ECR International

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HOTLINE INDIRECT WATER HEATER

MODELS HL30SK, HL40SK, HL50SK, HL80SK, HL119SK

SET-UP, OPERATING & MAINTENANCE INSTRUCTION MANUAL

- ✓ Twice the recovery of a standard gas-fired water heater and four times the recovery of an electric water heater.
- ✓ Counterflow design increases heat transfer by 50% for better temperature mixing.
- ✓ Unique, smooth tube heating coil resists lime buildup that commonly reduces the life of other indirect water heaters.
- ✓ Steel coil increases heat transfer for faster recovery and the luxury of never running out of hot water.
- ✓ Coils and tank lining are coated with the finest porcelain enamel available. Its extra cobalt makes our heaters highly resistant to damage from aggressive water.
- ✓ Two-inch layer of environmentally-friendly CFCfree foam insulation enhances efficiency and cuts fuel bills.
- ✓ Commercial quality at residential prices.



To the Installer:

Please attach these instructions next to the water heater.

To the Consumer:

Please read these and all component instructions and keep for future reference.

HatLine

Indirect Coil Tank Water Heater *Instruction Manual*

Warranty, Registration Card and Parts List are included. Homeowner: Please remember to <u>return</u> the Registration Card!

WARNING

Improper installation, adjustment, alteration, service or maintenance can cause serious injury or property damage. Refer to this manual. For assistance or additional information, consult a qualified installer or service agency.

CAUTION

The recommended temperature for normal residential use is 120°F. The dial on the aquastat does not always reflect the outcoming water temperature, which could occasionally exceed 120°F. The variation in outcoming temperature could be based on factors including but not limited to usage patterns and type of installation. Test your water at the tap nearest to the water heater.

WARNING

Hotter water increases the risk of scald injury. Before adjusting the water temperature setting, read this instruction manual. Temperatures at which injury occurs vary with the person's age and the length of exposure.

The slower reaction time of children, elderly, and physically or mentally challenged persons increases the scalding hazard to them. It is recommended that lower water temperatures be used where these exposure hazards exist. Such households may require a temperature setting less than 120°F to prevent accidental contact with hot water.

To lower water temperature use point-of-use temperature limiting devices.

WARNING

Water heater blankets are not recommended and will void the warranty.

THIS MANUAL HAS BEEN PREPARED
TO ACQUAINT YOU WITH THE INSTALLATION,
OPERATION, AND MAINTENANCE OF
YOUR WATER HEATER AND TO PROVIDE
IMPORTANT SAFETY INFORMATION.

INSTALLER RESPONSIBILITIES

Please read all instructions thoroughly before installing or placing the heater into service. This unit must be installed by licensed or authorized installers, or technical personnel that service water heating equipment. The heater must be installed in accordance with all local codes and ordinances.

These instructions are a guide for the correct installation of the water heater. The manufacturer will not be liable for damages caused by failure to comply with the installation and operating instructions outlined on the following pages.

CAUTION

The recommended water temperature setting for normal residential use is 120°F/49°C.

HANDLING

Before uncrating, check for shipping damage. Report any damage to your carrier. Note damage on bill of lading or delivery receipt and file a claim.

FAILURE TO FOLLOW THESE INSTRUCTIONS OR ALL APPLICABLE BUILDING CODES AND REGULATIONS VOIDS THE WARRANTY ON THIS WATER HEATER.

Read all instructions thoroughly before attempting installation or operation of your water heater. Keep these instructions for future reference.

Local plumbing and electrical codes must be followed in the installation of this water heater. In the absence of a local code use the UNIFORM PLUMBING CODE and the NFPA Code. Local codes may supersede instructions in this installation manual.

These instructions are a guide for the correct installation of the water heater. The manufacturer will not be liable for damages caused by failure to comply with the installation and operating instructions outlined on the following pages.

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SECTION I: SPECIFICATIONS

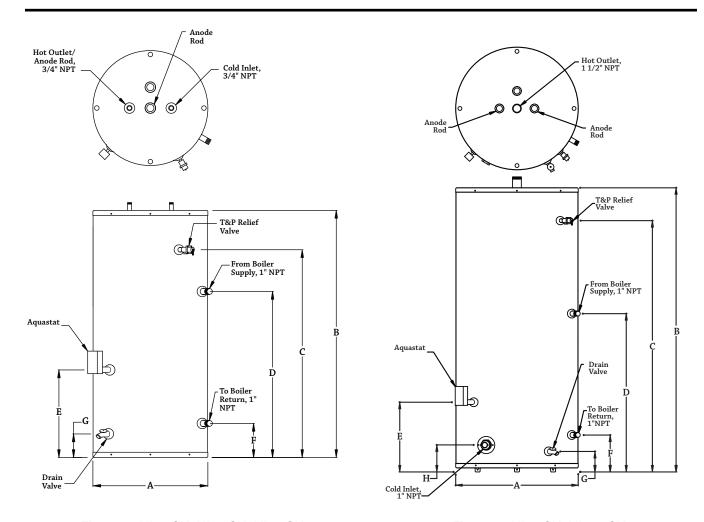


Figure 1: HL30SK, HL40SK, HL50SK

Figure 2: HL80SK, HL119SK

Table 1: Dimensions

	/	1	, D	i m e	n s i	o n s	1	1	/
Model	✓ ▼	/ @	/ ပ	/ 9	/ 4	/ 4	/ ၒ	/ I	
HL30SK	22*	35 ¾″	27 ¾″	19 ½″	11 ¾″	6 ½″	4 ½″	n/a	
HL40SK	22″	42 ¾″	34 ¾″	31 ½″	16 ¾″	6 ½″	4 ½″	n/a	
HL50SK	22″	48 ¾″	39 ¾″	31 ½″	16 ¾″	6 ½″	4 ½″	n/a	
HL80SK	24″	64 ¾″	57 1/2″	33″	19 1/4"	8″	5″	5″	
HL119SK	28″	65 1/4"	57 ¾″	33 ¾″	16 1/4"	8 ¾″	5″	6 ½″	

Foam insulation standard on Indirect models. **Pressures, all:** Test pressure, 300 PSI Working pressure, 150 PSI Standard voltage, all: 120V, 60Hz, 1P. **T&P valve installed;** nipples supplied for top connection.

WARNING: Installation should be in accordance with all national and/or local codes.

CAUTION: The recommended water temperature setting for normal residential use is 120°F. ECR recommends a tempering valve or anti-scald valve be installed and used according to the manufacturer's directions to prevent scalding.

SECTION I: SPECIFICATIONS (cont.)

Table 2: Capacity & Performance

	Tank	Coil Volume	/	Continuous Drain		Minimum Coil	a standby Loss		(i):
Model	Actual Volume	Coji (9al)	First Rating	Cont Pating	First Pating	Minij	Stan, Rating	Heat Loss (
HL30SK	30	1.38	110	85	25	55,000	1.3	2.0	
HL40SK	38	2.30	153	120	33	77,000	1.1	3.0	
HL50SK	45	2.30	160	120	40	77,000	1.0	3.0	
HL80SK	75	2.76	200	130	70	83,000	0.9	5.0	
HL119SK	110	2.76	232	130	102	83,000	1.2	5.0	

NOTES:

Table 3: Performance (cont.)

	/	/ FIRST I	/ HOUR RA	/ TING (ga	/ I) @ Coil	/ Output (E	/ Btu/hr)	/
Model	6 GPM*	10 780°F 10 GPM*	12 180°F 19 GPM*	6 GPW*	8 GPM*	10 200°F 10 GPM*	12 GPW*	
HL30SK	107 @ 53,000	114 @ 57,000	117 @ 59,000	129 @ 67,000	132 @ 69,000	136 @ 71,000	139 @ 73,000	
HL40SK	141 @ 69,000	165 @ 84,000	177 @ 92,000	171 @ 88,000	183 @ 96,000	195 @ 104,000	207 @ 111,000	
HL50SK	148 @ 69,000	172 @ 84,000	184 @ 92,000	178 @ 88,000	190 @ 96,000	202 @ 104,000	214 @ 111,000	
HL80SK	188 @ 76,000	212 @ 91,000	224 @ 98,000	221 @ 97,000	233 @ 104,000	245 @ 112,000	257 @ 119,000	
HL119SK	220 @ 76,000	244 @ 91,000	256 @ 98,000	253 @ 97,000	265 @ 104,000	277 @ 112,000	289 @ 119,000	

NOTES:

First Hour Rating = First Draw + Continuous Draw

All data obtained through testing in accordance with GAMA INDIRECT-FIRED WATER HEATER TESTING STANDARD IWH-TS-1_MARCH 2003

^{*} Based on 77°F rise with 58°F potable water inlet temperature at 8 GPM heat source flow rate. Heat source temperature was 180°F.

^{**} Minimum Coil output based on continuous boiler operation over 30 minutes. See Section III for additional considerations.

All data obtained through testing in accordance with GAMA INDIRECT-FIRED WATER HEATER TESTING STANDARD IWH-TS-1_MARCH 2003

^{*} Coil Input (temperature, flow rate). Ratings based on 77°F rise with 58°F inlet potable water.

SECTION II: GENERAL INFORMATION

LOCATION

The indirect coil tank water heater should be located in a central location to the piping system, as close as practical to the boiler and in an area not subject to freezing temperatures. Leave sufficient space for servicing and maintaining the heater.

Note: Long heating supply runs can lengthen recovery times.

WATER TREATMENT/FILTRATION

In areas where poor water conditions are suspected (i.e. lime, iron, and other minerals), it is essential that the water be tested and appropriate action taken to prevent damage to the indirect heater and ensure the quality of the water.

TEMPERATURE CONTROL

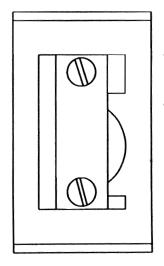
Water temperature from the heat source / boiler to the indirect coil tank water heater is controlled by an immersion aquastat. This control operates the circulator, and provides limited control for domestic hot water temperature. The proper temperature setting for domestic hot water use is 120° F/49°C. If hotter water is required a tempering device or anti-scald device must be installed at the domestic hot water outlet of the heater or at the point of use.

CAUTION: Hot water in excess of 120°F can cause scalding!

HotLine recommends a tempering valve or anti-scald valve be installed and used according to the manufacturer's directions to prevent scalding. Many state and local codes now require installation of these devices. The tempering valve or anti-scald valve will ensure potable water temperatures at the desired set point with a higher degree of accuracy.

IMMERSION CONTROL HL30SK ● HL40SK ● HL50SK HL80SK ● HL119SK

APPROXIMATE TEMPERATURE/TIME RELATIONSHIPS TO SCALDING			
120°F	More than 5 minutes		
125°F	1 ½ to 2 minutes		
130°F	130°F About 30 seconds		
135°F	135°F About 10 seconds		
140°F	Less than 5 seconds		
145°F	145°F Less than 3 seconds		
150°F About 1 ½ seconds			
155°F About 1 second			



- TEMPERATURE SETTING: 120° all models

-Fixed Differential: 8°

SECTION II: GENERAL INFORMATION (cont.)

ANODE RODS

The anode rod is used as a sacrificial element within the volume of the storage tank. The purpose of the magnesium anode rod is to protect the inside of the tank against corrosion. Anode rods should be inspected twice in the first year and at least yearly once a time interval for inspection has been developed. Water conditions can influence the consumption rate of the anode rods. Please see the Maintenance section of this manual for instructions on how to change the anode rods in your Hot Line water heater.

CAUTION: Hydrogen gas is produced in a hot water system served by this heater that has not been used for a long period of time (2 weeks or more). Hydrogen gas is extremely flammable. To reduce the risk of injury under these conditions, it is recommended that the hot water faucet be opened for several minutes at the kitchen sink before using any electrical appliance connected to the hot water system. When hydrogen is present, there will probably be an unusual sound such as air escaping through the pipe as the water begins to flow. There should be no smoking or open flame near the faucet at the time it is open (UL 174).

TEMPERAURE AND PRESSURE RELIEF VALUE (T&P)

The T&P valve is factory installed. A discharge drain tube must be installed (responsibility of the installer) and shall terminate plain, not threaded, 6 inches above the floor drain. The drain tube material must be approved for temperatures of 120°F or greater, and a pressure of 150 PSI or greater.

BACK-FLOW PREVENTOR (CLOSED LOOP SYSTEM)

Some local municipal codes and ordinances require the use of these devices on potable (domestic) water lines. Where back-flow preventors are required, it will be necessary to install a **thermal expansion tank** (designed for used with potable water) in order to prevent pressure build up in the indirect heater and associated piping, which could cause the T&P valve to discharge. Follow the expansion tank manufacturer's recommendations when selecting a tank for your hot water system.

Note: Working pressure of the water heater is 150 PSI. Do not exceed 150 PSI.

BOILER AND CIRCULATOR SIZING

The ratings published in this manual for your HotLine Indirect Coil Tank Water Heater can be obtained through proper selection of boiler output and circulator capacity. As noted, the ratings in Table 2 are based on a 77°F rise with 58°F potable water inlet temperature at a circulator pump flow rate of 8 GPM. The boiler was set at 180°F. See Table 3 for additional first hour ratings at pump flow rates of 6, 8, 10 and 12 GPM with 180°F and 200°F boiler water.

To determine the appropriate circulator for your system, follow these three steps:

- 1) Calculate the pressure drop of all straight pipe and fittings on the supply and return at the desired flow rate.
- 2) Add the pressure drop from Step 1 to the pressure drop through the indirect coil tank water heater coil (see Table 2 for friction loss) to obtain a total pressure drop.
- 3) Select a circulator pump that will provide adequate flow at the total pressure drop.

A pump performance curve should accompany every circulator pump. Figures 3-5 contain performance curves for Taco and Grundfos circulator pumps, recommended by HotLine.

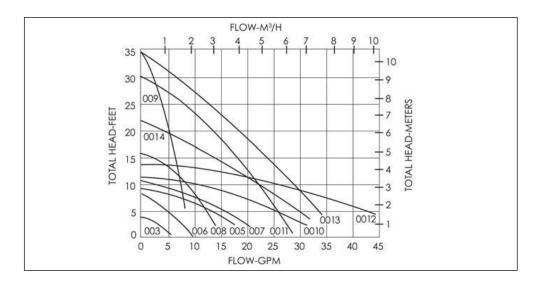


Figure 3: Taco 00 Series performance curves

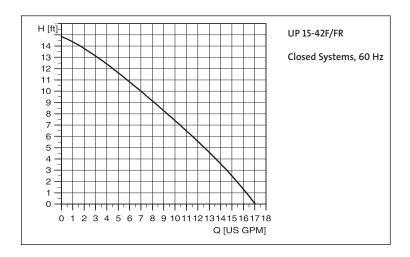


Figure 4: GRUNDFOS UP 15-42F performance curve

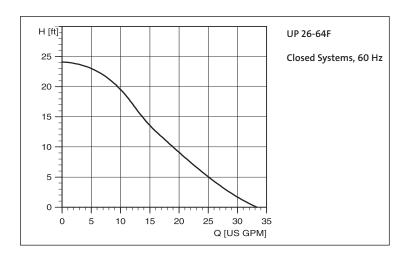


Figure 5: GRUNDFOS UP 26-64F performance curve

Note: Zone valves on the heat source supply to the indirect heater are not recommended and will drastically reduce performance.

System performance can also vary based on the heating capacity of the boiler. If the minimum coil output (assume coil output = boiler output) listed in Tables 2 and 3 is not met, the output (first hour rating) of the water heater will not be met at the selected flow rate. To approximate the reduction in first hour rating as a result of low boiler capacity, use the following formula:

*New first hour rating = (First hour rating) * (Actual boiler output)/(Minimum coil output)*

For example, the first hour rating of a 50SK at a 77°F rise with an 8 GPM heat source flow rate using a boiler having a DOE heating capacity (output) of 60,000 BTU/Hr would be:

New first hour rating = (160 gal) * (60,000 BTU/Hr)/(77,000 BTU/Hr) = 125 gal

SECTION IV: INSTALLATION

WATER CONNECTIONS

All piping between the boiler and the indirect heater should be new copper with a minimum size of 3/4" ID for models HL30SK, HL40SK, and HL50SK. Use 1" minimum copper for models HL80SK and HL119SK. Elbows should be minimized. A flow check valve must be installed on the return line.

All piping to the inlet (cold) and outlet (hot) domestic water connections should be new copper with a minimum size of 1/2" ID for models HL30SK, HL40SK, and HL50SK. Use 3/4" ID minimum for models HL80SK and HL119SK.

All piping should conform to local codes and ordinances. At a minimum, refer to IHLR 84 code if local codes are not in place. It is recommended that all piping be adequately insulated with approved material to ensure minimum heat loss. If a re-circulation line is used for domestic water, be certain that all lines are well insulated and the circulator is temperature controlled. Install isolation valves to permit proper servicing. It is also recommended to install a union on the domestic outlet to facilitate replacement of the hot outlet / anode nipple on models HL30SK, HL40SK, and HL50SK.

See Figures 6 and 7 for proper water connection installation.

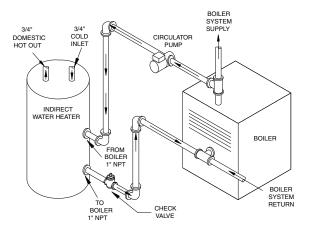


Figure 6: HL30SK, HL40SK, HL50SK water connections

Note: Indirect may be connected to a steam boiler provided that all piping to and from the boiler are below the water line of the boiler. Boiler must also be protected by a low water cut off safety device.

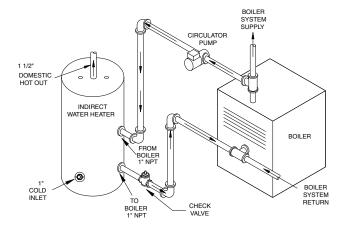


Figure 7: HL80SK, HL119SK water connections

SECTION IV: INSTALLATION (cont.)

See Figure 8 for piping your HotLine Indirect Coil Tank Water Heater to a low-mass boiler (diagram recommended by boiler manufacturer).

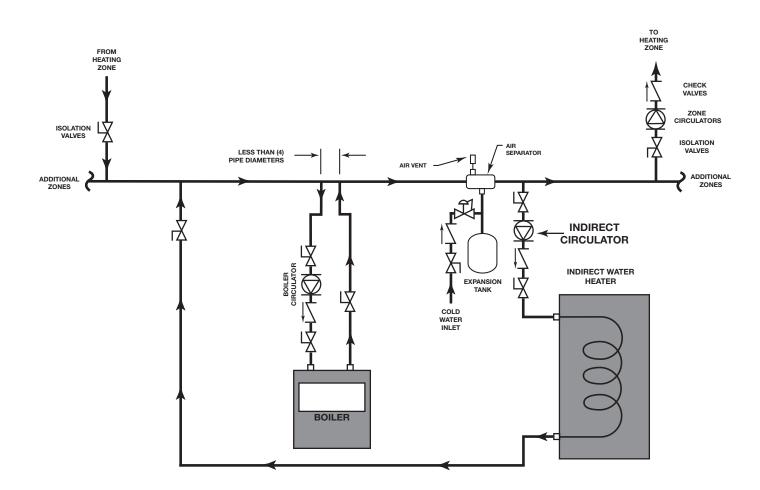


Figure 8: HotLine Indirect with Low-Mass Boiler

ELECTRICAL CONNECTIONS

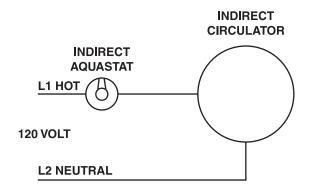


Figure 9: Boiler Maintaining 180°F

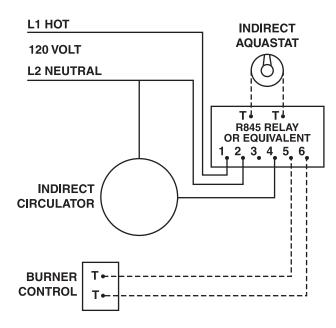


Figure 10: Cold Start Boiler

Figures 9 and 10 are general wiring diagrams. For a maintaining temperature boiler, Figure 9 should closely match your system. For cold start boilers your wiring may resemble Figure 10, but will vary depending on the boiler type and controls or relays used. It is not possible to list all wiring variations here. When connecting to a cold start boiler, always remember that in principle an indirect coil tank heater operates as another heating zone. The difference is when the indirect calls for heat, the indirect coil tank heater circulator must start rather than opening a zone valve; the system circulator stays off; and the boiler must light to reach high limit.

WIRING NOTES:

- 1. Dashed lines indicate low voltage (24 VAC)
- 2. Use jumper wire between terminals #1 and #3 on R845 relay

THERMOSTAT SPECIFICATIONS:

Thermostats can operate at low or line voltages.

24 volt N/A
 120 volt 8 amp
 240 volt 5 amp

This equipment must be properly grounded to prevent a potential shock hazard, and to reduce deterioration of the anode due to electrolysis. Refer to local electrical codes and ordinances.

SECTION V: MAINTENANCE

WATER PIPING

On an annual basis, all piping should be checked for leakage at joints, shut-off valves, and unions.

T&P RELIEF VALVE

On an annual basis, the temperature and pressure relief valve should be checked for proper operation. First, attach a drain line to the valve to direct the water discharge to an open drain. This is very important because the temperature of the discharge could be very hot. Second, lift the lever at the end of the valve several times. The valve should operate freely and return to its original position properly. If water does not flow out of the valve, remove and inspect for corrosion or obstructions. Replace with a new valve if necessary. Do not repair the faulty valve as this may cause improper operation.

ANODE RODS

Anode rods should be inspected twice in the first year and at least yearly once a time interval for inspection has been developed. It is recommended to check the rod(s) six months after the heater is installed. If the anode rod had reduced in size by two-thirds of its original diameter of 3/4" or shows signs of pitting, it is time for replacement. Take the following steps when changing the anode rod(s):

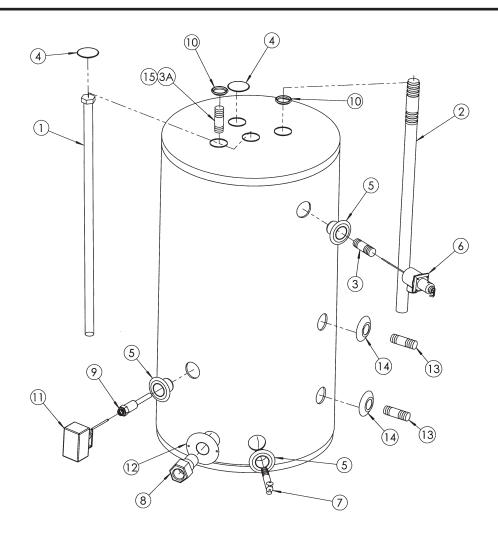
- 1. Shut off water supply.
- 2. Open any faucet to relieve tank pressure.
- 3. Remove caps on water heater top; push insulation aside.
- 4. Use a 1 1/16" six-sided socket wrench and a breaker bar. Snap hard to break the anode rod seal.
- 5. Remove rod(s) and replace with new rod(s).
- 6. Turn water supply back on and leave faucet open until air is out of line.
- 7. Turn faucet off and check that new rod(s) doesn't leak.
- 8. Snap caps back into place.

FLUSH THE TANK

The indirect coil tank water heater is glass lined. Elements in the water such as lime, iron and other minerals may accumulate in the heater. It is recommended that the tank be drained and flushed thoroughly once a year to prevent buildup in the tank.

PROBLEM	CAUSE	SOLUTION
No hot water at faucet		Refer to boiler installation
	operate	instructions
		Check main service switch
		Check fused disconnect
	Circulator does not	Check power supply
	operate	Replace as necessary
		Check aquastat setting
	Improper aquastat setting	Turn tank aquastat to safe temperature setting
	Electrical problem	Check fuse and replace
	(relay, wiring, etc.)	Check circuit breaker and
		reset (if applicable) Check power supply
	Scale build-up	If boiler, circulator, and tank
	Scale balla ap	are operating satisfactorily,
		coil may have scale coating.
		See Section VI for tank
		flushing procedure.
Water at faucet too	Aquastat set too high	Lower aquastat setting to
hot		safe level
	Tempering valve not	Check manufacturers
	properly set or defective	instructions
Insufficient hot water	Aquastat set too low	Raise aquastat setting to safe level. See Section III
	Undersized boiler with	
	no priority to	
	domestic hot water	
	Peak use of hot water	Determine peak usage,
	is greater than tank	compare to tank capacity,
	storage capacity	and add additional storage
	Faulty tank aquastat	(storage tank) if necessary Replace aquastat
	auty tank aquastat	Replace aquastat
Boiler cycles more than 5 times per day	Excessive demand	Reduce demand or consider larger tank
during hotest months	Faulty aquastat	Replace aquastat
	Boiler high limit set	Increase boiler high limit
	too low	setting
Scale, hard white	Lime, water hardness	Water treatment; softener;
particles from faucets, popping sound from	above 7 grains-	etc.
tank	120ppm	
Rust staining; bad	Iron/minerals in water	Filtration
taste and odor in	supply	
water	,	
Rotten egg odor	Hydrogen Sulfide	Flush tank with chlorine
		solution and install
		alumninum anode rod(s)
Air from hot water	Electrolysis or air	Properly ground heater &
fixture	introduced by water	replace anode rod(s). Check
Reduction in recovery	supply Dip tube broken or	well pump system. Replace dip tube
Reduction in recovery	compromised by high	Replace dip tube
Inlet/Outlet fitting	Galvanic corrosion of	Install dielectric unions
corrosion	dissimilar metals	
T&P Valve dripping	Excessive water	Check incoming water
water	pressure (above 150	supply pressure; closed loop
	psi)	system (System Plus)
		requires expansion tank
T&P gushing water	Excessive water temp.	Adjust or replace aquastat
	(above 210 °F)	and T&P valve

SECTION VII: PARTS LIST



	INDIRECT COIL TANK WATER HEATERS							
	HL30SK, HL40SK, HL50SK, HL80SK, HL119SK							
#	Item #	Qty	Description	Applicable Models				
			•	•••				
1	ST00301	1	Magnesium Anode Rod 3/4" x 30"	HL30SK, HL40SK, HL50SK				
1	ST00701	2	Magnesium Anode Rod 3/4" x 36"	HL80SK				
1	ST00901	2	Magnesium Anode Rods 3/4" x 40"	HL119SK				
2	ST00401	1	Dip Tube 3/4 x 3 x 33"	HL30SK				
2	ST00801	1	Dip Tube 3/4 x 3 x 44"	HL50SK				
2	ST01301	1	Dip Tube 3/4 x 3 x 38"	HL40SK				
3			Nipple 3/4 x 3", Hot Out or T&P	HL80SK, HL119SK				
3A			Nipple, 1 1/2"	HL80SK, HL119SK				
4			Cap, Magnesium Anode Rod	HL30SK, HL40SK, HL50SK, (3) HL80SK, (3) HL119SK				
5			Leak Detector Fitting	HL30SK, HL40SK				
5			Leak Detector Fitting	HL50SK, HL80SK, HL119SK				
6	ST00601	1	T&P Relief Valve 3/4" LL100XL	HL30SK, HL40SK, HL50SK				
6	ST01001	1	T&P Relief Valve 140X-5 (use with 15370)	HL80SK, HL119SK				
7			Drain Valve 3/4 x 2 1/4"	HL30SK, HL40SK, HL50SK, HL80SK, HL119SK				
8			Cold Water Inlet Bushing 1"	HL80SK, HL119SK				
9			Well - PNW-3SE 1.5PL (use with 21575)	HL30SK, HL40SK, HL50SK, HL80SK, HL119SK				
10			Ring, Snap-in	HL30SK, HL40SK, HL50SK				
11	ST01101	1	Aquastat L4080B-1352	HL30SK, HL40SK, HL50SK, HL80SK, HL119SK				
12			Steel Ring 5-3/8	HL80SK, HL119SK				
13			Nipple, 1 x 3 , plastic lined	HL30SK, HL40SK, HL50SK, HL80SK, HL119SK				
14			Finish Ring, plastic	HL30SK, HL40SK, HL50SK, HL80SK, HL119SK				
15			Nipple 3/4 x 3", Hot Out with Anode	HL30SK, HL40SK, HL50SK				

LIMITED LIFETIME WARRANTY

GENERAL CONDITIONS

Hot Line Water Heaters, ECR International, warrants that the Hot Line tank shall be free of defects in material and workmanship during normal use and service for as long as the original residential purchaser owns the home in which the unit was originally installed. For the purposes of this Limited Warranty, residential purchaser is defined as the owner of a single family home in which the purchaser resides on a permanent basis.

If at the time of a request for warranty the original residential purchaser can not provide a copy of the original sales receipt, deed, or equivalent document, then the warranty period for the Hot Line shall be seven (7) years from the date of manufacture of the unit. The Limited Warranty on the tank shall be reduced to a period of three (3) years if the purchaser is a business, partnership or corporation, or if the water heater is used for a commercial or multi-family residential property application.

Should a leak develop within this Limited Warranty period due to defective materials or workmanship and such leak having been verified by an authorized company representative, ECR International will repair the unit or furnish a replacement Hot Line heater or the nearest comparable model available at the time of replacement.

ECR International shall not be liable for any water damage arising directly or indirectly from any defect in the water heater or component part(s) or from the use thereof or any service call not involving malfunction or defects in materials or workmanship.

THIS WARRANTY IS VOID AND SHALL NOT APPLY IF:

- 1) The unit is not correctly installed according to the installation instructions provided with the unit.
- 2) The residential indirect-fired water heater is installed in buildings other than one or two family dwelling units, unless the buildings contain individual indirect-fired water heaters for each dwelling unit.
- 3) The indirect-fired water heater is operated at water temperatures of more than 125 degrees F. and water pressure of more than 150 PSI.
- 4) The failure or malfunction results from improper or negligent operation, accident, abuse (including freezing), misuse, unauthorized alteration, improper repair or maintenance, excessive pressure or leaks at water connections or any other similar cause.
- 5) The failure or malfunction results from failure to keep the unit full of potable water, free to circulate at all times; or failure due to water sediment or scale deposits.
- 6) The original serial number of the water heater cannot readily be determined.

- 7) ECR International Hot Line is installed outside of the United States or Canada.
- 8) ECR International Hot Line is repaired or altered without prior written approval of ECR International and this service adversely affects the product's reliability.
- 9) The malfunction or repairs result from the use of ECR International Hot Line for purposes other than that for which it was designed or any malfuction resulting from flood, fire, wind or lightning.

ECR International will provide, under the Limited Warranty, only a replacement water heater, repairs, or parts for defective units. The Limited Warranty does not cover any component of ECR International Hot Line that has to be replaced during the warranty period as a result of reasonable wear and tear, labor costs, shipping charges, delivery expenses, nor administrative fees incurred by the customer in removing or reinstalling the Hot Line.

In no event shall ECR International be liable for incidental or consequential damages. Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to you.

In order to gain coverage under this Limited Lifetime Warranty, the consumer is required to fill out and mail the Limited Warranty registration card provided with the unit by registered mail within 30 days of purchase.

To submit a warranty claim, contact the dealer who sold the Hot Line covered by this Limited Warranty. If the dealer cannot be located, contact ECR International at the address shown below. Whenever any inquiry or service request is made, please include the Hot Line model number, serial number, date of installation, and dealer's name.

No warranty, express or implied, other than the foregoing Limited Warranty is authorized by ECR International and no representative of ECR International or of the manufacturer of any component has the authority to amend, extend, modify, enlarge or contract the foregoing Limited Warranty and the disclaimers of the Limited Warranty in any manner whatsoever.



ECR International

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