

INSTALLATION, OPERATION, AND SERVICE MANUAL RESIDENTIAL STORAGE TYPE GAS WATER HEATER

THESE INSTRUCTIONS ARE INTENDED AS AN AID TO QUALIFIED SERVICE PERSONNEL FOR PROPER INSTALLATION, ADJUSTMENT AND OPERATION OF THIS WATER HEATER. READ THESE INSTRUCTIONS THOROUGHLY BEFORE ATTEMPTING INSTALLATION OR OPERATION. FAILURE TO FOLLOW THESE INSTRUCTIONS MAY RESULT IN IMPROPER INSTALLATION, OPERATION, SERVICE OR MAINTENANCE, POSSIBLY RESULTING IN FIRE, ELECTRICAL SHOCK, SCALD INJURY, CARBON MONOXIDE POISONING, EXPLOSION, PROPERTY DAMAGE, PERSONAL INJURY OR DEATH.

INSTALLER:

- ATTACH THESE INSTRUCTIONS TO OR ADJACENT TO THE WATER HEATER.
- BEFORE LEAVING THE PREMISES REVIEW THIS OPERATION AND SERVICE MANUAL TO BE SURE THE HEATER HAS BEEN INSTALLED CORRECTLY. START AND OPERATE THE UNIT FOR ONE COMPLETE CYCLE AND MAKE SURE THE WATER TEMPERATURE IS ACCEPTABLE TO THE CONSUMER AT THE FIXTURES.

OWNER:

- RETAIN THESE INSTRUCTIONS AND WARRANTY FOR FUTURE REFERENCE. RETAIN THE ORIGINAL RECEIPT AS PROOF OF PURCHASE.

SE PUEDE OBTENER UNA VERSION ESPAÑOL DE ESTAS INSTRUCCIONES SI ESCRIBE A LA FÁBRICA QUE APARECE EN LA PLACA DE ESPECIFICACIONES

A SPANISH VERSION OF THESE INSTRUCTIONS MAY BE OBTAINED IF YOU WRITE TO THE MANUFACTURER SHOWN ON THE RATING PLATE.

THIS MANUAL IS NOT TO BE USED WITH GAS STORAGE TYPE WATER HEATERS CERTIFIED FOR INSTALLATION IN MANUFACTURED HOMES (MOBILE HOMES).

AN ODORANT IS ADDED BY THE GAS SUPPLIER TO THE GAS USED BY THIS WATER HEATER. SEE WARNING BELOW.


WARNING

AN ODORANT IS ADDED BY THE GAS SUPPLIER TO THE GAS USED BY THIS WATER HEATER. THIS ODORANT MAY FADE OVER AN EXTENDED PERIOD OF TIME. DO NOT DEPEND UPON THIS ODORANT AS AN INDICATION OF LEAKING GAS. IF A GAS LEAK IS SUSPECTED, CHECK FOR LEAKS BY USING A CHLORIDE-FREE SOAP AND WATER SOLUTION, OR OTHER APPROVED METHOD. IF A LEAK CANNOT BE FOUND BUT IS STILL SUSPECTED, FOLLOW THE STEPS UNDER "WHAT TO DO IF YOU SMELL GAS" AS OUTLINED ON THIS PAGE. FAILURE TO OBSERVE THIS WARNING COULD RESULT IN PROPERTY DAMAGE, PERSONAL INJURY, OR DEATH.

WARNING

THIS WATER HEATER MUST BE BRACED, ANCHORED, OR STRAPPED TO AVOID FALLING OR MOVING DURING AN EARTHQUAKE. CONTACT LOCAL UTILITIES FOR CODE REQUIREMENTS IN YOUR AREA OR CALL THE 800 NUMBER SHOWN ON FRONT OF THIS MANUAL AND REQUEST INSTRUCTIONS 6600933 FOR EXAMPLES.

 Recognize this symbol as an indication of Important Safety Information.

 **WARNING:** If the information in these instructions is not followed exactly, a fire or explosion may result causing property damage, personal injury or death.

Do not store or use gasoline or other flammable vapors and liquids in the vicinity of this or any other appliance.

WHAT TO DO IF YOU SMELL GAS

- Do not try to light any appliance.
- Do not touch any electrical switch; do not use any telephone in your building.
- Immediately call your gas supplier from a neighbor's telephone. Follow the gas supplier's instructions.
- If you cannot reach your gas supplier, call the fire department.

Installation and service must be performed by a qualified installer, service agency or the gas supplier.

TO OBTAIN TECHNICAL, WARRANTY OR SERVICE ASSISTANCE DURING OR AFTER THE INSTALLATION OF THIS WATER HEATER, CALL TOLL FREE:

1-800-999-9515.

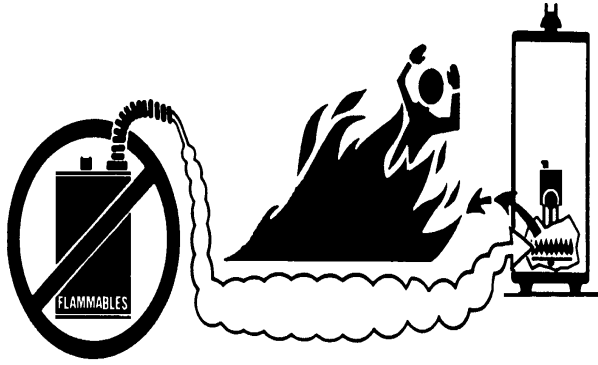
WHEN CALLING FOR ASSISTANCE, PLEASE HAVE THE FOLLOWING INFORMATION READY:

1. MODEL NUMBER
2. 7 DIGIT PRODUCT NUMBER
3. SERIAL NUMBER
4. DATE OF INSTALLATION



6510185
March 2000
Supersedes 6510160

⚠ DANGER



⚠ Vapors from flammable liquids will explode and catch fire causing death or severe burns.

Do not use or store flammable products such as gasoline, solvents or adhesives in the same room or area near the water heater.

Keep flammable products:

1. far away from the water heater.
2. in approved containers,
3. tightly closed and
4. out of children's reach.

Water heater has a main burner and pilot flame.
The pilot flame:

1. is on all the time and
2. will ignite flammable vapors.

Vapors:

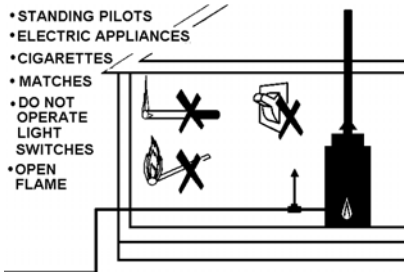
1. cannot be seen,
2. are heavier than air
3. go a long way on the floor and
4. can be carried from other rooms to the pilot flame by air currents.

Do not install this heater where flammable products will be stored or used unless the main burner and pilot flames are at least 18 inches above the floor. This will reduce but not eliminate the risk of vapors being ignited by the main burner or pilot flame.

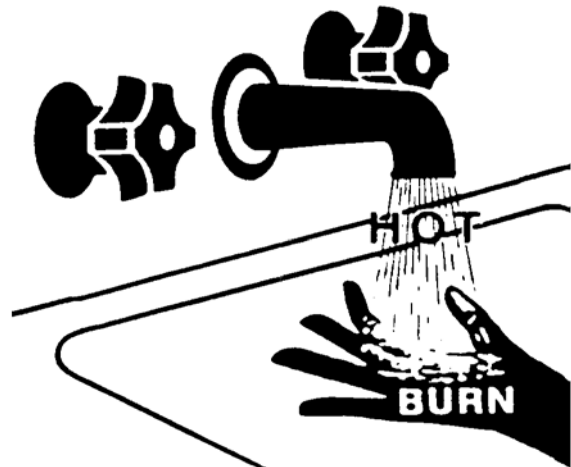
⚠ DANGER

DO NOT USE THIS WATER HEATER WITH ANY GAS OTHER THAN THE ONE LISTED ON THE DATA PLATE. This water heater is equipped for use with one type gas only. CHECK THE DATA PLATE NEAR THE GAS CONTROL VALVE FOR THE CORRECT GAS. FAILURE TO USE THE CORRECT GAS CAN CAUSE PROBLEMS WHICH CAN RESULT IN DEATH, SERIOUS BODILY INJURY OR PROPERTY DAMAGE. If you have any questions or doubts consult your gas supplier or gas utility company. Water heaters using bottled propane or liquefied petroleum gas (LPG) are different from natural gas models. A natural gas water heater will not function safely on bottled propane or liquefied petroleum gas (LPG) and a propane gas water heater will not function safely on natural gas. Do not attempt to convert a water heater from natural gas to LPG or from LPG to natural gas.

WHEN REMOVING PURGED GASES FROM A PIPING SYSTEM, DO NOT CREATE A HAZARDOUS CONDITION BY DISCHARGING THE GASES INTO A CONFINED AREA OR IN AN AREA THAT CONTAINS AN IGNITION SOURCE.



⚠ DANGER



Water temperature over 125°F can cause severe burns instantly or death from scalds.

Children, disabled and elderly are at highest risk of being scalded.

See the instruction manual before setting the water temperature at the water heater.

Feel the water before bathing or showering.

Temperature limiting valves are available for use.

GENERAL SAFETY WARNINGS

BEFORE ATTEMPTING TO INSTALL OR OPERATE THIS WATER HEATER, MAKE SURE YOU READ AND UNDERSTAND THE ENTIRE INSTALLATION, OPERATION AND SERVICE MANUAL. SPECIAL ATTENTION MUST BE GIVEN TO ALL THE SAFETY WARNINGS PROVIDED THROUGHOUT THIS MANUAL. **FAILURE TO FOLLOW THESE WARNINGS COULD RESULT IN A FIRE OR EXPLOSION CAUSING PROPERTY DAMAGE, PERSONAL INJURY OR DEATH.** IF YOU HAVE DIFFICULTY UNDERSTANDING THE INSTRUCTIONS IN THIS MANUAL OR ARE NOT AN EXPERIENCED INSTALLER, DO NOT PROCEED, BUT GET HELP FROM A QUALIFIED INSTALLATION OR SERVICE TECHNICIAN.



- TAMPERING WITH THE THERMOSTAT, IGNITER CONTROL, GAS VALVE OR TEMPERATURE AND PRESSURE RELIEF VALVE IS DANGEROUS AND MAY RESULT IN SERIOUS INJURY OR DEATH. TAMPERING Voids ALL WARRANTIES. ONLY PROPERLY TRAINED, QUALIFIED SERVICE PERSONNEL SHOULD SERVICE THESE COMPONENTS. DO NOT ATTEMPT TO MODIFY OR CHANGE THIS WATER HEATER IN ANY WAY.
- DO NOT ATTEMPT TO CONVERT THIS WATER HEATER FROM NATURAL GAS TO L.P. OR FROM L.P. TO NATURAL GAS. THIS CAN RESULT IN PROPERTY DAMAGE, FIRE, EXPLOSION, BODILY HARM OR DEATH.
- DO NOT INSTALL THIS WATER HEATER IN A MOBILE HOME
- DO NOT INSTALL THIS WATER HEATER OUTDOORS.
- RESIDENTIAL AREAS WHERE FLAMMABLE LIQUIDS (GASOLINE, SOLVENTS, LIQUID PROPANE, BUTANE, ETC.) OR OTHER SUBSTANCES WHICH EMIT FLAMMABLE VAPORS ARE STORED MAY NOT BE SUITABLE FOR WATER HEATER INSTALLATION. NATURAL AIR MOVEMENTS CAN CARRY FLAMMABLE VAPORS SOME DISTANCE FROM WHERE THEY ARE STORED OR USED. NEAR GROUND LEVEL VENTS CAN DRAW THESE VAPORS INTO THE WATER HEATER WHERE THE PILOT FLAME OR MAIN BURNER CAN IGNITE THEM CAUSING PROPERTY DAMAGE, SERIOUS BURNS OR DEATH. NEVER STORE OR USE FLAMMABLE SUBSTANCES IN THE SAME ROOM OR AREA CONTAINING A GAS WATER HEATER. IF SUCH FLAMMABLES MUST BE USED, ALL GAS BURNING APPLIANCES IN THE VICINITY MUST BE SHUT OFF AND THEIR PILOT LIGHTS EXTINGUISHED. OPEN THE DOORS AND WINDOWS FOR VENTILATION WHILE FLAMMABLE SUBSTANCES ARE IN USE.
- FLAMMABLE VAPORS MAY BE DRAWN TO THIS WATER HEATER FROM OTHER AREAS OF THE STRUCTURE BY AIR CURRENTS.
- WATER HEATERS INSTALLED IN RESIDENTIAL GARAGES MUST BE INSTALLED SUCH THAT THE PILOT FLAME AND MAIN BURNER FLAME ARE NO LESS THAN 18 INCHES ABOVE THE FLOOR. THIS IS TO REDUCE BUT NOT ELIMINATE THE RISK OF LIGHTING FLAMMABLE VAPORS WHICH MAY BE PRESENT IN A GARAGE. THIS WATER HEATER MUST BE LOCATED OR PROTECTED TO AVOID PHYSICAL DAMAGE BY VEHICLES OR FLOODING.
- THE WATER HEATER IS CERTIFIED FOR INSTALLATION ON A COMBUSTIBLE FLOOR. HOWEVER WHEN THIS WATER HEATER IS INSTALLED OVER CARPETING, THE CARPETING MUST BE PROTECTED BY A METAL OR WOOD PANEL BENEATH THE WATER HEATER AND EXTENDING BEYOND THE FULL WIDTH AND DEPTH OF THE WATER HEATER BY AT LEAST THREE INCHES IN ANY DIRECTION. IF THE WATER HEATER IS INSTALLED IN A CARPETED ALCOVE OR CLOSET, THE ENTIRE FLOOR MUST BE COVERED BY THE PANEL. FAILURE TO FOLLOW THESE INSTRUCTIONS MAY RESULT IN A FIRE HAZARD.
- THIS WATER HEATER AND ANY OTHER GAS FUEL BURNING APPLIANCE MUST BE PROVIDED WITH ENOUGH FRESH AIR FOR PROPER VENTILATION OF THE FLUE GASES.
- REPAIR, REPLACEMENT, SERVICE AND CLEANING OF WATER HEATER PARTS MUST ONLY BE PERFORMED BY A QUALIFIED SERVICE TECHNICIAN.
- DO NOT USE AN OPEN FLAME OR ANY KIND OF SPARK TO CHECK GAS PIPING FOR LEAKS.
- DO NOT ATTEMPT TO LIGHT THIS WATER HEATER UNTIL IT IS PROPERLY INSTALLED AND YOU UNDERSTAND ALL OF THE SAFETY WARNINGS AND PRECAUTIONS.
- VENTILATION AND COMBUSTION AIR SUPPLIES CANNOT BE TAKEN FROM AREAS THAT CONTAIN NEGATIVE PRESSURE PRODUCING DEVICES SUCH AS FIREPLACES, EXHAUST FANS AND AIR CIRCULATION SYSTEMS. INLET AIR CANNOT BE TAKEN FROM AN ATTIC EQUIPPED WITH POWER VENTILATION.
- THE USE OF VENT DAMPERS IS NOT RECOMMENDED BY THE MANUFACTURERS OF THIS WATER HEATER.
- FAILURE TO PROPERLY VENT THIS WATER HEATER CAN CAUSE AN EXPLOSION, FIRE, OR CARBON MONOXIDE POISONING WHICH MAY RESULT IN PROPERTY DAMAGE, PERSONAL INJURY OR DEATH.
- DO NOT VENT THIS WATER HEATER AND A FORCED DRAFT OR POWER VENT APPLIANCE INTO THE SAME CHIMNEY OR GAS VENT.
- MOISTURE IN THE FLUE GASES MAY CONDENSE AND FORM ON THE EXTERIOR OF THE GAS VENT PIPE. IMPROPER LOCATION OR INSTALLATION CAN CAUSE STRUCTURAL DAMAGE TO THE RESIDENCE.
- VENT CONNECTORS MAY NOT TERMINATE WITHIN A CHIMNEY FLUE SERVING A FIREPLACE UNLESS THE FLUE OPENING IS PERMANENTLY SEALED.
- OBSTRUCTIONS OR HOLES IN THE VENT PIPE CAN CAUSE TOXIC FUMES TO ENTER THE HOME RESULTING IN CARBON MONOXIDE POISONING OR DEATH. THE VENT PIPE MUST BE REPLACED IF IT IS LEAKING.
- NEVER OPERATE AN EMPTY OR PARTIALLY FILLED WATER HEATER. THIS CAN RESULT IN SERIOUS DAMAGE TO THE TANK.
- DO NOT ATTEMPT TO OPERATE THIS WATER HEATER WITH THE COLD WATER SHUTOFF VALVE CLOSED.
- DO NOT ATTEMPT TO OPERATE THIS WATER HEATER WITHOUT A PROPERLY INSTALLED TEMPERATURE AND PRESSURE RELIEF VALVE. FAILURE TO INSTALL AND MAINTAIN A NEW AND PROPERLY LISTED TEMPERATURE AND PRESSURE RELIEF VALVE WILL RELEASE THE MANUFACTURER FROM ANY CLAIMS WHICH MIGHT RESULT FROM EXCESSIVE TEMPERATURE OR WATER PRESSURE.
- WATER SUPPLY TO THIS HEATER MUST NOT EXCEED 180° F. WATER TEMPERATURES IN EXCESS OF 180° F WILL CAUSE THE HIGH LIMIT CONTROL (ECO) TO OPEN AND SHUT OFF THE GAS SUPPLY TO THE UNIT. THE HIGH LIMIT CONTROL IS A SINGLE USE TYPE THAT WILL REQUIRE THE REPLACEMENT OF THE THERMOSTAT BEFORE THE BURNER CAN OPERATE.
- THIS WATER HEATER IS EQUIPPED FOR ONE TYPE OF GAS ONLY. DO NOT USE THIS WATER HEATER WITH ANY GAS OTHER THAN THE ONE LISTED ON THE DATA PLATE LOCATED NEAR THE GAS CONTROL. FAILURE TO USE THE CORRECT GAS CAN RESULT IN PROPERTY DAMAGE, BODILY INJURY OR DEATH.
- ADJUSTING THE THERMOSTAT PAST THE 120° F BAR ON THE TEMPERATURE DIAL WILL INCREASE THE RISK OF SCALD INJURY.

GENERAL SAFETY WARNINGS (CONT.)



- CONTAMINANTS IN THE GAS PIPING MAY FOUL THE THERMOSTAT CAUSING A MALFUNCTION, FIRE OR EXPLOSION. BE SURE ALL GAS PIPING IS CLEAN AND CLEAR ON THE INSIDE BEFORE ATTACHING THE GAS LINE.
- HYDROGEN GAS CAN BE PRODUCED IN A HOT WATER SYSTEM THAT HAS NOT BEEN USED FOR A LONG PERIOD OF TIME (GENERALLY TWO WEEKS OR MORE). HYDROGEN GAS IS EXTREMELY FLAMMABLE AND CAN IGNITE WHEN EXPOSED TO A SPARK OR FLAME. TO PREVENT THE POSSIBILITY OF INJURY UNDER THESE CONDITIONS, WE RECOMMEND THE HOT WATER FAUCET BE OPENED FOR SEVERAL MINUTES AT THE KITCHEN SINK BEFORE USING ANY ELECTRICAL APPLIANCE WHICH IS CONNECTED TO THE HOT WATER SYSTEM. IF HYDROGEN IS PRESENT, THERE WILL PROBABLY BE AN UNUSUAL SOUND SUCH AS AIR ESCAPING THROUGH THE FAUCET AS WATER BEGINS TO FLOW. DO NOT SMOKE OR HAVE ANY OPEN FLAME NEAR THE FAUCET AT THE TIME IT IS OPEN.
- HOT WATER CAN PRODUCE FIRST DEGREE BURNS WITHIN:
 - 3 SECONDS AT 140°F (60°C)
 - 20 SECONDS AT 130°F (54°C)
 - 8 MINUTES AT 120°F (49°C)
- DO NOT ATTEMPT TO BYPASS OR JUMPER THE ECO. THIS WILL VOID THE WARRANTY AND RELEASE THE MANUFACTURER FROM ANY LIABILITY FOR ANY ACCIDENT RESULTING FROM ELIMINATING THE ECO FROM THE WATER HEATER CIRCUIT.
- HOUSEHOLDS WITH SMALL CHILDREN, ELDERLY, IMPAIRED OR DISABLED MEMBERS AND ANYONE WITH TEMPERATURE SENSITIVE SKIN MAY REQUIRE A LOW TEMPERATURE SETTING TO REDUCE THE RISK OF SCALD INJURY.
- THE GAS LINE MUST BE OF ADEQUATE SIZE SO AS TO PREVENT UNDUE PRESSURE DROP AND NEVER SMALLER THAN THE PIPE SIZE TO THE GAS VALVE ON THE WATER HEATER. FAILURE TO PROPERLY SIZE THE GAS LINE CAN RESULT IN A FIRE OR EXPLOSION CAUSING PROPERTY DAMAGE, PERSONAL INJURY OR DEATH.

CONSUMER INFORMATION

This water heater is design-certified by CSA International as a Category I, non-direct vented water heater which takes its combustion air either from the installation area or from air ducted to the unit from the outside.

This water heater should be installed in accordance with the latest edition of the "National Fuel Gas Code", ANSI Z223.1, NFPA 54 and the requirements and codes of the local utilities or other authorities having jurisdiction. This is available from the following:

National Fire Protection Agency 1 Batterymarch Park Quincy, MA 02269	American Gas Association 1515 Wilson Boulevard Arlington, VA 22209
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Local Authorities (Check your telephone listings)

CONSUMER RESPONSIBILITIES

This manual has been prepared to acquaint you with the installation, operation and maintenance of your gas water heater and to provide important safety information in these areas.

We urge you to read all of the instructions thoroughly before attempting the installation or operation of this water heater. This manual should be kept for future reference.

The manufacturer of this water heater will not be liable for any damages caused by failure to comply with the installation and operating instructions outlined in this manual.

If you lack the necessary skills required to properly install this water heater or you have difficulty following the directions, you should not proceed but have a qualified person perform the installation of this water heater.

A data plate identifying your water heater can be found next to the gas control valve/thermostat. When referring to your water heater always have the information listed on the data plate readily available.

Retain your original receipt as proof of purchase.

HIGH ALTITUDE INPUT RATING

The input rating on the data plate of this water heater is for installations up to 2000 feet of elevation. For installations at elevations above 2000 feet, the rating should be reduced by 4 percent for each 1000 feet above sea level.

WATER HEATER MODIFICATION/TAMPERING



TAMPERING WITH THE THERMOSTAT, IGNITER CONTROL, GAS VALVE, OR TEMPERATURE AND PRESSURE RELIEF VALVE IS DANGEROUS AND MAY RESULT IN SERIOUS INJURY OR DEATH. TAMPERING VOIDS ALL WARRANTIES. ONLY PROPERLY TRAINED, QUALIFIED SERVICE PERSONNEL SHOULD SERVICE THESE COMPONENTS. DO NOT ATTEMPT TO MODIFY OR CHANGE THIS WATER HEATER IN ANY WAY.

INSULATION BLANKET

Some governing bodies may require the use of external insulation blankets when water heaters are installed in newly constructed homes and additions. If an insulation blanket is applied to this water heater **CAUTION** must be exercised so as to not restrict its proper function and operation. Please note the following:

- The space between the base of the water heater and the floor must remain unobstructed to allow for proper airflow. As time passes, the blanket may sag and obstruct the air passage resulting in unsafe water heater operation.
- Do not apply an insulation blanket to the top of the water heater as this may obstruct the draft hood.
- Do not cover the temperature and pressure relief valve, any labels or instruction materials applied to the water heater. These labels must remain visible for reference by the user. Do not remove these labels, as they are a permanent part of the water heater as required by the certification agencies and/or the Federal Government.
- Do not cover any access panels leading to burner compartments. Do not cover the thermostat controls, or doors on the water heater.

GAS CONVERSION

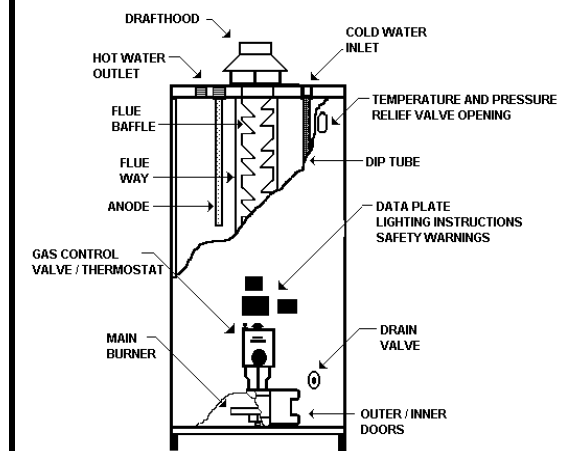


DO NOT ATTEMPT TO CONVERT THIS WATER HEATER FROM NATURAL GAS TO L.P. OR FROM L.P. TO NATURAL GAS. THIS CAN RESULT IN PROPERTY DAMAGE, FIRE, EXPLOSION, BODILY HARM OR DEATH.

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FIGURE 1
RESIDENTIAL STORAGE
TYPE GAS WATER HEATER



1. SOME MODELS MAY VARY SLIGHTLY IN APPEARANCE.
2. SOME MODELS MAY LOCATE THE TEMPERATURE AND PRESSURE RELIEF VALVE TAPPING ON THE TOP OF THE WATER HEATER.

IMPORTANT: TO INSURE PROPER INSTALLATION AND OPERATION OF THIS PRODUCT, COMPLETELY READ ALL INSTRUCTIONS PRIOR TO ATTEMPTING TO ASSEMBLE, INSTALL, OPERATE, MAINTAIN OR REPAIR THIS PRODUCT. UPON UNPACKING OF THE WATER HEATER INSPECT ALL PARTS FOR DAMAGE PRIOR TO INSTALLATION AND START-UP. THIS WATER HEATER MUST BE INSTALLED ONLY BY QUALIFIED INSTALLATION PERSONNEL..

LOCATION REQUIREMENTS AND CONSIDERATIONS

GENERAL INFORMATION

⚠ WARNING

DO NOT INSTALL THIS WATER HEATER IN A MOBILE HOME. This water heater is not approved for installation in a mobile home. **DO NOT INSTALL OUTDOORS.** This water heater is certified for indoor installation only. Failure to follow these instructions could result in **FIRE, PROPERTY DAMAGE, PERSONAL INJURY OR DEATH.**

⚠ DANGER

AREAS WHERE FLAMMABLE LIQUIDS (GASOLINE, SOLVENTS, LIQUID PROPANE, BUTANE, ETC.) OR OTHER SUBSTANCES WHICH EMIT FLAMMABLE VAPORS ARE STORED MAY NOT BE SUITABLE FOR WATER HEATER INSTALLATION. NATURAL AIR MOVEMENTS CAN CARRY FLAMMABLE VAPORS SOME DISTANCE FROM WHERE THEY ARE STORED OR USED. NEAR GROUND LEVEL VENTS CAN DRAW THESE VAPORS INTO THE WATER HEATER WHERE THE PILOT FLAME OR MAIN BURNER CAN IGNITE THEM CAUSING PROPERTY DAMAGE, SERIOUS BURNS OR DEATH. NEVER STORE OR USE FLAMMABLE SUBSTANCES IN THE SAME ROOM OR AREA CONTAINING A GAS WATER HEATER. IF SUCH FLAMMABLES MUST BE USED, ALL GAS BURNING APPLIANCES IN THE VICINITY MUST BE SHUT OFF AND THEIR PILOT LIGHTS EXTINGUISHED. OPEN THE DOORS AND WINDOWS FOR VENTILATION WHILE FLAMMABLE SUBSTANCES ARE IN USE.

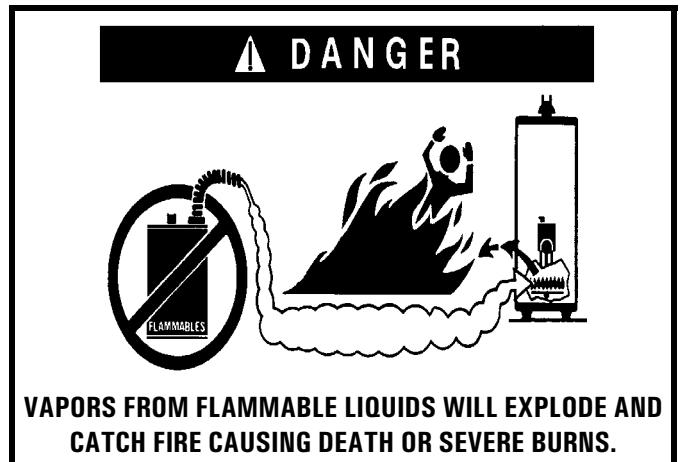
⚠ WARNING

FLAMMABLE VAPORS MAY BE DRAWN TO THIS WATER HEATER FROM OTHER AREAS OF THE STRUCTURE BY AIR CURRENTS.

IMPORTANT: This water heater should not be installed near a corrosive or potentially corrosive air supply. Water heater corrosion and component failure can be caused by the heating and breaking down of airborne chemicals. These materials are corrosive at low concentration levels with little or no odor to reveal their presence. Examples of potentially corrosive locations and compounds are:

- Beauty shops, dry cleaning establishments, photo processing labs
- Liquid or powdered bleaches, swimming pool chemicals, spray can propellants, cleaning solvents
- Refrigerants
- Calcium and sodium chloride
- Waxes and process chemicals

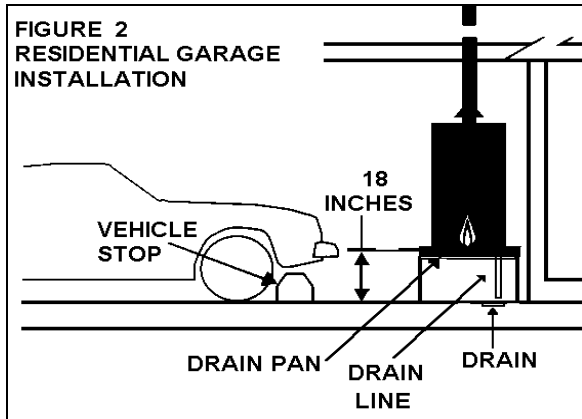
Products of this sort should not be stored near the water heater or air inlet.



⚠ WARNING

IT IS NOT DESIRABLE TO INSTALL A GAS FIRED WATER HEATER IN A RESIDENTIAL GARAGE. IF INSTALLATION IN A RESIDENTIAL GARAGE IS YOUR ONLY OPTION, THIS WATER HEATER MUST BE INSTALLED SUCH THAT THE PILOT FLAME AND MAIN BURNER FLAME ARE NO LESS THAN 18 INCHES ABOVE THE FLOOR (SEE FIGURE 2, PAGE 6). THIS IS TO REDUCE BUT NOT ELIMINATE THE RISK OF IGNITING FLAMMABLE VAPORS WHICH MAY BE PRESENT IN A GARAGE. THE WATER HEATER MUST BE LOCATED OR PROTECTED TO AVOID PHYSICAL DAMAGE BY VEHICLES OR FLOODING. FAILURE TO FOLLOW THESE WARNINGS CAN CAUSE A FIRE OR EXPLOSION, RESULTING IN PROPERTY DAMAGE, PERSONAL INJURY OR DEATH.

LOCATION REQUIREMENTS AND CONSIDERATIONS (CONT.)

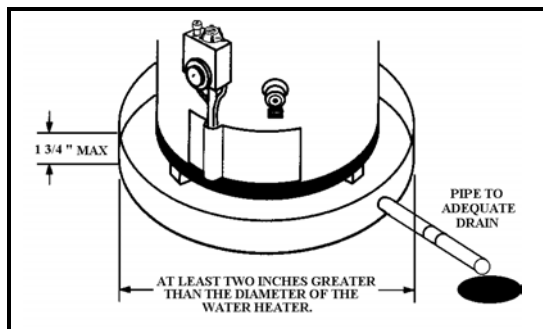


SITE LOCATION

1. Select a location near the center of the water piping system. It must be installed indoors and in a vertical position on a level surface. **DO NOT** install in bathrooms, bedrooms or any occupied room normally kept closed.
2. Locate the water heater as close to the chimney or gas vent as is practical. Consider the vent system piping and combustion air supply requirements when selecting the water heater location. The venting system must be able to run from the water heater to the termination with a minimal length and elbows. **THE VENT PIPE CANNOT EXCEED THE MAXIMUM ALLOWABLE LENGTH AS PERMITTED IN THE "NATIONAL FUEL GAS CODE".**
3. Locate the water heater near the existing gas piping. If installing a new gas line, locate the water heater to minimize the pipe length and elbows.

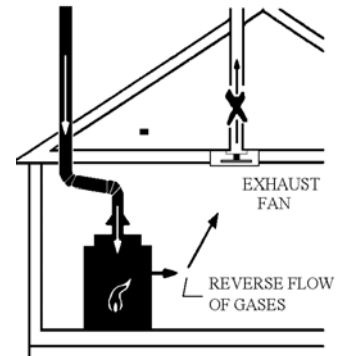
IMPORTANT

4. The water heater should be located in an area where leakage of the tank or connections will not result in damage to the area adjacent to the water heater or to lower floors of the structure. It is recommended that a suitable metal drain pan be installed under the water heater as shown below. This pan is to protect the property from damage which may occur from normal condensate formation on the tank jacket or leaks in the tank and pipe connections. The pan must limit the water level to a maximum depth of 1 3/4 inches and be two inches wider than the heater and piped to an adequate drain. Locate the water heater near a suitable inside drain. Outside drains are subject to freezing temperatures which can obstruct the drain line. The piping should be at least 3/4" ID and pitched for proper drainage. This pan must not restrict combustion air flow. **UNDER NO CIRCUMSTANCES IS THE MANUFACTURER TO BE HELD LIABLE FOR ANY WATER DAMAGE IN CONNECTION WITH THIS WATER HEATER.**



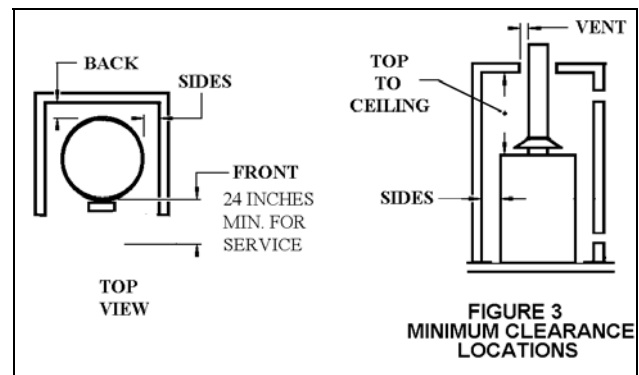
5. The water heater should be located in an area not subject to freezing temperatures. Water heaters located in unconditioned spaces (i.e. attics, basements, etc.) may require the insulation of the water piping and drain piping to protect against freezing. The drain and controls must be easily accessible for operation and service. Maintain proper clearances as specified.

6. Do not locate the water heater near an air-moving device. The operation of air-moving devices such as exhaust fans, ventilation systems, clothes dryers, fireplaces, etc., can affect the proper operation of the water heater. Special attention must be given to conditions these devices may create to avoid unsatisfactory operation of the equipment.



CLEARANCE/ACCESSIBILITY

Minimum clearances from combustible materials are stated on the data plate adjacent to the thermostat of the water heater. **REFER TO THE DATA PLATE OF THE WATER HEATER FOR THE CORRECT CLEARANCES FROM COMBUSTIBLE CONSTRUCTION MATERIALS.** Figure 3 may be used as a reference guide to locate the specific clearance locations. A minimum of 24 inches of front clearance should be provided for inspection and service.



⚠ WARNING

THE WATER HEATER IS CERTIFIED FOR INSTALLATION ON A COMBUSTIBLE FLOOR. HOWEVER, WHEN THIS WATER HEATER IS INSTALLED OVER CARPETING, THE CARPETING MUST BE PROTECTED BY A METAL OR WOOD PANEL BENEATH THE WATER HEATER AND EXTENDING BEYOND THE FULL WIDTH AND DEPTH OF THE WATER HEATER BY AT LEAST THREE INCHES IN ANY DIRECTION. IF THE WATER HEATER IS INSTALLED IN A CARPETED ALCOVE OR CLOSET, THE ENTIRE FLOOR MUST BE COVERED BY THE PANEL. FAILURE TO FOLLOW THESE INSTRUCTIONS MAY RESULT IN A FIRE HAZARD.