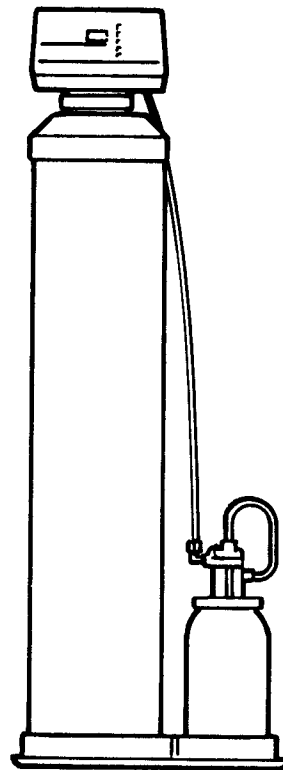
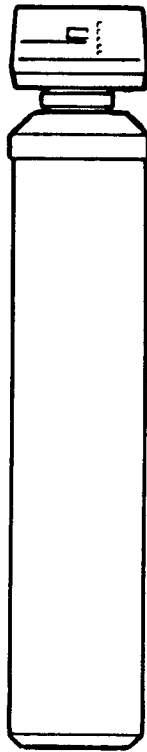


**SEARS**

# Kenmore

## Water Filters



**INSTALLATION MANUAL**

**CAUTION:**

Read All Safety Guides Before You Start to Install Your Filter

(Use plastic bag and tie provided, to hang manuals nearby the filter for future reference).

Sears, Roebuck and Co., Chicago, IL 60684 U.S.A.

## INTRODUCTION

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This manual gives you the steps needed to install your new Sears Kenmore Water Filter. To better understand how the water filter is installed, and to know what you will need, please read this entire manual before beginning.

After you have installed the water filter, the included Owners Manual tells you how to start, program, operate and maintain it. The owners manual also has the product warranty, and a listing of repair parts available from Sears.

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Your Sears Water Filter will improve your water supply as described in your owners manual. It will not soften hard water, or remove iron (except for the Automatic Iron Filter that does remove iron). The filter will not purify contaminated water, or make other unsafe water safe to drink.

**NOTE:**

Sears recommends installing a water softener **AFTER** an Automatic Iron Filter. In addition to softening the water, the water softener will remove iron that may escape through the iron filter.

Sears sells a complete line of water treating equipment to correct various water problems. To be sure you have the proper type and size equipment, you must have your water tested. Your Sears store can give you water test results for hardness, iron and acidity, and tell you what equipment you need. Simply take at least a 4 oz. sample of your water to Sears, and they will test it while you wait. To test for other elements, a qualified testing laboratory must test the water. **IF YOU NEED HELP TO GET YOUR WATER TESTED, OR IF YOU HAVE OTHER QUESTIONS ABOUT YOUR WATER, ASK AT YOUR SEARS STORE, OR CALL SEARS WATER-LINE . . . 1-800-426-9345.**

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## 1A.

## SAFETY GUIDES

▲ Read all steps, guides and rules carefully before installing and using your new water filter. Follow all steps exactly to correctly install. Failure to follow them could cause personal injury or property damage. Reading this book will also help you to get all of the benefits from your water filter.

▲ Your water filter will improve your water as described in your owners manual. It will not purify polluted water, or make it safe to drink. Also see the specifications page in the owners manual.

▲ Check with your local public works department for plumbing, electric and sanitation codes. You must follow their guides as you install your filter.

▲ Use only LEAD-FREE SOLDER AND FLUX, as required by Federal and State codes, when installing soldered copper plumbing.

▲ Protect the filter and piping from freezing. Damage from freezing voids the filter warranty. See how to protect from freezing in your owners manual.

**PLEASE READ AND COMPLY WITH THE FOLLOWING GUIDES TO PREVENT DAMAGE TO THE FILTER OR OTHER PROPERTY, PERSONAL INJURY, OR POSSIBLE FATAL SHOCK.**

▲ THIS FILTER WORKS ON 24 VOLTS ONLY. BE SURE TO USE THE TRANSFORMER INCLUDED, AND PLUG IT INTO A 120V OUTLET.

▲ Unplug the transformer right away if the power cable should become damaged or frayed. Make repairs before plugging back into the power outlet.

▲ Always unplug the filter from electrical power before removing outer valve covers.

# SECTION 1

## BEFORE INSTALLING CHECKS AND TESTS

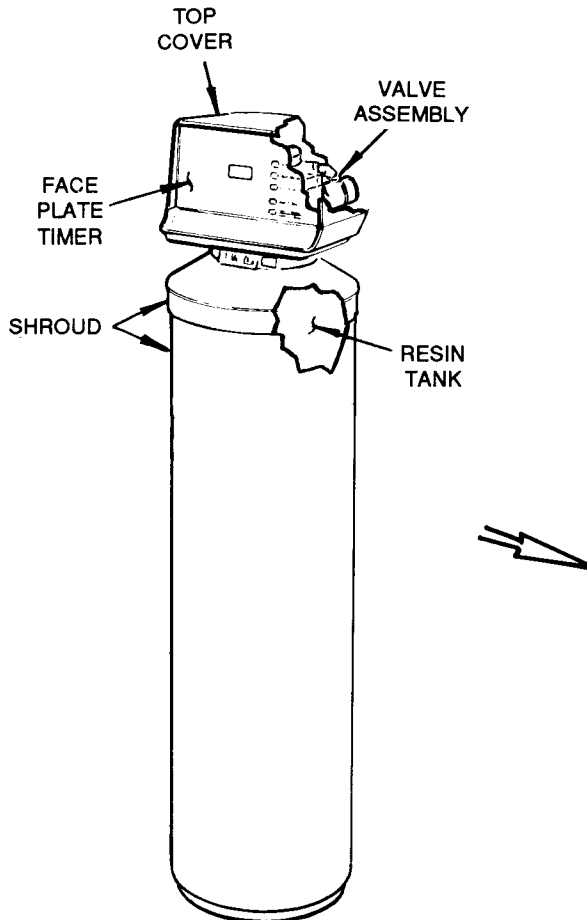
### 1B. UNPACKING THE WATER FILTER

Packed with the filter are installation and owners manuals, an electrical transformer, and a bag of several small parts. Automatic Iron Filter models also include a feeder valve and the other parts shown below. You will use all of these parts while installing the filter. So you don't lose any parts, keep in a safe place until you are ready to use them. Remove the filter from the master carton. Discard all cardboard and foam packing pieces.

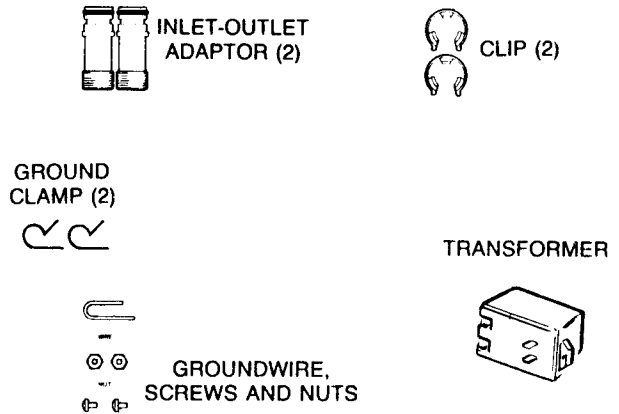
Use care when handling the filter. DO NOT turn upside-down. DO NOT drop, or set on sharp objects that could make a hole in the bottom. The water filter is heavy and to avoid damage, or personal injury, do not try to lift it or move more than necessary. See page 13, when you are ready to move it into installation position.

Check the filter for shipping damage. If you find damage, report it to your Sears store.

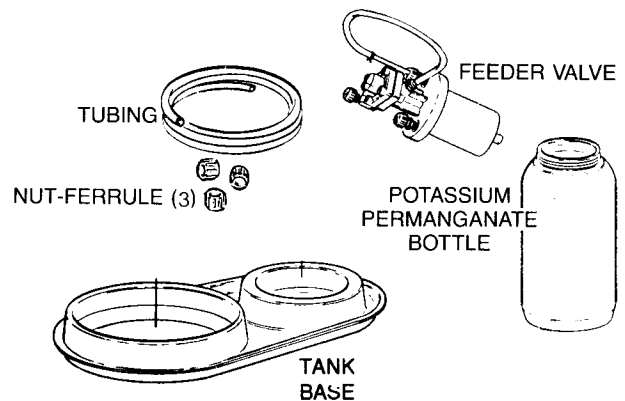
#### PARTS DESCRIPTIONS



#### SMALL PARTS



#### OTHER PARTS OF AUTOMATIC IRON FILTER ONLY



### 1C. WATER SYSTEM TESTS

HAS YOUR WATER SUPPLY HAD A CHEMICAL ANALYSIS? Please see page 2.

**CHECK YOUR WATER PRESSURE** — For your filter to work right, a water pressure of no lower than 20 pounds per square inch (psi) is needed in the house water pipes. The highest pressure allowed in the water pipes is 125 psi. If pressure is over 125 psi, buy and install a pressure reducing valve in the water inlet pipe to the filter.

**NOTE:**

If water pressure during the day is 100 psi or more, pressure during the night may go over 125 psi . . . Adding a pressure reducing valve may reduce the flow.

If you have a well water system, look at the pressure gauge to find the water pressure. Call your local water department if you have city water. They will tell you what the water pressure is where you live.

**CHECK YOUR WATER FLOW RATE** — A water flow of 5 1/2 to 7 gallons per minute is needed. A lower flow will keep your filter from working as well as it should. To make an easy check of your flow rate, do the following. You will need a 1 gallon container (can, jar, pail, etc.).

1. Fully open 2 cold water faucets close to the point water enters the house.
2. With both faucets open, fill the gallon container at 1 faucet while looking at a watch or clock to see how many seconds it takes.
3. Empty the container and go to the second faucet (be sure BOTH faucets are still on). Fill the gallon container at the second faucet and see how many seconds it takes.
4. Turn off both faucets. Now add the number of seconds it took to fill the container at both faucets.
5. A total of 35 seconds, or less, means the system flow rate is good.

FOR FUTURE REFERENCE, ENTER RESULTS OF YOUR WATER SYSTEM TESTS IN THE "FACTS AND FIGURES TO KEEP" TABLE IN YOUR OWNERS MANUAL.

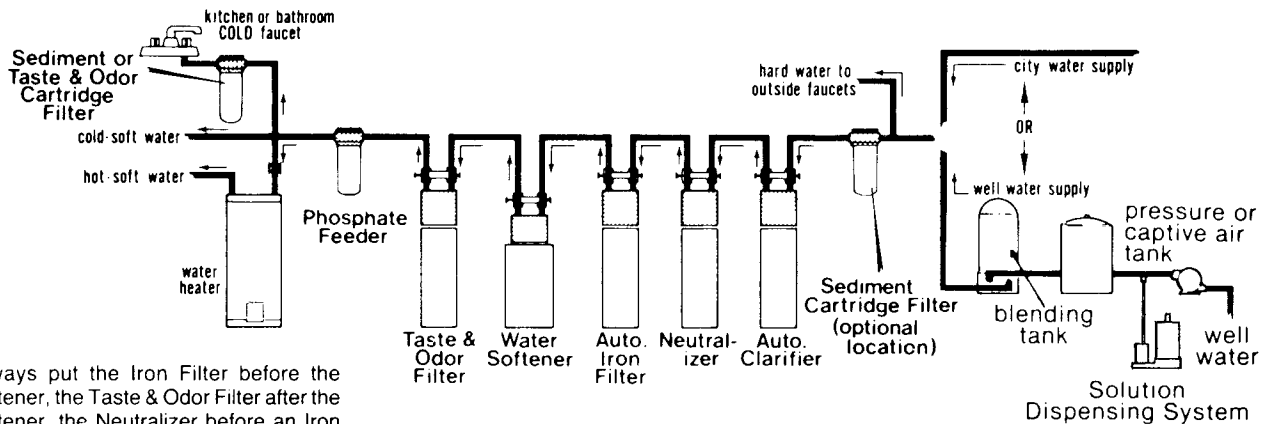
## 2A. WHERE TO INSTALL THE FILTER

Think of the following points as you choose a place to put your filter (See FIG. 1).

- Place as close as possible to the pressure tank (well water) or water meter (city water).
- Place as close as possible to a water drain such as a floor drain, laundry tub, sump or standpipe.
- Connect to the house main water pipe BEFORE THE WATER HEATER. Temperature of water going through the filter must not be more than 120 F (49 C).
- If a water softener, or other filter is installed, locate in the order shown in FIG. 1 below.
- DO NOT install in a place where the filter could freeze. Freeze damage voids the warranty by Sears, Roebuck and Co.
- Put the filter in a place water damage is least likely to occur if it develops a leak. Sears or the manufacturer will not repair or pay for water damage.
- A 120V electrical outlet, to plug the transformer into is needed within 10 feet of the filter (the filter has a 10 foot power cable). Be sure the outlet and transformer are in an inside place, to protect from wet weather. So the filter always has electrical power, use a continuously "live" outlet, that cannot be accidentally switched off.
- When installing in an outside location, you must take the steps necessary to assure the filter, installation plumbing, and wiring, are as well protected from the elements, contamination, vandalism, etc., as when installed indoors.
- Keep the filter out of direct sunlight. The sun's heat can melt plastic parts.

**FIG. 1 THE PROPER ORDER TO INSTALL WATER TREATING EQUIPMENT**

(Shows sequence of equipment only — seldom, if ever, would all items be needed)



\*Always put the Iron Filter before the softener, the Taste & Odor Filter after the softener, the Neutralizer before an Iron Filter, etc., as shown.

## 2B. TOOLS, PIPE AND FITTINGS, OTHER MATERIALS NEEDED

You must first decide how to run in and out pipes to the filter. Look at your house main water pipe at the point you will connect the filter. Is the pipe soldered copper, glued plastic, or threaded galvanized or brass? What is the pipe size? What kind of pipe and fittings is it easiest for you to work with, and what tools do you have?

Now look at the common plans for in and out piping on page 9. Select the drawing best for you and use it as a guide to plan what materials you will need. As you plan your in and out piping, keep in mind the following check list. Then get all the materials you will need before you start.

- ✓ In and out pipes to the filter must be at least 3/4 in. size. Some local codes may tell you to use no less than 1 in. pipe size (see note, below right).
- ✓ Use copper, brass, or galvanized pipe and fittings. Some codes may also allow CPVC plastic pipe.
- ✓ Copper and galvanized pipe corrode fast when connected together. Use pipe and fittings of the same material.
- ✓ You can buy adaptors to go from a copper or threaded main water pipe to CPVC in and out pipe.
- ✓ Sears has kits and bypass valves you can buy to help make installing your filter easier . . . see page 9.
- ✓ ALWAYS install a bypass valve or valves. Either use 3 shut-off valves, or 1 of Sears special valves. Bypass valves let you turn off water to the filter, but still have water in the house pipes.

- ✓ A drain hose is needed to carry away backwash discharge water, from the filter, to a drain point (see step 1 on page 14). The filter is factory equipped with a drain fitting that accepts either 5/8" inside diameter (I.D.) hose onto a barb, or a length of 5/8" minimum I.D. garden hose. You can buy a 15 ft. length of garden hose from Sears, Stock No. 42-3431.

### NOTE:

Flexible hose is not allowed by some codes. If a rigid drain is required, most hardware stores carry adaptors, garden hose on 1 end, and sweat or pipe thread on the other.

- ✓ TOOLS NEEDED:—Common and cross point (Phillips) screw drivers, slip joint pliers and a tape measure or rule. ALSO . . .

. . . for SOLDERED COPPER — tubing cutter, propane torch, solid-core LEAD-FREE solder, paste flux, emery cloth, sandpaper or steel wool.

. . . for THREADED PIPE — hacksaw or pipe cutter, pipe wrenches, pipe threading tool, pipe joint compound approved for use on potable water.

. . . for CPVC PLASTIC — hacksaw, adjustable wrench, solvent cement approved for use on potable water, primer.

### NOTE, FOR 1 INCH PLUMBING CONNECTIONS

. . . SOLDERED COPPER — Buy 2 sweat adaptors (1 in. female thread x 1 in. sweat) and plumb directly to the inlet-outlet adaptors or bypass valve. Threads on the inlet-outlet adaptors and bypass valve are 1 in. pipe thread . . . see (A) (B) and (C). Do not use the installation kit, Sears Stock No. 42-3441, or the flexible connectors, Sears Stock No. 42-3440.

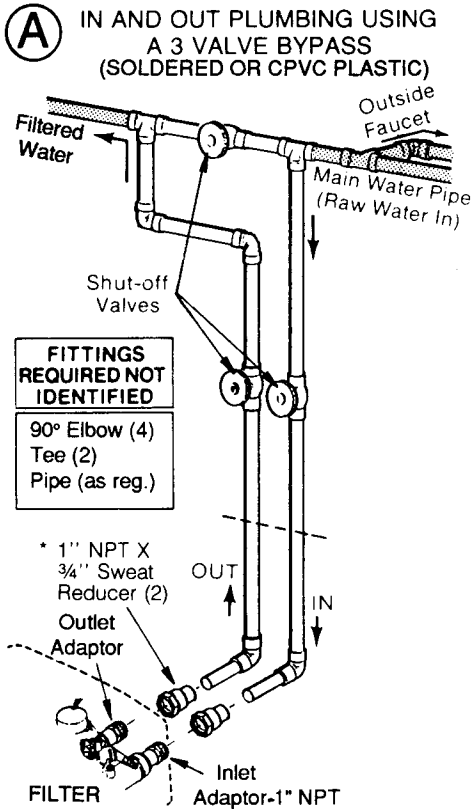
### CAUTION:

DO ALL SOLDERING BEFORE CONNECTING SWEAT ADAPTOR TO INLET-OUTLET ADAPTORS OR BY-PASS VALVE.

. . . THREADED PIPE — Use a 1 in. threaded straight connector in place of the reducer fitting shown in (D).

## 2C. TYPICAL IN AND OUT PIPES TO FILTER

**FIG. 2**



### SEARS KITS AND VALVES TO MAKE INSTALLING YOUR FILTER EASIER

**1** BYPASS VALVE (Plastic)  
Sears Stock No. 42-3437

One, easy working valve takes the place of 3 separate valves.

**2** BYPASS VALVE (Brass)  
Sears Stock No. 42-3436

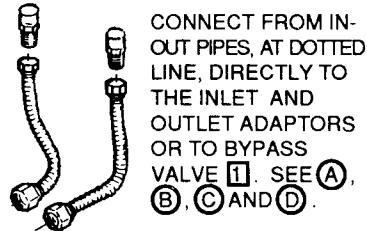
**3** INSTALLATION KIT  
Sears Stock No. 42-3441

USE AS SHOWN IN (C), OR TO REPLACE THE 1" X 3/4" SWEAT ADAPTORS IN (A) AND (B).

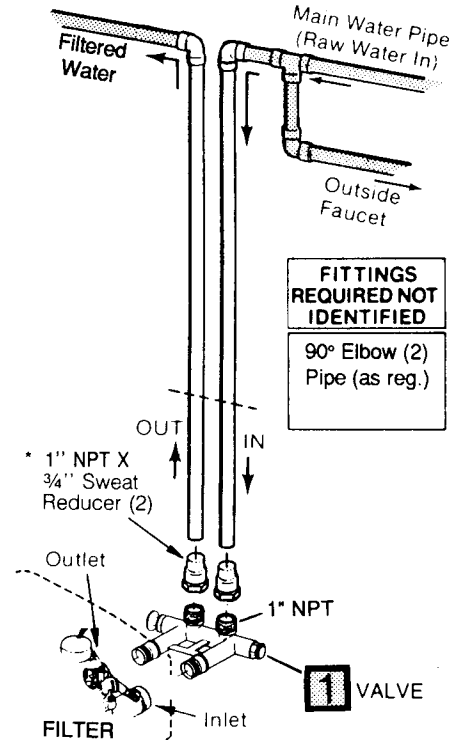
**FLEXIBLE CONNECTORS**  
Sears Stock No. 42-3440

Allows easy hook up even if pipes are not exactly aligned.

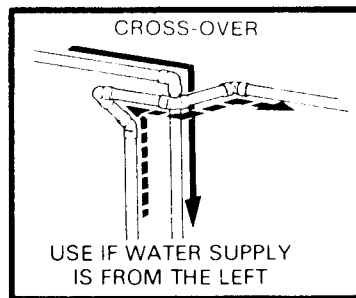
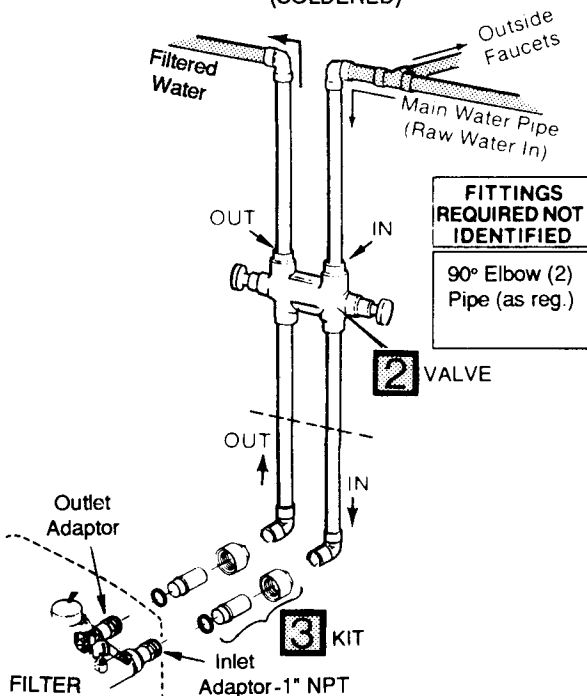
(CHECK LOCAL PLUMBING CODES)



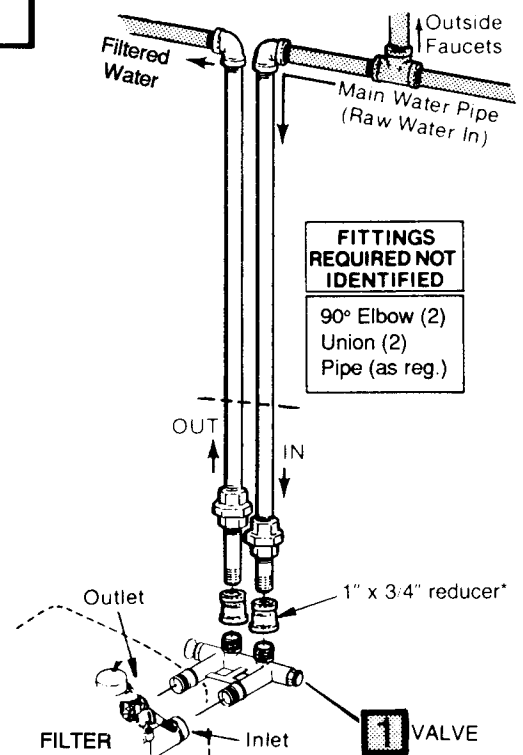
**(B) IN AND OUT PLUMBING USING SEARS SPECIAL PLASTIC BYPASS VALVE (SOLDERED OR CPVC PLASTIC)**



**(C) IN AND OUT PLUMBING USING SEARS SPECIAL BRASS BYPASS VALVE (SOLDERED)**



**(D) IN AND OUT PLUMBING USING SEARS PLASTIC BYPASS VALVE (THREADED PIPE)**



## 3A. ASSEMBLE FEEDER VALVE AND BOTTLE, CONNECT TO MINERAL TANK

IF INSTALLING CLARIFIER, NEUTRALIZER AND TASTE & ODOR FILTERS, SKIP THIS PAGE AND GO TO PAGE 11.

1. At the location you have chosen to install the filter, lift and set the mineral tank assembly onto the larger end of the base (FIG. 3).

### CAUTION:

BE CAREFUL WHEN YOU LIFT THE TANK, AS IT IS HEAVY. **DO NOT** LIFT BY THE VALVE OR VALVE COVERS.

2. Check the feeder valve to be sure the large o-ring seal is in place on the underside. Then remove the cap from the bottle and carefully turn the valve into the bottle. After the o-ring just touches the top of the bottle, tighten another 1/8 turn. **DO NOT OVERTIGHTEN OR THE BOTTLE WILL DEFORM AND LEAK.**

### WARNING:

**HANDLE THE BOTTLE CAREFULLY. THE POWDER (POTASSIUM PERMANGANATE) IN THE BOTTLE STAINS DEEPLY. KEEP IT AWAY FROM CHILDREN.**

### NOTE:

The bottle is only partly filled with powder (about 6 lbs.). The empty part of the bottle is needed so it can fill with water to dissolve the powder.

3. Shake the bottle to level the powder. Then set the bottle and feeder valve assembly into the base, next to the mineral tank (FIG. 3). You can turn the base so the bottle is on either side of the tank.
4. Remove the filter top cover (held in place with 4 screws).
5. Take the 4 ft. length of 5/16" O.D. plastic tubing and connect it to the feeder valve, and to the nozzle/venturi housing on the filter (FIG. 4). Tighten the nut-ferrules as tight as you can with your fingers.
6. Carefully replace the top cover, aligning with the face plate, and install 4 screws.

FIG. 3

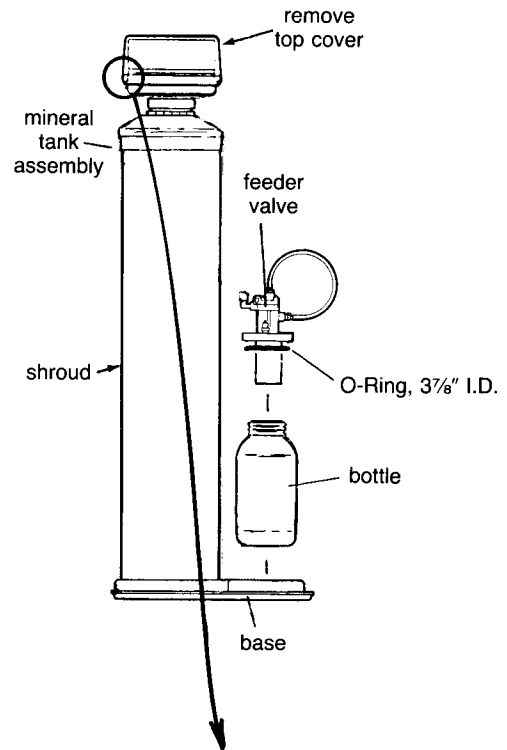
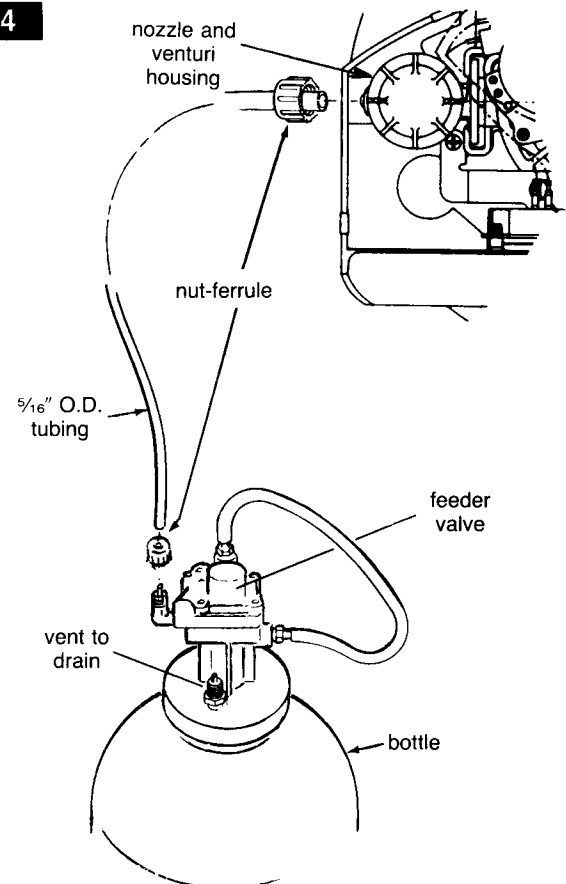


FIG. 4



# SECTION 4

# STEP BY STEP GUIDES TO INSTALL

## 4A. ASSEMBLE INLET-OUTLET ADAPTORS, OR PLASTIC BYPASS VALVE

1. Close the shut-off valve on the house main water pipe, near the water meter or pressure tank, to turn off the water.
2. Shut off the gas or electric supply to the water heater.
3. Open the highest and lowest water faucets in your house to let water drain from the pipes. Close faucets after water has drained.
4. **INSTALL THE INLET AND OUTLET ADAPTORS OR SEARS BYPASS VALVE. STOCK NO. 42-3437 (FIG. 6 AND 7).**

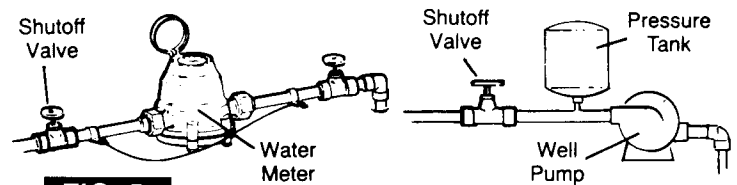


FIG. 5

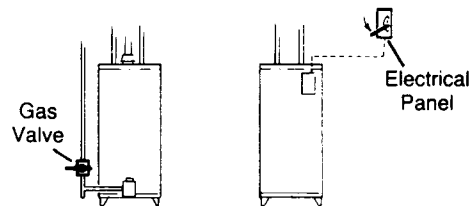
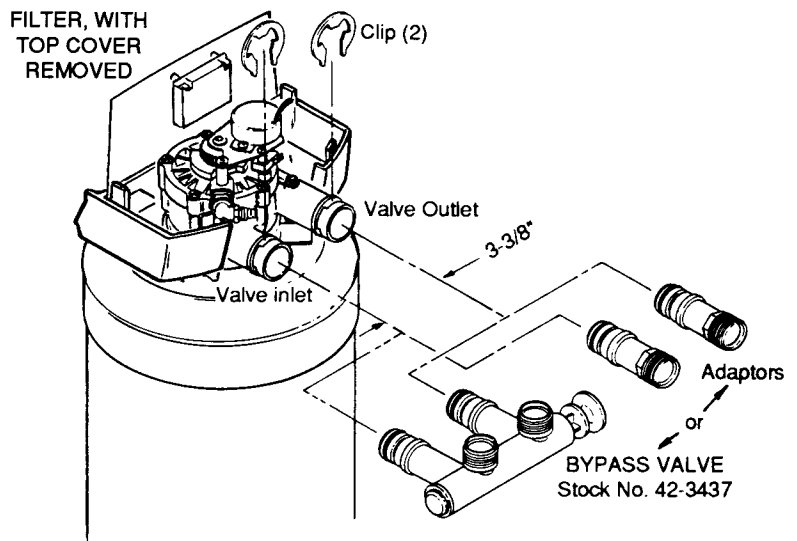


FIG. 6

INSTALLING INLET - OUTLET ADAPTORS OR BYPASS VALVE



NOTE:  
TURN BYPASS VALVE UPSIDE DOWN TO CONNECT TO FLOOR LEVEL PLUMBING

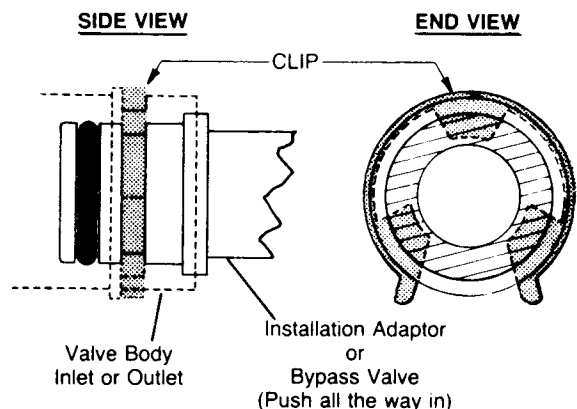
### NOTE:

If you will install the bypass valve (use following steps a and c), the adaptors are not used. If you do not install the bypass valve, you must use the adaptors (use following steps a and b).

- a. Visually check and remove any foreign materials from the valve inlet and outlet ports (FIG. 6).
- b. **INLET AND OUTLET ADAPTORS** (Adaptors and clips are on the cardboard liner). Push the adaptors into the valve inlet and outlet ports as far as they will go. Both adaptors are the same and fit either valve port. **SNAP THE 2 LARGE HOLDING CLIPS INTO PLACE FROM THE TOP DOWN AS SHOWN. CAUTION . . . BE SURE THE CLIPS SNAP FIRMLY INTO PLACE SO THE ADAPTORS WILL NOT PULL OUT . . . GO TO PAGE 12.**
- c. **BYPASS VALVE STOCK NO. 42-3437**  
If not already done, put a light coating of silicone grease or Vaseline on the bypass valve o-rings.

Push the bypass valve into the filter valve as far as it will go. **SNAP THE 2 LARGE HOLDING CLIPS INTO PLACE, FROM THE TOP DOWN AS SHOWN . . . CAUTION . . . BE SURE THE CLIPS SNAP FIRMLY INTO PLACE, SO THE BYPASS VALVE WILL NOT PULL OUT. GO TO PAGE 13.**

FIG. 7



## 4B. INSTALL 3-VALVE BYPASS, OR SINGLE BRASS BYPASS VALVE

### 1. INSTALLING 3 VALVE BYPASS, OR SEARS BYPASS VALVE, STOCK NO. 42-3436, AND PIPES (FIG. 8)

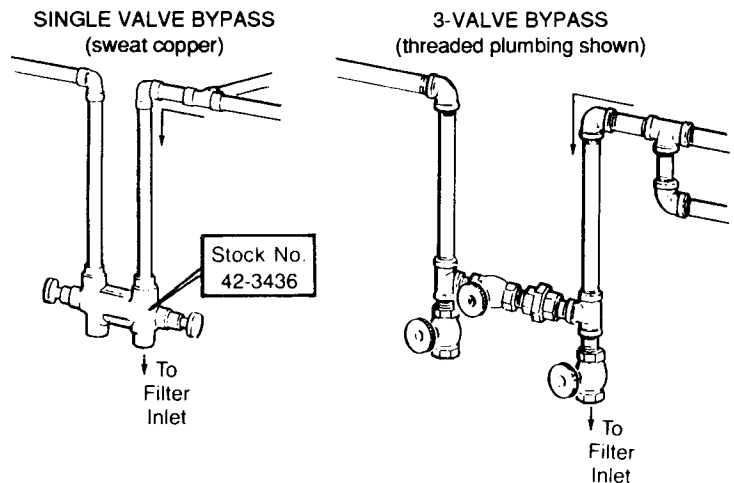
- a. Cut the house main water pipe where you will connect the filter. Loosely put together pipe, fittings, and the 3 valves or Sears special bypass valve. Place valve(s) within easy reach.

#### IMPORTANT:

WHEN LOOKING AT THE FRONT OF THE FILTER, THE INLET IS ON THE RIGHT SIDE. IF WATER IN YOUR HOUSE MAIN WATER PIPE RUNS FROM LEFT TO RIGHT, BE SURE TO USE A "CROSS-OVER" AS SHOWN ON PAGE 9.

- b. When all pipe, fittings and valves make a good fit together, tighten all threaded joints (use pipe dope on outside threads), or solder.

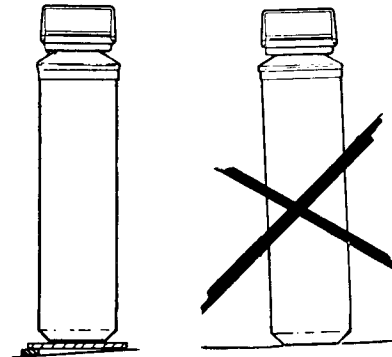
**FIG. 8** BYPASS VALVES



## 4C. LOCATE FILTER AND CONNECT PIPES

### 1. MOVE THE FILTER INTO PLACE

Carefully rock the filter, back and forth, and move into position. So the filter stands straight, be sure the surface it sets on is level and smooth. If needed, put a piece of 3/4" plywood under the filter. Then put spaces under the plywood to level the filter. **DO NOT PUT SHIMS OR SPACERS DIRECTLY UNDER THE TANK, (OR UNDER THE AUTOMATIC IRON FILTER TANK BASE), WITHOUT THE PLYWOOD.** THE FILTER'S WEIGHT MAY CAUSE THE OUTER SHROUD, OR THE TANK BASE, TO BREAK OR PUNCTURE.



### 2. CONNECT THE FILTER

Read the IMPORTANT note on page 12. Then, measure, cut (thread if needed) and put all pipe and fittings together up to the main water pipe, or to the bypass valve(s) installed on page 12.

#### NOTE:

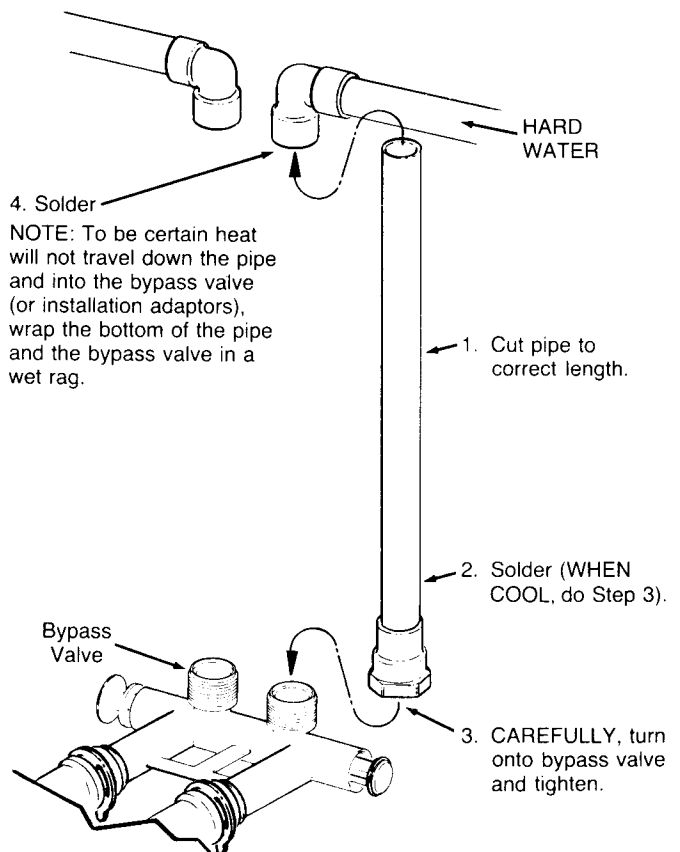
- Include adaptors, reducers, union fittings, \*flexible connectors, installation kit, etc., as needed.
- Cut pipe lengths exact for correct aligning, and to prevent stress on the filter valve.
- Use pipe joint compound or Teflon tape on outside pipe threads.
- When all piping fits together . . .  
 . . . solder all sweat fittings.  
 . . . prime and cement all CPVC joints.  
 . . . tighten all threaded joints.

#### CAUTION:

NEVER SOLDER FITTINGS WHILE CONNECTED TO NON-METALLIC PARTS. WAIT UNTIL SOLDERED PIPE HAS COOLED BEFORE CONNECTION (SEE FIG. 9).

BE VERY CAREFUL WHEN PUTTING PIPE FITTINGS ONTO THE PLASTIC THREADS OF THE INLET-OUTLET ADAPTORS, OR THE BYPASS VALVE. DO NOT CROSS THREAD. DO NOT OVERTIGHTEN.

**FIG. 9** TYPICAL SOLDERING CONNECTION



\*Flexible connectors are not allowed in all areas. CHECK YOUR LOCAL CODES.

# SECTION 4

# STEP BY STEP GUIDES TO INSTALL

## 4D. CONNECT DRAIN HOSES

### 1. CONNECT THE VALVE DRAIN HOSE

Attach a length of 5/8" minimum inside diameter hose to the filter and run to the floor drain or other suitable drain point. Other suitable drains include a laundry tub, a sump, and a standpipe.

To attach drain hose at the filter (FIG. 10), the drain fitting has both garden hose threads and a hose barb. Do the following, depending on the type of drain hose you use.

**GARDEN HOSE:** Remove the drain fitting from the valve. It is held in place by a plastic clip. Use a hacksaw to cut the hose barbs from the end of the fitting. Replace the fitting in the valve and attach the drain hose.

**HOSE ONTO BARB FITTING:** Push the end of the hose all the way onto the barbs. USE AN AUTOMOTIVE CLAMP, OR A SPRING CLAMP TO HOLD IT IN PLACE.

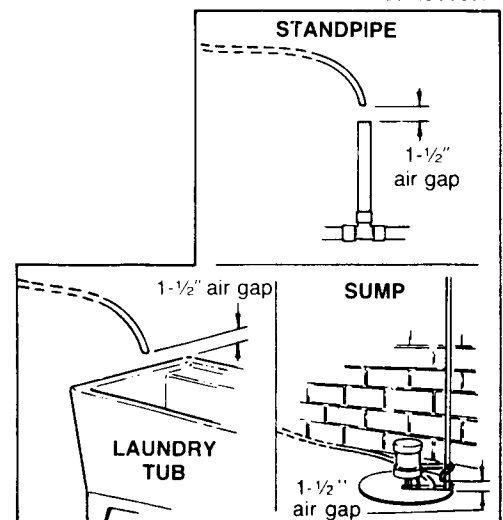
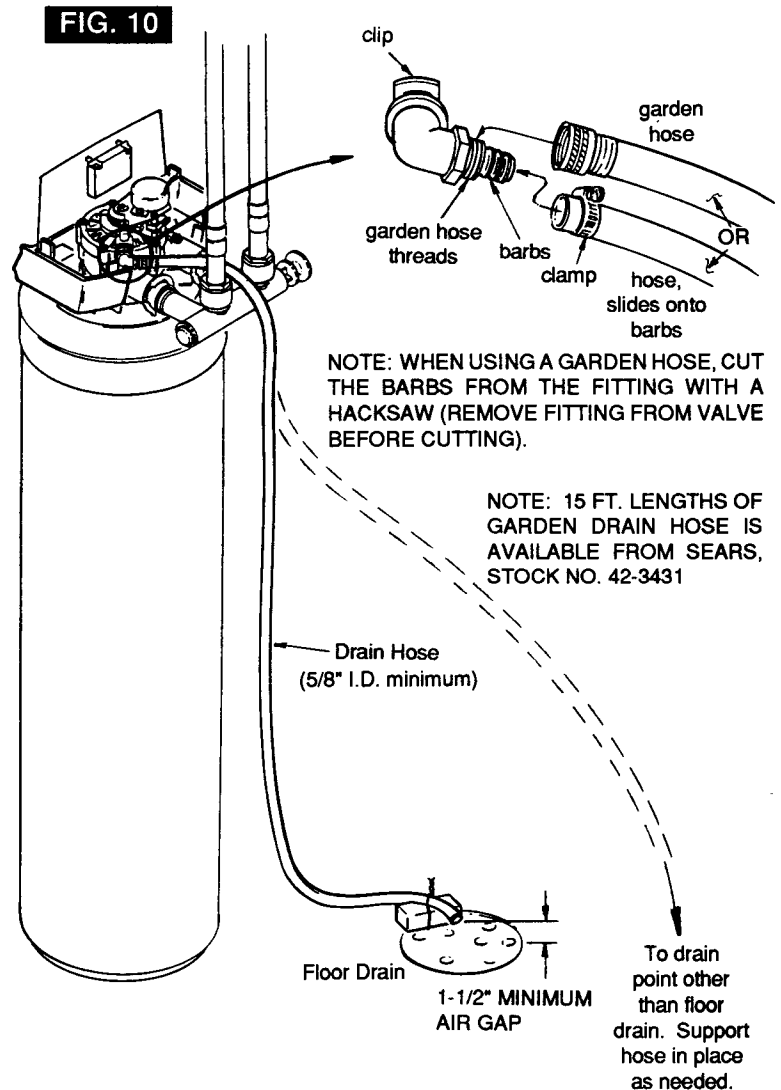
### IMPORTANT:

Flexible drain hose is not allowed in all areas. SEE NOTE ON PAGE 8.

Leave an air gap of about 1-1/2" between the end of the hose and the drain. This gap is needed so you don't get sewer water back-flow into the filter. DO NOT put the end of the hose down into the drain or connect without an air gap.

Place or support the hose so it does not kink or have sharp bends. FASTEN THE END OF THE HOSE TO A BRICK OR OTHER HEAVY OBJECT SO WATER PRESSURE WILL NOT MAKE IT "WHIP."

Keep the hose lower than the drain fitting. (In some homes, to get to a drain you must raise the hose and run it over-head. If you need an over-head drain, do not raise the hose more than 8' above the floor or the filter will not work as it should.



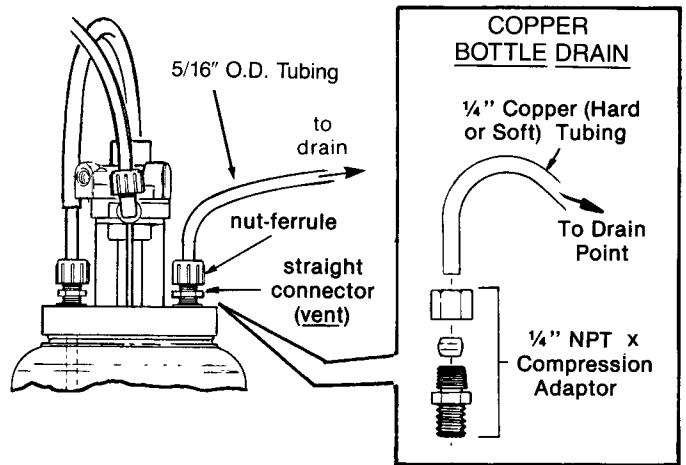
## 4D. CONNECT DRAIN HOSES

IF INSTALLING CLARIFIER, NEUTRALIZER AND TASTE & ODOR FILTERS, SKIP PAGE 15 AND GO TO PAGE 16.

### 2. CONNECT THE BOTTLE DRAIN TUBING, AUTOMATIC IRON FILTER

Connect a length of 5/16" plastic tubing to the vent fitting on the feeder valve (FIG. 11) using a nut-ferrule. Put the other end of the tubing over the drain and fasten it to the valve drain hose so it stays over the drain. If a copper drain is needed, get the tubing, and fittings shown in FIG. 11.

**FIG. 11** BOTTLE DRAIN TUBING, AUTOMATIC IRON FILTER



### WARNING:

**THIS DRAIN (VENT) MUST ALWAYS BE OPEN TO ALLOW AIR TO ENTER AND LEAVE THE BOTTLE. IF PLUGGED, THE BOTTLE WILL COLLAPSE. IF THE BOTTLE OVER-FILLS, SOME POTASSIUM PERMANGANATE SOLUTION COULD COME FROM THE DRAIN TUBING. BE SURE THE END OF THE TUBING IS ALWAYS OVER THE DRAIN.**

## 4E. PRESSURE TEST - CHECK FOR LEAKS

### TESTING YOUR PLUMBING WORK FOR WATER LEAKS.

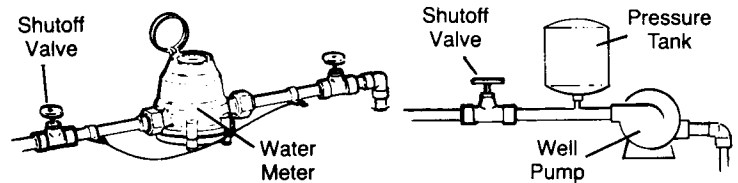
#### CAUTION:

TO AVOID WATER OR AIR PRESSURE DAMAGE TO FILTER INNER PARTS, AND TO FLUSH PIPE CHIPS OR OTHER RESIDUE FROM THE WATER PIPES, BE SURE TO DO THE FOLLOWING STEPS EXACTLY AS INSTRUCTED.

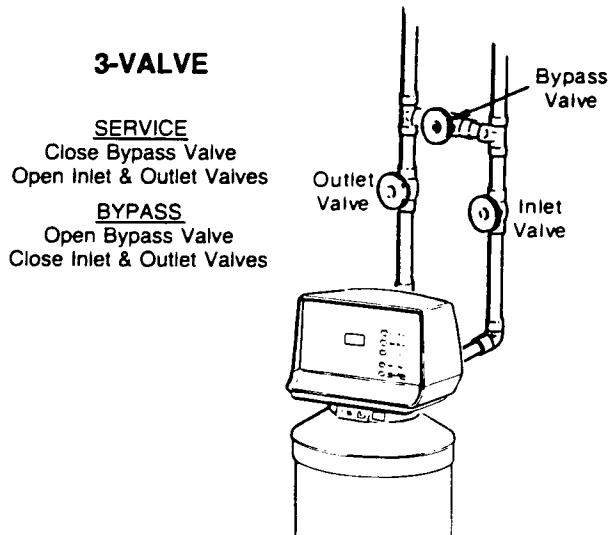
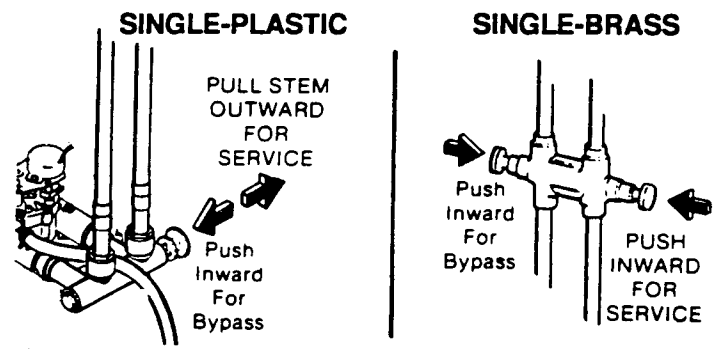
Look at the picture in FIG. 12 showing your kind of bypass valve(s).

1. Fully open 2 cold, filtered water faucets nearby the filter.
2. Place bypass valve(s) in "bypass" position. On a single valve, slide the stem into BYPASS. On a 3-valve system, close the inlet and outlet valves and open the bypass valve.
3. Fully open the house main water pipe shutoff valve. Observe steady water flow from both open faucets.
4. Place bypass valve(s) in "SERVICE," **EXACTLY** as follows. KEEP FILTERED WATER FAUCETS OPEN.
  - a. SINGLE BYPASS VALVE: **SLOWLY**, slide the valve stem toward SERVICE, pausing several times to allow the filter to pressurize slowly.
  - b. 3-VALVE BYPASS: Fully close the bypass valve and open the outlet valve. **SLOWLY**, open the inlet valve, pausing several times to allow the filter to pressurize slowly.
5. **AFTER ABOUT 3 MINUTES, OPEN A HOT WATER FAUCET FOR ABOUT 1 MINUTE, OR UNTIL ALL AIR IS EXPELLED, THEN CLOSE.**
6. **CLOSE BOTH COLD WATER FAUCETS.**
7. Check your plumbing work for leaks and fix right away if any are found. **BE SURE TO OBSERVE PREVIOUS CAUTION NOTES.**

**FIG. 12** MAIN WATER SHUTOFF VALVES



**FIG. 13** BYPASS VALVE (S) FILTERED WATER SERVICE/HARD WATER BYPASS



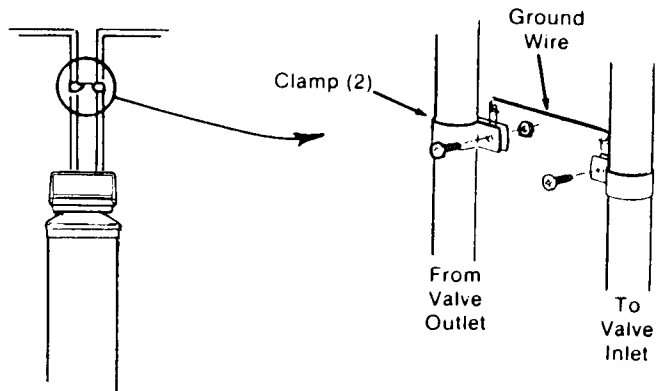
## 4F. GROUNDING, CONNECT TO ELECTRICAL POWER

### 1. INSTALL GROUNDING WIRE BETWEEN THE FILTER IN AND OUT PIPES

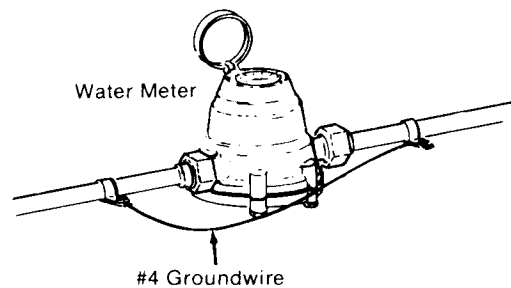
The house cold water pipe (iron or copper) is often used to ground all electric outlets in the home. Outlets are grounded to protect you from shock when you touch any electric appliance plugged into the outlet. If you didn't install a 3-valve bypass, or a brass single bypass valve (FIG.13), the cold water pipe ground is broken.

To restore the ground, take the clamps (2), screws (2), nuts (2) and ground wire that are in the small parts bag. Install across the iron or copper in and out pipes as shown in FIG 14. Be sure good contact is made between the pipe and the clamps. Fasten the ground wire tightly between the clamps.

**FIG. 14** COLD WATER PIPE GROUND



**FIG. 15** WATER METER JUMPER WIRE



### IMPORTANT:

Be sure the cold water pipe has direct metal to metal contact all the way to the ground. Plastic, rubber or other electrically insulating parts such as hoses, fittings, washers or gaskets can break the direct metal to metal contact. Also check the water meter (city water) or the well pump. Install #4 copper jumper wires, clamped tightly on both ends, across insulated parts (FIG. 15).

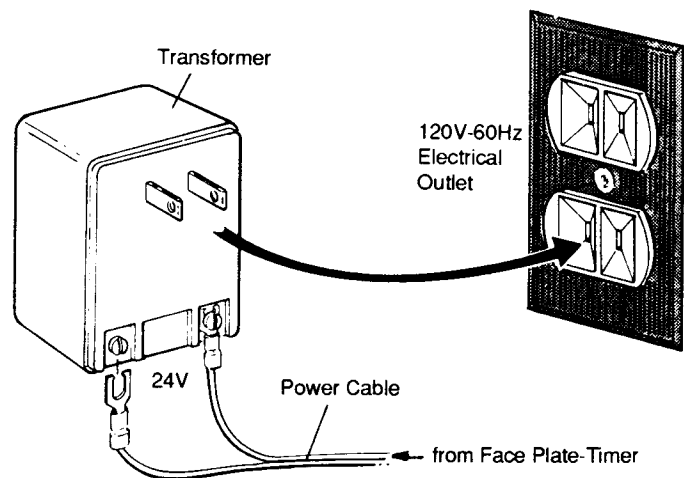
### 2. ELECTRIC POWER OUTLET FOR YOUR FILTER.

The filter works on 24 volt, 60 Hz electric power. The included transformer changes standard 120 volt AC house power to 24 volts. You must plug the transformer into a 120 volt outlet only. Be sure the outlet is always "live" so someone cannot turn it off by mistake.

### NOTE:

The included transformer is made for inside use only. Be sure the electrical outlet you plug the transformer into is inside, to protect from weather (see page 7).

**FIG. 16** CONNECTING TRANSFORMER



### 3. FASTEN THE POWER CABLE AND PLUG IN THE TRANSFORMER.

Looking at FIG. 16, fasten the 2 power cable lugs (1 under each screw) to the transformer as shown. Tighten both screws. Then plug the transformer into the electrical outlet.

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### RESTART THE WATER HEATER

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**TURN ON THE GAS (OR ELECTRIC) SUPPLY TO THE WATER HEATER AND LIGHT THE PILOT.**

**NOTE:**

Your new Sears filter is now filtering the water for your household needs. However, your **WATER HEATER is filled with unfiltered water**. To have fully filtered water right away, you can drain the water heater so it refills with filtered water. If you don't drain it, it will take

a few days before you have fully filtered water.

To drain the water heater, open a hot water faucet and let it run until the water turns cold. Then close the faucet.

**YOUR PLUMBING AND ELECTRICAL WORK IS COMPLETE. NOW GO TO YOUR OWNERS MANUAL AND DO THE FILTER START-UP STEPS . . . setting the timer, sanitizing, etc.**