



ENERGY SAVING PRODUCTS

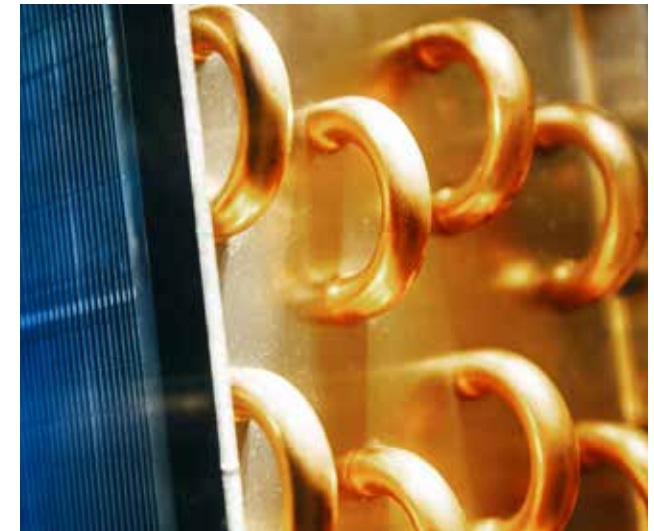
AIR CONDITIONING, HEATING, AND REFRIGERATION

PO Box 391  
Vandalia, OH 45377  
(937) 898-0391  
[www.espcompany.com](http://www.espcompany.com)

The Consolidator  
V18

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### 8732 Premium 100% Silicone



8732 Premium 100% silicone has exceptional adhesion and sealing qualities. This product meets USDA, FDA, UL, and NSF and has -40° to +450° F range. For general purpose refrigeration, air conditioning and heating applications. Available in 10.3 oz. cartridges or 3 oz. squeeze tube, individually boxed in clear, white, aluminum, or black.

**8732 C,W, A, B 10.3 oz cartridge or 3 oz squeeze tube**

### 8736 Hi-Temp Silicone



8736 Hi-temp silicone is also available, with use range of -85° F to 500° F (intermittent to 600° F), red only.

**8736R**

### AC&R



AC&R New low cost 100% silicone has exceptional adhesion and sealing qualities. This product meets USDA, FDA, and has -40° to +450° F range. For general purpose refrigeration, air conditioning and heating applications. Available in 10.3 oz. cartridges in clear, white, aluminum, or black. Order free AC&R display.

**ACR C,W, A, or B, 10.3 oz.**

### XtraBond 150 RTV Silicone



XtraBond®150 a one component, permanently flexible, RTV (Room Temperature Vulcanizing) mildew-resistant silicone sealant that is the industry standard. The product's tough chemical resistance makes it a worry-free solution for a wide range of applications. Clear.

- Approved for Cultured Marble
- Excellent Adhesion to Glass
- Window & Door Approved
- Easy to Gun, Easy to Tool
- Non-Sag & Slump
- Non-Paintable

**XB150**



### XtraBond 250 RTV Silicone



XtraBond®250 anti-microbial formula is NSF approved and FDA compliant, so it can be used confidently around food applications. Its resistance to moisture makes it ideal for use in high moisture areas such as marine, baths, and walk-in coolers.

- Consistent Gunability & Tooling
- Approved for Cultured Marble
- Anti-Microbial Formula
- FDA/USDA Compliant
- Excellent Adhesion
- Non-Paintable

**XB250**



### VULKEM 116



Vulkem 116 is a textured, single-component, moisture-curing, gun-grade polyurethane sealant. Vulkem 116 is an excellent general-purpose sealant designed for use on poured and precast concrete, masonry work, window and door perimeters, and similar types of construction joints. Available in Gray, White, and Bronze.

**VM116G, 10.3 oz.**  
**VM116W, 10.3 oz.**  
**VM 116BZ 10.3 oz.**



### ESP Butyl Caulk

An inexpensive sealant used as perimeter seal, or capping around windows, doors, masonry or metal to metal applications. Used extensively in refrigerated cases, walk-in cooler doors by the fast food and convenience store market. Available in White and Gray.

**7757WC White**  
**7757WC Gray**



### Mobil Grease Polyrex "EM"

Super-premium Mobil Polyrex EM Series grease is specially formulated for electric-motor bearings. The advanced thickener formulation and proprietary manufacturing techniques provide improved bearing performance and protection for long electric motor life.

**Polyrex EM Blue 13.7oz**



### Mobil Grease "EP"

Mobil Premium Lubricating Grease is a lithium thickened grease containing oxidation and corrosion inhibitors. It is suitable for lubrication of high speed ball and roller bearings found in motors, saws, spindles, generators, fans, and squirrel cages. Superior water resistance. Meets GM spec 7830695, 998537, and Detroit Diesel Corp. 1Y12 spec. -30° to 350° max exposure. Available in 14.1 oz. tubes.

**EP2**



### Mobil Grease XHP222 / FM222

Mobil Extended High Temp Service is a suitable bearing grease providing water resistance and corrosion protection for industrial, construction and marine service. Available in 14.1 oz. tubes.

**XHP222, 14.1 oz**  
**FM222, 14.1 oz**



### FS880 FIRE STOP

This is premium 8 hour E-814 Intumescent UL rated Fire Stop. Smoke and Draft sealer too. Red in color, 11 oz tube.

**FS880**



### PB B'laster

B'laster PB Penetrating Catalyst is a powerful, concentrated penetrant that frees stubborn rusted or immobilized parts by releasing the surface tension that causes them to stick. PB magnetically creeps up, around and into tight, hard-to-reach cavities, then converts into a high lubricant, loosening troublesome nuts, bolts, rusted joints, pipe threads and other frozen parts in record time! B'laster PB's non-evaporating formula then stays on the surface of the part to protect against rust and corrosion. 16 oz. aerosol.

**PB16 12/Box**



### Expand-A-Foam

Expand-A-Foam is a one part, multi-purpose filler for holes, joints, and cracks. Excellent for sealing and caulking during equipment installation and construction. Expand-A-Foam is tack-free in 20 minutes, and fully cured within 24 hours. As it expands to three times its exit size, fill only 35% of cavity to be filled. Great to use where regular caulking won't work or is cost prohibitive. UL recognized, contains no CFC, 12 oz. can.

**EF12**



### Wet/Dry Roof Cement

A heavy consistency mastic formulated with refined asphalt, filler, plastosizer, and solvent. All-purpose repair cement adheres to damp substrates. Remains soft and pliable through wide temperature fluctuations. Meets all requirements of ASTM D-4586-8-6, asbestos free.

**WDRC 10.3 oz. or WDRC 1 Gal**

**ESP Acid Pump**



The ESP compact submersible pump is designed to circulate strong acids and cleaning solutions. All parts are constructed of acid-resistant materials. Motor is protected by thermal overload. Powerful 300 GPH pump.

**G325A**

**ESP Beckett/Seabrook Replacement Pump**



This G100AILS replaced the Seabrook medical blanket pump, later used by Cincinnati Sub-Zero. 100 GPH.

**G100AILS**

**ESP NEW Replacement Pump**



Drill pump for Glycol/Oil/Any Fluid.

**PUP62 and PUP63**

**ESP Self Priming Pump**



Self priming Drill pump Heavy Duty action, Handles very viscous fluids and other dense fluids. 100 GPH, 1" barbed connections. DP70 Handy kit utilizes drill power pump capable of unclogging and removing all unwanted debris in condensate lines. Handy adapters will suction or pressurize lines that are 1/4" flared, 3/4" male or female union, "For walk-in condensate lines" and 1/2" and 3/4" sweat connections for AC lines, can be used in combination with LD10 Line Drive blowout valve. Where other systems only partially open up condensate lines, our system completely removes blockages.

**DP70 Self Priming Pump**

**PVC Clear Glue**



This medium body solvent cement is used to join PVC pipe and fittings for potable water and drain, waste and vent systems. Recommended for PVC Types I and II, schedule 40" to 8" and schedule 80" to 6" diameters. ASTM-D-2564. Available in 1/4 and 1/2 and 1 pint cans with dauber.

**PG14, PG12, or PG100**

**ABS, PVC, CPVC All Purpose Glue**



This clear regular bodied cement can be used on ABS, PVC schedule 40 and 80 Type I and Type II, gas pipe, conduit and CPVC schedule 40 up to 4" in diameter. Set time 45 seconds. Available in 1/4, 1/2, and 1 pint containers.

**AP14, AP12, or AP100**

**Purple Primer**



Softens and prepares PVC pipe and fittings for gluing. Use for potable water and drain, waste and vent systems. ASTM F656.

**PP14 (1/4 pint), PP12 (1/2 pint), PP100 (1 pint) containers, all with dauber**

**Clear Cleaner**



Cleans and prepares PVC, CPVC and ABS fittings for gluing.

**PC14 (1/4 pint). PC12 (1/2 pint), PC100 (1 pint)**



**Insulation Adhesive**

Used by contractors nationwide as the premier insulation adhesive. Is now specified by a major insulation tubing manufacturer to be used on their products. Color: Amber. Viscosity: 200 - 300 CPS. Odor: solvent when wet / none dry. Bonding range: to 20 minutes. CAUTION: Extremely flammable. Avoid open flame or spark. Apply in well ventilated area.

**CC12 (1/2 pint), or CC100 (1 pint)**



**ESP Teflon Thread Seal Tape**

Teflon thread seal tape offered in both .0035 and .0032 thick tape manufactured by Dupont. Both meet MILT-27730A specs, are recognized by NSF and are approved by NASA. .0035 Tape is UL approved. Available in 260" and 520"

**TT260 or TT520 for 1/2", .0032 mil and .70 density. Packed 100/box or 10/sleeve**

**TTUL260 or TTUL520 for 1/2", .0035 mil, .90 density. Both packed 144/box**



**LI' L POPPER Voltage 24V-250VAC**

Li' L Popper control circuit breaker saves the technician dozens of blown fuses while he diagnoses control circuit failures. Simply plug the leads in to the ATC fuse receptacle on the board, and manually reset the Li' L Popper each time the breaker blows. Has a quick setting thermal cut out. Self adhering backing allows the contractor to leave the unit on the job site overnight if he is out of fuses. Free counter display by request. Available in 3 amp, 5 amp, 10 amp, 15 amp, and 20 amp. Alligator clip versions are available.

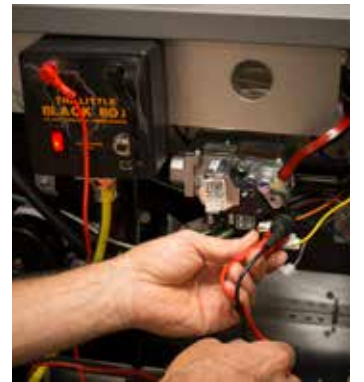
**POP3, POP5 for residential or commercial amp applications or, POP10, POP15, POP20 for microwave and appliance applications POP3Z, POP5Z for Alligator clip versions**



**The Little Black Box**

DETAILS

- Converts 120V to 24V check systems
- Designed for the lab, available to the contractor
- Perfect for parts counter control checking
- Professional 40" silicone test leads with point probes, and interchangeable alligator clip extensions
- 24v manual reset overload protection
- Lighted 120v power switch
- High strength magnetic backing grips metal surfaces
- One Year Warranty



**VP24**



**The Old Switcheroo**

The Old Switcheroo is a heavy duty industrial magnet designed to hold down pop out switches while the technician trouble shoots the furnace or air handler. Two wings will reach out to switches that are set apart from a flat metal surface. A must in the tool box. Ask for free counter display with tri-folds.

**FF75  
FF75 Display**



**N-Take 2**

This unique device is installed within the draft induction supply line in between the outdoor intake and the furnace. When a blocked intake would normally result in a no heat call, and a shut down furnace, the N-Take 2 opens due to a slight vacuum inside the pipe. Not to be used as a primary combustion inlet. Alternate only.

Free Display Pictured Here.

**NT02  
NT02 Display**



### Three Quart Scoops

Available, for ice or dry chemicals. 14 1/2" high x 6" wide x 6" deep polypropylene in White only.

PS621



### Chemical Transfer Funnels

Avoid any potential spills of harmful chemicals during transfer. Available in 1/2 Gallon. with brass filter screen, Part # 240117, or in a 1 gallon size (with screen).



240116 (1 gal.) or 240117 (64 oz.)

### PVC Drop Cloths

These 2 mil 12' X 12' pvc drop cloths are perfect for residential or commercial job cleanliness, and cut down on on-the-job damage of computers, furniture, carpet, or other valuables adjacent to the work area. In display box. 12/box.



DC12



### Caulking Guns

Durable, high quality, and heavy duty. Made of heavy gauge metal, with positive action plunger rod.

CG101



### Commercial Grade Skeleton Gun

Skeleton gun with heavy duty handle, spout cutter, seal punch, and ladder hook. 5/16" Plated rod.

CG102SC



### Pews Grease Guns

Meet the toughest grease guns around. The all new grease gun line from Pews. These guns have been completely redesigned and incorporate advanced features that are unmatched in the industry.

Constructed of heavy duty steel and finished in rugged baked enamel and tough zinc plate, every feature of these grease guns has been engineered for the rigors of professional use. Lifetime warranty.

30200



### Grease Hose

There are 1/8" NPT male fittings on each end. Meets U.S. Government mil-spec.

10-212 for 12" and 10-219 for 18"



### Fan Blade and Blower Wheel Tools

Fan blade and blower puller tool by E.S.P. offers a simple and easy solution to locked fan blades and blower wheels. Will not damage blower or blade, so the unit quickly pays for itself.

**FB42**



### Wilde Gasket Scraper

Heavy-duty 11" industrial gasket scraper for quick and easy removal with a one inch face and 1 1/2" face.

**GS-516 1" Face**  
**GS-516 Wide 1 1/2" face**

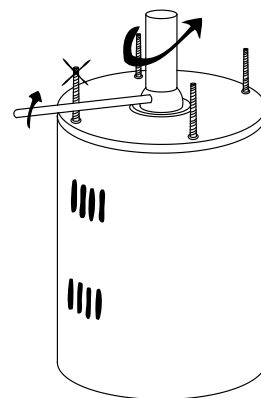


### Anti-Windmill Brake

This patented device slips over the motor shaft and will prevent the motor from rotating in the opposite direction due to windage. Most motors will start and continue to run in the opposite direction if the reverse rotation is severe enough, causing premature motor failure. Fits shaft sizes 1/2" and 5/8".

**AW12 or AW58**

- Wrong rotation will cause the rod to strike thru-bolt, which will stop the shaft from turning
- Shaft will rotate the correct direction freely
- NOTE: This device will stop windmilling in the wrong rotation only



### 6 'N 1 Lug Wrench



- Offers both hexagon and square sockets
- Four nut drives sized 1/4", 5/16", 11/32", 3/8"
- Two squares sized 3/16" and 1/4"
- Use as a handle for 1/4" extension drives
- Fits MC and B acetylene tanks
- Fits service valves
- High-quality vanadium tool steel
- Easy grip round handle
- Pocket sized
- Lightweight and compact
- All drives will accept long screws
- Individually bagged with card & hanging tab

**LW601**



### ESP Utility Knife

Sturdy construction, heavy-duty, low price.

**UK10**



### ESP Rubber Stretch Straps

The specially compounded rubber resists sun and weather to last indefinitely. Tensile strength to 50 pounds. Made In the USA Available in 10", 15", 21", and 31".

**RS10, RS15, RS21, or RS31**



### ESP Dominator Pry Bars

These pry bars separate themselves from the competition by their integrated hardened carbon steel core which runs the entire length of the tool. The end is capped to cushion hammer impact and they carry limited lifetime warranties. Available in 13", 31".

**PRY13, PRY31**





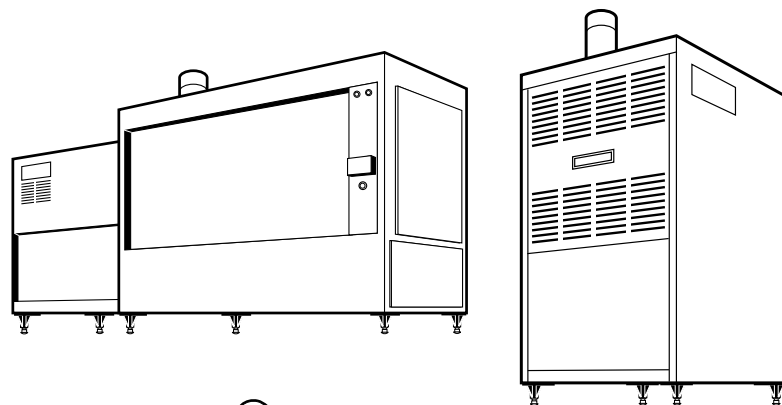
### Easy Levelers

Revolutionary furnace leveling system created for the perfectionist. Four sturdy bolt-adjusted leg extensions supplied with mounting materials. Simply turn the lag bolted insert clockwise or counter clockwise to raise or lower each corner of the furnace. Supports up to 400 lbs Adjustment from 2 3/4" - 4" Height.

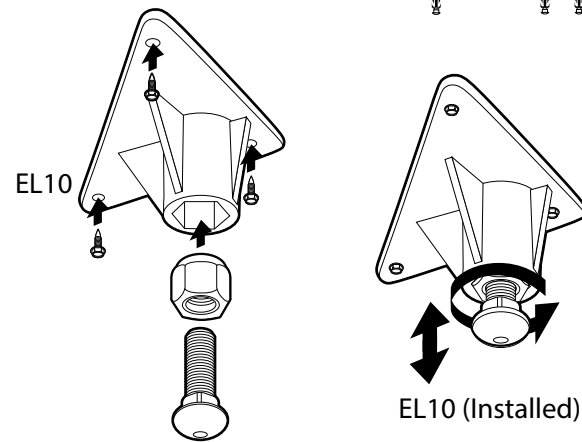
Free display, holds eight packages.

Patent #7,137,604

EL10



EL10 Display



### Pocket Caliper

Stainless steel 3" caliper, 1/32" and millimeters, inside, outside graduations.

132ME



### Utility Vernier Caliper

0-5" range, mm and 16th graduations.

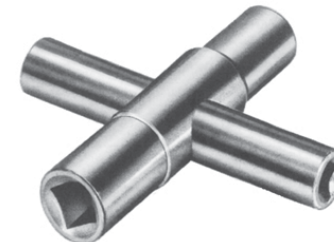
722  
For 0-4" Stainless order 729



### Four Way Key

Fits stopcocks, sillcocks, and valves. Sizes are 1/4" to 9/32" and 5/16" to 11/32" Precision machined plated steel.

FW1701



### TXV Power Head Element Wrench

This handy wrench fits most Sporlan and Alco power head elements for easy removal and replacement.

PH10

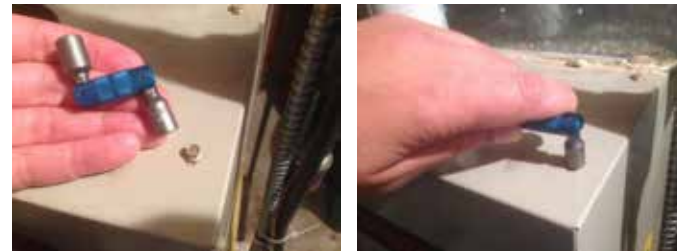




**Z-Tool**

This handy dual nut driver has 1/4" and 5/16" pivoting sockets to reach the most difficult angles, and tightest screw locations.

**ZT10**  
ZT10-Bulk 25/Box

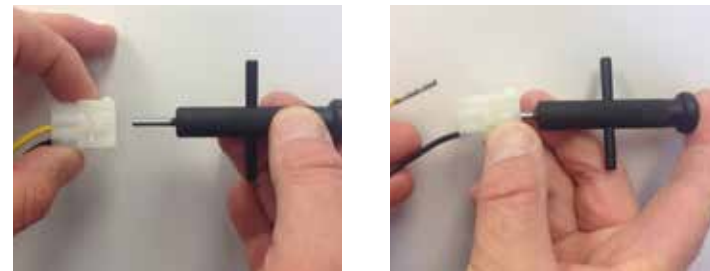


**Pin Extractor Tool**



This handy tool will help to pop out Molex and Amp Electrical pins in igniter and other controls.

**PE44**



**Core Gripper**



Just push in the base to extend four gripper fingers and the spring release grabs the core so that it can be turned out and removed.

**CGR10**



**Sight Glass Tool**

The ESP sight glass tool slides easily into the notches of a scroll compressor sight glass, and easily helps to extract the sight glass with a crescent or socket wrench. 1" diameter.

**SGRT**



**Rhino Tank and Compressor Tote**

The Rhino tank and compressor tote allows the user to easily pick up nitrogen, CO2, and oxygen 20 and 40 lb cylinders, along with all hermetic compressors with lift tabs.

6/box

**RH10**





**ESP Flowmeters**

Ground water-sourced, heat pump applications. This high quality polycarbonate bodied flowmeter has 3/4" MPT nylon threaded connections and 1-10 GPM capacity.

- LDF357N- 3/4" MPT 2-10 GPM**
- LDF359N-3/4" MPT 2-18**
- C-1K55-A020 King Glass/Brass Liebert Replacement 1" MPT**



**Pro-Line 1" NPT-Solenoid Valve**

Normally closed 24V or 115V slow closing 150 psi solenoid valve for use on ground water source heat pumps. Maximum operating temperature 110°F.

**HP215 or HP510-115**



**ESP BronzeY-Strainers**

Used primarily for all water applications. Working pressure: 300psi W.O.G.; 150psi W.S.P. 80 Mesh screen, 1/4" thru 3/4" sizes.

**BY12, BY34**



**ESP Plastic Y-Strainers**

Used extensively in the ice machine and water cooler industries. Size 3/8" Manitowoc part #136067-9; Scotsman part # 16-0162-00.

**PY38**



**Line Drive**

This 3/4" x 3/4" slip on condensate pan blow out valve is a patented one of a kind item. No more buying little cartridges and trying to find the end of drain lines in the dark. Simply install this unit exiting the evaporator in your residential or commercial AC system, and hook up a 1/4" charging hose to the valve and the other end to your CO2 or Nitrogen tank. Turn the valve one way, and blow out the line. Turn it the other way, and remove any blockage inside the coil.

**LD10 (8 per box)**



# KITZ

## Class 125 Brass Gate Valve

Code No.07 (Fig. AKFS)



Forged Brass Gate Valves have screwed-in-bonnet, non-rising stem, solid wedge disc, integral seat, NPT threaded or solder joint ends  
 \*\* high tensile strength. Non-rising stem permits installation where head space is limited.

Dimensions	inch					
Size	3/8	1/2	3/4	1	1-1/4	
L (IPS)	1.50	1.65	1.85	1.97	2.36	
L (C x C)	—	1.77	2.36	2.76	3.03	
H	2.95	2.95	3.39	3.82	4.61	
D	1.97	1.97	2.17	2.36	2.76	

Code No.08 (Fig. CFS)



07-038, 07-012, 07-034, 07-100, 07-114

KITZ Code No. 07/08



# KITZ

## Class 150 Y-Pattern Strainer

Code No.15 (Fig. AKYU)



Y-Pattern Strainers provide protection for equipment having internal moving parts. Has blow-out outlet for easy clean-out, threaded cap for easy removal. Bronze body and Type 304 stainless steel screen. NPT threaded ends or solder joint ends.

Working Pressure	Test Pressure
300 psi. W.O.G. non-shock	Shell .....450 psi. hydrostatic
150 psi. W.S.P. saturated	

Dimensions	inch					
Size	1/4	3/8	1/2	3/4	1	1-1/4
L (IPS)	2.76	2.76	3.15	3.94	4.53	5.31
L (C x C)	—	—	3.15	4.13	4.92	5.71
H	1.73	1.73	1.93	2.28	2.80	3.19
Drain Port	1/4	1/4	1/4	1/4	1/2	1/2
A	1.41	1.41	1.57	1.96	2.52	2.95
B	0.59	0.59	0.70	0.90	1.14	1.42

Code No.16 (Fig. CYU)



15-014, 15-038, 15-012, 15-034, 15-100, 15-114

KITZ Code No. 15/16

# KITZ

## 600 WOG "Full Port" Brass Ball Valves

Code No.58 (Fig. AKZA)



Full Port Brass Ball Valves are two-piece construction with a chrome plated brass ball, blowout-proof stem, PTFE seats and double 'O' ring stem seal. Quick quarter-turn for easy operation. For use in plumbing and light industry applications. Standard NPT end connection.

Working Pressure	Test Pressure
600 psi W.O.G.	Shell ..... 900 psi. hydrostatic
150 psi A 300° F	Seat ..... 80 psi. air

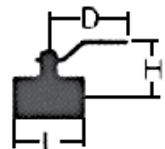
Dimensions	inch					
Size	1/4	3/8	1/2	3/4	1	1-1/4
Bore	0.39	0.39	0.59	0.79	0.98	1.26
L (IPS)	1.57	1.61	1.93	2.20	2.56	2.99
L (C x C)	1.73	1.81	2.13	2.87	3.47	3.94
H	1.42	1.42	1.54	1.73	1.93	2.17
D	3.15	3.15	3.15	5.12	5.12	5.12

Code No.59 (Fig. CZA)



58-014, 58-038, 58-012, 58-034, 58-100, 58-114

KITZ Code No. 58/59



Code No.60 (Fig. NO. AKGZH)  
Threaded Ends



## Gas Ball Valve

- Manual operated gas shut-off valves for appliances, appliance connector valves and hose end valves. The following agencies have certified these valves: AGA, CGA, ANSI, and ASME
- Forged Body Construction for Greater Strength
- Blowout-Proof Stem Design
- High Cycle Life PTFE Seats and NBR Seal
- Quarter Turn Open/Close Operation
- Positive Shutoff with Zero Leakage
- Rated for temperatures from -20° F to 125° F at pressures from 1/2 – 125 psi.

SPECIFICATIONS:  
Certified to AGA, CGA, ANSI and ASME

Wing Operator - KITZ Code # 60 (AKGZH)  
Square Operator - KITZ Code # 60 SQ (AKGZHSQ)

60-012 or 60-034



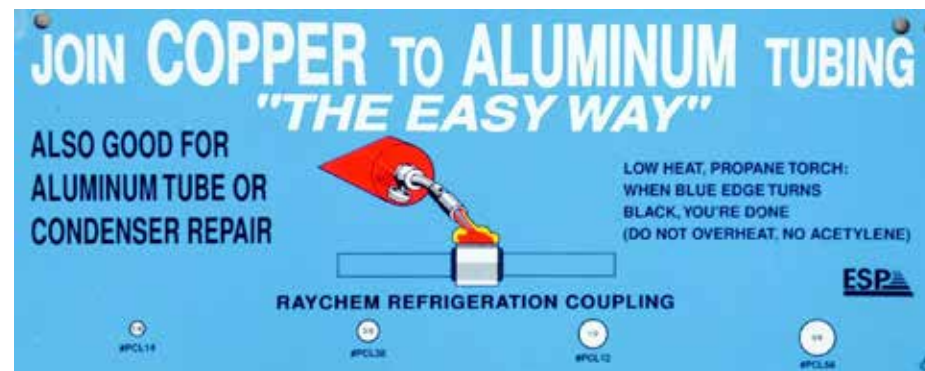
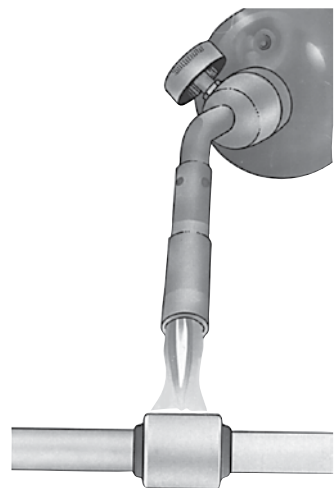
**Raychem Aluminum to Copper Refrigerant Coupling**

Raychem tube couplings, repair leaks in aluminum or copper/aluminum joints. When heated with a propane torch, this one-piece coupling shrinks to join and seal refrigerant tubing. Unlike traditional joining methods such as welding and brazing, where joint quality depends on preparation and technique, Raychem couplings create strong, reliable joints time after time. Joining copper or aluminum in hard-to-reach places. Trouble-free reliability. One-piece construction eliminates the problem of parts that vibrate loose after assembly. And Raychem tube couplings are stronger than the tubes they connect. They withstand pressures up to the burst pressure of the tubing, pullout forces in excess of the typical yield strength of the tubing, and vibration fatigue up to the failure of the tubing.

Easy to install. The only tool required is a propane torch. No flux, no solder, no wrenches are needed. Merely slip the coupling over the tube ends, and heat. A colored band at either end changes color to signal when the installation is complete. (This takes approximately 20 seconds for a 3/8" coupling.) And, because there is no residue, there is no need to flush the tubing. Now it is fast and easy to make these permanent, reliable joints even in hard-to-reach places.

Blister carded. Available in 1/4", 3/8", 1/2", and 5/8"

**PCL 1/4, PCL 3/8, PCL 1/2, and PCL 5/8**  
**PCL RAYCHEM DISPLAY, N/C.**

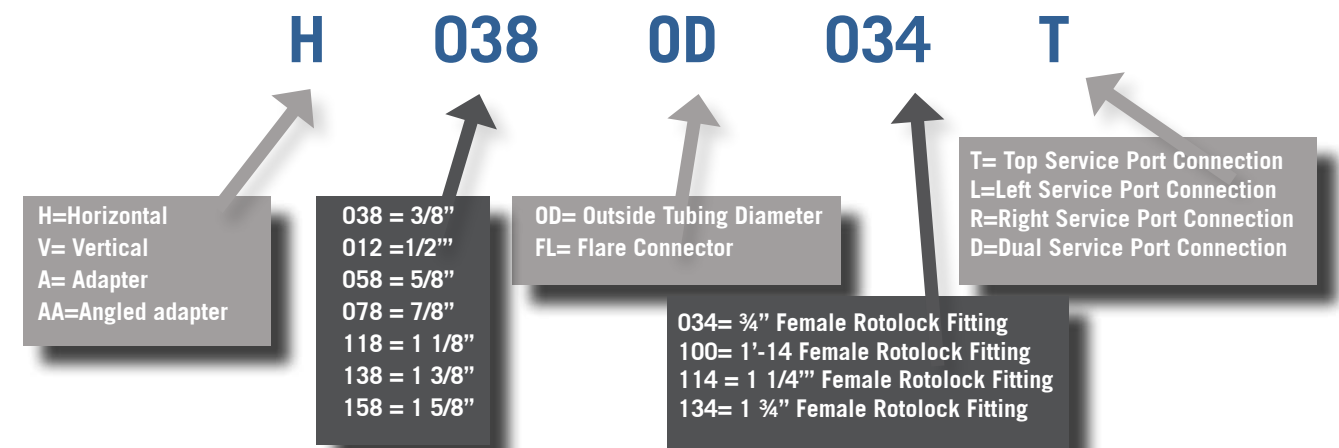


"FREE DISPLAY"

**ROTOLOCK VALVES, ADAPTERS, and ACCESSORIES**

ESP offers the fullest line of rotolock valves, adapters, and accessories and a complete cross reference to most Copeland and Alfa/Standard Refrigeration parts. All valves and adapters are available with or without O-ring. If you purchase without, the TR-10 Teflon O-Ring kit contains three each of ALL sizes.

**Part Number Key: E.g. H 038 OD 034 T**



**Service Port Connection Orientation**

\*Note Service Port connection left and right orientation determined by placing the valve with stem up, rotolock fitting facing up. This is a dual connection, with a upper left and lower right service port.



## HORIZONTAL ROTOLock VALVES



**HORIZONTAL ROTOLock**

ESP #	ESP WITH O-RING	COPELAND	ALFA-LAVAL #
<b>TOP PORT</b>			
H038FL034T	H038FL034T-O		H03FT
H038OD034T	H038OD034T-O		
H012FL034T	H012FL034T-O		
H012FL100T	H012FL100T-O		H04FT
H058FL100T	H058FL100T-O		HOSFT
H0120D100T	H0120D100T-O		H04ST
H0580D100T	H0580D100T-O		HOSST
H034OD114L	H034OD114T-O		
H0780D114T	H0780D114T-O		H07ST
H1180D114T	H1180D114T-O		H09ST
H1180D134T	H1180D134T-O		H11ST
	H138OD134T-O	998-0510-66	
<b>LEFT PORT</b>			
H038FL034L	H038FL034L-O		H03FL
H038FL100L	H038FL100L-O	998-0510-58	
H012FL100L	H012FL100L-O		H04FL
H058FL100L	H058FL100L-O		HOSFL
H0120D100L	H0120D100L-O		H04SL
HOS80D100L	HOS80D100L-O		HOSSL
H034OD114L	H034OD114L-O	998-0510-38	
H0780D114L	H0780D114L-O		H07SL
H1180D114L	H1180D114L-O	998-0510-51	H09SL
H1180D134L	H1180D134L-O		H11SL
	H158OD214L-O	998-0510-68	

## HORIZONTAL ROTOLock VALVES



ALFA-LAVAL #	ESP #	ESP WITH O-RING	COPELAND
<b>DUAL PORT</b>			
	H038OD100D	H038OD100D-O	998-0510-97
	H038FL100D	H038FL100D-O	
	H038FL114D	H038FL114D-O	998-0510-42
	H038OD114D	H038OD114D-O	998-0510-43
	H012FL034D	H012FL034D-O	
	H012FL100D	H012FL100D-O	998-0510-40
	H0120D100D	H0120D100D-O	998-0510-98
	H0120D114D	H0120D114D-O	998-0510-44
	H058FL100D	H058FL100D-O	998-0510-41
	H058OD114D	H058OD114D-O	998-0510-45
	H034OD114D	H034OD114D-O	
	H078OD100D	H078OD100D-O	998-0510-89 & 52
<b>RIGHT PORT</b>			
H03FR	H038FL034R	H038FL034R-O	
H04FR	H012FL100R	H012FL100R-O	
HOSFR	H058FL100R	H058FL100R-O	998-0510-56
H04SR	H0120 D100	H0120 D100-O	
H05SR	H058OD100R	H058OD100R-O	
		H078OD100R-O	998-0510-52
H07SR	H078OD114R	H078OD114R-O	998-0510-39 & 90
	H078OD134R	H078OD134R-O	
H09ST	H118OD114R	H118OD114R-O	998-0510-99
		H118OD134R-O	998-0510-02
	H138OD134R	H138OD134R-O	998-0510-46
		H158OD134R-O	998-0510-66

**VERTICAL ROTOLOCK VALVES**



**VERTICAL ROTOLOCK**

ALFA-LAVAL #	ESP #	ESP WITH O-RING	COPELAND
<b>TOP PORT</b>			
V03FT	V038FL100T	V038FL100T-O	998-0510-58
V04FT			
V05FT			
V04ST	V0120D100T	V0120D100T-O	
VO5ST	V0580D100T	V0580D100T-O	
V07ST	V0780D114T	V0780D114T-O	
V09ST	V1180D114T	V1180D114T-O	
V11ST	V138D134T	V138OD134T-O	
<b>LEFT PORT</b>			
V03FL			
V04FL			
VO5FL			
V04SL	V0120D100L	V0120D100L-O	
VO5SL	VOS80D100L	V0580D100L-O	
V07SL	V0780D114L	V0780D114L-O	
V09SL	V1180D114L	V1180D114L-O	
V11SL	V130D134L	V130D134L-O	
H09SL	H1180D114L	H1180D114L-O	998-0510-51
H11SL	H1180D134L	H1180D134L-O	
		H158OD214L-O	998-0510-68
<b>DUAL</b>			
	V0120D100D	V0120D100D-O	
	V038OD034D	V038OD034D-O	
	V058OD100D	V058OD100D-O	
	V078OD114D	V078OD114D-O	
	V118OD114D	V118OD114D-O	
<b>RIGHT PORT</b>			
V03FR			
V04FR			
VO5FR			
V04SR	V0120D100R	V0120D100R-O	
VO5SR	V0580D100R	V0580D100R-O	
V07SR	V0780D114R	V0780D114R-O	
V09SR	V1180D114R	V1180D114R-O	

**PAD VALVES**



**Two Bolt Flare Pad Valve**



**Two Bolt Sweat Pad Valve**

ESP #	ESP WITH O-RING	COPELAND	ALFA-LAVAL #
<b>TWO BOLT PAD VALVE</b>			
PV012FLLH	2B12FL158L	998-0510-28	
PV58FLLH	2B58FL158L	998-0510-29	
PV02FLLH	2B12FL158R	998-0510-30	
PV058SWLH	2B58FL158R	998-0510-31	
PV038FLLH	2B38FL158L	998-0510-32	
PV014FLLH	2B14FL158L	998-0510-33	
PV058SWRH	2B58OD158R	998-0510-34	
PV038SWRH	2B38OD158R	998-0510-35	
PV038SWLH	2B38OD158L	998-0510-36	

**SIGHT GLASS**



ESP #	ESP WITH O-RING	COPELAND	ALFA-LAVAL #
<b>SIGHT GLASS</b>			
SG12			SG12
SG34			
SG10			
SG114			
SG20			
3/4"			



Angle Adapter Steel



Male Adapter Brass



Male Adapter Steel



Straight Adapter



Pad Adapter

ESP #	ESP WITH O-RING	COPELAND	AALFA-LAVAL #
<b>STRAIGHT ADAPTER</b>			
A0380D114	A0380D114-O		SA03
A0120D114	A0120D114-O		SA04
	A0120D100-O	998-0034-18	
	A0580D100-O	998-0034-17	
A0580D114	A0580D114-O		SA05
	A0340D114-O	998-0034-07	
A078D114	A078D114-O	998-0034-08	SA07
	A1180D114-O	998-0034-09	
A1380D134	A1380D134-O		SA11
	A1180D134-O	998-0034-10	
	A1380D134-O	998-0034-13	
	A1380D214-O	998-0510-11	
	A1580D214-O	998-0519-12	

ESP #	ESP WITH O-RING	COPELAND	ALFA-LAVAL #
<b>MALE STEEL ADAPTER</b>			
	MA0380S114-O	998-0034-14	
A0120D100M	MA0120S100-O	998-0034-15	
	MA0580D100-O	998-0510-16	
	MA0340D114-O	998-0034-01	
A0780D114M	MA0780D114-O	998-0034-02	
A1180D134M	MA1180D134-O		
<b>ANGLE STEEL ADAPTER</b>			
AA0380D100	AA0380D100-O		AA03
AA0120D100	AA0120D100-O		AA04
AA0580D100	AA0580D100-O		AA05
AA0780D114	AA0780D114-O		AA07
AA1180D114	AA1180D114-O		AA09
AA1380D134	AA1380D134-O		AA11
<b>MALE BRASS ADAPTER</b>			
7000-186	7000-186-O		BA03X06
7000-187	7000-187-O		BA03X08
7000-190	7000-190-O		BA04X08
N/A	N/A		BA05X08
7000-188	7000-188-O		BA07X10
7000-193	7000-193-O		BA09X10
7000-196	7000-196-O		B09X14
7000-200	7000-200-O		BA11X14

Rotolock Caps



Plastic Rotolock Caps



Steel Rotolock Caps

ESP #	COPELAND	AALFA-LAVAL #
<b>ROTOLOCK CAPS</b>		
3/4" rotalock cap, plastic (2/pk)		RC034-2
1" rotalock cap, plastic (2/pk)		RC100-2
1 1/4" rotalock cap, plastic (2/pk)		RC114-2
1 3/4" rotalock cap, steel (1/pk)		RC134-1





ESP #	COPELAND	AALFA-LAVAL #
<b>FUSIBLE PLUGS</b>		
212 -1/8"		PLUG-175
212 -5/8"		PLUG-265
281 -3/8"		PLUG-337
300 -1/2"		PLUG-300

**Brackets**

ESP #	ESP WITH O-RING	COPELAND	AALFA-LAVAL #
<b>BRACKETS</b>			
BR1			BR1
BR3			BR3
BR5			BR5
BR7			BR7
BR9			BR9
5A			5A
6A			6A
6B			6B
8B			8B
10B			10B
12B			12B
14B			14B
16B			16B

**Teflon O-Rings**

ESP #	ALFA-LAVAL #	Description
<b>TEFLON O-RINGS</b>		
TR034-6	TS-24590	3/4 rotolock o-ring 6/pack
TR100-6	TS-24591	1" rotolock o-ring 6/pack
TR114-6	TS-24592	1 1/4" rotolock o-ring 6/pack
TR134-6	TS-24593	1 3/4" rotolock o-ring 6/pack
TR10-12	TR10	3 each, 3/4, 1" 1 1/4" and 1 3/4" o-rings

**TR10-12 O-Ring**



**GASKETS**

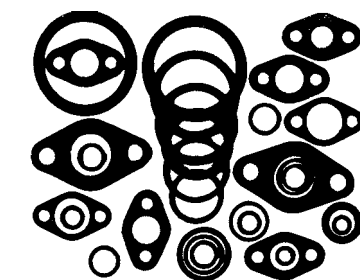


**ESP delivers o-rings, o-ring kits, valve caps & kits, rotolock pad adapters, and gaskets. Plus our gasket book**

**Finny's Gasket Book**

This array of 36 different gaskets replaces most common gaskets used today in expansion and solenoid valves and pumps. This fine gasket material Garlock replaces old gaskets on Sporlan, Penn, Alco, Jackes Evans, Parker, Mueller, Hamilton Pax, Henry and Primore for a fraction of the price. Attractive counter pad with all 36 life-size gaskets available.

**GB10**



Condenser Gasket ID

<b>GASKE111</b> 12 3/4" Dia. 12 Studs	<b>GASKE247</b> 8 5/8" Dia. 6 Studs	<b>GASKE445</b> 8 5/8" Dia. 6 Studs	<b>GASKE1471</b> 8 5/8" Dia. 12 Studs
<b>GASKE120</b> 12 3/4" Dia. 12 Studs	<b>GASKE256</b> 10 3/4" Dia. 9 Studs	<b>GASKE698A</b>	<b>GASKE1480</b> 12 3/4" Dia. 12 Studs
<b>GASKE166</b> 12 3/4" Dia. 12 Studs	<b>GASKE265</b> 10 3/4" Dia. 9 Studs	<b>GASKE698B</b>	<b>GASKE1499</b> 14" Dia. 12 Studs
<b>GASKE175</b> 6" Dia. 4 Studs	<b>GASKE337</b> 5" Dia. 4 Studs	<b>GASKE706A</b>	<b>GASKE1679</b> 19 11/16" Dia.
<b>GASKE184</b> 6" Dia. 4 Studs	<b>GASKE346</b> 5" Dia. 4 Studs	<b>GASKE706B</b>	<b>GASKE1688</b> 21 11/16" Dia.
<b>GASKE193</b> 6 5/8" Dia. 6 Studs	<b>GASKE355</b> 6 5/8" Dia. 6 Studs	<b>GASKE724A</b>	<b>1723</b> 8 5/8" Dia. 6 Studs
<b>GASKE201</b> 6 5/8" Dia. 6 Studs	<b>GASKE364</b> 6 5/8" Dia. 6 Studs	<b>GASKE724B</b>	<b>GASKE1732</b> 8 5/8" Dia. 6 Studs
<b>GASKE210</b> 8 5/8" Dia. 6 Studs	<b>GASKE373</b> 10 3/4" Dia. 9 Studs	<b>GASKE1057</b> 6 5/8" Dia. 6 Studs	<b>GASKE1741</b> 10 3/4" Dia. 9 Studs
<b>GASKE229</b> 8 5/8" Dia. 6 Studs	<b>GASKE382</b> 8 5/8" Dia. 6 Studs	<b>GASKE1066</b> 6 5/8" Dia. 6 Studs	<b>GASKE1750</b> 10 3/4" Dia. 9 Studs
<b>GASKE238</b> 8 5/8" Dia. 6 Studs	<b>GASKE436</b> 6 5/8" Dia. 6 Studs	<b>GASKE1462</b> 10 3/4" Dia. 12 Studs	<b>GASKE2074</b>  tube-in-tube gasket No picture available

Condenser Gasket ID

<b>GASKE2083</b> tube-in-tube gasket No picture available	<b>GASKE2584</b> 8 5/8" Dia. 6 Studs	<b>GASKE3170</b> 6 5/8" Dia. 6 Studs	<b>GASKE2191</b> 2 9/16" x 15 3/4" Dia.
<b>GASKE2092</b> 1 3/16" x 9 1/16"	<b>GASKE2591</b> 10 3/4" Dia. 9 Studs	<b>GASKE3718</b> 6 5/8" Dia. 6 Studs	<b>2GASKE977</b> 8 5/8" Dia. 6 Studs
<b>GASKE2100</b> 1 3/16" x 6 5/16"	<b>GASKE2953</b> 8 5/8" Dia. 6 Studs	<b>GASKE5057</b> 1 3/16" x 9 1/16"	<b>GASKE2209</b> 2 9/16" x 15 3/4" Dia.
<b>GASKE2984</b> 10 3/4" Dia. 9 Studs	<b>GASKE2254</b> 14 11/16" Dia.	<b>GASKE3101</b> 6 5/8" Dia. 6 Studs	<b>GASKE2263</b> 16 11/16" Dia.
<b>GASKE3118</b> 8 5/8" Dia. 6 Studs	<b>GASKE2290</b> 25" Dia.	<b>GASKE3149</b> 6" Dia. 4 Studs	<b>GASKE2461</b> 3 1/4" x 20 1/4" Dia.
<b>GASKE3156</b> 5" Dia. 4 Studs	<b>GASKE2470</b> 3 1/4" x 13 1/2" Dia.	<b>GASKE3163</b> 6" Dia. 4 Studs	

Endplates

ESP #	ALFA-LAVAL #
<b>ENDPLATES ALFA LAVAL REPLACEMENTS</b>	
ENDPL21	ENDPL21
ENDPL30	ENDPL30
ENDPL76	ENDPL76
ENDPL120	ENDPL120
ENDPL176	ENDPL176
ENDPL184	ENDPL184
ENDPL193	ENDPL193

ESP #	ALFA-LAVAL #
<b>ENDPLATES ALFA LAVAL REPLACEMENTS</b>	
ENDPL238	ENDPL238
ENDPL247	ENDPL247
ENDPL706	ENDPL706
ENDPL2245	ENDPL2245
ENDPL3064	ENDPL3064
ENDPL3482	ENDPL3482
ENDPL4047	ENDPL4047

ESP #	ALFA-LAVAL #
<b>ENDPLATES ALFA LAVAL REPLACEMENTS</b>	
ENDPL4180	ENDPL4180
ENDPL4304	ENDPL4304
ENDPL5583	ENDPL5583
ENDPL6412	ENDPL6412
ENDPL6900	ENDPL6900



### ESP Brass Compression Fittings

ESP brass compression fittings can be used with copper, aluminum, brass, and plastic tube. Compatible with a wide variety of liquids and gases such as water, air, and fuels. Listed with U.L. for flammable liquid. Manufactured for low and medium pressure tubing connection work where excessive vibration or tube movement is not involved. Not recommended for application using gaseous media.

Working pressure ranges:

PSI	Tube OD	Tube Wall (inches)
400	1/8	.030
400	3/16	.030
300	1/4	.030
300	5/16	.032
200	3/8	.032
200	1/2	.035

Available in most configurations from 1/8" thru 5/8". Sleeves, nuts, unions, tees, adapters, elbows and other specials available on request.



### Heresite Touch-Up Spray

This VR-554T air dry phenolic heresite spray is the highest quality metal protective coating sold in the U.S. today. Can be used to protect any surface subjected to corrosive atmospheres, 12 oz. Can.

VR-554



### Krylon Rust Preventative Undercoat Spray

Used as drain pan protectant and premium rust preventer spray. Thick, black, rubberized. 12 oz. Can.

1335

### Krylon Paint

Now offers a full line of Krylon Industrial, Maintenance & Touch Up Spray, High Heat Spray, Primers, Clear Acrylic, and Epoxy Appliance Spray Paints. Six per case, 16 oz. can size, 12 oz. net weight.



- 1301 Crystal Clear 12 oz. 6/cs
- 1324 All Purpose Silicone 12 oz. 6/cs
- 1358 All-Purpose Gray Primer 12 oz. 6/cs
- 1401 Bright Silver 12 oz. 6/cs
- 1501 Glossy White 12 oz. 6/cs
- 1502 Flat White 12 oz. 6/cs
- 1505 High Heat White 12 oz. 6/cs
- 1601 Glossy Black 12 oz. 6/cs
- 1602 Ultra-Flat Black 12 oz. 6/c
- 1605 Dove Gray 12 oz. 6/cs
- 1608 Smoke Gray 12 oz. 6/cs
- 1613 Semi-Flat Black 12 oz. 6/cs
- 1614 High Heat Black 12 oz. 6/cs
- 1631 Automotive Black Lacquer 12 oz. 6/cs
- 1813 Safety Yellow 12 oz. 6/cs
- 1901 Regal Blue 12 oz. 6/cs
- 1929 Plum 12 oz. 6/cs
- 2001 Hunter Green 12 oz. 6/cs
- 2012 Clover Green 12 oz. 6/cs
- 2013 G.M. Alpine Green 12 oz. 6/cs
- 2015 Teal Green 12 oz. 6/cs
- 2116 Scarlet 12 oz. 6/cs
- 2410 Popsicle Orange 12 oz. 6/cs
- 2414 Mauve 12 oz. 6/cs
- 2504 Desert Beige 12 oz. 6/cs
- 3201 Epoxy Appliance, White 12oz. 6/cs
- 3202 Epoxy Appliance, Almond 12 oz. 6/cs

*Rough Touch*  
**SCRUBS**



**Scrubs-In-A-Bucket**

Scrubs-in-a-bucket provide fast, easy and effective hand cleaning with portability. Pumice performance without gritty residue. Can be used with or without rinse. Removes grease, graphite, and even tar 6 per box.

**SB72. 72 sheets, 10-1/4" x 12-1/4"**  
**SCRUBS DISPLAY AVAILABLE AT NO CHARGE**  
**SB72**



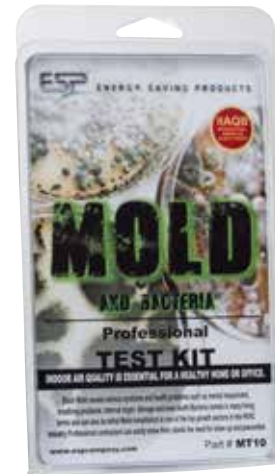
**SB30**  
**30 sheet, tool-box size**



**ESP Blue-Seamed Wiping Cloths**

Heavy-duty blue seamed industrial cotton for any cleanup job. Available in 5 or 10lb. boxes.

**WC05 (5lb.) or WC10 (10lb.)**



**ESP Mold Test Kit**

This kit contains two pretreated petri dishes, and two vials of growth medium for the professional contractor to easily test for the presence of mold or common types of bacteria, in a customer's home. Easy to use directions, for duct testing, or IAQ testing.

Includes prepaid envelope for lab analysis. 2 KITS

**MT10**



**The Sure Temp Product Thermometer**

Is the least expensive device manufactured today to show exact product temperature in a case, reach-in or walk-in. The sensing probe itself is immersed in a glycol filled well that reacts to changes in ambient at the same rate as stored product. This assures the technician that he is reading internal product temperature and not surrounding air temperature.

The Sure Temp Thermometer is NSF certified and meets the criteria of Food Service.

Operating: Range is -40 degrees F to +180 degrees F. Dimensions are 1-5/15" X 6-7/8". Each unit comes with a bracket and screw for easy attachment to a rack or a panel. Each 10 unit case ships in an attractive counter display.

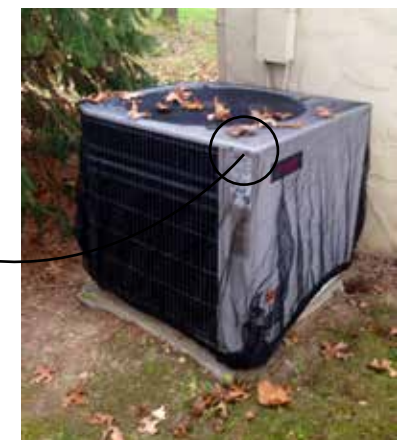
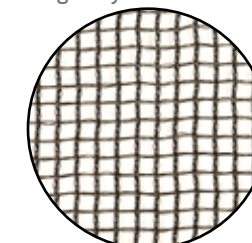
**ST1236-31, (10/cs).**



**AC Leaf & Debris Protector**

This adjustable AC & Leaf Debris Protector, accomodates condensing unit sizes up to 4'x4' and covers all new high Seer residential units. It secures to the unit with heavy-duty elastic bands and makes spring cleaning easy 1/4" x1/4" openings.

**ALDP**





### Universal Humidifier Solenoid

This universal solenoid can replace common units such as Aprilaire #4040, General's #990-53, Honeywell's #32001639-002, and the Skuttle #A01-0814-148 in 24V versions. The UHS will soon become an essential truck stock item. All appropriate fittings are included in the kit with a universal bracket. Flow can easily be reversed by removing two screws, turning the solenoid 180 degrees, and replacing the screws. 110V version is also available.

**UHS24 or UHS120**



### UHS 99 Universal Humidifier Solenoid

UHS99

The UHS 99 can replace common units such as Aprilaire #4040, General's #990-53, Honeywell's #32001639-002, and the Skuttle #A01-0814-148 in 24V versions.

**UHS99**

### Best Air Pro Water Pads



Best Air is the #1 selling humidifier water pad in the USA. These pads maximize humidity output and out perform all other pads. Our patented drip pattern, and 100% clay covered media is the difference. Replaces Aprilaire, Honeywell, Lasko, Hamilton, and Lennox.

**710, 712, 714, G13PR**



### Best Air Pro White Water Pads

These expanded paper pads with aluminum extrusion backing are the same size as our standard metal & clay pads above, but with 50% more water holding capacity.

**A10WPR, A12WPR, A35WPR**



### ESP Smoke Emitters

Supplied in clean-to-handle cartridges and leave no visible residue. Smoke produced is easy to see and photograph if required. Oil-free smoke eliminates possible damage to decorations or equipment. Sizes are 45, 90, and 150 seconds 10/Box.

**SE45, SE90, SE150**

4 Minute and 8 minute smoke emitters

**SE004 and SE008**



### Smoke Check



SmokeCheck™, Smoke Detector Tester puts both photoelectric and ionization smoke detectors through their paces to ensure that the circuitry, alarm and power is functioning and that they are actively sampling the air for any hint of a fire. Our patented formulation simulates the entire range of fire conditions giving you the confidence of knowing your fire alarm system will respond promptly to all fire conditions. This product is approved for testing smoke detector function per NFPA 72 par. 8-2.4.1 when used as directed.

Our SmokeCheck™, Smoke Detector Tester does not have HFC or CFC. Our products do not damage the Ozone layer and do not contribute to Global Warming. SmokeCheck™ has always been environmentally friendly. We did not change our products to comply with new codes or protocols. They were originally designed to be environmentally friendly. UL & ULC Listed, NFPA 72 Compliant, Safe on sensors.

**SDT-25**





**Master Heat Gun**

Heavy-duty industrial quality heat gun with temperature and power ratings of 750° F (399°C) and 1680 watts (120V). The airflow rating is 23 CFM at 3,000 FPM. A universal motor, die cast aluminum housing, reinforced mica-insulated ceramic heating element, and externally replaceable carbon brushes make the Master Heat Gun a rugged, reliable source of flameless heat whether you're working with freezer coils, plastic laminates, circuit boards, PVC, fiberglass, or heat-shrinkable materials.

HG501A



**ECOHEAT™ Heat Gun**

An economical, low cost, entry level, multi-use heat gun. Perfect for industrial and commercial applications.

Features & Benefits:

- Two heat settings 500° and 1000°F, 120V, 10 Amps, 1200 Watts
- Lightweight (1 lb.), easy to hold at any angle for long periods
- Built-in hand guard, protects hands and fingers
- 3-Wire grounded cordset
- UL and CIL listed
- Thermoplastic case, for high impact durability
- Built-in stand

EC-100



**Flame Guardian™**

This unique non-asbestos flame-gard system protects wood, painted or metal surfaces from the heat and flame of a torch. This 9-1/2" x 12-1/2" pad with aluminum backing can be formed to any application.

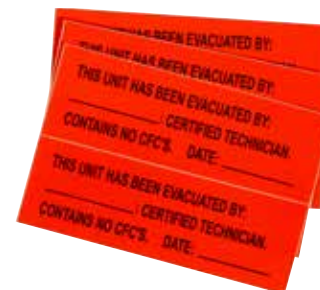
FG12



**Reusable Heat Blocker**

Reusable heat trap in a can. Completely stops heat down ferrous or non-ferrous pipe. Easily molds to any shape. Removes quickly & cleanly after each application. No drip or mess. Good for 100 jobs. 12 oz. Jar.

HB34



**ESP Unit Disposal Labels**

6 labels per packet, Bright orange.

UD12

UNIT DISPOSAL LABELS (Package Contains 6 Labels)	
THIS UNIT HAS BEEN EVACUATED BY:	:CERTIFIED TECHNICIAN.
CONTAINS NO CFC'S. DATE:	
THIS UNIT HAS BEEN EVACUATED BY:	:CERTIFIED TECHNICIAN.
CONTAINS NO CFC'S. DATE:	
THIS UNIT HAS BEEN EVACUATED BY:	:CERTIFIED TECHNICIAN.
CONTAINS NO CFC'S. DATE:	



**ESP Wheel Deal**

Handy pocket tool used to adjust 3/16" and 1/8" expansion valves or raise manual lift stems on solenoid valves.

WD10



**Expanding Hose**

The new ESP expanding hose is light weight, and made with durable brass fittings (with shut off valve) along with a latex core for long life. This hose takes up very little space, and stores in a neat plastic can. 25 foot, 5/8" diameter without pressure; and expands to 50' when water pressure is allowed to flow. Inexpensive, and great for the technician's crowded truck. Also on page 51.

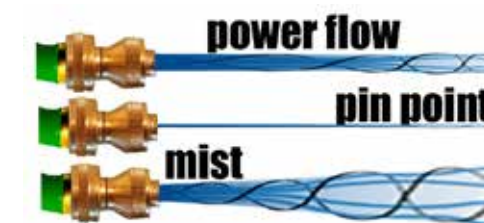
XH10



**Bulls Eye Nozzle**

This carded adjustable hose nozzle, sprays a fine stream up to a solid heavy blast of water. Made of brass and stainless steel bearings.

810-C



# THERMO PLUG

FREEZE PROTECTION THERMOSTAT



## Thermo Plug

The Thermo Plug is a dual socketed temperature activated, single set point thermostat. Great for heat tapes, electric heaters, sump and tower heaters. Available in 35F and 50F.

### TP35 and TP50

#### Features and Benefits

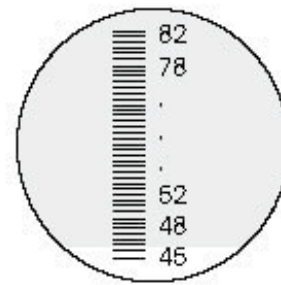
- Saves Energy - only operates when necessary.
- Red Power Indicator Light illuminates when power is on.
- Easy setup. The thermostat plugs into any standard outlet. No special wiring required. 120Volt 60Hz, Combined Maximum 15 amps and 1800 Watts.
- For indoor use only in residential or commercial applications.
- Follow the Heater Manufacturer Instructions before connecting the device.
- TP35 Turns a heater or other device on at approximately 35F (4C) and off at 45F when ambient temperature rises. TP50 turns on at 50F and off at 60F

### THERMO PLUG #TP35

The Thermo Plug is available in 35 F (on at 35, off at 45)

### THERMO PLUG #TP50

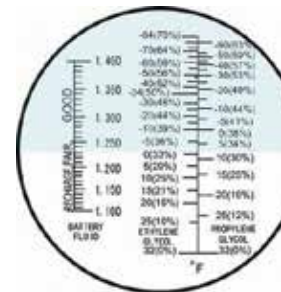
The Thermo Plug is available in 50 F (on at 50, off at 60)



## Oil Refractometer

This precise instrument is used to determine percentage of mineral oil in a refrigeration system during a POE (polyol ester) changeover. A brix scale, a refractive index, or any list of markings can be used to determine mineral oil percentage. ESP utilizes the brix scale. Copeland recommends a 5% mineral oil level as acceptable. At a 65.9 brix reading (E.S.P. Scale) or below, the residual mineral oil is at that safe level. No need to plot graphs. Easily understandable directions packed with the unit in a foam filled carrying case with oil dropper and calibration screw driver.

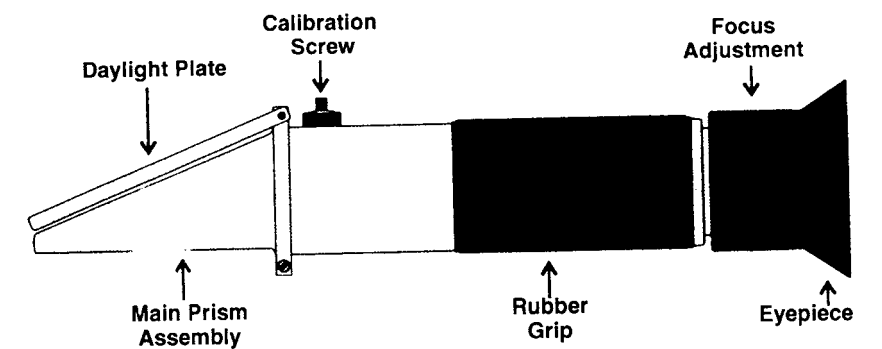
RHB-82 for POE unit or RHB-82G for our glycol unit  
RHB-82-ND BVA Oil Refractometer



## Glycol Refractometer

This instrument will give "good down to" temperatures for both ethylene and propylene glycol solutions, and an exact percentage of glycol calculation on the scale. Operates just like the oil refractometer in that the operator places a drop or two of solution on the Daylight Plate of the instrument, and then as he looks thru the eyepiece and focuses, a separation on the scale shows an accurate reading.

### RHB-82G



## ESP Industrial First Aid Kit

These 10, 25, 50 or 100 person weatherproof kits include all components listed in chart below

### Contents:

Description	#10
Adhesive Strips	16
Large Wound Dressing	—
Gauze Pads	4 (3")
Gauze Bandage, 4"	1
Eye Pads	2
Adhesive Tape, 1/2"	1
Triangular Bandage	1
Elastic Bandage	—
Antiseptic Towelettes	10
First Aid Cream Packets	—
Aspirin	10
Eye Flush, 1 oz.	(1)*
Eye Flush, 4 oz.	—
Cold Pack	0
Latex Exam Gloves	2 pr.
Scissors	1
Forceps	1
First Aid Instructions	1

**FA6060 (10 person)**



## Stat-Gard® Thermostat Protectors

Uniquely valued for their clean attractive design, competitive price, exceptional performance, and 5 year guarantee against breakage.

Stat-Gard® Thermostat Protectors offer unobstructed airflow design, easy3 step installation, tamper resistant, self-locking (no key required), space age high impact polycarbonate construction, three convenient sizes to cover most thermostats, fifteen attractive styles, mounting screws included. Available with clear or beige cover on clear, black or beige base.

**1-000 Standard**  
**3-000 Wide**



## Bussmann Fusetron



These dual element, time delay fuses afford the same excellent overload protection of low-peak fuses of motors and other type loads having temporary inrush currents such as caused by transformers and solenoids.

**FRN-R 250V and FRS-R 600V (2-1/2 - 200 A)**

Bussmann low cost FRN-R replacements are also available.

**ECNR10-100**

## Buss Fustat and Fustron Plug-In Fuses

Available in 1-1/4 thru 60 amp sizes.

**S & SL (2-30A), SC (1-60A), Part # T & TL (1-1/4-30A)**



## Bussmann Limitron

U.L. listed for branch circuit protection, motor control circuits, lighting ballasts, and control transformers. Grooved ferrule permits mounting in rejection type fuseholders as well as standard non-rejection type.

**KTK-R (600V) (1-30A)**



## Bussmann Glass and Specialty Fuses

ESP now makes these glass and specialty Buss fuses available to the diversified wholesaler.

**ABC 1-30; AGX 1-50; AGC 1/2 - 30; GLQ 3-10; C2 -2-1/2; GMF 1-5; or No. 263-R; MDL 1-30**





**Bussmann Fuse Holders**

These four Bussmann fuse holders are now available for your HVAC needs.

HLR, and HRK



**Bussmann Fuse Pullers**

The safest, non-conductive tools used to remove fuse. Always remove power from fuse circuit before removing fuse.

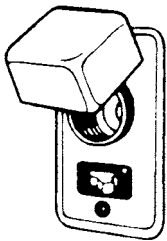
FP-2 for 13/32" to 13/16 dia. fuses  
FP-3 for 1" to 1-3/4" dia. fuses



**Bussmann fused outlets, switches and receptacles**

Also well stocked in our warehouse.

SSU (switch)  
SSY (fused receptacle)



**Bussmann Blade type fuses**

For P.C. board applications. Fast acting, 36V, UL recognized 3-40 A

ATC 1 through ATC 40



**Transition Terminals**

To be used when control connectors don't match wire connections during replacements.

- Transition Terminals from .250 Female to .187 Male, and .187 Female to .250 Male
- 5 Each



TT10



**Tool Light FlashLight**

This unique tool light slips onto the shaft of any screwdriver, 3/16"-7/16" lights up the work area with three LED. Just turn the grooved edge clockwise to turn on and off. Three magnets on the back will also hold it to the inside of your toolbox, or inside of a control compartment.

12 Per display box

TLFL





**ESP Power Cords**

ESP power cords are outdoor heavy capacity electrical cords, 12 or 14 gauge, 25', 50' or 100'.

**HC14-25, 50, 100**  
**HC12-25, 50, or 100**



**ESP Power Block**

ESP Power Blocks are heavy duty, 3 outlet electrical cords. Plug three power tools or appliances into one outlet. Available in 12 or 14 gauge, 25', 50', or 100'.

**PB14-25, 50, or 100; PB12-25, 50, or 100**

ESP offers a premium quality TPE-rubber cord Power Block for extremely high and sub-zero temperatures. Available in 12 gauge with 2' cord.

**PD12-2**



**ESP Light Bulbs**

Light bulbs are now available in LED: 60W, 75W, 100W.

**RS60**  
**RS75**  
**RS100**



**ESP Acid Blaster**

This is the premium two gallon compression sprayer manufactured specifically with the AC&R contractor in mind. This sturdy unit incorporates a patented acid valve and utilizes viton gaskets which are chemical resistant. There are no metal parts that contact liquid. Unit has stainless pump rod and plate. The nozzle has adjustable spray levels. Order part # AB10. Repair kits include all gaskets and seals, part # 6-1925.

**AB10 and 6-1925**

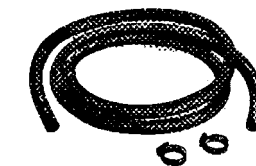


**ESP Big Shot III.**

This three gallon, acid resistant sprayer incorporates viton and polypropylene parts to minimize nuisance breakdowns and leakage. The wide angle, high delivery spray head provides quick application time and makes the coil cleaning job an easier one for your contractors.

**BS30**

**Acid Blaster and Big Shot Replacement parts**



**6-6136, AB10 or BS30 Hose Assembly**



**6-1925 Gasket Kit**

**6-7748, AB10 or BS30 Wand**



**6-6003, AB10 or BS30 Nozzle**



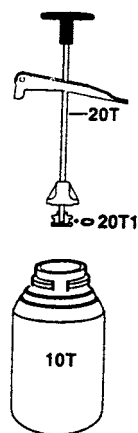
**6-4626, AB10 or BS30 Handle**



**ESP "Tommy Gun"**

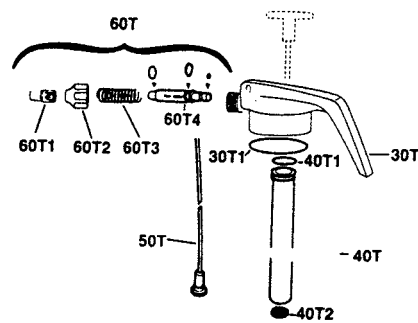
Two quart compression sprayer made out of high pressure impact polyethylene. Equipped with adjustable spray nozzle, the Tommy Gun is lightweight and easy to use.

**TG007**



**ESP “Tommy Gun” Replacement Parts**

10T - Container only, 20T - Plunger complete, 20T1 - Plunger O-ring, 30T - Pump head only, 30T1 - Container Sealing O-Ring, 40T - Pump barrel, 40T1 - Sealing O-Ring, 40T2 - Non Return Valve, 50T - Dip Tube & Filter, 60T - Nozzle & Spindle Assembly, 60T4 - Nozzle Spindle, 90T - Complete Set of O-Rings and pump Non Return Valve.



**Tommy II**

48 ounce sprayer in red, poly nozzle.

**TGII**  
3-1802 (Nozzle)



**Triple Shot Foamer**

Unique foamer tip produces a large volume of clinging foam. Comfort-grip cushioned trigger delivers 3.5 ML per stroke (3-4 times vs. our general purpose units). 32 oz. clear bottle makes product recognition an easy task.

**TS32** (12/cs)



**High Delivery Sprayer**

High delivery sprayer delivers 3.5 ML per stroke with adjustable nozzle and comfort-grip trigger. 32 oz. clear bottle to ease product recognition.

**HD32** (12/cs)



**Chem-Sprayer**

This chemical resistant sprayer holds up against harsh chemicals and solvents that cause standard trigger sprayers to fail. Adjustable nozzle, o-ring, and piston cup are made of chemical resistant viton. 32 oz. clear bottle to ease product recognition.

**CR32** (12/cs)



**ESP General Purpose Spray Bottles**

Economic design with extra long trigger for comfort. Provides average chemical resistance 24 oz. bottle.

**IS005** (12/cs)



**Expanding Hose**

The new ESP expanding hose is light weight, and made with durable brass fittings (with shut off valve) along with a latex core for long life. This hose takes up very little space, and stores in a neat plastic can. 25 foot, 5/8” diameter without pressure; and expands to 50’ when water pressure is allowed to flow. Inexpensive, and great for the technician’s crowded truck.

**XH10**

**See Page 41 for Bullseye Hose Nozzle 810C**



**Premium Braided PVC Garden Hose**

- Outstanding wear and weather resistance
- Tire cord reinforced for kink resistance, high burst pressure
- Superior year-round flexibility, coiling ease
- Heavy-duty octagonal female brass couplings
- Hoses are 3/8” or 5/8”. Available in 50 ft. length

**Z 75850 (3/8”) or GH5850 (5/8”)**

**See Page 39 for Bullseye Hose Nozzle 810C**

### ESP High Pressure Control Hose and Assembly Kit

High Pressure Control Hose and Assembly Kit

ESP offers pre-terminated high pressure control hoses to customers who want to avoid systems issues frequently caused by vibration on their pressure control connections. Standard hoses are straight flare nut x 90 degree flare nut. Other lengths and fitting configurations available by request. UV resistant jacket. 1000 psi working, 5000 psi burst. POE, alkylbenzene, and mineral oils acceptable.

**HPCH 18", 24", 36", 48", and 60" (Hose Length)**

High Pressure Control Hose Kit

This handy control hose kit includes 24' of 2MM hose, with cutter, crimper, and a wide assortment of over fifty straight, and 90 degree fittings. Also has core depressors, copper gaskets, everything a professional technician needs to make his own custom length hoses on site. No more wasted trips to the supply house. Essential to the upper echelon of contractors.

**HPHK**



2006-34



2007-41



2007-33



2006-38



2007-44



2026-14



2007-31



2001-26



2007-07



HPCH Control Hoses



HPHK Kit





**Premium Refrigeration Fitting Brushes - 900 Series  
Stainless Steel Wire**

The highest quality fitting brush, double spiral 4-ply wire construction. Solid plastic hand-fitting handle with convenient hole for hanging. Individual package.



OD REFRIGERATION SIZES				OD REFRIGERATION SIZES			
PART #	SIZE	PACK	WGT	PART #	SIZE	PACK	WGT
00924-1	1/4"	1	.04	00931-1	1-1/8"	1	.08
00925-1	3/8"	1	.08	00932-1	1-3/8"	1	.08
00926-1	1/2"	1	.08	00933-1	1-1/2"	1	.08
00927-1	5/8"	1	.08	00934-1	1-5/8"	1	.08
00928-1	3/4"	1	.08	00935-1	2-1/8"	1	.08
00929-1	7/8"	1	.08	00936-1	2-3/8"	1	.10
00930-1	1"	1	.08	00937-1	2-5/8"	1	.10

**Premium Plumbing Fitting Brushes - 900 Series  
Stainless Steel Wire**

The highest quality fitting brush, double spiral 4-ply wire construction. Solid plastic hand-fitting handle with convenient hole for hanging. Individual package.



OD REFRIGERATION SIZES				OD REFRIGERATION SIZES			
PART #	SIZE	PACK	WGT	PART #	SIZE	PACK	WGT
00943-1	1/8"	1	.04	00949-1	1"	1	.10
00944-1	1/4"	1	.08	00950-1	1-1/4"	1	.10
00945-1	3/8"	1	.08	00951-1	1-1/2"	1	.12
00946-1	1/2"	1	.10	00952-1	2"	1	.12
00947-1	5/8"	1	.10	00953-1	2-1/4"	1	.14
00948-1	3/4"	1	.110	00954-1	2-1/2"	1	.14

FITTING BRUSH SIZES & ACTUAL BRUSH DIAMETERS					
Fitting brushes are referred to by the size fitting they are designed to clean					
PLUMBING ID BRUSH AND FITTING SIZE	REFRIGERATION OD BRUSH AND FITTING SIZE	ACTUAL BRUSH DIAMETER	PLUMBING ID BRUSH AND FITTING SIZE	REFRIGERATION OD BRUSH AND FITTING SIZE	ACTUAL BRUSH DIAMETER
1/8"	1/4"	9/32"	1"	1-1/8"	1-3/16"
1/4"	3/8"	7/16"	1-1/4"	1-3/8"	1-7/16"
3/8"	1/2"	9/16"	1-1/2"	1-5/8"	1-3/4"
1/2"	5/8"	11/16"	2"	2-1/8"	2-1/4"
5/8"	3/4"	13/16"	2-1/4"	2-3/8"	2-1/2"
3/4"	7/8"	15/16"	2-1/2"	2-5/8"	2-3/4"



**2-IN-1 TOOL**



A combination tool that fits your hand comfortably and really works. One end cleans the fitting; the other cleans the tub.

PART #	PLBG. ID SIZE	REFRIG. OD SIZE	PACK	WEIGHT
00996-12	1/2"	5/8"	12	1.44
00998-12	3/4"	7/8"	12	1.44
00996-100	1/2"	5/8"	100	12
00998-100	3/4"	7/8"	100	12

**Outside Tube Cleaning Brush**



Tough molded plastic holder with comfortable sure grip design and high carbon steel bristles. Packed 6 per box.

PART #	PLBG. ID SIZE	REFRIG. OD SIZE	PACK	WGT	PART #	PLBG. ID SIZE	REFRIG. OD SIZE	PACK	WGT
00963-6	1/8"	1/4"	6	.24	00967-6	3/4"	5/8"	6	.48
00964-6	1/4"	3/8"	6	.24	00968-6	7/8"	7/8"	6	.48
00965-6	3/8"	1/2"	6	.24	00969-6	1"	5/8"	6	.48
00966-6	1/2"	5/8"	6	.24	00970-6	1-1/8"	7/8"	6	.48

**Nylon Tube Brush**



PART #	DIA.X BRUSH PART	OAL	PACK	WGT	PART #	DIA.X BRUSH PART	OAL	PACK	WGT
14504	1/4" x 2"	6-1/2"	12	.7	14529	3/4" x 3"	9"	12	1.1
14506	1/4" x 2"	15"	12	.7	14530	3/4" x 3"	15"	12	1.3
14509	5/16" x 2"	15"	12	.8	14533	3/4" x 3"	30"	12	3.0
14510	3/8" x 2"	6-1/2"	12	.7	14539	1" x 4"	15"	12	1.5
14512	3/8" x 2"	15"	12	1.1	14547	1-1/4" x 4"	15"	12	1.5
14515	7/16" x 2"	15"	12	1.1	14565	1-1/2" x 4"	15"	12	1.8
14517	1/2" x 3"	9"	12	.9	14567	1-1/2" x 4"	36"	12	3.5
14518	1/2" x 3"	15"	12	1.1	14573	1-3/4" x 4"	15"	12	1.8
14520	1/2" x 3"	30"	12	3.0	14582	2" x 4"	15"	12	2.0
14524	5/8" x 3"	15"	12	1.1	14588	2-1/4" x 4"	36"	12	3.5

**Natural Bristle or Hair**



PART #	DIA.X BRUSH PART	OAL	PACK	WGT	PART #	DIA.X BRUSH PART	OAL	PACK	WGT
10209	1/4" x 2"	6-1/2"	12	.8	10212	3/4" x 3"	9"	12	1.1
10210	3/8" x 2"	6-1/2"	12	.8	10214	3/4" x 3"	12"	12	1.2
10220	3/8" x 2"	9"	12	.9	10213	1" x 4"	12"	12	1.3
10211	1/2" x 3"	9"	12	.8	10216	1" x 4"	18"	12	1.8
10221	1/2" x 3"	12"	12	1.1	10217	1-1/4" x 4"	18"	12	1.9
10222	1/2" x 3"	18"	12	1.2	10218	1-1/2" x 4"	18"	12	2.0
10223	1/2" x 3"	24"	12	1.3	10225	1-3/4" x 4"	18"	12	2.1
10224	1/2" x 3"	36"	12	2.3	10226	2" x 4"	18"	12	2.3



**LONG HANDLE STAINLESS STEEL  
SINGLE SPIRAL TUBE BRUSHES - 144 SERIES**

3' brush part with long handle, filled with medium stiff wire.



PART #	EXACT		PACK	WGT	PART #	EXACT		PACK	WGT
	DIA.	OAL				DIA.	OAL		
14402	1/4"	15"	1	.04	14442	1/4"	27"	1	.08
14404	3/8"	15"	1	.06	14444	3/8"	27"	1	.10
14406	1/2"	15"	1	.08	14446	1/2"	27"	1	.14
14408	5/8"	15"	1	.10	14448	5/8"	27"	1	.18
14410	3/4"	15"	1	.12	14450	3/4"	27"	1	.18
14412	7/8"	15"	1	.12	14452	7/8"	27"	1	.19
14414	1"	15"	1	.12	14454	1"	27"	1	.19
14416	1-1/4"	15"	1	.12	14456	1-1/4"	27"	1	.19
14418	1-1/2"	15"	1	.13	14458	1-1/2"	27"	1	.20

**LARGE DIAMETER BRASS TUBE BRUSHES**

Double stem with 1/4" male pipe thread.



PART #	BRUSH		PACK	WGT	PART #	BRUSH		PACK	WGT
	DIA.	LGTH				DIA.	LGTH		
43636	1-1/4"	4-1/2"	1	.30	43653	2-3/4"	4-1/2"	1	.42
43639	1-1/2"	4-1/2"	1	.32	43656	3"	4-1/2"	1	.44
43642	1-3/4"	4-1/2"	1	.32	43658	3-1/4"	4-1/2"	1	.44
43645	2"	4-1/2"	1	.32	43660	3-1/2"	4-1/2"	1	.54
43648	2-1/4"	4-1/2"	1	.36	43662	3-3/4"	4-1/2"	1	.56
43651	2-1/2"	4-1/2"	1	.40	43664	4"	4-1/2"	1	.56

**NYLON LARGE DIAMETER TUBE BRUSHES**

Single stem with 1/4" male pipe thread.



PART #	BRUSH		PACK	WGT	PART #	BRUSH		PACK	WGT
	DIA.	LGTH				DIA.	LGTH		
43736	1-1/4"	5"	1	.18	43753	2-3/4"	5"	1	.32
43739	1-1/2"	5"	1	.24	43756	3"	5"	1	.32
43742	1-3/4"	5"	1	.24	43758	3-1/4"	5"	1	.34
43745	2"	5"	1	.26	43760	3-1/2"	5"	1	.38
43748	2-1/4"	5"	1	.26	43762	3-3/4"	5"	1	.44
43751	2-1/2"	5"	1	.32	43764	4"	5"	1	.44



**REFRIGERATOR COIL DUSTING & CLEANING BRUSHES**

Used to clean refrigerator coils, fan blades and areas under and behind appliances.



PART #	MATERIAL	STEM DIA.	DESCRIPTION	PK.	WT.
00415	Bristle	.200	Same as 00405 in single box	1	.44
50405	Bristle	.200	Same as 00405 on 4-color card	10	3.3
00406	W. Poly	.225	3/4" & 1-1/2" x 12" BR. 4-1/2" Wood HDL. 28" O.A.L.	36	9.8
00416	W. Poly	.225	Same as 00406 in single box	1	.48
00408	Bristle	.200	3/4" to 1-1/2" taper x 12" BR. 4-1/2" Wood HDL. 27" O.A.L.	36	9.2
00402	Bristle	.200	2" x 6" BR. x 24" O.A.L.	36	8.2
00403	Bk. Poly	.225	3/4" to 1-1/2" taper x 12" BR. 2-1/4" x 7" Br. x 24" O.A.L.	36	9.2

**DUCT CLEANING BRUSH**

7" long brush part with twisted wire stem and plastic, or wood handle.



PART #	MATERIAL	BRUSH DIA.	OVERALL LENGTH	PACK	WGT
76210	Stainless Steel	2-1/8"	48"	1	.50
76220	Black Pat. Fibre	2-1/8"	48"	1	.40

**FIBRE/HAIR MIX FURNACE &  
BOILER BRUSHES – 7624 SERIES**

Extra heavy fill, 6" long brush part with twisted wire handle and large loop end.



PART #	BRUSH DIA.	OVERALL LENGTH	PACK	WGT
76245	2"	42"	1	.44

**RADIATOR OR REFRIGERATOR BRUSHES**

Black natural bristle, twisted in wire with loop end.



PART #	STEM DIA.	BRUSH DIA.	OVERALL LENGTH	BRUSH LENGTH	PACK	WGT
00442	.225	1" to 2"	42"	7"	12	4.56



### RADIATOR DUSTING & CLEANING BRUSH

Twisted in wire with plastic handle at end.



PART #	MATERIAL	BRUSH LENGTH	BRUSH DIA.	OVERALL LENGTH	PACK	WEIGHT
76221	Bristle or Hair	7"	2"	27"	1	.22
76324	Black Horsehair	7"	2-1/2"	27"	1	.22
76524	HH/Poly Mix	7"	2-1/2"	27"	1	.22

### LONG WOOD HANDLE DUSTING BRUSH W/FLARED TIP

One row, curved lacquered wood handle.



PART #	MATERIAL	BRUSH LENGTH	BRUSH TRIM	OVERALL LENGTH	PACK	WEIGHT
76026	Horsehair	10"	2-1/4"	24"	1	.26

### NYLON SINGLE SPIRAL CONDENSER TUBE BRUSHES - 437 & 937 SERIES

Single spiral/single stem construction recommended for cleaning all tubes where deposits are light. 1/4" and 5/16" dia. brushes with female couplings have 8-32 threads, while 3/8" thru 1" dia. have 12-24 threads. 1/4", 5/16", and 3/8" dia. brushes with male couplings have 8-32 threads, while 7/16" thru 1" dia. have 1/4-28 threads.



BRUSH DIA.	BRUSH LENGTH	FEMALE THREAD	FEMALE PART	MALE THREAD	MALE PART	PACK	WEIGHT
1/4"	3"	8-32	43702	8-32	93702	1	.04
5/16"	3"	8-32	43703	8-32	93703	1	.04
3/8"	4"	12-24	43704	8-32	93704	1	.08
7/16"	4"	12-24	43707	1/4-28	93707	1	.10
1/2"	4"	12-24	43710	1/4-28	93710	1	.10
9/16"	4"	12-24	43713	1/4-28	93713	1	.10
5/8"	4"	12-24	43716	1/4-28	93716	1	.10
11/16"	4"	12-24	43719	1/4-28	93719	1	.10
3/4"	4"	12-24	43722	1/4-28	93722	1	.10
13/16"	4"	12-24	43725	1/4-28	93725	1	.10
7/8"	4"	12-24	43728	1/4-28	93728	1	.10
15/16"	4"	12-24	43731	1/4-28	93731	1	.10
1"	4"	12-24	43733	1/4-28	93733	1	.10



### BRASS SINGLE SPIRAL CONDENSER TUBE BRUSHES- 436 & 936 SERIES

Single spiral/double stem construction recommended for brass or copper tubes. 1/4" and 5/16" dia. brushes with female couplings have 8-32 threads, while 3/8" thru 1" dia. have 12-24 threads. 1/4", 5/16", and 3/8" dia. brushes with male couplings have 8-32 threads, while 7/16" thru 1" dia. have 1/4-28 threads.



BRUSH DIA.	BRUSH LENGTH	FEMALE THREAD	FEMALE PART	MALE THREAD	MALE PART	PACK	WEIGHT
1/4"	3"	8-32	43602	8-32	93602	1	.06
5/16"	3"	8-32	43603	8-32	93603	1	.06
3/8"	4"	12-24	43604	8-32	93604	1	.10
7/16"	4"	12-24	43607	1/4-28	93607	1	.10
1/2"	4"	12-24	43610	1/4-28	93610	1	.10
9/16"	4"	12-24	43613	1/4-28	93613	1	.14
5/8"	4"	12-24	43616	1/4-28	93616	1	.14
11/16"	4"	12-24	43619	1/4-28	93619	1	.14
3/4"	4"	12-24	43622	1/4-28	93622	1	.14
13/16"	4"	12-24	43625	1/4-28	93625	1	.16
7/8"	4"	12-24	43628	1/4-28	93628	1	.16
15/16"	4"	12-24	43631	1/4-28	93631	1	.16
1"	4"	12-24	43633	1/4-28	93633	1	.16

### STAINLESS STEEL SINGLE SPIRAL - 435 & 935 SERIES

Single spiral/double stem construction recommended for stainless steel tubes. 1/4" and 5/16" dia. brushes with female couplings have 8-32 threads, while 3/8" thru 1" dia. have 12-24 threads. 1/4", 5/16", and 3/8" dia. brushes with male couplings have 8-32 threads, while 7/16" thru 1" dia. have 1/4-28 threads.



BRUSH DIA.	BRUSH LENGTH	FEMALE THREAD	FEMALE PART	MALE THREAD	MALE PART	PACK	WEIGHT
1/4"	3"	8-32	43502	8-32	93502	1	.02
5/16"	3"	8-32	43503	8-32	93503	1	.06
3/8"	4"	12-24	43504	8-32	93504	1	.10
7/16"	4"	12-24	43507	1/4-28	93507	1	.10
1/2"	4"	12-24	43510	1/4-28	93510	1	.10
9/16"	4"	12-24	43513	1/4-28	93513	1	.10
5/8"	4"	12-24	43516	1/4-28	93516	1	.14
11/16"	4"	12-24	43519	1/4-28	93519	1	.14
3/4"	4"	12-24	43522	1/4-28	93522	1	.14
13/16"	4"	12-24	43525	1/4-28	93525	1	.14
7/8"	4"	12-24	43528	1/4-28	93528	1	.14
15/16"	4"	12-24	43531	1/4-28	93531	1	.16
1"	4"	12-24	43533	1/4-28	93533	1	.16



**TIN HANDLE ACID & DOPE BRUSHES**

Selected horsehair bristles are pressed securely in tin handles. Sold in gross packs only.



PART #	BRUSH WIDTH	HANDLE LENGTH	PACK	WEIGHT
10001	3/8"	5"	144	2.14
10002	1/2"	5"	144	2.64
10003	5/8"	5"	144	3.30

**WOOD HANDLE DOPE BRUSH**

Selected horsehair bristles secured tightly in metal ferrule. Sold in packs of 36.



PART #	BRUSH WIDTH	OVERALL LENGTH	BRUSH MATERIAL	PACK	WEIGHT
10007	3/4"	7"	Horsehair	36	1.34

**IMPORT WHITE BRISTLE CHIP BRUSHES**

White Chinese bristle, metal ferrule. Plain sanded wood handle. Low priced economy import.



PART #	WIDTH	THICKNESS	TRIM	PACK	WEIGHT
67191	1/2"	1/4"	1-3/8"	36	.72
67192	1"	5/16"	1-5/8"	36	1.44
67193	1-1/2"	5/16"	1-5/8"	36	1.44
67194	2"	5/16"	1-5/8"	24	1.44
67195	2-1/2"	3/8"	1-5/8"	24	2.40
67196	3"	3/8"	1-5/8"	24	2.40
67197	4"	11/16"	1-5/8"	12	3.84

**IMPORT BLACK BRISTLE CHIP**

Black Chinese bristle in a chemical resistant plastic handle.



PART #	WIDTH	THICKNESS	TRIM	PACK	WEIGHT
67230	1/2"	1/4"	1-3/8"	1	.02
67231	1"	5/16"	1-5/8"	1	.04
67232	1-1/2"	5/16"	1-5/8"	1	.06
67233	2"	5/16"	1-5/8"	1	.06
67234	2-1/2"	3/8"	1-5/8"	1	.10
67235	3"	3/8"	1-5/8"	1	.10



**WIRE HANDLE CHIP BRUSHES**

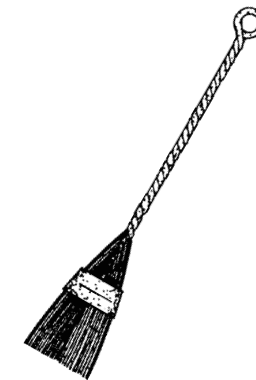
Ideal for cleaning rust, corrosion, etc. in high heat situations.



PART #	FILL	TRIM	OVERALL LENGTH	PACK	WEIGHT
81616	C. Steel	1-1/2"	5-1/2"	1	.10
81617	St. Steel	1-1/2"	5-1/2"	1	.10

**FLAT OIL/CHIP BRUSH**

Absorbent natural tampico or poly in a twisted wire handle with ring end. Overall length 8-1/4".



PART #	BRUSH MATERIAL	BRUSH WIDTH	BRUSH LENGTH	PACK	WEIGHT
24800	Tampico	2-1/4"	3"	1	.08
67118	Poly	2-1/4"	3"	1	.06

**CONDENSER FIN WHISK, DUSTERS & UPRIGHT BROOMS**

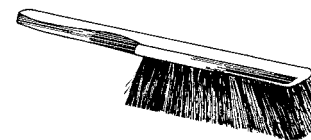
Plastic handle whisk for cleaning condenser fins and evaporators - A whisk with a hundred uses.



PART #	BRUSH WIDTH	TRIM	OVERALL LENGTH	PACK	WEIGHT
02026	3-1/8"	2-1/8"	7"	1	.04

**BENCH DUSTER**

Tough and durable brush available in tampico and horsehair.



PART #	MATERIAL	BRUSH FACE	OVERALL LENGTH	TRIM	PACK	WEIGHT
62034	Tampico	2" x 8"	14"	2-5/8"	1	.66





**POLYESTER VARNISH BRUSH**

Durable black polyester filament with a solvent resistant plastic handle.



PART #	WIDTH	THICKNESS	TRIM	PACK	WEIGHT
67240	1/2"	1/4"	1-5/8"	1	.02
67241	1"	5/16"	1-3/4"	1	.04
67242	1-1/2"	5/16"	1-3/4"	1	.06
67243	2"	5/16"	1-3/4"	1	.08
67244	2-1/2"	3/8"	2"	1	.10
67245	3"	3/8"	2"	1	.12

**PARTS CLEANING BRUSH**

Tampico or Poly fill in strong plastic handles, comes in standard or flow thru style.



PART #	BRUSH MATERIAL	OVERALL LENGTH	PACK	WEIGHT
25010	Poly	11-5/8"	1	.17
*25095	Poly	9"	1	.17
25013	Tampico	11-5/8"	1	.17
25015	All Poly	10-3/4"	1	.14

\*25095 is a Flow-Thru model.

**SHOE HANDLE WIRE HAND BRUSH**

10" hardwood handle filled with tempered steel, stainless steel, bronze, brass, fibre or poly.



PART #	FILL	ROWS	FILL SIZE	BRUSH PART	PACK	WEIGHT
81232	T Steel	2 x 17	.012	5"	1	.20
81233	T Steel	3 x 17	.012	5"	1	.28
81234	T Steel	4 x 17	.012	5"	1	.38



**CURVED HANDLE WIRE HAND BRUSHES**

14" hardwood handle filled with tempered steel, stainless steel, bronze, brass, fibre or poly.



PART #	FILL	ROWS	FILL SIZE	BRUSH PART	PACK	WEIGHT
*65341	Brass	4 x 17	.003	3-1/4"	1	.19
55104	Tampico	4 x 19	n/a	6-1/2"	1	.32
55105	Poly	4 x 19	.020	6-1/2"	1	.14
81008	T Steel	2 x 18	.012	6-1/2"	1	.22
81009	T Steel	3 x 19	.012	6-1/2"	1	.32
81010	T Steel	4 x 18	.012	6-1/2"	1	.42
81018	St. Steel	3 x 19	.012	6"	1	.22
81020	St. Steel	4 x 18	.012	6"	1	.38
81025	Bronze	4 x 18	.014	6"	1	.46
81044	Brass	3 x 19	.006	6"	1	.34
81045	Brass	4 x 19	.006	6"	1	.46

\*65341 has a straight, 8-3/4" long handle with a 3-1/4" brush part and 3/4" trim

**STOVE & APPLIANCE BRUSH**

2 X 9 rows, 5/8" trim. 8-5/8" long hardwood block with 2-7/8" long brush part.



PART #	FILL	ROWS	TRIM	OVERALL LENGTH	PACK	WEIGHT
25301	St. Steel	2 x 9	5/8"	8-5/8"	1	.08
25302	Brass	2 x 9	5/8"	8-5/8"	1	.08

**DIE CAST BRUSHES**

3 X 7 rows, 1/2" trim. 7" long plastic block with 1-1/2" long brush part.



PART #	FILL	ROWS	TRIM	OVERALL LENGTH	PACK	WEIGHT
25404	St. Steel	3 x 7	1/2"	7"	1	.04
25405	Brass	3 x 7	1/2"	7"	1	.04
25406	Bronze	3 x 7	1/2"	7"	1	.04
25407	Nylon	3 x 7	1/2"	7"	1	.04



**WELDER'S WIRE HAND BRUSH**

3 X 7 rows, 1/2" trim. 8" long hardwood block with 1-1/2" long brush part.



PART #	FILL	ROWS	TRIM	OVERALL LENGTH	PACK	WEIGHT
81002	St. Steel	3 x 7	1/2"	8"	1	.04
81003	Brass	3 x 7	1/2"	8"	1	.04
81005	Nylon	3 x 7	1/2"	8"	1	.04
81006	Horsehair	3 x 7	1/2"	8"	1	.04

**BRASS WIRE UTILITY BRUSHES**

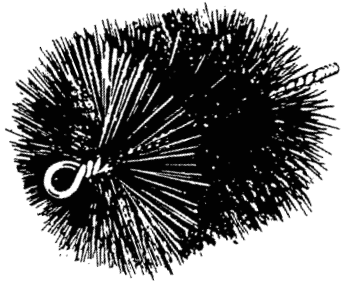
Curved hardwood block with crimped brass wire.



PART #	FILL	ROWS	TRIM	BRUSH PART	PACK	WEIGHT
27698	Brass	6 x 9	5/8"	1-1/4" x 2-1/4"	1	.18
27668	Brass	9 x 10	5/8"	2-1/4" x 3"	1	.36

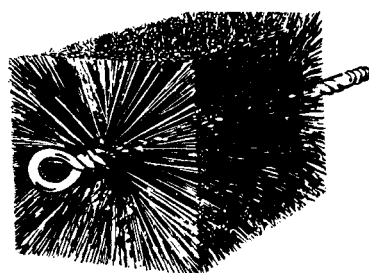
**PROFESSIONAL CHIMNEY BRUSHES**

All our professional chimney brushes have extra heavy 1/2" dia. stems, constructed with four lengths of .162 dia. galvanized steel wire. Plated shaft with 3/8" male pipe threads are secured to the stems for easy coupling to our heaviest fiberglass rods.



**MASTER CLEAN**

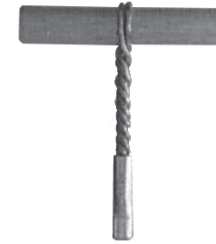
Fully filled with round tempered steel wire using double spiral construction. These premium brushes have been the choice of many professional chimney sweeps for years.



ROUND				SQUARE			
PART #	SIZE	PACK	WEIGHT	PART #	SIZE	PACK	WEIGHT
33066	6"	1	1.90	33277	7"	1	2.10
33076	7"	1	2.00	33288	8"	1	2.10
33086	8"	1	2.10	33299	9"	1	2.60
33096	9"	1	2.50	33310	10"	1	2.80
33106	10"	1	2.60	33311	11"	1	2.90
33116	11"	1	2.70	33312	12"	1	3.10
33126	12"	1	2.80	33314	14"	1	3.40
33266	6"	1	2.00				



**FLUE, DUCT, CHIMNEY RODS & T-HANDLES**



PART #	PIPE THREAD	PACK	WEIGHT
30599	1/4"	1	.22
30600	3/8"	1	.24

**FLUE BRUSH HANDLE**

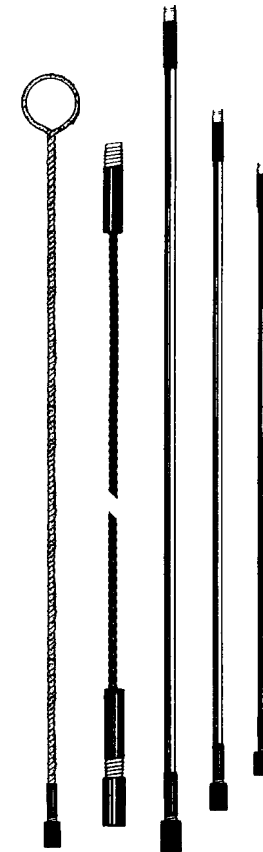
Semi-flexible, twisted galvanized wire with one female end and 1" ring at other end.



PART #	HANDLE LENGTH	PACK	WEIGHT
30328	3"	1	.56
30438	4"	1	.70
30548	5"	1	.86
30658	6"	1	1.06

**FIBERGLASS RODS**

Strong extruded fiberglass rods in a variety of diameters provide the proper stiffness for most jobs. We recommend using these nonconducting fiberglass rods whenever possible.



PART #	DIA.	LENGTH	PIPE THREAD	PACK	WEIGHT
30664	.350	4'	1/4"	1	.42
30666	.350	6'	1/4"	1	.68
36048	.440	4'	3/8"	1	.66
36072	.440	6'	3/8"	1	.92
30660	.480	6'	3/8"	1	1.24

**EXTENSION HANDLES**

Semi-flexible, twisted galvanized wire with female one end and male other.

PART #	HANDLE LENGTH	PACK	WEIGHT
31438	4'	1	.78
31448	5'	1	.92
31458	6'	1	1.04



**TEMPERED WIRE SINGLE SPIRAL FLUE BRUSHES**

4-1/2" long tempered wire brush part, 1/4" male pipe thread.



PART #	FLUE SIZE	BRUSH DIA.	PK.	WT.	PART #	FLUE SIZE	BRUSH DIA.	PK.	WT.
43206	1"	3/4"	1	.28	43224	2-3/4"	2-1/2"	1	.42
43208	1-1/4"	1"	1	.30	43226	3"	2-3/4"	1	.44
43212	1-1/2"	1-1/4"	1	.32	43228	3-1/4"	3"	1	.46
43214	1-3/4"	1-1/2"	1	.34	43232	3-1/2"	3-1/4"	1	.48
43216	2"	1-3/4"	1	.36	43234	3-3/4"	3-1/2"	1	.50
43218	2-1/4"	2"	1	.38	43236	4"	3-3/4"	1	.52
43222	2-1/2"	2-1/4"	1	.40	43238	4-1/4"	4"	1	.54

**TEMPERED WIRE - DOUBLE SPIRAL**

4-1/2" long tempered wire brush part, 1/4" male pipe thread. Brushes are individually boxed.



PART #	FLUE SIZE	BRUSH DIA.	PK.	WT.	PART #	FLUE SIZE	BRUSH DIA.	PK.	WT.
43306	1"	3/4"	1	.30	43324	2-3/4"	2-1/2"	1	.44
43308	1-1/4"	1"	1	.32	43326	3"	2-3/4"	1	.46
43312	1-1/2"	1-1/4"	1	.34	43328	3-1/4"	3"	1	.48
43314	1-3/4"	1-1/2"	1	.36	43332	3-1/2"	3-1/4"	1	.50
43316	2"	1-3/4"	1	.38	43334	3-3/4"	3-1/2"	1	.52
43318	2-1/4"	2"	1	.40	43336	4"	3-3/4"	1	.54
43322	2-1/2"	2-1/4"	1	.42	43338	4-1/4"	4"	1	.56

**STAINLESS STEEL - SINGLE SPIRAL FLUE BRUSHES**

4-1/2" long brush part, 1/4" male pipe thread. Brushes are individually boxed.



PART #	FLUE SIZE	BRUSH DIA.	PK.	WT.	PART #	FLUE SIZE	BRUSH DIA.	PK.	WT.
43536	1-1/2"	1-1/4"	1	.36	43559	3-1/2"	3-1/4"	1	.52
43539	1-3/4"	1-1/2"	1	.38	43562	3-3/4"	3-1/2"	1	.54
43542	2"	1-3/4"	1	.40	43565	4"	3-3/4"	1	.56
43545	2-1/4"	2"	1	.42	43568	4-1/4"	4"	1	.58
43548	2-1/2"	2-1/4"	1	.44	43571	4-1/2"	4-1/4"	1	.60
43551	2-3/4"	2-1/2"	1	.46	43573	4-3/4"	4-1/2"	1	.62
43553	3"	2-3/4"	1	.48	43576	5"	4-3/4"	1	.64
43556	3-1/4"	3"	1	.50	43579	5-1/4"	5"	1	.66



**FLAT BAFFLE BOILER BRUSH**

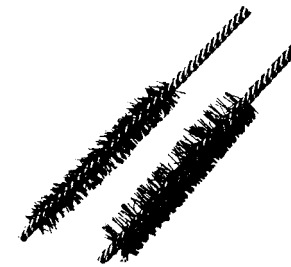
Double spiral, black oil tempered wire brush part with 1/4" male pipe thread. Brushes are individually boxed.



PART #	BRUSH SIZE	BRUSH LENGTH	PK.	WT.
41218	1"	4-1/2"	1	.16
41228	2"	4-1/2"	1	.30
41238	3"	4-1/2"	1	.38
41248	4"	4-1/2"	1	.44

**ORIGINAL COLUMBIA BOILER BRUSH**

Bristles stick out in all directions and are rough cut to a rectangular shape, approximately 1/2" x 1". Much lighter fill than the flat style.



PART #	BRUSH SIZE	HANDLE LENGTH	PACK	WEIGHT
46328	1/2" x 1" x 4"	3'	1	.36
46348	1/2" x 1" x 4"	4'	1	.46

**FLAT STYLE COLUMBIA BOILER BRUSH**

Bristles stick out to the 1" dimension as round brush is flattened after being made



PART #	BRUSH SIZE	OVERALL LENGTH	PACK	WEIGHT
46302	1/2" x 1" x 4-1/2"	27"	1	.41
46304	1/2" x 1" x 4-1/2"	48"	1	.72

**WEILER MCLAIN BOILER BRUSH**

1-1/2" x 1-1/8" x 4" oval shaped brush with crimped carbon steel or soft bristle. Long twisted wire handles with 1" ring end.



PART #	MATERIAL	DIA.	O.A.L.	PK.	WT.
14465	Crimped Wire	.20	30"	1	.32
14466*	Crimped Wire	.25	30"	1	.34
14467	Bristle	.20	30"	1	.40
14468*	Crimped Wire	.25	46"	1	.46
14476	Crimped Wire	.135	30"	1	.12
14477	Bristle	.135	30"	1	.10

**EXTRA LONG HANDLE/STIFF WIRE BRUSHES- 7625 SERIES**

Single spiral fine wire brush part 4" long, twisted in wire handle with loop end. 42" overall length.



PART #	BRUSH SIZE	OVERALL LENGTH	PACK	WEIGHT
76252	1/2"	42"	1	.26
76253	3/4"	42"	1	.28
76254	1"	42"	1	.44
76255	1-1/2"	42"	1	.46
76256	2"	42"	1	.50
76257	2-1/2"	42"	1	.52
76258	3"	42"	1	.54



**SPIN-GRIT™**

Single stem construction with silicone carbide impregnated nylon recommended for brass tubes. This brush is made oversized so the filament will lay over, resulting in increased contact with surface, providing better cleaning and longer life than conventional condenser cleaning brushes.



BRUSH DIA.	TUBE SIZE	FEMALE THREAD	FEMALE PART #	MALE THREAD	MALE PART #	PK.	WT.
1/2"	1/4" - 5/16"	8-32	43482	8-32	93482	1	.02
3/4"	3/8" - 9/16"	12-24	43484	1/4-28	93484	1	.06
1"	5/8" - 11/16"	12-24	43486	1/4-28	93486	1	.06
1 1/4"	3/4" - 1"	12-24	43488	1/4-28	93488	1	.07

**SPIN-CLEAN™**

Single stem construction with silicone carbide impregnated nylon. This brush is made with a tapered trim to allow better cleaning of enhanced condenser tubes. The long bristles are designed oversized with the intention of bending over, allowing the aggressive filament to come into maximum contact with the lands. The short bristles are able to get into the grooves. These brushes provide better cleaning and longer life than conventional condenser cleaning brushes.



PART #	TUBE SIZE	SMALL DIA. OF BRUSH	LARGE DIA. OF BRUSH
93490	5/8"	5/8"	1"
93491	1/2"	1/2"	3/4"
93492	3/4"	3/4"	1-1/8"

**RODS & ROD HANDLES**



- #13000 – “T” handgrip handle with 1/4-28 cap nut. 4” long x 1/2” diameter. For use with #13010 rods.
- #13001 – “T” handgrip handle with 12-24 screw. 4” long x 1/2” diameter. For use with #13002 and #13003 rods.
- #13002 – 24” aluminum extension rod 5/16” diameter with 12-24 male thread one end, female other. For use with 3/8” through 1” diameter condenser brushes.
- #13003 – 36” aluminum extension rod 5/16” diameter with 12-24 male thread one end, female other. For use with 3/8” through 1” diameter condenser brushes.
- #13010 – 36” galvanized steel condenser brush rod with 1/4-28 male thread one end and female thread at other end. For use with 1/4-28 male thread brushes.
- #13041 – “T” handle with 8-32 male thread one end. For use with #13042 rods.
- #13042 – 24” x .162 dia. rod, 8-32 female thread one end, male 8-32 thread other end.
- #13044 – 48” x .162 dia. rod with 8-32 male thread one end, formed handle other end. For use with 1/4” and 5/16” dia. condenser brushes.

**ADAPTERS**

- #13006 – 1/4-28 male thread to 12-24 male thread
- #13008 – 1/4-28 female thread to 12-24 male thread



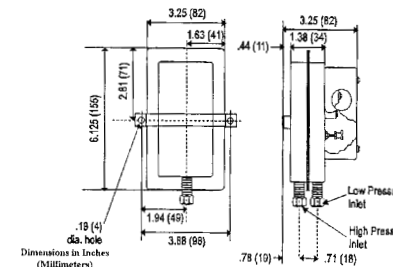
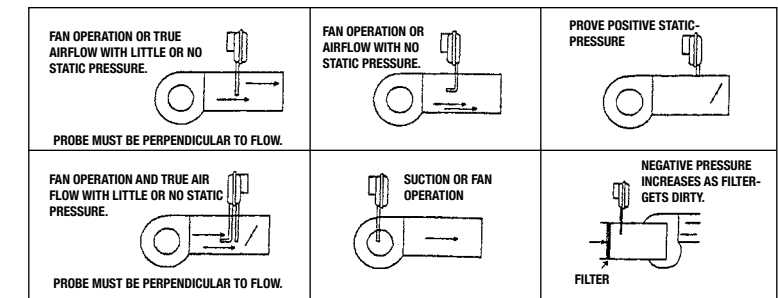
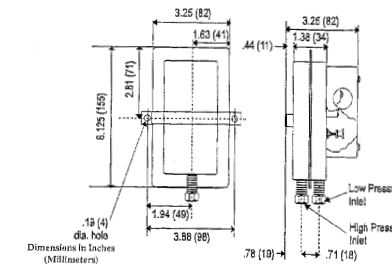
**CLEVELAND CONTROLS AIR PRESSURE SENSING SWITCH**

The model AFS-222 is a general purpose proving switch designed for HVAC and Energy Management applications. It may be used to sense positive, negative, or differential air pressure. Installation kit included. Replaces White Rodgers 770-1.

Set point range: 0.05 ± .02” W.C. to 12.0” W.C.  
 Operating temperature range: -40°F to 180°F  
 Approvals: UL, FM, CSA

**AFS-222-121**

Location of Sample Lines for Typical Applications



**CLEVELAND CONTROLS AIR PRESSURE SENSING SWITCH**

The model AFS-262 is a general purpose proving switch designed for HVAC and Energy Management applications. It may be used to sense positive, negative, or differential air pressure. Installation kit included.

Set point range: 0.05 ± 0.02” W.C. to 2.0” W.C.  
 Operating temperature range: -40° F to 180° F  
 Approvals: UL, FM, CSA, CE

**AFS-262-121**



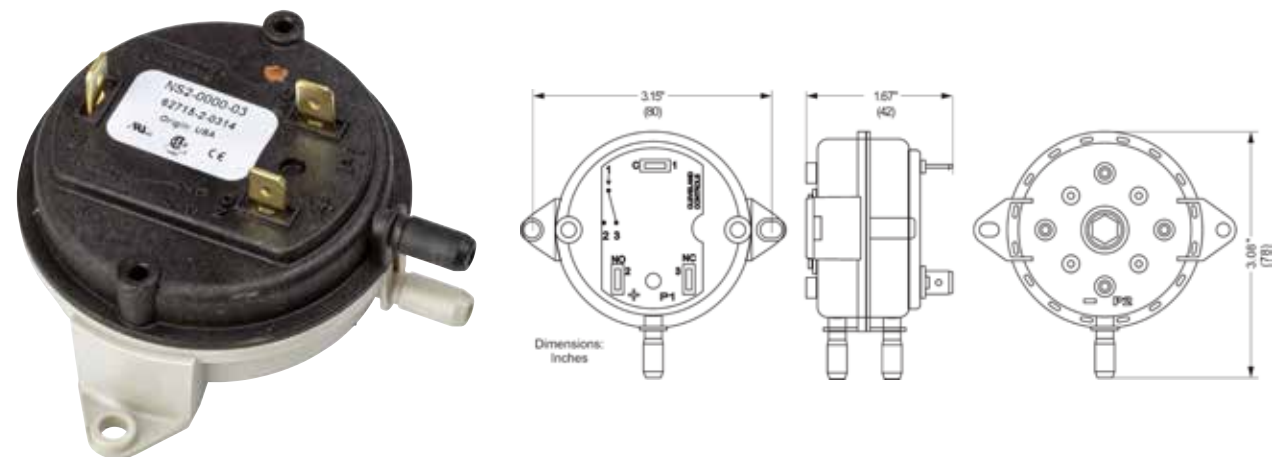
**SERIES AFS SWITCHES**



### CLEVELAND CONTROLS AIR PRESSURE SENSING SWITCH

The NS2 series, Universal Small Footprint Air Switch, replaces hundreds of other small footprint exact replacement air switches today. Five separate springs cover ranges from .10"WC to 10"WC. Set screw adjustment with allen wrench included. Eight different orifice restrictors to set different time delays, and comes with two brackets for all applications.

NS2-0000-03

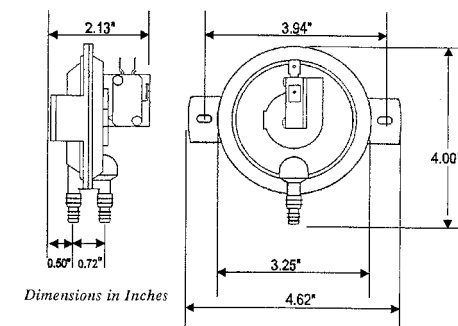


### CLEVELAND CONTROLS AIR PRESSURE SENSING SWITCH KIT

Series RSS-495-11 Air Sensing Switch Kit contains compact, economical switches designed for a residential furnace and light commercial aftermarket applications. The RSS-495 switches have an adjustable set point range of 0.25" W.C. to 1.0" W.C. (they have been factory set to activate on a pressure rise of 0.25" W.C.). The field adjustability makes these switches ideal for aftermarket residential furnace applications, electronic air cleaners and humidifiers.

Adjustable range: 0.25 + 0.05" W.C. to 1.0 + 0.05" W.C.  
 Operating temperature range: -40°F to 190°F  
 Approvals: UL, CSA, CE, NRTL, AUST. GAS ASSOC.>

RSS-495-11



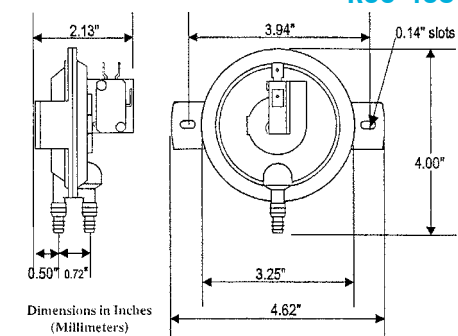
SERIES RSS SWITCHES

### CLEVELAND CONTROLS AIR PRESSURE SENSING SWITCH KIT

Series RSS-498-13 Air Sensing Switch Kit contains compact, economical switches designed for residential furnace and light commercial aftermarket applications. The RSS-498 switches have an adjustable set point range of 1.0" W.C. to 4.0" W.C. (They have been factory set to activate on a pressure rise of 1.0" W.C.) The field adjustability makes these switches ideal for aftermarket residential furnace applications, electronic air cleaners and humidifiers.

Adjustable range: 1.0 + 0.05" W.C. to 4.0 + 0.05" W.C.  
 Operating temperature range: -40° F to 180° F  
 Approvals: UL, CSA, CE, NRTL, AUST. GAS ASSOC.

RSS-498-13



SERIES RSS SWITCHES



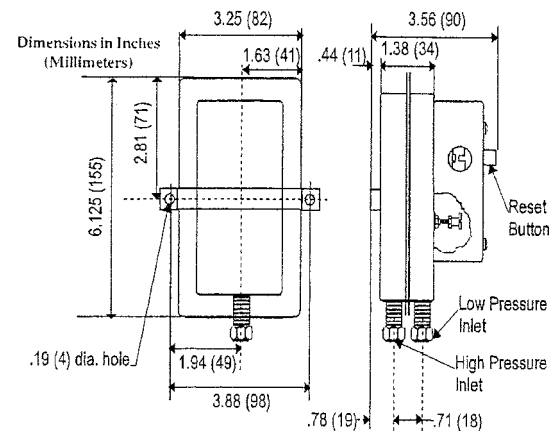
**CLEVELAND CONTROLS AIR PRESSURE SENSING SWITCH WITH MANUAL RESET**

The model AFS-460 is a general purpose proving switch designed to require manual operator reset following activation. It can be used to sense positive, negative, or differential air pressure in HVAC and Energy Management applications that require operator interface. Installation kit included.

**EXACT OEM AVAILABLE REPLACEMENT IN 1 WEEK.**

Set point range: 0.40 + 0.06" W.C. to 12.0" W.C.  
 Operating temperature range: -40°F to 180°F  
 Approvals: UL, CSA

AFS-460-121

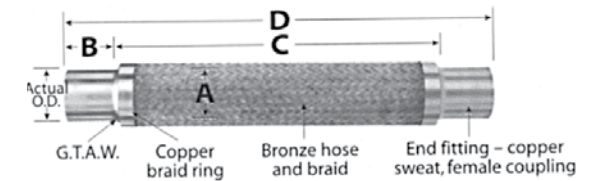
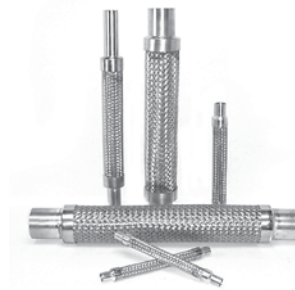


**SERIES AFS SWITCHES**

**Stainless Steel Vibration Absorbers**

Specify ESP Vibration Absorbers in refrigeration and air conditioning systems to:

- Reduce vibration and noise
- Extend compressor life
- Allow for horizontal or vertical movement
- Relieve stress on the compressor housing
- Reduce wear on the bearings



**Stainless Steel Vibration Absorbers Specifications**

Part Number	To Fit Copper Tube		"A" Nominal Hose I.D.	"B" Fitting Length	"D" Assembly Length	Maximum Working Pressure PSIG@70° F
	Actual O.D.	Nominal Tube				
VAB-2	1/4"	1/8"	1/4"	1/2"	7"	450
VAB-3	3/8"	1/4"	1/4"	1/2"	8-1/4"	450
VAB-4	1/2"	3/8"	3/8"	5/8"	9"	450
VAB-5	5/8"	1/2"	1/2"	7/8"	9-3/4"	450
VAB-6	3/4"	5/8"	1/2"	1"	10"	450
VAB-7	3/4"	5/8"	3/4"	1-1/8"	11-1/4"	440
VAB-8	7/8"	3/4"	3/4"	1-1/4"	11-1/2"	440
VAB-9	1-1/8"	1"	1"	1-1/2"	13"	400
VAB-10	1-3/8"	1-1/4"	1-1/4"	1-5/8"	14-3/4"	400
VAB-11	1-5/8"	1-1/2"	1-1/2"	2"	17"	400
VAB-12	2-1/8"	2"	2"	2-1/2"	20"	390
VAB-13SS	2-5/8"	2-1/2"	2-1/2"	3"	24"	340
VAB-14SS	3-1/8"	3"	3"	3-1/2"	27"	300

1. Minimum burst pressure is 5 times the maximum working pressure.
2. Hose may be helical or annular type.
3. Hose = C51000 (95/5)  
Braid = C22000 (90/10)
4. Length = D+1/4"
5. Hose is not to be used with ammonia refrigerants

CHILLER BUILDER KIT

Chiller builder kits provide a simple solution for system installers. The systems include all of the components needed for the low side package and can be assembled in less than one hour.

TXKIT Single Circuit Standard Designs

TXKIT are available in standard designs for water duty. They are available in 6 catalog models, which can be used with chiller barrels from 2 to 40 tons. The evaporator barrel is not included. All kits utilize brand name components.

TXKIT/DTXKIT Multiple Circuit Standard Designs

TXKIT/DTXKIT are available in standard designs for water duty. They are available in 9 catalog models, which can be used with evaporator barrels from 10 to 75 tons. The chiller barrel is not included. All kits utilize brand name components.

Included Components

- Control Power Supplies
- Expansion Valve
- Flow Switch
- Framework
- Freezestat
- Low Pressure Switch
- Piping
- Solenoids
- Temperature Controls

Non-Approved Refrigerants Unless Cleared by the Factory Ammonia/R717, due to copper tubing. R404A, R410A & R507A due to recommended operating pressures, custom units are available for these refrigerants.

Other Refrigerants

All other refrigerants must be approved by Standard Refrigeration/Alfa Laval before use.

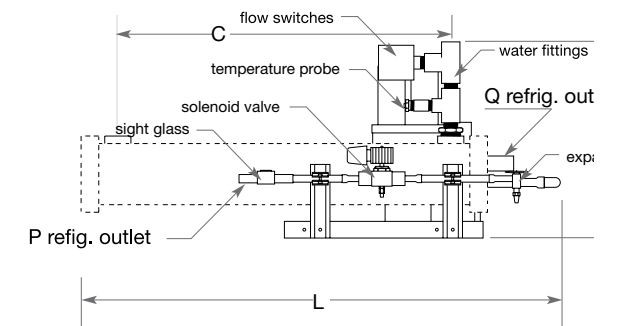
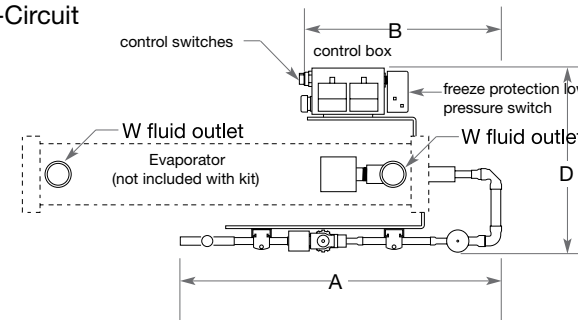
Alternative Options

Kits with a supplied chiller barrel, use CBKIT. For a clean water alternative, use a BHE-KIT (brazed evaporator builder kit).

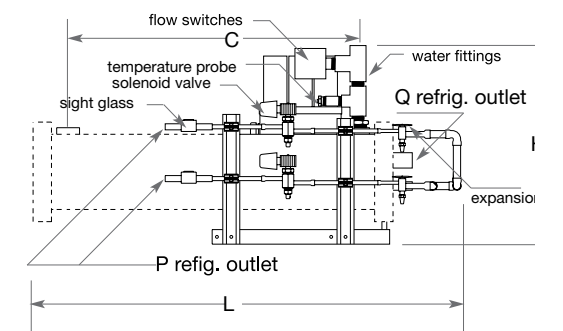
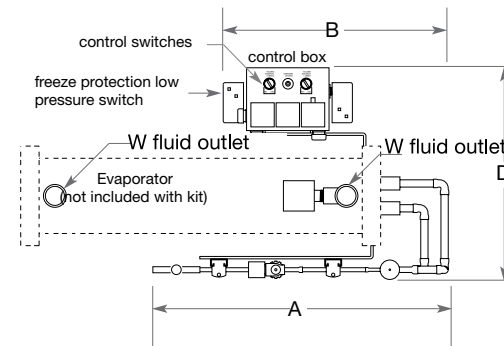
Approved Refrigerants R22, R134a.



1-Circuit

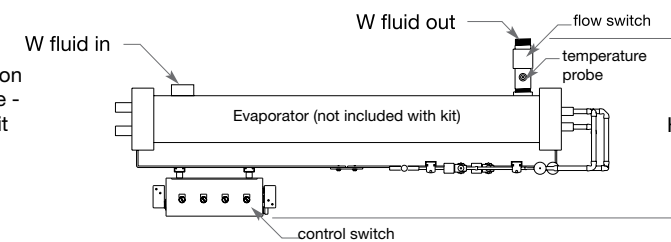


2-Circuit

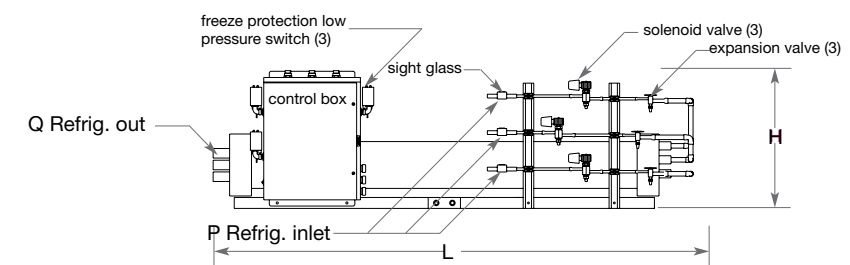


3 & 4 Circuit

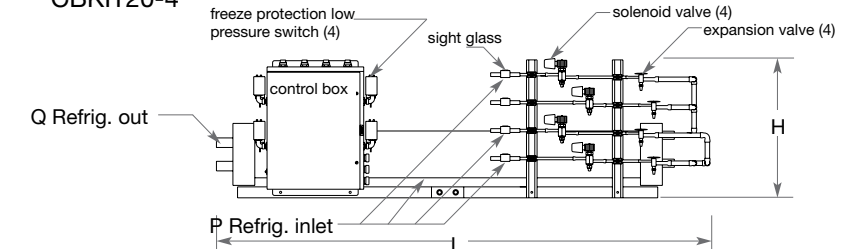
NOTE: Connection locations vary between 3&4 circuit models



CBKIT15-3



CBKIT20-4



Single Circuit

Models	R22 Nominal Capacity* (tons)	Number of Circuits	Chiller Barrel Included	TX-Kit (Control pack & framework included)	Connections (inches)				Working Pressure (psi)	
					P Ref. In (IDS)	Q Ref Out (IDS)	W Fluid Conn.	T Drain (FNPT)	Shell	Tube
CBKIT2-1	2.0	1	TX2 -1	TXKIT1	5/8	7/8	1" FPT	3/8	225	225
CBKIT3-1	2.9	1	TX3 -1	TXKIT2	5/8	7/8	1" FPT	3/8	225	225
CBKIT5-1	4.9	1	TX5 -1	TXKIT2	5/8	1 1/8	1 1/4" FPT	1/2	225	225
CBKIT6-1	6.7	1	TX6 -1	TXKIT3	5/8	1 1/8	1 1/2" FPT	1/2	225	225
CBKIT7.5-1	7.6	1	TX7 1/2 -1	TXKIT3	7/8	1 5/8	1 1/2" FPT	1/2	225	225
CBKIT10-1	11.3	1	TX10 -1	TXKIT3	7/8	1 5/8	2" FPT	1/2	225	225
CBKIT12-1	14.3	1	TX12 -1	TXKIT3	7/8	1 5/8	2" FPT	1/2	225	225
CBKIT15-1***	18.3	1	TX15-1	TXKIT4	1 1/8	2 1/8	2 1/2" FPT	1/2	225	225
CBKIT20-1***	22.6	1	TX20-1	TXKIT4	1 1/8	2 1/8	3" FPT	1/2	225	225
CBKIT25-1***	27.2	1	TX25 -1	TXKIT4	1 1/8	2 5/8	3" FPT	1/2	150	225
CBKIT30-1**	29.8	1	TXC30 -1	TXKIT5	1 1/8	2 5/8	3" MPT	3/4	150	300
CBKIT40-1**	40.2	1	TXC40 -1	TXKIT6	1 3/8	2 5/8	3" MPT	3/4	150	300

\*Ratings are based on entering water 54°F, leaving water 44°F, saturated suction temperature of 35°F, entering TXV temperature of 100°F with 7°F of superheating

\*\*Kits include unloading feature, kits with no unloading feature are also available

\*\*\* Pumpdown cycle included

Chiller builder kits require 120 volt power to operate

Includes 3/4" thick insulation as standard

Values shown are correct at the time of publication, all data should be reconfirmed at the time of purchase

Capacity Tons = 12,000 BTU/hr

For performance data with other refrigerants, please call

Single Circuit

Models	Dimensions (inches)						Gaskets Article #		Heads Article #	
	A	B	C	D	H	L	Front	Rear	Inlet	Outlet
CBKIT2-1	21.00	18.25	19.75	14.00	14.00	30.25	2865	2865	3444	3451
CBKIT3-1	26.00	18.25	19.75	18.00	14.00	30.25	2865	2865	3444	3451
CBKIT5-1	26.00	18.25	31.38	18.00	16.00	42.25	2872	2872	3501	3682
CBKIT6-1	27.00	18.25	31.13	18.00	19.00	42.25	2872	2872	3501	3682
CBKIT7.5-1	27.00	18.25	31.13	18.00	19.00	42.25	4809	4816	3468	3682
CBKIT10-1	27.00	18.25	30.38	18.00	19.00	42.25	4809	4816	3468	3682
CBKIT12-1	27.00	19.38	30.13	18.00	21.00	43.25	2889	2889	3794	3701
CBKIT15-1	32.00	20.38	29.63	18.00	21.00	44.25	2889	2889	3482	3701
CBKIT20-1	32.00	20.38	29.00	18.00	21.00	44.25	2889	2889	3482	3701
CBKIT25-1	32.00	20.38	29.00	18.00	21.00	44.25	2889	2889	3532	3701
CBKIT30-1	-	-	63.00	22.00	16.00	90.00	2218	2218	21992	21985
CBKIT40-1	-	-	63.00	24.00	17.00	90.00	2227	2227	22021	22038

Dimensions do not include the 3/4" insulation

Multiple Circuit

Models	R22 Nominal Capacity* (tons)	Number of Circuits	Chiller Barrel Included	TX-Kit (Control pack & framework included)	Connections (inches)				Working Pressure (psi)	
					P Ref. In (IDS)	Q Ref Out (IDS)	W Fluid Conn.	T Drain (FNPT)	Shell	Tube
CBKIT10-2	11.3	2	TX10-2	DTXKIT10-12	5/8	1.125	2" FPT	1/2	225	225
CBKIT12-2	14.3	2	TX12-2	DTXKIT10-12	5/8	1.125	2" FPT	1/2	225	225
CBKIT15-2	18.3	2	TX15-2	DTXKIT15-20	7/8	1 5/8	2 1/2" FPT	1/2	225	225
CBKIT15-3	18.3	3	TX15-3	TXKIT15-3	5/8	1 1/8	2 1/2" FPT	1/2	225	225
CBKIT20-2	22.6	2	TX20-2	DTXKIT15-20	7/8	1 5/8	3" FPT	1/2	225	225
CBKIT20-4	22.6	4	TX20-4	TXKIT20-4	5/8	1 1/8	3" FPT	1/2	225	225
CBKIT25-2	27.2	2	TX25-2	DTXKIT15-20	7/8	1 5/8	3" FPT	1/2	150	225
CBKIT30-2**	29.8	2	TXC30-2	DTXCKIT30	7/8	1 5/8	3" MPT	3/4	150	300
CBKIT40-2**	40.2	2	TXC40-2	DTXCKIT40	1 1/8	2 1/8	3" MPT	3/4	150	300
CBKIT50-2**	50.9	2	TXC50-2	DTXCKIT50	1 1/8	2 1/8	4" FLANGE	3/4	150	300
CBKIT60-2**	59.6	2	TXC60-2	DTXCKIT60	1 1/8	2 5/8	4" FLANGE	3/4	150	300
CBKIT75-2**	75.2	2	TXC75-2	DTXCKIT75	1 3/8	2 5/8	5" FLANGE	3/4	150	300

\*Ratings are based on entering water 54°F, leaving water 44°F, saturated suction temperature of 35°F, entering TXV temperature of 100°F with 7°F of superheating

\*\*Kits include unloading feature, kits with no unloading feature are also available

\*\*\* Pumpdown cycle included

Chiller builder kits require 120 volt power to operate

Includes 3/4" thick insulation as standard

Values shown are correct at the time of publication, all data should be reconfirmed at the time of purchase

Capacity Tons = 12,000 BTU/hr

For performance data with other refrigerants, please call

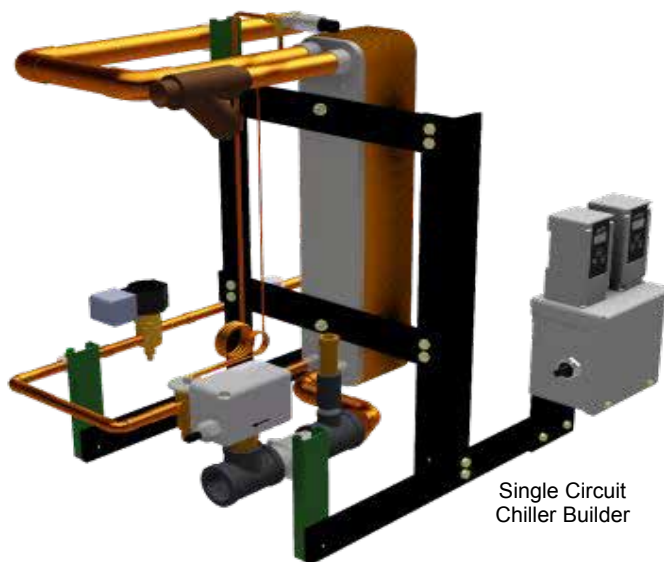
Multiple Circuit

Models	Dimensions (inches)						Gaskets Article #		Heads Article #	
	A	B	C	D	H	L	Front	Rear	Inlet	Outlet
CBKIT10-2	29.00	18.25	30.38	20.00	17.00	45.25	4809	2872	3668	3675
CBKIT12-2	29.00	19.38	30.13	20.00	19.00	46.25	2889	2889	3813	3699
CBKIT15-2	29.00	19.38	29.63	20.00	21.00	46.25	2889	2889	3620	3699
CBKIT15-3	30.75	-	-	-	23.25	80.00	18696	18696	7589	7596
CBKIT20-2	29.00	19.38	29.00	20.00	21.00	46.25	2889	2889	3620	3699
CBKIT20-4	30.75	-	-	-	23.25	80.00	2889	2889	7558	7541
CBKIT25-2	29.00	19.38	29.00	20.00	21.00	46.25	2889	2889	3620	3699
CBKIT30-2	-	-	63.00	22.00	19.00	90.00	2218	2218	22014	31318
CBKIT40-2	-	-	63.00	24.00	20.00	90.00	2227	2227	22045	22052
CBKIT50-2	-	-	63.00	24.00	20.00	90.00	2227	2227	22045	22052
CBKIT60-2	-	-	73.00	24.00	22.00	104.00	2227	2227	22090	22052
CBKIT75-2	-	-	73.00	24.00	22.00	104.00	2227	2227	22119	22052

Dimensions do not include the 3/4" insulation



## Chiller Builder Kits For Brazed Plate Evaporators



Single Circuit Chiller Builder

**BUILD A COMPLETE WATER CHILLER QUICKLY AND ECONOMICALLY**

**CONNECTS TO YOUR CONDENSING UNIT**

**IMMEDIATE AVAILABILITY**

Combine a **Chiller Builder Kit** with an Alfa Laval Brazed Plate Evaporator for a complete Low Side Chiller ready to be connected to your condensing unit. The Chiller Builder components and controls are properly matched to the evaporator, and can be used in either pump-down and non-pump-down systems.

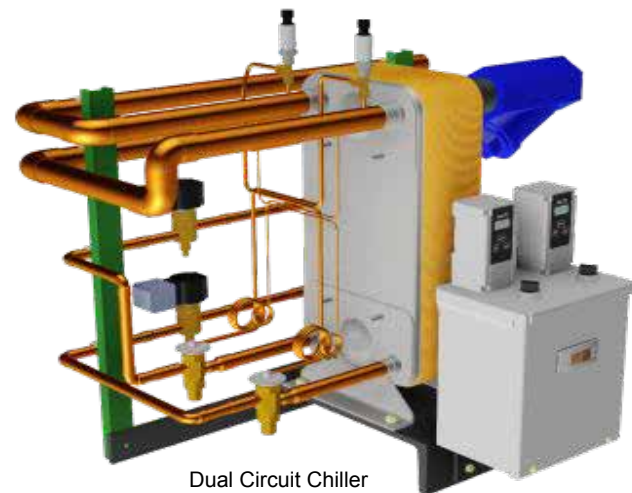
The evaporator and components are quickly assembled on the compact structural steel frame. The completed assembly can be conveniently located near the air handler or process load.

The Chiller Builder controls connect to the condensing unit thermostat terminals for simple and fool-proof installation and operation.

- Uses compact and efficient Brazed Plate Evaporators
- Available in single and dual refrigerant circuit models
- Available for R410A, R404A, R507, R22
- Brand name components
- Available in ranges from 2 to 80 tons
- Entire kit can be assembled in less than one hour
- Includes Digital Controls

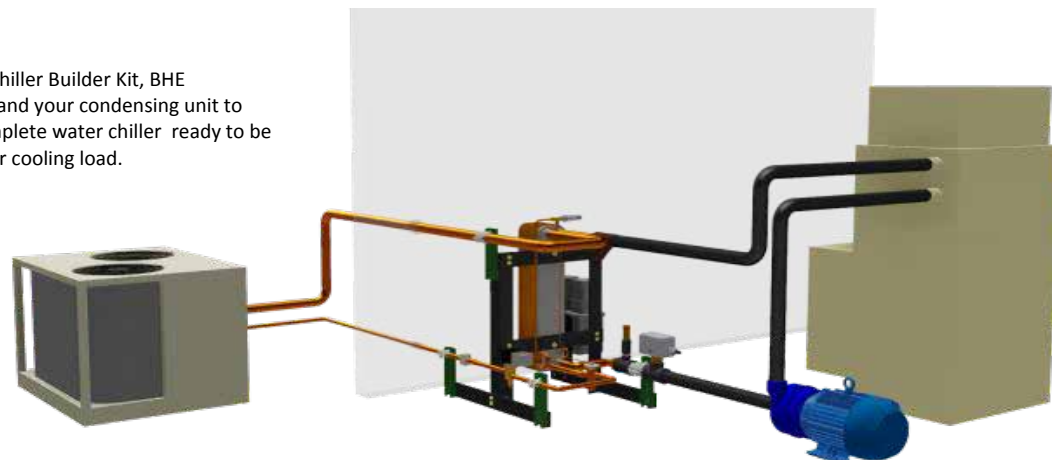
**Included Components**

- Structural Steel Framework
- Electronic chiller controller with fault indicating lights
- Temperature control
- Electronic low pressure freeze protection switch
- Expansion valve
- Solenoids
- Sight glass
- Freezestat
- Flow switch
- Water strainer



Dual Circuit Chiller

Combine a Chiller Builder Kit, BHE evaporator, and your condensing unit to create a complete water chiller ready to be piped to your cooling load.



### Technical specifications

Nominal Tons R410AI	Kit Model	Refrigerant		
		R410A Model	R404A / R507 Model	R22 Model
<b>Single Refrigerant Circuit Models</b>				
2	BHEKIT-2-1-*	ACH-30EQ-20H R52	ACH-30EQ-20H	ACH-30EQ-20H
3	BHEKIT-3-1-*	ACH-30EQ-30H S09	ACH-30EQ-30H	ACH-30EQ-30H
5	BHEKIT-5-1-*	ACH-30EQ-40H S09	ACH-30EQ-50H	ACH-30EQ-50H
7.5	BHEKIT-7.5-1-*	ACH-70X-32M S21	ACH-70X-32M	ACH-70X-42M
10	BHEKIT-10-1-*	ACH-70X-42M S24	ACH-70X-42M	ACH-70X-62M
15	BHEKIT-15-1-*	ACH-70X-62M S25	ACH-70X-62M	ACH-70X-78M
20	BHEKIT-20-1-*	ACH-70X-78M R49	ACH-70X-100M	ACH-70X-100M
25	BHEKIT-25-1-*	ACH-120EQ-46H S62	ACH-120EQ-76H	ACH-120EQ-76H
30	BHEKIT-30-1-*	ACH-120EQ-60H S62	ACH-120EQ-90H	ACH-120EQ-90H
40	BHEKIT-40-1-*	ACH-120EQ-76H S62	ACH-120EQ-124H	ACH-120EQ-124H
50	BHEKIT-50-1-*	ACH-120EQ-106H S62		
60	BHEKIT-60-1-*	ACH-120EQ-124H S62		
<b>Dual Refrigerant Circuit Models</b>				
10	BHEKIT10-2-*	ACH-230DQ-30H	ACH-230DQ-30H	ACH-230DQ-50H
15	BHEKIT15-2-*	ACH-230DQ-50H	ACH-230DQ-50H	ACH-230DQ-50H
20	BHEKIT20-2-*	ACH-230DQ-50H	ACH-230DQ-70H	ACH-230DQ-70H
25	BHEKIT25-2-*	ACH-230DQ-70H	ACH-230DQ-70H	ACH-230DQ-70H
30	BHEKIT30-2-*	ACH-230DQ-70H	ACH-230DQ-90H	ACH-230DQ-90H
40	BHEKIT40-2-*	ACH-230DQ-90H	ACH-230DQ-110H	ACH-230DQ-110H
50	BHEKIT50-2-*	ACH-230DQ-110H	ACH-230DQ-138H	ACH-230DQ-138H
60	BHEKIT60-2-*	ACH-230DQ-138H	ACH-230DQ-138H	ACH-230DQ-138H
80	BHEKIT80-2-*	ACH-230DQ-170H	ACH-230DQ-202H	ACH-230DQ-202H

\* -Refrigerant, e.g., The model number of a nominal 10 ton single circuit kit for R410A will be BHEKIT-10-1-410.

\*\* Based on R410A. Contact factory for other refrigerant and water line sizes.

**Assembled Kit Dimensions**

Nominal Tons R410AI	Kit Model	L Length	W Width	H Height	W** Water conn. (ids)	P** Liquid conn. (ids)	Q** Suction conn. (ids)	Kit Weight lbs.***
<b>Single Refrigerant Circuit Models</b>								
2	BHEKIT-2-1-*	32"	24"	19"	7/8"	3/8"	7/8"	40
3	BHEKIT-3-1-*	32"	24"	19"	7/8"	3/8"	7/8"	45
5	BHEKIT-5-1-*	32"	24"	19"	7/8"	3/8"	7/8"	45
7.5	BHEKIT-7.5-1-*	34"	25"	28"	1-1/8"	5/8"	1-1/8"	65
10	BHEKIT-10-1-*	34"	25"	28"	1-1/8"	5/8"	1-1/8"	65
15	BHEKIT-15-1-*	34"	25"	28"	1-1/8"	5/8"	2-1/8"	70
20	BHEKIT-20-1-*	34"	25"	28"	1-3/8"	7/8"	2-1/8"	75
25	BHEKIT-25-1-*	38"	31"	34"	2-1/8"	7/8"	2-1/8"	115
30	BHEKIT-30-1-*	38"	31"	34"	2-1/8"	1-1/8"	2-1/8"	115
40	BHEKIT-40-1-*	38"	31"	34"	2-1/8"	1-1/8"	2-1/8"	125
<b>Dual Refrigerant Circuit Models</b>								
10	BHEKIT10-2-*	40"	22"	30"	2" Victaulic	3/8"	1-1/8"	90
15	BHEKIT15-2-*	40"	22"	30"	2" Victaulic	5/8"	1-3/8"	90
20	BHEKIT20-2-*	40"	22"	30"	2" Victaulic	5/8"	1-3/8"	90
25	BHEKIT25-2-*	44"	22"	32"	2" Victaulic	5/8"	1-3/8"	95
30	BHEKIT30-2-*	48"	24"	32"	2" Victaulic	7/8"	1-3/8"	95
40	BHEKIT40-2-*	50"	24"	32"	2½" Victaulic	7/8"	1-5/8"	125
50	BHEKIT50-2-*	53"	24"	34"	2½" Victaulic	7/8"	1-5/8"	125
60	BHEKIT60-2-*	53"	24"	34"	2½" Victaulic	1-1/8"	2-1/8"	140
80	BHEKIT80-2-*	60"	26"	34"	2½" Victaulic	1-1/8"	2-1/8"	140

\* -Refrigerant, e.g., The model number of a nominal 10 ton single circuit kit for R410A will be BHEKIT-10-1-410.

\*\* Based on R410A. Contact factory for other refrigerant and water line sizes.

\*\*\* Does not include the weight of evaporator.



**CUSHIONED TUBING CLAMPS, GALVANIZED**

These channel mounted clamping systems are ideal for multiple line runs. They absorb shock and vibration, reduce unwanted noise, and prevent galvanic corrosion. The clamp features a unique shoulder stud which is securely fastened to one clamp half. This Controlled Squeeze design eliminates over-tightening and rotation while nylon insert nut assures a positive lock. Stocked with electro-dichromate finish, and available in stainless steel. The cushion is chemical resistant, and has a -50°F to 275°F operating range. A patented “Living Hinge” allows the cushion to be spread apart for quick, easy installation.

Z004T008 thru Z066N074

**TUBE X PIPE O.D.**

Z004T008	1/4"
Z006T010	3/8"
Z008T012	1/2"
Z010T014	5/8"
Z012T016	3/4"
Z014T018	7/8"
Z016T020	1"
Z018T022	1-1/8"
Z020T024	1-1/4"
Z022T026	1-3/8"
Z024N028	1-1/2"
Z026N030	1-5/8"
Z028N032	1-3/4"
Z030N034	1-7/8"
Z032N036	2"
Z034N040	2-1/8"
Z036N042	2-1/4"
Z038N044	2-3/8"
Z040N046	2-1/2"
Z042N048	2-5/8"
Z046N052	2-7/8"
Z050N054	3"
Z050N056	3-1/8"
Z053N060	3-5/16"
Z056N062	3-1/2"
Z058N064	3-5/8"
Z064N072	4"
Z066N074	4-1/8"

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