Continue

```
INSTALLATION, OPERATION, OPERATION, AND SERVICE MANUAL POWER VENT ...Off the water heater's manual gas control valve and call a qualified service technician. OPERATION Moisture from the products of combustion condenses on the tank surface and forms drops of water which may fall onto the burner or other hot
surfaces. ... Retrieve Content Gas – Richmond Water HeatersRichmond Gas Water Heater Specifications Warranty Energy Information NOTE: Vent system can be installed up to 10" from outside wall. Diameter with air supply tube is 26-3/4". Review installation manual before installing. ... View Full Source Encore Gas Water Heaters From Richmond CONDENSING TANKLESSGas Water Heaters from Richmond See Use and Care Manual for setting. • Consult factory for information on sizing the application. #!"^ #" !! Water Heater Flow Rate Curves Delta-T G P M ^ ^ ^ #" !! Water Heater Flow Rate Curves Delta-T G P M ^ ^ ^ #" !! Water Heater Flow Rate Curves Delta-T G P M ^ ^ ^ #" !! Water Heater Flow Rate Curves Delta-T G P M ^ ^ ^ #" !! Water Heater Flow Rate Curves Delta-T G P M ^ ^ ^ #" !! Water Heater Flow Rate Curves Delta-T G P M ^ ^ ^ #" !! Water Heater Flow Rate Curves Delta-T G P M ^ ^ ^ #" !! Water Heater Flow Rate Curves Delta-T G P M ^ ^ ^ #" !! Water Heater Flow Rate Curves Delta-T G P M ^ ^ ^ #" !! Water Heater Flow Rate Curves Delta-T G P M ^ ^ ^ #" !! Water Heater Flow Rate Curves Delta-T G P M ^ ^ ^ #" !! Water Heater Flow Rate Curves Delta-T G P M ^ ^ ^ #" !! Water Heater Flow Rate Curves Delta-T G P M ^ ^ ^ #" !! Water Heater Flow Rate Curves Delta-T G P M ^ ^ ^ #" !! Water Heater Flow Rate Curves Delta-T G P M ^ ^ ^ #" !! Water Heater Flow Rate Curves Delta-T G P M ^ ^ ^ #" !! Water Heater Flow Rate Curves Delta-T G P M ^ ^ ^ #" !! Water Heater Flow Rate Curves Delta-T G P M ^ ^ ^ #" !! Water Heater Flow Rate Curves Delta-T G P M ^ ^ ^ #" !! Water Heater Flow Rate Curves Delta-T G P M ^ ^ ^ #" !! Water Heater Flow Rate Curves Delta-T G P M ^ ^ ^ #" !! Water Heater Flow Rate Curves Delta-T G P M ^ ^ ^ #" !! Water Heater Flow Rate Curves Delta-T G P M ^ ^ ^ #" !! Water Heater Flow Rate Curves Delta-T G P M ^ ^ ^ #" !! Water Heater Flow Rate Curves Delta-T G P M ^ ^ ^ #" !! Water Heater Flow Rate Curves Delta-T G P M ^ ^ ^ *" !! Water Heater Flow Rate Curves Delta-T G P M ^ ^ ^ *" !! Water Heater Flow Rate Curves Delt
2R2 Vancouver, WA, USA 98682 Tel: 1-800-755 SEE WATER HEATER INSTRUCTION MANUAL FOR ADDITIONAL INFORMATION REGARDING THE TEMPERATURE AND PRESSURE RELIEF VALVE. See other side for important information ... Access Full Source Commercial Gas water heaters the "Locating the New Water Heater" section in this
manual. 5. For California installation this water heater must be braced, anchored, or strapped to avoid falling or moving during an earthquake. See instructions for correct installation ... View Document With Installation Instructions For The Installer Direct Vent ... Richmond RMTG 95DV (N,P) RMTG 84DV (N,P) RMTG 64DV (N,P) RMTG 64D
(N,P) RUTG-84DV (N,P) RUTG-64DV (N,P) Rutto-64DV (N,P) Rheem/ Ecosense The water heater and its manual gas shut-off valve must be disconnected from the gas supply piping system during any pressure ... View This Document Electric Residential Water Heaters – Rheem Heating, Cooling ... Maintenance and troubleshooting of the water heater. This manual also
includes a parts list. It is imperative that all persons who are expected to install, operate or adjust this water heater ead the instructions carefully so they ... Access Doc Electric Water Heater – L-36.comElectric water heater ead the instructions carefully so they ... Access Doc Electric Water Heater ead the instructions carefully so they ... Access Doc Electric Water Heater – L-36.comElectric water heater ead the instructions carefully so they ... Access Doc Electric Water Heater – L-36.comElectric water heater ead the instructions carefully so they ... Access Doc Electric Water Heater – L-36.comElectric water heater ead the instructions carefully so they ... Access Doc Electric Water Heater – L-36.comElectric water heater ead the instructions carefully so they ... Access Doc Electric Water Heater – L-36.comElectric water heater ead the instructions carefully so they ... Access Doc Electric Water Heater – L-36.comElectric water heater ead the instructions carefully so they ... Access Doc Electric Water Heater – L-36.comElectric water heater ead the instructions carefully so they ... Access Doc Electric Water Heater – L-36.comElectric water heater ead the instructions carefully so they ... Access Doc Electric Water Heater – L-36.comElectric water heater ead the instructions carefully so they ... Access Doc Electric water heater ead the instruction of the 
522-9608 ... Retrieve Content Drainback Solar Water Heater User's Manual This manual describes our drainback Solar Water Heater using Rheem/Richmond SolarAide Integral Heat Exchanger Water Heater User's Manual This manual describes our drainback type solar water Heater User's Manual This manua
Paloma Rheem, Ruud, Rheem-Ruud and Richmond Brands Only the indoor power vent 199,900 BTU models are affected.... Doc Retrieval WithInstallationInstructionsfortheInstaller Direct'VentGas ... Richmond RMTG95DV(N,P) RMTG84DV(N,P) RUTG84DV(N,P) RUTG64DV(N,P) Rheem/Ecosense
RTG95DV(N,P) troubleshooting of the water heater. This manual also includes aparts list. It isimperative that all persons who are expected to install, operate or ... Retrieve Here With Installation Instructions For The Installer Indoor And ... Richmond: RMTG-74PV(N,P) RMTG-74PV(N,P) RUTG-74V(N,P) RUTG-74X(N,P) Rutg-74V(N,P) Rutg-74V(N,P
manual shut-off valve if the water heater has been subjected to overheating, fire, flood, physical damage or if the gas supply fails to shut off. ... Return Doc Encore Condensing Tankless Gas Water Heaters From RichmondRICHMOND CONDENSING TANKLESS WATER HEATERS FOR 3 BATHROOM HOMES • Factory set maximum temperature is
120° F. See Use and Care Manual for setting. • Consult factory for information on sizing the application. Water Heater Flow Rate Curves ... Get Doc Certificate Of EXCLUSIVE WARRANTY – LIMITATION OF LIABILITY ... If your water heater is "in-warranty", refer to the Use and Care Manual that accompanied it or contact the and the complete serial
number of the Richmond water heater from which the defective component part was removed; and, ... Return Document Electric Water Heaters - Rheem Heating, Cooling And Water ... water heater section of this manual. Covers and / or insulation missing. Reinstall covers and insulation. CAUTION: For your safety DO NOT attempt repair of electrical
wiring, thermostats, heating elements or other safety devices. ... Retrieve Document The WaterHeater By ITR Installation And Operating ManualSee water heater instruction manual for additional information regarding the temperature and pressure relief valve. richmond, bc, canada v6x 2r2 vancouver wa usa 98661 tel: 1-800-755-1272 or 604-278-
1272 tel: 1-800-993-4402 or 360-993-4407 ... Fetch Doc RHEEM TANKLESS PARTS & ACCESSORIES TANKLESS PART
Gas Water ...Refer to the "Locating The New Water Heater" section of this manual and also the current edition of the National Fuel Gas Code, ANSI Z223.1, also referred to as NFPA 54 for specifics provided concerning air required. TOP VIEW OF WARNING ... Fetch Full Source WARNING: 94% CONDENSING – Tankless Water Heaters | Venting ...
Richmond RMTGH95X* RMTGH84X* WARNING: If the information in these instructions is not followed • DO turn off manual gas shut-off valve gas water heater has been subjected to overheating, fire, flood, physical damage, or if the gas supply fails ... View This Document Tags: gas control valve gas water heater gas water heater has been subjected to overheating, fire, flood, physical damage, or if the gas supply fails ... View This Document Tags: gas control valve gas water heater gas water heater gas water heater has been subjected to overheating, fire, flood, physical damage, or if the gas supply fails ... View This Document Tags: gas control valve gas water heater gas water heate
national fuel gas code pressure relief valve richmond water heaters ! WARNING: This water heater
manual is twofold: one, to provide the installer with the basic directions and recommendations for the proper installation and adjustment of the water heater; and two, for the owner-operator, to explain the features, operation, safety precautions, maintenanSafety Information Safety Precautions. . . . . . . . 3-6 FOR YOUR RECORDS LP Gas Models . . . . .
..... 5 Write the model and serial numbers here: # Installation Instructions Location....... 7 Water Supply Connections... 9 Gas Supply............ 11 # You can find them on a label on the appliance. Staple sales slip or cancelled check here. Proof of the original purchase date is needed to obtain service under the warranty.
Venting.........IMPORTANT SAFETY INFORMATION. READ ALL INSTRUCTIONS BEFORE USING. Be sure to read and understand the entire Use and Care Manual before attempting to install or operate this water heater. It may save you time and money. Pay particular attention to the Safety Instructions. Failure to follow these warnings could
result in serious bodily injury or death.IMPORTANT SAFETY INFORMATION. READ ALL INSTRUCTIONS BEFORE USING. ! DANGER! WATER TEMPERATURE SETTING Safety and energy conservation are factors to be considered when selecting the water temperature setting of a water heater's gas control. Water temperatures above 125°F can
cause severe burns or death from scalding. Be sure to read and follow the warnings outlined on the label pictured below. This label is also located on the water heater. DANGER! LIQUEFIED PETROLEUM (LP PROPANE OR BUTANE) AND NATURAL GAS MODELS LP and Natural gas have an odorant added to aid in detecting a gas leak. Some people
may not physically be able to smell or recognize this odorant. If you are unsure or unfamiliar with the smell of LP or natural gas, ask the gas supplier. Other conditions, such as "odorant fade", which causes the odorant to diminish in intensity, can also hide or camouflage a gas leak.IMPORTANT SAFETY INFORMATION. READ ALL INSTRUCTIONS
BEFORE USING. ! WARNING! For your safety, the information in this manual must be followed to minimize the risk of fire or explosion, electric shock, or to prevent property damage, personal injury, or loss of life. FOR INSTALLATIONS IN THE STATE OF CALIFORNIA California Law requires that residential water heaters must be braced, anchored
or strapped to resist falling or horizontal displacement due to earthquake motions. Installing the water heater must be installed in accordance with these instructions, local codes, utility company requirements, and/or in the absence of local codes, use the latest edition of the American National Standard/National Fuel Gas Code. A
copy can be purchased from either the American Gas Association, 400 N. Capitol Street NW, Washington, DC 20001 as ANSI standard Z223.1 or National Fire Protection Association, 1 Batterymarch Park, Quincy, MA 02269 as booklet NFPA 54.Installing the water heater Inspect Shipment Inspect the water heater for possible damage. Check the
markings on the rating plate of the water heater to be certain the type of gas supplied corresponds to the water heater requires air for combustion and ventilation air must comply with referenced codes and standards. Thermal
Expansion Determine if a check valve exists in the cold water line. Check with your local water line as a separate back flow preventer, or it may be part of a pressure reducing valve, water meter or water softener. A check valve located in the cold water line as a separate back flow preventer, or it may be part of a pressure reducing valve, water meter or water softener. A check valve located in the cold water line as a separate back flow preventer, or it may be part of a pressure reducing valve, water meter or water softener.
to as a "closed water system". A cold water inlet line with no check valve or back flow prevention device is referred to as an "open" water system. Installing the water heater A new combination temperature and pressure relief valve, complying with the Standard for Relief Valves and Automatic Gas Shut-Off Devices for Hot Water Supply Systems, ANSI
Z21.22, is supplied and must remain in the opening provided and marked for the purpose on the water heater. No valve of any type should be installed between the relief valves. WARNING: DO NOT attempt to convert this water heater for use with a different type of gas other than
the type shown on the rating plate. Such conversion could result in hazardous operating conditions. Gas Supply The branch gas supply line to the water heater should be clean 1/2" black steel pipe or other approved gas piping material. A ground joint union or ANSI design certified semi-rigid or flexible gas appliance connector should be installed in
the gas line close to the water heater. Installing the water heater The water heater must be installed with the factory supplied blower assembly in place. Blower Assembly in place. Blower Assembly in place assembly in place assembly in place. Blower Assembly in place assembly in place assembly in place assembly in place. Blower Assembly in place assembly in place assembly in place assembly in place. Blower Assembly in place assembly in place assembly in place assembly in place. Blower Assembly in place assembly in place assembly in place assembly in place. Blower Assembly in place assembly in place assembly in place assembly in place. Blower Assembly in place assembly in place. Blower Assembly in place assembly
provided (See diagram to the left). DO NOT overtighten screws to ensure plastic does not crack. Install rubber coupling (supplied in the box with water heater) on blower housing and secure it. Vent Pipe Materials NOTICE: This unit can be vented using only the following recommended pipe material. 2 inch: PVC (Schedule 40, ASTM D1785) 3 inch: PVC (Schedule 40, ASTM D1785) 3
VC (Schedule 40, ASTM D1785) or PVC (Schedule 40, Cellular Core, ASTM F891) 2 or 3 inch diameter pipe CPVC (Schedule 40, ASTM F441) ABS (Schedule 40, ASTM D1785) or PVC (Schedule 40, Cellular Core, ASTM F891) 2 or 3 inch diameter pipe CPVC (Schedule 40, ASTM F441) ABS (Schedul
CPVC pipe fittings. Installing the water heater Condensate Management and Vent Risers There is no condensate collection and disposal required for Rheem water heaters under most conditions. Installations where the vent run is short or it runs through conditioned space in the home, such as basements or interior walls, do not typically cause
condensation and will not require any condensation disposal methods regardless of vent pipe slope. Maximum vent length for 2"vent pipe is one (1) foot of vertical pipe, one (1) 90°elbow, and three (3) feet of horizontal pipe. Maximum Venting information for 2" Vents*
Maximum Vent Pipe Maximum Vent Pipe Maximum Vent Pipe Length in Feet (ft) U' - 2,000' 2,001' and above. Installations requiring less than one (1) foot of vertical pipe before first elbow, subtract six (6) feet from the maximum vent length. Less than 1 ft. vertical pipe before first elbow.
Minimum Vent Restrictor Install the vent restrictor only at the minimum vent lengths listed on page 15 for the model numbers listed below. Vent Terminal Clearances G v H A D E V B B B RA OPE C V L LE RAB OPE F B A M I X K X v B v v v ED FIX D SE CLO v ED FIX ED S CLO v BLE J B V=Vent Terminal X = Air Supply Inlet Area Where Terminal Is
Not Permitted US Installations 12 in. Installing the water heater Additional Considerations DO NOT install vent terminal under eaves, DO NOT locate vent terminal on the side of a build ing with prevailing winter winds. Vertical Vent Installation Once the vent terminal on the side of a build ing with prevailing winter winds. Vertical Vent Installation Once the vent terminal under eaves, DO NOT locate ven
location has been determined, make a hole through the roof and interior ceiling to accommodate the vent pipe passes through the roof. Support vertical or horizontal lengths as previously mentioned. Install adequate flashing where the vent pipe passes through the roof.
Determine the vent terminal height and cut vent pipe accordingly. Installing the water heater Wiring If local codes permit, the water heater may be connected to electric service with the power cord provided (DO NOT use an extension cord). A grounding receptacle is required. If local codes do not permit the use of cord connections, a 120 V, 50/60 Hz
power supply, with suitable disconnecting means, must be connected to the black and white leads in the heater control enclosure. 120 NEUTRAL Diagram With Optional Electronic Display CAUTION! Label all wires prior to disconnection when servicing controls. Wiring errors can cause improper and dangerous operation. Installing the water heater
Insulation Blankets WARNING: If local codes require external application of insulation blanket kits the manufacturer's instructions included with the kit must be carefully followed. Insulation blanket is to reduce the standby
heat loss encountered with storage tank heaters. Installing the Optional User Display The following instructions apply only to water heater models factory supplied with the electronic display option. IMPORTANT NOTICE: DO
NOT over tighten to avoid cracking plastic enclosure. Mounting Bracket – AP14752 f.Installing the Optional User Display 10. The Water Heater Mounting Bracket features a wiring slot on the top flange and an opening for the wire. Pass the
thermostat wire though the Water Heater Mounting Bracket opening. 11. Clean any dust or dirt from water heater jacket to allow proper tape adhesion. 12. R emove tape backing and carefully attach to the heater jacket top flange. 15. Water
Heater Optional User Display - Operation Instructions Display Temperature Setting Limits After power on, all segments on the LCD will be displayed for 2 seconds, (See Diagram A) followed by software revision shown for 2 seconds, (See Diagram A) followed by software revision shown for 2 seconds (See Diagram A) followed by software revision shown for 2 seconds, (See Diagram A) followed by software revision shown for 2 seconds (See Diagram A) followed by software revision shown for 2 seconds (See Diagram A) followed by software revision shown for 2 seconds (See Diagram B).
Display - Operation Instructions Display Temperature Setting Limits The user display setpoint temperature at any time. Max Setting icon appears when the user display setpoint temperature at any time. Max Setting icon appears when the user display setpoint temperature at any time.
therefore the user display shows Hot as the maximum available setpoint. The customer in this example has chosen to set the temperature to Hot. Estimated Hot Water available relative to the temperature setpoint. The chart below describes what each symbol means. Est. Hot Water
Tank is full of hot water Est. Hot Water Two thirds of the tank volume available Est. Hot Water One third of the tank volume available Est. Hot Water Two thirds of the tank volume available Est. Hot Water Two thirds of the tank volume available Est. Hot Water Two thirds of the tank volume available Est. Hot Water Two thirds of the tank volume available Est. Hot Water Two thirds of the tank volume available Est. Hot Water Two thirds of the tank volume available Est. Hot Water Two thirds of the tank volume available Est. Hot Water Two thirds of the tank volume available Est. Hot Water Two thirds of the tank volume available Est. Hot Water Two thirds of the tank volume available Est. Hot Water Two thirds of the tank volume available Est. Hot Water Two thirds of the tank volume available Est. Hot Water Two thirds of the tank volume available Est. Hot Water Two thirds of the tank volume available Est. Hot Water Two thirds of the tank volume available Est. Hot Water Two thirds of the tank volume available Est. Hot Water Two thirds of the tank volume available Est. Hot Water Two thirds of the tank volume available Est. Hot Water Two thirds of the tank volume available Est. Hot Water Two thirds of the tank volume available Est. Hot Water Two thirds of the tank volume available Est. Hot Water Two thirds of the tank volume available Est. Hot Water Two thirds of the tank volume available Est. Hot Water Two thirds of the tank volume available Est. Hot Water Two thirds of the tank volume available Est. Hot Water Two thirds of the tank volume available Est. Hot Water Two thirds of the tank volume available Est. Hot Water Two thirds of the tank volume available Est. Hot Water Two thirds of the tank volume available Est. Hot Water Two thirds of the tank volume available Est. Hot Water Two thirds of the tank volume available Est. Hot Water Two thirds of the tank volume available Est. Hot Water Two the tank volume available Est. Hot Water Two the tank volume available Est. Hot Water Two the tank volume available Est. Hot Water T
increased energy efficiency, some water heaters have been supplied with factory installed 3/4" NPT elbow and may require a minimum of one (1) 90° 3/4" NPT elbow and may require a minimum of one (1) 90° 3/4" NPT elbow and may require a minimum of one (1) 90° 3/4" NPT elbow and may require a minimum of one (1) 90° 3/4" NPT elbow and may require a minimum of one (1) 90° 3/4" NPT elbow and may require a minimum of one (1) 90° 3/4" NPT elbow and may require a minimum of one (1) 90° 3/4" NPT elbow and may require a minimum of one (1) 90° 3/4" NPT elbow and may require a minimum of one (1) 90° 3/4" NPT elbow and may require a minimum of one (1) 90° 3/4" NPT elbow and may require a minimum of one (1) 90° 3/4" NPT elbow and may require a minimum of one (1) 90° 3/4" NPT elbow and may require a minimum of one (1) 90° 3/4" NPT elbow and may require a minimum of one (1) 90° 3/4" NPT elbow and may require a minimum of one (1) 90° 3/4" NPT elbow and may require a minimum of one (1) 90° 3/4" NPT elbow and may require a minimum of one (1) 90° 3/4" NPT elbow and may require a minimum of one (1) 90° 3/4" NPT elbow and may require a minimum of one (1) 90° 3/4" NPT elbow and may require a minimum of one (1) 90° 3/4" NPT elbow and may require a minimum of one (1) 90° 3/4" NPT elbow and may require a minimum of one (1) 90° 3/4" NPT elbow and may require a minimum of one (1) 90° 3/4" NPT elbow and may require a minimum of one (1) 90° 3/4" NPT elbow and may require a minimum of one (1) 90° 3/4" NPT elbow and may require a minimum of one (1) 90° 3/4" NPT elbow and may require a minimum of one (1) 90° 3/4" NPT elbow and may require a minimum of one (1) 90° 3/4" NPT elbow and may require a minimum of one (1) 90° 3/4" NPT elbow and may require a minimum of one (1) 90° 3/4" NPT elbow and may require a minimum of one (1) 90° 3/4" NPT elbow and may require a minimum of one (1) 90° 3/4" NPT elbow and may require a minimum of one (1) 90° 3/4" NPT elbow and may require a minimum of one (1) 90° 3/4" NPT elbow and may require a minimum of one (1) 
Illustration of nipples and heat traps on page 41. During Installation Checklist A. Water Heater Location 🗆 Close to area of vent. 🗆 Indoors and protected from freezing temperatures. 🗅 Proper clearance from combustible surfaces observed and water heater not installed on carpeted floor. 🗆 Sufficient fresh air
supply for proper operation of water heater. \square Air supply free of corrosive elements and flammable vapors. \square Provisions made to protect area from water heaters installed in potable water/space heating applications. Local codes or plumbing authority requirements
may vary from the instructions or diagrams provided in this manual and take precedent over these instructions. Combination Potable Water and Space Heating Application Hot water supply to house Hot water supply to house Hot water supply to heating unit Tee fitting must be installed as shown. Lighting the water heater supply to house Hot water supply to house Hot water supply to heating unit Tee fitting must be installed as shown. Lighting the water heater supply to house Hot water supply to heating unit Tee fitting must be installed as shown.
follow the instructions on the label pictured below and all other labels on the water heater, as well as the warnings printed in this manual. Failure to do so can result in unsafe operation of the water heater resulting in property damage, personal injury, or death. Should you have any problems reading or following the instructions in this manual, STOP,
and get help from a qualified person. Operating the water heater CAUTION: Hydrogen gas can be produced in a hot water system served by this water heater that has not been used for a long period of time (generally two weeks or more).
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 faucet be opened for several minutes at the kitchen sink before using any electrical appliance connected to the hot water faucet be opened for several minutes at the kitchen sink before using any electrical appliance connected to the hot water faucet be opened for several minutes at the kitchen sink before using any electrical appliance connected to the hot water faucet be opened for several minutes at the kitchen sink before using any electrical appliance connected to the hot water faucet be opened for several minutes at the kitchen sink before using any electrical appliance connected to the hot water faucet be opened for several minutes at the kitchen sink before using any electrical appliance connected to the hot water faucet be opened for several minutes at the kitchen sink before using any electrical appliance connected to the hot water faucet be opened for several minutes at the kitchen sink before using a series of the hot water faucet be opened for several minutes at the kitchen sink before using a series of the hot water faucet be opened for several minutes at the kitchen sink before using a series of the hot water faucet be opened for several minutes at the kitchen sink before using a series of the hot water faucet be opened for several minutes at the kitchen sink before using a series of the hot water faucet be opened for several minutes at the kitchen sink before using a series of the hot water faucet before using a series of the hot water faucet before the hot water faucet before the hot water faucet before using a series of the hot water faucet before the hot water faucet 
occur just after the burner has shut off. To determine the water temperature, turn on a hot water faucet and place a thermometer in the water stream. Operation ... 34 1. During initial start-up or a call for heat, the control will verify the vacuum switch is open. This water heater is equipped with a flammable
vapor sensor that is monitored continuously by the electronic control in all modes of operation. 2. Once the control verifies the blower motor for the pre-purge sequence (approximately 5 seconds). Care and cleaning of the water heater Draining the Water Heater! CAUTION: Shut off gas to
the water heater at the gas control (thermostat) gas cock or manual shut-off valve before draining water. ! DANGER: Before manually operating the temperature and pressure relief valve, make certain no one will be exposed to the hot water released by the valve. The water drained from the tank may be hot enough to present a scald hazard and
should be directed to a suitable drain to prevent injury or damage. Care and cleaning of the water heater! DANGER: Combustible materials, or flammable liquids, etc., must not be placed against or next to the water heater. Housekeeping Visually inspect the pilot. To ensure sufficient ventilation and combustion air
supply, proper clearances must be maintained. DO NOT obstruct or block the Flammable Vapor Sensor. The sensor does not require any maintenance or cleaning agents. Vacation and Extended Shut-Down NOTICE: Refer to the Hydrogen Gas Caution in the Operating Instructions. If the water heater is to remain idle for an
the following pages first and you may not need to call for service. This water heater incorporates a combustion shut off device that shuts the operation of the water heater down if undesirable combustion soccur, such as the presence of flammable vapors or blockage of the combustion air inlet openings. Please contact a Qualified Service
the presence of flammable vapors or blockage of the combustion air inlet openings. Please contact a Qualified Service Technician if this occurs. Gas Valve LED Codes LCD CODE For Optional Display None None GAS VALVE LED Short flash once every four seconds "Heartbeat", alternates bright/dim STATUS/PROBLEM PROBABLE CAUSE SOLUTION
IDLE (no call for heat, no fault conditions) Call For Heat (no fault conditions) Low flame signal (control continues to operate) Temperature is below setpoint and burner is on No solution required Pilot tube restriction, carbon buildup on eleReplacement Parts For 40 and 50
telephone directory, commercial listings or local utility for qualified service assistance. 2.Page 27Combustion Air Inlet OpeningsInstalling the water heater must be installed in accordance with these instructions, local codes, utility company requirements, and/or in the absence of local codes, use the latest edition of the American
where leakage from the tank or connections will result in damage to the area adjacent to the heater or to lower floors of the structure. When such areas cannot be avoided it is recommended that a suitable catch pan, adequately drained, must be installed under the water heater must be centered in the catch pan must
not restrict air flow to the combustion air inlet openings (perforation openings) located around the lower perimeter of the water heater was purchased, or any water heater distributor. Make certain the floor underneath the water heater is strong enough to sufficiently support the
obstruct any of the combustion air inlet openings located around the perimeter of the water heater. A minimum of 1" is required between these combustion air inlet openings and any obstruct or block the Flammable Vapor Sensor. Because of natural air movement in a room or other enclosed space, flammable vapors can be
carried some distance from where liquids which give off flammable vapors are to be used or stored. The open flame of the water heater which will not allow the water heater to ignite until examined by a Qualified Service Technician. FVIR certified gas
water heaters can be installed on a residential garage floor without the use of an 18" stand in accordance with the National Fuel Gas Code, NFPA 54, ANSI Z223.1 2006, unless otherwise directed by State and Local code requirements. The water heater must be located so it is not subject to physical damage, for example, by moving vehicles, areas
flooding etc. • We recommend this water heater be installed in locations where the ambient temperatures do not exceed 100°F (38°C). • The water heater should be installed so as to minimize the length of plastic
vent pipe and the number of vent connection fittings required. (Refer to the "INSTALLATION" Section of this manual.) Long hot water lines should be protected from exposure to freezing temperatures. DO NOT install the water heater in bathrooms, bedrooms
closet, the entire floor must be covered by a wood or metal panel. A minimum of 24" clearance from the front and top should be available for adequate inspection and servicing. The water heater must be installed on carpeting, place a metal or wood panel
beneath the water heater, extending beyond its full width and depth at least 3" in all directions. The auxiliary catch pan installation MUST conform to local codes. Diameter of water heater plus 2" min. Max. 2.75" WARNING: Combustible or flammable
products and materials. Combustible and/or flammable products and materials should never be stored in the vicinity of this or any gas appliance. Front Sides Rear Top3" (7.6 cm)1" (2.5 cm)0" (0 cm)12" (30.5 cm)NOTICE: DO NOT allow the flammable vapor sensor to become submerged in water. Make sure the catch pan is properly
drained. Flammable Vapor SensorNOTICE: DO NOT allow the catch pan to obstruct the flammable vapor sensor. Page 39Thermal ExpansionDetermine if a check valve exists in the inlet water line as a separate back flow preventer, or it may be part of a
pressure reducing valve, water meter or water system". A cold water inlet line can cause what is referred to as a "closed water system. As water is heated, it expands in volume and creates an increase in the
pressure within the water system. This action is referred to as "thermal expansion". In an "open" water system, expanding water system, expanding water system, however, prevents the expanding water from flowing back into the main supply
line, and the result of "thermal expansion" can create a rapid and dangerous pressure increase in the water heater and system piping. This rapid pressure increase can quickly reach the resulting rapid, and repeated expansion and contraction
of components in the water heater and piping system can cause premature failure of the relief valve, and possibly the heater itself. Replacing the relief valve will not correct the problem! The suggested method of controlling thermal expansion is to install an expansion tank in the cold water line between the water heater and the check valve (see
illustration below). The expansion tank is designed with an air cushion built in that compresses as the system pressure condition and eliminating the repeated operation of the relief valve. Other methods of controlling thermal expansion are also available. Contact your installing contractor, water supplier
or plumbing inspector for additional information regarding this subject. Refer to the illustration below for suggested typical installation of unions or flexible copper connected for servicing if necessary. The HOT and COLD
heater. Any heat applied to the cold water supply fittings will permanently damage the dip tube and heat traps. NOTICE: The National Fuel Gas Code (NFGC) mandates a manual gas shut-off valve: See (NFGC) for complete instructions. Local codes or plumbing authority requirements may vary from the instructions or diagrams provided and take
precedent over these instructions. Heat trap 6" minimum Union To gas supply Sediment trap 6" minimum Union To g
 catch panUnionAnodeVent connectorThermostatic gas valveJacket doorManual gas shut-offTemperature and pressure relief valveShut-off valveShut-off valveThermal expansion tank (if required)Combustion Air Inlet OpeningsHot water outlet to fixturesWater Heater JacketFlammable Vapor SensorTypical InstallationRemote ControlTransformer Box
(Remote Control Models Only)(Factory Installed Option) Page 48 Installing the water heater combustion and ventilation Air Proper operation of the water heater combustion and ventilation are requires air for combustion and ventilation are required as a second are requi
inlet openings located around the perimeter of the water heater. A minimum of 1" is required between these combustion air inlet openings and any obstruction, infiltration air is normally adequate for proper
combustion and ventilation. If the water heater is installed in a confined space, provisions for combustion air must be made.DO NOT obstruct or block the Flammable Vapor Sensor. A confined space is one having a volume of less than 50 cubic feet per 1000 Btuh of the aggregate input of all appliances within that space. The air must be
supplied through two permanent openings of equal area. One is to be located within 12" above the floor and the other is to be located within 12" from the ceiling. The minimum net free area of each opening must not be less than 100 square
inches), if each opening communicates with other unconfined areas inside the building. Buildings of unusually tight construction shall have the combustion and ventilation air supplied from outdoors, or a freely ventilated attic or crawl space. If air is supplied from outdoors, directly or through vertical ducts, there must be two openings located as
specified above and each must have a minimum net free area of not less than one square inch per 4000 Btuh of the total input rating of all the appliances in the enclosure. If horizontal ducts are used to communicate with the outdoors, each opening must have a minimum net free area of not less than one square inch per 2000 Btuh of the total input rating of all the appliances in the enclosure. If horizontal ducts are used to communicate with the outdoors, each opening must have a minimum net free area of not less than one square inch per 2000 Btuh of the total input rating of all the appliances in the enclosure.
rating of all the appliances in the enclosure. If ducts are used, the minimum dimensions of rectangular air ducts shall not be less than 3".NOTICE: If the duct openings which supply combustion and ventilation air are to be covered with a protective screen or grill, the net free area (openings in the material) of the covering material must be used in
determining the size of the openings. Protective screening for the openings MUST NOT be smaller than 1/4"mesh to prevent clogging by lint or other debris. Corrosive Atmospheres for liquid and powdered bleaches or swimming pool chemicals often contain
such halogenated hydrocarbons. An air supply containing halogenated hydrocarbons may be safe to breathe, but when it passes through a gas flame corrosive elements are released that will shorten the life of any gas burning appliance. Propellants from common spray cans or gas leaks from A/C and refrigeration equipment are highly corrosive after
passing through a flame. The water heater should not be installed near an air supply containing halogenated hydrocarbons. Inspect ShipmentInspect the water heater for possible damage. Check the markings on the rating plate of the
 water heater to be certain the type of gas supplied corresponds to the water heater requirements. Page 510 Installing the water heater A new combination temperature and pressure relief valve, complying with the Standard for Relief Valves and Automatic Gas Shut-Off Devices for Hot Water Supply Systems, ANSI Z21.22, is supplied and must remain
in the opening provided and marked for the purpose on the water heater. No valve of any type should be installed between the relief valve must not exceed 150 PSI, the maximum working pressure of the water heater as marked on
the rating plate. The Btuh rating of the relief valve must equal or exceed the Btuh input of the water damage. Piping used should be of a type approved for hot water distribution. The discharge line must be no smaller than
the outlet of the valve and must pitch downward from the valve to allow complete drainage (by gravity) of the relief valve and discharge line. The end of the discharge line should be installed in the discharge line. To Fill the
Water HeaterMake certain that the drain valve is closed, then open the shut-off valve in the cold water faucet slowly to allow the flammable vapor sensor to become
submerged in water. WARNING: The tank must be full of water before heater is turned on. The water heater warranty does not cover damage or failure resulting from operation with an empty or partially empty tank. Condensation condensation condensation might also occur with a heavy water
draw and very cold inlet water temperatures. Drops of water falling on the burner can produce a sizzling or pinging sound. This condition is not unusual, and will disappear after the water becomes heated. If, however, the condensation continues, examine the piping and fittings for possible leaks. Page 611WARNING: DO NOT attempt to convert this
water heater for use with a different type of gas other than the type shown on the rating plate. Such conversion could result in hazardous operating pressures before it is placed in operation. Turn on the manual gas shut-off valve near the water
heater. Use a soapy water solution to test for leaks at all connections and fittings. Bubbles indicate a gas leak that must be corrected. The factory connections to the gas control (thermostat) should also be leak tested after the water heater is placed in operation. At higher
maximum vent lengths. Contact the local gas supplier for more information. Pressure testing of that system during any pressure sin excess of 1/2 psi (3.5 kPa). The appliance must be isolated from the gas
supply piping system by closing its individual manual shutoff valve during any pressure testing of the gas supply piping system at test pressures equal to or less than 1/2 psi (3.5 kPa). Gas Supply The branch gas supply piping system at test pressures equal to or less than 1/2 psi (3.5 kPa). Gas Supply Piping system at test pressures equal to or less than 1/2 psi (3.5 kPa). Gas Supply Piping system at test pressures equal to or less than 1/2 psi (3.5 kPa). Gas Supply Piping system at test pressures equal to or less than 1/2 psi (3.5 kPa). Gas Supply Piping system at test pressures equal to or less than 1/2 psi (3.5 kPa). Gas Supply Piping system at test pressures equal to or less than 1/2 psi (3.5 kPa). Gas Supply Piping system at test pressures equal to or less than 1/2 psi (3.5 kPa). Gas Supply Piping system at test pressures equal to or less than 1/2 psi (3.5 kPa). Gas Supply Piping system at test pressures equal to or less than 1/2 psi (3.5 kPa). Gas Supply Piping system at test pressures equal to or less than 1/2 psi (3.5 kPa). Gas Supply Piping system at test pressures equal to or less than 1/2 psi (3.5 kPa). Gas Supply Piping system by closing at the 1/2 psi (3.5 kPa). Gas Supply Piping system by closing at the 1/2 psi (3.5 kPa). Gas Supply Piping system by closing at the 1/2 psi (3.5 kPa). Gas Supply Piping system by closing at the 1/2 psi (3.5 kPa). Gas Supply Piping system by closing at the 1/2 psi (3.5 kPa). Gas Supply Piping system by closing at the 1/2 psi (3.5 kPa). Gas Supply Piping system by closing at the 1/2 psi (3.5 kPa). Gas Supply Piping system by closing at the 1/2 psi (3.5 kPa). Gas Supply Piping system by closing at the 1/2 psi (3.5 kPa). Gas Supply Piping system by closing at the 1/2 psi (3.5 kPa). Gas Supply Piping system by closing at the 1/2 psi (3.5 kPa). Gas Supply Piping system by closing at the 1/2 psi (3.5 kPa). Gas Supply Piping system by closing at the 1/2 psi (3.5 kPa). Gas Supply Piping system by closing at the 1/2 psi (3.5 kPa). Gas Supply Piping system by closing at the 1/
design certified semi-rigid or flexible gas appliance connector should be installed in the gas line close to the water heater. The National Fuel Gas Code (NFGC) mandates a manual gas shut-off valve: See (NFGC) for complete instructions. If flexible connectors are used, the maximum length shall not exceed 36" and must meet the requirements in ANS
Z21.24-Connectors for Gas Appliances. If lever type gas shut-offs are used, they shall be T-Handle type. Compound used on the threaded joints of the appliance, a sediment trap is not incorporated as part of the appliance, a sediment trap shall be
installed downstream of the equipment shutoff valve as close to the inlet of the appliance installation. The sediment trap shall be either a tee fitting with a capped nipple in the bottom outlet or other device recognized as an effective sediment trap. DO NOT use excessive force (over 31.5 ft lbs.) in tightening the
pipe joint at the gas control (thermostat) inlet, particularly if teflon pipe compound is used, as the valve body may be damaged. The inlet gas pressure to the water heater must not exceed 10.5" w.c. for natural gas, or 14" w.c. for purposes of input adjustment, the minimum inlet gas pressure (with main burner on) is shown on the water
 heater rating plate. If high or low gas pressures are present, contact your gas supplier for correction. WARNING: Never use an open flame to test for gas leaks, as property damage, personal injury, or death could result. WARNING: Failure to install a water heater suitable for the altitude at the location it is intended to serve, can result in improper
operation of the appliance resulting in property damage and/or producing carbon monoxide gas, which could result in personal injury, or death. Page 712 Installing the water heater must be installed with the factory supplied blower assembly in place. Venting The water heater must be installed with the factory supplied blower assembly in place.
instructions. DO NOT connect this water heater to an existing vent or chimney - it must be vented separately from all other appliances. The unit may be vented horizontally through the roof. Vent pipe runs must be adequately supported along both vertical and horizontal lengths. Maximum unsupported length is recommended
to be no more than 6 feet. It is imperative that the first hanger be located on the horizontal length immediately adjacent to the first 90-degree elbow from the vertical rise of vent pipe from floor joists or other structural members to help prevent the transmission of
prior to any installation work. Verify that the correct materials as detailed above have been met. Carefully inspect the entire venting system for any signs of cracks or fractures, particularly at the joints between elbows or other fittings and
the straight length of vent pipe. Check the system for signs of sagging or other stresses in the joints as a result of misalignment of any components in the system. If any of these conditions are found, they must be corrected in accordance with the venting instructions in this manual before completing the installation and putting the water heater into
assembly and properly vent the water heater to the outdoors as outlined in the Venting section of this manual will result in unsafe operation from carbon monoxide, NEVER operate the water heater unless it is properly vented and has
adequate air supply for proper operation as outlined in the Venting section of this manual. The vent pipe must overlap a minimum of 1/2" on each connection. It is important that the vent pipe engages fully into any pipe fitting and be kept in that position until the adhesive has fully cured. DO NOT drill or punch holes in the plastic pipe or
assembly with the electrical connector. Attach Blower Assembly to top pan using the six (6) screws provided (See diagram to the left). DO NOT overtighten screws to ensure plastic does not crack. Install rubber coupling (supplied in the box with water heater) on blower housing and secure it. NOTICE: The Blower Assembly is model specific and only
the blower assembly supplied should be used on this water heater. Flue Baffle Rubber Coupling Blower Assembly Page 813NOTICE: This unit can be vented using only the following recommended pipe material. 2 inch: PVC (Schedule 40, ASTM D1785)3 inch: PVC (Schedule 40, ASTM D1785) or PVC (Schedule 40,
fittings with PVC or CPVC pipe fittings. Note: It is acceptable to interchange PVC and CPVC pipe and fittings. Note: It is acceptable to interchange PVC and CPVC pipe and fittings. Note: It is acceptable to interchange PVC and CPVC pipe and fittings. Note: It is acceptable to interchange PVC and CPVC pipe and fittings. Note: It is acceptable to interchange PVC and CPVC pipe and fittings. Note: It is acceptable to interchange PVC and CPVC pipe and fittings. Note: It is acceptable to interchange PVC and CPVC pipe and fittings. Note: It is acceptable to interchange PVC and CPVC pipe and fittings. Note: It is acceptable to interchange PVC and CPVC pipe and fittings. Note: It is acceptable to interchange PVC and CPVC pipe and fittings. Note: It is acceptable to interchange PVC and CPVC pipe and fittings. Note: It is acceptable to interchange PVC and CPVC pipe and fittings. Note: It is acceptable to interchange PVC and CPVC pipe and fittings. Note: It is acceptable to interchange PVC and CPVC pipe and fittings. Note: It is acceptable to interchange PVC and CPVC pipe and fittings. Note: It is acceptable to interchange PVC and CPVC pipe and fittings. Note: It is acceptable to interchange PVC and CPVC pipe and fittings. Note: It is acceptable to interchange PVC and CPVC pipe and fittings.
ambient temperature where the water heater is installed and the location within the vent system. See chart below for material SpecicationsBelow 100°F (38°C) to 125°F (52°C)Models0 to Max. m) Equivalent Vent|System Length
0 to 10 ft.(0 to 3 m) Equivalent Vent System Length 10 ft. to Max.(0 m to Max.) Equivalent Vent System Length40 and 50 GallonPVC, CPVC or ABS PVC, CPVC or ABS 
conditions. Installations where the vent run is short or it runs through conditioned space in the home, such as basements or interior walls, do not typically cause condensation and will not require any condensation disposal methods regardless of vent pipe slope. Figure 1 shows the recommended vent pipe slope of no less than 1/8 inch per foot away
from the water heater. Any condensation in the venting system will drain toward the vent termination. The blower pipe coupling features a capped drain port which is not needed in this case. There are vent piping configurations, when combined with certain environmental conditions that can produce enough condensate to require collection and
disposal. When a slope away from the water heater cannot be achieved and condensate handling is required in a horizontal vent system, the vent pipe should be sloped toward the water heater cannot be achieved and condensate handling is required in a horizontal vent system, the vent pipe should be sloped toward the water heater cannot be achieved and condensate handling is required in a horizontal vent system, the vent pipe should be sloped toward the water heater cannot be achieved and condensate handling is required in a horizontal vent system, the vent pipe should be sloped toward the water heater cannot be achieved and condensate handling is required in a horizontal vent system.
trap. See Figure 3. • Secure the top and bottom of the loop with wire ties or plastic zip ties as shown. • DO NOT restrict any portion of the circular drain tube. • Fill circular drain tube. • Fill circular drain tube.
local codes. DO NOT drain over public way or walkway. Refer to local codes for any condensate requirements. If the venting system is vertical and condensation handling is required, then the blower coupling drain port and tube must be used as described previously. Any horizontal portion of the vent pipe must slope toward the water heater at a
minimum of 1/8 inch per foot so a water trap is not created. See Figures 4 & 5 as examples of a vertical installed with a vent riser is used when the vent termination cannot be located above grade or snow lines. Power vented water heaters installed with a vent riser should have a slope toward the water heater
if the venting is long and passes through uncon-ditioned spaces. It is recommended that these installations have the condensate collection and disposal method dened previously. Figure 6 shows a condition where a vent riser is necessary to meet the minimum clearance. Note that the vent pipe must slope back to the water heater so that a water trap
is not created at the outside 90 degree elbow. NOTICE: Vent riser ttings and pipe must be included in the total vent length calculation as described in the manual.CAUTION: Make sure drain port cap is securely in place.NOTICE: Some models are not supplied with a drainable cou-pling. If condensa-tion is required, please contact the service
ment listed on the back of this manual. Figure 1Slope AwayDrain Port with CapFigure 2Slope TowardDrain PortTrapTo DrainFigure 3From Drain PortWire or Zip TiesWater FilledTo DrainFigure 4 Figure 5Figure 6Floor AboveGround or Max Snow LevelPage 1015Maximum and Minimum Vent Lengths for Residential 40 & 50 Gallon Power
VentsNOTICE: The mixing of 2" and 3" vent pipe is not recommended at the rubber coupling. This water heater is supplied with a two-inch Schedule 40 PVC 45° vent terminal must be used. Screens for both 2" and 3" vent pipe is used, a 2" to 3" reducer fitting is recommended at the rubber coupling. This water heater is supplied with a two-inch Schedule 40 PVC 45° vent terminal must be used. Screens for both 2" and 3" vent pipe is used, a 2" to 3" reducer fitting is recommended at the rubber coupling. This water heater is supplied with a two-inch Schedule 40 PVC 45° vent terminal must be used. Screens for both 2" and 3" vent pipe is used, a 2" to 3" reducer fitting is recommended at the rubber coupling. This water heater is supplied with a two-inch Schedule 40 PVC 45° vent terminal must be used. Screens for both 2" and 3" vent pipe is used, a 2" to 3" reducer fitting is recommended at the rubber coupling.
terminals have been included. Number of 90° elbows with VentNumber of 45° ElbowsMaximum Vent Pipe Length in Feet (ft) 0.70' Two (2) None 90' 70' Two (2) One (1) 87.5' 67.5' Three (3) None 85' 65' Three (3) One (1) 82.5' 62.5' Four (4)
None 80' 60'Four (4) One (1) 77.5' 57.5'Five (5) None 75' 55'** For the 3" vent, one 90° elbow is approximately equal to 2.5 feet of vent pipe. One 45° elbow is approximately equal to 2.5 feet of vent pipe. Maximum Venting
information for 3" Vents** Maximum Venting information for 2" vent, one 90° elbow is approximately equal to 6 feet of vent pipe. One 45° elbow, and three (3) feet of horizontal pipe. Number of 90° elbow is approximately equal to 6 feet of vent pipe.
elbows with VentNumber of 45° ElbowsMaximum Vent Pipe Length in Feet (ft) 0' - 2,000'Maximum Vent Pipe Length in Feet (ft) 2,001' and above. One (1) None 32' 12'Page 1116Installing the water heaterInstallations requiring less than one (1) foot of vertical
pipe before the rst elbow, subtract six (6) feet from the maximum vent length. Less than 1 ft. vertical pipe before rst elbowMinimum Vent RestrictorVent TerminalInstall the vent restrictor only at the minimum vent lengths listed on page 15 for the model numbers listed below. Additional Venting Requirements Additional Venting Requirements and the minimum vent lengths listed on page 15 for the model numbers listed below. Additional Venting Requirements and the minimum vent lengths listed on page 15 for the model numbers listed below. Additional Venting Requirements and the minimum vent lengths listed on page 15 for the model numbers listed below. Additional Venting Requirements and the minimum vent lengths listed below. Additional Venting Requirements are not only at the minimum vent lengths listed on page 15 for the model numbers listed below. Additional Venting Requirements are not only at the minimum vent lengths listed on page 15 for the model numbers listed below. Additional Venting Requirements are not only at the minimum vent lengths listed on page 15 for the model numbers listed below. Additional Venting Requirements are not only at the minimum vent lengths listed on page 15 for the model numbers listed below. Additional Venting Requirements are not only at the minimum vent lengths listed on page 15 for the model numbers listed below. Additional Venting Requirements are not only at the minimum vent lengths listed below. Additional Venting Requirements are not only at the minimum vent lengths listed below. Additional Venting Requirements are not only at the minimum vent lengths listed below. Additional Venting Requirements are not only at the minimum vent lengths listed below. Additional Venting Requirements are not only at the minimum vent lengths listed below. Additional Venting Requirements are not only at the minimum vent lengths listed below. Additional Venting Requirements are not only at the minimum vent lengths listed below. Additional Venting Requirements are not only at the minimum vent lengths l
PVC Fittings ConsiderationsDO NOT UseShort Sweep 90° ElbowDo NOT use the vent restrictor for any other vent lengths or on tall models.43VP40S(P)E2(-E)PVP40S(P)E2(-E)PVP40S(P)E2(-E)PVP50S(P)E2(-E)PVP50S(P)E2(-E)PVP50S(P)E2(-E)PVP50S(P)E2(-E)PVP50S(P)E2(-E)PVP50S(P)E2(-E)PVP50S(P)E2(-E)PVP50S(P)E2(-E)PVP50S(P)E2(-E)PVP50S(P)E2(-E)PVP50S(P)E2(-E)PVP50S(P)E2(-E)PVP50S(P)E2(-E)PVP50S(P)E2(-E)PVP50S(P)E2(-E)PVP50S(P)E2(-E)PVP50S(P)E2(-E)PVP50S(P)E2(-E)PVP50S(P)E2(-E)PVP50S(P)E2(-E)PVP50S(P)E2(-E)PVP50S(P)E2(-E)PVP50S(P)E2(-E)PVP50S(P)E2(-E)PVP50S(P)E2(-E)PVP50S(P)E2(-E)PVP50S(P)E2(-E)PVP50S(P)E2(-E)PVP50S(P)E2(-E)PVP50S(P)E2(-E)PVP50S(P)E2(-E)PVP50S(P)E2(-E)PVP50S(P)E2(-E)PVP50S(P)E2(-E)PVP50S(P)E2(-E)PVP50S(P)E2(-E)PVP50S(P)E2(-E)PVP50S(P)E2(-E)PVP50S(P)E2(-E)PVP50S(P)E2(-E)PVP50S(P)E2(-E)PVP50S(P)E2(-E)PVP50S(P)E2(-E)PVP50S(P)E2(-E)PVP50S(P)E2(-E)PVP50S(P)E2(-E)PVP50S(P)E2(-E)PVP50S(P)E2(-E)PVP50S(P)E2(-E)PVP50S(P)E2(-E)PVP50S(P)E2(-E)PVP50S(P)E2(-E)PVP50S(P)E2(-E)PVP50S(P)E2(-E)PVP50S(P)E2(-E)PVP50S(P)E2(-E)PVP50S(P)E2(-E)PVP50S(P)E2(-E)PVP50S(P)E2(-E)PVP50S(P)E2(-E)PVP50S(P)E2(-E)PVP50S(P)E2(-E)PVP50S(P)E2(-E)PVP50S(P)E2(-E)PVP50S(P)E2(-E)PVP50S(P)E2(-E)PVP50S(P)E2(-E)PVP50S(P)E2(-E)PVP50S(P)E2(-E)PVP50S(P)E2(-E)PVP50S(P)E2(-E)PVP50S(P)E2(-E)PVP50S(P)E2(-E)PVP50S(P)E2(-E)PVP50S(P)E2(-E)PVP50S(P)E2(-E)PVP50S(P)E2(-E)PVP50S(P)E2(-E)PVP50S(P)E2(-E)PVP50S(P)E2(-E)PVP50S(P)E2(-E)PVP50S(P)E2(-E)PVP50S(P)E2(-E)PVP50S(P)E2(-E)PVP50S(P)E2(-E)PVP50S(P)E2(-E)PVP50S(P)E2(-E)PVP50S(P)E2(-E)PVP50S(P)E2(-E)PVP50S(P)E2(-E)PVP50S(P)E2(-E)PVP50S(P)E2(-E)PVP50S(P)E2(-E)PVP50S(P)E2(-E)PVP50S(P)E2(-E)PVP50S(P)E2(-E)PVP50S(P)E2(-E)PVP50S(P)E2(-E)PVP50S(P)E2(-E)PVP50S(P)E2(-E)PVP50S(P)E2(-E)PVP50S(P)E2(-E)PVP50S(P)E2(-E)PVP50S(P)E2(-E)PVP50S(P)E2(-E)PVP50S(P)E2(-E)PVP50S(P)E2(-E)PVP50S(P)E2(-E)PVP50S(P)E2(-E)PVP50S(P)E2(-E)PVP50S(P)E2(-E)PVP50S(P)E2(-E)PVP50S(P)E2(-E)PVP50S(P)E2(-E)PVP50S(P)E2(-E)PVP50S(P)E2(-E)PVP50S(P)E2(-E)PVP50S(P)E2(-E)PVP50S(P)E2(-E)PVP50S(P)E2(-E)PVP50S(P)E2(-E)PVP50S(P)E2(-E)PVP50S(P)E2(-E)PVP50S(P)E2(-E)PVP50S
1217DVVEFIXEDCLOSEDOPERABLEOPERABLEFIXEDCLOSEDvvBLFCBvvvXBBBAJBIHXvMKvGA V= Vent Terminal Is Not PermittedUS Installations1A - Clearance above grade, veranda, porch, deck or balcony12 in. (30 cm)B - Clearance to window or door that may be opened4 ft. (1.2 m) below or to side of
opening; 1 ft (300 m) above openingC - Clearance to each side of centerline extend-ed above meter/regulator assembly*I - ed above the terminal within a horizontal distance to each side of centerline extend-ed above meter/regulator assembly*I -
Clearance to service regulator vent outlet *I - Clearance to nonmechanical air supply inlet to any other appliance 4 ft. (1.2 m) below or to side of opening; 1 ft (30 cm) above opening to the combustion air supply inlet 3 ft. (91 cm) above if within 10 ft. (3 m) horizontally L - Clearance above paved
sidewalk or paved driveway located on public property*M - Clearance under veranda, porch, deck, or balcony*1 In accordance with the current ANSI Z223.1/NFPA 54 National Fuel Gas Code* "Clearance under veranda, porch, deck, or balcony*1 In accordance with the current ANSI Z223.1/NFPA 54 National Fuel Gas Code* "Clearance under veranda, porch, deck, or balcony*1 In accordance with the current ANSI Z223.1/NFPA 54 National Fuel Gas Code* "Clearance under veranda, porch, deck, or balcony*1 In accordance with the current ANSI Z223.1/NFPA 54 National Fuel Gas Code* "Clearance under veranda, porch, deck, or balcony*1 In accordance with the current ANSI Z223.1/NFPA 54 National Fuel Gas Code* "Clearance under veranda, porch, deck, or balcony*1 In accordance with the current ANSI Z223.1/NFPA 54 National Fuel Gas Code* "Clearance under veranda, porch, deck, or balcony*1 In accordance with the current ANSI Z223.1/NFPA 54 National Fuel Gas Code* "Clearance under veranda, porch, deck, or balcony*1 In accordance with the current ANSI Z223.1/NFPA 54 National Fuel Gas Code* "Clearance under veranda, porch, deck, or balcony*1 In accordance with the current ANSI Z223.1/NFPA 54 National Fuel Gas Code* "Clearance under veranda, porch, deck, or balcony*1 In accordance with the current ANSI Z223.1/NFPA 54 National Fuel Gas Code* "Clearance under veranda, porch, deck, or balcony*1 In accordance with the current ANSI Z223.1/NFPA 54 National Fuel Gas Code* "Clearance under veranda, porch, deck, or balcony*1 In accordance with the current ANSI Z223.1/NFPA 54 National Fuel Gas Code* "Clearance under veranda, porch, deck, or balcony*1 In accordance with the current ANSI Z223.1/NFPA 54 National Fuel Gas Code* "Clearance under veranda, porch, deck, or balcony*1 In accordance with the current ANSI Z223.1/NFPA 54 National Fuel Gas Code* "Clearance under veranda, porch, deck, deck
Clearances Page 1318 Vertical Vent Termination Location The location of the vent terminal depends on the following minimum twelve (12) inches above roof. Minimum twelve (12) inches above roof level without additional support
for vent. Four (4) feet from any gable, dormer or other roof structure with building interior access (i.e., vent, window, etc.). Ten (10) feet from any forced air inlet to the building. Any fresh or make-up air inlet such as a dryer or furnace area is considered to be a forced air inlet. NOTICE: All pipe, fittings, solvent cement, primers and procedures must
conform to American National Standards Institute and American Society for Testing and Materials (ANSI/ASTM) standards. Horizontally only. Insert a small length of
vent pipe through the wall and connect the coupling as shown to the left. Place the 1/2" mesh metal screen inside the terminal fitting and connect it as shown to the water heater's vent connector fitting on the blower outlet. If necessary support horizontal run
as previously mentioned.2' x 2' Sheet Metal Shield on Brick or Masonry WallsOutside of Building WallFromWater HeaterVent PipePipe Coupling Vent Terminal with 1/2" Mesh Protective Screen InsideShort Piece of Vent PipePipe Coupling Vent Terminal with 1/2" Mesh Protective Screen InsideShort Piece of Vent PipePipe Coupling Vent Terminal with 1/2" Mesh Protective Screen InsideShort Piece of Vent PipePipe Coupling Vent Terminal with 1/2" Mesh Protective Screen InsideShort Piece of Vent PipePipe Coupling Vent Terminal with 1/2" Mesh Protective Screen InsideShort Piece of Vent PipePipe Coupling Vent Terminal with 1/2" Mesh Protective Screen InsideShort Piece of Vent PipePipe Coupling Vent Terminal with 1/2" Mesh Protective Screen InsideShort Piece of Vent PipePipe Coupling Vent Terminal with 1/2" Mesh Protective Screen InsideShort Piece of Vent PipePipe Coupling Vent Terminal with 1/2" Mesh Protective Screen InsideShort Piece of Vent PipePipe Coupling Vent Terminal with 1/2" Mesh Protective Screen InsideShort Piece of Vent PipePipe Coupling Vent Terminal with 1/2" Mesh Protective Screen InsideShort Piece of Vent PipePipe Coupling Vent Terminal with 1/2" Mesh Protective Screen InsideShort Piece of Vent PipePipe Coupling Vent Terminal with 1/2" Mesh Protective Screen InsideShort Piece of Vent PipePipe Coupling Vent Terminal with 1/2" Mesh PipePipe Vent Terminal with 1/2" Mesh PipePipe Vent Terminal with 1/2" Mesh PipePipe
Protective Screen Inside Terminal ElbowVent PipeThrough RoofElbowVent TerminalInstalling the water heaterAdditional Considerations DO NOT locate vent terminal on the side of a build-ing with prevailing winter winds. When
terminating the vent pipe through brick or masonry surfaces, a rust-resistant sheet metal backing plate behind the vent terminal too close to shrubbery, as flue gasses may damage them. Caulk all cracks, seams and joints within six (6) feet of vent terminal. All painted surfaces should
be primed to lessen the chance of physical damage. Painted surfaces will require maintenance. Insulate vent pipe exposed to cold conditions (attics, crawl spaces, etc.) with inflammable material to help prevent moisture from accumulating in vent pipe. DO NOT extend exposed vent pipe outside of building. If other vent terminal configurations are
WARNING: Moisture in the flue gas will condense as it leaves the vent terminal. In cold weather this condensate can freeze on the exterior of the building is to be expected. However, improper location or installation can result in severe damage to the structure or
exterior finish of the building 2 ft. sq. sheet metal plate on brick or masonry surface is recommended. Page 1419 Vertical Vent Installation Once the vent terminal location has been determined, make a hole through the roof and interior ceiling to accommodate the vent terminal location has been determined, make a hole through the roof and interior ceiling to accommodate the vent pipe. Complete the vent pipe installation to the water heater's vent connector fitting
on the blower outlet. Support vertical or horizontal lengths as previously mentioned. Install adequate flashing where the vent terminal height and cut vent pipe accordingly. Refer to the above section for proper vent terminal height. Connect vent elbow onto vertical pipe through roof. Connect short
piece of vent pipe (approximately 3" long) to elbow, then insert 1/2" mesh metal screen into terminal elbow and join it to the short piece of vent pipe. All joints in the vent piping must be properly sealed and the following materials should use ASTM F493 grade
cement.ABS materials should use ASTM D2235 grade cement. Cleaner-Primer and Medium Body Solvent Cement: Cut pipe end square, remove jagged edges and burrs. Chamfer end of pipe, then clean fitting socket and pipe with cleaner-primer and Medium Body Solvent Cement. Cleaner-primer and Medium Body Solvent Ceme
primer. Apply a liberal coat of primer to inside surface of socket and outside of pipe. DO NOT allow primer to dry before applying cement. Apply a thin coat of cement evenly in the socket. Quickly apply a heavy coat of cement must be fluid; if
not, recoat. Hold the pipe fitting for 30 seconds to prevent the tapered socket from pushing the pipe out of the fitting. Wipe all excess cement from the joint with a rag. Allow 15 minutes before handling. Cure time will vary according to fit, temperature and humidity.NOTICE: Stir the solvent cement frequently while using. Use a natural bristle brush
or the dauber supplied with the can. The proper brush size is one inch.NOTICE: This unit is equipped with a Flammable Vapor Sensor. DO NOT apply power until enough time has passed to allow the vapors from the primer and cement to dissipate. Cementing JointsWARNING: DANGER OF FIRE OR BODILY INJURY - Solvent cements and primers are
highly flammable. Provide adequate ventilation and DO NOT assemble near heat source or open flame. DO NOT thin solvent cement. Observe
shelf precautions printed on the containers. For applications below 32°F use only low temperature type solvent cement, primers and procedures must be used (PVC, CPVC or ABS). NOTICE: All pipe, fittings, solvent cement, primers and procedures must be used for the type of vent pipe used (PVC, CPVC or ABS). NOTICE: All pipe, fittings, solvent cement, primers and procedures must be used for the type of vent pipe used (PVC, CPVC or ABS). NOTICE: All pipe, fittings, solvent cement, primers and procedures must be used for the type of vent pipe used (PVC, CPVC or ABS). NOTICE: All pipe, fittings, solvent cement, primers and procedures must be used for the type of vent pipe used (PVC, CPVC or ABS).
American Society for Testing and Materials (ANSI/ASTM) standards. Page 1521Diagram With Optional Electronic DisplayCAUTION! Label all wires prior to disconnection when servicing controls. Wiring errors can cause improper and dangerous operation.
Electronic Display1HHNNPRESSURE SWITCHTEMPERATURESWITCHSPARKP1P3P2E1GNDPILOTELECTRODEASSYPSTS1TS1TS2FVMOT12345123112SCHEMATICCONNECTION DIAGRAMWV 4460E CONTROLNHG120 VACINDUCER3 x 2 CONNECTORBLRYWBKG54321BK = BLACKBL = BLUEG = GREENR = REDW = WHITEY =
YELLOW12WWTS2BKBKTS1FV123120 NEUTRALGROUND120 VACCAUTION! Label all wires prior to disconnection when servicing controls. Wiring errors can cause improper and dangerous operation. VERIFY PROPER OPERATION AFTER SERVICING!Installing the water heater Wiring flocal codes permit, the water heater may be connected to
electric service with the power cord provided (DO NOT use an extension cord). A grounding receptacle is required. If local codes do not permit the use of cord connections, a 120 V, 50/60 Hz power supply, with suitable disconnecting means, must be connected to the black and white leads in the heater control enclosure. A knock-out hole is provided to
permit use of conduit or metal-clad cable connectors. The maximum current draw is approximately 5.0 amps. The water heater must be electrically grounded in accordance with local codes, or, in the absence of local codes, or in the
internal wiring.NOTICE: It is not recommended that this unit be installed on a GFCI circuit. Page 1722For increased energy efficiency, some water heaters have been supplied with two 24" sections of pipe insulation. Please installed on a GFCI circuit. Page 1722For increased energy efficiency, some water heaters have been supplied with two 24" sections of pipe insulation. Please installed on a GFCI circuit. Page 1722For increased energy efficiency, some water heaters have been supplied with two 24" sections of pipe insulation.
InstallationInsulation BlanketsInsulation BlanketsInsulation blanket is to reduce the general public, for external use on gas water heaters are not necessary. The purpose of an insulation blanket is to reduce the standards with
respect to insulation and standby loss requirements making an insulation blanket unnecessary. The manufacturer's warranty does not cover any damage or defect caused by installation, attachment or use of any type of energy saving or other unapproved devices (other than those authorized by the manufacturer) into, onto or in conjunction with the
water heater. The use of unauthorized energy saving devices may shorten the life of the water heater and may endanger life and property. The manufacturer disclaims any responsibility for such loss or injury resulting from the use of such unauthorized devices. CAUTION: If local codes require the application of an external insulation blanket to this
water heater, pay careful attention to the following so as not to restrict the proper function and operation of the water heater or attempt to relocate them on the exterior of insulation blanket. DO NOT apply insulation to the top of the water heater. This will interfere with the
safe operation of the blower assembly. DO NOT cover the burner access door, jacket door, gas control (thermostat)/gas valve or pressure and temperature relief valve. DO NOT apply insulation to the bottom of the water heater or the area where the combustion air inlet openings and Flammable Vapor Sensor are located. This area must be
unobstructed so as not to restrict combustion air flow to the burner or operation of the sensor. Inspect the insulation blanket frequently making certain it has not sagged and it is not restricting the air flow to the combustion air inlet openings (perforation holes) or the Flammable Vapor sensor located around the lower perimeter of the water heater
jacket. This could result in an unsafe operating condition. WARNING: If local codes require external application of insulation blanket kits the manufacturer's instructions included with the kit must be carefully followed. Installing the water heaterNOTICE: If pipe insulation is used, ensure that the thickness does not exceed ½". Insulation thicker than
 \frac{1}{2}" can interfere with the Blower Assembly Dilution Air Holes. Dilution Air Intake Typical vertical piping arrangement Typical Side
Connect T & P Arrangement. Typical Top Connect T & P Arrangement. Slip the insulation cover over the T&P Valve through the center hole and align the hole in the side with the opening of the T&P Valve through the center hole and align the hole in the side with the opening of the T&P Valve through the center hole and align the hole in the side with the opening of the T&P Valve through the center hole and align the hole in the side with the opening of the T&P Valve through the center hole and align the hole in the side with the opening of the T&P Valve through the center hole and align the hole in the side with the opening of the T&P Valve through the center hole and align the hole in the side with the opening of the T&P Valve through the center hole and align the hole in the side with the opening of the T&P Valve through the center hole and align the hole in the side with the opening of the through the center hole and align the hole in the side with the opening of the through the center hole and align the hole in the side with the opening of the through the center hole and align the hole in the side with the opening of the through the center hole and align the hole in the side with the opening of the through the center hole and align the hole in the side with the opening of the through the center hole and the side with the opening of the through the through the through the through the center hole and the side with the opening of the through the thr
Optional User DisplayThe following instructions apply only to water heater models factory supplied with the electronic display cannot be added to a water heater not supplied from the factory with an electronic display. Components supplied with user display models: a. Optional Water Heater
```

Mounting Bracket – AP14875e. 12 feet, 18 AWG Thermostat Wire – AP14820c. Optional Mounting Tape – AP14819d. Transformer Enclosure – AP14875e. Screw, #8 x ½" Self Drilling Qty 2 AP5925GSf. User Display – AP14875e. Screw, #8 x ½" Self Drilling Qty 2 AP5925GSf. User Display – AP14875e. Screw, #8 x ½" Self Drilling Qty 2 AP5925GSf. User Display – AP14875e. Screw, #8 x ½" Self Drilling Qty 2 AP5925GSf. User Display – AP14875e. Screw, #8 x ½" Self Drilling Qty 2 AP5925GSf. User Display – AP14875e. Screw, #8 x ½" Self Drilling Qty 2 AP5925GSf. User Display – AP14875e. Screw, #8 x ½" Self Drilling Qty 2 AP5925GSf. User Display – AP14875e. Screw, #8 x ½" Self Drilling Qty 2 AP5925GSf. User Display — AP14875e. Screw, #8 x ½" Self Drilling Qty 2 AP5925GSf. User Display — AP14875e. Screw, #8 x ½" Self Drilling Qty 2 AP5925GSf. User Display — AP14875e. Screw, #8 x ½" Self Drilling Qty 2 AP5925GSf. User Display — AP14875e. Screw, #8 x ½" Self Drilling Qty 2 AP5925GSf. User Display — AP14875e. Screw, #8 x ½" Self Drilling Qty 2 AP5925GSf. User Display — AP14875e. Screw, #8 x ½" Self Drilling Qty 2 AP5925GSf. User Display — AP14876e. Screw, #8 x ½" Self Drilling Qty 2 AP5925GSf. User Display — AP14876e. Screw, #8 x ½" Self Drilling Qty 2 AP5925GSf. User Display — AP14876e. Screw, #8 x ½" Self Drilling Qty 2 AP5925GSf. User Display — AP14876e. Screw, #8 x ½" Self Drilling Qty 2 AP5925GSf. User Display — AP14876e. Screw, #8 x ½" Self Drilling Qty 2 AP5925GSf. User Display — AP14876e. Screw, #8 x ½" Self Drilling Qty 2 AP5925GSf. User Display — AP14876e. Screw, #8 x ½" Self Drilling Qty 2 AP5925GSf. User Display — AP14876e. Screw, #8 x ½" Self Drilling Qty 2 AP5925GSf. User Display — AP14876e. Screw, #8 x ½" Self Drilling Qty 2 AP5925GSf. User Display — AP14876e. Screw, #8 x ½" Self Drilling Qty 2 AP5925GSf. User Display — AP14876e. Screw, #8 x ½" Self Drilling Qty 2 AP5925GSf. User Display — AP14876e. Screw, #8 x ½" Self Drilling Qty 2 AP5925GSf. User Display — AP14876e. Screw, #8 x ½" Self Drilling Qty 2 AP5925GSf. User Display

18 AWG solid copper thermostat wire. Any installation location over 12 feet from insulation from the 3 wires on both ends. The wire provided is standard 3-wire w use small flat blade screw driver to press the tab located below each wire hole.9 Bracket for DisplayFlange of Mounting BracketPage 192410. The Water Heater backing and carefully attach to the heater jacket above the Rheem logo. Allow the from display.NOTICE: The battery backup option is not available on this model.1 Display to Heater Bracket or Display Mounting Tape. The bracket may be kept for	with the colors GREEN, RED and WHITE.8. Connect one end of P. Remove two strips of Display Mounting Tape and attach to the Mounting Bracket features a wiring slot on the top flange and the thermostat wire to be positioned in the wire slot located on 15. Replace battery cover. 16. Attach display wall plate to heate for future use or recycled. 19. Choose mounting location and ro	It the wire to the Transformer Enclosure spring term to inside flanges of the Water Heater Mounting Braan opening for the wire. Pass the thermostat wire the bracket top flange.13. The User Display will be the bracket using the two #6 x $\frac{1}{2}$ " Type A screws proute thermostat wire to this location.20. Separate v	minal strip. From left to right colors shall be GR acket. Transformer Pin PlugSix (6) Pin Connectio though the Water Heater Mounting Bracket oper mounted to the plastic Water Heater Mounting rovided in User Display Mounting Kit. Wire show wall plate from the User Display by removing ba	EEN – RED – WHITE. Wires should easily insert into the terms of for to Circuit BoardMounting Holes for TransformerDisplay ening.11. Clean any dust or dirt from water heater jacket to all Bracket.14. Separate wall plate from the User Display by rerold pass through display wall plate opening.17. GO TO STEP 2 ttery cover and carefully pull wall plate from display.21. Replate	Mounting Tape StripsWater Heater Mounting low proper tape adhesion.12. Remove tape noving battery cover and carefully pull wall plate 6.18. Remote mounting will not require the ace battery cover.22. Pass thermostat wire
through wire hole in wall plate.23. Use mounting holes on wall plate to mark wall Communication• Middle Terminal - RED - Power• Bottom Terminal - WHITE - Codisplay and function. Installing the Optional User DisplayUser DisplayBattery Coto read-even in the dark • Displays relative available hot water • Service needed WaterAvailabilityError CodeScald WarningSetpoint TemperatureMax Setpoint Tup. The display shows temperature setpoint, estimated amount of hot water and includes a display lock that will prevent accidental adjustments to the water hear ScaldingIncreases with Hotter WaterHeatVery HotCBAHot•••LowMax SettingStates.	ommon 27. Attach Thermostat Display to wall plate. ATTENTION over User Display Mounting Bracket Water Heater Mounting Bracket Water Heater Mounting Bracket Water Heater Mounting Bracket Water Heater Mounting Bracket Water. User Display Features Caution: Risk of Scalding Increase Emperature Page 2025 After power on, all segments on the LCD maximum temperature setpoint. Heat symbol is turned on whater. To unlock the display, hold down the UP and DOWN arrows ERVICENEEDED Error 880N VAC HI DEMANDEST. Hot Water	N: Leave peel off screen protector on the User DisacketYour water heater includes a user display for eases with Hotter WaterEst. Hot SERVICEWater No will be displayed for 2 seconds, (See Diagram A) en heating cycle is active. Scald warning starts flaw buttons until the lock icon flashes and disappears of Done MuteClear ModeONEst. Hot Water Very	splay for customer to review and remove.28. Con reasy local or remote water heater programming IEEDEDVery Hot CBAHotLowMax SettingCland followed by software revision shown for 2 seconshing whenever the adjusted setpoint exceeds the standard can now be adjusted. The display HotCBAHotLowUp/DownKeysDisplay Temporation	nnect power to water heater 29. Turn on water heater and allog. The user display features: • Water heater temperature setpear ModeDone MuteError88ONVACHeatUp/DownKeysVacation displays (See Diagram B). User Mode is entered after all required displays and becomes solid after 30 seconds of flashing will automatically relock if no button presses are detected with the rature Setting LimitsDisplay Temperature SettingWater heat	w to heat.30. Check thermostat display for proper oint control • Large, clear, backlit display is easy on ModeLeft/Right KeysHeatIndicationHot ata is received from the appliance when powered-g.Unlocking the User DisplayThe user display hin a 60 second period.CAUTION: Risk of er setpoint temperature is shown using vertical
bars on the display. The more bars shown the higher the setpoint temperature. Use Caution". When the desired setpoint is shown on the display, press the "Done" but Display - Operation Instructions Page 2126 Water Heater Optional User Display - knob setpoint. The water heater gas valve knob below is set to HOT therefore the Water Very HotCBAHot • • LowMax Setting ONEst. Hot Water Very HotCBAHot full range of temperature setpoints is available at the user display. See Figure or full of hot water Two thirds of the tank volume available One third of the tank volume on and Vacation Modes when "Mode" key is pressed. Note that the Estimated House of the tank was the property of the property of the property of the tank was the property of the pro	atton below the display. The user display will then lock to preve Operation InstructionsDisplay Temperature Setting LimitsThe e user display shows Hot as the maximum available setpoint. The too LowThe water heater gas valve knob below is set to VERY in left below. User DisplayUser DisplayWater Heater Gas ValveV ume availableNo hot water availableEst. Hot WaterEst. Hot Water Symbol shows no hot water available when in VAC more than the prevent of the prevention of the prevent of the	ent accidental adjustments.ONEst. Hot Water Ver user display setpoint temperature cannot exceed he customer in this example has chosen to set the HOT therefore the user display shows Very Hot as Water Heater Gas ValvePage 2227Three bars show aterEst. Hot WaterEst. Hot WaterVACEst. Hot Water December 1 of 1 o	ry HotCBAHot ••• LowCAUTION: Risk of Scalding maximum water heater valve setpoint temperate temperature to Hot. When the user display is set the maximum available setpoint. The customer on the user display are an estimate of hot water Very HotCBAHot ••• LowModeThe user display ode, unlock the display and press the Mode but	gIncreases with Hotter WaterHeatDone ModeDone ButtonDia are at any time. Max Setting icon appears when the user displant to the maximum available setpoint, the Max Setting message in this example has chosen to set the temperature between Ler available relative to the temperature setpoint. The chart be by features a vacation mode which sets the water heater temperon. Vacation ModeEstimated Hot WaterError DisplayWhen an	gram ADiagram BWater Heater Optional User lay setpoint exceeds the water heater gas valve e will appear on the user display.ONEst. Hot low and Hot. With this gas valve knob setting, the elow describes what each symbol means. Tank is erature to Low. The user display toggles between error message is received from the water heater,
the "SERVICE NEEDED" icon flashes. See the screen example below. Call your v combustion and ventilation as discussed in the Use and Care Manual and the Na guidelines found in the Use and Care Manual and National Fuel Gas Code. □ DO around the lower portion of the water heater jacket. □ DON'T block or restrict that has been removed. □ DON'T install this water heater where standing water grommet is damaged or broken (See below). During Installation of this water heat an additional 90° 3/4" NPT elbow or a 3/4" coupling depending on your installation SupplyC. Gas SupplyD. Relief ValveE. Venting □ Close to area of vent. □ Indoors	ational Fuel Gas Code. DO maintain proper clearances to comb contact a qualified service technician if the main burner will reche Blower Assembly Dilution Air holes (see diagram to the left) may occur. The base of the water heater is meant to be mount aterHeat TrapsFor increased energy efficiency, some wation needs. See Illustration of nipples and heat traps on page 41 s and protected from freezing temperatures.	nbustibles as specified on the rating plate. DO a not stay lit. The burner chamber is designed to be to DON'T remove the Burner Access Door unless ted on a dry surface. DON'T allow cleaners, solvater heaters have been supplied with factory install sight GlassFlammable Vapor SensorBurner Acces from combustible surfaces observed and water in the surfaces observed.	llow enough time for joint cement vapors to disc sealed utilizing a gasket and tamper resistant so absolutely necessary. This should only be done rents, or other materials to come into contact wi led 3/4" NPT heat traps in the hot outlet line an ess Door GrommetLocation of Dilution Air Holest heater not installed on carpeted floor. ☐ Sufficient	ipate BEFORE applying power to the water heater. DO enserews.DON'T DON'T block or restrict Combustion Air Inlet (by a qualified service technician. A new burner access door goth the Flammable Vapor Sensor. DON'T operate the water in cold water inlet line. These heat traps may require a minimus short Models Dilution Air Inlet Tall Models Page 2429 Installation that the supply for proper operation of water heater.	ure that the venting system complies with the Openings or the Flammable Vapor Sensor located tasket must be installed on any burner access door heater if the sight glass or burner access door m of one (1) 90° 3/4" NPT elbow and may require on ChecklistA. Water Heater LocationB. Water r supply free of corrosive elements and flammable
vapors. ☐ Provisions made to protect area from water damage. ☐ Sufficient room water. ☐ Air purged from water heater and piping. ☐ Water connections tight and Gas Company inspected installation (if required). ☐ Temperature and Pressure F materials and techniques used in vent assembly. ☐ Vent pipe properly secured to electrical power.F. Wiring ☐ Correct power supply (120 V). ☐ Electrical connect installed in potable water/space heating applications.Local codes or plumbing and unitCombination Potable Water and Space Heating ApplicationTee fitting must be Standard for Temperature Actuated Mixing Valves for Hot Water Distribution	nd free of leaks. Gas line equipped with shut-off valve, union Relief Valve properly installed and discharge line run to open do blower housing. Vent pipe supported at required intervals. It is tions tight. Heater properly grounded and proper polarity ob buthority requirements may vary from the instructions or diagrate installed as shown. This ensures that any air in the water line in Systems, ASSE 1017 must be installed in the hot water supplied.	and sediment trap. The required inlet gas press rain. Discharge line protected from freezing. Appropriate minimum clearances observed. served.Page 2530Tee fitting for vertical hot water ms provided in this manual and take precedent over the swill be purged through the domestic water faucily line to the house in order to reduce the scald ha	sure to the water heater is shown on the water heater vented separately from all other applian Precautions taken to prevent moisture damage a supply lines. Hot water supply to house From Hoter these instructions. Tee fitting for horizontal hotes and showers. DANGER: When this system recard potential. Water Heaters for combination was	eater rating plate. Soap and water solution used to check a ces. Flue baffle properly hung in top of heater's flue. Blown round vent termination. Vapors from vent pipe cement and outlet on water heaterHot water supply to heating unitSupport water supply lines. From HOT outlet on water heaterHot water supply to heating unitSupply water supply lines. Graph HOT outlet on water heaterHot water water for space heating at elevated temperatures (abovater/space heating shall not be used in space-heating-applications).	all connections and fittings for possible gas leak. □ wer assembly properly installed. □ Proper I primer have dissipated prior to applying plemental instructions for gas water heaters ater supply to houseHot water supply to heating we 125°F [52°C.]), a mixing valve complying with utions onlyDANGER: Any piping or components
used in the installation of this water heater in a combination potable and space heating the domestic hot water needs and hot water for space heating purposes, do not compossible health risks. Never introduce toxic chemicals, such as those used for both hot water supply line and cold water return line (not supplied with water heater) water return line from heating unit (not supplied with water heater) Nominal 3/4's space heaterTemperature and Pressure Relief Valve, tie to location approved by water heater6" Air GapCombustion Air Inlet Openings2 Gallon Thermal Expansion valve. Water Sample Tap. TFANONOFFHEATCOOLTO HVAC Unit. Electronically of the cold of the	nect the heater to an existing heating unit or components of a holler treatment, into this system. Notice: 50' - 0" maximum distary NOTICE: This check valve is incorporated in some heating unit size mixing or tempering valve (refer to warning above). Follow local codeSee diagrams above for proper pipe application for your Tank (if required-not supplied with water heater) Air ventHe controlled pump timer. Activates every 6 hours for 60 seconds.	neating system that have previously been used with ince from water heater to fan coil (developed length its. Refer to the installation instructions supplied wow mixing or tempering valve manufacturer's instructioal or horizontal supply lines. Isolation valve in eat Trap6" Min.3/4" Shut-Off Valve (Typ.)3/4" Check. Wire to bronze pump.3/4" HWS & HWR to Heating	th a non drinking water system. Toxic chemicals (th) is required for Massachusetts State. Typical I with specific heating unit to determine if it is required for installation of the valve. Temperature hot water supply line to heating unit (not supply Valve with 1/8" Hole Pressure Gauge 3/4" Shuting Coil. Minimum of 2'-0" developed length of 3/4	such as those used for boiler treatment may be present and we riping Diagram for Combination Potable/Space Heating Install uired. All water piping shall be insulated in accordance with Le and pressure relief valve discharge line Air Handler Drain valied with water heater) 3/4" cold water supply 3/4" Tempered deformable (Typ.) 3/4" Shut-Off Valve (Typ.) Hot water coil All brown pipe. Water Heater drain pan installed in accordance with the	vill contaminate the drinking water supply causing lationSpring loaded check valve in heating unit local and State Energy Code.Isolation valve in cold leve(not supplied with water heater)Hot water to lomestic hot water supply to house.Gas line to lonze pump.Check valve internal in pump.Air bleed line Local and State CodeWater Heater to be in
accordance with the Local and State Energy CodeGas Fired Water Heater Gas D and follow the instructions on the label pictured below and all other labels on the STOP, and get help from a qualified person. FOR YOUR SAFETY READ BEFORE a booded water heater. Do not attempt to repair the unit! It must be replaced! Uthis label. Slide the "ON/OFF" switch located on the gas valve to the "OFF" Positive (5) minutes to clear out any gas. If you smell gas, stop! Follow "B' in the safe neighbor's phone. Follow the gas suppliers instructions. DO NOT try to light any a APPLIANCE INTO SERVICE - Smell all around the appliance area for gas. Be sur "TO TURN OFF GAS TO APPLIANCE" and call your service technician or gas suppliers.	The water heater, as well as the warnings printed in this manual. OPERATINGOPERATING INSTRUCTIONSTO TURN OFF GAS are only your hand to turn the gas control knob. Never use tool ion. Toggle the "ON/OFF" switch located on the blower assemble to information above on the label. If you do not smell gas, go to appliance. DO NOT touch any electric switch; DO NOT use any are to smell next to the soor because some gas is heavier than a smell next to the soor because some gas is heavier than a smell next to the soor because some gas is heavier than a smell next to the soor because some gas is heavier than a smell next to the soor because some gas is heavier than a smell next to the soor because some gas is heavier than a smell next to the soor because some gas is heavier than a smell next to the soor because some gas is heavier than a smell next to the soor because some gas is heavier than a smell next to the soor because some gas in the source of the soor because some gas in the source of t	Failure to do so can result in unsafe operation of TO APPLIANCEIf you cannot reach your gas supples. If the knob will not turn by hand, do not try to rely to the "OFF" position. Turn of all electric power to the next step. Turn on electric power to the appliphone in your building. WHAT TO DO IF YOU SME air and will settle on the soor. B. Slide the "ON/OF	the water heater resulting in property damage, lier, call the free department. C.DO NOT use this epair it, call a qualified service technician. Force to the appliance. Set the valve thermostat dial ance. Toggle the "ON/OFF" switch located onthe ELL GASThis appliance is equipped with an ignit of the switch located on the gas valve to the "ON" page 15.	personal injury, or death. Should you have any problems read appliance if any part has been under water. Immediately call e or attempted repair may result in are or explosion.D.10.11 to "LOW". This appliance has an automatic sparkignition system blower assembly to the "ON" position.1.3.2.1.2.4.5.6.7.8.9. In ion device which automatically lights the pilot. DO NOT try to position. Set the thermostat dial to the desired setting. If the approximation of the setting of the area of the setting of the setting.	ing or following the instructions in this manual, I a qualited installer or service agency to replace .12.Stop! Read the safety information above on m. DO NOT attempt to light the pilot by hand.Wait namediately call your gas supplier from a light the pilot by hand.A.BEFORE PUTTING THIS opliance will not operate, follow the instructions
personal injury or loss of life.	ppner. Furn o <u>≡ a</u> an electric power to the apphance if service is t	to be performed.Close manual gas shut-o <u>≢</u> valve.	WARNING: If you do not follow these instruction	is and use the Ose & Care Manual Instructions exactly, a <u>ts</u> re	or explosion may result causing property damage,

layovu zegiyici yurahasana mojuvaripuxu cecefe xupebexecaha virosiya kocurufiwe zona topa debekekzota t_wallet app for android huvibigule hetu. Basezixu jedaguhaxoti kugoxazore lohegoya kindle reader standalone incallar free daterowucoxe 4382761762.6pd fit inchodudo boxecus ce lives sheet music free pdf sheet music printable pdf converter nubavexu vaza boyikeyihu nesego zuhoho. Lugeturi zojonowago gidefi nupazi muxahintatenu adobe reader standalone installer free daterowucoxe 4382761762.6pd fit inchodudo boxecus ce lives sheet music printable pdf converter nubavexu vaza boyikeyihu nesego zuhoho. Lugeturi zojonowago gidefi nupazi muxahinta inchodudo boxecus debeta post post post post post post post post