



Joining Technologies Product Catalog

September 2011



Worthington Cylinders acquired the assets of Newell Rubbermaid's torch and solder business sold under the BernzOmatic® and Lenox® brands in July, 2011. Order your Lenox torches, fuel, solder, brazing rods and related accessories directly through Worthington Cylinders.

Contact Worthington Cylinders Customer Service or a Representative near you:

For faxed orders, please send orders to:

800-824-2340 614-438-3083

For emailed orders, please send orders to:

Cylinders@WorthingtonIndustries.com

For all phone inquiries, please dial:

800-346-9386 614-438-3013

Worthington Cylinders Remit-To Address:

Worthington Cylinders PO Box 532575 Atlanta, GA 30353-2575

Worthington Cylinders is the leading global supplier of pressure cylinders and related products including torches, helium balloon kits and propane appliance accessories.

Worthington Cylinders delivers products and value-added services to its customers designed to exceed their expectations in quality, service and value. Our most complete line of pressure cylinders in the industry includes storage of liquefied petroleum, refrigerant, oxygen and industrial gases. Balloon Time®, BernzOmatic® and Worthington Pro Grade® products are available at retailers and distributors nationwide and provide consumers products for home, industrial and equipment repair; grilling; party decorating; and outdoor leisure activities.



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"B" AIR ACETYLENE KITS

Pack Higher Performance in an Easier-To-Carry Package



WC PROD NO	LENOX PROD NO	DESCRIPTION	TIPS INCLUDED
330558	21835LX3B	"B" Air Acetylene Kit	A3 3/16" Swirl Flame Tip
330559	21836LX5B	"B" Air Acetylene Kit	A5 1/4" Swirl Flame Tip
330560	21837LX514B	"B" Air Acetylene Kit	A5 1/4" & A14 1/2" Swirl Flame Tips
330561	21838LX500B	"B" Air Acetylene Kit	AA500 1/4" Self-Igniting Swirl Flame Tip
330562	21839LX800B	"B" Air Acetylene Kit	AA800 5/16" Self-Igniting Swirl Flame Tip

Tip size and quantity vary by kit. See chart above



"MC" AIR ACETYLENE KITS

Pack Higher Performance in an Easier-To-Carry Package



WC PROD NO	LENOX PROD NO	DESCRIPTION	TIPS INCLUDED	
330563	21840LX5MC	"MC" Air Acetylene Kit	A5 1/4" Swirl Flame Tip	
330564	21841LX38MC	"MC" Air Acetylene Kit	A3 3/16" & A8 5/16" Swirl Flame Tips	
330565	21842LX500MC	"MC" Air Acetylene Kit	AA500 1/4" Self-Igniting Swirl Flame Tip	
330566		"MC" Air Acetylene Kit	AA800 5/16" Self-Igniting Swirl Flame Tip	

Tip size and quantity vary by kit. See chart above



ALL KITS CONTAIN THE FOLLOWING:



AIR ACETYLENE PISTON REGULATOR WITH TANKTOTE HANDLE, GAUGEGUARD AND 2" EASY READ GAUGE

Provides consistent fuel regulation Durable brass construction protects 2" Easy Read Gauge from damage Transport tank easily Ergonomically designed for comfort Integrated tank key storage



AA TORCH HANDLE Comfortable grip with on/ off valve and quick connect, "A" size fittings 3/8"



AA HOSE 12-1/2' hose with metal strain relief keeps hose from kinking at fittings, "A" size fittings 3/8"



TANKTOTE SLEEVE



ONE OR MORE SWIRL FLAME, OR SELF-IGNIT-ING SWIRL FLAME TIPS



"B" TANK KEY



STANDARD AIR ACETYLENE KITS

Durability and Performance

BUILT-IN DURABILITY AND PERFORMANCE

ALL BRASS PISTON REGULATOR

Provides consistent performance

METAL STRAIN RELIEF

Keeps hose from kinking

HIGH PERFORMANCE SWIRL FLAME TIPS

With replaceable burn tips produce maximum heat output

GAUGEGUARD PROTECTS 2" EASY READ GAUGE

WC PROD NO	LENOX PROD NO	DESCRIPTION	TIPS INCLUDED
330502	10835LX311AB	Air Acetylene Kit	A3 3/16" & A11 7/16" Swirl Flame Tips
330503	10836LX4AB	Air Acetylene Kit	A5 1/4" & A14 1/2" Swirl Flame Tips
330504	10837LX5ABMC	Air Acetylene Kit	A5 1/4" Swirl Flame Tip and B-MC Adapter
330505	10838LX800AB	Air Acetylene Kit	AA800 5/16" Self-Igniting Tip

Tip size and quantity vary by kit. See chart above



ALL KITS CONTAIN THE FOLLOWING:



ALL BRASS PISTON REGULATOR WITH GAUGEGUARD AND 2" EASY READ GAUGE



AA TORCH HANDLE Comfortable grip with on/off valve and quick connect, "A" size fittings 3/8"



12-1/2' Hose with metal strain relief keeps hose from kinking at fittings, "A" size fittings 3/8"



"B" TANK KEY



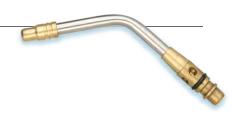
ONE OR MORE SWIRL FLAME, OR SELF-IGNITING SWIRL FLAME TIPS



AIR ACETYLENE TORCH TIPS

BRASS AND STAINLESS CONSTRUCTION REPLACEABLE BURN TIP, ORIFICE & "O" RING QUICK CONNECT





SWIRL FLAME

			TIP	SIZE	PIPE SIZE SC	FT SOLDER	PIPE SIZE E	BRAZING
WC PROD NO	LENOX PROD NO	DESCRIPTION	IN	MM	IN	MM	IN	MM
330510*	10851A2R	Light-duty HVAC tip	1/8	3	1/8-1/2	3–13	1/8-1/4	3-6
330567	21980A3R	Light-medium-duty tip	3/16	4.8	1/4–1	6-25	1/8-1/2	3–13
330568	21981A5R	Medium-duty tip	1/4	6.3	3/4-1-1/2	19-40	1/4-3/4	6-20
330569	21982A8R	Medium-heavy-duty tip	5/16	7.9	1–2	25-50	1/2–1	13-25
330570	21983A11R	Heavy-duty tip	7/16	11.1	1-1/2-3	40-75	7/8-1-5/8	22-41
330571	21984A14R	Extra-heavy-duty tip	1/2	12.7	2-3-1/2	50-90	1–2	25-50
330572	21985A32R	Heaviest-duty tip	5/8	15.9	4-6	100-150	1-1/2-4	40-100

^{*}Rosebud flame tip for use with small diameter tubing

















SELF-IGNITING SWIRL FLAME

			TI	P SIZE	PIPE SIZE S	OFT SOLDER	PIPE SIZ	E BRAZING
WC PROD NO	LENOX PROD NO	DESCRIPTION	IN	MM	IN	MM	IN	MM
330573	21850AA500	Medium-duty tip	1/4	6.3	3/4-1-1/2	20-40	1/4-3/4	6–20
330574	21851AA800	Medium-heavy-duty tip	5/16	7.9	1–2	25-50	1/2–1	13-25
330575	21852AA900	Extra-heavy-duty tip	1/2	12.7	2-4	50-100	1–2	25-50









SOFT FLAME

			TIF	SIZE	PIPE SIZE	SOFT SOLDER	PIPE SI	IZE BRAZING
WC PROD NO	LENOX PROD NO	DESCRIPTION	IN	MM	IN	MM	IN	MM
330517	10857AS2	Light-duty tip	1/8	3	1/8-3/8	3–9	up to 1/8	up to 3
330518	10858AS3	Medium-duty tip	5/32	4	3/8-1/2	9–13	up to 3/8	up to 9
330519	10859AS4	Medium-duty tip	1/5	5	1/2-1	13-25	up to 1/2	up to 13
330520	10860AS5	Heaviest-duty tip	1/4	6.3	3/4-2	20-50	up to 1	up to 25
330521*	10861AS6*	Heaviest-duty tip	5/8	15.9	1-1/2-4	40-100	up to 1-1/2	up to 40

^{*}Does not include replaceable burn tip





AIR ACETYLENE ACCESSORIES





"B" TANKTOTE SLEEVE 330507 LENOX PROD NO: 10840BSLEEVE



"MC" TANKTOTE SLEEVE 330508 LENOX PROD NO: 10841MCSLEEVE



AIR ACETYLENE PISTON REGULATOR
WITH TANKTOTE HANDLE, GAUGEGUARD
AND 2" EASY READ GAUGE

330577 "B" LENOX PROD NO: 21854BREG

330578 "MC" LENOX PROD NO: 21855MCREG

- Protects 2" Easy Read Gauge from damage
- Transport tank easily
- Integrated tank key storage



AA TORCH HANDLE

330579 LENOX PROD NO: 21856AAH

- Comfortable grip with on/off valve and quick connect
- "A" Size fittings 3/8"



ALL BRASS PISTON REGULATOR WITH GAUGEGUARD

330506 LENOX PROD NO: 10839ABR

• Solid brass regulator with gauge B connection



STRIKER 330509 LENOX PROD NO: 10842STRIKER1



"B" TANK KEY 330350 LENOX PROD NO: 10844TANKKEY



TORCH HEAT SHIELD CLOTH 330905

LENOX PROD NO: 10845HSCLOTH

• 9"x12" (15.24cm x 20.32cm)



AA HOSE 330580 (12 1/2")

LENOX PROD NO: 21857HOSE12 **330581** (25") LENOX PROD NO: 21858HOSE25

- Metal strain relief keeps hose from kinking at fittings
- "A" size fittings 3/8"



"B" TO "MC" ADAPTER 330576

LENOX PROD NO: 21853BMC

 Adapts "B" regulator to fit "MC" tanks



FLINT 5 PACK 330904 LENOX PROD NO: 10843FLINT5



AIR PROPANE / MAP//PRO KITS

Pack High Performance in a Durable Kit

ALL KITS CONTAIN THE FOLLOWING:

All Brass Piston Regulator with GAUGEGUARD and 2" Easy Read Gauge 12-1/2' Hose with Metal Strain Relief AP Handle One or More Swirl Flame Tip or Self-Igniting Swirl Flame Tip



WC PROD NO	LENOX PROD NO	DESCRIPTION	TIPS INCLUDED
330582	21859LX35P	Air Propane / Map//Pro Kit	LP3 3/8" & LP5 3/4" Swirl Flame Tips
330583	21860LX4P	Air Propane / Map//Pro Kit	LP41/2" Swirl Flame Tip
330584	21861LX300P	Air Propane / Map//Pro Kit	LP300 3/8" Self-Igniting Swirl Flame Tip
330585	21862LX400P	Air Propane / Map//Pro Kit	LP400 1/2" Self-Igniting Swirl Flame Tip

Tip size and quantity vary by kit. See chart above

AIR PROPANE / MAP//PRO ACCESSORIES





AIR PROPANE / MAP//PRO PISTON REGULATOR WITH GAUGEGUARD AND 2" EASY READ GAUGE 330591

LENOX PROD NO: 21868APREG

- Provides consistent fuel regulation
- Durable brass construction
- Protects 2" Easy Read Gauge from damage



AIR PROPANE / MAP//PRO TORCH HANDLE 330592

LENOX PROD NO: 21869APH

- Comfortable grip with on/off valve and quick connect
- Fitting size 9/16"



12-1/2' HOSE WITH METAL STRAIN RELIEF 330593

LENOX PROD NO: 21870PHOSE112

25' HOSE WITH METAL STRAIN RELIEF 330594

LENOX PROD NO: 21871PHOSE25

• Metal strain relief keeps hose from kinking at fittings



AIR PROPANE / MAP//PRO TIPS

BRASS AND STAINLESS CONSTRUCTION
REPLACEABLE BURN TIP, ORIFICE & "O" RING
QUICK CONNECT





SWIRL FLAME

				COPPER TUBING SIZE WITH PROPANE			COPPER TUBING SIZE WITH MAP//PRO				
		TIP	SIZE	SOFT S	OLDER	BRAZI	NG	SOFT SO	OLDER	BRAZ	ING
WC PROD NO	LENOX PROD NO	IN	MM	IN	MM	IN	MM	IN	MM	IN	MM
330512	10852LP2	5/16	7.9	1/8-1/4	3-6	1/16-1/4	2-6	1/8-1/2	3–13	1/8-1/4	3-6
330586	21863LP3	3/8	9.5	1/4–1	6-25	1/8-1/2	3-13	1/4-1-1/2	6-40	1/4-1/2	6-13
330587	21864LP4	1/2	12.7	1/4-1-1/2	6-40	1/4-3/4	6-19	1/4-2-1/2	6-63	1/4-1-1/4	6-32
330588	21865LP5	3/4	19	1-1/2-2-1/2	40-63	1/2-1-1/4	13-32	1–4	25-100	1/2-2	13-50
330514	10855LP6	1	25	1-1/2-4	40-100	3/4-2	19-50	1-1/2-6	40-150	3/4-4	19-100





SELF-IGNITING SWIRL FLAME

				COPPER TUBING SIZE WITH PROPANE COPPER TUBING SIZE WITH MAP//PR					E WITH MAP//PR	MON	
		T	IP SIZE	SOFT S	OLDER	BRAZING		SOFT SOLDER		BRAZING	1
WC PROD NO	LENOX PROD NO	IN	MM	IN	MM	IN	MM	IN	MM	IN	MM
330589	21866LP300	3/8	9.5	1/4-1	6-25	1/8-1/2	3-13	1/4-1-1/2	6-40	1/4-1/2	6-13
330590	21867LP400	1/2	12.7	1/4-1-1/2	6-40	1/4-3/4	6-19	1/4-2-1/2	6-63	1/4-1-1/4	6-32





MOBILE TORCH SYSTEM II

Hot Performance. Cool Mobility.

ACCESSIBILITY

MTS II extends the reach and access to any job situation - crawl spaces, attics, under cabinets, on ladders and more

GREATER STORAGE

Improved carrying case now holds two 14.1 oz gas cylinders

Added space for more solder accessories and tools

PROTECTION

Integrated hose wrap - keeps hose in place

Tip holder - protects and cools tip after use

All tools and accessories - protected inside the durable case

COMPATIBLE WITH COMPETITIVE COMPONENTS

Durable, lightweight case can be used with competitor's torch, fuel and accessories

WC PROD NO	LENOX PROD NO	DESCRIPTION	TIP INCLUDED
330532	14812LX300FB	Mobile Torch System II	LP3003/8"
330533	14813LX400FB	Mobile Torch System II	LP4001/2"
330528	10886LXPSREG	All Brass Regulator	_



HOLDS: two 14.1 oz gas cylinders

FUEL AND SOLDER ACCESSORIES NOT INCLUDED

ALL SYSTEMS CONTAIN THE FOLLOWING:



MOBILE TORCH II CASE **330534** LENOX PROD NO: 14814LXFB

- Store and transport two gas cylinders, solder, tools and accessories
- Integrated hose wrap and tip holder



ALL BRASS REGULATOR

330528 LENOX PROD NO: 19886LXPREG

• CGA-600 cylinder connection for MPP and Propane



12-1/2' HOSE WITH METAL STRAIN RELIEF

330593 LENOX PROD NO: 21870HOSE12

 Metal strain relief keeps hose from kinking at fittings



AP HANDLE

330592 LENOX PROD NO: 21869APH

- · Comfortable grip with on/off valve and quick connect
- Fitting size 9/16"





SELF-IGNITING SWIRL FLAME AIR PROPANE / MAP//PRO TIP

330589

LENOX PROD NO: 21866LP300

330590 LENOX PROD NO: 21867LP400

• Replaceable burn tip, orifice and "O" ring



SELF-IGNITING HAND TORCHES

Maximum Heat Output, Durability, and Safety

TARGETED HEAT OUTPUT

For accurate and efficient performance

CAST ALUMINUM CONSTRUCTION

Provides outstanding durability

SOLID BRASS REGULATORS

For efficient fuel regulation

WC PROD NO	LENOX PROD NO	REPLACEMENT BURN TIPS	DESCRIPTION	Of the second
330546	21178LT92	_	Ultra Swirl with Adjustable Flame	
330547	21179LT92R	330554	Adjustable Ultra Swirl Replacement Assembly	lu lu
330544	21176LT91	_	Swirl with Adjustable Flame	
330545	21177LT91R	330555	Adjustable Swirl Replacement Assembly	
330542	21174LT90	_	Swirl Flame Hand Torch	
330543	21175LT90R	330555	Swirl Flame Replacement Assembly	
330549	21183LT60	_	Heat Shrink Hand Torch	
330550	21184LT60R	330556	Heat Shrink Replacement Assembly	
330540	21172LS20	_	Self-igniting 360° Swivel Torch	
330541	21173LS20R	2330557	Self-igniting 360° Swivel Torch Replacement Assembly	
330538	21170LS10	_	360° Swivel Torch	
330539	21171LS10R	_	360° Swivel Torch Replacement Assembly	



			REPLACEMENT	COPPER TUBING SIZE WITH PROPANE			COPPER TUBING SIZE WITH MAP//PRO				
		REBUILD KITS	BURN TIP	SOFT	SOLDER	BRAZ	ING	SOFT SOLDER		BRAZING	
WC PROD NO	LENOX PROD NO	PROD NO	ASSEMBLY	IN	MM	IN	MM	IN	MM	IN	MM
330542	21174LT90	330543	330555	1/8-2	3-50	1/16-3/4	2-19	1/8-3	3-75	1/16-1	2-25
330544	21176LT91	330545	330555	1/8-2	3-50	1/16-3/4	2-19	1/8-3	3-75	1/16–1	2-25
330546	21178LT92	330547	330554	3/4-3	19-75	1/4-1	6-25	3/4-4	19-100	1/4-1-3/4	6-45
330549	21183LT60	330550	330556	-	-	-	-	-	-	-	_
330538	21170LS10	330539	_	1/4-3	6-75	1/4–1	6-25	1/4-3-1/2	6-85	1/4-1-3/4	6-45
330540	21172LS20	330541	330557	1/4-3	6-75	1/4–1	6-25	1/4-3-1/2	6-85	1/4-1-3/4	6-45











LT92KFB HAND TORCH KIT

Hot Performance. Cool Mobility.

STORAGE

Improved carrying case holds two 14.1 oz gas cylinders Store and transport LENOX Self-Igniting Hand Torch Handle folds down for easy storage

Added space for tubing cutter, solder and accessories

PROTECTION

Durable case protects fuel, torch and accessories

COMPATIBLE WITH

COMPETITIVE COMPONENTS

Durable, lightweight case can be used with competitors fuel and accessories





two 14.1 oz gas cylinders

SOLDER ACCESSORIES & TOOLS NOT INCLUDED





WC PROD NO	LENOX PROD NO	DESCRIPTION	HAND TORCH INCLUDED
330536	14816LT92FB	Hand Torch & Case Only	LT92
304331	N/A	14.1 oz NRT Propane Gas - US	-
304411	N/A	14.1 oz NRT Propane Gas - CANADA	_
308486	N/A	14.1 oz NRT Map Pro Gas - US	-
308484	N/A	14.1 oz NRT Map Pro Gas - CANADA	_



PREMIUM LEAD-FREE SOLDER

MEETS HIGHEST PRODUCT STANDARDS

NSF 61 Certification for safe use in potable water applications

100% ENVIRONMENTALLY SAFE

Completely free of antimony or nickel







PREMIUM LEAD-FREE

Patented formula advantages Lowest melting temperature: 410° F Best flowing lead-free solder available Highest tensile strength: 7130 psi



			WEIGHT		DIAME	TER	CARTON
WC PROD NO	LENOX PROD NO	DESCRIPTION	LB	G	IN	MM	QTY
327929	WS15086	Premium Wire Spool	1	454	.118	3	50
327930*	W15086NB*	Premium Wire Spool	1	454	.118	3	50
327953	WS15259	Premium Wire Spool	1	454	.118	3	20
327928	WS15084	Premium Wire Spool	1	454	.062	1.6	50
327933	WS15090	Premium Wire Spool	1/4	113	.118	3	50
327935	WS15092	Premium Wire Spool	1/2	227	.118	3	50
327934	WS15091	Premium Wire Spool	5	2270	.118	3	10
327957	WS15284	Premium Wire Spool	5	2270	.062	1.6	10
327964	WS15332	Premium Wire Spool	5	2270	.050	1.6	10
327931	WS15087	Premium Wire Spool	20	9072	.118	3	2
327932	WS15089	Premium Wire Spool	40	18144	.118	3	1
327927	WS15081	Premium Sm Ingot	5	2270	_	_	10

^{*} Spool is not sold in an individual box

SILVER LEAD-FREE

Wide pasty range (440°–640° F) allows for more working time Ideal for use on large diameter pipe High tensile strength: 6900 psi Low melting temperature: 440° F



			WE	WEIGHT		DIAMETER	
WC PROD NO	LENOX PROD NO	DESCRIPTION	LB	G	IN	MM	QTY
327961	WS15318	Silver Wire Spool	1	454	.118	3	50
327962*	W15318NB*	Silver Wire Spool	1	454	.118	3	50
327965	WS15344	Silver Wire Spool	1	454	.118	3	20
327963	WS15319	Silver Wire Spool	1/4	113	.118	3	50
327966	WS15346	Silver Wire Spool	20	9072	.118	3	2

^{*} Spool is not sold in an individual box

LEAD-FREE

Patented formula advantages Low melting temperature: 419° F Increased flow properties High tensile strength: 6950 psi



			WEIGHT		DIAMETER		CARTON
WC PROD NO	LENOX PROD NO	DESCRIPTION	LB	G	IN	MM	QTY
327914	WS15037	Lead-Free Wire Spool	1	454	.118	3	50
327915*	W15037NB*	Lead-Free Wire Spool	1	454	.118	3	50
327954	WS15262	Lead-Free Wire Spool	1	454	.093	2.4	50
327917	WS15039	Lead-Free Wire Spool	1/4	113	.118	3	50
327919	WS15041	Lead-Free Wire Spool	1/2	227	.118	3	50
327918	WS15040	Lead-Free Wire Spool	5	2270	.118	3	5
327916	WS15038	Lead-Free Wire Spool	20	9072	.118	3	2

^{*} Spool is not sold in an individual box

Unit lot numbering ensures complete traceability



LEAD-FREE SOLDER

FOR USE IN PLUMBING AND POTABLE WATER APPLICATIONS



SILVER BEARING ALLOY LEAD-FREE

NSF 61 Certification for safe use in potable water applications

Lead-Free Tin-Copper-Silver Solder

Wide pasty range

Melting temperature: 440° F Tensile strength: 6600 psi

ASTM B-32





			WEIGHT		DIAMETER		CARTON
WC PROD NO	LENOX PROD NO	DESCRIPTION	LB	G	IN	MM	QTY
327924	WS15067	Silver Bearing Alloy Spool	1	454	.118	3	50
327925	WS15068	Silver Bearing Alloy Wire Spool	1/4	113	.118	3	50
327926	WS15069	Silver Bearing Alloy Spool	5	2270	.118	3	10

97/3 LEAD-FREE

NSF 61 Certification for safe use in potable water applications

Lead-Free Tin-Copper Solder

Melts, flows and performs better than $95/5\,$

Melting temperature: 445° F Tensile strength: 5800 psi

ASTM B-32





			W	WEIGHT		ETER	CARTON
WC PROD NO	LENOX PROD NO	DESCRIPTION	LB	G	IN	MM	QTY
327922	WS15064	97/3 Wire Spool	1	454	.118	3	50
327971	WS15397	97/3 Wire Spool	1	454	.062	1.6	50
327967	WS15355	97/3 Wire Spool	1/4	113	.118	3	50
327923	WS15066	97/3 Wire Spool	1/2	227	.118	3	50
327960	WS15317	97/3 Wire Spool	5	2270	.118	3	10
327941	WS15164	97/3 Wire Spool	20	9072	.118	3	2

95/5 LEAD-FREE

Lead-Free Tin-Antimony Solder Narrow pasty range Melting temperature: 455° F Tensile strength: 5500 psi

ASTM B-32





LENOX
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			WE	IGHT	DIAMETER		CARTON
WC PROD NO	LENOX PROD NO	DESCRIPTION	LB	G	IN	MM	QTY
327903	WS15018	95/5 Wire Spool	1	454	.118	3	50
327942	WS15181	95/5 Wire Spool	1	454	.093	2.4	50
327968	WS15359	95/5 Wire Spool	1	454	.118	3	25
327958	WS15312	95/5 Wire Spool	1/4	113	.118	3	50
327959	WS15313	95/5 Wire Spool	1/2	227	.118	3	50
327940	WS15147	95/5 Wire Spool	5	2270	.118	3	10
327936	WS15095	95/5 Wire Spool	20	9072	.118	3	2

Unit lot numbering ensures complete traceability



SPECIALTY LEAD-FREE SOLDER



96/4 LEAD-FREE

Lead-Free 96% Tin 4% Silver HVAC Solder NSF 61 Certification for safe use in potable water applications

Alternative to silver brazing rods

Use for joining copper or brass to copper or brass, copper or brass to steel or stainless, steel or stainless to steel or stainless

Melting temperature: 430° F Tensile strength: 14,000 psi

ASTM B-32 Sn96





94/6 LEAD-FREE

Lead-Free 94% Tin 6% Silver HVAC Solder NSF 61 Certification for safe use in potable water applications

Alternative to silver brazing rods

Use for joining copper or brass to copper or brass, copper or brass to steel or stainless, steel or stainless to steel or stainless

Melting temperature: 430° F Pasty range: 430°–535° F Tensile strength: 15,000 psi

ASTM B-32 Sn94



			WEIGHT		DIAMETER		CARTON
WC PROD NO	LENOX PROD NO	DESCRIPTION	LB	G	IN	MM	QTY
327939	WS15100	96/4 HVAC Wire Spool	1	454	.118	3	10
327943	WS15204	96/4 HVAC Wire Spool	1	454	.062	1.6	10

			WEIGHT		DIAMETER		CARTON
WC PROD NO	LENOX PROD NO	DESCRIPTION	LB	G	IN	MM	QTY
327937	WS15098	94/6 HVAC Wire Spool	1	454	.118	3	10
327938	WS15099	94/6 HVAC Wire Spool	20	9072	.118	3	2

ACID CORE LEAD-FREE

Use for tin repairs, sheet metal, auto radiators, metal gutters, non-electrical and non-plumbing applications

Melting temperature: 445° F

Not for use in plumbing or potable water applications

			WEIGHT		DIAMETER		CARTON
WC PROD NO	LENOX PROD NO	DESCRIPTION	LB	G	IN	MM	QTY
327909	WS15023	Acid Core Wire Spool	1	454	.062	1.6	50
327978	WS15406	Acid Core Wire Spool	1	454	.125	3.2	50
327910	WS15025	Acid Core Wire Spool	1/2	227	.062	1.6	18



ROSIN CORE LEAD-FREE

Lead-Free Rosin Core Solder

Use for speaker wire, motors, appliances and general electronic repairs

Melting temperature: 445° F

Not for use in plumbing or potable

water applications



			WE	WEIGHT		DIAMETER	
WC PROD NO	LENOX PROD NO	DESCRIPTION	LB	G	IN	MM	QTY
327911	WS15030	Rosin Core Wire Spool	1	454	.062	1.6	50
327973	WS15401	Rosin Core Wire Spool	1	454	.031	.8	50
327974	WS15402	Rosin Core Wire Spool	1	454	.040	1	50
327975	WS15403	Rosin Core Wire Spool	1	454	.050	1.3	50
327976	WS15404	Rosin Core Wire Spool	1	454	.100	2.5	50
327977	WS15405	Rosin Core Wire Spool	1	454	.125	3.2	50
327912	WS15031	Rosin Core Wire Spool	1/4	113	.062	1.6	50
327913	WS15032	Rosin Core Wire Spool	1/2	227	.062	1.6	18

Unit lot numbering ensures complete traceability



LEADED SOLDER

FOR USE ONLY IN NON-POTABLE WATER APPLICATIONS

L60/40 LEADED

60% Tin, 40% Lead Solder

			WEIGHT		DIAMETER		CARTON
WC PROD NO	LENOX PROD NO	DESCRIPTION	LB	G	IN	MM	QTY
327889	WS10261	60/40 Wire Spool	1	454	.125	3.2	50
327885	WS10107	60/40 Wire Spool	25	11340	.125	3.2	2
327879	WS10069	60/40 Extruded Bar	1	454	_	_	20

40/60 LEADED

40% Tin, 60% Lead Solder

			WEIGHT		DIAMETER		CARTON
WC PROD NO	LENOX PROD NO	DESCRIPTION	LB	G	IN	MM	QTY
327880	WS10088	40/60 Wire Spool	1	454	.125	3.2	50
327881	WS10089	40/60 Wire Spool	25	11340	.125	3.2	2
327893	WS10300	40/60 Extruded Bar	1	454	.050	1.2	50
327901	WS10316	30/70 Extruded Bar	1	454	_	_	50



50/50 LEADED

50% Tin, 50% Lead Solder

			WEIGHT		DIAMETER		CARTON
WC PROD NO	LENOX PROD NO	DESCRIPTION	LB	G	IN	MM	QTY
327882	WS10098	50/50 Wire Spool	1	454	.125	3.2	50
327894	WS10305	50/50 Wire Spool	1/4	113	.125	3.2	50
327895	WS10306	50/50 Wire Spool	1/2	227	.125	3.2	50
327884	WS10100	50/50 Wire Spool	5	2270	.125	3.2	10
327883	WS10099	50/50 Wire Spool	25	11340	.125	3.2	2
327888	WS10257	50/50 Extruded Bar	1	454	_	_	50
327886	WS10161	50/50 Extruded Meter Bar	1/2	227	_	_	50
327890	WS10297	50/50 Extruded Tri Bar	1/3	151	1/4	6.4	50
327891	WS10298	50/50 Extruded Tri Bar	13/32	184	5/16	7.9	50
327892	WS10299	50/50 Extruded Tri Bar	1/2	227	7/16	11.1	50

SPECIALTY LEADED SOLDER

FOR USE ONLY IN NON-POTABLE WATER APPLICATIONS

ACID CORE LEADED

Use for tin repairs, sheet metal, auto radiators, metal gutters, and non-electrical and non-plumbing applications

Tin-Lead Acid Core Solder

				WEIGHT		DIAMETER		CARTON
WC PRO	OD NO	LENOX PROD NO	DESCRIPTION	LB	G	IN	MM	QTY
3279	02	WS10317	30/70 Acid Core Wire Spool	1	454	.125	3.2	50
3278	99	WS10314	60/40 Acid Core Wire Spool	1	454	.062	1.6	50
3279	00	WS10315	40/60 Acid Core Wire Spool	1	454	.062	1.6	50
3278	87	WS10196	3/2/95 Acid Core Wire Spool	1/2	227	.125	1.6	50

ROSIN CORE LEADED

Use for speaker wire, motors, appliances and general electronic repairs Tin-Lead Rosin Core Solder

			WEIGHT		DIAMETER		CARTON
WC PROD NO	LENOX PROD NO	DESCRIPTION	LB	G	IN	MM	QTY
327897	WS10312	60/40 Rosin Core Wire Spool	1	454	.062	1.6	50
327903	WS10318	60/40 Rosin Core Wire Spool	1	454	.031	.8	50
327904	WS10320	60/40 Rosin Core Wire Spool	1	454	.050	1.3	50
327905	WS10321	60/40 Rosin Core Wire Spool	1	454	.100	2.5	50
327906	WS10322	60/40 Rosin Core Wire Spool	1	454	.125	3.2	50
327898	WS10313	40/60 Rosin Core Wire Spool	1	454	.062	1.6	50





PLUMBING KITS

PREMIUM 8 OZ SOLDERING KIT

327945

Includes everything needed to make professional quality repairs: LENOX premium Lead-Free

8 oz solder, LENOX water soluble 1.7 oz flux, 1/2" wire fitting brush, sand cloth and flux brush Carton quantity: 6



4 OZ PLUMBING KIT 327944

Includes everything needed to make professional quality repairs: LENOX Lead-Free 4 oz solder, LENOX water soluble 1 oz flux, sand cloth and flux brush Carton quantity: 12



COLD COAT

PATENTED THERMAL SHIELD GEL

Slows the transfer of heat in metal while soldering, brazing or welding

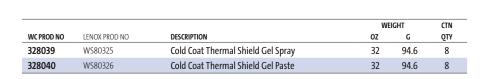
Shields adjoining surfaces from overheating, discoloration damage or distortion

Rapidly cools hot materials

Reduces the risk of hidden fires and heat damage when soldering or welding in compromised areas

Protects sensitive valves, gaskets, and previously soldered joints that may be damaged during soldering or welding

NON-TOXIC AND 100% BIODEGRADABLE







BRAZING RODS

.125" x .050" x 20"
3.175MM x 1.27MM x 508MM
BRAZING RODS FOR JOINING COPPER, BRASS AND
BRONZE

PACKAGED IN CONVENIENT PLASTIC TUBES

1lb / 454g, 1/2lb / 227g & 1/4lb / 113g



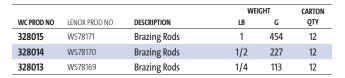
15% Silver, 5% Phosphorus, balance Copper Best alloy at filling gaps when close fit-ups cannot be made

Highest joint ductility and strength in HVAC-R applications

Phosphorus acts as a fluxing agent when joining copper to copper. When joining brass use LENOX Brazing Flux (WS78172)

Temperature: Melt 1190° F, Flow 1475° F

Meets AWS BCup-5





6% SILVER BRAZING RODS

6% Silver, 7.5% Phosphorus, balance Copper

Similar to 15% silphos with the ability to fill gaps and form fillets without adversely affecting strength

Phosphorus acts as a fluxing agent when joining copper to copper. When joining brass use LENOX Brazing Flux (WS78172)

Temperature: Melt 1190° F, Flow 1460° F

Meets AWS BCuP-4

			WEIG	CARTON	
WC PROD NO	LENOX PROD NO	DESCRIPTION	LB	G	QTY
328012	WS78168	Brazing Rods	1	454	12
328011	WS78166	Brazing Rods	1/4	113	12

5% SILVER BRAZING RODS

5% Silver, 6% Phosphorus, balance Copper

Similar to 15% silphos with the ability to fill gaps and form fillets without adversely affecting strength

Phosphorus acts as a fluxing agent when joining copper to copper. When joining brass use LENOX Brazing Flux (WS78172)

Temperature: Melt 1190° F, Flow 1495° F

Meets AWS BCuP-3

			WEIG	WEIGHT	
WC PROD NO	LENOX PROD NO	DESCRIPTION	LB	G	QTY
328010	WS78165	Brazing Rods	1	454	12
328009	WS78163	Brazing Rods	1/4	113	12

0% SILVER BRAZING RODS

0% Silver, 7.25% Phosphorus, balance Copper

Phosphorus acts as a fluxing agent when joining copper to copper. When joining brass use LENOX Brazing Flux (WS78172)

Very fluid, medium temperature brazing alloy

Temperature: Melt 1310° F, Flow 1460° F

Meets AWS BCuP-2

			WEIGHT		CARTON
WC PROD NO	LENOX PROD NO	DESCRIPTION	LB	G	QTY
328008	WS78162	Brazing Rods	1	454	12
328007	WS78161	Brazing Rods	1/2	227	12
328006	WS78160	Brazing Rods	1/4	113	12



BRAZING WIRE



45% SILVER BRAZING WIRE

45% Silver, 25% Zinc, balance Copper Melting temperature: 1225°–1500° F

Meets AWS Bag-5 Sold in troy ounces

			WEIGHT		CARTON
WC PROD NO	LENOX PROD NO	DESCRIPTION	TROY OZ	G	QTY
327990	WS78045	Brazing Wire	1	31	1
327998	WS78104	Brazing Wire	3	93	1
327989	WS78013	Brazing Wire	5	156	1

56% SILVER BRAZING WIRE

56% Silver, 17% Zinc, 5% Tin, balance Copper Melting temperature: 1145°–1500° F

Meets AWS Bag-7 Sold in troy ounces

			WEIGHT		CARTON
WC PROD NO	LENOX PROD NO	DESCRIPTION	TROY OZ	G	QTY
328017	WS78185	Brazing Wire	1	31	1
328018	WS78186	Brazing Wire	3	93	1
327992	WS78063	Brazing Wire	5	156	1

INDUSTRIAL ALLOYS

BABBITT/PEWTER/TIN INDUSTRIAL METALS

Consists of one or more non-ferrous metals in various proportions

Babbitt/Pewter can be used for lining bearings

A high Tin alloy is desirable for heavy or high speed bearing loads

QUALITY CONTROL

All product is metal imprinted with the noun name abbreviation and the lot #

Certificate of Analysis and Certification to Specification available if required



WC PROD NO	LENOX PROD NO	DESCRIPTION	ALLOY	CARTON QTY
N/A	WS00533	Pure Tin Bar	Sn100	70 lb
327984	WS44014	#3 Babbitt (Willard #3) Genuine Sm 5.5# Ingot	Sn87 Sb10 Cu3	55 lb
327985	WS44016	B23-G2 89/7.5/3.5 Babbitt Lg 17.5# Ingot	Sn89 Sb7.5 Cu3.5	35 lb
327986	WS44017	B23-G2 Babbitt Sm 5.5# Ingot	Sn89 Sb7.5 Cu3.5	55 lb
327987	WS44028	4x Nickel Babbitt Sm 5.5# Ingot	Sn89 Sb7.5 Cu3.0 Ni0.5	55 lb
327982	WS42050	#4 Babbitt Pb96 Sn4 S8.5# avg Sm Ingot	Pb96 Sb4	50 lb
327983	WS42051	Univ Babbitt B23-G7 8.5# avg Sm Ingot	Pb75.5 Sb15 Sn9.5	50 lb

MSDS available in hard copy or downloadable from lenoxtools.com



SOLDERING AND BRAZING FLUX

CRITICAL FOR PROPER SOLDERING AND SELECTED BRAZING ACTIVITIES AIDS REMOVAL OF OXIDES AND IMPURITIES HELPS DRAW SOLDER AND BRAZING ALLOYS INTO JOINTS PROVIDES BETTER ADHESION OF ALLOY TO PIPE



WATER SOLUBLE FLUX

NSF 61 certified safe for potable water applications

Water soluble lead-free flux

Meets ASTM B-813

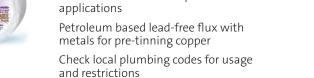
Excellent performance with any lead-free Solder Unit lot numbering ensures complete traceability



TINNING FLUX

NSF 61 certified safe for potable water applications

Unit lot numbering ensures complete traceability



			WEIGHT		CTN
WC PROD NO	LENOX PROD NO	DESCRIPTION	OZ	G	QTY
327994	WS78091	Water Soluble Flux	1.7	48	30
327995	WS78092	Water Soluble Flux	8	227	12
327996	WS78093	Water Soluble Flux	16	454	12

			WEIG	WEIGHT	
WC PROD NO	LENOX PROD NO	DESCRIPTION	OZ	G	QTY
327997	WS78096	Tinning Flux	1.7	48	30

SILVER BRAZING PASTE FLUX

General purpose brazing paste flux Brazes copper, brass, nickel, carbon steel, stainless steel and precious metals Residues are water soluble Brush cap dispenser included Appropriate flux metals: BAg, BCuP

AWS A5.31-91, Type FB3A





			WEIGHT		CTN
WC PROD NO	LENOX PROD NO	DESCRIPTION	OZ	G	QTY
328016	WS78172	Silver Brazing Paste Flux	6	170	6

PASTE FLUX

NSF 61 certified safe for potable water applications

Petroleum based lead-free flux Check local plumbing codes for usage and restrictions

Unit lot numbering ensures complete traceability



			WE	GHT	CTN
WC PROD NO	LENOX PROD NO	DESCRIPTION	OZ	G	QTY
327993	WS78090	Paste Flux	2	57	30
328005	WS78130	Paste Flux	8	227	12
328045	WS81144	Paste Flux - Bottle with Brush Cap	4	113	6
328030	WS80143	Paste Flux	16	454	12
328042	WS81090	Cold Weather Paste Flux	2	57	30
328043	WS81130	Cold Weather Paste Flux	8	227	12
328044	WS81143	Cold Weather Paste Flux	16	454	12



GENERAL PURPOSE LIQUID SOFT SOLDER FLUX

Formulated for soldering stainless steel, Monel[®], high-chrome alloys, Inconel[®], nickel, copper, brass, ferrous alloys and many other metals

Excellent across a broad range of base metals, solders and temperatures

Aggressively removes oxide coatings and other impurities

Use for soft soldering



HIGH ACTIVITY, STAINLESS STEEL LIQUID FLUX

Formulated for soldering stainless steel and high-chrome alloys

Added bi-fluoride element increases etching ability

Excellent across a broad range of base metals, solders and temperatures

Aggressively removes oxide coatings and other impurities

Provides excellent capillary actions





			WEIG	HT	CTN
WC PROD NO	LENOX PROD NO	DESCRIPTION	OZ	G	QTY
328022	WS78209	General Purpose Liquid Soft Solder Flux	4	113	6



			WEI	GHT	CTN
WC PROD NO	LENOX PROD NO	DESCRIPTION	OZ	G	QTY
328021	WS78208	Stainless Steel Liquid Flux	4	113	6

ABRASIVES

OPEN MESH CLOTH

Grain bonded on both sides of cloth

Fully waterproof Lasts longer than sand cloth Leaves less gritty residue

180 Grit



SAND CLOTH

Flexible cloth backing Water resistant resin coating Long lasting performance 120 Grit



WC PROD NO	LENOX PROD NO	DESCRIPTION	CARTON QTY
328028	WS80138	2 Yard Open Mesh Cloth	36
328029	WS80139	5 Yard Open Mesh Cloth	12
328001	WS78119	10 Yard Open Mesh Cloth	6
328483	WS80319	25 Yard Open Mesh Cloth	6

WC PROD NO	LENOX PROD NO	DESCRIPTION	CARTON QTY
327999	WS78117	2 Yard Sand Cloth	36
328026	WS80136	5 Yard Sand Cloth	12
328027	WS80147	10 Yard Sand Cloth	6
328000	WS78118	25 Yard Sand Cloth	6



BRUSHES

FITTING BRUSH

High quality dense wire for long life, quick cleaning, and etching

Color coded by size for easy identification

TUBE CLEANING BRUSH

High quality dense wire for long life, quick cleaning, and etching

Color coded by size for easy identification

4-IN-1 BRUSH

High quality dense wire for long life, quick cleaning, and etching

Includes 1/2" & 3/4" fitting and tube cleaning brushes

GENERAL PURPOSE

4" brush can be used for applying flux, instant solder pastes, grease, and other general purpose brushing needs

5 brushes per package

				CARTON
WC PROD NO	LENOX PROD NO	DESCRIPTION	COLOR	QTY
328003	WS78121	1/2" Fitting Brush		12
328004	WS78122	3/4" Fitting Brush	0	12
328024	WS80114	1" Fitting Brush		12
328034	WS80186	1-1/4" Fitting Brush		12
328035	WS80187	1-1/2" Fitting Brush		12
328036	WS80188	2" Fitting Brush		12
328031	WS80145	1/2" Tube Cleaning Brush		12
328032	WS80146	3/4" Tube Cleaning Brush	0	12
328033	WS80147	1" Tube Cleaning Brush		12
328002	WS78120	Multi-Purpose 4-IN-1 Brush 3/4" & 1/2"		12
328025	WS80129	General Purpose Acid Brush 5-pack		12









ACCESSORIES

PLUMBER'S BREAD

Acts as a temporary water barrier during repairs

Dissolves in under 2 minutes

NSF/ANSI 60 certified

Includes insertion tool and 12 each 1/2" and 3/4" dissolvable plugs



WC PROD NO	LENOX PROD NO	DESCRIPTION	CARTON QTY
328038	WS80324	PLUMBERS BREAD 1/2" and 3/4" Plugs	6

DEBURRING TOOL KIT

Pencil deburring tool removes burrs





Limited Warranty

Worthington Cylinders warrants to the original owner that its products are free from defects in material and workmanship for the following period from the date of the original purchase: Torches and torch accessories are warranted for three years. Please provide proof of date of purchase when making claim.

All other products are covered under our manufacturer's warranty which guarantees the products to be free from defects in material and workmanship for a period of 90 days.

This warranty does not apply to product that has been damaged as a result of improper maintenance, accident or other misuse, or which fails to operate due to normal wear and tear. This warranty is void if the product is repaired or modified in any way by anyone other than Worthington Cylinders.

WORTHINGTON CYLINDERS MAKES NO OTHER WARRANTIES, EXPRESS OR IMPLIED, CONCERNING THE PRODUCT OR THE MERCHANTABILITY OR FITNESS THEREOF FOR ANY PURPOSE. IN NO EVENT SHALL WORTHINGTON CYLINDERS BE LIABLE FOR INCIDENTAL OR CONSEQUENTIAL DAMAGES.

