

AnswerLine 1-800-558-5700

Division of Emerson Electric Co. Racine, Wisconsin 53406, U.S.A.

In-Sink-Erator Instant Hot Water Dispenser Installation, Care & Use Guide

Congratulations on the purchase of your new In-Sink-Erator instant hot water dispenser. This product is designed and manufactured to the highest standards.

SAFETY SYMBOLS!

The warning symbol alerts you to potential hazards or unsafe practices which could result in severe personal injury or death.

A CAUTION The caution symbol alerts you to hazards or unsafe practices which could result in minor personal injury or property damage.

IMPORTANT SAFETY INFORMATION!

This product dispenses water at approximately 190°F, which is hot enough to cause severe burns. Caution should be exercised when installing and using this product.Do not allow children to operate this appliance without adult supervision.

CAUTION Do not attempt to install the unit until you have read and understand these installation guide instructions.

CAUTION Under no circumstances is this product to be altered in any way other than that which is specifically addressed in these instructions. Doing so may void your warranty.

A CAUTIONDo not use an electric drill to drill into metal water pipes; doing so could result in an electrical shock hazard. If necessary, use a cordless drill or hand drill.

Premature connection of the unit to an electrical supply could result in a "dry start" condition, which could damage the unit and void your warranty. The unit must be completely installed and the tank must be completely full with water running from the dispenser before plugging the unit in to an electrical supply. Consult these installation instructions.

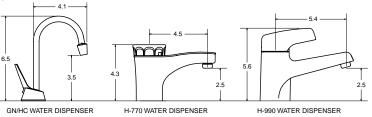
A CAUTION Do not under any circumstances use bleach, abrasive liquids, powders or scouring pads to clean the faucet as doing so could void your warranty. Occasional cleaning with a soft cloth and warm soapy water is sufficient.

A hot water dispenser, like any water heater, has limited life and will eventually fail. To avoid possible property damage, a hot water dispenser should be regularly examined for leakage and replaced when necessary. A drain pan plumbed to an appropriate drain is suggested in those applications where any leakage could cause property damage.

IMPORTANT WARRANTY INFORMATION!

Retain your receipts (purchase and/or installation) as these document the start date of your 1-year warranty. In the absence of purchase or installation receipts, your warranty is one full year from the date of manufacture.

Dispenser head configurations covered in this installation guide. If your dispenser head still varies, you may require another installation guide.



P/N 43142 Rev. 10/00

WHAT YOU SHOULD KNOW BEFORE YOU BEGIN

Connecting the dispenser to your regular water supplies requires no special plumbing. All details are covered in the installations instructions. Be sure that the plumbing connections conform to your applicable local codes. If your water supply contains sand, grit or other suspended particles, the use of a filter is recommended. The filter should not result in the water pressure to the dispenser dropping below 30 pounds per square inch (207kPa). This will prevent your unit from operating properly.

A standard 115-volt grounded electrical outlet is required under the sink for the dispenser's electrical power. The current use is 6.5 amps only when the tank is heating. Ensure that all electrical wiring and connections conform to applicable codes. *Note: The wall outlet to your dispenser must have power supplied to it continuously and must be fused. It should not be controlled by the same wall switch that operates your disposer.*

WARNING

Personal Injury

- Dispenses 190°F (88°C) water which can instantly cause scalds or burns. Use care when operating this appliance.
- Do not allow children to operate this appliance without adult supervision.

Fire Hazard

• To minimize possibility of fire, do not store flammable items such as rags, paper or aerosol cans near the tank. Do not store or use gasoline or other flammable vapors and liquids in the vicinity of this or any other appliance.

Personal Iniury

- This tank is a non-pressure tank. Do not modify this system. Do not close vent tube or connect other type faucets or valves to the tank.
- Use only the faucet supplied.

Electrical Shock Hazard

- Disconnect power before installing or servicing unit.
- Use only a properly grounded and polarized electric outlet.

A CAUTION

Product Damage

Do not plug unit in until tank is filled with water and water flows from spout.

These are the tools and materials you will need	These are the tools you may need
Pliers	Cordless or hand drill. If you
Phillips and flat blade screwdrivers	have galvanized water supply pipe, you may need a non-electric drill to make a small hole.
Adjustable wrench	Basin Wrench. If you intend to use the hand sprayer hole in
115-volt grounded outlet within 30 inches (76 cm) of the dispenser	your sink for your dispenser, you may need a basin wrench and a 1/8" plug or a 1/4" cap for the faucet spray hose line. See
Cold water line within 2 feet (61 cm) of the dis-	item 1 of installation instructions for details.
penser. A shutoff valve to connect the dispenser to the cold water line (see step 4 for examples of connections that can be used).	Chassis punch. If you need to punch a mounting hole in your stainless steel sink you may need a 1-1/4" (3.2 cm) chassis punch.

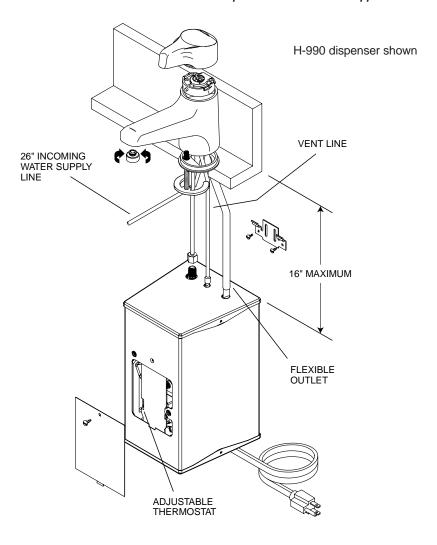
HOW YOUR HOT WATER DISPENSER WORKS

Water is electrically heated to near-boiling (190°F/88°C) in a compact tank that mounts under the sink. A thermostat maintains it at this approximate temperature. When you turn the handle, cold water enters the tank and forces hot water out of the faucet. The system is vented so the tank is not pressurized.

Due to the unique operation of your instant Hot Water Dispenser, you may experience a slight delay in the dispensing of water after the handle is actuated. This assures maximum water temperature and is not indicative of a problem with the unit.

Important:

Do not install this appliance in public areas or institutions where there is unsupervised access to this appliance.



SPECIFICATIONS

Capacity: 1/2 gallon (1.9L), up to 60 cups of 190°F (88°C) water per hour

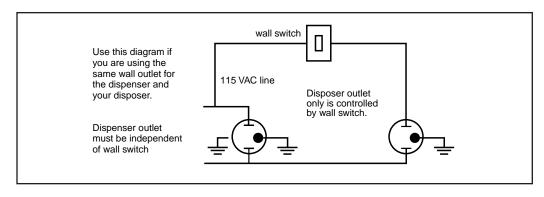
Electrical: 750 watts, 6.5 amps, 115 volts A.C. Grounding 3-wire cord and plug provided

Thermostat: Snap-action, adjustable from 160°F to 211°F (71° to 99°C). Factory pre-set at approximately 190°F (88°C)

Insulation: Meets UL 94HF-1 flammability specification

Valve: Rapid, self-closing Shipping weight: 7 lbs. (3.2 kg.)

ELECTRICAL WIRING



INSTALLATION INSTRUCTIONS

IF YOU WISH TO USE THE HOLE IN WHICH THE SPRAY HOSE IS LOCATED, FOLLOW THESE EASY STEPS:

- 1. Turn off water supply
- 2. Remove nut that connects spray hose at bottom of faucet.
- **3.** Remove nut that connects spray hose at bottom of washer flange in spray hole using ordinary wrench or basin wrench.
- 4. Plug faucet tube opening with either a 1/8" plug or a 1/4" cap (not supplied)

What if you don't use a sprayer hole?

You can cut a mounting hole through a stainless steel sink with a 1-1/4" (32mm) chassis punch. Rent or purchase one at your hardware or electrical supply store. Or, mount the Hot Water Dispenser's head in a 1-1/4" (32mm) hole drilled through your countertop with a hole saw. Don't attempt to drill a hole through a cast iron or porcelain covered sink unless you have the proper tools and skills.

2 STRAIGHTEN DISPENSER TUBES

There are two copper tubes exiting from the dispenser head, which are curved for easier packing and shipping. Straighten, holding the head down with one hand while working the tubes down slowly with your other hand. **See Caution, Step 9.**

3 INSTALL DISPENSER HEAD

H-990

- 1. Place dispenser assembly (without handle) thru sink hole.
- **2.** Place toggle on bolt from bottom, then the nut and tighten by bolt head located on top of the faucet. Note that the open area on the toggle is positioned around the copper lines and vent lines. Note that the toggle is mounted with the nut holder facing down.
- **3.** Hand tighten toggle bolt until faucet cannot easily be twisted from side to side. Torque on bolt should not exceed 30in. Lbs.

Note: Ensure toggle bolt head is seated in recess

H-770

- **1.** Place the dispenser head with #10-24 mounting screw and gasket attached down through the mounting hole. Then while an assistant holds the dispenser head in place, secure the head as shown in 3-2 and 3-3.
- **2.** Working from below the sink, place semi-circular metal mounting washer over the mounting screw.
- 3. Now, simply tighten.

GN/HC

- **1.** Remove wing nut from valve body for 1-1/4" (32mm) sink hole, stack 1-5/8" rubber washer, 1-5/8" stainless washer or 2-1/4" colored washer. For cast iron sink or hole greater than 1-1/4", stack 1-5/8" rubber washer with 2-1/4" stainless or 2-1/4" colored washer.
- **2.** Have someone hold the head assembly from above and, while working from under sink, slide the 2-1/4" fiber washer into place and tighten the assembly using the plastic wing nut.(A): Shroud (B): Set screw for adjusting head direction (C): countertop or sink 7/8" max (22mm) (D): Wing nut (E): 2-1/4" fiber washer (F): 1-5/8" rubber washer (G): 1-5/8" stainless washer or 2-1/4" colored washer
- **3.** Cast iron sink hole greater than 1-1/4" (32mm) (A): 2-1/4"SS or colored washer (B): 1-5/8" rubber washer (C): Fiber Washer (D): Wing nut **If desired**, the spout may be rotated 90° in either direction to allow the dispenser levers to be on the left or right side of the spout. To do this, remove shroud which snaps onto inner cover. Using small screwdriver, loosen set screw on left side of valve body and rotate spout in desired direction. **Do not pull spout up or out!** RETIGHTEN SET SCREW AND REPLACE SHROUD.

4 MAKE CONNECTION TO COLD WATER SUPPLY LINE

- **1.** The recommended connection can be made using a shutoff valve. This is a complex installation and should only be attempted by an experienced installer with the proper knowledge and tools.
- **2.** Where plumbing codes permit, a saddle valve (not supplied) can be used to supply water to the dispenser. If the saddle valve is to be used on copper pipe it is not necessary to pre-drill any holes. Simply follow the directions for "self-piercing attachments" included with the valve. (Attach the valve to a cold water supply line) **Note:** Saddle valves are susceptible to clogging.

A WARNING

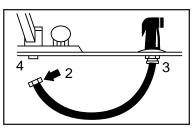
Electric Shock Hazard

Never use an electric drill to drill into water pipes. It can result in an electric shock. Use a cordless or non-electric hand drill.

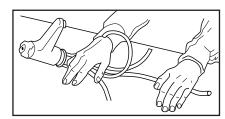
A CAUTION

Product Damage

Excessive use of paste or tape pipe sealants on water connections can clog small water passages.



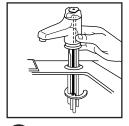


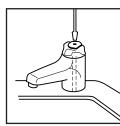




MODEL H-990







3 -1



3 -3

MODEL H-770







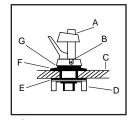
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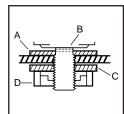
3 -2

3 -3

MODEL GN/HC



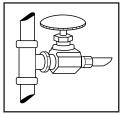


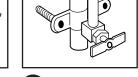


3-1

3 -2

3 -3





4 -1

4 -2

CONNECT WATER TO DISPENSER HEAD – H770, H990, GN

- **1.** Before you start open the shutoff valve and let a small amount of water run through it into the pan. This will flush the line of any sediment.
- 2. When connecting to a compression type fitting (tee or valve), remove the nut and ferrule (a rounded brass fitting) from the valve. Then place the nut followed by the ferrule over the end of the LONGEST copper tube coming from the dispenser head. (A): Nut (B): 1/4" copper tube (C): Ferrule
- **3.** Push the tube end all the way into the valve opening, or tee fitting. Hold the tube end in position and push the ferrule down as far as it will go. Now, tighten the nut over the ferrule with your fingers. Make sure the tube end is going straight into the hole. Then tighten the nut firmly with a 1/2" wrench. Do not overtighten.

CONNECT WATER TO DISPENSER HEAD - H/C ONLY

The HC dispenser has two incoming 1/4" water lines. One line (color coded white) supplies water to the tank for 190°F(88°C)* hot water. The other line (no color code) supplies water from the water supply line. The two lines may be connected through two (2) tees to a common water supply line (see diagram A) or if a water chiller is used, the unmarked line is connected to the chiller (see diagram B). Shown are typical installations with tees and shut-off valve.

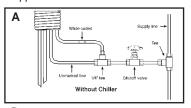
A. Water connection without a chiller

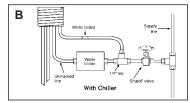
Connect both the white coded and the unmarked 1/4" copper line, thouth a 1/4" tee to a supply line tee. Locate shutoff valve to shut off flow to dispenser.

B. Water connection with water chiller

Connect the white coded 1/4" copper line to a supply line tee.Connect the unmarked 1/4" copper line to the water chiller outlet. Connect chiller to supply line tee. See chiller manufacturer's instructions.

*Approximate





6 ATTACH DISPENSER HANDLE (model H-990 only)

Place handle over top of dispenser assembly. Align hole on inside front of handle with black peg. Use a downward and rolling movement to the back until the handle "clicks" into place. The handle can be removed by pressing the release button on the back of the handle and tilting the handle down and forward.

7 TEST YOUR WATER CONNECTION

- **1.** Open the shutoff valve all the way and see if your connections are watertight.
- **2.** Place a pan under the unattached tubes and turn the handle on the dispenser. You should see water coming out of the small copper tube. Let the water run for a few seconds to flush out the lines, then turn the faucet off.

A CAUTION

Product Damage

Do not plug unit in until tank is filled with water and water flows from spout.

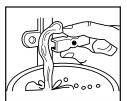
8 MOUNT TANK

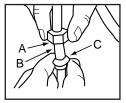
- **1.** Mount the tank on either a back or side wall. Start by holding tank up and making sure the tubes reach it. When you have decided where you want to mount the tank, mark the position of the top of the tank on the wall with a pencil. Allow sufficient space under tank for drain access.
- **2.** Position the metal mounting bracket about one inch (25mm) below the mark on the wall and attach it through the slots with the two screws provided. The use of (2) #8 plastic anchors (not provided) is recommended for mounting screws in any material other than wood.
- **3.** Hang the tank on the bracket. There is room to adjust the bracket, if necessary.

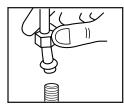
A CAUTION

Product Damage

- Do not connect electric power until tank is filled with water (step 10).
- Failure to do so may damage heating element or trip the thermal over load protector.







5 -1

5 -2

5 -3

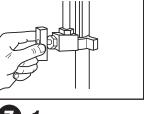


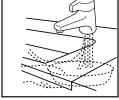


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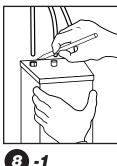
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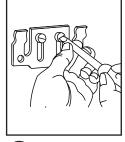


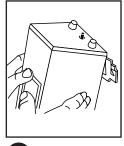


7-1









8

8 -3

9 MAKE FINAL PLUMBING CONNECTIONS

A CAUTION

- **Product Damage** Make sure bends in all tubes are smooth and unkinked before you proceed.
- Make sure all tubes are not twisted, pinched or blocked.
- Do not extend the two water lines to the tank beyond the 16" (40cm) provided.
- Pinched or blocked water lines may cause access pressure and damage the dispenser tank.
- 1. Slip plastic nut over 1/4" copper inlet tube. Insert tube into threaded inlet fitting until you feel it stop. Be sure copper tube is straight.
- 2. Align plastic nut and tighten by hand. Use caution to avoid cross-threading nut. Next, use a small adjustable wrench to slowly tighten nut 1-2 turns past finger tight until tube is snug. If tube is not snug after two full turns, remove nut, and check that tube is fully seated. Then retighten nut NOT MORE THAN THREE (3) FULL TURNS past finger tight.

A CAUTION

Product Damage

Overtightening the plastic nut can break the inlet fitting.

- 3. Connect clear plastic vent line to smallest (center) fitting by squeezing hose clamp with pliers, positioning clamp/hose on fitting, and releasing to secure.
- 4. Finally, connect 7/16" flexible outlet tube to remaining fitting by squeezing hose clamp with pliers, positioning clamp/hose on fitting, and releasing to secure. Note: Ensure that the flexible plastic vent and outlet tubes are not twisted, pinched or blocked.

FILL TANK

- 1. Make sure shutoff valve is turned on. Then turn handle, left or right, or up or down, and hold open.
- 2. After about one minute, tank will fill and water will flow from dispenser spout. Check all water connections for leaks. If water leaks, check all fittings and tighten if necessary.

A CAUTION

Product Damage - DO NO PLUG IN YET

Do not plug unit in until tank is filled with water and water flows from spout.

A WARNING

Electric Shock Hazard - This Appliance Must be Properly Grounded.

- Do not alter or remove the ground pin from the power supply cord.
- Using an ungrounded appliance can result in serious injury or death from electric shock.

This appliance must be grounded. In the event of a malfunction or breakdown, grounding provides a path of least resistance for electric current to reduce risk of electric shock. This appliance is equipped with a cord having an equipment grounding conductor and a grounding pin. The plug must be connected to an appropriate outlet that is properly installed and grounded in accordance with all local codes and ordinances.

- · Improper connection of the equipment-grounding conductor can result in a risk of electric shock. Check with a qualified electrician or serviceman if your are in doubt as to whether the appliance is properly grounded.
- Do not modify the plug provided with the appliance. If it will not fit the outlet, have a proper outlet installed by a qualified electrician.
- Once the electrical cord is plugged in, it will take 10 to 15 minutes for the water to reach its 190°F (88°C) (approximate) temperature.
- · During the heating cycle you can expect to hear gurgling or hissing sounds within the tank. This is normal. The unit may boil briefly on initial start-up until the temperature sensing system reaches equilibrium. This is also normal. Boiling is indicated by steam or hot water spurting from the dispenser spout without actuating the dispenser handle.
- · If your dispenser is boiling, carefully activate the dispenser handle for about 20 seconds to draw off that steaming hot water and allow the water in the tank to reheat. Repeat this step one or two more times. Do not allow the dispenser to continue to boil.
- · If the dispenser continues to steam or boil it will be necessary to adjust the thermostat slightly to decrease the water temperature. Refer to temperature adjusting procedure and warnings.

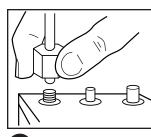
High Altitudes: Because the boiling point of water is reduced at higher elevations (e.g. Denver, Colorado) it may be necessary to decrease the temperature setting to keep the unit from boiling. Refer to temperature adjusting procedure and warnings.

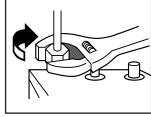


PLUG IN THE UNIT

A CAUTION

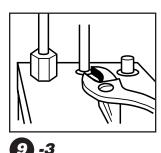
Product DamageDo not plug unit in until tank is filled with water and water flows from spout.

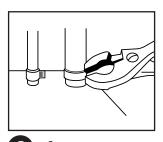


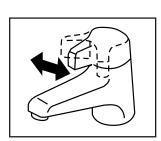


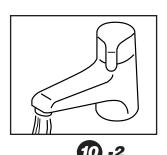












ADJUSTING TEMPERATURE

A WARNING

Electric Shock Hazard

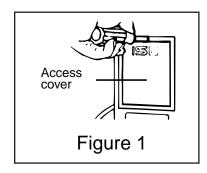
• To prevent electrical shock, disconnect power before removing access cover to adjust or service the thermostat.

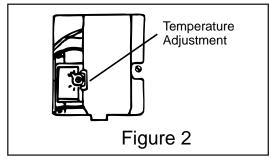
Scalding Hazard

• Do not allow water to boil. May result in severe burns.

Fire / Product Hazard

• Do not remove or alter the thermal overload protector. May result in product damage or fire.





The thermostat is factory pre-set at approximately 190°F (88°C). If the temperature needs to be adjusted follow the steps outlined below.

- 1. Unplug or disconnect the unit from the electrical supply.
- 2. Remove the screw securing the access cover to the unit (see Figure 1).
- Insert a small flat blade screwdriver into the thermostat adjusting screw (see Figure 2).
- 4. Turn the screw 1/2 dial marker clockwise to increase the temperature (1/2 dial marker counterclockwise to decrease water temperature).
- 5. Replace access cover and screw.
- 6. Reconnect the electrical supply.
- 7. Draw three (3) cups of water and allow the unit to reheat.
- Check the water temperature and repeat the process if necessary.Do not allow the unit to boil.

DRAINING THE TANK

- 1. Unplug or disconnect the unit from the electrical supply.
- Allow water to run from the dispenser head until cool (approximately 1/2 gallon).
- 3. Shut off the supply of water to the dispenser.
- 4. Place a drain pan or other similar container underneath the tank.
- 5. Remove the drain cap located on the bottom of the tank and drain water (approximately 1/2 gallon).
- 6. Replace drain cap. Do not over tighten.
- 7. Reconnect the water supply.
- Actuate dispenser head handle until water flows from the dispenser head.
- 9. Reconnect the electrical supply.

SEASONAL STORAGE

Seasonal storage of the unit is recommended if the unit is to be left unattended for long periods of time (typically more than two weeks) particularly if the unit could be exposed to freezing temperatures.

- 1. Unplug or disconnect the unit from the electrical supply.
- Allow water to run from the dispenser head until cool (approximately 1/2 gallon).
- 3. Shut off the supply of water to the dispenser.
- 4. Place a drain pan or other similar container underneath the sink.
- 5. Remove the drain cap located on the bottom of the tank and drain water (approximately 1/2 gallon).
- 6. Replace drain cap. Do not over tighten.

A CAUTION

Product Damage

Remember - do not reconnect the electrical supply unless the tank is completely filled with water and water flows from the dispenser head. Reference **step 10** in these installation instructions.

CLEANING

Use only a soft cloth and warm soapy water to clean the dispenser head and tank. The use of harsh cleaning agents containing acids, alkalines and organic solvents can destroy the dispenser head and tank finishes.

TROUBLESHOOTING GUIDE

Problem	Possible Cause	What to do
Water is not hot	Unit not plugged in or electric outlet is inoperative.	Check that the unit is connected to a properly grounded electric outlet and that circuit breakers or fuses are in good order.
	Thermal overload protector has tripped	Contact your In-Sink-Erator dealer for service.
Water too hot or not hot enough	Thermostat not adjusted to your taste	Adjust thermostat. See Adjusting Temperature.
Water dripping from the spout or vent:	Low water pressure preventing the expansion chamber from draining properly	Unplug the unit. If the dripping stops within a few minutes, your water pressure may not be sufficient to properly drain the expansion chamber.
When heating		Check that there are no obstructions in the water line reducing the supply pressure below 20 pounds per square inch. For example: a poorly mounted saddle valve, a clogged water filter (not supplied), or a partially opened shut-off valve (not supplied).
Constantly	Construction debris from water line obstructing the faucet valve seat causing a slow water leak.	Contact your In-Sink-Erator dealer for service.
Water comes out the vent instead of the spout.	Outlet tube is blocked Flow straightener is blocked	Check that the outlet tube is not kinked, twisted or pinched.Remove flow straightener from end of spout by twisting counterclockwise. Remove any debris or scale accumulation. Soak in a mild vinegar solution if necessary to loosen scale deposits. Reinstall flow straightener by threading it on clockwise.
Water and steam spits forcefully from spout without turning on the dispenser faucet.	Unit is boiling	Reduce water temperature. See Adjusting Temperature.
Water taste or odor.	Normal start-up	Under some water conditions your unit may need a few days to "season". Open the dispenser faucet and run until the water is cold. Allow the unit to reheat. Repeat several times per day over 3-4 days to season the unit.
	Chlorine or contaminants in the incoming water supply may be more noticeable in hot water	Provide a suitable drinking water filter. Contract your local water authority for suggestions.
Water does not flow immediately after the actuating handle.	Normal functioning of the unit	

IN-HOME SERVICE WARRANTY

WARRANTY DURATION: In-Sink-Erator provides a full one (1) year warranty from the date of manufacture or the date of purchase with supporting receipt. If the unit is professionally installed, the warranty is one (1) year from the date of installation with supporting receipt.

WARRANTY COVERAGE: The In-Sink-Erator In-Home-Service warranty provides replacement parts and labor to correct defects in material or workmanship in the dispenser. If warranty service is required, contact the nearest authorized In-Sink-Erator Service Center. Service Center personnel will repair or replace the unit in your home at no cost to you.

This warranty gives you specific legal rights and you may have other rights, which vary from state to state. If the manufacturer determines that the unit should be replaced rather than repaired, the warranty on the replacement unit will be limited to the unexpired term of the original warranty. No other express warranty, written or oral, applies.

Before initiating warranty service, please consult these installation instructions to ensure the unit is properly installed and the troubleshooting guide. If the unit still does not function properly, contact the In-Sink-Erator Answerline at 1-800-558-5700 or write to In-Sink-Erator Service Department • 4700 21st Street • Racine, Wisconsin 53406 USA.

When writing or calling, give the following information: date, your name, address and phone number. Describe the product by model number, serial number, date purchased, place purchased, service history (include name and address of service agent) and clearly describe the problem and service required.

Note: The foregoing warranty does not apply to damage or inoperation resulting from accident, alteration, misuse, abuse, improper installation, installation not in accordance with these instructions or local electrical and/or plumbing codes or to product which shows evidence of having been started up "dry". We do not assume any responsibility for consequential damage.

A CAUTION

Property Damage

- Do not plug unit in until tank is filled with water and water flows from spout.
- To avoid water damage due to leakage, replace any cut, loose or split plastic tubing.

Important:

Do not install this appliance in public areas or institutions where there is unsupervised access to this appliance.





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