# Westwood

## **FILTRATION DE-AERATION** Tigerloop<sup>®</sup> Oil De-Aerators **Oil Filters** & Spin Ons **Increase Efficiency! Burn Oil Cleaner! Reduce Soot! IGNITION** Electrodes & Terminals Standard 2 Models Rajah<sup>™</sup> Terminals ACCESSORIES BioHeat® Models Couplings (up to B100) Nylo-Flex™ Spiralink™ **Giralin** Tigerloop<sup>®</sup> will increase the efficiency of any burner by reducing vacuum, removing air and pre-heating oil delivered to the nozzle. Tigerloop<sup>®</sup> also reduces soot problems by burning cleaner and minimizing nozzle drips from air bubbles **Testers** expanding in the nozzle line.

## **Heating Products** www.WestwoodProducts.com Westwood Products Inc.

330 William Street • P.O. Box 610 • South River, NJ 08882

Dear Westwood Customer,

Here is the latest Westwood Heating Products Catalog. As with our previous issues, this issue has new items and additions that are geared to the heating service industry. Every section has been revised and updated in our ongoing effort to make the Westwood Catalog the most comprehensive reference source for the products your customers, as professionals, demand and deserve.

In keeping with today's trend toward renewable fuels, we have expanded the number of products that are "BIOFUELS COMPATIBLE". Look for our logo (shown below) throughout the new catalog.

Our customers continue to remark that they had no idea such a varied and complete line of products was hidden amongst all those pages. Take a look yourself and browse through this latest issue. A small investment of time will prove a worthwhile experience. You will find that Westwood has truly become a "one stop" source for all your heating specialty needs.



Sincerely,

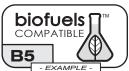
Pat DiNicola President

### PUBLIC NOTICE OF RESTRICTED PRODUCT USE

The products shown in this catalog are "for professional use only" and not for use by the general public. They are for use in servicing heating equipment by a trained, qualified technician familiar with such systems, equipped with the proper tools and equipment, familiar with all governing codes and ordinances, and licensed by the proper authority where applicable. WARNING: USE OF THESE PRODUCTS BY AN UNQUALIFIED PERSON CAN RESULT IN HAZARDS TO THAT PERSON AND OTHERS. THESE HAZARDS MAY INCLUDE RELEASE OF FUEL, FIRE, SEVERE BURNS, DAMAGE TO SYSTEM COMPONENTS, AND OTHER HAZARDS.

### STATEMENT OF BIOFUELS COMPATIBILITY

The use in this catalog of the "biofuels COMPATIBLE" logo for a product indicates that the item has been tested by Westwood Products or the product's manufacturer and found to be suitable for use with biofuels made from biodiesel meeting ASTM D6751 and fuel oil meeting ASTM D396 at the blends indicated on the logo (i.e. B5, B20, B100), or lower. This suitability



is specific as to that product's life expectancy and performance when used (1.) in an application for which it was originally designed, and (2.) as part of a system wherein all other non-Westwood components have been similarly approved by their respective manufacturers. Further, the indication of biofuels compatibility for an item that is UL Listed, or is a UL Recognized Component, shall not be construed to indicate testing by UL for biofuels compatibility.

### TERMS

**Invoice Terms:** 2% 10 days, Net 30 days upon credit approval. No discount allowed on freight charges. **Freight:** All shipments FOB our plant, South River, New Jersey.

**Prices:** Price lists are available only to authorized distributors. Possession of a confidential price list by anyone else does not constitute an offer to sell. All prices subject to change without notice.

**Sales Policy:** Westwood Products Inc. sells only to wholesale supply houses or original equipment manufacturers. All orders are subject to home office approval. Minimum order charge is \$25.00.

Late Charges: There will be a 1-1/2% per month late charge on accounts over 30 days old.

**Returns:** Returned goods will not be accepted without authorization and may be subject to a restocking charge. **Warranty:** Westwood Products Inc. guarantees that any product of its manufacture which is found to be defective in material or workmanship and is not suitable for use or service for the purpose for which it is designed will be replaced free of charge within one year of purchase. This includes transportation costs (US only) but no costs of installation. Inspection must be performed by a Westwood representative. This shall be Westwood's maximum liability. The sale of these products under any other warranty, expressed or implied, is not authorized by Westwood.

QUICK INDEX TO SECTIONS	SECTION
CROSS FORMER PART NUMBERS TO NEW P No.	CROSS REFERENC
CHEMICALS ODOR NEUTRALIZERS, FUEL TREATMENT, SOLVENTS	С
ELECTRODES, TERMINALS, AND RELATED ITEMS	E
FILTERS & FILTER ELEMENTS HEATING OIL FILTERS AND RELATED ITEMS	F
HYDRONIC PRODUCTS FOR STEAM & HOT WATER HEAT	Н
SERVICE PARTS & SUPPLIES PRODUCTS TO SERVICE & MAINTAIN HEATING SYSTEMS	S
TOOLS & TESTERS SPECIALIZED TOOLS & TESTERS FOR THE SERVICE TECH	Т
COMPLETE ALPHABETICAL INDEX OF PRODUCTS	INDEX

## CROSS REFERENCE

ТО

Reference No.

(Before May 1, 2004 Westwood number)

(After May 1, 2004 Westwood number)

As of May 1, 2004, all Westwood part numbers were changed and updated to a new numbering system. This cross reference contains a listing by "Reference No." (the pre May 1, 2004 part number) and shows the corresponding new part number and the page number on which the item may be found.

## SPECIAL NOTE: FOR ELECTRODES, PORCELAINS, & Rajah™ TERMINALS

The WP No. for electrodes and related items is "E5- " followed by the former number. Example: former electrode number "1510" is now "E5-1510"

The WP No. for Rajah™ terminals and related items is " E9- " followed by the former number. Example: former Rajah™ terminal number "CT" is now "E9-CT"

Reference No.	WP No.	Page	Reference No.	WP No.	Page	Reference No.	WP No.	Page
Electrodes Rajah <sup>™</sup> Terminals #1 #2 #3 Gasket 3L V-Belts #4 4FO-30 4FO-IB 4FO-IBG 4L V-Belts 5L V-Belts 6FO-30 8FO-30 #9 #10 10FO-30 #11 #12 12" Lighter #13 #15 20 AMP BOOT 20 AMP BOOT 20 AMP BOOT 20 AMP CLIP #33 Gasket 34 #35 #35 Blade 54 #88 #99A #101	E5 Series E9 Series S70-30 S70-35 S70-40 H6-50 S30 Series S70-45 F84-30 F84-36 F84-36 F84-48 S40 Series S50 Series F85-30 F86-30 S70-9 S70-10 F87-24 S70-11 S70-12 T34-40 S70-13 S70-15 E9-20 AMP BOOT E9-20 AMP BOOT E9-20 AMP CLIP H6-55 E9-34 T100-310 T100-312 E9-54 S85-500 S85-510 S85-520	E1 E30 S2 S2 S2 F10 F10 F10 S1 F10 S1 F10 S1 F10 S2 F10 S2 F10 S1 F10 S2 S2 F12 S2 F12 S2 F13 S2 S2 F10 F10 S1 S1 S2 S2 S2 S2 S2 S2 S2 S2 S2 S2 S2 S2 S2	#135 #200 250 BOOT 251 BOOT #271 467 GASKET 475-243 475-287 500 SHIELD 575-287 625-400 686 BAR #695 951-57 951-78 951-78 951-78 951-78 951-78 951-78 951-170 #996 #996 #996 #996 #997 #1240 #1240 #1240 #1240 #1250 #1251 1412 1416 1890 2097 #3250 #3253 3500 3605	$\begin{array}{c} S70-25\\ S70-27\\ E9-250 \ BOOT\\ E9-251 \ BOOT\\ T200-15\\ E9-467 \ GASKET\\ S90-60\\ S90-62\\ E9-500 \ SHIELD\\ S90-64\\ S90-66\\ E9-686 \ BAR\\ T200-10\\ S91-74\\ S90-68\\ S90-70\\ S91-74\\ S90-68\\ S90-70\\ S91-72\\ T100-340\\ T100-342\\ T100-340\\ T100-342\\ T100-370\\ S85-530\\ S85-550\\ S85-550\\ S85-550\\ S85-550\\ S85-560\\ S85-570\\ S214-12\\ S214-16\\ S83-200\\ E9-2097\\ E64\\ E64-20\\ E9-3500\\ S213-5\\ \end{array}$	S2 S2 E34 E34 E32 S9 S9 E32 S9 S9 E32 S9 S9 E32 S9 S9 E32 S9 S9 E32 S9 S9 E32 S9 S9 E32 S9 S9 E32 S9 S9 E32 S9 S9 E32 S9 S9 E32 S9 S9 E32 S9 S9 E32 S9 S9 E32 S9 S9 E32 S9 S9 S9 E32 S9 S9 S9 E32 S9 S9 E32 S9 S9 E32 S9 S9 E32 S9 S9 S9 E32 S9 S9 S9 S9 S9 S9 S9 S9 S9 S9 S9 S9 S9	3607 3608 3611 3612 3616 4030 4235 4725 4729 4729-1 4734 4734-1 5220 5220-1 5225 5220-1 5225 5225-1 5229 5229-1 5229 5229-1 5234 5504 5506 5508 5510 5512 5512 5512 5515 5516 554	S213-7 S213-8 S213-11 S213-12 S213-16 S90-10 S90-12 S90-14 S90-16 S90-18 S90-20 S91-20 S90-22 S91-22 S90-24 S90-24 S90-26 S91-22 S90-24 S90-26 S91-26 S90-28 S91-28 H25-10 S100-158 S100-158 S100-166 S100-166 S100-166 S100-166 S100-170 S100-172 H25-12 S100-174 S100-176	S13 S13 S13 S13 S13 S9 S9 S9 S9 S9 S9 S9 S9 S9 S9 S9 S9 S9

• REFERENCE No. IS THE FORMER WESTWOOD NUMBER (before May 1, 2004) •

## 1-800-442-1630

Westwood

Reference No.	WP No.	Page	Reference No.	P No.	Page	Reference No.	WP No.	Page
5561 5563 5729 $5729 \cdot 1$ 5734 $5738 \cdot 1$ 6325 6329 $6329 \cdot 1$ 6334 $6334 \cdot 1$ 6338 $6334 \cdot 1$ 6338 $6338 \cdot 1$ 6342 $6342 \cdot 1$ 6346 $7243 \cdot 1$ $7243 \cdot 1$ 728 11498 11937 21551 21552 21553 21554 31156 31156 31157W 45330 45331 45764 45765 46646 46648 46645 46646 46648 46775 46646 46648 46775 46646 46648 46775 46778 46912 46913 47101 47102 47103 47104 47490 47491 47495 47495 47495 47738 47925 48363 48365 49488 49609 49611	S100-178 S100-180 S90-30 S91-30 S90-32 S91-32 S90-34 S91-34 S90-36 S90-38 S91-38 S90-40 S91-40 S90-42 S91-40 S90-42 S91-42 S90-44 S91-44 S90-46 S91-48 T100-322 S100-322 S100-324 S100-330 S100-332 S88-70 S88-72 S88-74 S100-114 S100-146 S100-112 S100-112 S100-152 S100-152 S100-156 H25-30 S100-156 H25-30 S100-150 S100-150 S100-120 S100-150 S100-120 S100-1	\$10 \$10 \$9 \$9 \$9 \$9 \$9 \$9 \$9 \$9 \$9 \$9	51484U 51670U 52420 52576 58156 75260 75991 75995 75996 135392 135393 141608 141612 144824 144434 144435 144827 146010 146011 146013 161963 161964 161965 161966 161967 161968 161968 161967 161970 161971 161972 165282 165283 165284 165285 165284 165287 165288 165287 165288 165299 165297 165299 165297 165297 165299 165297 165297 165297 165297 165297 165297 165297 165300 165300 165307 165307 165308 165307 165307 165308 165307 165307 165308 165307 165307 165308 165377 165378 165378 165378 165380	S88-32 S88-34 S100-126 S100-130 S100-412 S100-404 S100-328 S100-326 S100-326 S100-324 H25-15 S70-50 S70-51 S70-52 H25-18 H25-17 H25-19 H25-20 S100-100 S100-102 S100-100 S100-300 S100-300 S100-300 S100-300 S100-310 S100-310 S100-314 S100-316 S100-318 S100-314 S100-316 S100-314 S100-212 S100-214 S100-216 S100-220 S100-222 S100-224 S100-228 S100-228 S100-228 S100-230 S100-230 S100-238 S100-238 S100-238 S100-238 S100-236 S100-244 S100-246 S100-246 S100-252 S100-252 S100-252 S100-252 S100-256	S8 S8 S10 S11 S11 S11 S11 S11 S11 S11	165381 166664 166665 166667 166668 166669 169128 169130 169131 169132 169133 AB AECF AO25 AO25B AO25B AO30 AO70 ARM-3L ARM-3S ARM-5C ARM-5C ARM-5C ARM-5S ARM-14 ARM-15 BB BG-4 BG-20 BG-25 BG-25 BG-25 BG-33 BG-2002 BK-1 BK-2 BK5780 BK5782 CBR CBS CG-20 CG-25 CG-70 CG-300 CG-25 CG-70 CG-84 CK-1 CK780 CO2 Cartridges CP-1 DB DN DT ECF FP2-E1 FP2-E2 FP2-M2 FP2-R2 FP2-R2 FP2-R2 FP2-R2 FP2-R2 FP2-R2 FP2-R2 FP2-R2 FP2-R2 FP2-R2 FP2-R2 FP2-R2 FP2-R2 FP2-R2 FP2-R2 FP2-R2 FP3-R1 FT-1 Gauge Adaptor GGW-7102 GGW-7103	$\begin{array}{l} S100-274\\ S100-200\\ S100-202\\ S100-204\\ S100-206\\ S100-208\\ S100-200\\ S100-600\\ S100-610\\ S100-620\\ S100-630\\ S100-650\\ E9-AB\\ E9-AECF\\ F15-36\\ F15-48\\ F75-12\\ F35-24\\ S300-400\\ S300-400\\ S300-400\\ S300-400\\ S300-402\\ S300-400\\ S300-402\\ S300-400\\ S300-40\\ S30$	$\begin{array}{c} \$10\\ \$10\\ \$10\\ \$10\\ \$10\\ \$10\\ \$10\\ \$10\\$

то

Reference No.

P No.

• REFERENCE No. IS THE FORMER WESTWOOD NUMBER (before May 1, 2004) •

Please order by P No.

## 1-800-442-1630

Westwood

	[	Refe	erence No.	то	W <sub>P</sub> N	0.		
Reference No.	WP No.	Page	Reference No.	WP No.	Page	Reference No.	WP No.	Page
$\begin{array}{l} GGW-7105\\ GV-22\\ HDT 303K\\ HK-17\\ HWT-A\\ HWT-D\\ I-18 GASKET\\ Ignitor Gauge\\ IJW-12\\ IJW-18\\ IJW-36\\ JHS\\ JK-52\\ JW-12\\ JW-18\\ JW-36\\ LG-300\\ Lighter, 12"\\ LK-66\\ LV BOOT\\ LV CLIP\\ LV Tester\\ MK-3 Kit\\ ML-3\\ ML-26\\ ML-3-150\\ ML-3-150\\ ML-3-150\\ ML-3-150\\ ML-3-150\\ ML-3-PQ\\ MR-1X2\\ MR-2X3\\ MR-4\\ NAS-A1\\ NAS-A1\\ NAS-A1\\ NAS-A1\\ NAS-A1\\ NAS-A1\\ NAS-A1\\ NAS-A1\\ NAS-B1\\ NS-SB1\\ NAS-B1\\ $	$\begin{array}{c} H6-25\\ H7\\ T100-120\\ T200-58\\ H25-52\\ H25-90\\ E9-1-18\ GASKET\\ T100-220\\ T100-80\\ T100-82\\ T100-82\\ T100-84\\ S150\\ H24-15\\ T100-70\\ T100-72\\ T100-74\\ F75-56\\ T34-40\\ T200-50\\ E9-LV\ BOOT\\ E9-LV\ BOOT\\ E9-LV\ CLIP\\ T100-10\\ T34-30\\ T32\\ T34-35\\ T32-10\\ T32-11\\ T32-15\\ T32-16\\ T34-35\\ T32-10\\ T32-11\\ T32-15\\ T32-16\\ T34-35\\ T32-10\\ T32-15\\ T32-16\\ T34-30\\ T32-11\\ T32-15\\ T32-16\\ T34-30\\ T32-12\\ S85-10\\ S36-12\\ S85-12\\ S85-12\\ S85-15\\ S85-30\\ T32-25\\ S305-150\\ S305-150\\ S305-125\\ S305-150\\ S214-25\\ F80-36\\ F91-36\\ F92-36\\ S300-424\\ S300-426\\ S300-428\\ S300-430\\ S300-432\\ \end{array}$	H1 H3 T18 H7 H7 E324 T133 F17 F133 F17 F133 F17 F133 F17 F133 F17 F133 F17 F17 F17 F16 F16 F17 F17 F14 F17 F17 F17 F17 F17 F17 F17 F17 F17 F17	$\begin{array}{l} {PTA-224C} \\ {PTA-234C} \\ {PTA-322C} \\ {PTA-322L} \\ {QCK-1 Kit} \\ {RD-95} \\ {RD-95-W} \\ {Red. Bushing,} \\ {5/16 X 7/16} \\ {RK-97} \\ \#RS-3350 \\ {SD Tester} \\ {Service-Saw} \\ {Sight Glass,} \\ {1/8" Thick} \\ {3/16" Thick} \\ {SK-59} \\ {SS KIT} \\ {SW-4} \\ {SW-5} \\ {SW-6} \\ {SW-8} \\ {SW-9} \\ {T-160} \\ {T-220} \\ {T-571} \\ {T-571 Brass} \\ {T-572 Brass} \\ {T-572 Brass} \\ {T-1050} \\ {T-1051} \\ {TA} \\ {TB-60} \\ {TM-30L} \\ {TM-30S} \\ {TM-30S} \\ {TMK-60} \\ {Type ET} \\ {Type F} \\ {Type M} \\ {Type ST} \\ {Type W} \\ {ULTRAGLO} \\ {VG-25} \\ {VG-2002} \\ {W5781} \\ {W5782} \\ {W5783} \\ {W5940} \\ {WF-1} \\ {WMK-1000} \\ {WRM-798} \\ {WTG-54VL} \\ {WTG-54VL} \\ {WTG-DK1} \\ {WTG-DK1} \\ {WTG-DD} \\ {WTG-EB} \\ \end{array}$	$\begin{array}{l} H25\\ H25-1\\ H25-2\\ H25-3\\ T32-20\\ T100-350\\ T100-352\\ S83-10\\ \hline\\ T200-56\\ E64-5\\ T100-15\\ S400\\ \hline\\ S312 Series\\ S318 Series\\ S325 Series\\ T200-52\\ S70-60\\ S300-414\\ S300-416\\ S300-416\\ S300-416\\ S300-416\\ S300-418\\ S300-416\\ S300-412\\ T100-125\\ T100-125\\ T100-130\\ H25-51\\ H25-53\\ H25-55\\ S85-130\\ T100-230\\ E80\\ E80-1\\ E9-TYPE F\\ E81\\ E9-TYPE F\\ E81\\ E9-TYPE ST\\ E81-10\\ E140-2\\ F92-54\\ S88-20\\ S88-22\\ S88-24\\ S88-20\\ S88-22\\ S88-24\\ S88-20\\ S88-22\\ S88-24\\ S88-26\\ S88-28\\ T100-330\\ S88-60\\ H24-62\\ H24-60\\ E140\\ E140-1\\ E151\\ E151-1\\ E151-2\\ E151-3\\ E142\\ \hline\end{array}$	H7 H7 H7 H7 H7 H7 H7 H7 H7 H7 S1 S2 S2 S2 S2 S2 S2 S2 S2 S2 S2 S2 S2 S2	WTG-EK WTG-EM WTG-EO WTG-K WTG-K WTG-RM WTG-RB WTG-RK WTG-RM WTG-RO WTG-RWM WTG-UB2 WTG-UM2 WTG-UM1DH WTG-UM1DH WTG-UM1DOWR WTG-UM1DH WTG-UM1DH WTG-UM1DH WTG-UWM1DH WTG-UWM1DH WTG-UWM1DOH WTG-UWM1DOH WTG-UWM1DOH WTG-UWM1DOH WTG-UWM1DH WTG-UWM1DH WTG-UWM1DH WTG-UWM1DH WTG-UWM1DH WTG-UWM1DH WTG-UWM1DH WTG-UWM1DH WTG-UWM1DH WTG-UWM10H	E142-1 E142-2 E142-3 E143-1 E143-2 E143-2 E144-1 E144-2 E144-3 E144-3 E144-4 E144-3 E144-4 E145-1 E147-2 E147-3 E147-3 E147-3 E147-5 E147-5 E150-1 E150-2 E150-5 T200-54	E38 E38 E38 E39 E39 E39 E39 E39 E39 E39 E39 E39 E39

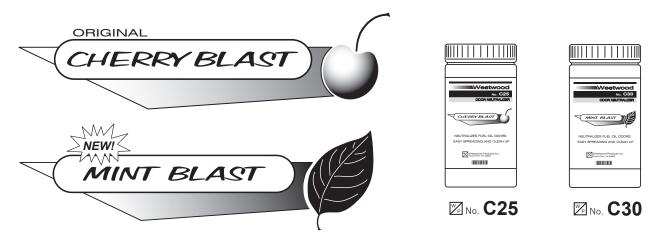
• REFERENCE No. IS THE FORMER WESTWOOD NUMBER (before May 1, 2004) •

## ODOR NEUTRALIZERS

No more: "PU, what's that smell?"



General purpose industrial strength odor neutralizers. Especially effective on fuel oil and other basement odors. Leaves a pleasant, clean, fresh scent that customers will like. Easy to spread granules (CHERRY BLAST) or crystals (MINT BLAST).



P No.	Description
C25 C30	CHERRY BLAST fuel oil odor neutralizer, 1 quart container MINT BLAST fuel oil odor neutralizer, 1 quart shaker container

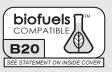


## HEATING OIL ADDITIVE

Next generation fuel oil additive that stabilizes fuel, dissolves sludge, lowers pour point and

disperses water. Helps prevent fuel line and oil filter freeze-ups.

- Stabilizes fuel and dissolves sludge
- ► Inhibits rust and tank corrosion
- ► Lowers pour point for better cold weather combustion
- Disperses water and prevents waxing
- Melts ice and helps prevent fuel line freeze-ups



P No.	Description
C50	WP-3 premium fuel oil additive, 8 oz. bottle (treats 275 gal. tank)
C50-1	WP-3 premium fuel oil additive, 1 gallon "Tip-N-Pour" bottle
C50-55	WP-3 premium fuel oil additive, 54 gallon drum





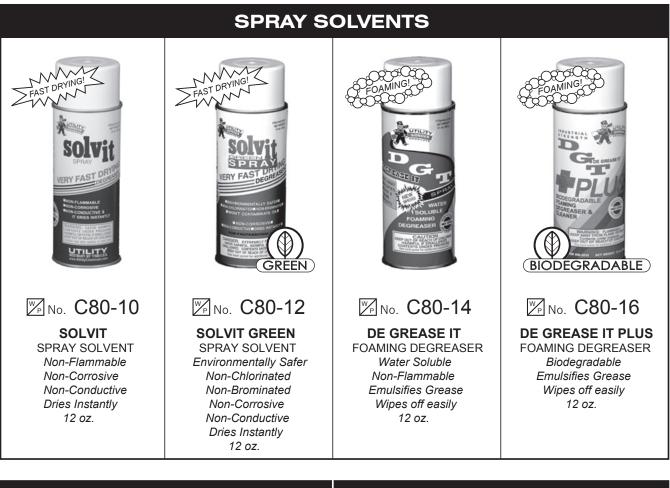


🖾 No. C50-1



## UTILITY PRODUCTS

Quality Chemicals for the Service Professional



## SOOT SPRAY

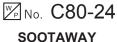


## No. C80-20 SOOTAWAY SOOT REMOVER No Flashback

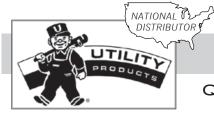
Non-Corrosive Leaves No Residue Harmless to Metal 12 oz.



## SOOT STICKS



SOOT REMOVER STICK Non Explosive Non-Corrosive Leaves No Residue Harmless to Metal 2.8 oz.

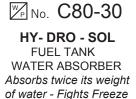


## UTILITY PRODUCTS

Quality Chemicals for the Service Professional

## WATER ABSORBER

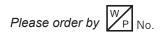


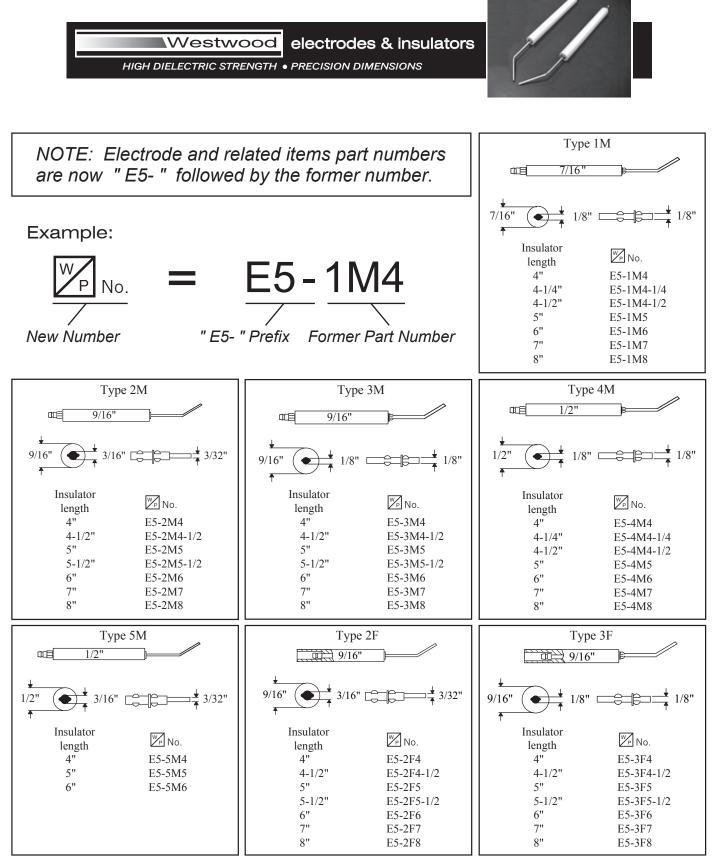


Ups - Inhibits algae and bacteria growth 32 oz.



As a National Distributor, the entire Utility Products line is available through Westwood





Note: To order the insulator only for any electrode found on this page, add "INS" to the part number.

#### Westwood electrodes & insulators HIGH DIELECTRIC STRENGTH • PRECISION DIMENSIONS 7" -1-3/4" -"A" 3-9/16" -1-1/8" -"A" -- 2-9/16" -7/16" mm 9/16" E5-144A E5-144B E5-144C E5-144C E5-144E E5-144E E5-144F ABC ABC ABC ABC ABC ABC ABC ABC 6" 5" 4-1/2" 9/16" E Â Arco E5-124 4-1/2" 4" 3" 2" 1-3/4" None "A" -4"-+2-1/16" + 5" E5-100 Ace 6" E5-100B mmc] 9/16" 13-1446 5-144H Ace 7" E5-100C Ace Arco E5-126 1-9/16" 7 5" 9/16" 4" -2"-4-1/4" 4' 9/16" 9/16" 600E] 9/16" 80000 E5-100A ABC E5-146 Ace E5-127 Arco 4" 2-1/4" 4"-2"-- "A" 9/16" 9/16" Ш 9/16" Acme E5-102A E5-127A Arco 1-1/4″<sub>⊲1</sub> 5" #1-9/16" "A" 4-1/4" 5" ABC E5-146A аЩ 9/16" E5-146B E5-146C 9/16" ABC ABC none 4-1/2" 10000 E5-102B Acme E5-128 Armstrong + 1-9/16" 🏄 -4" 5" 7/16" .8' 1-3/4" Q V 9/16" II // 9/16" ( 9/16" 0 ABC E5-147 Acme E5-107 II A 9/16' HE. -5" 3-9/16"--6" -2-3/4" -9/16' 9/16" Aeroil E5-108 ABC (with bracket) E5-130 ABC E5-148 4-1/4" --4" ← 1-5/8" → m= 1-1/4" ► 1-1/8" and l 9/16" 7/16 Q 7/16 E5-109 ABC E5-148A Aero S Ο -4" 1-9/16" + 4-1/4" 2" 7/16 m 9/16' 7/16 ABC (with bracket) E5-130A ABC E5-148B Aero E5-110 3"— -5"-3-9/16"-- 4" ₱ 7/16" 9/16" "A" + 1-9/16" + 9/16" en l 9/16" nun f ABC E5-148C E5-110B Aero -5' 3-9/16"-4" 1" + "A" 4" 5" 9/16" spring E5-131A E5-132A ABC 1/2'ABC Alcoa E5-111 ABC E5-148D 13/16" - 5" spring А 4" -"A" 1-9/16" 9/16" 'n Q S 9/16" m 9/16" mm8 R L "A" ABC E5-148E none 9-1/2" 13-1/2" E5-111A Aero -2-3/4"--5" 3-9/16"-E5-111D Aero "A" 4" 5" 9/16" E5-111E Aero ABC ABC E5-131 E5-132 4-3/4" 7-1/2" Aero E5-111F

Please order by No

Aero

Arco

Arco

Arco

5"

9/16'

5"

9/16'

7"

9/16"

Ē5-111G

1-1/2"

1-3/4"

1-3/4"

E5-121

E5-122

E5-123

mafi

E5-148F

E5-148H

E5-148J

Þ

E5-148K

-2-3/4"-

3-3/4"-

3-3/4"-

"A" 1-1/2" 4-1/4" 7-1/2"

mi)

9/16"

ABC

ABC ABC

ABC

А

-3-9/16"

9/16"

Ð

E5-133

E5-137B E5-137C

E5-137E

← 1-5/8" →

E

L 🕲

ABC

ABC

ABC

ABC

with 6" spring

. 3" -

- 5"

9/16"

-5"

9/16"

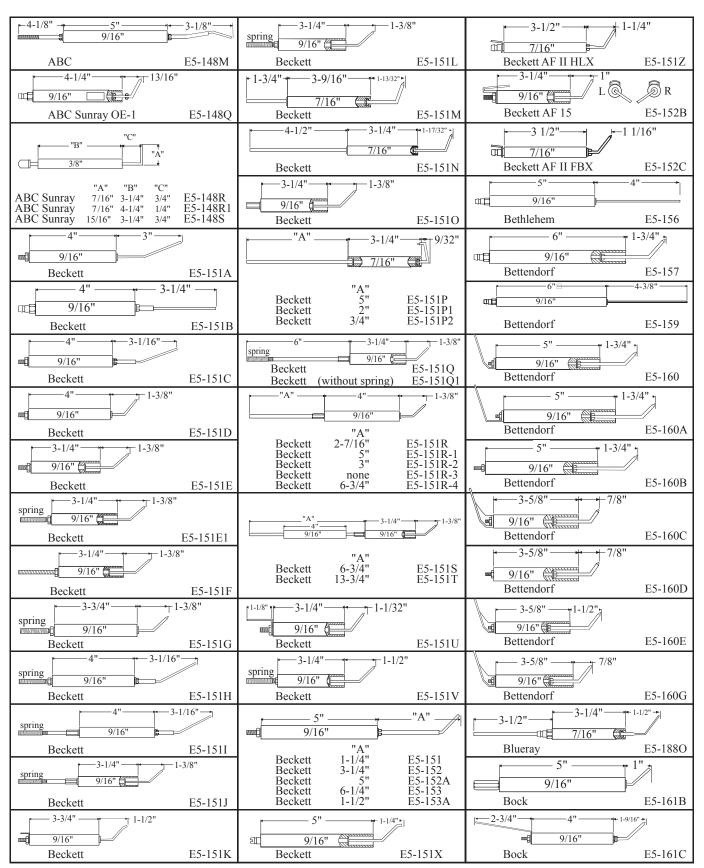
- 5"

9/16"

spring

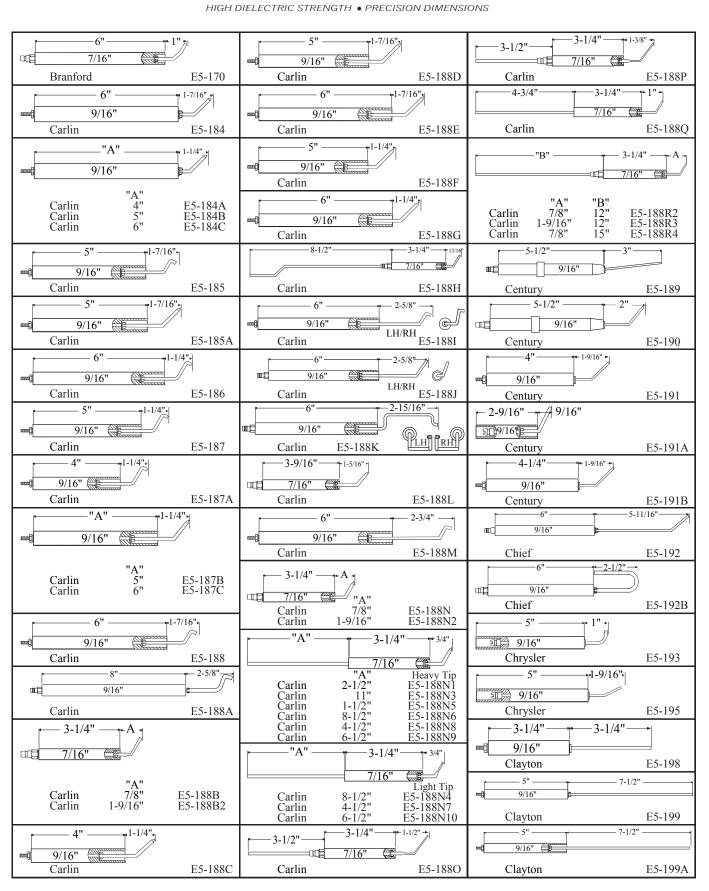
spring

20.00



## 

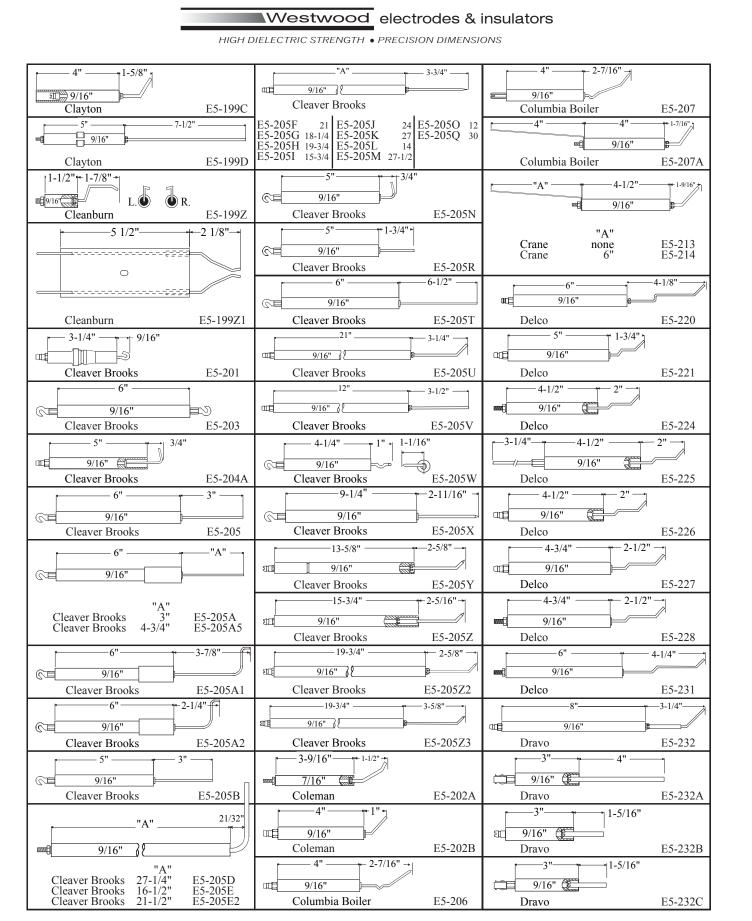
HIGH DIELECTRIC STRENGTH • PRECISION DIMENSIONS

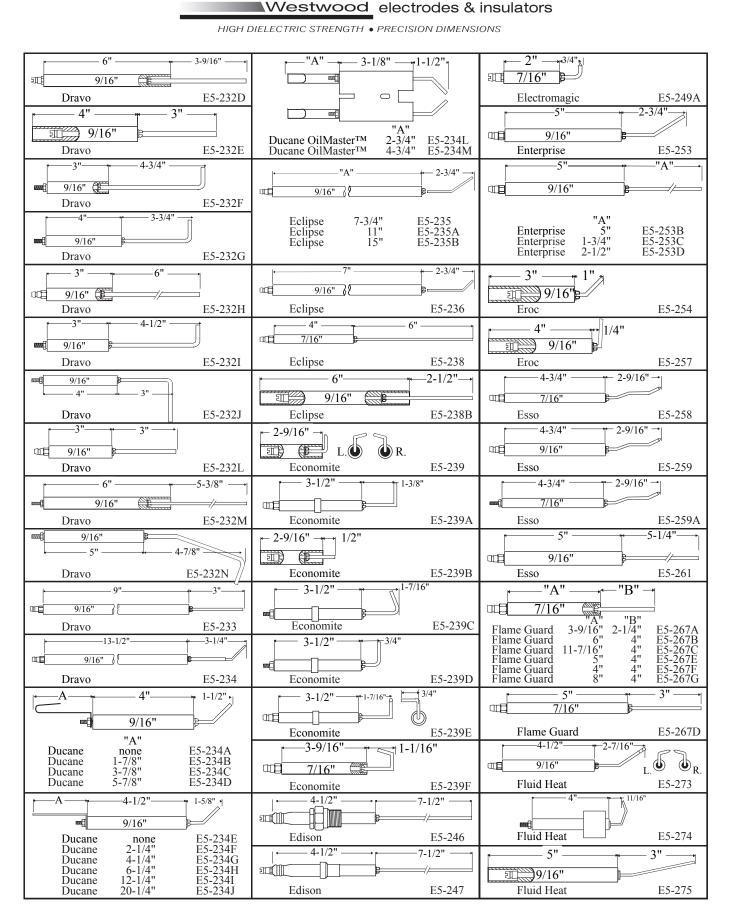


Westwood

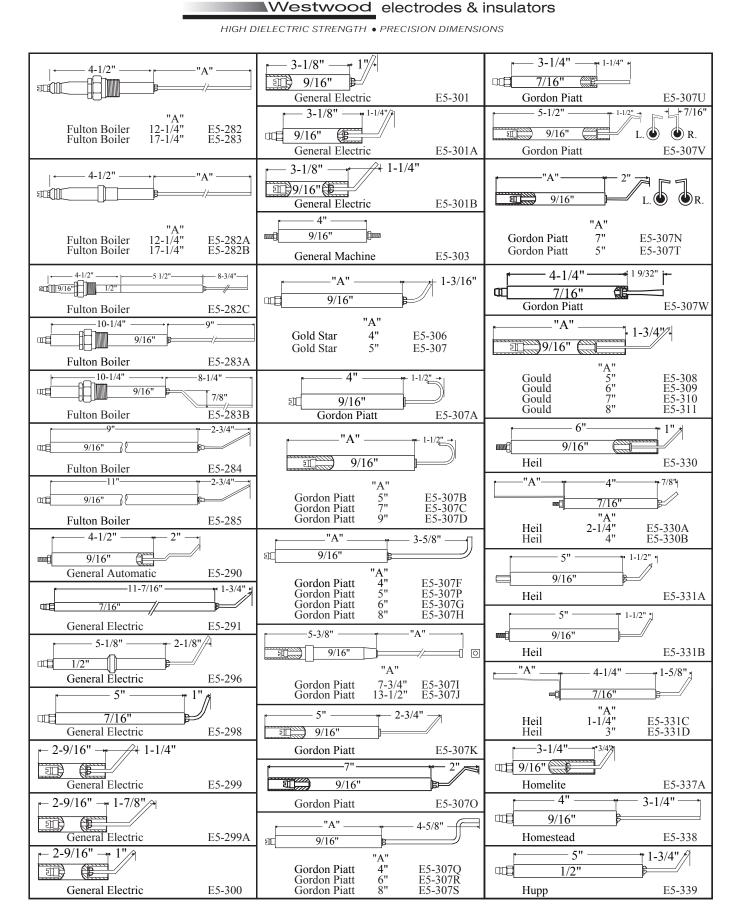
electrodes & insulators

Please order by P No.





Please order by P No.



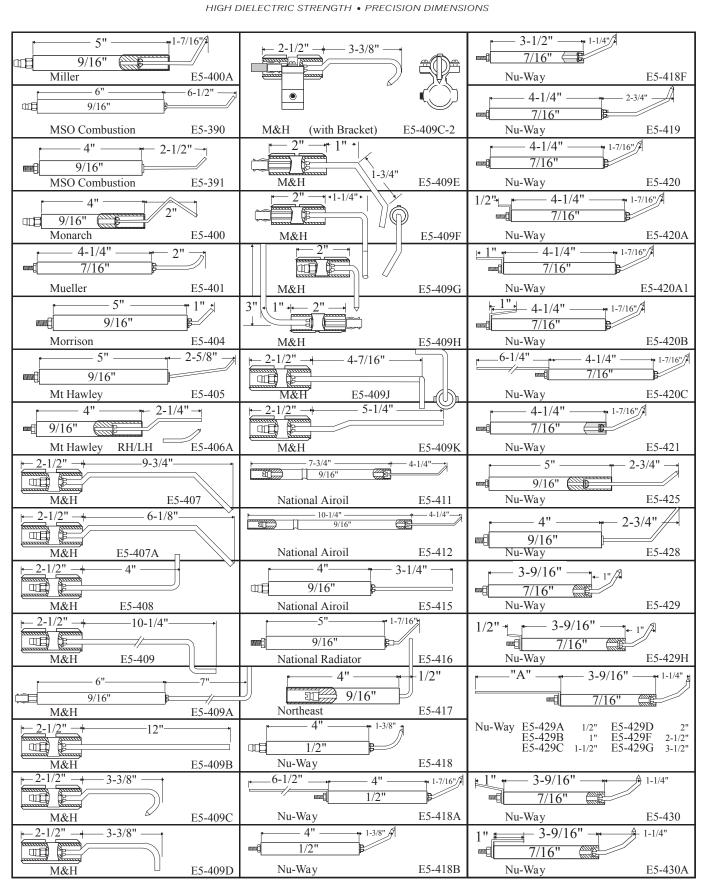
Than E	DIELECTRIC STRENGTH • PRECISION DIMENSI	
4" 5"	5"1-1/2"/	1-3/8"
9/16" <b>F</b>	1. R.	9/16" (11, 11, 12, 12, 12, 12, 12, 12, 12, 12,
Homestead E5-340	Iron Fireman E5-357B	Iron Fireman E5-357Y
9/16" 7-1/2"	5"1-1/2"	6" <u> </u>
	9/16" CL. R.O	9/16"
Homestead E5-341	Iron Fireman E5-357C	Iron Fireman E5-358 ►
	9/16" SL. R.	9/16" 5/4
Homestead E5-341A	Iron Fireman E5-357D	Iron Fireman E5-363
4-1/2"? <u>7/16</u> "		7"
9/16"	9/16" C L. R. S	9/16"
Industrial Combustion E5-342	Iron Fireman E5-357E	Iron Fireman E5-364
4" 1-3/4"	5"1-5/8"*	6"3/4"
9/16"	9/16" CL. R.	9/16" ØL. R.
Industrial Combustion E5-343	Iron Fireman E5-357F	Iron Fireman E5-365
7" 1-1/8"	5"1-3/4"-	6" 2"
	9/16"	<u>9/16"</u>
Industrial Combustion E5-343A	Iron Fireman         E5-357I	Iron Fireman         E5-365B           Image: 6"
9/16"	9/16"	9/16"
Industrial Combustion E5-344	Iron Fireman E5-357J	Iron Fireman E5-365D
	*5"** 1" #	4"
धा <u>7/16</u> "	9/16"	9/16"
Industrial Combustion E5-344A	Iron Fireman E5-357K	Iron Fireman (U. R. ) E5-366
7"	5" <u> </u>	7"2-7/16"
	9/16"	9/16"
Industrial Combustion E5-345	Iron Fireman         E5-357L           ▶ 3" 1-1/4" ⊨	Iron Fireman E5-366A
	9/16"	9/16"
Industrial Combustion E5-345A	Iron Fireman E5-357M	Iron Fireman E5-366D
<u></u>		→ 3-3/4" → "A" ↑
9/16"	9/16"	.612"
International E5-348	Iron Fireman E5-357N	
spring	5"	"A" Johnson 1-1/2" E5-371
₩₩₩₩₩₩ <u>₩</u>	9/16" (Thursday)	Johnson 2" E5-371A Johnson 7-1/2" E5-372
International E5-348A	Iron Fireman E5-3570	Johnson 6" E5-374
3-9/16"-1-1/4"		<u>3-3/4"</u> ————————————————————————————————————
International E5-349	Iron Fireman E5-357R	
4"	1-1/4"	Johnson E5-373
9/16" DL. R. D	▶1-3/8"- <del>₩</del> 5"	
Iron Fireman E5-356	Iron Fireman E5-357S	Johnson E5-373A
<u>▶</u> 5" <u>▶</u> 1"+	μ-1-3/8"-μ-1-3/4" = 5"	6" 2-13/16"
9/16"	9/16" (1) 3/4	9/16"
Iron Fireman E5-357	Iron Fireman E5-357U	Johnson E5-375
	2-3/4"5"5"	
9/16" (L. R. )	9/16" 9/16"	
Iron Fireman E5-357A	Iron Fireman E5-357W	Johnson E5-375A

HIGH DIELECTRIC STRENGTH • PRECISION DIMENSIONS

Please order by PNo.

HIGH DIELECTRIC STRENGTH • PRECISION DIMENSIONS

6"2-5/8"		4"5-1/2"
9/16" E		
Johnson E5-377	"A"	Mettler E5-399B
3-1/2"	"A" Lennox 2" E5-384C Lennox 4" E5-384D	Ū Ū
₩₩₽ <u>7/16"</u> ₽	Lennox 6" E5-384E	9/16"
Johnson Gas E5-377A		Mettler E5-399C
5-3/8"	3-5/8" — 1" •	9/16" 4-3/4"
	QCE 9/16" €	
Kewanee E5-378	Lisk Savory E5-384F	Mid Continental E5-399G
5"1-3/4"	<u>r</u> −−−−−−−−−−−−−−−−−−−−−−−−−−−−−−−−−−−−	4" 4-1/2"
<u>1</u> 9/16"	□□□ 7/16" ₽	₩₩ <u>9/16"</u>
Kewanee E5-378A	Lynn E5-387	Mid Continental E5-399H
8" <u> </u>	4-1/4" — <u>1-3/16</u>	
9/16"		
Kewanee E5-378B	Lynn E5-388	Mid Continental         E5-399I           # 4" 4 4-1/2"         #
6" <u> </u>	4-1/4" 1-1/8"	9/16" <b>B</b>
9/16" (Filler)		
Kewanee E5-378C	Lynn E5-388A	Mid Continental         E5-399J           r         6"
4"		5-1/2 1 9/16"
	Master Vibrator E5-392A	
Kewanee E5-378D	$\frac{1}{12} - \frac{1}{12} - \frac{1}{12} + \frac{1}{12} $	Mid Continental         E5-399K           r
9/16"		9/16"
Lanair E5-379H	Master Vibrator E5-392B	
Earan E3-3/9H	r−2-9/16" + 1"	Mid Continent E5-399M
		9/16"
Lenan E5-379I	Master Vibrator E5-393	Mid Continent E5-399N
5" <u></u> 4-1/2" <u></u>		r 3-9/16" → 1"
9/16"	9/16 <b>F</b>	<u>3-9/10</u> 1
La Salle E5-380	Messer E5-393A	Mid Continent E5-399O
	7"7"3"	<u>+ 2-9/16" → 1-3/8" ×</u>
9/16"	9/16 B	10,9/16 <b>2</b>
La Salle E5-381	Messer E5-393B	Mid Continent // E5-399P
6" <u>1-7/16"</u>	<u>∗</u> 4"	<u>*</u> 3-1/8" <u></u>
9/16"	1/2"	±€9/16"
Lennox (Bettendorf) E5-383	Mc Naulin E5-393D	Mid Continent E5-399Q
<u>3-5/8"</u> <u>1-1/8"</u>		3/4"r—r-2-9/16" -
9/16" <b>9</b> /16"	spring 4-1/4" 1-3/4"	9/16 9/16
Lennox (Bettendorf) E5-383A	Metal Master E5-395	Mid Continent E5-399R
7" 1-3/4" *	spring 4-1/4" 1-3/4"	<u>1-3/4" +</u>
9/16"		7/16"
Lennox (Bettendorf) E5-384	Metal Master E5-397	Mid Continental (MIDCO) E5-399S
3-9/16"	"	r 3-9/16" <u>7/16</u> "
7/16"	7/16"	7/16"
Lennox (Bettendorf) LH/RH E5-384A	Metropolitan E5-399	Miller E5-399F
4"	<u>ب</u> 4" <u>ب</u> 7"	+1"→ +3 5/8" +1"→
7/16"	Ⅲ⊒ 7/16" ₽ //	
Lennox (Bettendorf) LH/RH E5-384B	Mettler E5-399A	Miller E5-399F1



Please order by P No.

12" 2"	I I← 2-3/4" —★── "A" →	<b>3"</b> 19/32"
9/16" }		
Oil Equipment E5-432		Power Flame E5-477I
	"A"	5"
₩Ê <u>9/16"</u> ₽	Petro 1-1/2" E5-468B Petro 2" E5-468C	9/16"
Orr & Sembower E5-443	Petro 18" E5-468D	Power Flame E5-477J
6"3-3/4"	5"3"	6" <u></u> 2-3/8" <u>-</u>
mm2 9/16" ====================================	9/16"	9/16"
Orr & Sembower E5-448	Power Flame E5-475-1	Power Flame E5-477K
6" — 10-1/2" — 1	<b>▶ 5</b> " <b>→ 1</b> " <b>•</b>	5" <u> </u>
мг	9/16"	9/16"
Orr & Sembower E5-449	Power Flame E5-475	Power Flame E5-478
12" 9/16" 3/4"	5" 9/16"	5" <u></u> 2-1/4" <del>-</del>
	9/16"	Power Flame E5-478A
Orr & Sembower E5-451	Power Flame E5-475A	
9/16"	5" 3-23/32"	► 2-1/4" <del>//</del>
	9/16"	9/16" E5-478B
Orr & Sembower E5-452	Power Flame (Kanthal tip) $E5-475B$	Fower Frame E3-478B
9/16"	9/16"	
Orr & Sembower E5-453	Power Flame E5-477	9/16" E5-478C
	"A" <u>**</u> "B"	<u>∗</u> <u>+</u> 5" <u>+</u> 7/8"
9/16"		9/16" ( <b>B</b>
Peabody E5-457		Power Flame E5-478D
6"5"	"A" "B" Power Flame 5.81" .50" E5-477A	5"1-3/4"-
mm[ 9/16" }=	U) Power Flame 6.44" .38" E5-477B	9/16" <u>L. R.</u>
Peabody E5-458	Power Flame 6.88" .47" E5-477C	Power Flame E5-478E
4" 2-3/4"	"A""B"	5" ——
9/16"		¤∎ 9/16"
Penn Boiler E5-461	"A" "B"	Power Flame E5-479
6"4-1/2"	Power Flame 5.81" 6.30" E5-477A-1	5" 4"
9/16"	Power Flame 6.44" 6.69" E5-477B-1 Power Flame 6.88" 8.66" E5-477C-1	9/16"
Petro E5-465		Power Flame E5-479A
5" 2-3/4"	5" <u>+</u> 1-9/16" +	
9/16"		9/16"
Petro E5-465B	Power Flame E5-477D	Power Flame E5-479B
6"		5" <u>-2-3/8</u> " J
		Power Flame $E5-479C$
Petro E5-466	Power Flame E5-477E ★	
	7/16"	<u>5"</u> <u>2-3/8</u> <u>9/16</u> <u>5</u>
	Power Flame E5-477F	Power Flame E5-479D
Petro 1-1/2" E5-467	5"	5" <u> </u>
Petro 2" E5-467A	9/16"	9/16" B
Petro 18" E5-467B Petro 6" E5-467G	Power Flame (Stainless tip) E5-477G	Power Flame E5-479E
▶ 3-9/16" → 2-1/4" →	<u>3"</u> <u>19/32</u> "	<u>→ 4 1/2"   1 1/4"</u>   →
Petro E5-468A	Power Flame E5-477H	Power Flame E5-479E1

HIGH DIELECTRIC STRENGTH • PRECISION DIMENSIONS

#### HIGH DIELECTRIC STRENGTH • PRECISION DIMENSIONS 4" -3 3/8"-2-5/8" 2" A Light "A" 1-21/32" 10-E 7/16" $\odot$ 9/16" Tip Preferred Utilities E5-471A Ray E5-502 3" 4-1/2" -5" 4" 5" 7/16" हान Shellhead E5-513-4 9**1**[] Shellhead E5-513-5 6" 7" E5-513-6 E5-513-7 PVI E5-473F E5-503A Ray Shellhead Shellhead -5" 2-1/2" 6" 8" 9" Shellhead E5-513-8 ШĒ 9/16' 30 7/16" E5-513-9 Shellhead 10" 11" E5-513-10 Shellhead PVI E5-473G Ray E5-503D E5-513-11 Shellhead 12" 13" E5-513-12 Shellhead .6" 7-1/4" 2-3/4" E5-513-13 Shellhead 9/16" ٩F Shellhead 14" E5-513-14 11 E5-503E Pyronics E5-474C-1 6" E5-474C-2 12" Ray 4" 1-3/4"/ -"A" -9" <sup>1-21/32</sup>" Heavy aad 7/16" Þυ 7/16" 9/16" œĦ Tip E5-474E E5-514-4 E5-514-5 E5-514-6 E5-514-7 E5-514-8 Pyronics Rav E5-503F Shellhead 4" 5" 6" 7" Shellhead 4" - 1-3/4" 4" 7" Shellhead Shellhead 9/16" anna 🗌 Ш-гг 9/16" Shellhead 8" E5-514-9 E5-514-10 Quiet Automatic E5-480 E5-503G ğ" Rav Shellhead 10" Shellhead 5" 2-7/8" -11" 12" E5-514-11 E5-514-12 Shellhead -"A" 1-5/8" Shellhead <u>7/16"</u> αŒ 13" E5-514-13 Shellhead Œ 7/16" E5-503H 14" E5-514-14 Rav Shellhead 5" -2-7/8" -"A" + 1-21/32" "/Light 4-1/4" 5" Quiet Heet E5-483 Щ 7/16" 9/16" Tip Quiet Heet E5-483-5 Quiet Heet 6" E5-483-6 E5-503I Ray 4" 2-9/16" 6" - 4"-5" 6" 7" 8" Shellhead E5-515-5 Ш 7/16" E5-515-6 E5-515-7 E5-515-8 Shellhead 9/16" Shellhead Radiant E5-490 E5-503J Shellhead Rav .5" 4' 5-3/8" 4-3/8" ╶े 5 $\searrow \checkmark$ OF 7/16" "A" (ひ) 1-21/32" オ Heavy £16" § Rails E5-489B Ray E5-503M Tip 6" -4" 5-3/8" 4" ∕े 5" 6" E5-516-5 E5-516-6 7/16" Shellhead Ê Shellhead Rails E5-489C Ray E5-503P 4-1/4" 2" - 2-3/4" -8-3/4 "A" \$ 1-1/8" 1/8" 1/16" m 7/16" 11 II -9/16" Rasol E5-494 E5-503Q Ray E5-523 E5-524 E5-525 E5-526 E5-527 3" 4" 5" Silent Glow -3-3/4" or 5" 6" 4" 4-1/4" Silent Glow Silent Glow ٩ 7/16" 9/16" Silent Glow Silent Glow 6" E5-499C 5" Ray E5-499 3-3/4" Robert Gordon E5-506B 11-3/4" 6" 2-5/8" 13/16" r1-3/8"n 4" -4-1/4" Ш 7/16' □□□□ 9/16" 🖻 9/16" ШВ Ray E5-499D Robert Gordon E5-506C Silent Glow E5-523A 3-3/4" - 4" -2-3/4" 5" 6" 1-1/2"/> 7/16" mm 9/16" 9/16" E5-500 Ray Sandberg E5-510 Stewart Warner E5-545 2-5/8"-6' 6" 1-3/4" 20" ШĘ 9/16" 9/16' ШĘ 9/16'

Westwood

electrodes & insulators

Please order by P No.

E5-501

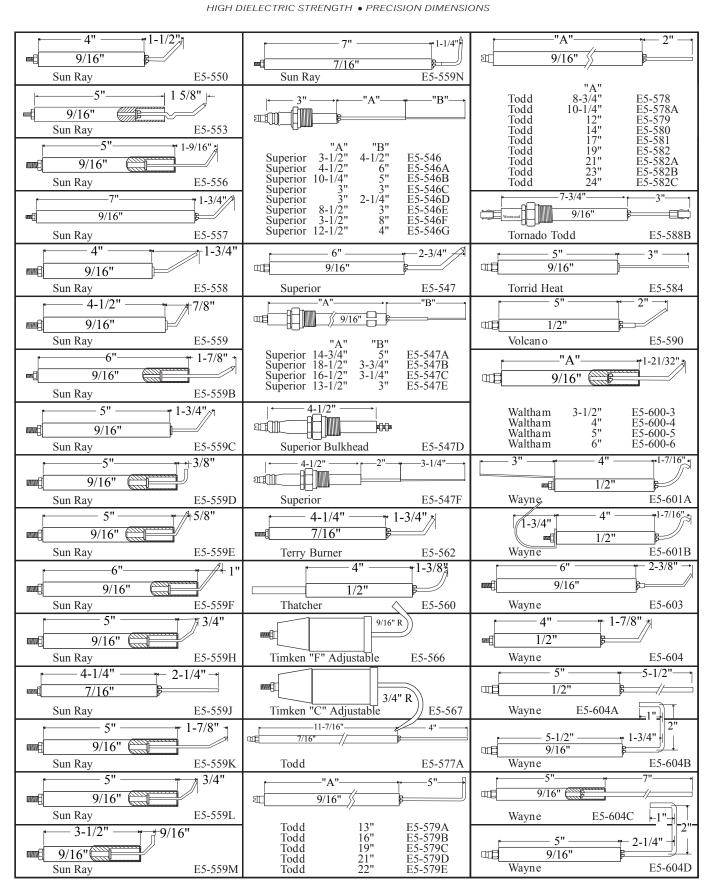
Ray

E5-545A

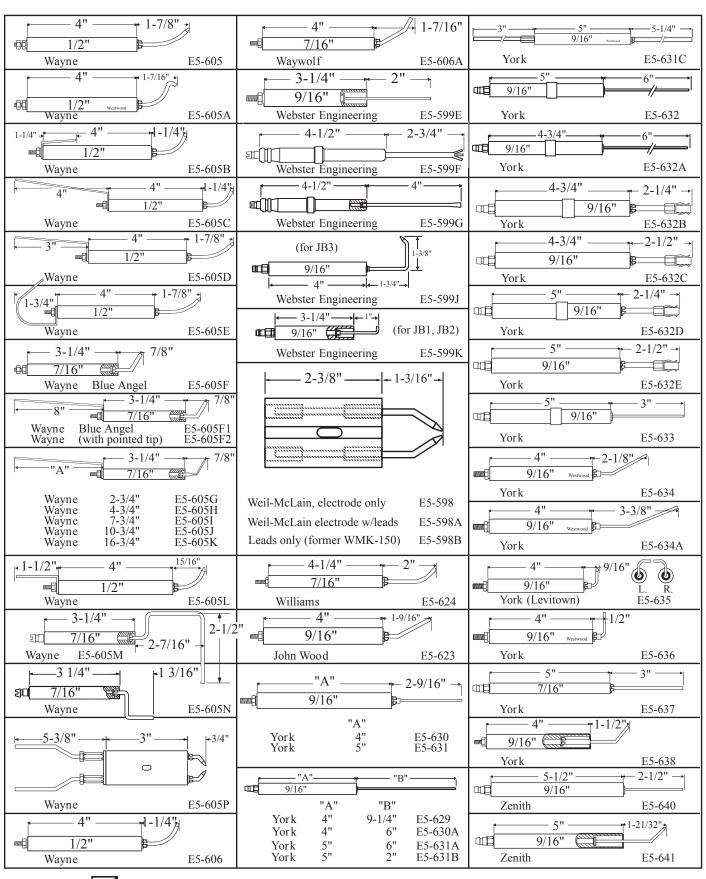
E5-512A

Stewart Warner

Scully Fastlite



## E13



HIGH DIELECTRIC STRENGTH • PRECISION DIMENSIONS

Please order by PNO.

E14



## **ELECTRODE & INSULATOR KITS**

### Serviceman's Deluxe Kit

#### OEM Electrodes - 2 ea.

ABC: E5-146 Beckett: E5-151E, E5-1510 Carlin: E5-188B, E5-188N, E5-188K Quiet Heet: E5-483 Wayne: E5-604, E5-605, E5-605B, E5-605F, E5-606

#### Rajah<sup>™</sup> Terminals - 10 ea.

E9-CT, E9-SS, E9-R-2, E9-RAC, E9-SF, E9-BS 6-32, E9-BS 10-32, E9-HS 6-32 (5 ea.), E9-HS 10-32 (5 ea.), 6-32 nut, 10-32 nut **Standard Electrodes - 2 ea.** E5-1M4, E5-2M4, E5-2M5, E5-2M6, E5-4M4, E5-3M4, E5-3M5, E5-3M6

#### Also includes

5 feet of GTO-15 ignition cable 1 set (2) T100-230 electrode benders 1 · T100-220 electrode gauge 1 set (2) T100-70 jumpers 1 · NAS gauge<sup>™</sup> nozzle gauge 1 · **Coupler Popper**<sup>™</sup> tool 1 · Plastic carrying case



No. E5-2001

₩No. E5-1897

₩No. E5-1897-C

### Serviceman's Super Kits

Same contents as the E5-2001 Deluxe Kit, less the NAS gauge<sup>™</sup> and Coupler Popper<sup>™</sup> in a plastic carrying case

Same contents as the E5-2001 Deluxe Kit, less the NAS gauge<sup>™</sup> and Coupler Popper<sup>™</sup> in a cardboard box

## **ELECTRODE & INSULATOR ROLL-UP KITS**

#### Contains:

Electrodes - 2 ea.

E5-3M4 (9/16"x4"), E5-3M5 (9/16"x5"), E5-3M6 (9/16"x6"), E5-3F5 (9/16"x5"), E5-483 (Quiet Heet)

E5-188N (Carlin), E5-151E (Beckett), E5-605 (Wayne), E5-2M4 (9/16"x4"), E5-2M5 (9/16"x5"), E5-2M6 (9/16"x6"), E5-2F5 (female 5"), E5-2F6 (female 6")

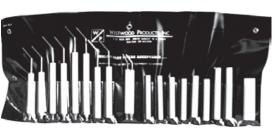
#### Insulators - 2 ea.

Contains: Electrodes - 2 ea.

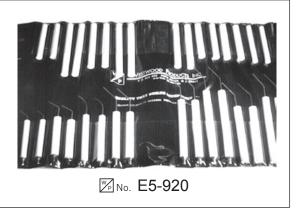
Insulators - 2 ea.

E5-1M4-1/4 (7/16"x4-1/4"), E5-4M4 (1/2"x4"), E5-2M4 (9/16"x4"), E5-2M5 (9/16"x5"), E5-3M4 (9/16"x4")

E5-1M4-1/4 (7/16"x4-1/4"), E5-3M4 (9/16"x4"), E5-2M4 (9/16"x4"), E5-2M5 (9/16"x5"), E5-2M6 (9/16"x6"), E5-2F5 (female 5"), E5-2F6 (female 6"), E5-4M4 (1/2"x4")



No. E5-595



E15

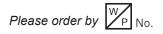


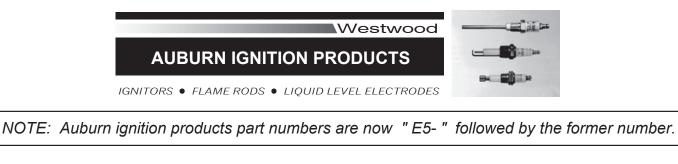


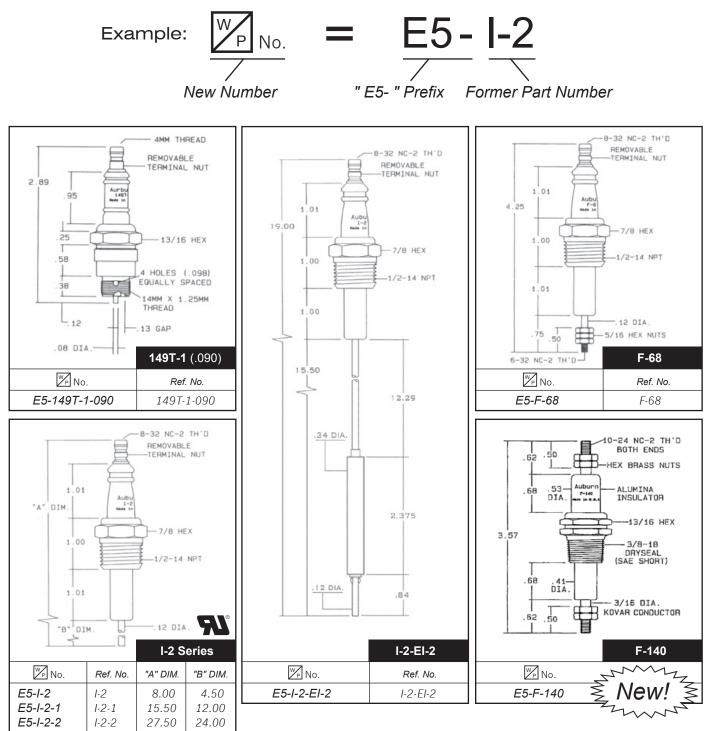
PORCELAIN CUTTER No. T100-370 on page T17

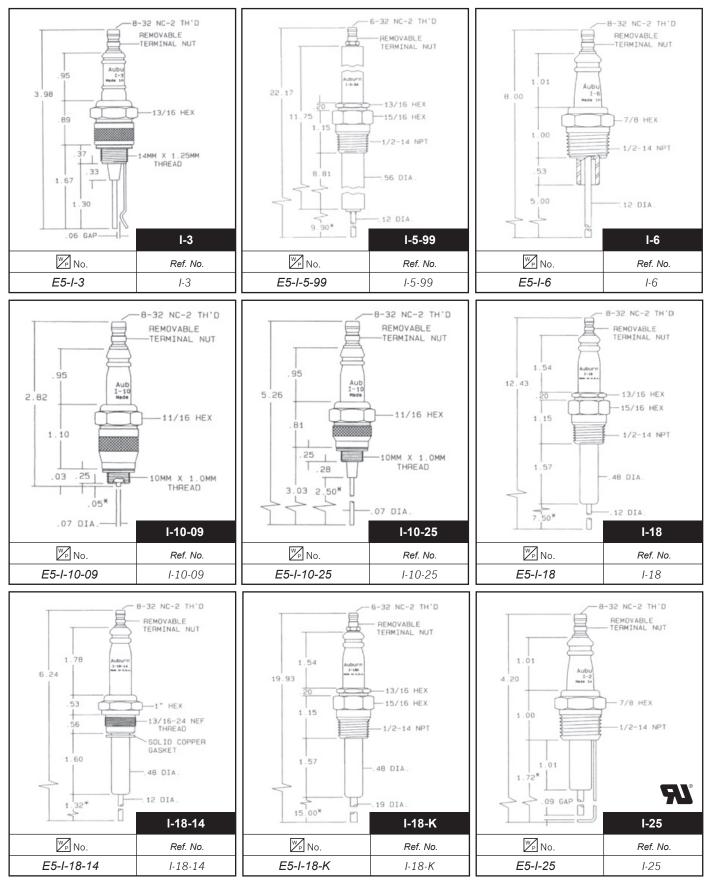
&

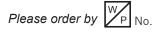
RAJAH TERMINAL KITS on page E33

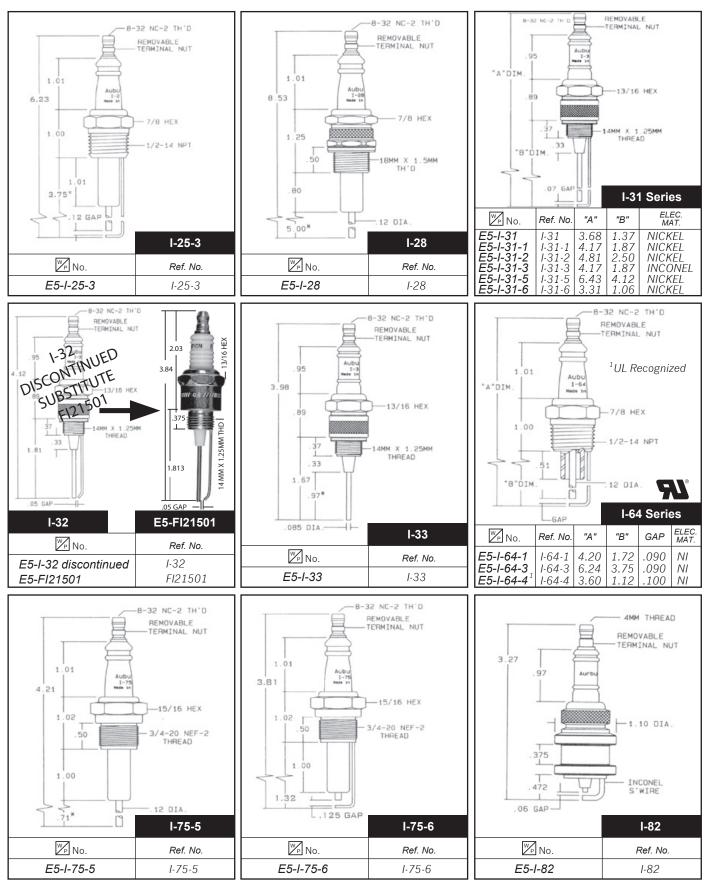


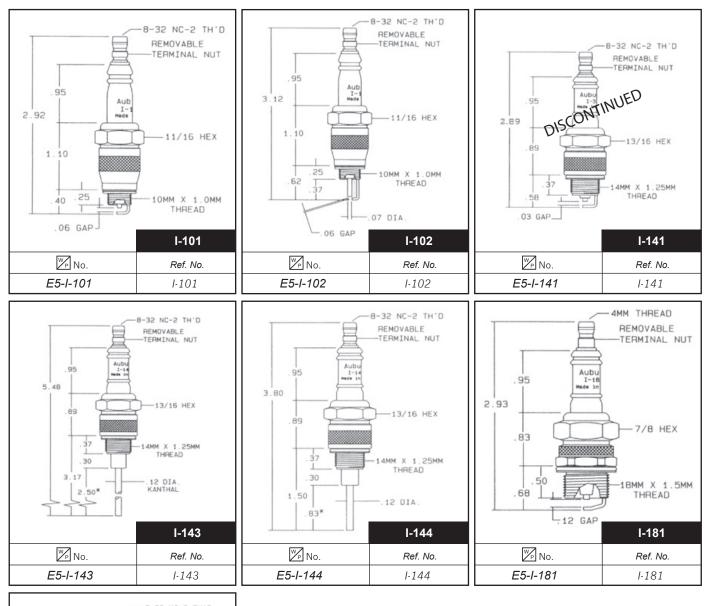


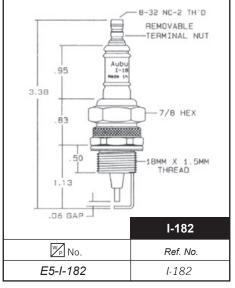




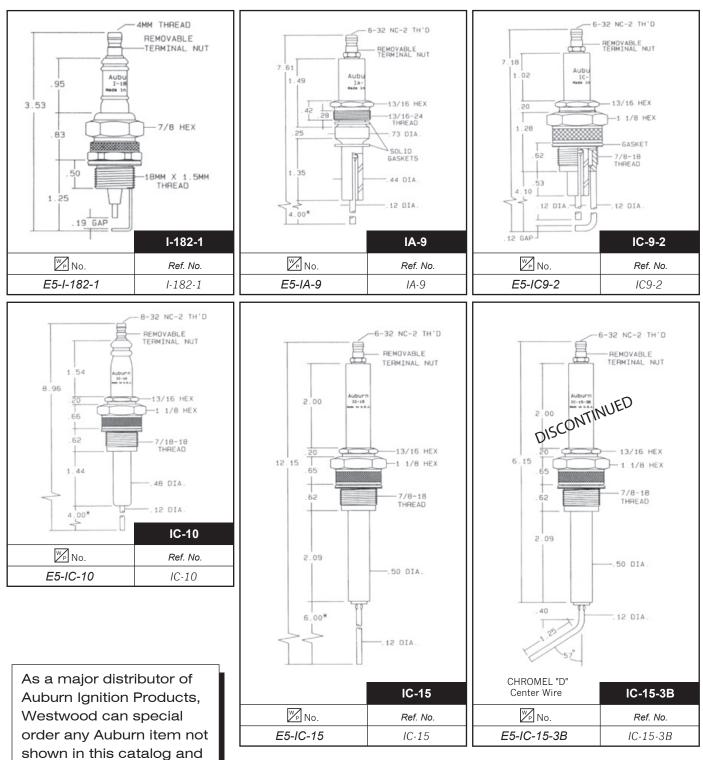






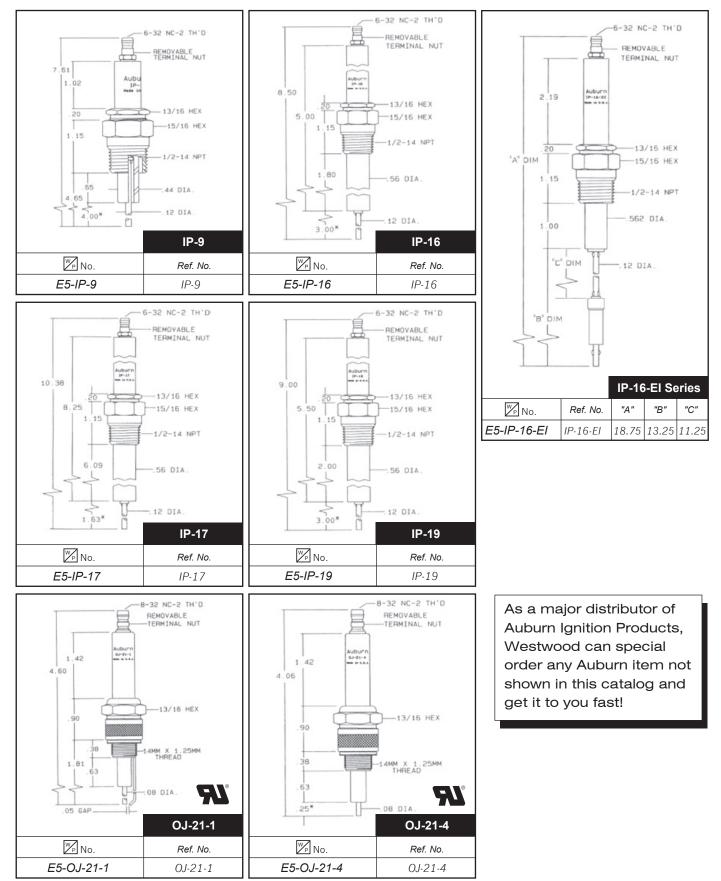


As a major distributor of Auburn Ignition Products, Westwood can special order any Auburn item not shown in this catalog and get it to you fast!

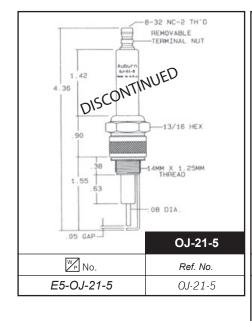


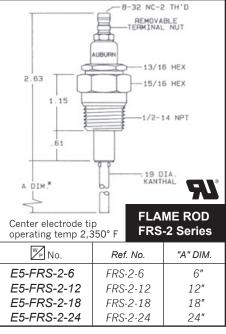
\* Dimensions marked with an asterisk are standard lengths - Other lengths available upon request

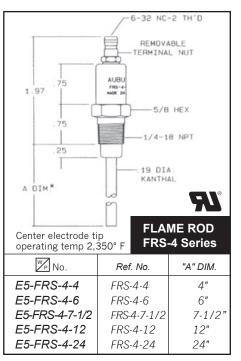
get it to you fast!

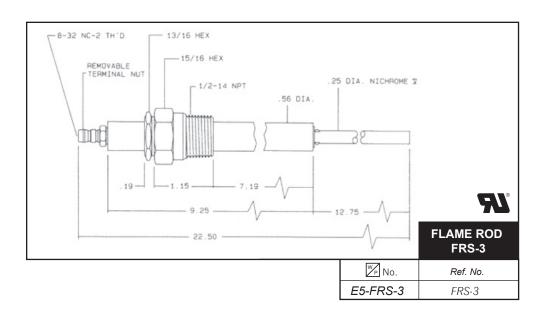


### **AUBURN ELECTRODES & FLAME RODS**









As a major distributor of Auburn Ignition Products, Westwood can special order any Auburn item not shown in this catalog and get it to you fast!

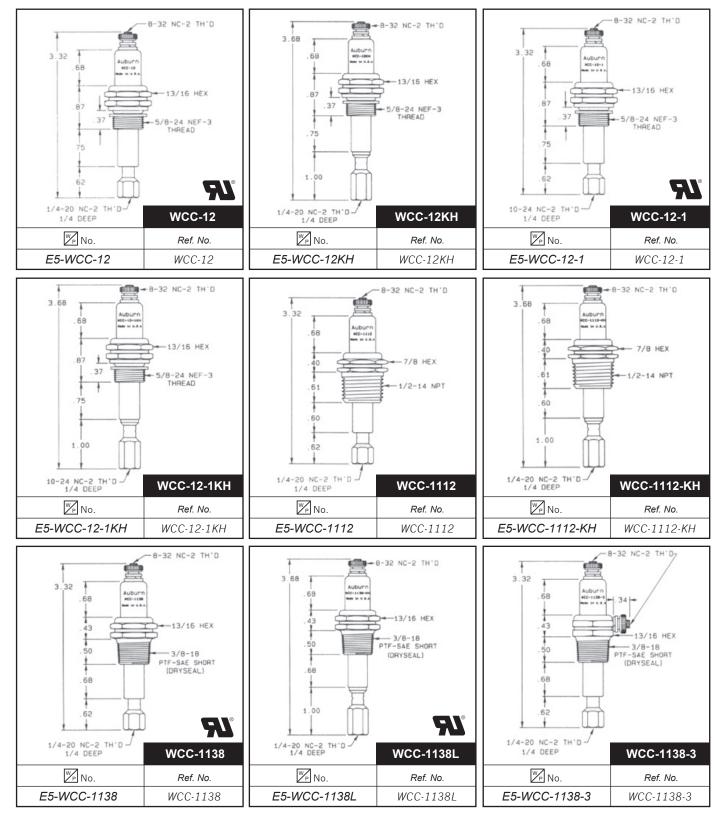
## AUBURN LIQUID LEVEL ELECTRODES

### WCC Series:

Metal parts are 303 or 304 non-magnetic stainless steel. Incorporates an internal conductive glass seal (not recommended for use above 450 volts). Non-steam applications up to 2,500 PSI at 120° F or 0 PSI at 700° F. Steam applications up to 250 PSI at 406° F

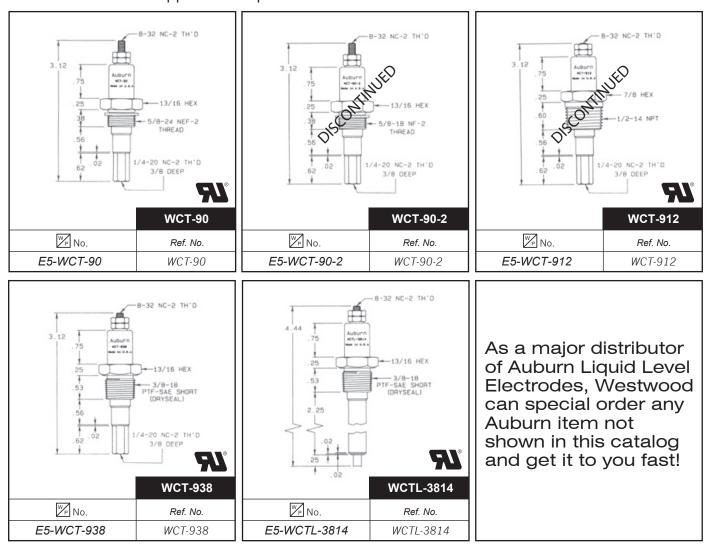
### WCC-KH Series:

Metal parts are 303 or 304 non-magnetic stainless steel. Incorporates a special insulator tip seal and Kovar center wire-glass seal. Non-steam applications up to 2,500 PSI at 120° F or 0 PSI at 450° F. Steam applications up to 450 PSI at 459° F



Westwood

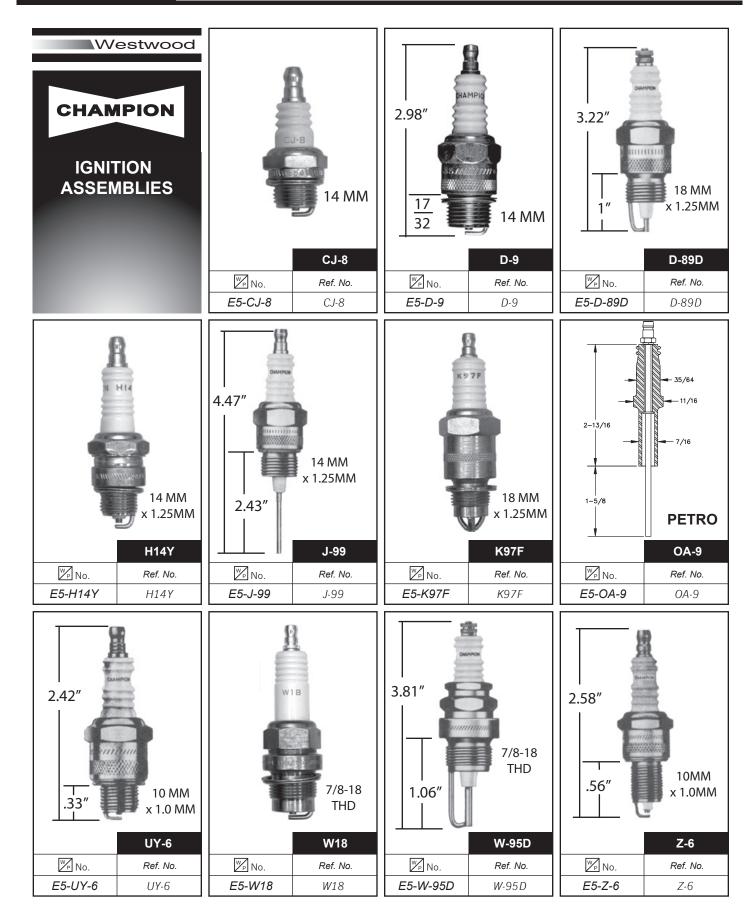
### WCT Series: Metal parts are 303 or 304 non-magnetic stainless steel, center electrodes are one piece. Non-steam applications up to 1,000 PSI at 120° F or 0 PSI at 400° F Steam applications up to 100 PSI at 337° F



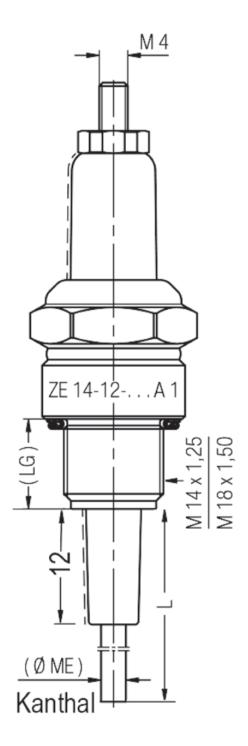
WP No.	Ref. No.	Thread	Length	Dia.	SOLID STAINLESS STEEL PROBES
E5-1024-12 E5-1024-18 E5-1024-24 E5-1420-6	1024-12 1024-18 1024-24 1420-6 1420-12	10-24 10-24 10-24 1/4-20	12" 18" 24" 6" 12"	3/16" 3/16" 3/16" 1/4"	FOR USE ON LIQUID LEVEL ELECTRODE ASSEMBLIES
E5-1420-12 E5-1420-18 E5-1420-24 E5-1420-36 E5-3816-12 E5-3816-18 E5-3816-24	1420-12 1420-18 1420-24 1420-36 3816-12 3816-18 3816-24	1/4-20 1/4-20 1/4-20 3/8-16 3/8-16 3/8-16	12" 18" 24" 36" 12" 18" 24"	1/4" 1/4" 1/4" 1/4" 3/8" 3/8" 3/8"	1/4" Dia.       1/4-20 Thread         3/8" Dia.       3/8-16 Thread         Take a look       LIQUID LEVEL PROBES for FULTON BOILERS on page H9

STANDARD SIZES\*

\*Made to order non-standard lengths available by special order.



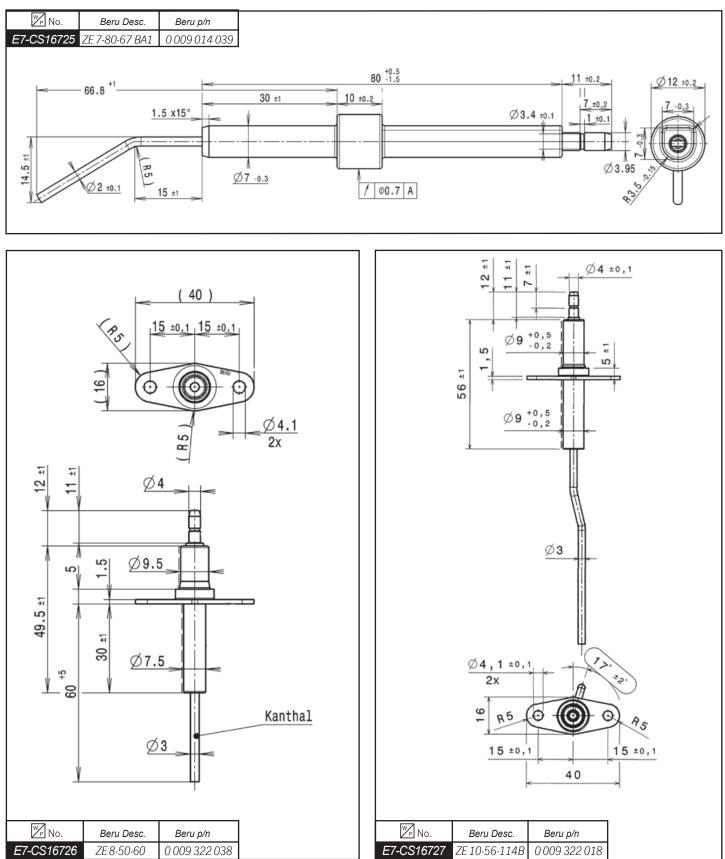
## **BERU NEUHAUS ELECTRODES**

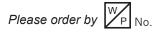


₩ No.	Beru Desc.	Thread	"L" mm	"ME" mm	Beru p/n
E7-CS16668 E7-CS16669 E7-CS16670 E7-CS16671 E7-CS16709	ZE 14-12-66 A1 ZE 14-12-100 A1 ZE 14-12-200 A1 ZE 14-12-300 A1 ZE 14-12-1200 A1	M14x1.5 M14x1.5 M14x1.5 M14x1.5 M14x1.5 M18x1.5	66 100 200 300 1200	2.5 2.5 2.5 2.5 3.5	0 009 340 094 0 009 340 041 0 009 340 028 0 009 340 038 0 009 380 045

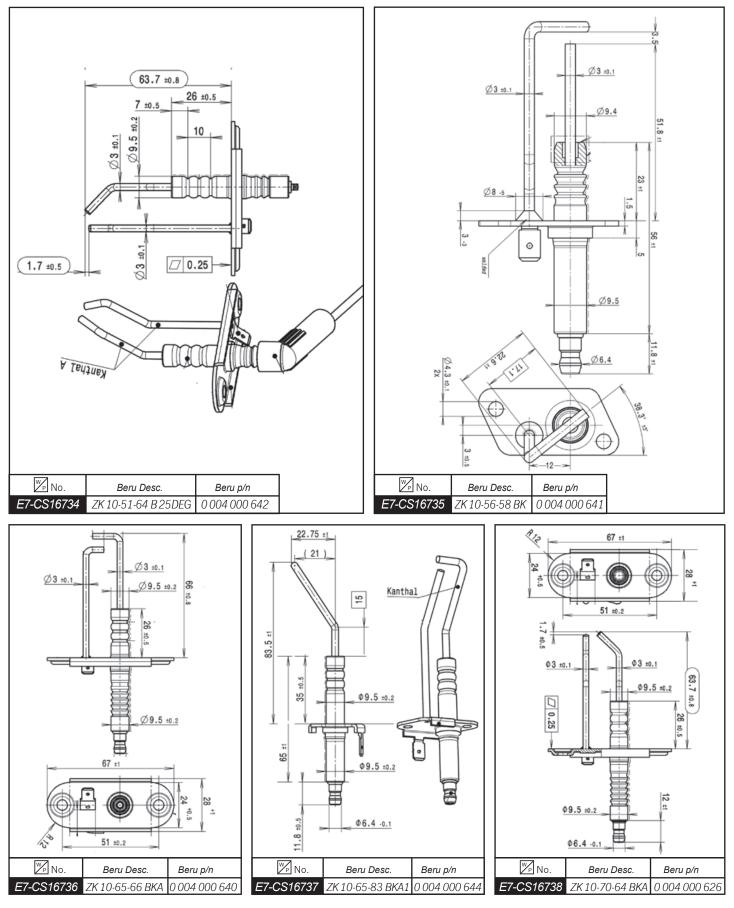
Westwood

**BERU NEUHAUS ELECTRODES** 





#### **BERU NEUHAUS ELECTRODES**



Please order by P No.

TE	REMINALS & HIGH VOLTAGE PRODUCTS
	SPECIAL NOTE: NEW <b>Rajah</b> ™ TERMINAL PART NUMBERS
	<b>Rajah</b> <sup>™</sup> terminals and related items part numbers are now "E9-" followed by the former part number.
	Example: $W_{P}_{No.}$ = E9-CT New Number "E9-" Prefix Former Part Number

Note: Terminal part number endings of 6-32, 8-32, 10-24, and 10-32 refer to terminal thread size

	E B	A CONTRACTION OF A CONT		
No. E9-CT	₩ No. E9-SS	₩ No. E9-R-2	₩ No. <b>E9-SF</b>	₩ No. E9-TT
₩ No. E9-CT-TS 8-32 E9-CT-TS 10-32	No. Ε9-SS-TS 10-32	No. E9-SR	₩ No. E9-HS 6-32 E9-HS 10-32	No. E9-CT-BS 6-32 E9-CT-BS 8-32 E9-CT-BS 10-32
No. E9-SS-BS 6-32 E9-SS-BS 8-32 E9-SS-BS 10-32	No. E9-HT 6-32 E9-HT 8-32 E9-HT 10-32	₩ No. E9-SX-1 6-32 E9-SX-1 10-32	No. E9-CT-SS	No. E9-ACT
No. E9-ASS	No. E9-CHT	<ul> <li>№.</li> <li>E9-BS 6-32</li> <li>E9-BS 8-32</li> <li>E9-BS 10-24</li> <li>E9-BS 10-32</li> </ul>	Rajan (10) No. E9-458-9 10-32	No. E9-RAC
No. E9-RASS	No. E9-EBS 6-32 E9-EBS 10-32	Ratah EQUID	No. E9-SS-SOS	No. E9-R-SOS

ÂRajah™	~////~~~
TERMINALS & HIGH VOLTAGE PRODUCTS	

TERMINALS

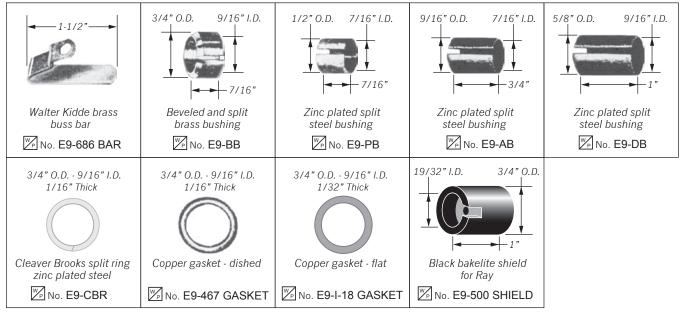


Note: Terminal part number endings of 6-32, 8-32, 10-24, and 10-32 refer to terminal thread size

			10. E9-SSN	10. E9-RSN
No. E9-T-SOS	No. E9-AS-SOS	No. E9-BS-SOS	<u>∠</u> ⊧ No. E9-SSN	IZPINo. E9-RSN
No. E9-TSN	No. E9-ASN	No. E9-BSN	No. E9-ACT-BS 6-32 E9-ACT-BS 10-32	No. E9-DS-1
No. E9-FF-1	No. E9-CC-1	No. E9-SS-LBS	No. E9-SS-LTS	10. E9-XC
No. E9-SA-1 6-32	₩ No. E9-ITN 8-32 E9-ITN 10-32	₩ No. E9-ITN-S 6-32 E9-ITN-S 8-32	No. E9-TC-10	No. E9-TS-10
₩No. E9-R-1	₩No. E9-RS-3 10-32	<ul> <li>№ No.</li> <li>E9-RX-4 6-32</li> <li>E9-RX-4 8-32</li> <li>E9-RX-4 10-32</li> </ul>	₩ No. E9-RX-5 10-32	No. E9-RP-6
No. E9-RC-5	No. E9-RE-7	No. E9-AEBF	No. E9-EBF	5/16" Long
11/16" Long	No. E9-BC-11	No. E9-BS-12		

TERMINALS & HIGH VOL	TERMINALS & HIGH VOLTAGE PRODUCTS					
Note: Termin	al part number endings	of 6-32, 8-32, 10-24, a	nd 10-32 refer to termin	al thread size		
Beckett DISCONTINUED USEIE9-YS-10		a. Man		KALLAL LOUDD		
₩ No. E9-S-15 10-32	₩ No. E9-AL-10	₩ No. <b>E9-AS-10</b>	No. E9-ASC	₩ No. E9-S-10		
	() Dan		10 11 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1-1/8" Long		
₩ No. E9-CS	₩ No. E9-YL-10	WP No. E9-YS-10	No. E9-YSC	₩ No. E9-SCS-2 6-32		
1-1/4" Long	<ul> <li>№ No.</li> <li>E9-KBN 6-32</li> <li>E9-KBN 10-24</li> </ul>	No. E9-DT	Statement and state	Cleaver Brooks Spring Connects plate assembly to ignitors - 20" Long Ino. E9-CBS		

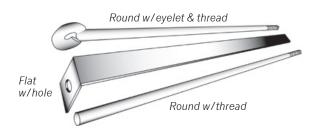
#### SPECIALTY TERMINAL & ELECTRODE HARDWARE



#### **BUSS BARS**

WP No.	Ref. No.	12" Length*
E9-TYPE ET	Type ET	Round brass with eyelet and 6-32 thread
E9-TYPE F E9-TYPE ST	Type F Type ST	Flat brass with 1/8" hole Round brass with 6-32 thread

\* Other lengths available up to 24"



E32

	WP No.	Ref. No.	Description
			Rajah <sup>™</sup> "Mini" Ignition Terminal Kit:
	E9-34	34	20 - CT Cage Terminals 12 - SS Spring Snap Terminals 20 - R2 Ring Terminals 10 - RAC Right Angle Cage Terminals 12 - SF Stud Ferrule Terminals
			Rajah <sup>™</sup> Transformer Terminal Kit:
	E9-54	54	6 - AS-10Short Adapter Spring6 - CC-1Cage on Cage6 - AL-10Long Adapter Spring6 - RC-5Ram's Horn on Cage2 - STS-10Thumb Nut on Cage4 - RX4Ram's Horn on Hex2 - 458-9Spring Plunger (10-32)2 - R1Ram's Horn Clip4 - B-10Button Contact (short)6 - HSHollow Stud (10-32)2 - B-11Button Contact (long)6 - SXHex Stud (10-32)
			<b>Rajah<sup>™</sup> "Pro" Ignition Terminal Kit:</b>
	E9-2097	2097	24 - CTCage Terminals24 - FF-1Ferrule on Ferrule24 - SSSpring Snap Terminals24 - FF-1Ferrule on Ferrule24 - R2Ring Terminals1 - T200-10 (former #695)24 - SFStud Ferrule Terminals1 - T200-10 (former #695)24 - RACRight Angle Cage Terminals100 - DT100 - DTDistributor TerminalsTerminal
			Rajah <sup>™</sup> "Deluxe" Ignition Terminal Kit:
	E9-3500	3500	12 - CTCage Terminals12 - HSHollow Stud (10-32)12 - SSSpring Snap Terminals12 - CC-1Cage on Cage12 - R2Ring Terminals12 - CT-TSCage on Stud (10-32)12 - ACTAngle Cage Terminals12 - RC-5Ram's Horn on Cage12 - SFStud Ferrule Terminals12 - R-1Ram's Horn Clip12 - BSBase Stud (6-32)12 - #299 Special GE Slotted Stud12 - HSHollow Stud (6-32)12 - SXHex Stud (10-32)12 - HSHollow Stud (6-32)1 - 5/16" Nut Driver1 - T200-10 (former #695)Terminal Crimping Tool
Alam .			<b>Rajah</b> <sup>™</sup> Carlin Transformer Contact Kit:
50000 0000	E9-CK-1	СК-1	For in the field conversion on Carlin Burner models 98, 99, 100, 101, 10. Webster transformer model 313-28AB85
0000			2 - Contact clips 2 - Flat washers (#10) 2 - Flat washers (#10) 2 - 10-32 nuts

## Westwood CLIPS, RUBBER & CERAMIC BOOTS

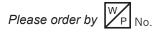
### **ELECTRICAL CLIPS & RUBBER BOOTS**

	Vinyl		Vinyl
₩ No. E9-LV CLIP	🔀 No. E9-LV BOOT	No. E9-20 AMP CLIP	No. E9-20 AMP BOOT
Distributor nipple	Silicone Rubber	Silicone Rubber	
	0		
No. E9-DN	🕅 No. E9-250 BOOT	<sup>™</sup> №. Е9-251 ВООТ	



### HIGH TEMPERATURE CERAMIC SPARK PLUG BOOTS with Stainless Steel Terminals

WP No.	Ref. No.	Description
E9-ECF	ECF	EXTENDED CERAMIC BOOT - with stainless steel terminal for 7mm ignition wire
		With the second se
E9-AECF	AECF	ANGLE EXTENDED CERAMIC BOOT - with stainless steel terminal for 7mm ignition wire

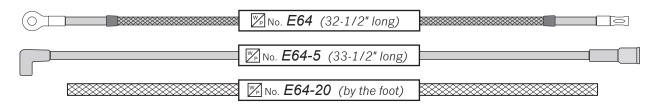


Wes	twood	d IGI	NITION CAE	BLE	
	R		W P No.		
Cable Type	UL Recognized Component	25' Roll	100' Roll	1,000' Roll	
GTO-15	Yes	E60-25	E60-100	E60-1000	
White Silicone	-	E62-25	E62-100	-	
Red Silicone	Yes	E63-25	E63-100	E63-1000	

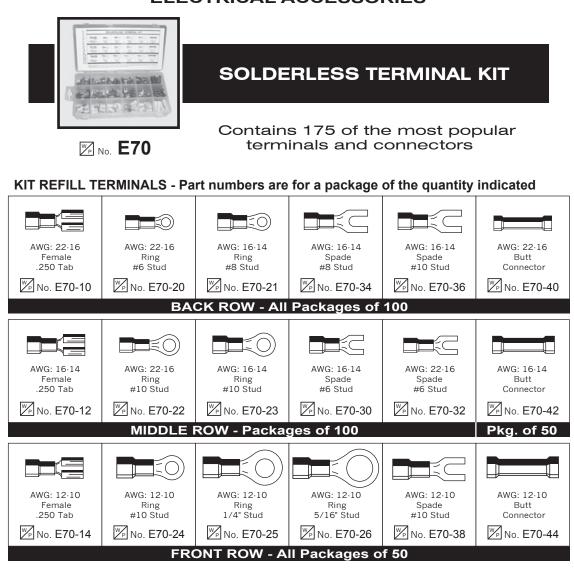
GTO-15 (black)	Large .275" outside diameter fits Rajah terminals perfectly. Withstands more than <b>15,000 VAC</b> with low current leakage. Resists arc-over, tracking, and burning. Tested to withstand conditions of heat, oil, and moisture. No. 14 gauge, 19 x 26 stranded tinned copper wire. All vinyl insulation affords low temperature flexibility. Flame retardant, will not support combustion. Tough and abrasion resistant, yet easy stripping. Temperature range: <b>UL Recognized</b> to 105 <sup>0</sup> C (221 <sup>0</sup> F)
White Silicone	Large .275" outside diameter fits Rajah terminals perfectly. Withstands more than <b>10,000 VAC</b> and <b>25,000 VDC</b> with low current leakage. No. 16 gauge, 19 x 26 stranded tinned copper wire. Natural Silicone insulation, high dielectric strength. Temperature range: -65 <sup>0</sup> F to 400 <sup>0</sup> F (-54 <sup>0</sup> C to 204 <sup>0</sup> C)
Red Silicone	Large .275" outside diameter fits Rajah terminals perfectly. Withstands more than <b>10,000 VAC</b> and <b>25,000 VDC</b> with low current leakage. No. 16 gauge, 19 x 26 stranded nickel plated copper wire. Natural Silicone insulation, high dielectric strength. Temperature range: -65 <sup>0</sup> F to 482 <sup>0</sup> F (-54 <sup>0</sup> C to 250 <sup>0</sup> C) <b>UL Recognized</b>

### CABLE ASSEMBLIES and FIBERGLAS BRAID

P No.	Ref. No.	Description
E64	#3250	Red Silicone wire <b>high temperature</b> cable assembly with protective <b>metal braid</b> . Temperature range -65 <sup>0</sup> F to 450 <sup>0</sup> F. Overall length is 32-1/2".
E64-5	#RS-3350	5
E64-20	#3253	Fiberglas braided sleeving. Fits over ignition cable for high temperature protection. Sold by the foot. (Ordering example: For 5' of sleeving order 5 of E64-20. Shipped as one piece)



### **ELECTRICAL ACCESSORIES**



WIRE CONNECTORS - Part numbers are for a package of 100							
GREY	BLUE	ORANGE	YELLOW	RED			

E70-52



White Nylon

₩ No.

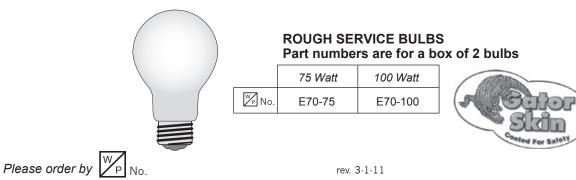
#### CABLE TIES - Part numbers are for a package of 100

E70-54

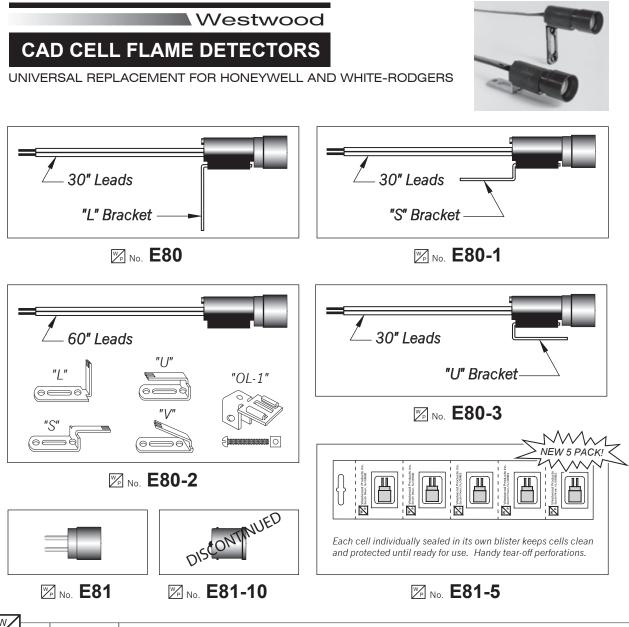
E70-56

E70-58

-0-			, i art manns		puonago or r	
		4"	5-1/2"	7-1/2"	11"	14-1/2"
*	₩ No.	E70-60	E70-62	E70-64	E70-66	E70-68



E70-50



P No.	Ref. No.	Description
E80	TM-30L	Complete flame detector with cad cell eye*, 30" leads, "L" bracket, poly bag package
E80-1	TM-30S	Complete flame detector with cad cell eye*, 30" leads, "S" bracket, poly bag package
E80-2	TMK-60	Complete flame detector kit with cad cell eye*, 60" leads, "L" bracket, "S" bracket, "U" bracket, "V" bracket, "OL-1" special oil line bracket with mounting screw and nut, packaged in a box
E80-3	-	Complete flame detector with cad cell eye*, 30" leads, "U" bracket, poly bag package
E81	Туре М	Cad cell eye* packaged in a box
E81-5	-	Cad cell eye* <b>5 pack</b> (blister card with 5 E81-5 eyes per card), tear-off perforations
E81-10	Туре W	Cad cell eye, bayonet mount for White-Rodgers cad cell flame detector DISCONTINUED

\* Cad cell eye replaces Honeywell 130367 and fits C554A flame detector



T70 Cad cell relay and eye tester on page T11

## THERMOSTAT GUARDS

METAL AND PLASTIC TAMPER PROOF DESIGNS IN PLEASING COLORS

Designed for use in schools, industrial plants and military installations where rugged, maximum protection is the first consideration. The louvered covers cannot be twisted or jammed open. Bobby pins, pencils, letter openers and other such objects cannot be inserted through the cover to adjust the thermostat.

- Metal guards are constructed of 18-22 gauge steel with a baked enamel finish
- Plastic guards are molded from hi-impact plastic and can be used with both horizontally or vertically mounted thermostats
- All guards come with eight tumbler lock, one key, and mounting hardware
- Guards with ring bases can be installed without removing the thermostat



No. **E140** 



No. E140-1



₩ No. **E141** 



No. **E142** 



No. E142-1



No. E142-2



No. E142-3

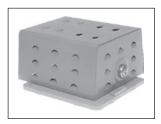


₩ No. E143

WP No.	Ref. No.	Inside Dimensions H" x W" x D"	Mat'l	Color	Base	Comments
E140	WTG-54VL	6-1/4 x 4-3/4 x 3	М	BE	SH	T80, T90, T91, T199, T330, T340, T42, T26, T87, T92, T651,
E140-1	WTG-54VLW	6 x 3-13/16 x 3-1/8	М	BE	RH	T921, T872, T882
E141	WTG-B	5-1/4 x 4-5/8 x 3-1/4	Р	BR	SR	
E142	WTG-EB	3-7/8 x 3-1/2 x 2-1/2	Р	BR	S	
E142-1	WTG-EK	3-7/8 x 3-1/2 x 2-1/2	Р	CL	S	T199, TP970, TP971, TP972, TP973, T26, T87, TS86, T832,
E142-2	WTG-EM	3-7/8 x 3-1/2 x 2-1/2	М	BE	S	T853, TP910
E142-3	WTG-EO	3-7/8 x 3-1/2 x 2-1/2	Р	OP	S	
E143	WTG-K	5-1/4 x 4-5/8 x 3-1/4	Р	CL	SR	
ſ		M=Meta P=Plasti	c	BE=Beige BR=Bron CL=Clea OP=Opac WH=Whit	ze r que	H=Hinged R=Ring S=Solid
e order by	P No.			rev. 3	.1.11	E

## THERMOSTAT GUARDS (CONTINUED)

METAL AND PLASTIC TAMPER PROOF DESIGNS IN PLEASING COLORS



No. **E143-1** 



No. E143-2



₩ No. **E143-3** 



₩ No. **E144** 



No. **E144-1** 



No. **E144-2** 



No. **E144-3** 



₩ No. **E144-4** 



No. E145 Series



No. **E146** 

WP No.	Ref. No.	Inside Dimensions H" x W" x D"	Mat'l	Color	Base	Comments	
E143-1	WTG-KM	5-1/4 x 4-5/8 x 3	М	BE	S		
E143-2	WTG-KWM	5-1/4 x 4-5/8 x 3-1/4	М	BE	R		
E143-3	WTG-O	5-1/4 x 4-5/8 x 3-1/4	Р	OP	SR		
E144	WTG-RB	6-3/8 x 3-1/2 x 3-1/4	Р	BR	SR		
E144-1	WTG-RK	6-3/8 x 3-1/2 x 3-1/4	Р	CL	SR	T80, T90, T91, T99, T199, T330, T340, T42, TA42, T26, TS86,	
E144-2	WTG-RM	6-3/8 x 3-1/2 x 3	M	BE	S	T87, T92, T498, T651, T834, T921, T872, T882	
E144-3	WTG-RO	6-3/8 x 3-1/2 x 3-1/4	Р	OP	SR		
E144-4	WTG-RWM	6-3/8 x 3-1/2 x 3-1/4	М	BE	R		
E145	WTG-UB2	8-1/8 x 4-5/8 x 3-5/8	Р	BR	SR	General, White-Rodgers, Barber Colman, Honeywell, Robertshaw,	
E145-1	WTG-UK2	8-1/8 x 4-5/8 x 3-5/8	Р	CL	SR	Camstat, Penn	
E146	WTG-UM	7-1/4 x 5-3/8 x 3-1/2	М	BE	S		
M=Metal BE=Beige H=Hinged P=Plastic BR=Bronze R=Ring CL=Clear S=Solid							

OP=Opaque WH=White

## THERMOSTAT GUARDS (CONTINUED)

METAL AND PLASTIC TAMPER PROOF DESIGNS IN PLEASING COLORS



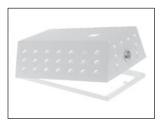
No. **E147** Series



No. **E148** 



No. **E149** 



No. E150 Series



No. **E151** 



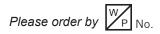
₩ No. **E151-1, -2** 



₩ No. **E151-3** 

P No.	Ref. No.	Inside Dimensions H" x W" x D"	Mat'l	Color	Base	Comments	
E147	WTG-UM1	9-3/8 x 6-3/4 x 3	м	WH	SH	Honeywell T7300 series	
E147-1	WTG-UM1DH	9-3/8 x 6-3/4 x 3	м	WH	SH	Honeywell T7300 series w/display opening	
E147-2	WTG-UM1DOH	9-3/8 x 6-3/4 x 3	М	WH	SH	Honeywell T7300 series w/override/display opening	
E147-3	WTG-UM1DOWR	9-3/8 x 6-3/4 x 3	М	WH	SH	White-Rodgers IF90 series w/override/display opening	
E147-4	WTG-UM10H	9-3/8 x 6-3/4 x 3	М	WH	SH	Honeywell T7300 series w/override opening	
E147-5	WTG-UM1SDH	9-3/8 x 6-3/4 x 3	М	WH	SH	Honeywell T7400 series w/display opening	
E148	WTG-UO2	8-1/8 x 4-5/8 x 3-5/8	Р	OP	SR		
E149	WTG-UWM	6-3/4 x 4-1/4 x 3-9/16	М	BE	R		
E150	WTG-UWM1	9-3/8 x 6-3/4 x 3	М	WH	RH	Honeywell T7300 series	
E150-1	WTG-UWM1DH	9-3/8 x 6-3/4 x 3	М	WH	RH	Honeywell T7300 series w/display opening	
E150-2	WTG-UWM1DOH	9-3/8 x 6-3/4 x 3	М	WH	RH	Honeywell T7300 series w/override/display opening	
E150-3	WTG-UWM1DOWR	9-3/8 x 6-3/4 x 3	М	WH	RH	White-Rodgers IF90 series w/override/display opening	
E150-4	WTG-UWM10H	9-3/8 x 6-3/4 x 3	М	WH	RH	Honeywell T7300 series w/override opening	
E150-5	WTG-UWM1SDH	9-3/8 x 6-3/4 x 3	М	WH	RH	Honeywell T7400 series w/display opening	
E151	WTG-DB	4-1/8 x 7-1/16 x 2-1/4	Р	BR	SR		
E151-1	WTG-DK	4-1/8 x 7-1/16 x 2-1/4	Р	CL	SR		
E151-2	WTG-DK1	4-1/8 x 7-1/16 x 2-1/4	Р	CL	SR	w/override opening	
E151-3	WTG-DO	4-1/8 x 7-1/16 x 2-1/4	Р	OP	SR		
M=Metal BE=Beige H=Hinged P=Plastic BR=Bronze R=Ring CL=Clear S=Solid OP=Opaque							

OP=Opaqu WH=White



## ULTRAGLO<sup>™</sup> Thermostat Light

Mounts anywhere!



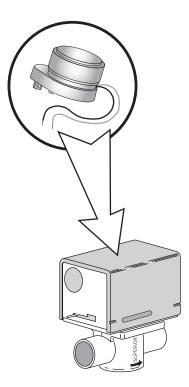
This easy to mount battery powered light has an ultra bright bulb that draws little current. It can be mounted in any convenient location with the two mounting screws provided. Easily slips out of its mounting bracket for use as a hand light. Use in cars, boats, RVs and campers too!



## REPLACEMENT ZONE VALVE MOTOR

For motor driven OPEN, spring return CLOSE valves (ie. Erie, Flare, Honeywell, Superior)

INSTALLS WITHOUT REMOVING VALVE FROM PIPING USING EASY TO INSTALL EXTENDED BRASS SCREWS



New easy to install screws!						
P No.	Description					
E180	Individually packaged with installation instructions, wire nuts, and easy to install extended brass mounting screws 24 VAC, 50/60 Hz, .32 A					



- Heavy gage canister with EPOXY COATING on the inside FIRST in the industry!
- UL GPH and pressure ratings EXCEED comparable OEM filters

• 360° screwdriver slot makes disassembly for element changing easy



• Service environment: Indoors, 20° to 105° F



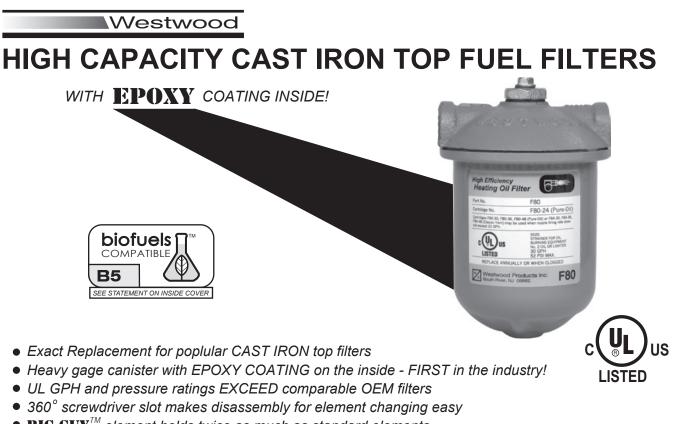
## COMPLETE CAST IRON TOP FILTERS with EPOXY coated canister

WP No.	Element Type	GPH	PSI	Exact Replacement for:
F20 F25	Pure-Oil <sup>™</sup> CLASSIC FELT <sup>™</sup>	17	52	General 1A-25A
F65 F70	Pure-Oil <sup>™</sup> CLASSIC FELT <sup>™</sup>	32	52	General 2A-700A

All filters have 3/8"- NPT pipe connections



UL Recognized CANISTER UPGRADE KITS on page F11 Individual FILTER GASKETS on page F10



- **BIG GUY**<sup>TM</sup> element holds twice as much as standard elements
- Service environment: Indoors, 20° to 105° F



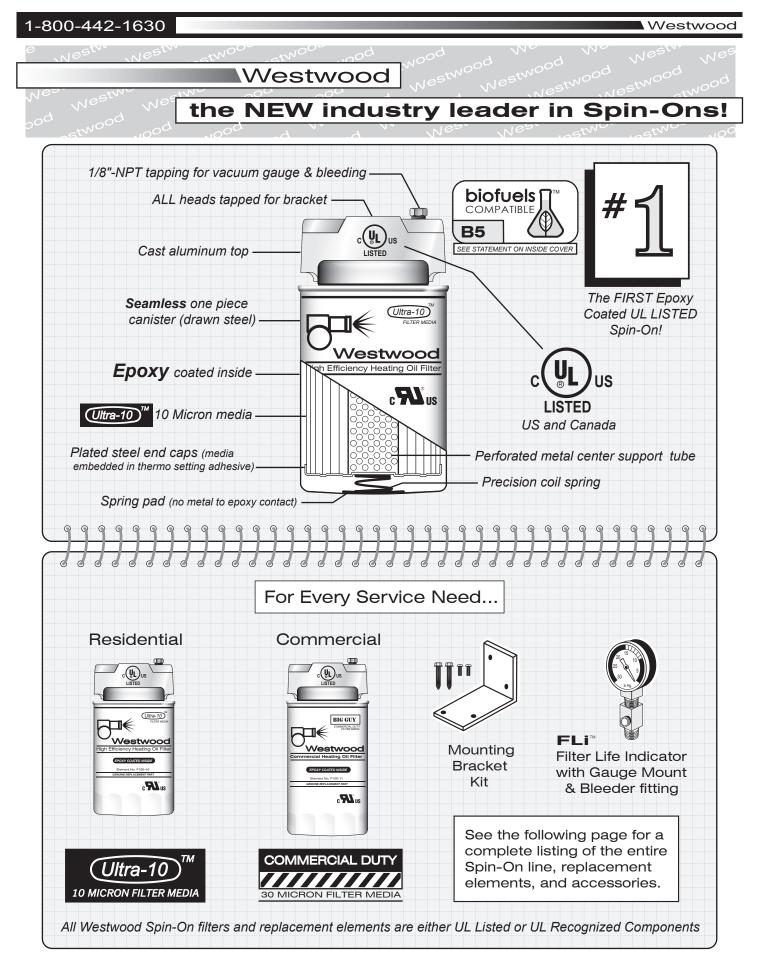
## **COMPLETE CAST IRON TOP FILTERS** with EPOXY coated canister

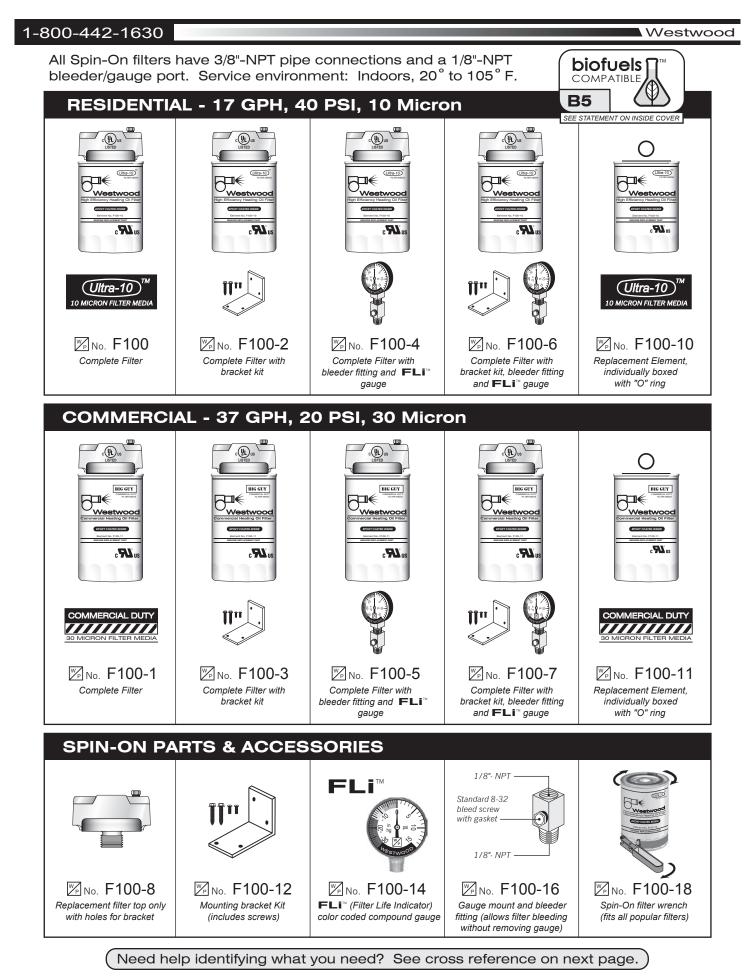
	WP No.	Element Type	GPH	PSI	Exact Replacement for:
	F80	Pure-Oil <sup>™</sup> <b>BIG GUY</b> <sup>™</sup>	30	52	Fulflo FB4
HOLDS TWICE AS MUCH!	F84	CLASSIC YARN <sup>™</sup>	22	52	

All filters have 3/8"- NPT pipe connections

**0**\*\***O** Take a look ....

UL Recognized CANISTER UPGRADE KITS on page F11 Individual FILTER GASKETS on page F10





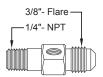
SPIN-ON CROSS REFERENCE - Westwood to others							
P No.	Description	Gar-Ber	Sid Harvey (Mitco)	Crown			
F100	Filter - Residential	11V-R	290, 264-SO	41439			
F100-1	Filter - Commercial	-	292-2, 264-92	-			
F100-2	Filter - Residential w/bracket	11BV-R	-	-			
F100-3	Filter - Commercial w/bracket	11BV-M	292-2B, 264-92B	-			
F100-4	Filter - Residential w/gauge	11V-RK	-	-			
F100-5	Filter - Commercial w/gauge	-	292-2G, 264-92G	-			
F100-6	Filter - Residential w/bracket & gauge	11BV-RK	-	-			
F100-7	Filter - Commercialw/bracket & gauge	11BV-MK	292-2GB, 264-92GB	-			
F100-8	Replacement spin-on filter top only	-	290-SO, 290-SOM	-			
F100-10	Spin-On element only - Residential	R	290-6, 264-91	41436			
F100-11	Spin-On element only - Commercial	M	292-1, 264-93	-			
F100-14	Filter Life Indicator (FLI) color coded guage, 1/8"-NPT	F.R.I.	-	-			
F100-16	Gauge mount and bleeder fitting	-	-	-			
F100-18	Spin-on filter wrench	-	-	-			

This cross-reference is provided as an aid in identifying which Westwood part numbers most closely replace those part numbers shown. It was accurate at the time it was created, to the extent that the information was publically available. Since manufacturers may sometimes change specs or discontinue products altogether, some inaccuracies may develop over time. Further, the Westwood parts shown will provide an equivelant, or superior, level of performance and service. However, due to differences among manufacturers, physical size and dimensions may vary.



## FILTER LIFE INDICATOR GAUGE AND FITTINGS

The **F**LI<sup>™</sup> gauge is a color coded compound gauge that predicts filter life by showing the running vacuum as the filter loads up. The fittings may also be used as a diagnostic tool wherever a gauge needs to be inserted into the system.





3/8"- Flare

No. F100-50 Piping: 3/8" Copper Use at: Pump, OSV, Tigerloop

No. **F100-60** Piping: 3/8" Copper Use at: Filter

1/4"- NPT

No. F100-70 Piping: Flexible oil Line Use at: Pump, OSV, Tigerloop



No. F100-80 Piping: Buderus flexible oil line between Tigerloop and pump inlet port



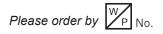
No. F100-85 Piping: Buderus flexible oil line between pump return port and Tigerloop





P No.	Description	System Piping	Typically Installed At
F100-14	FLi™ Filter Life Indicator color coded gauge, 1/8"-NPT	-	-
F100-50	<b>FLi</b> <sup>™</sup> fitting, 3/8" flare x 1/4"- NPT(M)	3/8" OD Copper	Pump, OSV, Tigerloop
F100-55	F100-50 fitting with <b>FLi</b> ™ gauge	3/8" OD Copper	Pump, OSV, Tigerloop
F100-60	<b>FLi</b> ™ fitting, 3/8" flare x 3/8"- NPT(M)	3/8" OD Copper	Filter
F100-65	F100-60 fitting with <b>FLi</b> ™ gauge	3/8" OD Copper	Filter
F100-70	<b>FLi</b> ™ fitting, 1/4"- NPT(F) x 1/4"- NPT(M)	Flexible Oil Line	Pump, OSV, Tigerloop
F100-75	F100-70 fitting with <b>FLi</b> ™ gauge	Flexible Oil Line	Pump, OSV, Tigerloop
F100-80	FLi™ fitting, 3/8"- BSPP <sup>*</sup> x 1/4"- NPT(M), with FLi™ gauge	Buderus Oil Line	Tigerloop to pump
F100-85	Buderus-Tigerloop pump return fitting, 3/8"- BSPP <sup>*</sup> x 1/4"- NPT(M)	Buderus Oil Line	Pump to Tigerloop

\*BSPP = British Standard Pipe Parallel. The thread used on Buderus flexible oil lines.

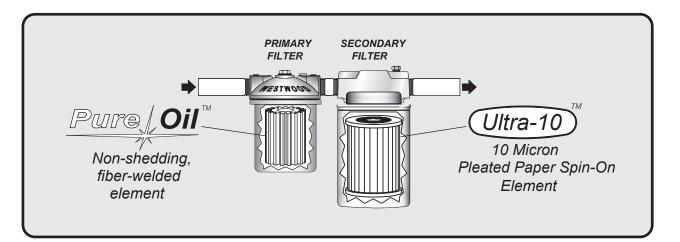


### Westwood

## SECONDARY FILTRATION ASSEMBLIES

*Fully assembled filter assemblies combining Westwood's premium cast iron top filters with Westwood's ultra fine spin-on filter. Connected in series, the* **PRIMARY** *filter catches most contamination; the* **SECONDARY** *filter traps the small nozzle plugging particles. All filters used in the secondary filtration assemblies are UL Listed. Service environment: Indoors, 20° to 105° F.* 

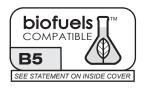






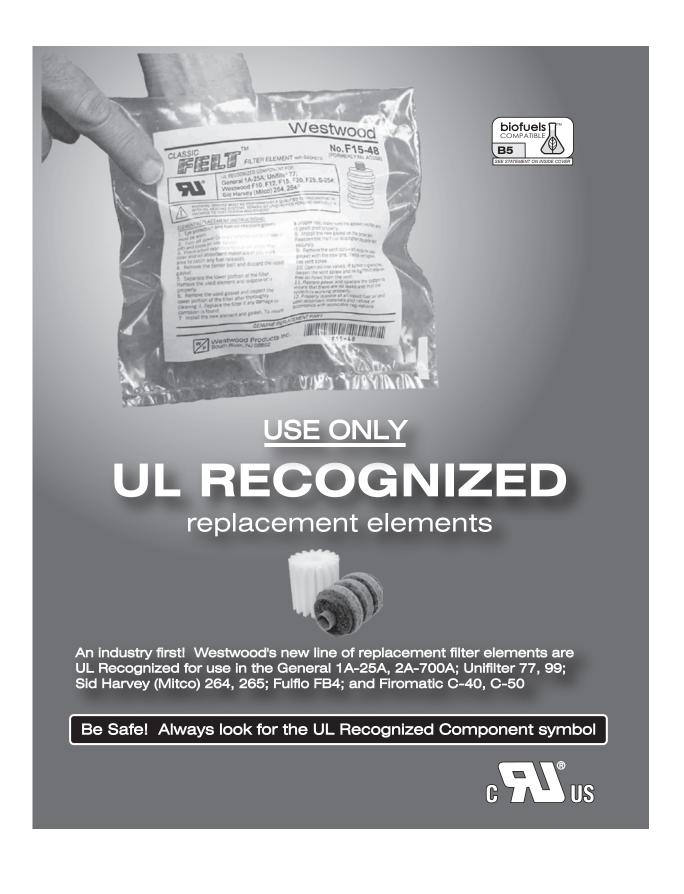
WP No.	Primary Filter No.	Primary Element	Secondary Filter No.	Secondary Element
F20-100	F20	Pure-Oil <sup>™</sup>	F100	10 minute animan
F65-100 F80-100	F65 F80		F100 F100	10 micron spin-on

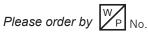
All filters have 3/8"- NPT pipe connections





UL Recognized CANISTER UPGRADE KITS on page F11 Individual FILTER GASKETS on page F10



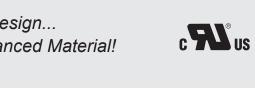


1-800-442-1630	



- Latest Computer Designed Shape
- Largest surface area with most filtering ribs
- Greater capacity highest in it's class!
- ► Fiber-welded for shed free performance
- Environmentally friendly processed plant fiber
- Popular elements UL Recognized Components

The Most Advanced Design... With the Most Advanced Material!



No.	Reference No.	Description	Fits	QTY PKG
F10-48*	PA-25	Pure-Oil <sup>™</sup> Individually bagged with gaskets	General 1A-25A; Unifilter 77; Westwood F10, F12, F15, F20, F25;	48
F30-24*	-	Pure-Oil <sup>™</sup> Individually bagged with gaskets	Sid Harvey (Mitco) 264, 264F General 2A-700A; Unifilter 99; Westwood F30, F32, F35, F65, F70; Sid Harvey (Mitco) 265, 265F	24
F80-24*	-	Pure-Oil <sup>™</sup> <b>BIG GUY</b> <sup>™</sup> Ind. bag w/gaskets	Fulflo FB4; Westwood F80, F84	24
F80-30*	-	Pure-Oil <sup>™</sup> bulk packed less gaskets	Fulflo FB4; Westwood F80, F84	30
F80-36*	P4FO-IB	Pure-Oil <sup>™</sup> Individually boxed with gaskets	Fulflo FB4; Westwood F80, F84	36
F80-48*	-	Pure-Oil <sup>™</sup> Individually bagged with gaskets	Fulflo FB4; Westwood F80, F84	48
F81-10	-	Pure-Oil <sup>™</sup> Individually bagged with gaskets	Fulflo FB6	10
F82-6	-	Pure-Oil <sup>™</sup> Individually bagged with gaskets	Fulflo FB8	6
F83-4	-	Pure-Oil <sup>™</sup> Individually bagged with gaskets	Fulflo FB10	4
F90-6*	-	Pure-Oil <sup>™</sup> Individually bagged with gaskets	Firomatic C-40 (RC-20)	6
F90-12*	-	Pure-Oil <sup>™</sup> <b>BIG GUY</b> <sup>™</sup> Ind. bag w/gaskets	Firomatic C-40 (RC-20)	12
F90-36*	PF-20	Pure-Oil <sup>™</sup> Individually bagged with gaskets	Firomatic C-40 (RC-20)	36
F91-6*	-	Pure-Oil <sup>™</sup> Individually bagged with gaskets	Firomatic C-50 (RC-30)	6
F91-12*	-	Pure-Oil <sup>™</sup> <b>BIG GUY</b> <sup>™</sup> Ind. bag w/gaskets	Firomatic C-50 (RC-30)	12
F91-36*	PF-30	Pure-Oil <sup>™</sup> Individually bagged with gaskets	Firomatic C-50 (RC-30)	36
F92-6	-	Pure-Oil <sup>™</sup> Individually bagged with gaskets	Purolator PF2002	6
F92-36	PP-20	Pure-Oil <sup>™</sup> Individually bagged with gaskets	Purolator PF2002	36

\* UL Recognized Component



Individual FILTER GASKETS on page F10



biofuels

COMPATIBLE

EE STATEMENT ON IN

**B**5

NEWLY REDESIGNED!

#### 1-800-442-1630

Westwood



## **10 MICRON FILTER ELEMENTS**

Upgrades any standard filter to the performance of a SPIN-ON!

- B5 SEE STATEMENT ON INSIDE COVER
- ► 10 Micron rating for super fine filtration
- Same type element as used in Spin-Ons
- Advanced collapse-proof design
- UL Recognized Component





🖾 No. **F12-12** 

🖾 No. **F32-12** 

WP No.	Description	Fits	QTY PKG
F12-12*	Ultra-10 <sup>™</sup> Indiv. bagged with gaskets	General 1A-25A; Unifilter 77; Westwood F10, F12, F15, F20, F25; Sid Harvey (Mitco) 264, 264F	12
F32-12*	Ultra-10 <sup>™</sup> Indiv. bagged with gaskets	General 2A-700A; Unifilter 99; Westwood F30, F32, F35, F65, F70; Sid Harvey (Mitco) 265, 265F	12

\* UL Recognized Component



## STACKED SEGMENT ELEMENTS



- Premium quality precision cut wool felt
- Economical time proven classic design
- UL Recognized Component





₩No. **F15-36, -48** 

B ⊮No. F35-12, -24

No.	Reference No.	Description			
F15-36*	A025	CLASSIC FELT <sup><math>m</math></sup> Indiv. boxed with gaskets	General 1A-25A; Unifilter 77; Westwood F10, F12, F15, F20, F25;	36	
F15-48*	A025B	CLASSIC FELT <sup>™</sup> Indiv. bagged with gaskets	Sid Harvey (Mitco) 264, 264F	48	
F35-12*	-	CLASSIC FELT <sup>™</sup> Indiv. bagged with gaskets	General 2A-700A; Unifilter 99;	12	
F35-24*	A070 CLASSIC FELT <sup>™</sup> Indiv. boxed with gaskets		Westwood F30, F32, F35, F65, F70; Sid Harvey (Mitco) 265, 265F	24	

\* UL Recognized Component

# **COMMERCIAL ELEMENT** for General Filters 2A-300

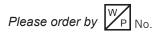
### Original Hard to find sealed can design

P No.	Reference No.	Description	Fits	QTY PKG
F75-12	A030	Original sealed can design, individually boxed with gaskets	General 2A-300	12



₩No. **F75-12** 

Individual FILTER GASKETS on page F10



6″



## WOUND ELEMENTS

**B5** 

Premium quality tightly wound yarn

- Economical time proven design
- ▶ Popular elements UL Recognized

P No.	Reference No.	Description	Fits	QTY PKG
F84-30*	4FO-30	Bulk (no gaskets)	Fulflo FB4;	30
F84-36*	4FO-IB	Boxed with gaskets	Westwood	36
F84-48*	4FO-IBG	Bagged with gaskets	F80, F84	48
F85-10	-	Bagged with gaskets	Fulflo FB6	10
F85-30	6FO-30	Bulk (no gaskets)		30
F86-6	-	Bagged with gaskets	Fulflo FB8	6
F86-30	8FO-30	Bulk (no gaskets)		30
F87-4	-	Bagged with gaskets	Fulflo FB10	4
F87-30	10FO-30	Bulk (no gaskets)		30

\* UL Recognized Component

#### **FILTER GASKETS**

	~		FILTER GASKI		biofue COMPATI B5 SEE STATEMENT O	
	No.	Reference No.	Description / Filter Manufacturer and Model Information	Where Used	Material	QTY PKG
Ne Ne	F80-60	-	Gasket set for Fulflo FB4, FB6, FB8, FB10; Westwood F80, F84 filters; (1 ea. cover, nut, vent), bagged	Cover Nut Vent	Rubber Fiber Fiber	1 1 1
	F10-50 F10-52 F10-54	CG-25 BG-25 -	General 1A-25A; Unifilter 77; Westwood F10, F12, F15, F20, F25; Sid Harvey (Mitco) 264, 264F	Cover Bolt Vent	Rubber Fiber Fiber	100 100 100
	F10-55	VG-25	Westwood S-254	Vent	Fiber	100
	F30-50 F10-52 F10-54	CG-70 BG-25 -	General 2A-700A; Unifilter 99; Westwood F30, F32, F35, F65, F70; Sid Harvey (Mitco) 265, 265F	Cover Bolt Vent	Rubber Fiber Fiber	100 100 100
	F75-50 F75-56	CG-300 LG-300	General 2A-300	Cover Lower Can	Rubber Rubber	100 100
	F80-50 F80-52 F80-54	CG-B4 BG-4 VG-4	Fulflo FB4, FB6, FB8, FB10; Westwood F80, F84	Cover Nut Vent	Rubber Fiber Fiber	100 100 100
	F90-50 F90-52	CG-20 BG-20	Firomatic C-40 (RC-20), C-50 (RC-30) DISCONTINUED	Cover Bolt	Rubber Fiber	100 100
	F92-50 F92-52 F92-54	CG-2002 BG-2002 VG-2002	Purolator PF2002	Cover Bolt Vent	Rubber Rubber Fiber	100 100 100



**F84** (SERIES) for Fulflo FB4: Westwood F80, F84



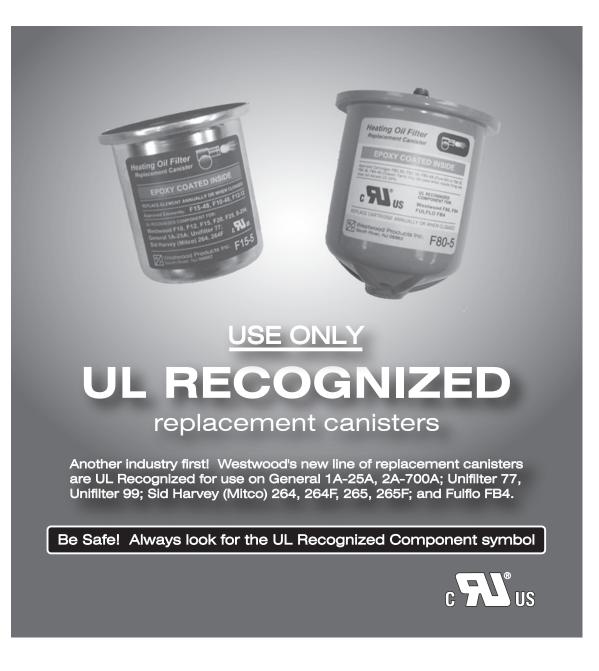
for Fulflo FB8



No. F85 (SERIES)

for Fulflo FB6

No. F87 (SERIES) for Fulflo FB10

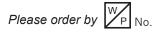


## CANISTER UPGRADE KITS\*

Epoxy coated canister, element, center bolt, gasket, fiber washers Service environment: Indoors,  $20^{\circ}$  to  $105^{\circ}$  F

Scivice cin		COMPATIBLE
P No.	Element Type	Upgrades B5 Upgrades
F10-5 F15-5	Pure-Oil <sup>™</sup> CLASSIC FELT <sup>™</sup>	General 1A-25A; Unifilter 77; Westwood F10, F12, F15, F20, F25; Sid Harvey (Mitco) 264, 264F
F30-5 F35-5	Pure-Oil <sup>™</sup> CLASSIC FELT <sup>™</sup>	General 2A-700A; Unifilter 99; Westwood F30, F32, F35; Sid Harvey (Mitco) 265, 265F
F80-5 F84-5	Pure-Oil <sup>™</sup> <b>BIG GUY</b> <sup>™</sup> CLASSIC YARN <sup>™</sup>	FULFLO FB4; Westwood F80, F84

\* All kits contain UL Recognized Component canisters and elements



( biofuels **∏**™



Westwood

## STANDARD GAUGE GLASS

HIGH QUALITY GLASS IN 5/8" AND 3/4" OUTSIDE DIAMETER (O.D.) SIZES

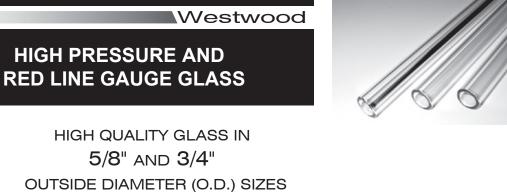
	STANDARD									
Length	WP No.		WP No.		Max. PSI	Length	WP	No.	Max. PSI	
(inches)	<b>5/8"</b> 6/Pkg.	<b>3/4"</b> 12/Pkg.	PSI Length Water-Steam (inches) (see note 1.)		<b>5/8"</b> 6/Pkg.	<b>3/4</b> " 12/Pkg.	Water-Steam (see note 1.)			
6	H1-6	-	210 - 100	24	H1-24	H2-24	180 - 100			
8	H1-8	H2-8	210 - 100	26	-	-	-			
10	H1-10	H2-10	205 - 100	28	-	-	-			
12	H1-12	H2-12	200 - 100	30	H1-30	-	175 - NR			
14	H1-14	H2-14	200 - 100	36	H1-36	H2-36	165 - NR			
16	H1-16	H2-16	195 - 100	48	H1-48	H2-48	140 - NR			
18	H1-18	H2-18	190 - 100	60	H1-60	-	-			
20	H1-20	H2-20	185 - 100	72	-	-	-			
22	H1-22	H2-22	180 - 100							

note 1. Maximum Working Pressure (PSI): Water up to  $150^{\circ}$  F - Steam up to  $425^{\circ}$  F - NR = Not Recommended

### GAUGE GLASS WASHERS - Standard (Neoprene - Square cut)

			· · ·	,	/	
I.D. x O.D. x Thickness	WP No.	Ref. No.	WP No.	Ref. No.	P No.	Ref. No.
	Pkg.	Pkg. of 12		Pkg. of 50		of 100
9/16" x 13/16" x 1/4"	H6-6	-	H6-8	-	H6-10	GGW-6812
3/4" x 15/16" x 1/4"	H6-11	-	H6-13	-	H6-15	GGW-7102
3/4" x 15/16" x 3/8"	H6-16	-	H6-18	-	H6-20	GGW-7103
3/4" x 15/16" x 1/2"	H6-21	-	H6-23	-	H6-25	GGW-7105





In addition to the standard package of 12 pieces, High Pressure and Red Line gauge glass is now available individually packaged in PVC pipe containers for break resistant shipping.

HIGH PRESSURE					RED	LINE	I		
Length	WP	No.	Max. PSI	WP	No.	Max. PSI	WP	No.	Max. PSI
(inches)	<b>5/8"</b> 12/Pkg.	<b>5/8"</b> Individually Packaged	Water-Steam (see note 1.)	<b>5/8"</b> 12/Pkg.	<b>5/8"</b> Individually Packaged	Water-Steam (see note 1.)	<b>3/4"</b> 12/Pkg.	<b>3/4"</b> Individually Packaged	Water-Steam (see note 1.)
8	H3-8	H3-9	435 - 320	H4-8	H4-9	370 - 285	H5-8	H5-9	360 - 280
10	H3-10	H3-11	420 - 315	H4-10	H4-11	345 - 280	H5-10	H5-11	340 - 275
12	H3-12	H3-13	410 - 305	H4-12	H4-13	335 - 280	H5-12	H5-13	330 - 275
14	H3-14	H3-15	390 - 295	H4-14	H4-15	325 - 275	H5-14	H5-15	320 - 270
16	H3-16	H3-17	375 - 285	H4-16	H4-17	315 - 270	H5-16	H5-17	310 - 265
18	H3-18	H3-19	360 - 280	H4-18	H4-19	305 - 265	H5-18	H5-19	300 - 260
20	H3-20	H3-21	350 - 270	H4-20	H4-21	290 - 265	H5-20	H5-21	285 - 260
24	H3-24	H3-25	320 - 255	H4-24	H4-25	265 - 255	H5-24	H5-25	260 - 250
-	-	-	-	H4-30	H4-31	235 - NR	-	-	-
36	H3-36	H3-37	245 - NR	H4-36	H4-37	205 - NR	H5-36	H5-37	200 - NR
-	-	-	-	H4-48	H4-49	165 - NR	-	-	-
-	-	-	-	H4-60	H4-61	125 - NR	-	-	-
-	-	-	-	H4-72	H4-73	90 - NR	-	-	-

note 1. Maximum Working Pressure (PSI): Water up to  $150^{\circ}$  F - Steam up to  $425^{\circ}$  F - NR = Not Recommended

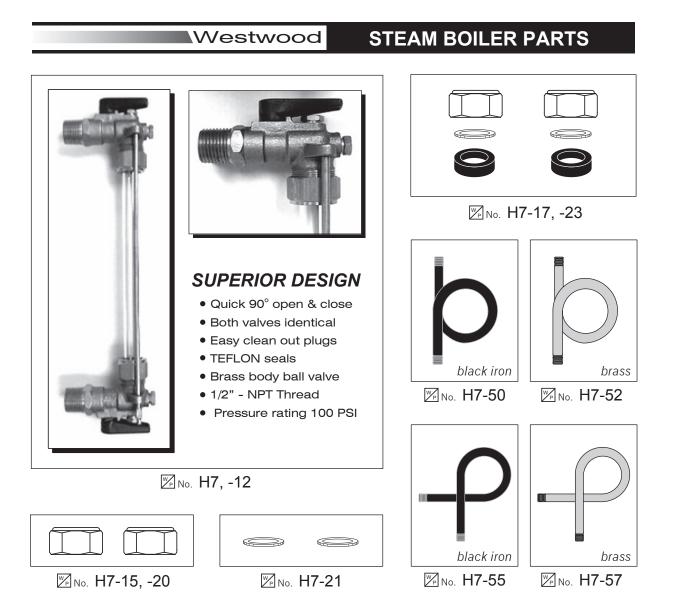
### GAUGE GLASS WASHERS - High Pressure (Lip mold) 300°F

I.D. x O.D. x Thickness	WP No.	Ref. No.	P No.	Ref. No.	P No.	Ref. No.
	Pkg. of 12		Pkg. of 50		Pkg. of 100	
5/8" x 7/8" x 9/32" 3/4" x 1-1/8" x 1/2"		#3 GASKET #33 GASKET	H6-52 H6-57	-	H6-54 H6-59	-



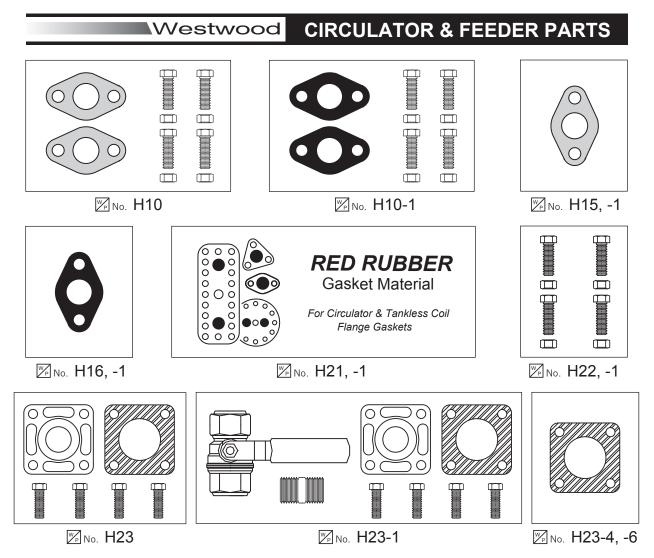
Please order by PNo.

Take a look ... GAUGE GLASS CUTTERS on page T16



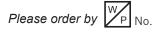
### **STEAM BOILER PARTS**

WP No.	Ref. No.	Description
H7	GV-22	Gauge Glass Set, 1/2"- NPT, w/Quick Open 90° Ball Valve, TEFLON Seals, Brass, w/10" rods
H7-12	-	Gauge Glass Set, 1/2"- NPT, w/Quick Open 90° Ball Valve, TEFLON Seals, Brass, w/12" rods & glass
H7-15	-	Gauge glass nut, special for H7 and H7-12, package of 2
H7-17	-	Repair Kit for H7 and H7-12, (2) ea. of nuts, friction washers, standard gauge glass washers
H7-20	-	Gauge glass nut, general replacement (not for H7 and H7-12), package of 2
H7-21	-	Gauge glass nut friction washer, universal replacement, package of 6
H7-23	-	Repair Kit, general replacement (not for H7 and H7-12), (2) ea. of nuts, friction washers, standard gauge glass washers
H7-50	-	Straight steam pig tail, black iron, 1/4"-NPT
H7-52	-	Straight steam pig tail, brass, 1/4"-NPT
H7-55	-	90° angle steam pig tail, black iron, 1/4"-NPT
H7-57	-	90° angle steam pig tail, brass, 1/4"-NPT



## **BOILER, CIRCULATOR, FEEDER PARTS**

WP No.	Ref. No.	Description
H10	-	Circulator Flange Gasket Kit, (2) - RED rubber flange gaskets, (4) - 7/16"X1-3/4" bolts w/nuts
H10-1	-	Circulator Flange Gasket Kit, (2) - BLACK neoprene flange gaskets, (4) - 7/16"X1-3/4" bolts w/nuts
H15	-	Taco RED rubber flange gasket, package of 10 gaskets
H15-1	-	Taco RED rubber flange gasket, package of 100 gaskets
H16	-	Taco BLACK neoprene flange gasket, package of 10 gaskets
H16-1	-	Taco BLACK neoprene flange gasket, package of 100 gaskets
H21	-	Flange Gasket Material, Red Rubber, 1/8" Thick X 12" X 24" Sheet
H21-1	-	Flange Gasket Material, Red Rubber, 1/8" Thick X 18" X 36" Sheet
H21-36	-	Flange Gasket Material, Red Rubber, 1/8" Thick X 36" X 50' Roll
H22	-	B&G (small), Taco, Modern Flange Nuts and Bolts, (4) - 7/16" X 1-3/4"
H22-1	-	B&G (large) Flange Nuts and Bolts, (4) - 1/2" X 1-3/4"
H23	-	Dirt pocket cap for McDonnell & Miller (3/4"- NPT) w/gasket and (4) bolts
H23-1	-	Blow Down Kit for McDonnell & Miller (dirt pocket cap, full flow ball valve, nipple, gasket, (4) bolts
H23-4	-	Dirt pocket cap gasket, package of 10 gaskets
H23-6	-	Dirt pocket cap gasket, package of 100 gaskets



## Westwood COUPLINGS FOR B & G CIRCULATORS

P No.	Ref. No.	Replaces B&G No.	Circ. HP	Description and Representation	ve Picture
H24-10	PD-40	118705 (PZ-4291)	1/12, 1/6	Cast zinc, steel eyelet inserts, standard duty springs, for 1/2" shaft, individually boxed	
H24-15	JK-52	118705 (PZ-4291)	1/12, 1/6	Cast iron, heavy duty cross bar, springs reinforced, for 1/2" shaft, individually boxed	
H24-40	BG-33	118705 (PZ-4291)	1/12, 1/6	FLEXI-LINK spiral spring shock absorbing coupling, no moving parts, compensates for misalignment, quieter operation, for 1/2" shaft, individually bagged	
H24-60	WRM-858	118723 (P2Z-12291)	1/4, 1/3	Cast iron, heavy duty cross bar, heavy duty springs, for 1/2" shaft, individually bagged	
H24-62	WRM-798	118473 (PDZ-12291)	1/2, 3/4	Cast iron, heavy duty cross bar, heavy duty springs, for 1/2" shaft, individually bagged	



More parts for CIRCULATORS on page H4

#### 1-800-442-1630





No. H24-30 Model 10010 1/2" x 1/2" Shafts

No. H24-31 Model 10010HD 1/2" x 1/2" Shafts (Heavy Duty)



No. H24-32 Model 10023 1/2" x 1/2" or 1/2" x 5/8" Shafts



No. **H24-34** Model 10034 1/2" x 5/8" or 5/8" x 5/8" Shafts



No. H24-36 Model 10045 1/2" x 1/2" or 1/2" x 5/8" or 5/8" x 5/8" Shafts

Please order by  $\bigvee_{P}$  No.



## The Single Spring Alternative!

# **Spiralink**<sup>™</sup> Coupling Cross Reference Chart

W	Spiralink	C	irculator	Model	M	otor	Shaft	OEM P	art No.
P No.	Model	В	& G	Armstrong	HP	Rot	Dia.	B & G	Armstrong
		1 1	75 00 25	- S-25	1/12			118705 or	806026
		1-	50 1/2" <u>2</u> "	S-34 S-35	1/6			189110	
H24-30	10010	L	1/2" D3	S-45	1/4	CCW	1/2 x 1/2	118723	806168
		HV1 HV1	V1" -1/4" -1/2"	H-32	1/6			118705 or	806026
			PR	H-41				189110	
H24-31	10010HD		D3	S-46	1/3		1/0 1/0	110470	007400
H24-32*	10023		)-35	S-55	1/2		1/2 x 1/2 or 1/2 x 5/8	118473 or 118708 or 09	807436 or 806137
H24-34*	10034	PE	)-37 )-38 )-39	S-57 S-60	3/4 1		1/2 x 5/8 or 5/8 x 5/8		812734 or 816665
		OLD	NEW						
H24-32*	10022	60-1 60-2	60-11	H-51 H-52	1/4 1/3		B&G 1/2 x 1/2	118473	807436
TI24-32	10023	60-3 60-4	60-13 60-14	H-53 H-54	1/2 3/4	C₩	Armstrong 1/2 x 5/8	118709 or P77234	806137
H24-34*	10034	60-5 60-6 60-8	60-15 60-16	H-63 H-64 H-66	1/2 3/4		1/2 x 5/8	186410 or P77237	812734
			60-17 60-19	H-65 H-67	1		5/8 x 5/8	118476 or P77271	816665
H24-32*	10023	1S&1	: 1522 1 T thru & 1 7 T		1/4 thru 1/2		1/2 x 1/2 or 1/2 x 5/8	118473 or 118709	
H24-36*	10045	17S & 17T Taco Model		121 122 131 132 133 138	1/4 1/3 1/2 3/4 1	CCW	1/2 x 1/2 or 1/2 x 5/8 or 5/8 x 5/8	1624-053RP (Woods 3J or 4J)	

\* Comes with appropriate bushing(s) for use with shaft sizes indicated

#### **ROTATION INFORMATION**

For purposes of this cross-reference, rotation is determined by viewing the motor with the shaft pointing away. In the case of a three phase motor, or a motor that has been repaired, make sure to check motor rotation before installing a new coupling. Running a coupling in the wrong rotation will severely damage the coupling!

#### **GUARANTEE**

**Spiralink**<sup>™</sup> couplings are warranted for life when correctly installed in the appropriate circulating pump. If a **Spiralink**<sup>™</sup> coupling should ever fail, simply return it to your place of purchase to receive a free replacment.

## HYDRONIC GAUGES Tridicator, Steam, Combination, Altitude, Temperature

Dimensions and range specifications may vary slightly from those shown

WP No.	Ref. No.	Туре	Mount	Face	Shank	Insert.	Range / Description	Representative Picture
H25 H25-1 H25-2 H25-3	PTA-224C PTA-234C PTA-322C PTA-322L	Tridicator	1/4" CBM 1/4" CBM 1/2" CBM 1/2" LM	2-1/2" 2-1/2" 3-1/4" 3-1/4"	1-3/4" 2" 1-1/4" 1"	1" 1" 1-1/8" 3/4"	70°- 320°F, 20°- 160°C 0 - 75 PSI, 0 -170 Ft H <sub>2</sub> 0	
H25-10 H25-12	5495 5549	Steam gauge	1/4" LM 1/4" LM	3-1/2" 4-1/2"	-	-	30" Hg 30 PSI 30" Hg 30 PSI	5 10 15 10 20 20 30 30 30 30 30 30 30 30 30 30 30 30 30
H25-15 H25-16 H25-17 H25-18 H25-19 H25-20	135393 135392 144435 144434 144826 144827	PT 1088 Combination temperature and pressure gauge	1/4" CBM 1/4" CBM 1/2" LBM 1/2" LM 1/2" LM 1/2" LBM	2-1/2" 2-1/2" 4-1/4" 4-1/4" 4-1/4" 4-1/4"	2" .79" 1-3/4" 1-1/8" 1-1/8" 1-3/4"	1-5/8" 1.73" 2" 2" 2" 2"	70°- 320°F, 75 PSI 60°- 320°F, 75 PSI 60°- 260°F, 50 PSI 60°- 260°F, 75 PSI 80°- 320°F, 200 PSI 80°- 320°F, 200 PSI	
H25-30 H25-31 H25-35	46775 11498 11937	Altitude & water level gauge	1/4" LM 1/4" LM 1/4" LM	3-1/2" 4-1/2" 4-1/2"	-	-	100 PSI, 0 - 231 FT 100 PSI, 0 - 231 FT 0 - 390 FT	
H25-50 <sup>1</sup> H25-51 <sup>2</sup> H25-52 <sup>1</sup> H25-53 <sup>2</sup>	T-571 T-571 Brass HWT-A T-572 Brass	Hot water glass tube thermometer	1/2" LM 1/2" LM 1/2" LBM 1/2" LBM	-	1-5/8" 1-1/8" 1-1/8" 1-1/8"	1-3/8" 1-3/8" 1-3/8" 1-3/8"	40°-280°F, Vertical 40°-260°F, Vertical 40°-280°F, Vertical 40°-280°F, Vertical	
H25-54	T-1050	Hot water thermometer	1/2" LM	3-1/2"	1"	2"	60°-260°F	
H25-90 <sup>3</sup> H25-92 <sup>4</sup> H25-96 <sup>5</sup>	HWT-D - -	Dial Thermometer	CBM CBM CBM	2-1/2" 2-1/2" 2-1/2"	3/4" - -	1-1/4" 2" -	32°- 248°F 32°- 248°F 0°- 250°F	

<sup>1</sup> Steel immersion well

<sup>2</sup>Brass immersion well

<sup>3</sup> 1/2"- NPT(M) pipe mount (pictured at right)

<sup>4</sup>3/4" CWT sweat mount (detachable mount soldered in place)

<sup>5</sup> Surface mount (retaining spring for mounting included)

CBM = Center back mount

*LM* = *Low mount (bottom)* 

LBM = Low back mount

Take a look ...

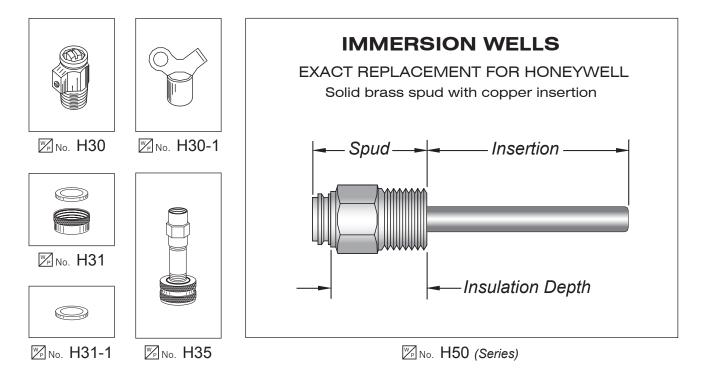


(NPT pipe mount shown)

Shank Insert.

Face

### **MISC. PARTS & IMMERSION WELLS**

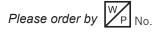


## **RADIATOR VENT & KEY, HOSE CAP, HOSE ADAPTOR**

P No.	Thread Size	Description	QTY PKG
H30	1/8" - NPT	Radiator bleed valve, plated finish, coin/key/screwdriver operated	6
H30-1	-	Radiator bleed key, square socket and screwdriver	6
H31	Garden hose (F)	Garden hose cap, brass with washer	10
H31-1	-	Garden hose washer only	10
H35	Garden hose (F) x 1/4" - NPT (F or M)	Gauge adaptor for measuring water pressure	1

## **IMMERSION WELLS - Brass spud, copper insertion**

P No.	Replaces Honeywell	Pipe Size (Male NPT)	Insertion Diameter	Insertion Length	Insulation Depth (ins.)	Comments
H50	121371A 123869A	1/2"	3/8"	3"	1-1/2"	Used with: L4006, L6006, L8124, L8148, R8182D, E, F
H50-1	121371B 123870A	3/4"	3/8"	3″	1-1/2"	Used with: L4006, L6006, L8124, L8148, R8182D, E, F
H50-2	122555A	3/4"	3/8"	3″	4-1/2"	Long spud for water heaters
H50-3	122555E	3/4"	3/8", 5/8"	3″	4-1/2"	Plastic sleeve on insertion
H50-4	121371M	3/4"	3/8"	3″	3"	Long spud for water heaters
H50-5	121371L	1/2"	3/8"	3″	3"	Long spud for water heaters



1-800-442-1630

Westwood

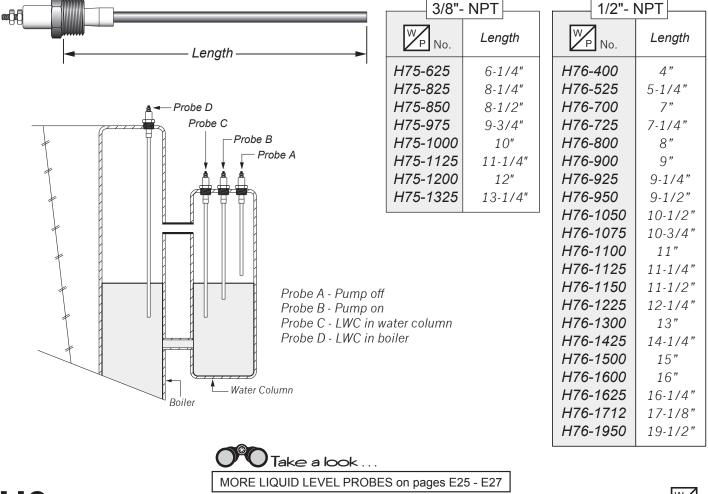
New Part Numbers

INDIVIDUAL REPLACEMENT PROBES

#### Westwood LIQUID LEVEL PROBES for FULTON BOILERS

#### **COMPLETE REPLACEMENT PROBE KITS** (Kits contain 1 each of Probe A, B, C, D)

COMPL	ETE REF	PLACEMENT PROBE KITS (Kits c	contain 1	each of Prob	e A, B, C, D)		dded!
W	Ref.	Poilor Description	Thread		Kit Co	ntains	
P No.	No.	Boiler Description	(NPT)	Probe A	Probe B	Probe C	Probe D
H75	FP3-M1	Miniature, 2 & 4 HP (prior to April 5, 1965)	3/8″	H75-850	H75-1000	H75-1125	H75-1200
H75-1	FP3-R1	Regular, 6 to 30 HP (prior to Aug. 1, 1964)	3/8"	H75-625	H75-825	H75-975	H75-1325
H76	FP2-M2	Miniature, 2 & 4 HP (after April 5, 1965)	1/2"	H76-950	H76-1100	H76-1225	H76-1300
H76-1	FP2-R2	Regular, 6 to 30 HP (after Aug. 1, 1964)	1/2"	H76-725	H76-925	H76-1075	H76-1425
H76-2	FP2-E1	Series E, 4 HP	1/2"	H76-950	H76-1100	H76-1225	H76-1300
H76-3	FP2-E2	Series E, 6 to 100 HP	1/2"	H76-725	H76-925	H76-1075	H76-1625
H76-4	-	Oil/Gas fired steam, 4 HP	1/2"	H76-525	H76-725	H76-925	H76-1712
H76-5	-	Oil/Gas fired steam, 6 to 100 HP	1/2"	H76-725	H76-925	H76-1125	H76-1712
H76-6	-	Electric steam, 1.2 to 3.6 HP	1/2"	H76-950	H76-1050	H76-1150	H76-1150
H76-7	-	Electric steam, 5 to 20 HP	1/2"	H76-1150	H76-1300	H76-1500	H76-1500
H76-8	-	Electric steam, 30 to 100 HP	1/2"	H76-725	H76-925	H76-1125	H76-1600
H76-9	-	Pulse VLP, 750kBtu to 1,150kBtu	1/2"	H76-700	H76-800	H76-900	H76-1950
H76-10	-	VMP, 40 to 150 HP	1/2"	H76-725	H76-925	H76-1125	H76-400



## **BRAZED PLATE HEAT EXCHANGERS**

For radiant heating, domestic hot water, snow melting, heat zoning, fuel pre-heating, and general shell & tube replacement



- All 316 Stainless Steel with copper brazing
- ▶ Maximum pressure 450 PSI, temperature 365°F
- ▶ UL Listed (US and Canada), CSA Approved
- Mounting brackets and insulation kits available



			BTUH	(1,000's)*			Approxir	nate Dim	ensions &	& Weight
P No.	No. of Plates	Radiant Heat	Heat Zoning	Domestic Hot Water	Snow Melting	Pipe Connections (Male NPT)	Height (in.)	Width (in.)	Depth (in.)	Weight (lbs.)
H101-10	10	38	38	113	50	3/4"	8	2-7/8	1-1/2	2.8
H101-14	14	52	53	155	70	3/4"	8	2-7/8	1-7/8	3.2
H101-20	20	72	73	220	98	3/4"	8	2-7/8	2-3/8	3.8
H101-30	30	103	103	310	140	3/4"	8	2-7/8	3-5/16	5.0
H103-14	14	85	87	255	115	1"	6-3/4	4-7/8	1-7/8	4.5
H103-20	20	120	122	360	160	1"	6-3/4	4-7/8	2-3/8	5.3
H103-40	40	230	229	685	310	1"	6-3/4	4-7/8	4-1/4	7.8
H104-10	10	41	41	122	55	1"	13	4-7/8	1-1/2	6.2
H104-14	14	57	58	170	76	1"	13	4-7/8	1-7/8	7.2
H104-24	24	97	97	290	130	1"	13	4-7/8	2-3/4	9.8
H104-30	30	120	122	360	160	1"	13	4-7/8	3-5/16	11.4
H104-50	50	195	195	585	260	1"	13	4-7/8	5-1/4	16.6

**GENERAL APPLICATION** Many more sizes and styles available. Consult the factory for detailed specifications

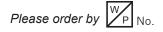
**ISTED** 

\* Ratings @ temperatures shown in Table 1 on next page.

#### **DOUBLE WALL VENTED - Protects against cross fluid contamination**

			BTUH	' (1,000's)*			Approxir	nate Dim	ensions &	& Weight
WP No.	No. of Plates	Radiant Heat	Heat Zoning	Domestic Hot Water	Snow Melting	Pipe Connections (Male NPT)	Height (in.)	Width (in.)	Depth (in.)	Weight (lbs.)
H105-14	14	48	50	147	66	1"	20-7/8	4-7/8	1-7/8	11.8
H105-20	20	70	71	210	95	1"	20-7/8	4-7/8	2-3/8	15.0
H105-30	30	105	106	310	140	1"	20-7/8	4-7/8	3-5/16	20.3
H105-50	50	170	171	510	230	1"	20-7/8	4-7/8	5-1/4	31.0
H105-80	80	255	260	770	340	1"	20-7/8	4-7/8	8	47.0
H105-100	100	300	305	910	410	1"	20-7/8	4-7/8	10	57.5

\* Ratings @ temperatures shown in Table 1 on next page.



## BRAZED PLATE HEAT EXCHANGERS (CONTINUED)

#### **HIGH CAPACITY**

			BTUH	l (1,000's)*			Approxii	mate Dim	ensions &	& Weight
P No.	No. of Plates	Radiant Heat	Heat Zoning	Domestic Hot Water	Snow Melting	Pipe Connections (Male NPT)	Height (in.)	Width (in.)	Depth (in.)	Weight (lbs.)
H107-20	20	265	270	785	350	2"	20-7/8	10-5/8	2-3/8	38.6
H107-24	24	310	320	940	420	2"	20-7/8	10-5/8	2-3/4	43.8
H107-30	30	380	390	1,150	520	2"	20-7/8	10-5/8	3-5/16	51.8
H107-40	40	500	508	1,500	670	2"	20-7/8	10-5/8	4-1/4	65.0
H107-50	50	590	602	1,785	800	2"	20-7/8	10-5/8	5-1/4	78.2
H107-60	60	685	680	2,000	920	2"	20-7/8	10-5/8	6-3/16	91.4
H107-100	100	885	885	2,600	1,200	2"	20-7/8	10-5/8	10	144.2
H107-120	120	930	925	2,750	1,270	2"	20-7/8	10-5/8	11-7/8	170.6
H107-150	150	960	950	2,850	1,330	2"	20-7/8	10-5/8	14-3/4	210.2

\* Ratings @ temperatures shown in Table 1.

### **AEROFLEX PRESSURE SENSITIVE INSULATION KITS**

		Heat Ex	changer Serie	es	
No. of Plates	H101	H103	H104	H105	H107
10	H111-10		H114-10		
14	H111-14	H113-14	H114-14	H115-14	
20	H111-20	H113-20		H115-20	H117-20
24			H114-24		H117-24
30	H111-30		H114-30	H115-30	H117-30
40		H113-40			H117-40
50			H114-50	H115-50	H117-50
60					H117-60
80				H115-80	
100				H115-100	H117-100
120		—			H117-120
150					H117-150





Many more sizes and styles of heat exchangers are available. Call for more information.

#### TABLE 1 - Temperatures for BTUH ratings shown

Heat Exchanger Connected to	Heat Exchanger			
	Input Side (boiler)		Output Side <sup>1</sup>	
	In	Out	In	Out
Radiant Heat	180°F	140°F	90°F	110°F
Heat Zoning	180°F	160°F	150°F	170°F
Domestic Hot Water	180°F	120°F	60°F	120°F
Snow Melting <sup>2</sup>	180°F	140°F	100°F	130°F

<sup>1</sup>Output side pressure drop  $\approx$  2 psi

<sup>2</sup>40% Glycol in melt loop

– NOTE —

The heat exchanger BTUH ratings shown are very conservative, and were derived using familiar system temperatures, flow rates, and pressure drops.

For each heat exchanger, the BTUH output can be greatly increased by choosing different system design temperatures and increasing flow rates.



**V-BELTS** 

## **OIL & HEAT RESISTANT**

Rugged polyester cord and neoprene construction with specially treated natural and synthetic elastomeric compounds make the **MAX-DRIVE** V-belt the ideal choice for heavy loads under extreme heat or for constant exposure to oil.

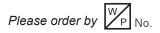
When replacing a V-belt, always clean pulley grooves and check that shafts are parallel and pulley alignment is correct.

	Standa	W		
	3L	4L	5L	
W	3/8"	1/2"	21/32"	

Outside Length		WP No.		Outside Length	No.		
(inches)	ЗL	4L	5L	(inches)	ЗL	4L	5L
20	S30-20	S40-20	-	40	S30-40	S40-40	S50-40
21	S30-21	S40-21	-	41	S30-41	S40-41	S50-41
22	S30-22	S40-22	-	42	S30-42	S40-42	S50-42
23	S30-23	S40-23	S50-23	43	S30-43	S40-43	S50-43
24	S30-24	S40-24	S50-24	44	S30-44	S40-44	S50-44
25	S30-25	S40-25	S50-25	45	S30-45	S40-45	S50-45
26	S30-26	S40-26	S50-26	46	S30-46	S40-46	S50-46
27	S30-27	S40-27	S50-27	47	S30-47	S40-47	S50-47
28	S30-28	S40-28	S50-28	48	S30-48	S40-48	S50-48
29	S30-29	S40-29	S50-29	49	S30-49	S40-49	S50-49
30	S30-30	S40-30	S50-30	50	S30-50	S40-50	S50-50
31	S30-31	S40-31	S50-31	51	S30-51	S40-51	S50-51
32	S30-32	S40-32	S50-32	52	S30-52	S40-52	S50-52
33	S30-33	S40-33	S50-33	53	S30-53	S40-53	S50-53
34	S30-34	S40-34	S50-34	54	S30-54	S40-54	S50-54
35	S30-35	S40-35	S50-35	55	S30-55	S40-55	S50-55
36	S30-36	S40-36	S50-36	56	S30-56	S40-56	S50-56
37	S30-37	S40-37	S50-37	57	S30-57	S40-57	S50-57
38	S30-38	S40-38	S50-38	58	S30-58	S40-58	S50-58
39	S30-39	S40-39	S50-39	59	S30-59	S40-59	S50-59
L	I	1	l]	60	S30-60	S40-60	S50-60

#### SPECIAL FOR LENNOX BURNER

P No.	Ref. No.	Lennox Burner No.	Belt Type	Outside Length	
S20-16	VB-1049	DV-1049	2L - Cogged	16"	



## Westwood ceramic fibre chambers

SOUND ABSORBING • RED HOT IN SECONDS • FIRES DRY • 2,300° - 3,000° F

## WET COMBUSTION CHAMBER LINERS - Sealed in a plastic bag and individually boxed\*

WP No.	Ref. No.	Туре		GPH	Description and Representive Picture
S70-9 S70-10 S70-11 S70-12 S70-13 S70-15	#9 #10 #11 #12 #13 #15	Wet	Westwood Round - Preshaped	.5075 .85 - 1.00 1.10 - 1.25 1.35 - 1.50 1.65 - 1.85 2.00 - 2.50	9" diameter, 12" high 10" diameter, 12" high 11" diameter, 12" high 12" diameter, 12" high 13" diameter, 14" high 15" diameter, 14" high
S70-25 S70-27	#135 #200	Wet	Westwood Rect Preshaped	.75 - 1.35 1.35 - 2.00	14" x 11" x 12" 14" x 12" x 12"
S70-30 S70-35 S70-40 S70-45	#1 #2 #3 #4	Wet	Westwood Flat sheet(s)	1.25 2.50 2.65 1.25	(1) - 14" x 48" (1) - 14" x 48" (1) - 16" x 16" (1) - 16" x 48" (1) - 16" x 16" (1) - 16" x 48"

\*Wet chambers have a shelf life and should be ordered such that they are not held in inventory longer than 6 months.

## J-M Cerafelt<sup>™</sup> Dry Refractory Liners

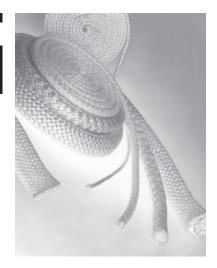
## DRY COMBUSTION CHAMBER LINERS

P No.	Ref. No.	Туре		De GPH Description and Representive	
S70-50 S70-51 S70-53	141608 141612 -	Dry	Cerafelt blanket	-	1/4" x 16" x 8 ft. 1/4" x 16" x 12 ft. 1/4" x 48" x 20 ft.
S70-60	SS Kit	Dry	<b>Cerafelt SS Kit</b> (For lining burned out stainless steel combustion chambers)	.50 - 1.75	(1) - 14" x 48" (1) - 16" x 33" (8) - Stainless Steel Clips

## **HIGH TEMPERATURE ROPE**

NON-ASBESTOS • KNITTED FIBERGLASS

This strong, flexible, resilient knit-braided rope is ideal for industrial boilers, cast iron boilers, wood burning stoves, ovens, and furnaces. Will not "bloom" or untwist like braided twisted glass rope. Made of 100% texturized fiberglass, it will not burn or support combustion. Resists temperatures to 1,000° F.



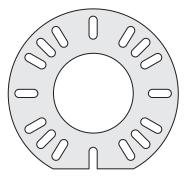
## NON-ASBESTOS HIGH TEMPERATURE ROPE

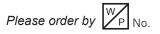
WP No.	Туре	Description	Length
S70-101	Round	1/4" diameter	10 ft.
S70-102	Round	1/4" diameter	25 ft.
S70-104	Round	3/8" diameter	10 ft.
S70-106	Round	3/8" diameter	25 ft.
S70-108	Round	1/2" diameter	10 ft.
S70-110	Round	1/2" diameter	25 ft.
S70-111	Round	3/4" diameter	10 ft.
S70-112	Round	3/4" diameter	25 ft.
S70-114	Round	1" diameter	10 ft.
S70-116	Round	1" diameter	25 ft.
S70-140	Flat	1" wide x 1/8" thick	25 ft.
S70-142	Flat	1" wide x 1/8" thick with adhesive backing	100 ft.
S70-150	Flat	2" wide x 1/8" thick	25 ft.
S70-152	Flat	2" wide x 1/8" thick with adhesive backing	100 ft.

Other types and sizes of high temperature materials are available on special order. Consult the factory for price and availability.

## **BECKETT BURNER FLANGE GASKET**

WP No.	Description
S70-170	Gasket for Beckett and Aero burner flange 8-1/2" OD x 3-5/16" ID





# Westwood ONE PIECE MOTOR COUPLINGS

HEAVY DUTY FOR GENERAL USE ON BURNERS AND MOTOR DRIVEN EQUIPMENT



Rugged, precision machined end pieces are held in place by heavy steel collars. Set screws at each end insure that there is no slippage on the shaft flats. Quiet, noise and vibration absorbing, these premium couplings out-perform conventional couplings where misalignment exists or where punishing service is the norm. Available for  $1/2" \times 7/16"$  and  $1/2" \times 5/16"$  shaft sizes, or 7/16" shaft x spline socket.

## **ONE PIECE COUPLINGS**

Length	WP No.								
Lengin	1/2" x 7/16"	1/2" x 5/16"	7/16" x Spline						
2"	S80-200*	S81-200*	-						
2-3/8"	S80-237	S81-237*	-						
2-1/2"	S80-250*	S81-250*	-						
3″	S80-300*	S81-300*	S82-300*						
3-1/4"	S80-325	S81-325*	S82-325						
3-3/8″	S80-337	S81-337*	S82-337						
3-1/2"	S80-350*	S81-350	S82-350						
4"	S80-400*	S81-400	S82-400*						
4-1/2"	S80-450*	S81-450	S82-450						
5″	S80-500	S81-500	S82-500*						
5-1/2"	S80-550	S81-550	S82-550						
6″	S80-600	S81-600	S82-600						
6-1/2"	S80-650	S81-650	S82-650						
7"	S80-700	S81-700	S82-700						
7-1/2"	S80-750	S81-750	S82-750						
8"	S80-800	S81-800	S82-800						

\* Included in One Piece Coupling Kit No. S83-200, shown below

#### **REDUCER BUSHING & COUPLING KIT**

WP No.	Ref. No.	Description
S83-10 S83-200	0	5/16" I.D. x 7/16" O.D. bushing One piece coupling kit containing those couplings marked with an asterisk above, plus (6) S83-10 reducer bushings

## Westwood

# **Nylo-Flex<sup>™</sup>** BURNER COUPLINGS

EASILY INSTALLED 3 PIECE COUPLING • NO SET SCREWS





Assemble

Chosen by top service professionals and original equipment (oem) burner manufacturers. Three piece design allows for custom fit in all installations.

## *Nylo-Flex*<sup>™</sup> COMPONENTS

P No.	Reference No.	Description and Representive Picture					
S85-6 S85-10 S85-12 S85-15 S85-30	6" Nyloshaft 10" Nyloshaft 12" Nyloshaft 15" Nyloshaft 30" Nyloshaft	Nylo-Flex™6" Nyloshaft center pieceNylo-Flex™10" Nyloshaft center pieceNylo-Flex™12" Nyloshaft center pieceNylo-Flex™15" Nyloshaft center pieceNylo-Flex™30" Nyloshaft center piece					
S85-100 S85-110 S85-120 S85-130	Red End Fitting Blue End Fitting Black End Fitting TA	Nylo-Flex <sup>™</sup> 5/16" shaft size end piece, REDNylo-Flex <sup>™</sup> 7/16" shaft size end piece, BLUENylo-Flex <sup>™</sup> 1/2" shaft size end piece, BLACKNylo-Flex <sup>™</sup> Torrington adapter, 1/2" shaft					

# Nylo-Flex<sup>™</sup> OEM SPEC COUPLINGS\*

Two end pieces, plus a Nyloshaft correctly cut to OEM specs

Description

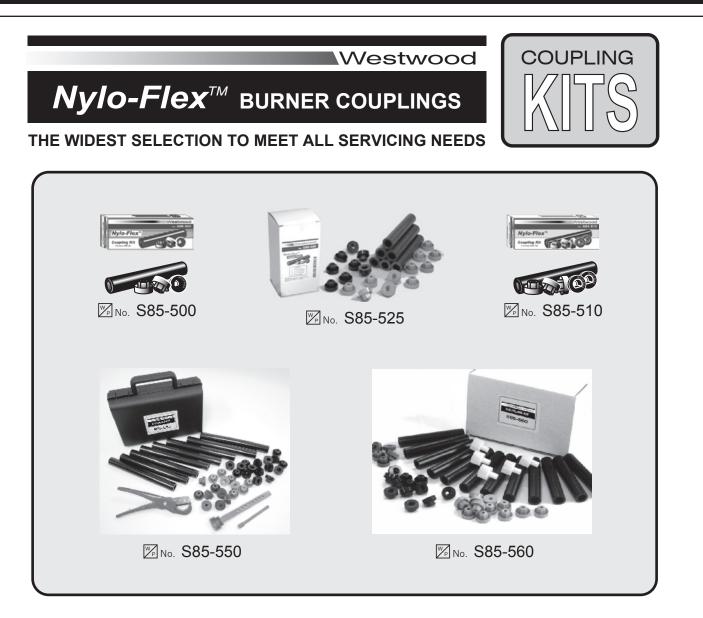


S85-200	Nylo-Flex <sup>™</sup> Pre-cut Coupling for Beckett AF (2454), 1/2" & 5/16" Ends, 3-13/32" Nyloshaft
S85-210	Nylo-Flex <sup>™</sup> Pre-cut Coupling for Beckett (2290), 1/2" & 7/16" Ends, 2-7/8" Nyloshaft
S85-220	Nylo-Flex <sup>™</sup> Pre-cut Coupling for Carlin 99-100 (99RA10208), 1/2" & 5/16" Ends, 2-3/16" Nyloshaft
S85-222	Nylo-Flex <sup>™</sup> Pre-cut Coupling for Carlin (99RA5220), 1/2" & 7/16" Ends, 3-1/16" Nyloshaft
S85-223	Nylo-Flex <sup>™</sup> Pre-cut Coupling for Carlin CRDA (1020J), 1/2" & 7/16" Ends, 2-3/4" Nyloshaft
S85-224	Nylo-Flex <sup>™</sup> Pre-cut Coupling for Carlin 1020 (A Pump), 1/2" & 5/16" Ends, 2-11/32" Nyloshaft
S85-225	Nylo-Flex <sup>™</sup> Pre-cut Coupling for Ducane (B1011503), $1/2$ " & $5/16$ " Ends, $3-13/16$ " Nyloshaft
S85-227	Nylo-Flex <sup>™</sup> Pre-cut Coupling for Lennox (65A4101), 1/2" & 5/16" Ends, 3-5/8" Nyloshaft
S85-229	Nylo-Flex <sup>™</sup> Pre-cut Coupling for Wayne E (13279), 1/2" & 5/16" Ends, 4-5/16" Nyloshaft
S85-230	Nylo-Flex <sup>™</sup> Pre-cut Coupling for Wayne (13424), 1/2" & 5/16" Ends, 3-13/16" Nyloshaft
S85-231	Nylo-Flex <sup>™</sup> Pre-cut Coupling for Wayne M, 1/2" & 5/16" Ends, 3-1/4" Nyloshaft

\* Each coupling individually sealed in a plastic bag and labeled



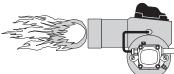
W P No.



## *Nylo-Flex*<sup>™</sup> COUPLING KITS

		Quantity of End Pieces		Nyloshaft	S85-130	T100-300	T100-310	Molded	
P No.	Ref. No.	1/2"	7/16"	5/16"	Quantity & Length	Torrington Adapter	Coupler Popper™	Coupling Cutter	Plastic Box
S85-500	#88	1	1	1	1 - 6"	-	-	-	-
S85-502	-	1	1	1	1 - 12"	-	-	-	-
S85-510	#99A	2	2	1	1 - 6"	-	-	-	-
S85-520	#101	2	1	2	1 - 6"	-	-	-	-
S85-525	-	8	6	5	6 - 6″	-	-	-	-
S85-530	#1240	16	8	8	8 - 9″	-	-	-	YES
S85-540	#1240C	16	8	8	8 - 9″	-	-	-	-
S85-550	#1242	16	8	8	8 - 9″	-	YES	YES	YES
S85-560	#1250	12	12	5	12 - 6"	5	-	-	-
S85-570	#1251	12	12	5	12 - 6"	5	YES	-	-





A REAL TIME SAVER FOR THE MOST POPULAR BURNERS

## **TUNE-UP & ELECTRODE KITS**

	₩P No.	Ref. No.	Description
Westwood BURNER TUNE-UP KIT	S88-10	BK5780	TUNE-UP KIT for Beckett AF, AFG, AR, SF, SR (up to 9" air tube)2 · Electrode assemblies2 · Extension rods with nuts1 · 12" oil line assembly1 · TG-99 tip setting gauge1 · Pump coupling kit S85-5002 · Hex connectors
	S88-12	NBK5780	TUNE-UP KIT for Beckett AF, AFG, AR, SF, SR (up to 9" air tube)2 · Electrode assemblies1 · TG-99 tip setting gauge1 · 12" oil line assembly1 · NAS gauge™ B-1 nozzle gauge1 · Pump coupling kit S85-5002 · Hex connectors2 · Extension rods with nuts2
	S88-14	BK5782	TUNE-UP KIT for Beckett AF, AFG, AR, SF, SR (over 9" air tube)2 - Electrode assemblies2 - Extension rods with nuts1 - 12" oil line assembly1 - TG-99 tip setting gauge2 - E5-2M4 insulators2 - Hex connectors1 - Pump coupling kit \$85-5002
₩ <sub>No.</sub> S88-14	S88-16	NBK5782	TUNE-UP KIT for Beckett AF, AFG, AR, SF, SR (over 9" air tube)2 · Electrode assemblies2 · Extension rods with nuts1 · 12" oil line assembly1 · TG-99 tip setting gauge2 · E5-2M4 insulators1 · NAS gauge™ B-1 nozzle gauge1 · Pump coupling kit \$85-5002 · Hex connectors
	S88-20	W5780	ELECTRODE KIT for Beckett AF, AFG, SF, SR (up to 9" air tube)         2 - Electrode assemblies         2 - Extension rods with nuts         1 - TG-99 tip setting gauge
	S88-22	W5781	<b>ELECTRODE KIT</b> for Beckett A and S (up to 9" air tube) 2 - Electrode assemblies 2 - Extension rods with nuts 2 - Extension rods with nuts
Westwood ELECTRODE KIT	S88-24	W5782	ELECTRODE KIT for Beckett AF, AFG, SF, SR (over 9" air tube)         2 - Electrode assemblies       2 - Hex Connectors         2 - Extension rods with nuts       1 - TG-99 tip setting gauge         2 - Insulators       1 - TG-99 tip setting gauge
$\langle \rangle  _{1}$	S88-26	W5783	ELECTRODE KIT for Beckett AQ and S (over 9" air tube)         2 · Electrode assemblies       2 · Insulators         2 · Extension rods with nuts       2 · Hex Connectors
	S88-28	W5940	ELECTRODE KIT for Beckett MB and MD (up to 9" air tube)         2 - Electrode assemblies       2 - Hex Connectors         2 - Extension rods with nuts       1 - TG-99 tip setting gauge
	S88-32	51484U	ELECTRODE KIT for Beckett AF II, HLX (up to 9" air tube)         2 · Electrode assemblies       2 · Hex Connectors         2 · Extension rods with nuts       1 · TG-99 tip setting gauge
	S88-34	51670U	ELECTRODE KIT for Beckett AF II, FBX (up to 9" air tube)         2 · Electrode assemblies       2 · Hex Connectors         2 · Extension rods with nuts       1 · TG-99 tip setting gauge
™ <sub>№.</sub> S88-20	S88-36	BK-1	ELECTRODE KIT for Beckett AF, AFG, AR, SF, SR (up to 9" air tube)2 - Beckett 1510 electrodes2 - 10-32 nuts2 - 3/16" x 6" buss bar rods2 - Hex Connectors

Packaging may vary from that shown

2 - Beckett 1510 electrodes

2 - 3/16" x 13" buss bar rods

2 - E5-2M4 insulators

2 - Electrode assemblies

2 - Electrode assemblies

2 - Electrode assemblies

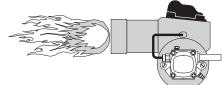
2 - Electrode assemblies 2 - Rod extensions 4-7/8" long

**ELECTRODE KIT** for Beckett NX

2 - Rod extensions 2-7/8" long **ELECTRODE KIT** for Beckett CF375

**BURNER TUNE-UP KITS** 

MP NO.



Description

ELECTRODE KIT for Beckett CF500, CF800, up to 9"

ELECTRODE KIT for Beckett CF500, CF800, over 9"

ELECTRODE KIT for Beckett CF1400, CF3500

**ELECTRODE KIT** for Beckett AF, AFG, AR, SF, SR (all size air tube)

2 - 10-32 nuts

2 - Hex Connectors

1 - Instruction sheet

1 - Instruction sheet

2 - Couplings

1 - Instructions

A REAL TIME SAVER FOR THE MOST POPULAR BURNERS **TUNE-UP & ELECTRODE KITS** (Continued)

Ref. No.

		ZP NO.	<i>Nel.</i> NC
Westwo ELECTRODE KIT	od	S88-38	BK-2
		S88-40	
		S88-42	
		S88-44	
₩No. S88-3	6	S88-46	
	od	S88-48	
		S88-50	
		S88-60	WMK-10
₩No. S88-3	8	<b>S88-70</b> Genuine Wayne	31156
TUNE UP REPAIR KI	т 	S88-72	311561
· · · ·		<b>S88-74</b> Genuine Wayne	31157
		S88-76	311571

No. S88-74

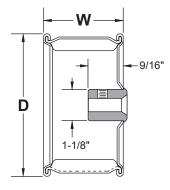
	S88-48		2 - Electrode assemblies 2 - Support insulators	1 - Instructions				
			TUNE-UP KIT for Carlin 98 - 102, Elite, 201CRD, 301CRD					
	S88-50		2 - Electrode assemblies 1 - 12" oil line assembly 1 - Red tip setting gauge	1 - Yellow tip setting gauge 1 - Pump coupling kit S85-500 1 - Instructions				
			TUNE-UP KIT for We	il McLain burner				
	<b>S88-60</b> WMK-100		1 - One piece electrode assembly 2 - Ignition cable leads	1- Coupling 1 - Oil line assembly				
			TUNE-UP KIT for Wayne ER, ERA, EI	H, EHA, EHASR, M, MSR, MH, OE, OEA				
	<b>S88-70</b> Genuine Wayne	31156	2 - Electrode stems 2 - Electrode assemblies w/insul. 2 - Insulator bushings 2 - Buss bars (8") 1 - Buss bar support	1 - Oil line assembly 1 - Coupling 1 - "J " pump coupling end 1 - 90° nozzle line flare elbow				
			TUNE-UP KIT for Wayne ER, ERA, EH, EHA, EHASR, M, MSR, MH, OE, OEA					
L	000 70	2115014	<b>IUNE-UP KII</b> IOI Wayne ER, ERA, EI					
	S88-72	31156W	Same components as S88-70, m					
	S88-72	31156W		anufactured by Westwood				
	S88-72 S88-74	31156W 31157	Same components as S88-70, m <b>TUNE-UP KIT</b> for Wayne L 2 - Electrode assemblies w/buss bars	anufactured by Westwood Blue Angel model HS 1 - Coupling				
			Same components as S88-70, m TUNE-UP KIT for Wayne I	anufactured by Westwood Blue Angel model HS				
	<b>S88-74</b> Genuine Wayne	31157	Same components as S88-70, m <b>TUNE-UP KIT</b> for Wayne I 2 - Electrode assemblies w/buss bars 1 - Electrode support 1 - Buss bar support	anufactured by Westwood Blue Angel model HS 1 - Coupling 1 - "J" pump coupling end 1 - 90° nozzle line flare elbow 1 - Gun setting gauge				
	<b>S88-74</b> Genuine		Same components as S88-70, m <b>TUNE-UP KIT</b> for Wayne B 2 - Electrode assemblies w/buss bars 1 - Electrode support 1 - Buss bar support 1 - Oil line assembly	anufactured by Westwood Blue Angel model HS 1 - Coupling 1 - "J" pump coupling end 1 - 90° nozzle line flare elbow 1 - Gun setting gauge Blue Angel model HS				

Packaging may vary from that shown



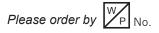
Westwood
BLOWER WHEELS

Precision balanced general purpose blower wheel ideal for oil burners. Blade strip is continuous and roll-locked front and back.



<b>BLOWER WHEELS</b>	(Rotation as viewed from closed end)
----------------------	--------------------------------------

C	V	CC	W		14/	Fits	
WP No.	Ref. No.	WP No.	Ref. No.	D	VV	shaft size	Comments
	STAN	DARD					
S90-10	4030	-	-	4"	3"	1/2"	
S90-12	4230	-	-	4-1/4"	3″	1/2"	
S90-14	4235	-	-	4-1/4"	3-1/2"	1/2"	
S90-16	4725	-	-	4-3/4"	2-1/2"	1/2"	
S90-18	4729	S91-18	4729-1	4-3/4"	3″	1/2"	
S90-20	4734	S91-20	4734-1	4-3/4"	3-1/2"	1/2"	
S90-22	5220	S91-22	5220-1	5-1/4"	2"	1/2"	
S90-24	5225	S91-24	5225-1	5-1/4"	2-1/2"	1/2"	
S90-26	5229	S91-26	5229-1	5-1/4"	3″	1/2"	
S90-28	5234	S91-28	5234-1	5-1/4"	3-1/2"	1/2"	
S90-30	5729	S91-30	5729-1	5-3/4"	3″	1/2"	
S90-32	5734	S91-32	5734-1	5-3/4"	3-1/2"	1/2"	
S90-34	5738	S91-34	5738-1	5-3/4"	3-7/8"	1/2"	
S90-36	6325	-	-	6-1/4"	2-1/2"	1/2"	
S90-38	6329	S91-38	6329-1	6-1/4"	3″	1/2"	
S90-40	6334	S91-40	6334-1	6-5/16"	3-1/2"	1/2"	
S90-42	6338	S91-42	6338-1	6-1/4"	3-7/8"	1/2"	
S90-44	6342	S91-44	6342-1	6-1/4"	4-1/4"	1/2"	
S90-46	6346	-	-	6-1/4"	4-5/8"	1/2"	
-	-	S91-48	7243-1	7"	4-1/4"	1/2"	
	SPE	CIAL	1				
S90-60	475-243	-	-	4-3/4"	2-7/16"	1/2"	Outside hub
S90-62	475-287	-	-	5-3/4"	2-7/8"	1/2"	Lovejoy prongs
S90-64	575-287	-	-	5-3/4"	2-7/8"	1/2"	Lovejoy prongs
S90-66	625-400	-	-	6-1/4"	4"	1"	Cast hub
S90-68	951-78	-	-	7"	4-1/4"	5/8"	
S90-70	951-81	-	-	9-3/16"	5-1/4"	5/8"	Heavy braces
-	-	S91-72	951-170	9-3/16"	5-1/4"	7/8"	Heavy braces
-	-	S91-74	951-57	11-3/4"	6-1/4"	1-1/8"	Heavy braces



### **PRESSURE GAUGES**

-40 PSJ 10	P No.	Ref. No.	Mount	Face	Range	WP No.	Ref. No.	Mount	Face	Range
	S100-100	146010	1/8" CBM	1-1/2"	0-15 PSI	S100-142	47738	1/4" LM	2-1/2"	0-30 PSI
	S100-102	146011	1/8" CBM	1-1/2"	0-30 PSI	S100-144	47495	1/4" LM	2-1/2"	0-60 PSI
E.	S100-104	146013	1/8" CBM	1-1/2"	0-100 PSI	S100-146	45331	1/4" LM	2-1/2"	0-100 PSI
PRESSURE	S100-106	49488	1/4" CBM	2"	0-30 PSI	S100-148	48365	1/4" LM	2-1/2"	0-160 PSI
	S100-108	47615	1/4" LM	2"	0-15 PSI	S100-150	46913	1/4" LM	2-1/2"	0-200 PSI
	S100-110	46644	1/4" LM	2"	0-30 PSI	S100-152	45765	1/4" LM	2-1/2"	0-300 PSI
	S100-112	45764	1/4" LM	2"	0-60 PSI	S100-154	49611	1/4" LM	2-1/2"	0-400 PSI
	S100-114	45330	1/4" LM	2"	0-100 PSI	S100-156	46648	1/4" LM	2-1/2"	0-600 PSI
	S100-116	46912	1/4" LM	2"	0-160 PSI	S100-158	5504	1/4" LM	3-1/2"	0-30 PSI
	S100-118	47101	1/4" LM	2"	0-200 PSI	S100-160	5506	1/4" LM	3-1/2"	0-60 PSI
	S100-120	46778	1/4" LM	2"	0-300 PSI	S100-162	5508	1/4" LM	3-1/2"	0-100 PSI
	S100-122	47492	1/4" LM	2"	0-400 PSI	S100-164	5510	1/4" LM	3-1/2"	0-160 PSI
	S100-124	47493	1/4" LM	2"	0-600 PSI	S100-166	5512	1/4" LM	3-1/2"	0-200 PSI
	S100-126	52420	1/8" LM	2"	0-15 PSI	S100-168	5514	1/4" LM	3-1/2"	0-300 PSI
	S100-128	47490	1/8" LM	2"	0-30 PSI	S100-170	5515	1/4" LM	3-1/2"	0-400 PSI
	S100-130	52576	1/8" LM	2"	0-60 PSI	S100-172	5516	1/4" LM	3-1/2"	0-600 PSI
	S100-132	47491	1/8" LM	2"	0-100 PSI	S100-174	5551	1/4" LM	4-1/2"	0-60 PSI
	S100-134	48302	1/8" LM	2"	0-160 PSI	S100-176	5554	1/4" LM	4-1/2"	0-100 PSI
	S100-136	46645	1/8" LM	2"	0-200 PSI	S100-178	5561	1/4" LM	4-1/2"	0-200 PSI
	S100-138	48363	1/8" LM	2"	0-300 PSI	S100-180	5563	1/4" LM	4-1/2"	0-300 PSI
	S100-140	47102	1/4" LM	2-1/2"	0-15 PSI					

## PRESSURE GAUGES - LIQUID FILLED - Stainless steel case

	P No.	Ref. No.	Mount	Face	Range	WP No.	Ref. No.	Mount	Face	Range
and a second	S100-200	166664	1/8" CBM	1-1/2"	0-30 PSI	S100-238	165295	1/4" CBM	2"	0-1000 PSI
Coris ()	S100-202	166665	1/8" CBM	1-1/2"	0-60 PSI	S100-240	165296	1/4" LM	2-1/2"	0-30 PSI
	S100-204	166666	1/8" CBM	1-1/2"	0-100 PSI	S100-242	165297	1/4" LM	2-1/2"	0-60 PSI
	S100-206	166667	1/8" CBM	1-1/2"	0-160 PSI	S100-244	165298	1/4" LM	2-1/2"	0-100 PSI
PRESSURE	S100-208	166668	1/8" CBM	1-1/2"	0-300 PSI	S100-246	165299	1/4" LM	2-1/2"	0-160 PSI
	S100-210	166669	1/8" CBM	1-1/2"	0-1000 PSI	S100-248	165300	1/4" LM	2-1/2"	0-300 PSI
	S100-212	165282	1/4" LM	2"	0-30 PSI	S100-250	165301	1/4" LM	2-1/2"	0-600 PSI
	S100-214	165283	1/4" LM	2"	0-60 PSI	S100-252	165302	1/4" LM	2-1/2"	0-1000 PSI
	S100-216	165284	1/4" LM	2"	0-100 PSI	S100-254	165377	1/4" LM	2-1/2"	0-2000 PSI
	S100-218	165285	1/4" LM	2"	0-160 PSI	S100-256	165378	1/4" LM	2-1/2"	0-3000 PSI
	S100-220	165286	1/4" LM	2"	0-300 PSI	S100-258	165303	1/4" CBM	2-1/2"	0-30 PSI
	S100-222	165287	1/4" LM	2"	0-600 PSI	S100-260	165304	1/4" CBM	2-1/2"	0-60 PSI
	S100-224	165288	1/4" LM	2"	0-1000 PSI	S100-262	165305	1/4" CBM	2-1/2"	0-100 PSI
	S100-226	165289	1/4" CBM	2"	0-30 PSI	S100-264	165306	1/4" CBM	2-1/2"	0-160 PSI
	S100-228	165290	1/4" CBM	2"	0-60 PSI	S100-266	165307	1/4" CBM	2-1/2"	0-300 PSI
	S100-230	165291	1/4" CBM	2"	0-100 PSI	S100-268	165308	1/4" CBM	2-1/2"	0-600 PSI
	S100-232	165292	1/4" CBM	2"	0-160 PSI	S100-270	165309	1/4" CBM	2-1/2"	0-1000 PSI
	S100-234	165293	1/4" CBM	2"	0-300 PSI	S100-272	165380	1/4" CBM	2-1/2"	0-2000 PSI
	S100-236	165294	1/4" CBM	2"	0-600 PSI	S100-274	165381	1/4" CBM	2-1/2"	0-3000 PSI

1/4" = 1/4"- NPT pipe thread 1/8" = 1/8"- NPT pipe thread CBM = Center back mount LM = Low mount LBM = Low back mount

Please order by PNo.

RE

## LOW PRESSURE DIAPHRAGM GAUGES

WP No.	Ref. No.	Mount	Face	Range	WP No.	Ref. No.	Mount	Face	Range	and a state of the
S100-300	161963	1/4" LM	2-1/2"	15" WC	S100-318	161971	1/4" LM	2-1/2"	10 PSI	
S100-302	161964	1/4" LM	2-1/2"	35" WC	S100-320	161972	1/4" LM	2-1/2"	20 oz35" WC	
S100-304	162787	1/4" LM	2-1/2"	60" WC	S100-322	21551	1/4" CBM	2-1/2"	15" WC	
S100-306	161965	1/4" LM	2-1/2"	100" WC	S100-324	21552	1/4" CBM	2-1/2"	35" WC	LOW PRESSU
S100-308	161966	1/4" LM	2-1/2"	200" WC	S100-326	75995	1/4" CBM	2-1/2"	60" WC	DIAPHRAG
S100-310	161967	1/4" LM	2-1/2"	20 oz.	S100-328	75991	1/4" CBM	2-1/2"	20 oz.	
S100-312	161968	1/4" LM	2-1/2"	32 oz.	S100-330	21553	1/4" CBM	2-1/2"	36 oz.	
S100-314	161969	1/4" LM	2-1/2"	36 oz.	S100-332	21554	1/4" CBM	2-1/2"	5 PSI	
S100-316	161970	1/4" LM	2-1/2"	5 PSI	S100-334	75996	1/4" CBM	2-1/2"	10 PSI	

## **COMPOUND GAUGES**

WP No.	Ref. No.	Mount	Face	Range	P No.	Ref. No.	Mount	Face	Range	200
S100-400	47925	1/8" LM	2"	30"-60 PSI	S100-408	46646	1/4" LM	2-1/2"	30"-60 PSI	
S100-402	49609	1/8" LM	2"	30"-150 PSI	S100-410	47411	1/4" LM	2-1/2"	30"-150 PSI	
S100-404	75260	1/8" LM	2"	30"-300 PSI	S100-412	58156	1/4" LM	2-1/2"	30"-300 PSI	
S100-406	47105	1/4" LM	2-1/2"	30"-30 PSI						COMPOUND

## **GAUGE ADAPTER**

WP No.	Description	
S100-10	1/4"-NPT (F) x 1/8"-NPT (M) Brass gauge adapter	

## VACUUM GAUGES

P No.	Ref. No.	Mount	Face	Range	
S100-498	-	1/8" LM	1-1/2"	0 - 30" Hg	
S100-500	47225	1/8" LM	2″	0 - 30" Hg	
S100-502	47103	1/4" LM	2"	0 - 30" Hg	
S100-504	47104	1/4" LM	2-1/2"	0 - 30" Hg	\



## **TEST GAUGES**

P No.	Ref. No.	Туре	Mount	Face	Range	Refrigerant Scale	For Westwood Tester
S100-280	-	Pressure*	1/8" LM	2"	0 - 300 PSI	-	T10, T11
S100-285	-	Pressure*	1/8" LM	2-1/2"	0 - 300 PSI	-	T20, T22
S100-290	-	Vacuum*	1/8" LM	2"	0 - 30" Hg	-	T15
S100-295	-	Vacuum*	1/8" LM	2-1/2"	0 - 30" Hg	-	T20
* Liquid fillod	ctainloss st						

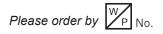


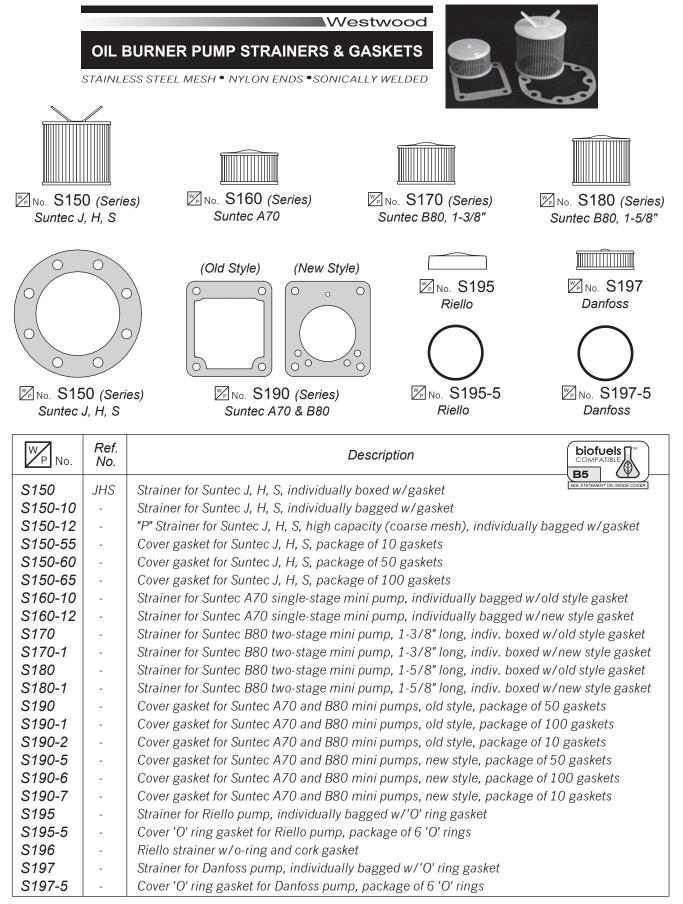
\* Liquid filled, stainless steel case

1/4" = 1/4"- NPT pipe thread 1/8" = 1/8"- NPT pipe thread CBM = Center back mount LM = Low mount LBM = Low back mount

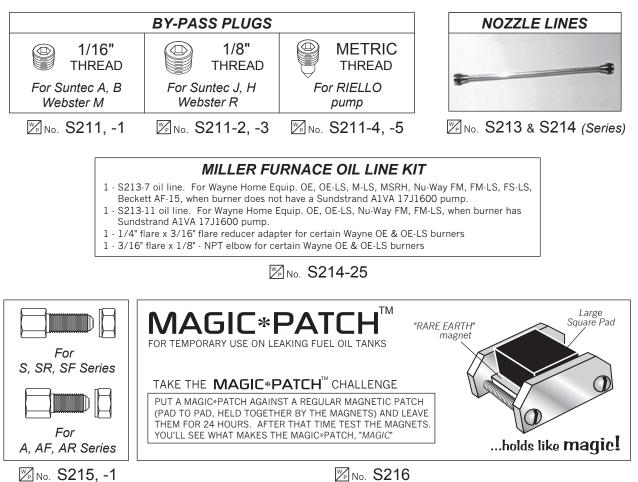


PRESSURE & VACUUM TESTERS starting on page T1





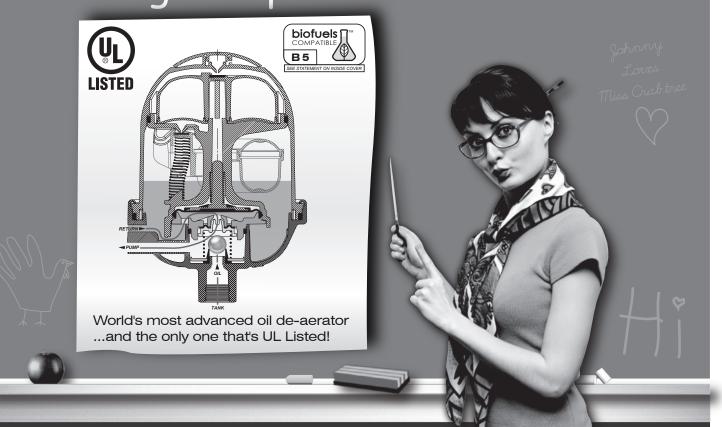
#### **FUEL SYSTEM PARTS**



## **BY-PASS PLUGS, OIL LINES & FITTINGS, MAGIC-PATCH**

P No.	Ref. No.	Description
S211	-	By-Pass Plug for Suntec A, B and Webster M, 1/16"- NPT, package of 10
S211-1	-	By-Pass Plug for Suntec A, B and Webster M, 1/16"- NPT, package of 100
S211-2	-	By-Pass Plug for Suntec J, H and Webster R, 1/8" NPT, package of 10
S211-3	-	By-Pass Plug for Suntec J, H and Webster R, 1/8" NPT, package of 100
S211-4	-	By-Pass Plug for RIELLO pump, (takes 2.5mm hex key), package of 10
S211-5	-	By-Pass Plug for RIELLO pump, (takes 2.5mm hex key), package of 100
S213-5	3605	Nozzle line w/flare nuts, 3/16" O.D. copper tubing, 5" long
S213-7	3607	Nozzle line w/flare nuts, 3/16" O.D. copper tubing, 7" long
S213-8	3608	Nozzle line w/flare nuts, 3/16" O.D. copper tubing, 8" long
S213-11	3611	Nozzle line w/flare nuts, 3/16" O.D. copper tubing, 11" long
S213-12	3612	Nozzle line w/flare nuts, 3/16" O.D. copper tubing, 12" long
S213-16	3616	Nozzle line w/flare nuts, 3/16" O.D. copper tubing, 16" long
S214-12	1412	Nozzle line w/flare nuts, 1/4" O.D. copper tubing, 12" long
S214-16	1416	Nozzle line w/flare nuts, 1/4" O.D. copper tubing, 16" long
S214-25	OL-711	Oil line parts kit for Miller furnaces, (1) S213-7, (1) S213-11, (2) fittings
S215	-	Replacement nozzle line fitting for Beckett S, SR, SF series burners
S215-1	-	Replacement nozzle line fitting for Beckett A, AF, AR series burners
S216	-	MAGIC*PATCH magnetic emergency tank leak patch

# The Tigerloop® Oil De-aerator



# The Tigerloop® Oil De-aerator

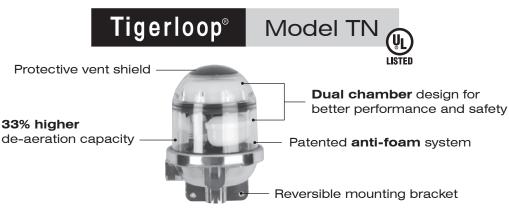
The Tigerloop<sup>®</sup> is a wonderful device that has many benefits. It is often misunderstood and its workings can be difficult to grasp. Hopefully after reading this you'll come away with at least a basic idea of how the Tigerloop<sup>®</sup> works, and how it can improve the efficiency and extend the life of your oil heating systems.

The Tigerloop® combines the benefits of a single pipe system with a two pipe system. With a Tigerloop® installed, you need only to transport oil at the nozzle firing rate (i.e. 1 gph). This allows you to use one small line from the tank to the Tigerloop<sup>®</sup>, whereas with a 2 pipe installation you have to provision 2 large diameter lines that will handle oil traffic at approximately 20 gph in both directions. One immediate benefit is the cost savings of dropping one line, but there are many more advantages. You filter less oil, 1 gph vs. 20 gph, which extends filter life. You preheat oil because it travels slowly into the house (at 1 gph) and loops through the Tigerloop® and pump approx. 20 times, picking up heat before it is fired. Contrast this to a 2 pipe system where cold oil enters the house rapidly (20 gph) and then is immediately sent back outside into the cold tank again (this also stirs up sediment in the tank, which can clog nozzles and filters). With a Tigerloop<sup>®</sup> you also eliminate the risk of a leak from the pressurized return line that is constantly pumping oil back to the tank. You also get a vacuum reduction because you are only pulling 1 gph up the inlet line instead of 20 gph. This is even more critical if you are lifting oil, or have a restricted line or a dirty filter. Imagine trying to pull 20 gph through a small restriction. Installing a Tigerloop® cuts the flow rate down to 1 gph, dropping vacuum and improving burner efficiency, while putting less strain on your oil pump and motor. Vacuum pulls vapor right out of the oil even in an "air tight" system. Less vacuum, less air, less problems....higher efficiency.

The Tigerloop<sup>®</sup> takes the good things of a 2 pipe system and improves them. With a 2 pipe system, all of the air and oil in the line flows through the pump, flows by (or out) the nozzle and then gets returned all the way back to the tank. The Tigerloop<sup>®</sup> improves upon this by deaerating the return oil and sending it back to the pump. This can reduce air by 95%. For example if you need 1 gph from the tank, the Tigerloop<sup>®</sup> is supplying 19 gph of de-aerated oil. This means that 19 out of 20 gallons (or 95%) of the oil has been de-aerated, and you get an efficiency bump. The flame will sputter less, the burner will fire cleaner and produce less soot. Soot build-up on the inside of a boiler will interfere with the absorption of heat. With a Tigerloop<sup>®</sup> installed, the heat will be going into the home, instead of up the chimney. In a single pipe system, all air in the line has to go out the nozzle, so installing a Tigerloop<sup>®</sup> will reduce lockouts, flameouts, and sputters. This will give you the efficiency benefits mentioned above.

Now a quick explanation of how the Tigerloop<sup>®</sup> works. Oil gets pulled through a check valve (inside the Tigerloop) and then thru the pump. The pump gives the nozzle what it needs (i.e. 1 gph) and then sends the excess 19 gph back to the Tigerloop<sup>®</sup> to be de-aerated. As oil rises in the Tigerloop<sup>®</sup>, air escapes from the top vent until a float lifts and seals the vent. When the vent seals, the Tigerloop<sup>®</sup> builds pressure (about 1/3 psi). The pressure opens a valve sending de-aerated oil back to the pump, creating the loop. If any air reaches the Tigerloop<sup>®</sup>, the float drops, the vent opens and the air is removed. The float rises again sealing the Tigerloop<sup>®</sup>.

You can see that having a Tigerloop<sup>®</sup> is better than either a single pipe system or a 2 pipe system, and if the Tigerloop<sup>®</sup> saves a service call, you save money (and aggravation). You also improve burner efficiency and gain customer satisfaction, things which are extremely important in today's oil heating marketplace.



## World's most advanced oil de-aerator!

After years of development, the next generation Tigerloop<sup>®</sup> oil de-aerator has arrived! With over 30 years experience and more than 3.5 million Tigerloops<sup>®</sup> installed worldwide, Tigerholm is uniquely qualified to take oil de-aeration to the next level.

## More than just a problem solver!

For years, Tigerloop<sup>®</sup> has been primarily thought of as a problem solver, a "band-aid," used to easily cure air and suction line problems. But, that's only part of the story! All systems benefit from Tigerloop's<sup>®</sup> unique ability to condition the oil prior to burning. Whether it's air elimination, nozzle coking problems, vacuum reduction, oil preheating, or just the elimination of that potentially leaky return line, Tigerloop<sup>®</sup> is today's safe, economical, environmentally friendly choice for all oil supply systems.

# The Advantages of Tigerloop<sup>®</sup>...

Safely Handles suction line air leaks.

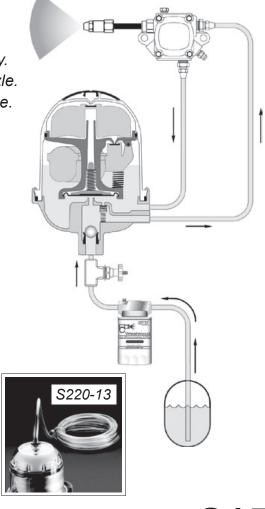
Removes air entrained in oil during transporting and delivery. Reduces running vacuum for clear, foam-free oil at the nozzle. Eliminates potential leak hazard by eliminating the return line. Preheats the oil for cleaner combustion.



**Technical Information** 

MAX. NOZZLE CAPACITY 29.0 GPH
MAX. RETURN OIL FLOW
TEMPERATURE RANGE $\dots \dots 20^{\circ}$ - 105° F
MAX. INLET PRESSURE 8 PSI
CONNECTIONS 1/4" - NPT (female)
FUEL No. 1 & 2 HEATING OIL, B5 BioHeat <sup>®</sup>
Not for use with E-diesel or any fuel containing Ethanol (alcohol)

P No.	Description
S220*	<b>Tigerloop</b> <sup>®</sup> oil de-aerator, model TN, UL Listed
	includes Firomatic fusible valve.
S220-10	3/8"- NPT Firomatic fusible valve only w/reducing
	nipple installed (3/8"- NPT x 1/4"- NPT)
S220-11	Tigerloop <sup>®</sup> Installation Bundle, oil de-aerator,
	model TN, UL Listed, w/Firomatic fusible valve,
	plus two 36" flexible oil lines.
S220-13	<b>Tigerloop</b> <sup>®</sup> vent hose kit to re-route vapors.



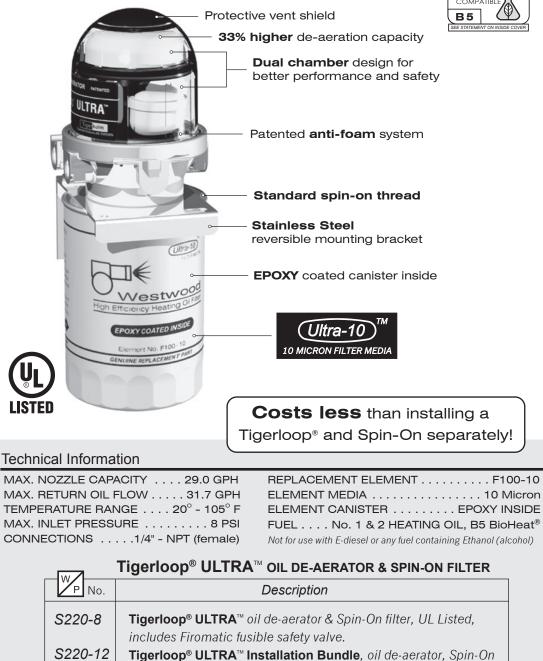
# The New

Tigerloop®

ULTRA™

biofuels

The economical Tigerloop<sup>®</sup>/Spin-On filter combination that's fast and easy to install. Costs less than installing a Tigerloop<sup>®</sup> and Spin-On separately! Designed specifically for the demands of American heating systems.





A standard Tigerloop<sup>®</sup> with B100 compatibility!





## **Technical Information**

MAX. NOZZLE CAPACITY	
MAX. RETURN OIL FLOW	
TEMPERATURE RANGE	
MAX. INLET PRESSURE	8 PSI
CONNECTIONS	. 1/4" - NPT (female)
FUEL biofuels up to <b>B100</b> Biol	Heat®, No. 1 & 2 OIL
Not for use with E-diesel or any fuel containing Ethanol (alco	hol)

P No.	Description
S220-1	<b>Tigerloop® Bio</b> <sup>™</sup> oil de-aerator for biofuels to B100

# Tigerloop<sup>®</sup> ULTRA-**B<sup>™</sup> ≷** NEW!

## A standard Tigerloop<sup>®</sup> ULTRA<sup>™</sup> with B100 compatibility!

Totally **Metallic** Housing

AERATOR

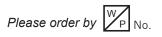
Ultra-10

i	COMP		Ĩ
ł	B100		ψ
	SEE STATEME	NT ON INSI	DE C

#### **Technical Information**

MAX. NOZZLE CAPACITY	29.0 GPH
MAX. RETURN OIL FLOW	
TEMPERATURE RANGE	20° - 105° F
MAX. INLET PRESSURE	8 PSI
CONNECTIONS	. 1/4" - NPT (female)
REPLACEMENT ELEMENT	F100-10
ELEMENT MEDIA	
ELEMENT CANISTER	EPOXY INSIDE
FUEL biofuels up to B100 BioHeat®, No	. 1 & 2 HEATING OIL
Not for use with E-diesel or any fuel containing Ethanol (alco	hol)

P No.	Description
S220-9	Tigerloop® ULTRA™- <i>B</i> oil de-aerator & filter



biofuels

COMPATIBLE

**B**5

# Tigerloop®



The **Tigerloop<sup>®</sup> Combi<sup>™</sup>** was developed for the low firing rate burners of Europe. It features a clear plastic bowl which houses a high efficiency sintered plastic filter element. The forerunner of the **Tigerloop<sup>®</sup> ULTRA**.<sup>™</sup>

A European Favorite

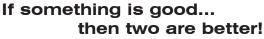
## Tigerloop<sup>®</sup> Combi<sup>™</sup> OIL DE-AERATOR & FILTER

WP No.	Description
S220-4 S220-6	<b>Tigerloop<sup>®</sup> Combi</b> <sup>™</sup> oil de-aerator & filter Replacement sintered plastic filter element for S220-4 (Combi)
S220-7	O-ring for Combi filter cup (Pkg. of 6)

Technical specs are the same as for the S220. See page S15



Combi<sup>™</sup>



The Tigerloop<sup>®</sup> **Twin**<sup>™</sup> has twice the capacity for those large commercial jobs. Get all the benefits of Tigerloop's famous de-aeration capabilities...in a bigger way! Comes complete with Westwood's commercial duty Spin-On filter.

# B5

#### **Technical Information**

Tigerloo

Tiaerlo

Tigerloop <sup>®</sup> Twin <sup>™</sup> OIL DE-AERATOR & SPIN-ON FILTER		
P No.	Description	
S220-15 F100-11	<b>Tigerloop<sup>®</sup> Twin</b> <sup>™</sup> oil de-aerator & commercial duty Spin-On filter Replacement Spin-On element, standard thread, see page F4	

#### GENUINE

# Tigerloop®

For use as oil burner pump suction and return lines (not for nozzle line)

# FLEXIBLE OIL LINES

For swing-out doors and oil de-aerators

Steel Braided Covering - 24" and 36" Long - 145 PSI - 200 °F For No. 1 and 2 heating oil, BioHeat<sup>®</sup> B20 or B100

## FLEXIBLE OIL LINES, Standard

P No.	Description	BioFuels Rating
S220-24 S220-36 S220-40 S222-36	Flexible oil line, braided steel covering, 1/4"- NPT (MxM), 24" long Flexible oil line, braided steel covering, 1/4"- NPT (MxM), 36" long Replacement fitting for flexible oil line, 3/8" inv. flare x 1/4"-NPT Flexible oil line, braided steel covering, 3/8" Flare (FxF), 36" long	B20 See statement on inside cover
S223-24 S223-36	BioFuels Flexible oil line, braided steel covering, 1/4"- NPT (MxM), 24" long BioFuels Flexible oil line, braided steel covering, 1/4"- NPT (MxM), 36" long	<b>Diofuels</b> COMPATIBLE B100 See STATEMENT ON INSIDE COVER

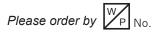


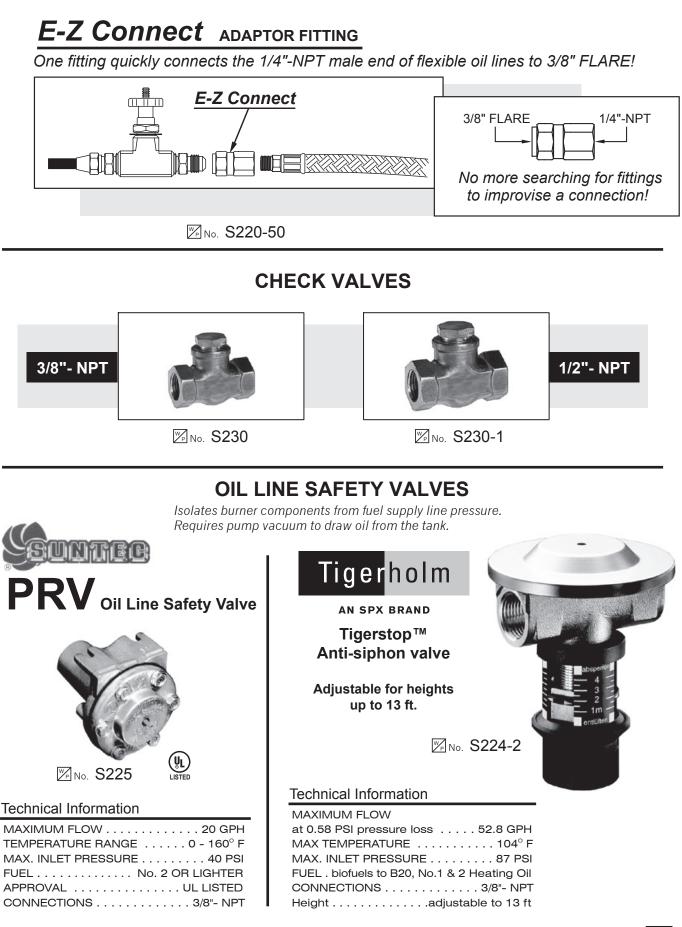
## FLEXIBLE OIL LINES, Special for RIELLO burners

P	Description	BioFuels Rating
S221- S221-	1/4"- NPT (M) x 1/4"- BSPP (RIELLO pump adapter thread), 24" long	B20 SEE STATEMENT ON INSIDE COVER

Service Advisory: All flexible oil lines should be inspected annually for deterioration (i.e. stiffness, cracks, etc.) and replaced every 3 years





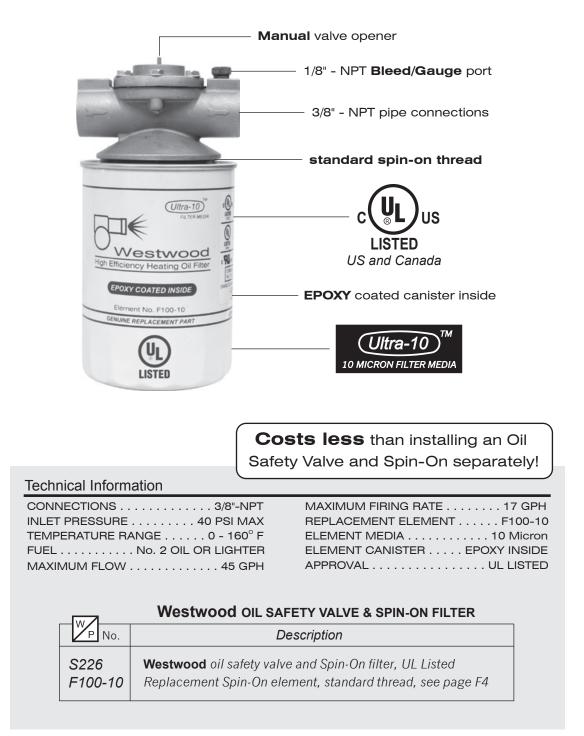


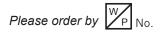




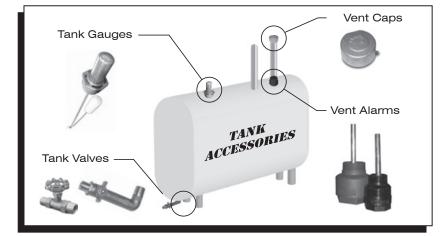
## **OIL SAFETY VALVE & SPIN-ON FILTER**

Combines the Suntec PRV-38P oil safety valve with the Westwood Products Ultra-10<sup>™</sup> (10 micron) high efficiency Spin-On filter element number F100-10. This combination provides the ultimate in protection for oil supply systems and costs less than installing an oil safety valve and Spin-On separately!





## HEATING OIL TANK ACCESSORIES





## S260 Tigerflex<sup>™</sup> Floating Suction Line

WP No.	Description	WP No.	Description
S260	Tigerflex™ Floating Suction Line 1-1/2"& 2"	S270-10	2" Aluminum vent cap, set screw, screen
S270	1-1/4" Vent alarm	S270-20	1/2" x 3/8" Oil tank valve, straight
S270-1	2" Vent alarm	S270-22	1/2" x 3/8" Oil tank valve, 90° angle
S270-4	1-1/4" Aluminum vent cap, set screw	S270-24	1-1/2" and 2" Tank gauge, 24"
S270-6	1-1/4" Aluminum vent cap, set screw, screen	S270-44	1-1/2" and 2" Tank gauge, 44"
S270-8	2" Aluminum vent cap, set screw		I

# S280 Tigex<sup>®</sup> 150 Draft Stabilizer

Stainless steel design fights soot, moisture, and corrosive chemicals. Gas tight 1100°C superwool seal ensures no leakage of exhaust fumes, and quiet function - the damper flap opens and closes quietly during operation as there are no metal parts hitting each other. Easy to install. Self-cleaning door axel. Incredible quality - the top of the line!



Tigex<sup>®</sup> 150

Draft Stabilizer



Adapter for round flue pipe

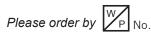
Finish	Color	Description
Stainless Black		
S280 S280-130 S280-150 S280-180 S280-200	S280-2 S280-132 S280-152 S280-182 S280-202	Tigex <sup>®</sup> 150 Draft Stabilizer Adapter for 5" round flue pipe Adapter for 6" round flue pipe Adapter for 7" round flue pipe Adapter for 8" round flue pipe

# UNIVERSAL DRAFT REGULATOR

Fits the most popular smoke pipe sizes, 6", 7", 8", galvanized steel.

WP No.	Ref. No.	Description	
S300-300	#678	3 in 1 combination draft regulator, fits 6", 7", 8" smoke pipe	





A A 3/4" B $5/8"$ $1\cdot13/32"$ $5/8"$ $5/8"$ $5/8"$ $1\cdot13/32"$ $5/8"$ $1'$ $1'''$ $1''$ $1'''$ $1''$ $1'''$ $1'''$ $1'''$ $1'''$ $1'''$ $1'''$ $1'''$ $1''''$ $1'''$ $1'''$ $1'''$ $1''''$ $1'''$ $1'''$ $1'''$ $1''''$ $1''''$ $1''''$ $1''''$ $1''''$ $1''''$ $1'''''$ $1''''$ $1'''''''$ $1''''''''''$							
Slotte	ed Crank	Arm			3 Hole (	Crank Arı	m
3/4"	A ←B Shaft dia.	R 9/64"		€	5/16" Dia. Thread x Length (see below)		5/16" Dia.
	ed Crank aft clamping				Swivel		Push Rod
			Α	В	Swivel Swivel Thread x Length	Push Rod Length	Push Rod
(sha	aft clamping	g) Shaft	<b>A</b> 3-3/16″	<b>B</b> 2-1/8″	Swivel		
(sha	aft clamping <i>Ref. No.</i>	g) Shaft Dia.			Swivel		Description
(sha <u>WP</u> No. S300-400	aft clamping <i>Ref. No.</i> <i>ARM-3S</i>	g) Shaft Dia. 3/8"	3-3/16"	2-1/8"	Swivel		Description Slotted crank arm
(sh: WP No. \$300-400 \$300-402	aft clamping Ref. No. ARM-3S ARM-5S	9) Shaft Dia. 3/8" 1/2"	3-3/16" 3-3/16"	2-1/8" 2-1/8"	Swivel		<b>Description</b> Slotted crank arm Slotted crank arm
(sha WP No. S300-400 S300-402 S300-404	ARM-3S ARM-3S ARM-3L	g) Shaft Dia. 3/8" 1/2" 3/8"	3-3/16" 3-3/16" 4-15/16"	2-1/8" 2-1/8" 3-7/8"	Swivel		<b>Description</b> Slotted crank arm Slotted crank arm Slotted crank arm
(sha WP No. S300-400 S300-402 S300-404 S300-406	ARM-3S ARM-3S ARM-5S ARM-3L ARM-5L	g) Shaft Dia. 3/8" 1/2" 3/8" 1/2"	3-3/16" 3-3/16" 4-15/16"	2-1/8" 2-1/8" 3-7/8"	Swivel		Description Slotted crank arm Slotted crank arm Slotted crank arm Slotted crank arm
(sh:	ARM-3S ARM-3S ARM-5S ARM-3L ARM-5L ARM-14	<ul> <li>Shaft Dia.</li> <li>3/8"</li> <li>1/2"</li> <li>3/8"</li> <li>1/2"</li> <li>3/8"</li> </ul>	3-3/16" 3-3/16" 4-15/16"	2-1/8" 2-1/8" 3-7/8"	Swivel		Description Slotted crank arm Slotted crank arm Slotted crank arm Slotted crank arm 3 hole crank arm 3 hole crank arm
(sha WP No. S300-400 S300-402 S300-404 S300-406 S300-408 S300-410	ARM-3S ARM-3S ARM-3S ARM-3L ARM-3L ARM-14 ARM-15	<ul> <li>Shaft Dia.</li> <li>3/8"</li> <li>1/2"</li> <li>3/8"</li> <li>1/2"</li> <li>3/8"</li> <li>1/2"</li> </ul>	3-3/16" 3-3/16" 4-15/16" 4-15/16" - -	2-1/8" 2-1/8" 3-7/8" 3-7/8" -	Swivel		Description Slotted crank arm Slotted crank arm Slotted crank arm Slotted crank arm 3 hole crank arm 3 hole crank arm
(sh: S300-400 S300-402 S300-404 S300-404 S300-408 S300-410 S300-412	ARM-3S ARM-3S ARM-5S ARM-3L ARM-5L ARM-14 ARM-15 ARM-15 ARM-5C SW-4 SW-5	<ul> <li>Shaft Dia.</li> <li>3/8"</li> <li>1/2"</li> <li>3/8"</li> <li>1/2"</li> <li>3/8"</li> <li>1/2"</li> </ul>	3-3/16" 3-3/16" 4-15/16" 4-15/16" - -	2-1/8" 2-1/8" 3-7/8" 3-7/8" -	Swivel Thread x Length - - - - - - 1/4-20 x 7/16" 5/16-24 x 41/64"		Description Slotted crank arm Slotted crank arm Slotted crank arm Slotted crank arm 3 hole crank arm 3 hole crank arm
(sh: <sup>₩</sup> / <sub>P</sub> <sub>No.</sub> S300-400 S300-402 S300-404 S300-406 S300-408 S300-410 S300-412 S300-414	ARM-3S ARM-3S ARM-3S ARM-3L ARM-3L ARM-5L ARM-15 ARM-15 ARM-5C SW-4	<ul> <li>Shaft Dia.</li> <li>3/8"</li> <li>1/2"</li> <li>3/8"</li> <li>1/2"</li> <li>3/8"</li> <li>1/2"</li> </ul>	3-3/16" 3-3/16" 4-15/16" 4-15/16" - -	2-1/8" 2-1/8" 3-7/8" 3-7/8" -	Swivel Thread x Length - - - - - - - 1/4-20 x 7/16"		Description Slotted crank arm Slotted crank arm Slotted crank arm Slotted crank arm 3 hole crank arm 3 hole crank arm Clamping crank arm Swivel
(sh: S300-400 S300-402 S300-404 S300-406 S300-406 S300-408 S300-410 S300-412 S300-414 S300-416	ARM-3S ARM-3S ARM-5S ARM-3L ARM-5L ARM-14 ARM-15 ARM-15 ARM-5C SW-4 SW-5	<ul> <li>Shaft Dia.</li> <li>3/8"</li> <li>1/2"</li> <li>3/8"</li> <li>1/2"</li> <li>3/8"</li> <li>1/2"</li> </ul>	3-3/16" 3-3/16" 4-15/16" 4-15/16" - -	2-1/8" 2-1/8" 3-7/8" 3-7/8" -	Swivel Thread x Length - - - - - - 1/4-20 x 7/16" 5/16-24 x 41/64"		Description Slotted crank arm Slotted crank arm Slotted crank arm 3 hole crank arm 3 hole crank arm Clamping crank arm Swivel Swivel
(sh: S300-400 S300-402 S300-404 S300-406 S300-406 S300-408 S300-410 S300-412 S300-414 S300-416 S300-418 S300-420 S300-422	Ref. No. Ref. No. ARM-3S ARM-3S ARM-5S ARM-5L ARM-5L ARM-14 ARM-15 ARM-15 SW-4 SW-5 SW-6 SW-8 SW-9	<ul> <li>Shaft Dia.</li> <li>3/8"</li> <li>1/2"</li> <li>3/8"</li> <li>1/2"</li> <li>3/8"</li> <li>1/2"</li> </ul>	3-3/16" 3-3/16" 4-15/16" 4-15/16" - -	2-1/8" 2-1/8" 3-7/8" 3-7/8" -	Swivel Thread x Length - - - - - 1/4-20 x 7/16" 5/16-24 x 41/64" 5/16-24 x 33/64"	Length	Description Slotted crank arm Slotted crank arm Slotted crank arm 3 hole crank arm 3 hole crank arm Clamping crank arm Swivel Swivel Swivel Swivel Swivel Swivel
(shi S300-400 S300-402 S300-404 S300-404 S300-408 S300-408 S300-410 S300-410 S300-412 S300-416 S300-418 S300-420 S300-422 S300-424	Ref. No. Ref. No. ARM-3S ARM-3S ARM-3L ARM-5L ARM-14 ARM-15 ARM-15 ARM-15 SW-4 SW-5 SW-6 SW-6 SW-8 SW-9 PR-12	<ul> <li>Shaft Dia.</li> <li>3/8"</li> <li>1/2"</li> <li>3/8"</li> <li>1/2"</li> <li>3/8"</li> <li>1/2"</li> </ul>	3-3/16" 3-3/16" 4-15/16" 4-15/16" - -	2-1/8" 2-1/8" 3-7/8" 3-7/8" -	Swivel Thread x Length - - - - - - - 1/4-20 x 7/16" 5/16-24 x 41/64" 5/16-24 x 33/64" 1/4-28 x 9/16"	Length	Description Slotted crank arm Slotted crank arm Slotted crank arm Slotted crank arm 3 hole crank arm Clamping crank arm Swivel Swivel Swivel Swivel Swivel Swivel Swivel Swivel Swivel
(sh: S300-400 S300-402 S300-404 S300-406 S300-406 S300-408 S300-410 S300-412 S300-414 S300-416 S300-418 S300-420 S300-422	Ref. No. Ref. No. ARM-3S ARM-3S ARM-5S ARM-5L ARM-5L ARM-14 ARM-15 ARM-15 SW-4 SW-5 SW-6 SW-8 SW-9	<ul> <li>Shaft Dia.</li> <li>3/8"</li> <li>1/2"</li> <li>3/8"</li> <li>1/2"</li> <li>3/8"</li> <li>1/2"</li> </ul>	3-3/16" 3-3/16" 4-15/16" 4-15/16" - -	2-1/8" 2-1/8" 3-7/8" 3-7/8" -	Swivel Thread x Length - - - - - - - 1/4-20 x 7/16" 5/16-24 x 41/64" 5/16-24 x 33/64" 1/4-28 x 9/16"	Length	Description Slotted crank arm Slotted crank arm Slotted crank arm 3 hole crank arm 3 hole crank arm Clamping crank arm Swivel Swivel Swivel Swivel Swivel Swivel 5/16" dia. push rod 5/16" dia. push rod
(sh: S300-400 S300-402 S300-404 S300-406 S300-406 S300-408 S300-408 S300-410 S300-412 S300-412 S300-414 S300-416 S300-418 S300-420 S300-422 S300-426 S300-428	Ref. No.         ARM-3S         ARM-3S         ARM-3L         ARM-5L         ARM-14         ARM-15         ARM-5C         SW-4         SW-5         SW-6         SW-8         SW-9         PR-12         PR-18         PR-24	<ul> <li>Shaft Dia.</li> <li>3/8"</li> <li>1/2"</li> <li>3/8"</li> <li>1/2"</li> <li>3/8"</li> <li>1/2"</li> </ul>	3-3/16" 3-3/16" 4-15/16" 4-15/16" - -	2-1/8" 2-1/8" 3-7/8" 3-7/8" -	Swivel Thread x Length - - - - - - - 1/4-20 x 7/16" 5/16-24 x 41/64" 5/16-24 x 33/64" 1/4-28 x 9/16"	Length	Description Slotted crank arm Slotted crank arm Slotted crank arm 3 hole crank arm 3 hole crank arm Clamping crank arm Swivel Swivel Swivel Swivel Swivel 5/16" dia. push rod 5/16" dia. push rod
(sh: S300-400 S300-402 S300-404 S300-404 S300-408 S300-408 S300-408 S300-410 S300-412 S300-414 S300-416 S300-418 S300-418 S300-420 S300-422 S300-424 S300-426	Ref. No.           ARM-3S           ARM-3S           ARM-5S           ARM-5L           ARM-14           ARM-15           ARM-5C           SW-4           SW-5           SW-6           SW-9           PR-12           PR-18	<ul> <li>Shaft Dia.</li> <li>3/8"</li> <li>1/2"</li> <li>3/8"</li> <li>1/2"</li> <li>3/8"</li> <li>1/2"</li> </ul>	3-3/16" 3-3/16" 4-15/16" 4-15/16" - -	2-1/8" 2-1/8" 3-7/8" 3-7/8" -	Swivel Thread x Length - - - - - - - 1/4-20 x 7/16" 5/16-24 x 41/64" 5/16-24 x 33/64" 1/4-28 x 9/16"	Length	Description Slotted crank arm Slotted crank arm Slotted crank arm Slotted crank arm 3 hole crank arm 3 hole crank arm Clamping crank arm Swivel Swivel Swivel Swivel Swivel Swivel 5/16" dia. push rod 5/16" dia. push rod

rev. 5-1-05



PRECISION MACHINED • HEAVY DUTY • PLATED STEEL

Westwood



HIGH TEMPERATURE GLASSWARE



BOROSILICATE & SODA LIME WINDOW GLASS

## OBSERVATION PORTS Clear - Soda Lime Window Glass - Male Pipe Thread Mount - 500° F

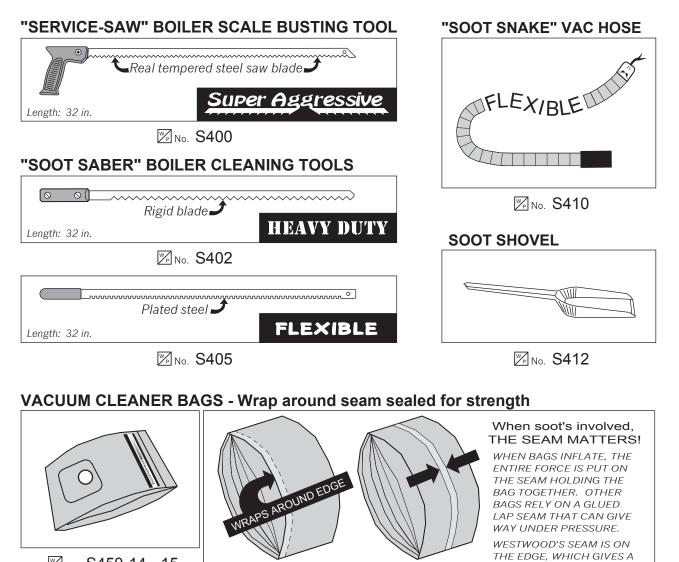
P No.	Reference No.	Pipe Thread	Working Pressure
S305-37	OBS-38	3/8"- NPT	3,700 PSI
S305-50	OBS-50	1/2"- NPT	3,500 PSI
S305-75	OBS-75	3/4"- NPT	3,000 PSI
S305-100	OBS-100	1"- NPT	2,500 PSI
S305-125	OBS-125	1-1/4"- NPT	2,000 PSI
S305-150	OBS-153	1-1/2"- NPT	1,500 PSI

## ROUND SIGHT GLASSES - Clear - Borosilicate Glass - 400° F

		WP No.				WP No.	
Diameter	1/8" Thick	3/16" Thick	1/4" Thick	Diameter	1/8" Thick	3/16" Thick	1/4" Thick
1"	S312-100	S318-100	S325-100	2-5/8"	S312-262	S318-262	S325-262
1-1/8"	S312-112	S318-112	S325-112	2-3/4"	S312-275	S318-275	S325-275
1-3/16"	S312-118	S318-118	S325-118	3″	S312-300	S318-300	S325-300
1-1/4"	S312-125	S318-125	S325-125	3-1/8"	S312-312	S318-312	S325-312
1-3/8"	S312-137	S318-137	S325-137	3-3/16"	S312-318	S318-318	S325-318
1-7/16"	S312-143	S318-143	S325-143	3-1/4"	S312-325	S318-325	S325-325
1-1/2"	S312-150	S318-150	S325-150	3-3/8"	S312-337	S318-337	S325-337
1-5/8"	S312-162	S318-162	S325-162	3-7/16"	S312-343	S318-343	S325-343
1-3/4"	S312-175	S318-175	S325-175	3-1/2"	S312-350	S318-350	S325-350
2"	S312-200	S318-200	S325-200	3-5/8"	S312-362	S318-362	S325-362
2-1/8"	S312-212	S318-212	S325-212	3-3/4"	S312-375	S318-375	S325-375
2-3/16"	S312-218	S318-218	S325-218	4"	S312-400	S318-400	S325-400
2-1/4"	S312-225	S318-225	S325-225	4-1/2"	S312-450	S318-450	S325-450
2-3/8"	S312-237	S318-237	S325-237	5"	S312-500	S318-500	S325-500
2-7/16"	S312-243	S318-243	S325-243	6"	S312-600	S318-600	S325-600
2-1/2"	S312-250	S318-250	S325-250				

Special size round, square, rectangular shapes, and colors available. Consult the factory for price and delivery.

## **BOILER & FURNACE CLEANING ITEMS**



₩ No. S450-14, -15

## CLEANING TOOLS & VACUUM CLEANER BAGS

P No.	Reference No.	Description
S400	Service-Saw	"Service-Saw" boiler scale cleaning tool, tempered steel saw blade, plastic handle
S402	-	"SOOT SABER" Heavy Duty (rigid) boiler cleaning tool, zinc coated steel, wood handle
S405	-	"SOOT SABER" Flexible boiler cleaning tool, zinc coated steel, soft vinyl handle
S410	-	"SOOT SNAKE" Flexible steel vacuum cleaner hose, 7/8" dia., 48" long, with installed
		rubber adapter to fit a standard 1-1/2" rubber vacuum cleaner hose
S412	-	Soot Shovel, 4-1/2" wide, 19-1/2" long, steel with black enamel finish
S450-14	-	Style 4464 (3-1/2 gal.) vacuum cleaner bags. Fits Mastercraft 605, 641, 1100, 6500
		and others; Sid Harvey S12. Package of 5 bags
S450-15	-	Style 4465 (5 gal.) vacuum cleaner bags. Fits Mastercraft 652, 653, 880, 990, 1005,
		1010, 1015, 1200, 7000, 13008, D6508, D6520, D6530, W6508, W6509, W6510,
		6513, and others; Sid Harvey S14. Package of 5 bags

Westwood

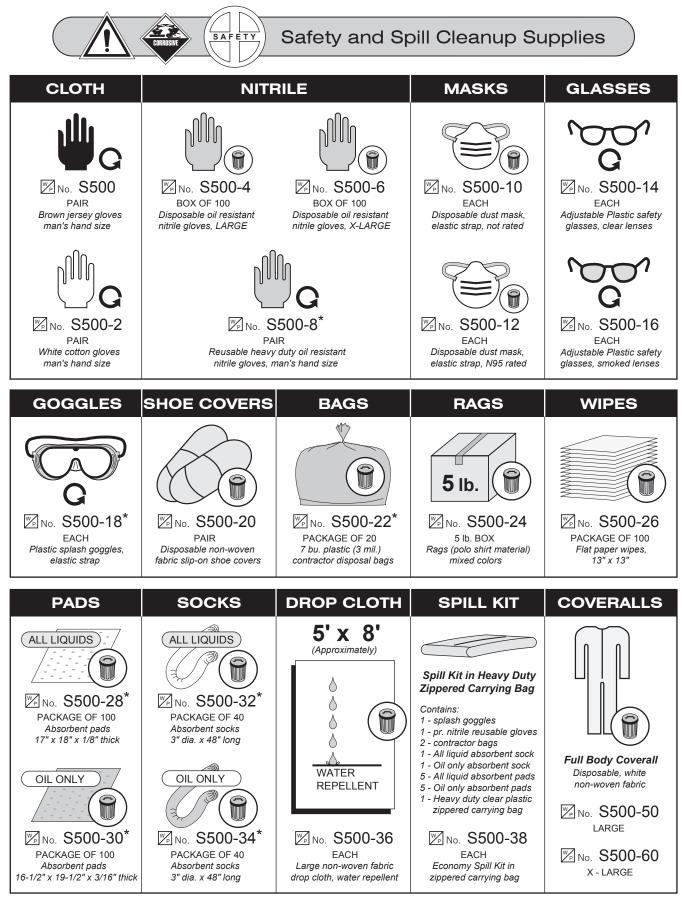
BRAND "X"

STRONGER, WRAP AROUND

SEAL.

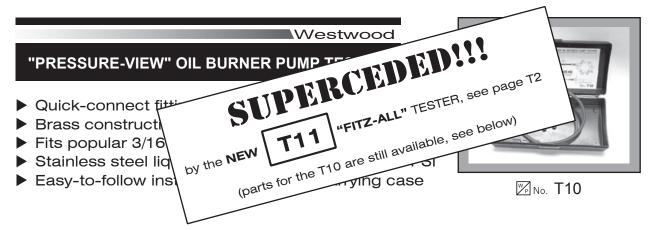
1-800-442-1630

Westwood



 $^*$  Part of the S500-38 Economy Spill Kit (see listing above for quantities of each included in the kit).

rev. 12-14-15



## **T10 TESTER PARTS**

WP No.	Description
T10-3	Replacement adaptor fittings for T10 tester, 3/16" X 1/4" flare, Pkg. of 2
T10-4	Replacement rubber quick-connect seats (gaskets) for T10 tester, Pkg. of 12
T10-5	Replacement hose set (2 color coded hoses) with fittings for T10 tester
S100-280	Replacement Liquid Filled 0-300 PSI Pressure Gauge for T10 tester

#### Westwood

## "VACUUM-VIEW" SUCTION LINE ANALYZER

- Thick clear tubing does not collapse from vacuum
- All brass with stainless steel tubing clamps
- ► Fits popular 3/8" and 1/2" suction line fittings
- Stainless steel liquid filled gauge, range 0 30" Hg
- Easy-to-follow instructions rugged carrying case



<sup>₩</sup>No. T15

Analyze suction line problems (ie. air leaks, restrictions, dirt, etc.) using this clear tubing service tool. Vacuum gauge liquid dampens pulsation allowing precise measurement and protects gauge from hydraulic shock damage. Actually see what's happening inside that problem suction line! Complete instructions and "Service Truck Tough" carrying case.

## **OIL BURNER PUMP VACUUM TESTER**

WP No.	Description
T15	Complete suction line analyzer w/case, adaptor fittings and instructions
T15-1	Replacement adaptor fittings for T15 tester, 1/2" suction line, Pkg. of 2
T15-2	Replacement clear tubing w/clamps for T15 tester
S100-290	Replacement Liquid Filled 0-30" Hg. Vacuum Gauge for T15 tester



For testing RIELLO pumps see pages T2 &T3

Please order by

#### 1-800-442-1630

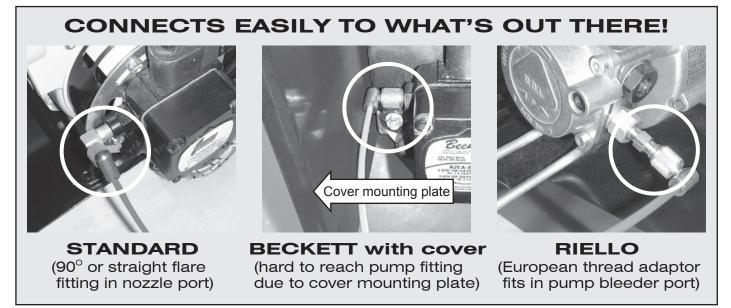


Westwood "FITZ - ALL" OIL BURNER PUMP TESTER

## The first NEW design in pump testers in over 25 years!

Tests: Standard burners Beckett w/cover (Burnham AFG, NX, etc.) Riello

- ✓ Angle connector for hard to reach connection to Beckett pumps
- ✓ Quick-connect fittings have built-in seals and require only finger tightening
- Super flexible micro diameter color coded high pressure hoses
- Fits popular 3/16" flare nozzle line fittings comes with adaptors for **Riello** pumps (European thread) and 1/4" flare nozzle line fittings
- Stainless steel liquid filled gauge with 0 300 PSI range
- Rugged carrying case with easy-to-follow instructions



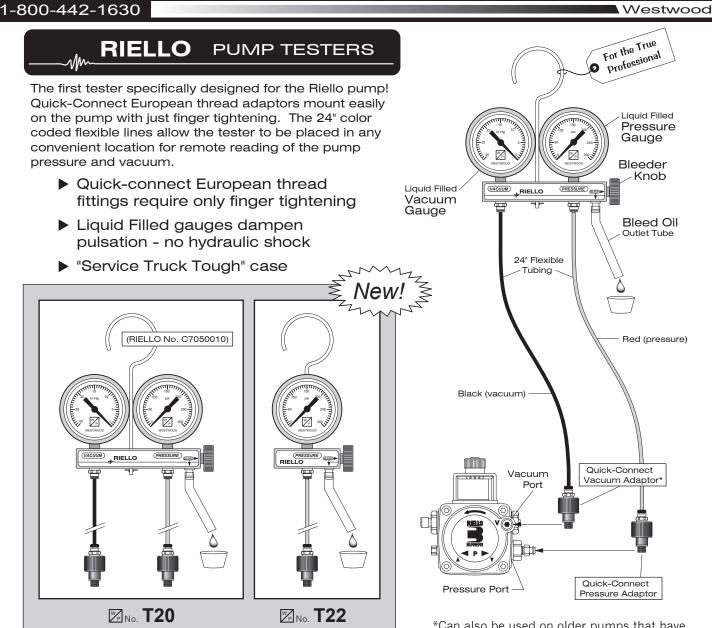
Choose between pressure measurement and cut-off test\* with just the turn of the knob - no disconnecting! Fits standard 3/16" flare nozzle line fittings. Includes adaptors for 1/4" flare nozzle line fittings and for Riello pumps (European threads). Super flexible small diameter high pressure tubing and quick-connect fittings allow fast hook-up with just finger tightening. "Service Truck Tough" carrying case with complete instructions. \* *Not used for checking cut-off on Riello pumps* 



₩No. **T11** 

## "FITZ-ALL" OIL BURNER PUMP PRESSURE & CUT-OFF TESTER

P No.	Description
T11	Complete oil burner pump tester w/case, adaptors and instructions
T11-3	Replacement adaptors for T11 tester, (2) 3/16" X 1/4" flare, (1) Riello
T11-4	Replacement rubber quick-connect seals (gaskets) for T11 tester, Pkg. of 12
T11-5	Replacement hose set (2 color coded hoses w/fittings) for T11 tester
S100-280	Replacement Liquid Filled 0-300 PSI Pressure Gauge for T11 tester



Tests Vacuum & Pressure

Tests Pressure

\*Can also be used on older pumps that have the vacuum port on the side of the pump.

P No.	RIELLO No.	Description
T20	C7050010	Complete RIELLO tester with case, liquid filled gauges, Quick-Connect adaptor fittings
T20-10	-	Replacement hose set (1 ea. Red and Black) for T20 tester
T20-12	-	Replacement "O" ring for T20 and T22 tester Quick-Connect adaptors, Pkg. of 6
T20-14	-	Replacement Nylon washer for T20 and T22 tester Quick-Connect adaptors, Pkg. of 6
T20-16	-	Replacement "Drip Cap" for T20 and T22 tester Quick-Connect adaptors, Pkg. of 6
T20-18	-	Replacement carrying case for T20 tester
T22	-	RIELLO pressure tester with case, liquid filled gauge, Quick-Connect adaptor fitting
T22-10	-	Replacement hose (Red) for T22 tester
T22-18	-	Replacement carrying case for T22 tester
S100-285	-	Replacement Liquid Filled 0-300 PSI pressure gauge (2-1/2" face) for T20 and T22
S100-295	-	Replacement Liquid Filled 0-30" Hg. vacuum gauge (2-1/2" face) for T20

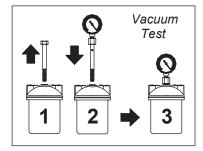


For testing SUNTEC & WEBSTER pumps see pages T1 & T2

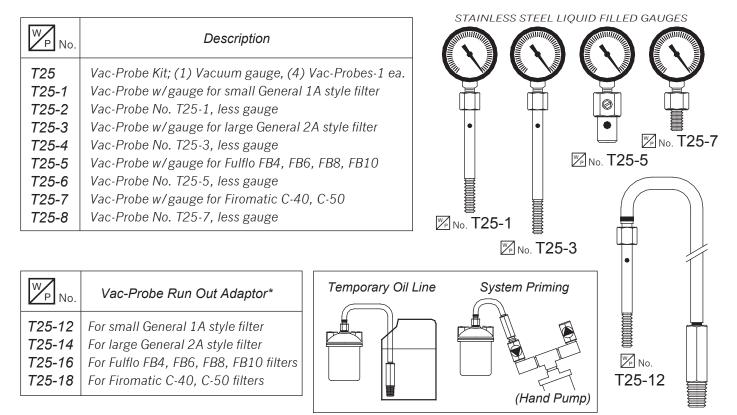


## "VAC-PROBE" OIL LINE ACCESS PORT

Allows access to oil lines without opening or disconnecting fittings. Installed in place of the center bolt on the line filter it allows not only vacuum tests to be made quickly and neatly, but also affords easy access to the fuel system for pump priming and connection of a temporary oil line (run outs). One piece solid steel construction.



- Quickly and neatly access fuel system without disconnecting fittings!
- Liquid filled gauge dampens pulsation allowing precise measurement and protects gauge from hydraulic shock damage
- Models available for all popular heating oil line filters



\*Vac-Probe w/48" flexible hose connected to a heavy weight 3/8" NPT hand pump connection adaptor. Adaptor easily connects to a hand pump, or serves as a hose end weight when drawing oil from a can.

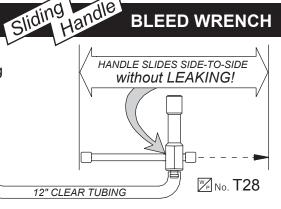
"FLO-THRU"



## **BLEED WRENCH**

- Quickly and neatly bleed oil burner pumps
- Handle slides side-to-side for easy bleeding

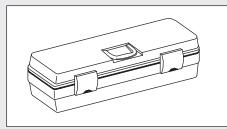
P No.	Description
T28	Bleed Wrench with 12" hose
T28-2	Replacement hose, Pkg. of 6



## Hand operated piston pumps with built-in check valves for use with liquids and air. Ideal for clearing plugged oil lines, priming pumps, transferring liquids, and adding chemicals to boilers. Unique "EASY ANGLE" 120° valve angle makes connections easy Two Sizes - Standard and High Capacity High Capacity model gives 50% more volume per stroke! Exclusive center port for installation of a compound gauge allows monitoring of the system pressure and vacuum during operation Comfortable "T" handle and protective vinyl sleeve on barrel Quick-connect hose set attaches to hand pump using no tools! (Same, no tools needed connection to all popular hand pumps) QUICK-CONNECT FITTINGS ANY HAND PUMP (NO TOOLS NEEDED) CHECK VALVE No. **T30-1** 🖉 No. **T30** HIGH CAPACITY STANDARD (gauge optional)

QUICK-CONNECT FITTINGS & HOSE SET

**"EASY ANGLE" PRESSURE & VACUUM HAND PUMPS** 



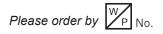
№ №. **Т30-6** CARRYING CASE FOR T30 & T30-4



Westwood

₩ No. **S100-402** CENTER PORT COMPOUND GAUGE 30" Hg. - 150 PSI (2" FACE, 1/8"- NPT)

P No.	Description
T30	Standard hand pump w/1/8"- NPT center access port
T30-1	High capacity hand pump w/1/8"- NPT center access port
T30-4	Quick-connect, no tools needed fittings and hoses set
T30-6	Plastic carrying case for T30 hand pump, fittings and hoses
T30-8	"O" ring for T30, -1 and all 1-1/4" barrel pumps, Pkg. of 2
S100-402	Compound pressure-vacuum gauge for center access port
S230	Replacement check valve, 3/8" NPT, genuine Firomatic®





Contents:

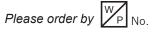
- 2 2 FT Hoses
- 1 1/2" Flare Adapter
  - 1 Garden Hose Adapter
  - 2 Hose Caps

# CO<sub>2</sub> BLOW OUT GUNS & KITS

FOR QUICKLY CLEARING PLUGGED LINES ALL BRASS CONSTRUCTION

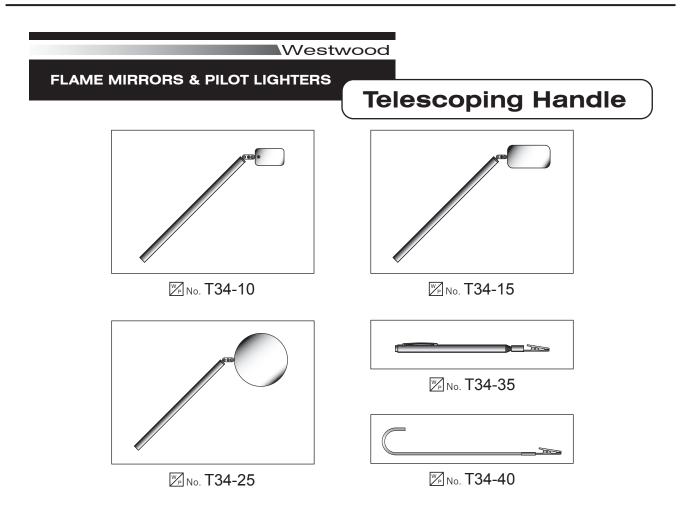
WP No.	Reference No.	Description & Representative Picture
T32	ML-3	CO <sub>2</sub> blow out gun for clearing clogged oil lines and instrument transmission lines. Built-in check valve allows spent cartridge to be removed without loss of pressure.
T32-10	ML-3-150	$CO_2$ blow out gun with built-in safety valve. Limits pressure at outlet of gun to 150 PSI. Since $CO_2$ cartridges produce approximately 800 PSI, the additional pressure is relieved should a severely restricted line be encountered.
T32-11	ML-3-150-UPG	150 PSI safety valve upgrade kit for blow out gun (Relief valve and angle adapter, 1/8"-NPT)Image: Comparison of the second sec
T32-15	ML-3-P1000	CO <sub>2</sub> blow out gun with 1,000 PSI pressure gauge. Accurately monitors pressure in the line during clearing. Constant pressure indicates line is blocked; falling pressure means blockage is moving; no pressure means line is clear. Complete kit includes blow out gun with gauge, box of CO <sub>2</sub> cartridges, plastic carrying case, and instructions
T32-16	ML-3-PQ	CO <sub>2</sub> blow out gun with Quick-Connect Kit for quickly connecting to different line sizes. Kit includes blow out gun with 1,000 PSI pressure gauge, quick-connect coupling, (1) ea. 3/8" & 1/2" compression connectors, (1) ea. 3/8" & 1/2" flare connectors, plastic carrying case, and instructions
T32-20	QCK-1 Kit	Quick-Connect Fittings Kit (blow out gun not included). Contains quick-connect coupling, (1) ea. 3/8" & 1/2" compression connectors, (1) ea. 3/8" & 1/2" flare connectorsImage: Connector connector coupling co
T32-25	"O" rings	Replacement "O" ring for blow out gun, package of 6



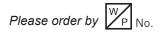


			Westwood
CO2 CARTRIDGES	CO <sub>2</sub> CARTRIDGES		
	WP No.	Reference No.	Description
	T32-30	CO <sub>2</sub> Cartridges	CO <sub>2</sub> cartridges, 8 gram, 800 PSI, Box of 10*

\* 36 boxes of 10 cartridges per case



P No.	WP         No.         Reference No.         Description	
T34-10	MR-1X2	1-1/4" x 2" telescoping rectangular flame mirror
T34-15	MR-2X3	2" x 3-3/4" telescoping rectangular flame mirror
T34-25	MR-4	4-1/4" diameter telescoping round flame mirror
T34-35	ML-26	24" telescoping pilot lighter
T34-40	12" Lighter	12" pilot lighter, plated handle, non-telescoping



Westwood is proud to introduce the **BRIGON** line of quality combustion test equipment. One of the world's oldest and most respected manufacturers of test equipment for the heating industry, **BRIGON** offers advanced European technology at an affordable price. And while the **BRIGON** name may be unfamiliar in North America, the products will be immediately recognized as interchangeable with test equipment widely used here today.



**T35 TEST KIT CONTAINS:** 

CO<sub>2</sub> Indicator CO<sub>2</sub> Indicator sampling assembly Stack thermometer - 900° F Draft gauge & sampling hose assembly Smoke tester with smoke test paper and smoke scale Efficiency calculating slide rule Steel carrying case



🕅 No. T35

Westwood

OIL BURNER CO<sub>2</sub> INDICATOR KIT

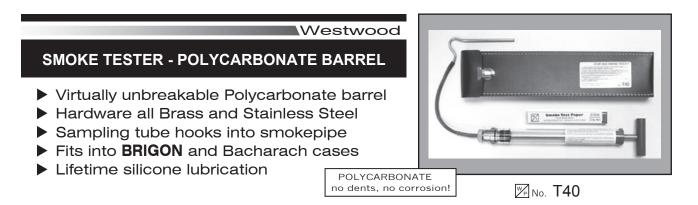
BRIGON

T36 TEST KIT CONTAINS:

CO<sub>2</sub> Indicator CO<sub>2</sub> Indicator sampling assembly Efficiency calculating slide rule Carrying case

₩No. **Т36** 

WP No.	Description	Replaces Bacharach
T35	BRIGON Oil burner combustion test kit with carrying case	10-5022
T35-1	T35 kit with smoke tester & stack thermometer manufactured by Westwood	10-5022
T36	<b>BRIGON</b> CO <sub>2</sub> indicator kit with carrying case	10-5000
T36-2	BRIGON CO2 indicator only	11-7032
T36-10	Replacement sampling assembly for <b>BRIGON</b> and Bacharach CO <sub>2</sub> indicator	11-7029
T36-12	Replacement bulb only for BRIGON and Bacharach sampling assembly	11-0120
T36-14	Replacement red (in) check valve for <b>BRIGON</b> and Bacharach sampling assembly	11-0138
T36-15	Replacement green (out) check valve for <b>BRIGON</b> and Bacharach sampling assembly	11-0127
T36-16	Replacement rubber hose for <b>BRIGON</b> and Bacharach sampling assembly	11-0119
T36-18	Replacement filter tube w/yarn for <b>BRIGON</b> and Bacharach sampling assembly	11-0130
T36-20	BRIGON Efficiency calculating charts	-



Reliable and durable instrument for measuring the smoke number of a flue gas sample. Flue gas is taken from an opening in the flue pipe and drawn through the smoke test paper mounted in the tester. Comparison of the test paper with the smoke scale determines the smoke scale number.

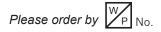
INCLUDES : SMOKE TESTER, SMOKE TEST PAPER, SMOKE SCALE, CARRYING CASE



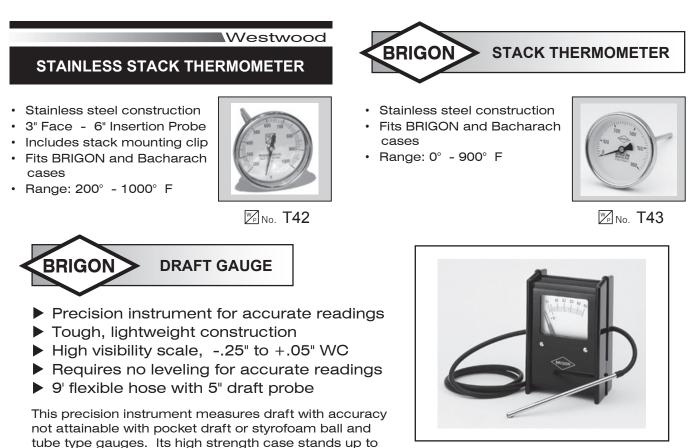
- Corrosion proof construction
- Fits into BRIGON and Bacharach cases

🖾 No. **T41** 

WP No.	Description	Replaces Bacharach
T40	Westwood polycarbonate barrel smoke tester kit with carrying case	21-7006
T40-1	Westwood Universal precut smoke test paper and smoke scale, Pkg. of 50 strips	21-0019
T41	BRIGON smoke tester	21-7006
T41-1	BRIGON smoke test paper, Pkg. of 40 papers	21-0019
T41-2	BRIGON smoke scale	21-0018
T41-5	BRIGON smoke tester lubricant	-



#### 1-800-442-1630



₩No. **T45** 



₩No. T50-2, -5

daily use and will not damage the way Bakelite cases do.

🕅 No. T50-3

No. T50-4

P No.	Description	Replaces Bacharach
T42	Westwood stainless steel stack thermometer	12-7014
T43	BRIGON stack thermometer	12-7014
T45	BRIGON precision draft gauge	13-7019
T45-1	Replacement hose & probe for <b>BRIGON</b> draft gauge	-
T50-2	Westwood CO <sub>2</sub> Indicator Repair Kit, (1) Bottle CO <sub>2</sub> Fluid, Valve Plunger Seal, Top Gasket, Diaphragm, Screws, Filtering Material, Nitrile Gloves, for Bacharach	11-7052
T50-3	<b>Westwood</b> CO <sub>2</sub> Indicator Recharging Kit, (2) Bottles CO <sub>2</sub> Fluid, Top Gasket, Screws, Filtering Material, Nitrile Gloves, for Bacharach	11-7047
T50-4	Westwood CO <sub>2</sub> Indicator Fluid, (1) Bottle, for Bacharach and BRIGON	-
T50-5	<b>Westwood</b> Repair Kit for <b>BRIGON</b> CO <sub>2</sub> Indicator, (1) Bottle CO <sub>2</sub> Fluid, Valve Plunger Seal, Top Gasket, Diaphragm, Screws, Filtering Material, Nitrile Gloves	-

rev. 1-1-09

#### **OIL BURNER IGNITION TRANSFORMER TESTER**

- Safely tests from the transformer's primary side
- Transformer remains on the burner for testing
- Detects early stages of transformer breakdown
- Easy access built-in fuse protects meter
- Simple, easy-to-read meter
- Plugs into 120 volt outlet (ie. trouble light)
- "Service Truck Tough" with high impact case

Test standard iron core 10,000 volt oil burner ignition transformers quickly and safely with this rugged, easy-to-use tester. All testing is done from the primary side of the transformer avoiding contact with the high voltage terminals. Tests transformer while mounted right on the burner. (*Note: Not for testing solid state igniters*)

#### Westwood

## CAD CELL RELAY & EYE TESTER

- Tests primary control and eye right on the burner
- Simple, easy-to-read and understand ohmmeter
- Built-in flame simulators for all popular controls
- "Service Truck Tough" with high impact case

Test both cad cell primary control and flame detector eye simultaneously without removing components from the burner. Built-in flame simulators for all popular controls insure accurate diagnosis and testing.

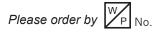
#### Westwood

## "AMP-MASTER" THERMOSTAT CIRCUIT METER

- Accurately measures thermostat control circuit draw to correctly adjust heat anticipator setting
- Meter dial matches T87F heat anticipator scale
- "Service Truck Tough" with high impact case

Precisely measures the thermostat control circuit current to allow correct setting of the heat anticipator. Avoids repeat service calls to remedy short cycling or override problems. Connects at either the thermostat or relay.

WP No.	Description		
T60	Standard 10,000 volt oil burner ignition transformer tester		
T70	Cad cell primary control and flame detector eye tester		
T80	"AMP-MASTER" thermostat heat anticipator meter		





No. T60



No. T70



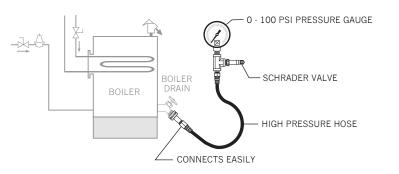
₩No. **T80** 

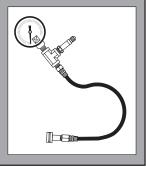
#### **"EASY ACCESS" PRESSURE TESTER**

0 - 100 PSI PRESSURE GAUGE • ALL BRASS CONSTRUCTION

#### FOR LEAK TESTING TANKLESS COILS AND PRESSURE TESTING NEW PIPING

The ideal tester for checking tankless coils for leaks, and pressure testing new piping of all types prior to building code inspections. Easily connects to any convenient garden hose thread (ie. boiler drain valve, wash tub faucet, etc.) without disturbing any fittings in the system. Built-in Schrader valve allows system pressurization with just a simple bicycle pump. Comes in a rugged, "Service Truck Tough" high impact case.





₩No. **T90** 

#### Westwood

#### GAS PRESSURE TESTER

- Precision 0-15" WC "EZ Read" gauge with color coded dial for natural and L. P. gas
- ▶ 36" flexible hose with 1/8"- NPT brass adaptor
- "Service Truck Tough" with high impact case

For setting pressure of natural and L. P. gas applicances without the troublesome inconvenience and mess of water filled manometers. Gauge is precision diaphragm type with a 2-1/2" color coded "EZ Read" dial.





#### Westwood

#### "PILOT PUFFER" LINT & DUST BLOWER

- Cleans hard-to-reach gas pilot burners and orifices
- Durable, rust proof 11" brass air tube
- Flexible, long life flexible rubber bulb

WP No.	Description	
T90	"EASY ACCESS" tankless coil and piping pressure tester	
T91	Gas pressure tester for natural and L.P. gas	
T92	"PILOT PUFFER" gas pilot and orifice lint and dust blower	



## LINE VOLTAGE TESTER **SMOKE PRODUCTS** LOW VOLTAGE TESTER For HVAC leakage and flow testing No. T100-15 No. T95 (Series)

### CORD & CLIP SET - 8' Long



M C

Clips are heavy duty, insulated with color coded boots, and rated at 20 amps!

No. T100-50

## No. T100-10

JUMPERS - Insulated & non-insulated



No. T100-70 through -84

## POCKET DIAL THERMOMETER



No. T100-120

POCKET DIGITAL THERMOMETER

₩ No. T100-125, -130

## SMOKE, VOLTAGE TESTERS, CORD & CLIP SET, JUMPERS, POCKET THERMOMETERS

P No.	Reference No.	Description	
T95-20	-	Smoke emitter sticks, 20 seconds of smoke per stick, package of 25 sticks	
T95-22	-	Smoke emitter pen with 6 wicks, 30 seconds of smoke per test, 60 tests per wick	
T95-24	-	Smoke emitter pen refill wicks, package of 6 wicks	
T95-26	-	Smoke emitter cartridges, 90 seconds of smoke, package of 10 cartridges	
T95-28	-	Smoke emitter cartridges, 3 minutes of smoke, package of 5 cartridges	
T100-10	LV Tester	Pocket low voltage tester, 5 - 50 VAC/VDC	
T100-15	SD Tester	Pocket screwdriver line voltage tester, bright red light, 70 - 250 VAC	
T100-50	7328	110 VAC/15A cord & clip set, 8' long cold weather flexible wire, w/ground wire clip	
T100-70	JW-12	18 gage stranded wire jumper, non-insulated clips, 12" long	
T100-72	JW-18	18 gage stranded wire jumper, non-insulated clips, 18" long	
T100-74	JW-36	18 gage stranded wire jumper, non-insulated clips, 36" long	
T100-80	IJW-12	18 gage stranded wire jumper, insulated clips, 12" long	
T100-82	IJW-18	18 gage stranded wire jumper, insulated clips, 18" long	
T100-84	IJW-36	18 gage stranded wire jumper, insulated clips, 36" long	
T100-120	HDT 303K	Pocket digital thermometer, range: -58° to +572° F	
T100-125	T-160	Pocket dial thermometer, range: -40° to +160° F	
T100-130	T-220	Pocket dial thermometer, range: 0° to +220° F	

Appearance of testers and thermometers may vary from those shown

## NAS gauge<sup>TM</sup> NOZZLE ASSEMBLY SETTING GAUGES

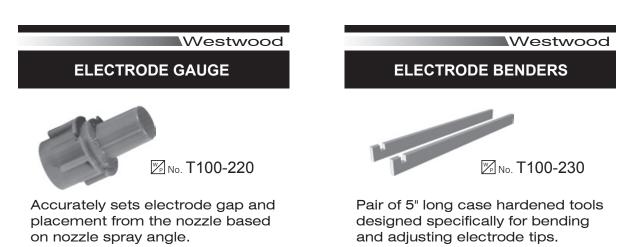
NO GUESSWORK • NO BLIND ADJUSTMENTS • NO BURNER REMOVAL

Proper **NOZZLE - COMBUSTION HEAD** relationship without removing the burner!

- Gauges are made of high impact polystyrene for long service life
- ▶ The B-1 & W-1 gauges are also used to set the electrode tips
- Available individually or in a complete kit containing all three gauges



No. T100-200 (Kit containing all 3 gauges)

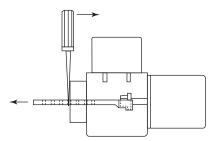


P No.	Reference No.	Description	
T100-200 T100-202	NAS-ABW NAS-B1	NAS gauge™ nozzle assembly setting gauge kit, (3) gauges, instructions NAS gauge™ nozzle assembly setting gauge for Beckett burners	
T100-204	NAS-A1	NAS gauge <sup>TM</sup> nozzle assembly setting gauge for Aero burners	
T100-206	NAS-W1	NAS gauge <sup>TM</sup> nozzle assembly setting gauge for Wayne burners	
T100-220	Ignitor Gage	Electrode tip setting gauge	
T100-230	TB-60	Electrode tip benders, 5" long case hardened steel, set of 2 benders	

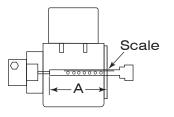


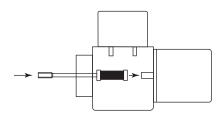
## Westwood Coupler Popper<sup>™</sup> with Coupler Aligner / Installer

This handy tool removes coupling ends stuck on the motor shaft from the pump side of the burner. No need to remove the motor! It also measures the proper dimension to cut a new coupling for a perfect fit, installs couplings through the pump side of the burner, and centers the pump end of the coupling for perfect alignment with the pump shaft. A real time saver that no service tech should be without.

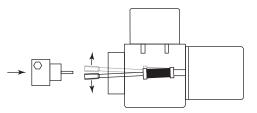


Removing stuck coupling end piece on motor shaft from pump side of burner

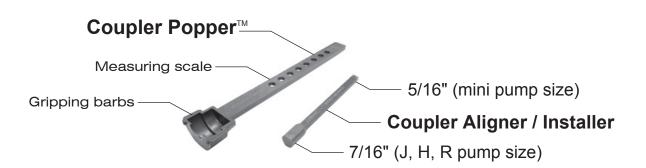




Using Aligner/Installer to install coupling on motor shaft from pump side of burner



Measuring for proper coupling length (dimension "A" minus 13 marks on the **Coupler Popper**<sup>TM</sup> scale) Using Aligner/Installer to center coupling end for perfect alignment with pump shaft



	WP No.	Ref. No.	Description	
T	100-300	CP-1	<b>Coupler Popper</b> <sup>™</sup> multi purpose coupling tool with Coupler Aligner/Installer	



**COUPLING & GAUGE GLASS CUTTERS** 

Use the right tool for the job!

FIELD PROVEN • RUGGED CONSTRUCTION • QUALITY MATERIALS

COUPLING CUTTER



Cuts coupling shafts quickly and cleanly. No twisting or turning necessary. Cuts 1/8" to 1-1/4" O.D. rubber, polyethylene, neoprene, vinyl, PVC, etc. Reversible blade gives twice the blade life. Curved handles are easy on the hands.

No. T100-310

## GAUGE GLASS CUTTERS

Note: Always wear gloves and eye protection when working with glass





No. **T100-330** 

The only one recommended for cutting Red Line and High Pressure gauge glass. Cuts easily leaving a clean, straight edge. Just score and snap!



🕅 No. T100-340

For cutting standard gauge glass. Cuts pieces as short as 1/2" or less. Set the stop to the desired length, squeeze the "trigger" and rotate the glass until it snaps cleanly in two.



#### No. T100-350

For cutting standard gauge glass. Set the stop to the desired length, squeeze the handles and rotate the glass until it snaps cleanly in two.

P No.	Ref. No.	Description	
T100-310	#35	Coupling cutter, heavy duty die cast metal handles, reversible blade	
T100-312	#35 Blade	Replacement blade for T100-310	
T100-330	WP-1	Gauge glass cutter for standard, Red Line, and High Pressure glass	
T100-332	-	Replacement cutting wheel for T100-330	
T100-340	#996	Gauge glass cutter with adjustable stop for standard glass	
T100-342	#996-W	Replacement cutting wheel for T100-340	
T100-350	RD-95	Gauge glass cutter for standard glass, adjustable stop, cast metal handles	
T100-352	RD-95-W	Replacement cutting wheel for T100-350	



T100-370 PORCELAIN CUTTER also cuts gauge glass, see page T17

PORCELAIN CUTTER

Use the right tool for the job!

FIELD PROVEN • HEAVY DUTY CONSTRUCTION • HARDENED CUTTING WHEELS



No. T100-370

## NEW DESIGN! Easier to use!

Replaces the old tool with external chain - no more wrapping the chain around! Powerful compound lever action snaps even the toughest oil burner porcelain. Hardened and tempered cutting wheels, sure-grip molded handles, hardened steel jaws, locking clasp, adjustable stop.

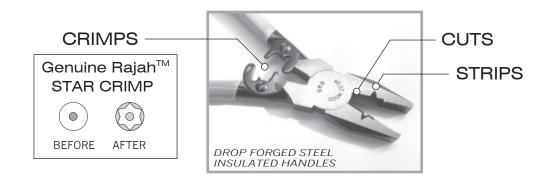


The Grandson of the famous Rajah<sup>™</sup> Crimping Tool!

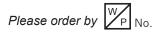


No. **T200-10** 

A service tech's dream come true! All the features of lineman's pliers, plus the ability to cut, strip, and crimp ignition cable and terminals. Hand fitted and finished to make this professional quality tool a joy to use and a pleasure to look at.



WP No.	Ref. No.	Description	
T100-370	#997	Porcelain cutter, heavy duty chain, hardened wheels & jaws	
T100-372	-	Replacement cutting chain for T100-370	
T200-10	#695	Master Lineman's Pliers & Terminal Crimper, drop forged steel, 8-1/2" long	





No. **T200-15** 

Cuts and strips #10 to #22 gage wire. Crimps standard insulated, non-insulated, and 7mm automotive type terminals. (for Rajah<sup>M</sup> ignition terminals, see T200-10 Lineman's pliers and crimper on page T17)



For installing popular B&G and Taco circulator flanges on pipe. Use with a socket or wrench.

No. **T200-80** 

P No.	Ref. No.	Description
T200-15	#271	Cutting - Crimping - Stripping tool, for standard wire terminals
T200-50	LK-66	Long hex key set in pouch, 5/64", 3/32", 1/8", 5/32", 3/16", 7/32", 1/4"
T200-52	SK-59	Short hex key set in pouch, 5/64", 3/32", 1/8", 5/32", 3/16", 7/32", 1/4"
T200-54	XK104	6" long hex key set in pouch, 5/64", 3/32", 1/8", 5/32", 3/16", 7/32", 1/4"
T200-56	RK-97	Hex key set in case, .050, 1/16", 5/64", 3/32", 1/8", 5/32", 3/16", 7/32"
T200-58	HK-17	Folding hex key set, .050, 1/16", 5/64", 3/32", 1/8", 5/32", 3/16"
T200-80	FT-1	Circulator flange installation tool, square drive

#### Α

Absorbent pads & socks, S26 Adapter, flexible oil lines, S20 Adapter, gauge, S11 Additive, heating oil, C1 Alligator clip cord set, T13 Alligator clips, E34 Altitude gauges, H7 Amp tester, T11 AMP-MASTER tester, T11 Anti-siphon valves, S20, S21 Aquastat wells, H8 Assemblies, Auburn, E17 - E25 Assemblies, cable, E35 Assemblies, Champion, E26 Assemblies, filtration, F6 Auburn products, E17 - E25

#### В

B&G circulator, couplings for, H5 Bacharach, repair parts for, T10 Bags, vacuum cleaner, S25 Beckett burner flange gasket, S3 Beckett nozzle line fittings, S13 Beckett, NYLO-FLEX for, S5 Beckett, tune-up kits for, S7, S8 Belts, MAX-DRIVE v-belts, S1 Benders, electrode, T14 Beru Neuhaus electrodes, E27 - E29 BIG GUY filter elements, F8 Black iron steam pig tails, H3 Bleed wrench, T4 Bleeder fitting, spin-on filter, F4 Bleeders, radiator, H8 Blow down kit for McD & M, H4 Blow out gun, CO2, T6 Blower wheels, S9 Blue Angel tune-up kit, S8 Boiler probes, Fulton boilers, H9 Bolts, circulator flange, H4 Boots, insulating, E34 Brass steam pig tails, H3 Brass, buss bars, E32 Brazed plate heat exchangers, H10 Brigon combustion testers, T8 - T10 Bulbs, rough service, E36 Burner fans, S9 Burner flange gasket, S3 Bushings, electrode, E32 Buss bars, E32 By-pass plugs, S13

#### С

Cable assemblies, E35 Cable ties, E36 Cable, high voltage, E35 Cable, ignition, E35 Cable, red & white silicone, E35 Cad cell eye, E37 Cad cell flame detector , E37 Cad cell tester, T11 Can, filter upgrade kit, F11 Canister upgrade kits, F11 Cap, garden hose, H8 Carlin, NYLO-FLEX for, S5 Carlin, tune-up kits for, S8 Cartridges, CO2, T7 Cast iron top filters, F1, F2 Cerafelt chamber liners, S2 Ceramic boots, terminal, E34 Ceramic spark plug boots, E34 Chamber liners, S2 Champion ign. assem, E26 Charges, CO2, T7 Check valves, S20 CHERRY BLAST odor powder, C1 Circulator couplings, H5 Circulator flange bolts, H4 Circulator flange gaskets, H4 Circulator flange tool, T18 CLASSIC FELT filter element, F9 CLASSIC YARN filter element, F10 Cleanup supplies, S26 Cleaver Brooks ring, E32 Cleaver Brooks spring, E32 Clips, alligator, E34 Clips, electrical, E34 Clips, jumper, T13 CO2 blow out gun, T6 CO2 cartridges, T7 CO2 indicators, T8 CO2 tester fluid & parts, T10 CO2 testers, T8 COMBI oil de-aerator, S18 Combination gauges, H7 Combustion chamber liners, S2 Combustion test equip., T8 - T10 Commercial element, 2A-300, F9 Commercial spin-on filters, F4 Compound gauges, S11 Connectors, wire, E36 Copper gaskets, E32 Copper oil lines, S13 Cord & clip set, T13 Coupler Popper tool, T15 Coupling cutter, T16 Coupling kits, S4, S6 Coupling, for B&G circulators, H5 Couplings, motor, S4 Couplings, NYLO-FLEX, S5 Couplings, one piece, S4 Couplings, SPIRALINK, H6 Couplings, spline, S4 Coveralls, disposable, S26 Crank arm linkage, S23 Crimpers, terminal, T17, T18 Cutter, coupling, T16 Cutter, porcelain, T17 Cutters, gauge glass, T16

#### D

Danfoss, strainers for, S12 DE GREASE IT Plus, solvent, C2 DE GREASE IT solvent, C2 De-aerator, oil, S15 - S18 Degreasers, C2 Deodorant, C1, C3 Dial thermometer, H7 Digital pocket thermometer, T13 Dirt pocket cap for McD & M, H4 Disposal bags, S26 Distributor nipple, E34

#### INDEX

Double wall heat exchgrs, H10 Draft gauge, T10 Draft regulator, S22 Draft stabilizer, TIGEX®, S22 Drop cloth, S26 Dry comb. chamber liners, S2 Ducane, NYLO-FLEX for, S5 Dust masks, S26

#### Ε

EASY ACCESS tester, T12 EASY ANGLE hand pump, T4 Electrical clips, E34 Electrode benders, T14 Electrode kits, E15, E16, S7, S8 Electrode setting gage, T14 Electrodes, Auburn, E17 - E25 Electrodes, Beru Neuhaus, E27 - E29 Electrodes, Champion, E26 Electrodes, E1 - E29 Elements, BIG GUY, F8 Elements, filter, 10 micron, F4, F9 Elements, filter, felt, F9 Elements, filter, Pure-Oil, F8 Elements, filter, yarn, F10 Epoxy coated canisters, F1 - F11 Eye, cad cell, E37 E-Z CONNECT, S20

#### F

Fans, S9 FB10, element for, F8, F10 FB4, element for, F8, F10 FB6, element for, F8, F10 FB8, element for, F8, F10 Feeder, McD & M, parts for, H4 Felt filter elements, F9 Fiberglass braid, E35 Fiberglass rope, S3 Filter canister upgrade kit, F11 Filter elements, 10 micron, F4, F9 Filter elements, BIG GUY, F8 Filter elements, felt, F9 Filter elements, Pure-Oil, F8 Filter elements, ULTRA-10, F9 Filter elements, yarn, F10 Filter Life Indicator, F5 Filter, canister type, F1, F2 Filter, canister upgrade kit, F11 Filters, commercial spin-on, F4 Filters, dual, F6 Filters, F1 - F11 Filters, gaskets for, F10 Filters, secondary filtration, F6 Filters, spin-on, F4 Filters, with BIG GUY element, F2 Firomatic valve, S15 Firomatic, elements for, F8 Fitting, garden hose, H8 FITZ-ALL pump tester, T2 Flame detector, cad cell, E37 Flame mirrors, T7 Flame rods, Auburn, E24 Flange bolts, circulator, H4 Flange gasket material, H4 Flange gasket, burner, S3

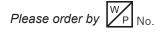
Flange tool, T18 Flexible oil lines, S19 FLEXI-LINK circulator coupling, H5 Floating suction line, S22 FLO-THRU pump bleed wrench, T4 Friction washers, gauge glass, H3 Fuel filter gaskets, F10 Fuel oil additive. C1 Fuel oil treatment, C1 Fuel oil, filters, F1 - F11 Fuel stabilizer, C1 Fuel treatment, C1 Fulflo FB10, element for, F8, F10 Fulflo FB4, element for, F8, F10 Fulflo FB6, element for, F8, F10 Fulflo FB8, element for, F8, F10 Fulton boilers, level probes for, H9 Furnace oil line kit for Miller, S13

#### G

Garden hose cap & fitting, H8 Gas pressure tester, T12 Gasket material, red rubber, H4 Gasket set, Fulflo, F10 Gaskets, circulator flange, H4 Gaskets, dirt pocket cap, H4 Gaskets, fuel filters, F10 Gaskets, pump strainer, S12 Gauge adapter, S11 Gauge glass cutters, T16 Gauge glass friction washers, H3 Gauge glass nuts, H3 Gauge glass repair kit, H3 Gauge glass sets, H3 Gauge glass washers, H1, H2 Gauge glass, H1, H2 Gauge glass, high pressure, H2 Gauge glass, red line, H2 Gauge glass, standard, H1 Gauge, draft, T10 Gauges, altitude, H7 Gauges, combination, H7 Gauges, compound, S11 Gauges, diaphragm, S11 Gauges, hydronic, H7 Gauges, liquid filled, S10 Gauges, pressure, S10 Gauges, refrigeration test, S11 Gauges, spin-on filter, F4 Gauges, steam, H7 Gauges, tank, S22 Gauges, temperature, H7 Gauges, tester, S11 Gauges, tridicator, H7 Gauges, vacuum, S11 Gauges, water level, H7 General Filters, elmt. for, F8, F9 Gloves, brown jersey, S26 Gloves, nitrile, S26 Gloves, white canvas, S26 Goggles, splash, S26 GTO-15 Cable, E35 Guards, thermostat, E38 - E40

#### Н

Hand pump, T5



Harvey, elements for, F4, F8, F9 Heat exchangers, H10 - H11 Heating oil additive, C1 Heating oil filters, F1 - F11 Hex key wrenches, T18 High pressure gauge glass, H2 High temperatue cable, E35 High temperature boots, E34 High temperature rope, S3 High volt terminals, E30 - E34 High voltage cable, E35 Honeywell, wells for, H8 Hose fitting, H8 Hot water thermometer, H7 Hydronic gauges, H7 HY-DRO-SOL water absorber, C3

#### I

Ignition cable, E35 Ignition terminals, E30 - E34 Ignition transformer tester, T11 Ignition wire, E35 Ignition, Auburn, E17 - E25 Ignition, Auburn, E17 - E25 Ignition, Champion, E26 Ignitor kits, E15, E16, S7, S8 Ignitors (electrodes), E1 - E29 Immersion wells, H8 Insulation, heat exchgrs, H11 Insulators, E1

#### J

Jumpers, T13

#### Κ

Key, radiator bleeder (vent), H8 Keys, hex, T18 Kit, blow down for McD & M, H4 Kit, dirt pocket cap, McD & M, H4 Kit, gauge glass repair, H3 Kit, Miller furnace oil line, S13 Kit, spill, S26 Kits, burner tune-up, S7, S8 Kits, cad cell flame detector, E37 Kits, circulator flange bolt, H4 Kits, circulator flange gasket, H4 Kits, CO2 blow out gun, T6 Kits, combustion testing, T8 Kits, couplings, S4, S6 Kits, electrode, E15, E16, S7, S8 Kits, filter canister upgrade, F11 Kits, heat exchanger insul., H11 Kits, NYLO-FLEX couplings, S6 Kits, Rajah terminals, E33 Leak tester, T12 Lennox, NYLO-FLEX for, S5 Light, thermostat, E41 Line voltage tester, T13 Lineman's pliers, T17 Liners, combustion chamber, S2 Lines, oil (nozzle), S13 Linkage, crank arm, S23 Lint and dust blower, T12 Liq. filled pressure gauges, S10 Lig. level probes Auburn, E25 Liq. level probes Fulton boilers, H9 Liq. level probes, stainless, E25 Low pres. diaph. gauges, S11 Low voltage tester, T13 Low water cut off, parts for, H4

#### Μ

MAGIC-PATCH tank patch, S13 Magnetic oil tank patch, S13 MAX-DRIVE v-belts, S1 McDonnell & Miller, parts for, H4 Miller furnace oil line kit, S13 MINT BLAST, odor absorber, C1 Mirrors, flame, T7 Mitco, elements for, F4, F8, F9 Motor couplings, S4 Motor, zone valve, E41 Mounting bkt., spin-on filter, F4

#### Ν

NASgauge nozzle tool, T14 Neuhaus electrodes, E27 - E29 Nitrile gloves, S26 Nozzle line fitting, Beckett, S13 Nozzle lines, S13 Nuts, gauge glass, H3 Nuts, wire, E36 NYLO-FLEX couplings, S5

#### 0

Observation ports, S24 ODOR KILL, odor absorber, C3 Odor neutralizer, C1, C3 Oil burner blower wheels, S9 Oil de-aerator, S15 - S18 Oil line access port, T4 Oil line kit for Miller furnace, S13 Oil line safety valve, S20, S21 Oil lines, copper, S13 Oil lines, flexible, S19 Oil tank patch, S13 OSV valve, S20, S21

#### Ρ

Pads, absorbent, S26 Paper wipes, S26 Paper, smoke test, T9 Petro ignition assembly, E28 Pig tails, steam, H3 Pilot cleaner, T12 Pilot lighters, T7 PILOT PUFFER lint blower, T12 Plastic bags, S26 Plate heat exchanger, H10 - H11 Pleated paper elements, F9 Pliers, lineman's, T17 Plugs, by-pass, S13 Pocket thermometers, T13 Porcelain cutter, T17 Porcelains, E1 Ports, observation, S24 Pour point reducer, C1 Pres. tester, EASY ACCESS, T12 Pressure gauges, S10 Pressure-Vac. hand pump, T5 Probes, stainless steel, E25

#### **INDEX**

Pump bleed wrench, T4 Pump cover gaskets, S12 Pump strainers, S12 Pump test, Suntec & Web., T2 Pump tester, Riello, T2, T3 Pump testers, T1 - T3 Pump, hand pressure-vac., T5 Pure-Oil filter elements, F8 Purolator, elements for, F8 Push rods, linkage, S23 PV pump, T5

#### R

Radiator bleeder (vent) key, H8 Radiator bleeders (vent), H8 Rags, polo, S26 Rajah terminal kits, E33 Rajah terminals, E30 - E33 Ray burner bakelite shield, E32 Red Line gauge glass, H2 Red rubber gasket material, H4 Reducer bushing, S4 Refractory chamber liners, S2 Refrigeration test gauges, S11 Riello by-pass plug, S13 Riello pump tester, T3 Riello, strainer for, S12 Rope, high temperature, S3 Rough service bulbs, E36 Rubber couplings, S4 Rubber gask. material, red, H4

#### S

Safety and spill supplies, S26 Safety glasses, S26 Sampling assem, CO2 test., T8 Saws, soot, S25 Screwdriver line volt tester, T13 Secondary filtration assem., F6 SERVICE-SAW tool, S25 Set, hex key wrenches, T18 Sets, gauge glass, H3 Shoe covers, S26 Shovel, soot, S25 Sid Harvey, elements for, F4-F9 Sight glasses, S24L Silicone rubber boots, E34 Sliding handle bleed wrench, T4 Sludge solvent, C1 Smoke cartridges (candles), T13 Smoke pen, T13 Smoke sticks, T13 Smoke test paper, T9 Smoke testers, T9 Socks, absorbent, S26 Solderless terminal kit, E36 Solderless terminals, E36 Solvents, C2 SOLVIT GREEN spray solvent, C2 SOLVIT spray solvent, C2 Soot remover, C2 SOOT SABER cleaning tool, S25 Soot saws, S25 Soot shovel, S25 SOOT SNAKE vacuum hose, S25 Soot spray, C2

Soot stick, C2 SOOTAWAY spray, C2 SOOTAWAY stick, C2 Spark plugs, Champion, E26 Spill cleanup supplies, S26 . Spill kit, S26 Spin-on filter bleeder fitting, F4 Spin-on filter gauges, F4 Spin-on filter mounting brkt, F4 Spin-on filter wrench, F4 Spin-on filters, F4 SPIRALINK couplings, H6 Splash goggles, S26 Spring terminals, E32 Stack thermometers, T10 Stainless heat exchangers, H10 Stainless steel probes, E25 Standard electrodes, E1 Steam boiler parts, H3, H4 Steam gauges, H7 Steam pig tails, H3 Strainers, pump, S12 Strippers, wire, T17, T18 Suntec by-pass plugs, S13 Suntec, strainers for, S12 Swivels, linkage, S23

System pressure tester, T12

#### Т

Tank gauges, S22 Tank patch, S13 Tank valves, S22 Tank, floating suction line, S22 Tankless coil gask. material, H4 Tankless coil tester, T12 Telescoping flame mirrors, T7 Telescoping pilot lighters, T7 Temperature gauges, H7 Terminal crimpers, T17, T18 Terminal, ceramic boots, E34 Terminals, high volt, E30 - E33 Terminals, ignition, E30 - E33 Terminals, Rajah, E30 - E33 Terminals, solderless, E36 Terminals, spring, E32 Test equip, combustion, T8 - T10 Test gauges, refrigeration, S11 Tester gauges, S11 Tester, AMP-MASTER, T11 Tester, cad cell, T11 Tester, draft, T10 Tester, gas pressure, T12 Tester, ignition trans., T11 Tester, line voltage, T13 Tester, low voltage, T13 Testers, CO2, T8 Testers, pump, T1 - T3 Testers, smoke, T9 Thermometer, dial, H7 Thermometer, dig. pocket, T13 Thermometer, pocket, T13 Thermometers, stack, T10 Thermostat circuit tester, T11 Thermostat guards, E38 - E40 Thermostat light, E41 TIGERFLEX<sup>™</sup> floating suction line, S22 TIGERLOOP ULTRA-B™, S17 TIGERLOOP ULTRA™, S16 TIGERLOOP® Bio, S17 TIGERLOOP<sup>®</sup> Combi, S18 TIGERLOOP® installation bundles, S15, S16 TIGERLOOP® oil de-aerator, S15 TIGERLOOP® Twin, S18 TIGERLOOP® ventilation hose kit, S15, S16 TIGERSTOP<sup>™</sup> anti-siphon valve, S20 TIGEX<sup>®</sup> Draft Stabilizer, S22 Tool, circulator flange, T18 Tool, Coupler Popper, T15 Tool, crimping, T17, T18 Tool, gauge glass cutting, T16 Tool, nozzle assembly, T14 Tool, porcelain cutting, T17 Torrington NYLO-FLEX adpt., S5 Transformer tester, T11 TRANS-TEMP heat exchng., H10

#### **INDEX**

Treatment, heating oil, C1 Tridicator gauges, H7 Tubing, copper oil lines, S13 Tune-Up kits, S7, S8

#### U

UL Listed filters, F1 - F4 UL Recognized filter canisters, F11 UL Recognized filter elmts., F7-F10 ULTRA-10 filter elements, F9 ULTRAGLO thermo. light, E41 Unifilter 77, elmts. for, F8, F9 Unifilter 99, elmts. for, F8, F9 Upgrade kits, filter canister, F11

#### V

VAC-PROBE oil line fitting, T4 Vacuum cleaner bags, S25 Vacuum cleaner hose, S25 Vacuum gauges, S11 VACUUM-VIEW pump tester, T1 Valves, check, S20 Valves, tank, S22 V-Belts, S1 Vent alarms, S22 Vent caps, S22

#### W

Washers, gauge gl. friction, H3 Washers, gauge glass, H1, H2 Water absorber, C3 Water dispersant, C1 Water level gauges, H7 Water temperature gauges, H7 Wayne, NYLO-FLEX for, S5 Wayne, tune-up kits for, S8 Webster by-pass plugs, S13 Weil McLain electrode, E14 Wells, aquastat, H8 Wells, immersion, H8 Wet combustion chambers, S2 White filter elements, F8 Wipes, paper, S26 Wire connectors, E36 Wire connectors, E36 Wire nuts, E36 Wire strippers, T17, T18 Wire, ignition, E35 WP-3 fuel oil additive, C1 Wrench, hex key, T18 Wrench, pump bleeder, T4 Wrench, spin-on filter, F4

#### Υ

Yarn filter elements, F10 Yarn filters, F2, F10

#### Ζ

Zone valve motor, E41







## Representation WORLDWIDE...

United States	Representative	Phone Number	FAX Number
NY Metro, West. Cnty, L.I.	Chapman Equip., Bob Chapman	(516) 579-4494	(516) 579-0257
NY State, above NY Metro	AKR Associates., Mark Riggi	(585) 538-6786	(585) 538-6787
No. NJ, Rockland Cnty NY	Advanced Hydronics Sales Inc., David Vaccari	(201) 573-0606	(201) 573-0499
MA, CT, RI	Heat Tech Assoc., Tony Audia	(860) 482-6321	(860) 482-9601
ME, NH, VT	Edward B. "Spike" Lingel	(781) 235-8044	(781) 237-8999
East PA, So. NJ, DE, MD	John Stack Sales Company, Gary Stack	(888) 466-4328	(866) 634-7737
Western PA, West Virginia	The Weaver Agency, Gary Weaver	(412) 793-5021	(412) 795-3532
IN, N. IL, MN, N. MI, WI	G. Miller Company, Gary Miller	(815) 964-5692	(815) 964-5770
KS, MO	Halfpenny Sales, Inc., Bill Halfpenny	(816) 776-2967	(816) 470-5514
So. MI	Paige & Associates, Pete Ciaramitaro	(586) 216-7136	(586) 465-5565
NC, SC	United Components, Inc., Bob Bradley	(336) 786-8952	(336) 786-6543
OH, KY	Thomas J. Finnegan Company, Gregg Finnegan	(937) 890-5215	(937) 890-6664
IA, NE	Lambert Company, Mike Lambert	(563) 588-2393	(563) 588-2452
Outside the US	Representative	Phone Number	FAX Number
Canada	E.S. Gallagher Sales Ltd., Andy Gallagher	(416) 789-5385	(416) 781-6734
Export Distributor	George Nikiforov Inc., George Nikiforov	(212) 473-4555	(212) 473-5925
Areas not listed	Westwood Products Inc.	(800) 442-1630	(888) 651-7798

P Westwood Products Inc. 330 William Street, South River, NJ 08882 Tel: (732) 651-7700 Fax: (732) 651-7798

## Toll Free 1-800-442-1630 Toll Free Fax 1-888-651-7798