by miniature onboard computers. Consequently, small variations in voltage can significantly affect vehicle performance.

To combat these problems and increase longevity, the major manufacturers in these

industries are using completely sealed electrical systems. Unfortunately, the repair and maintenance industry is lagging behind. The integrity of sealed electrical harnesses is often breached when repairs are made with inferior, unsealed electrical connectors. Master Appliance has the solution.

The heat shrink connector is the innovative solution that allows the aftermarket to keep pace with changing technology. Each repair made with a heat shrink connector is individually protected from corrosion, contaminants and current leakage. This ensures that the original integrity of the wiring harness is maintained.



Master Appliance high quality adhesive-lined Heat-Seal Electrical Connectors are available in three styles:

Multiseal<sup>™</sup> Crimp, solder & heat-seal connectors

Solderseal<sup>™</sup> Solder & heat-seal connectors

**Proseal**<sup>™</sup> Crimp and heat-seal connectors

Resist water & condensation Resist salt & other contaminants Resist wire pull out & current leakage

# Multiseal<sup>™</sup> Electrical Connector Kits

# High quality crimp, solder & heat-seal connectors

- Crimped for mechanical reliability; soldered for strength and conductivity, and heat sealed for superior durability
- Prevents opening of connector barrel for stronger crimp
- Low temperature pre-measured solder with flux for greater tensile strength and superior current flow
- Uniform adhesive flow does not overflow onto terminal to impede contact
- Heat shrink tubing does not reduce in length creating better insulation along with superior wire support and strain relief
- Translucent, adhesive-lined polyolefin shrink tubing Allows visual inspection, prevents wire corrosion, and provides a water and contaminant resistant seal
- Color-coded tubing with wire gauge imprint Provides easy identification of the correct part for the job
- Superior integrity of electrical systems Sealed electrical systems ensure the original integrity of wire connections and wiring harnesses and conforms with OEM standards. 103 lbs tensile strength

#### 10058 - Multiseal Butt Splice Connector Minipak

t tors	Description	Qty
But	18-20 AWG, Butt Connector, Red 14-16 AWG, Butt Connector, Blue 10-12 AWG, Butt Connector, Yellow	20 20
ပိ	10-12 AWG, Butt Connector, Yellow	10

#### 3 items & 50 pieces

### 10067 Multiseal Connector Kit

	Description 18-20 AWG, Ring Terminal, #6 Stud, Red 18-20 AWG, Ring Terminal, #10 Stud, Red 14-16 AWG, Ring Terminal, #10 Stud, Blue 14-16 AWG, Ring Terminal, 1/4" Stud, Blue 14-16 AWG, Ring Terminal, 3/8" Stud, Yellow 10-12 AWG, Ring Terminal, 1/4" Stud, Yellow 10-12 AWG, Ring Terminal, 3/8" Stud, Yellow 10-12 AWG, Ring Terminal, 1/2" Stud, Yellow	<b>Qty</b> ភូ ភូ ភ
Spade Terminals	18-20 AWG, Spade Terminal, #10, Red 14-16 AWG, Spade Terminal, #10, Blue 10-12 AWG, Spade Terminal, #10, Yellow	5 5 5
Butt Connectors	22-24 AWG, Butt Connector, Clear 18-20 AWG, Butt Connector, Red 14-16 AWG, Butt Connector, Blue 10-12 AWG, Butt Connector, Yellow	5 10 15 10
Insulated Couplers	18-20 AWG, Female Coupler, 1/4 Tab, Red 14-16 AWG, Female Coupler, 1/4 Tab, Blue 18-20 AWG, Male Coupler, 1/4" Tab, Red 14-16 AWG, Male Coupler, 1/4" Tab, Blue	5 5 5 5

#### 20 items and 120 pieces

40000

	66 - Multiseal Connector Kit with 68 - Multiseal Connector Kit with		
	Description 18-22 AWG, Ring Terminal, #10 Stud, Red 14-16 AWG, Ring Terminal, #8 Stud, Blue 14-16 AWG, Ring Terminal, #10 Stud, Blue 14-16 AWG, Ring Terminal, 1/4" Stud, Blue	Qty 5 5 5 5 5 5 5 5	
	18-22 AWG, Butt Connector, Red 14-16 AWG, Butt Connector, Blue 10-12 AWG, Butt Connector, Yellow 10-12 AWG, Butt Connector, Yellow	10 10 10 10	
Insulated Couplers	18-20 AWG, Female Coupler, 1/4 Tab, Red 14-16 AWG, Female Coupler, 1/4 Tab, Blue 18-20 AWG, Male Coupler, 1/4" Tab, Red 14-16 AWG, Male Coupler, 1/4" Tab, Blue	5 5 5 5	
14	itoms and 90 niocos		100

LA MARKEN STREET, LA

#### 14 items and 90 pieces



10058

10067

10066

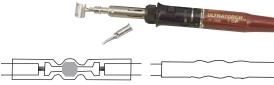
10068











 Strip wires 3/8" and insert into crimp barrel of the connector  Apply heat to the connector until solder and adhesive flows and tubing recovers. Allow the connector to cool.

### Crimp

Crimp barrel inside

Solder preform inside

Mechanical reliability holds wires in place **Solder** 

2. Crimp the wires in crimp

barre

Ultimate tensile strength • Superior conductivity **Seal** 

### Durable insulation • Watertight connection



Temperature rating: Longitudinal change: Recovery temperature: Dialectic strength: UL Voltage Rating: Corrosion resistance: Fungus Resistance: Water absorbtion:

-67°F to 230°F -55°C to 110°C +1, -10% 275°F/135°C 900 Volts/Mil. 600 Volts Non-corrosive Non-nutrient <0.1%

# Solderseal<sup>™</sup> Electrical Connector Kits

# High quality solder & heat-seal connectors

- High quality, sealed solder connection that takes the guesswork out of soldering water tight connections
- Low temperature pre-measured solder with flux for greater tensile strength and superior current flow
- Uniform adhesive flow does not overflow onto terminal to impede contact
- Heat shrink tubing does not reduce in length creating better insulation along with wire superior support and strain relief
- Translucent, adhesive-lined polyolefin shrink tubing Allows visual inspection, prevents wire corrosion, and provides a water and contaminant resistant seal
- Ensures the original integrity of wire connections and wiring harnesses and conforms with OEM standards 102 lbs tensile strength

10056 - Solderseal Butt Splice Connector M	linipak

Š	Description	Qty
유 다	22-24 AWG, Butt Connector, Red	10
ed ut	18-20 AWG, Butt Connector, Red	15
Ë E	14-16 AWG, Butt Connector, Blue	15
ŭ	18-20 AWG, Butt Connector, Red 14-16 AWG, Butt Connector, Blue 10-12 AWG, Butt Connector, Yellow	15

4 items & 55 pieces

#### 10724 - Solderseal Connector Kit

Description 18-20 AWG, Ring Terminal, Red, #6 Stud 18-20 AWG, Ring Terminal, Red, #8 18-20 AWG, Ring terminal, Red, #10 18-20 AWG, Ring Terminal, Red, 1/4"	<b>Qty</b> 5 5 5 5 5 5 5 5 5
10-12 AWG, Ring Terminal, Yellow, #10 Stud 10-12 AWG, Ring Terminal, Yellow, 1/4" Stud 10-12 AWG, Ring Terminal, Yellow, 3/8" Stud 10-12 AWG, Ring Terminal, Yellow, 1/2" Stud	5 5 5 5 5 5
18-20 AWG, Spade Terminal, Red, #10 14-16 AWG, Spade Terminal, Blue, #10 Stud 10-12 AWG, Spade Terminal, Yellow, #10 Stud	5 5 5
	5 10 10 5
18-20 AWG, Slip-On Connector, Red, .250 Female 18-20 AWG, Slip-On Connector, Red, .250 Male 14-16 AWG, Slip-On Connector, Blue, .250 Female 14-16 AWG, Slip-On Connector, Blue, .250 Male 10-12 AWG, Slip-On Connector, Yellow, .250 Female 10-12 AWG, Slip-On Connector, Yellow, .250 Male	5 5 5 5 5 5 5 5 5
	Description           18-20 AWG, Ring Terminal, Red, #6 Stud           18-20 AWG, Ring Terminal, Red, #8           18-20 AWG, Ring terminal, Red, #10           18-20 AWG, Ring Terminal, Blue, #4           14-16 AWG, Ring Terminal, Blue, #10           14-16 AWG, Ring Terminal, Blue, 1/4"           14-16 AWG, Ring Terminal, Blue, 3/8" Stud           10-12 AWG, Ring Terminal, Yellow, 1/4" Stud           10-12 AWG, Ring Terminal, Yellow, 1/4" Stud           10-12 AWG, Ring Terminal, Yellow, 1/4" Stud           10-12 AWG, Ring Terminal, Yellow, 1/2" Stud           18-20 AWG, Spade Terminal, Red, #10           14-16 AWG, Spade Terminal, Red, #10           14-16 AWG, Spade Terminal, Red, #10           14-16 AWG, Butt Connector, Clear           18-20 AWG, Butt Connector, Red           14-16 AWG, Butt Connector, Blue           10-12 AWG, Butt Connector, Red           14-16 AWG, Slip-On Connector, Red, .250 Female           18-20 AWG, Slip-On Connector, Red, .250 Male           14-16 AWG, Slip-On Connector, Blue, .250 Female           14-16 AWG, Slip-On Connector, Red, .250 Male           14-16 AWG, Slip-On Connector, Blue, .250 Female           14-16 AWG, Slip-On Connector, Sl

#### **25 items and 135 pieces**

#### 10729 - Solderseal Connector Kit with Tool Slot 10725 - Solderseal Connector Kit with UT-100Si

	Ring Terminals	Description 18-20 AWG, Ring Terminal, Red, #10 14-16 AWG, Ring Terminal, Blue, #10 14-16 AWG, Ring Terminal, Blue, 1/4" 14-16 AWG, Ring Terminal, Blue, 3/8" Stud 10-12 AWG, Ring Terminal, Yellow, #10 Stud 10-12 AWG, Ring Terminal, Yellow, 3/8" Stud	<b>Qty</b> 5 5 5 5 5 5 5
		22-24 AWG, Butt Connector, Clear 18-20 AWG, Butt Connector, Red 14-16 AWG, Butt Connector, Blue 10-12 AWG, Butt Connector, Yellow	10 10 10 10
	Insulated Couplers	14-16 AWG, Slip-On Connector, Blue, .250 Female 14-16 AWG, Slip-On Connector, Blue, .250 Male	5 5

12 items and 80 pieces





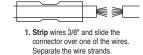




10729







2. Intermingle the wire strands and slide the connector over the joined wires. 3. Apply heat to the connector until solder and adhesive flows and tubing recovers. Allow the

# Solder

Ultimate tensile strength • Superior conductivity **Seal** 

Durable insulation • Watertight connection



 Temperature rating:
 -67

 Longitudinal change:
 +1

 Recovery temperature:
 27

 Dialectic strength:
 50

 OUL Voltage Rating:
 60

 Corrosion resistance:
 No

 Fungus Resistance:
 No

 Water absorbtion:
 <0</td>

-67°F to 230°F -55°C to 110°C +1, -10% 275°F/135°C 500 Volts/Mil. 600 Volts Non-corrosive Non-nutrient <0.1%

# Proseal<sup>™</sup> Electrical Connector Kits

# High quality crimp & heat-seal connectors

- The finest "Crimp & Heat-Seal" connector on the market today. Better wire contact - Less voltage drop - Better current flow
- Seamless butt connectors & brazed seam rings and spades Prevents opening of connector barrel for stronger crimp
- Uniform adhesive flow does not overflow onto terminal to impede contact
- Heat shrink tubing does not reduce in length, creating better insulation along with superior wire support and strain relief
- Translucent, adhesive-lined polyolefin shrink tubing Allows visual inspection, prevents wire corrosion and provides a water and contaminant resistant seal
- Color-coded tubing with wire gauge imprint Provides easy identification of the correct part for the job
- Superior integrity of electrical systems Sealed electrical systems ensure the original integrity of wire connections and wiring harnesses and conforms with OEM standards. 89 lbs tensile strength

### 10054 - Proseal Butt Splice Connector Minipak

t	Description	Qty		
er H	18-20 AWG, Butt Connector, Red	20		
B E	18-20 AWG, Butt Connector, Red 14-16 AWG, Butt Connector, Blue	20		
ŏ	10-12 AWG, Butt Connector, Yellow	5		
2 items 9 AF misses				

#### 3 items & 45 pieces

#### **10600 Assortment Proseal Connector Kit**

Ring Terminals	Description 18-20 AWG, Ring Terminal, #6 Stud, Red 18-22 AWG, Ring Terminal, #10 Stud, Red 14-16 AWG, Ring Terminal, #8 Stud, Blue 14-16 AWG, Ring Terminal, 1/4" Stud, Blue 14-16 AWG, Ring Terminal, 3/8" Stud, Blue 10-12 AWG, Ring Terminal, #8 Stud, Yellow 10-12 AWG, Ring Terminal, #10 Stud, Yellow 10-12 AWG, Ring Terminal, 1/4" Stud, Yellow 10-12 AWG, Ring Terminal, 3/8" Stud, Yellow	Qty 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5
Spade Terminals	18-20 AWG, Spade Terminal, #10, Red 14-16 AWG, Spade Terminal, #10, Blue 10-12 AWG, Spade Terminal, #10, Yellow	5 5 5
Butt Connectors	18-22 AWG, Butt Connector, Red 14-16 AWG, Butt Connector, Blue 10-12 AWG, Butt Connector, Yellow	10 10 10
Insulated Couplers	18-20 AWG, Female Coupler, 1/4 Tab, Red 14-16 AWG, Female Coupler, 1/4 Tab, Blue 18-20 AWG, Male Coupler, 1/4" Tab, Red 14-16 AWG, Male Coupler, 1/4" Tab, Blue	5 5 5 5

### 20 items and 115 pieces

	-	23 - Proseal Connector Kit with T 19 - Proseal Connector Kit with U		
		Description	Qty	
		18-20 AWG, Ring Terminal, Red, #10	5	
	als	14-16 AWG, Ring Terminal, Blue, #8	5	
	<u>g</u> i	14-16 AWG, Ring Terminal, Blue, #10	5	
	ΈE	14-16 AWG, Ring Terminal, Blue, #8 14-16 AWG, Ring Terminal, Blue, #10 14-16 AWG, Ring Terminal, Blue, 1/4" Stud	5	
	ъ	14-16 AWG, Ring Terminal, Blue, 3/8" Stud	5	
		10-12 AWG, Ring Terminal, Yellow, #10 Stud	5	
		10-12 AWG, Ring Terminal, Yellow, 3/8" Stud	5	
ſ	rs	18-20 AWG, Butt Connector, Red	10	
		14-16 AWG, Butt Connector, Blue	10	
	ΒĔ	10-12 AWG, Butt Connector, Yellow	10	1
l	õ		10	1 3
	b s	14-16 AWG, Slip-On Connector, Blue, .250 Fem	ale 5	1
	Insulated Couplers	14-16 AWG, Slip-On Connector, Blue, .250 Male	e 5	
	ln s	· · · · · · · · · · · · · · · · · · ·	-	
l	ΞŬ			
1	121	items and 75 pieces		









Crimp barrel inside







# Crimp

Mechanical reliability • Holds wires in place Seal

Durable insulation • Watertight connection



Temperature rating: ongitudinal change: Recovery temperature: Dialectic strength: UL Voltage Rating: Water absorption: Corrosion resistance: Fungus Resistance:

-67°F to 230°F -55°C to 110°C +1, -10% 275°F/135°C 900 Volts/Mil. 600 Volts <0.1% Non-corrosive Non-nutrient <0.1%

# **Heat-Shrink Tubing Kits**

# High quality heat-shrink tubing

### **Dual wall flexible heat-shrink** tubing with adhesive lining

Highly flexible for conforming to irregular shapes

Internal layer of thermo-plastic adhesive provides

Self-extinguishing UL224 (except clear)

a barrier against contaminants



### Thin wall flexible heat-shrink tubing with no adhesive

- Polyolefin, 2 to 1 shrink ratio
  - Highly flexible for conforming to irregular shapes
  - Self-extinguishing UL224 (except clear)



Polyolefin, 3 to 1 shrink ratio





#### 10064

#### 10063 Flexible Adhesive-Lined Shrink Tubing Minipak

I	-	Desc	cription	Qty
I	ing	1/8"	pre-shrink I.D., 6" length, Black	5
ŀ	e e	1/4"	pre-shrink I.D., 6" length, Black	5
ľ	ΞĘ.	3/8"	pre-shrink I.D., 6" length, Black	5
	ĒĒ	1/2"	pre-shrink I.D., 6" length, Black	4
I	Sh	3/4"	pre-shrink I.D., 6" length, Black	3
I	37	1"	pre-shrink I.D., 6" length, Black	2

#### 6 items and 24 pieces

#### 10064 Flexible Adhesive-Lined Shrink Tubing Kit

	Description	011/
	Description	QUY
	1/8" pre-shrink I.D., 6" length, Black	5
	1/8" pre-shrink I.D., 6" length, Clear	3
	3/16" pre-shrink I.D., 6" length, Red	3
	3/16" pre-shrink I.D., 6" length, Black	5
	3/16" pre-shrink I.D., 6" length, Clear	2
	3/16" pre-shrink I.D., 6" length, Red	2
bu	1/4" pre-shrink I.D., 6" length, Black	5
le je	1/4" pre-shrink I.D., 6" length, Clear	2
Flexible Shrink Tubing	1/4" pre-shrink I.D., 6" length, Red	2
Ë Ë	3/8" pre-shrink I.D., 6" length, Black	5
Ч.	3/8" pre-shrink I.D., 6" length, Clear	2
•,	3/8" pre-shrink I.D., 6" length, Red	2
	1/2" pre-shrink I.D., 6" length, Black	3
	1/2" pre-shrink I.D., 6" length, Clear	2
	1/2" pre-shrink I.D., 6" length, Red	2
	3/4" pre-shrink I.D., 6" length, Black	1
	3/4" pre-shrink I.D., 6" length, Clear	1
	3/4" pre-shrink I.D., 6" length, Red	1

#### 18 items and 48 pieces

### 10065 Flexible Adhesive-Lined Shrink Tubing Kit

Т		Desc	ription	Qty
Т		1/8"	pre-shrink I.D., 6" length, Black	10
Т		1/8"	pre-shrink I.D., 6" length, Clear	10
Т	6	3/16"	pre-shrink I.D., 6" length, Black	8
	Shrink Tubing	3/16"	pre-shrink I.D., 6" length, Clear	8
3		1/4"	pre-shrink I.D., 6" length, Black	6
Ì	ž×	1/4"	pre-shrink I.D., 6" length, Clear	6
Ē	Ē	3/8"	pre-shrink I.D., 6" length, Black	4
Т	Ś	3/8"	pre-shrink I.D., 6" length, Clear	4
Т		1/2"	pre-shrink I.D., 6" length, Black	3
Т		1/2"	pre-shrink I.D., 6" length, Clear	3
Т		3/4"	pre-shrink I.D., 6" length, Black	2
Т		3/4"	pre-shrink I.D., 6" length, Clear	2

#### 12 items and 66 pieces

MIL-DTL-23053/4 Class 3 UL E157227 Recovery temp. 250°F/121°C, Dielectric strength 700V/Mil., Continuous oper. temp. -67°F to 230°F/-55°C to 110°C



10062

#### 10061 Thin Wall Flexible Shrink Tubing Minipak

Flexible Shrink Tubing	Description 3/16" pre-shrink I.D., 6" length, Black 3/16" pre-shrink I.D., 6" length, Red 1/4" pre-shrink I.D., 6" length, Black 1/4" pre-shrink I.D., 6" length, Black 3/8" pre-shrink I.D., 6" length, Black 3/8" pre-shrink I.D., 6" length, Black	<b>Qty</b> 5 5 5 5 5 5 4
ê		-
a ia		5
ië 1	3/8" pre-shrink I.D., 6" length, Black	5
ěž	3/8" pre-shrink I.D., 6" length, Yellow	5
Ē		4
ŝ	3/4" pre-shrink I.D., 6" length, Black	3
	1" pre-shrink I.D., 6" length, Black	2

#### 9 items and 39 pieces

#### 10062 Thin Wall Flexible Shrink Tubing Kit

Description	Qty
3/16" pre-shrink I.D., 6" length, Black	20
3/16" pre-shrink I.D., 6" length, Red	15
1/4" pre-shrink I.D., 6" length, Black	20
1/4" pre-shrink I.D., 6" length, Blue	10
3/8" pre-shrink I.D., 6" length, Black	10
3/8" pre-shrink I.D., 6" length, Yellow	10
1/2" pre-shrink I.D., 6" length, Black	10
3/4" pre-shrink I.D., 6" length, Black	5
1" pre-shrink I.D., 6" length, Black	3
	3/16" pre-shrink I.D., 6" length, Black 3/16" pre-shrink I.D., 6" length, Red 1/4" pre-shrink I.D., 6" length, Black 1/4" pre-shrink I.D., 6" length, Black 3/8" pre-shrink I.D., 6" length, Black 3/8" pre-shrink I.D., 6" length, Yellow 1/2" pre-shrink I.D., 6" length, Black 3/4" pre-shrink I.D., 6" length, Black

#### 9 items and 103 pieces

MIL-DTL-23053/5 Class 1 (colors) Class 2 (clear), UL E35506 (except clear), CSA LR31929 (except clear), Recovery temperature: 250°F/121°C, Dialectic strength: 900 Volts/Mil., Continuous operating temperature:-67°F to 275°F/-55°C to 135°C



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# **Electrical Connector Kit Refills**

Multiseal<sup>™</sup>, Solderseal<sup>™</sup> & Proseal<sup>™</sup> heat-seal electrical connectors

Part Number	Description	Std.Pack
Multiseal Ring		
	18-20 AWG, Red, #6 Stud	10
11573 11525	18-20 AWG, Red, #6 Stud 18-20 AWG, Red, #10 Stud	50 10
	18-20 AWG, Red, #10 Stud	50
11518	14-16 AWG, Blue, #10 Stud	10
	14-16 AWG, Blue, #10 Stud	50
	14-16 AWG, Blue, 1/4" Stud	10 50
11574 11520	14-16 AWG, Blue, 1/4" Stud 14-16 AWG, Blue, 3/8" Stud	50 10
	14-16 AWG, Blue, 3/8" Stud	50
11521	10-12 AWG, Yellow, #10 Stud	10
11569	10-12 AWG, Yellow, #10 Stud	50
11523 11582	10-12 AWG, Yellow, 1/4" Stud 10-12 AWG, Yellow, 1/4" Stud	10 50
11524	10-12 AWG, Tellow, 1/4 Stud	10
11570	10-12 AWG, Yellow, 3/8" Stud 10-12 AWG, Yellow, 3/8" Stud	50
11522	10-12 AWG, Yellow, 1/2" Stud	10
11575 Multional Spada	10-12 AWG, Yellow, 1/2" Stud	50
Multiseal Spade 11517	18-20 AWG, Red, #10 Stud	10
11580	18-20 AWG, Red, #10 Stud	50
11526	14-16 AWG, Blue, #10 Stud	10
	14-16 AWG, Blue, #10 Stud	50
11527 11571	10-12 AWG, Yellow, #10 Stud 10-12 AWG, Yellow, #10 Stud	10
Multiseal Butt C		50
	22-24 AWG, Clear Butt	10
11566	22-24 AWG, Clear Butt	50
	18-20 AWG, Red Butt	10
	18-20 AWG, Red Butt	50 10
	14-16 AWG, Blue Butt 14-16 AWG, Blue Butt	50
11515	10-12 AWG, Yellow Butt	10
11567	10-12 AWG, Yellow Butt	50
	e Slip-On Terminals 18-20 AWG, Red	10
11526	18-20 AWG, Red	50
11530	14-16 AWG, Blue	10
11584	14-16 AWG, Blue	50
	Slip-On Terminals 18-20 AWG, Red	10
11578	18-20 AWG, Red	50
11531	14-16 AWG, Blue	10
11585	14-16 AWG, Blue	50
Solderseal Ring		10
10772 10811	18-20 AWG, Red, # 6 Stud 18-20 AWG, Red, # 6 Stud	10 50
	18-20 AWG, Red, # 8 Stud	10
10812	18-20 AWG, Red, # 8 Stud	50
	18-20 AWG, Red, # 10 Stud	10
	18-20 AWG, Red, # 10 Stud 18-20 AWG, Red, 1/4" Stud	50 10
	18-20 AWG, Red, 1/4" Stud	50
	14-16 AWG, Blue, # 8 Stud	10
10818	14-16 AWG, Blue, # 8 Stud	50
10780	14-16 AWG, Blue, # 10 Stud	10
10819 10781	14-16 AWG, Blue, # 10 Stud 14-16 AWG, Blue, 1/4" Stud	50 10
10820	14-16 AWG, Blue, 1/4" Stud	50
10783	14-16 AWG, Blue, 3/8" Stud	10
10822	14-16 AWG, Blue, 3/8" Stud	50
10784 10823	10-12 AWG, Yellow, # 10 Stud 10-12 AWG, Yellow, # 10 Stud	10 50
10823	10-12 AWG, Yellow, # 10 Stud 10-12 AWG, Yellow, 1/4" Stud	50 10
10824	10-12 AWG, Yellow, 1/4" Stud	50
10787	10-12 AWG, Yellow, 3/8" Stud 10-12 AWG, Yellow, 3/8" Stud	10
10826	10-12 AWG, Yellow, 3/8" Stud	50
10788 10827	10-12 AWG, Yellow, 1/2" Stud 10-12 AWG, Yellow, 1/2" Stud	10 50
Solderseal Space		50
10792	18-20 AWG, Red, # 10 Stud	10
10831	18-20 AWG, Red, # 10 Stud	50
10793	14-16 AWG, Blue, # 10 Stud	10
10832 10794	14-16 AWG, Blue, # 10 Stud 10-12 AWG, Yellow, # 10 Stud	50 10
10833	10-12 AWG, Yellow, # 10 Stud 10-12 AWG, Yellow, # 10 Stud	50

	Solderseal Butt	Connectors	
		22-24 AWG. Clear	10
	10834	22-24 AWG, Clear	50
	10796	18-20 AWG, Red	10
	10835	18-20 AWG, Red	50
	10797	14-16 AWG, Blue	10
	10836	14-16 AWG, Blue	50
	10798	10-12 AWG, Yellow	10
h. 17.	10837	10-12 AWG, Yellow	50 Id Dools
1		Description S On Connectors	td.Pack
	10799	18-20 AWG, Red, .250 Female	10
	10838	18-20 AWG, Red, .250 Female	50
	10801	18-20 AWG, Red, .250 Male	10
e	10840	18-20 AWG, Red, .250 Male	50
	10802	14-16 AWG, Blue, .250 Female	10
18	10841	14-16 AWG, Blue, .250 Female	50
	10804	14-16 AWG, Blue, .250 Male	10
	10843 10805	14-16 AWG, Blue, .250 Male 10-12 AWG, Yellow, .250 Female	50 10
	10844	10-12 AWG, Yellow, .250 Female	50
	10807	10-12 AWG, Yellow, .250 Male	10
	10846	10-12 AWG, Yellow, .250 Male	50
	Proseal Ring Te	erminals	
	10906	18-20 AWG, Red, # 6 Stud	10
	10658	18-20 AWG, Red, # 6 Stud	50
	10908	18-20 AWG, Red, # 10 Stud 18-20 AWG, Red, # 10 Stud	10 50
	10659 10910	14-16 AWG, Blue, # 8 Stud	10
	10648	14-16 AWG, Blue, # 8 Stud	50
	10912	14-16 AWG, Blue, # 10 Stud	10
	10649	14-16 AWG, Blue, # 10 Stud	50
	10914	14-16 AWG, Blue, 1/4" Stud	10
	10650	14-16 AWG, Blue, 1/4" Stud	50
10	10916	14-16 AWG, Blue, 3/8" Stud	10
200 C	10652	14-16 AWG, Blue, 3/8" Stud	50
	10918 10653	10-12 AWG, Yellow, # 8 Stud 10-12 AWG, Yellow, # 8 Stud	10 50
	10920	10-12 AWG, Yellow, # 10 Stud	10
18	10654	10-12 AWG. Yellow. # 10 Stud	50
- 66	10922	10-12 AWG, Yellow, # 10 Stud 10-12 AWG, Yellow, 1/4" Stud	10
	10655	10-12 AWG, Yellow, 1/4" Stud	50
5.5	10924	10-12 AWG, Yellow, 3/8" Stud	10
	10657 Brossel Spede	10-12 AWG, Yellow, 3/8" Stud	50
173	Proseal Spade 10926	18-20 AWG, Red, # 10 Stud	10
	10665	18-20 AWG, Red, # 10 Stud	50
-	10928	14-16 AWG, Blue, # 10 Stud	10
	10663	14-16 AWG, Blue, # 10 Stud	50
	10930	10-12 AWG, Yellow, # 10 Stud	10
12.1	10664	10-12 AWG, Yellow, # 10 Stud	50
	Proseal Butt Co 10932	nnectors 18-20 AWG, Red	10
	10932	18-20 AWG, Red 18-20 AWG, Red	50
	10934	14-16 AWG, Blue	10
	10667	14-16 AWG, Blue	50
	10936	10-12 AWG, Yellow	10
	10668	10-12 AWG, Yellow	50
-	Proseal Fully In 10940	sulated Slip On Connectors	10
va :	10940	18-20 AWG, Red, .250 Female 18-20 AWG, Red, .250 Female	10 50
	10938	18-20 AWG, Red, .250 Female 18-20 AWG, Red, .250 Male	10
	10672	18-20 AWG, Red, .250 Male	50
	10944	14-16 AWG, Blue, .250 Female	10
	10671	14-16 AWG, Blue, .250 Female	50
	10942	14-16 AWG, Blue, .250 Male	10
	10673	14-16 AWG, Blue, .250 Male	50
653	Conception of the local division of the		and the second se



Multiseal Patent Numbers: Butt Connectors - US 6,838,621 B2, US 6,677,529 B1 Terminals - US 6,666,732,B1

Solderseal Patent Numbers: Butt Connectors - US 4,883,925 Ring and spades - US 5,137,478

aster Appliance Corp. • 2420 18th St. • Racine, WI 53403 • Phone 800-558-9413 • Fax 262-633-9745

18-20 AWG

# Heat-Shrink Tubing Kit Refills

Thin and dual wall shrink tubing



Master Heat<sup>®</sup> Guns or Butane-powered portable heat tools, when used with these flexible polyolefin connectors and shrink tubing, create wireharness repairs that meet OEM Standards.

Thin Wall	Shrink Tubing 6" Long (NO ADHESI	VE)
11601	Shrink Tubing, 3/16", Black	10
11602	Shrink Tubing, 3/16", Red	10
11603	Shrink Tubing, 1/4", Black	10
11604	Shrink Tubing, 1/4", Blue	10
11605	Shrink Tubing, 3/8", Black	10
11606	Shrink Tubing, 3/8", Yellow	10
11607	Shrink Tubing, 1/2", Black	10
11608	Shrink Tubing, 3/4", Black	10
11609	Shrink Tubing, 1", Black	10
Dual Wall	Shrink Tubing 6" Long (WITH ADHE	
11620	Shrink Tubing, 1/8", Black	8
11621	Shrink Tubing, 1/8", Clear	8
11622	Shrink Tubing, 1/8", Red	8
11623	Shrink Tubing, 3/16", Black	8
11624	Shrink Tubing, 3/16", Clear	8
11625	Shrink Tubing, 3/16", Red	8
11626	Shrink Tubing, 1/4", Black	8
11627	Shrink Tubing, 1/4", Clear	8
11628	Shrink Tubing, 1/4", Red	8
11629	Shrink Tubing, 3/8", Black	8
11630	Shrink Tubing, 3/8", Clear	8
11631	Shrink Tubing, 3/8", Red	8
11632	Shrink Tubing, 1/2", Black	8
11633	Shrink Tubing, 1/2", Clear	8
11634	Shrink Tubing, 1/2", Red	8
11635	Shrink Tubing, 3/4", Black	8
11636	Shrink Tubing, 3/4", Clear	8
11637	Shrink Tubing, 3/4", Red	8
11638	Shrink Tubing, 1", Black	8
11639	Shrink Tubing, 1", Clear	8
11640	Shrink Tubing, 1", Red	8

# **Crimping Tools**

# Hand tools for heat-seal electrical connectors

### Cutter, Stripper, Crimper

- Two precision-ground wire cutters: up-front anvil-type and scissors-type located behind pivot point
- Cuts, strips and crimps stranded wire in 22 to 10 AWG sizes and solid wire in 18 to 8 AWG sizes
- Cuts 6-32, 8-32, 10-32, 10-24 and 4-40 bolts and screws
- Scissors action wire stripper is precision-ground for accuracy and clean, neat stripping.
- Cushioned handle for user comfort, made of heat-treated tool steel for long life, reliability and accuracy

MODEL NO.DESCRIPTION35083Cutter, Stripper, Crimper



35083

### **Ratcheting Crimper**

- Crimps 22-18, 16-14 and 12-10 AWG size connectors
- Rounded crimp die area for insulated terminals
- Industry standard color-coded crimp numbers for easy size identification
- Full-cycle ratcheting handle ensures a complete crimp
- Made from heat-treated steel for long life and reliability
- Cushioned handle for user comfort

MODEL NO.	DESCRIPTION
35084	Crimp Tool, Ratcheting, Full Cycle



35084

# Master Heat<sup>™</sup> Tool Technology

# Quality, precise, reliable heat tools perform a variety of tasks

### **Convection Heat/Hot Air**

Most Master heat tools use the convection principle to provide hot air for many different applications and processes.

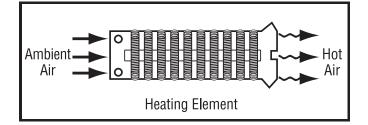
Hot air is particularly well suited for use in a wide variety of applications and processes throughout industry.

The appropriate Master heat tool is selected depending on the air flow and temperature characteristics needed to do the job. Temperature is controlled by selecting a proper model or by using one of our variable temperature units. Air flow is determined by the unit selected, its outlet configuration and by the use of specially designed attachments if required.

### How Master Heat Tools Work

Air is forced through (or over) an electric heating element. In the process, heat energy is transferred from the heating element to the air.

Most Master heat tools use a self-contained motor-driven fan to supply the air which is then passed over an electric heating element.



Temperature Conversion Formulas  $^{\circ}C = 5/9 (^{\circ}F - 32) ^{\circ}F = 9/5 (^{\circ}C + 32)$ 

#### **Facts About Heat**

**Applied heat technology** is the basis of all Master Appliance products. Definitions of some of the basic principles of heat follow:

**Heat** is the form of kinetic energy which causes a rise in temperature in a body as it is absorbed or a reduction in temperature as it is lost to the environment.

**Temperature differential** is the driving force of heat energy. The greater the temperature differential between two objects, the greater the flow of heat energy from the higher-temperature object to the cooler object.

**BTU's** (British Thermal Units) or calories are the units used to measure heat energy. One BTU is equivalent to 252 calories.

**Thermal conductivity** is the property of a material related to its ability to transfer heat through itself. The higher the thermal conductivity of a material, the greater the heat transfer rate. In general, metals have higher thermal conductivities than insulators. Copper and aluminum have higher thermal conductivities than steel, while steel has a higher thermal conductivity than wood or plastics.

The heat transfer rate is the quantity of heat energy flowing per unit of time through an object. It can be measured in BTU's per minute or by calories per second flowing through a specified area of the object.

#### COMMON MODES OF HEAT TRANSFER

- **Convection** employing a heated fluid such as air to convey heat from the source to the object being heated. Master Heat guns are an example of applied convection.
- **Conduction** heat transfer within an object. Ultratorches, in the soldering mode, are an example of applied conduction.
- **Radiation** heat transfer employing electromagnetic waves similar to light or radio waves. This method does not require the presence of solids, liquids or gases to transmit heat energy. The sun is the best example of radiant heat.

FAHRENHEIT TO CENTIGRADE CONVERSION TABLE															
⁰F	°C		F <i>°C</i>	⁰F	°C	⁰F	°C	⁰F	°C	⁰F	°C	₽F	°C	₽F	°C
58º 49º 40º 31º 22º	-50° -45° -35° -30°	167 176 185 194 203	₽ 80° ₽ 85° ₽ 90°	401º 410º 419º	200° 205° 210° 215° 220°	617º 626º 635º 644º 653º	325° 330° 335° 340° 345°	842º 851º 860º 869º 878º	450° 455° 460° 465° 470°	1067º 1076º 1085º 1094º 1103º	575° 580° 585° 590° 595°	1292º 1301º 1310º 1319º 1328º	700° 705° 710° 715° 720°	1517º 1526º 1535º 1544º 1553º	825° 830° 835° 840° 845°
-13º - 4º - 5º 14º 23º	-25° -20° -15° -10° - 5°	212 221 230 239 248	° 105° ° 110° ° 115°	446º 455º 454º	225° 230° 235° 240° 245°	662º 671º 680º 689º 689º	350° 355° 360° 365° 370°	887º 896º 905º 914º 923º	475° 480° 485° 490° 495°	1112º 1121º 1130º 1139º 1138º 1148º	600° 605° 610° 615° 620°	1337º 1346º 1355º 1364º 1373º	725° 730° 735° 740° 745°	1562º 1571º 1580º 1589º 1598º	850° 855° 860° 865° 870°
32º 41º 50º 59º 68º	0° 5° 10° 15° 20°	257 266 275 284 293	≗ 130° ≌ 135° ≌ 140°	491º 500º 509º	250° 255° 260° 265° 270°	707º 716º 725º 734º 743º	375° 380° 385° 390° 395°	932º 941º 950º 959º 968º	500° 505° 510° 515° 520°	1157º 1165º 1175º 1184º 1183º	625° 630° 635° 640° 645°	1382º 1391º 1400º 1409º 1418º	750° 755° 760° 765° 770°	1607º 1616º 1625º 1634º 1643º	875° 880° 885° 890° 895°
77º 86º 95º 104º 113º	25° 30° 35° 40° 45°	302 311 320 329 338	° 155° № 160° № 165°	236º 545º 554º	275° 280° 285° 290° 295°	752º 761º 770º 779º 788º	400° 405° 410° 415° 420°	977º 986º 995º 1004º 1013º	525° 530° 535° 540° 545°	1202º 1211º 1220º 1229º 1228º 1238º	650° 655° 660° 665° 670°	1427º 1436º 1445º 1454º 1453º	775° 780° 785° 790° 795°	1652º 1661º 1670º 1679º 1688º	900° 905° 910° 915° 920°
122º 131º 140º 149º 158º	50° 55° 60° 65° 70°	347 356 365 374 383	₽ 180° ₽ 185° ₽ 190°	581º 590º 599º	300° 305° 310° 315° 320°	797º 806º 815º 824º 833º	425° 430° 435° 440° 445°	1022º 1031º 1040º 1049º 1058º	550° 555° 560° 565° 570°	1247º 1256º 1265º 1274º 1283º	675° 680° 685° 690° 695°	1472º 1481º 1490º 1499º 1508º	800° 805° 810° 815° 820°	1697º 1706º 1715º 1724º 1733º	925° 930° 935° 940° 945°
					TADL										
$1^{\circ}C = 1.8^{\circ}F$ $4^{\circ}C = 7.2^{\circ}F$ $2^{\circ}C = 3.6^{\circ}F$ $5^{\circ}C = 9.0^{\circ}F$ $3^{\circ}C = 5.4^{\circ}F$ $6^{\circ}C = 10.8^{\circ}F$			TABLE OF VALUES FOR IN $7^{\circ}C = 12.6^{\circ}F$ $8^{\circ}C = 14.4^{\circ}F$ $9^{\circ}C = 16.2^{\circ}F$			Iterpolation in above           1ºF = 0.55 °C           2ºF = 1.11 °C           3ºF = 1.66 °C			4°F = 2.22 °C 5°F = 2.77 °C 6°F = 3.33 °C			7°F = 3.88 <i>°C</i> 8°F = 4.44 <i>°C</i> 9°F = 5.00 <i>°C</i>			

# Master Heat<sup>™</sup> Tool Applications

# Professional quality heat tools for Industry

#### Master Heat<sup>™</sup> Tools

Heat has many industrial applications. The proper use of the right heat technology and the right product are necessary to achieve optimum results in each application.

Master is continually developing new products and techniques to meet the demands of new applications. Master heat guns are designed and constructed to provide our customers with dependable, cost-effective ways to apply heat properly for specific jobs.

With over fifty years of experience in the industry, the Master Appliance name assures its customers of an uncommon expertise in heat technology, quality products and unsurpassed service.

Our original heat gun met the heating needs of the maintenance, repair, operation and production applications of its time. Today's Master heat tools are designed with expanded capabilities which make it easy to work with the growing range of new materials and processes being developed by industry.

Master heat tools are used for drying, heating, welding, shrinking, soldering and de-soldering as well as a variety of other applications. Wherever heat is the need, Master has the answer.

Because each application is unique, the Master heat tool line offers options such as varying temperatures, air flow, a choice of nozzle configurations, attachments and voltage/plug combinations to meet your needs.

The introduction of new plastics, adhesives and other materials is a continuous process. The range of options and attachments offered by Master heat tools enables you to use the newest materials and techniques while relying on the traditional Master quality and durability.

Master is always here to help. When you're considering a new application, material or process, call Master Appliance for professional, efficient and courteous assistance.

#### **Applications/Processes**

Master heat tools are being used for hundreds of applications and processes throughout industry including:

- Activate adhesives and potting compounds
- Bend and form plastics and plastic laminates
- Cure and set adhesives
- Defrost freezers and frozen coils
- Dry body filler
- Dry conformal coatings on circuit boards
- Dry parts
- Expand metals
- General heating and drying applications
- Desolder backs of printed circuit boards to thru-hole components
- PVC bending
- Preheat flux
- Remove dents in fiberglass and other materials
- Remove pin striping
- Remove/install plastic autobody panels
- Remove windshield caulking
- Shrink and terminate environmental splices
- Shrink and terminate heat-shrinkable insulated solder preforms
- Shrink heat-shrinkable anti-static film
- Shrink heat-shrinkable molded parts
- Shrink heavy gauge shrink packaging
- Shrink heavy wall and adhesive-lined tubings
- Smooth vinyl tops
- Soldering and desoldering
- Spot dry paint
- Stretch vinyls
- Strip paint
- Vinyl repair

New applications and processes which require heat are discovered everyday. Users should independently evaluate the suitability of the product for their application.

As with all electrical and butane-powered tools, for your safety, read the instruction manual before using.



### Worldwide Corporate Headquarters

Master Appliance Corp. 2420 -18th Street, Racine, WI 53403-2300 U.S.A. Sales/Customer Service: 800-558-9413 (US & Canada) Local and International: 262-633-7791 Fax: 262-633-9745 sales@masterappliance.com www.masterappliance.com

### For Master Appliance Products Contact:

Designers and Manufacturers of Heat Tools for Industry