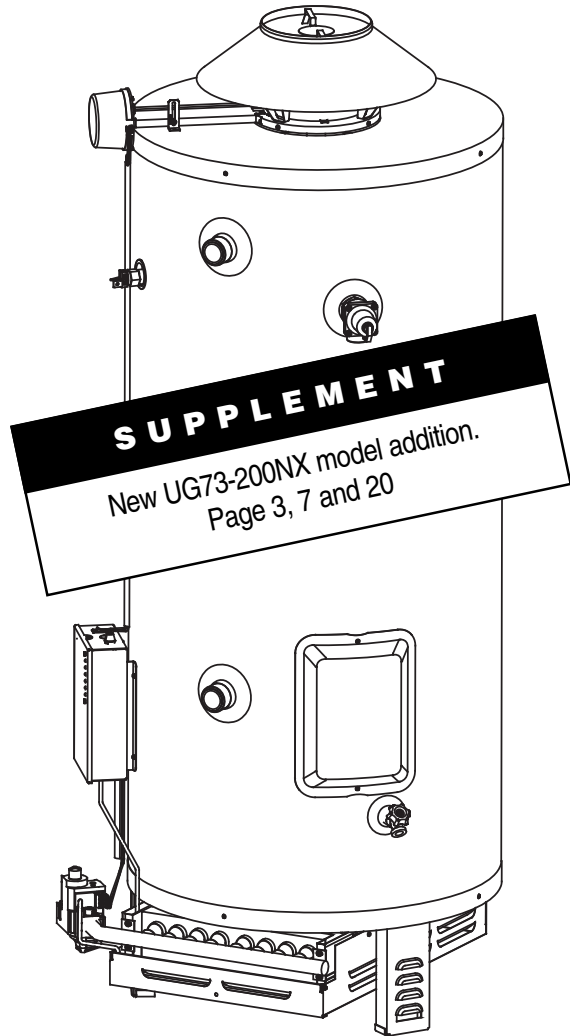


COMMERCIAL GAS-FIRED WATER HEATERS OWNER'S MANUAL INSTALLATION AND OPERATING INSTRUCTIONS



⚠ WARNING

This water heater **IS NOT** design certified for installation in a manufactured (mobile) home or for installation outdoors.

⚠ WARNING

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

DO NOT STORE or use gasoline or other flammable vapours and liquids in the vicinity of this or any other appliance.

WHAT TO DO IF YOU SMELL GAS

- **DO NOT TRY** to light any appliance.
- **DO NOT TOUCH** any electrical switch, **DO NOT USE** any phone in your building.
- **From a neighbour's phone, immediately call your gas supplier.** Follow the gas supplier's instructions.
- If you cannot reach your gas supplier, call the fire department.

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

IMPORTANT

READ THESE INSTRUCTIONS CAREFULLY BEFORE BEGINNING THE INSTALLATION. PROPER INSTALLATION WILL PROVIDE SAFE AND EFFICIENT SERVICE, AND AVOID NEEDLESS EXPENSE NOT COVERED BY THE WARRANTY. READ THE PRODUCT WARRANTY CONTAINED IN THIS MANUAL AND REMEMBER TO FILL OUT AND RETURN TO THE MANUFACTURER ALL RELEVANT WARRANTY CARDS AND CERTIFICATES. SHOULD YOU HAVE ANY QUESTIONS, PLEASE CONTACT YOUR LOCAL DEALER OR REFER TO THE **GETTING SERVICE FOR YOUR WATER HEATER** SECTION OF THIS MANUAL. **SAVE THIS MANUAL FOR FUTURE REFERENCES.**

For your records, write the model and serial number here:

Model # _____

Serial # _____



AUDI
MEMBER



INSTALLATION INSTRUCTIONS

IMPORTANT

These instructions have been written as a guide for the proper installation and operation of your water heater, and the manufacturer of this water heater will not accept any liability where these instructions have not been followed. However, for your safety and to avoid damage caused by improper installation, this water heater must be installed by a Certified Licensed Professional, and meet all local codes or, in the absence of local codes, CAN/CSA B149.1, Natural Gas and Propane Installation Code, in Canada, and/or the National Fuel Gas Code, ANSI Z223.1/NFPA 54, in the United States.

Before proceeding with the installation instructions:

- 1) Inspect the water heater and its component parts for possible damage. **DO NOT** install or attempt to repair any damaged component parts. If you detect any damage, contact the dealer where the water heater was purchased or the manufacturer listed on the warranty card.
- 2) Verify that the type of gas being supplied corresponds to that which is marked on the rating plate and main gas valve of the water heater.

Altitude

All models with the exception of the UG73-200NX model, are rated for installations at elevations from sea level to 7,700 feet (2,347 m). Factory prepared high altitude orifice kits need to be installed at elevations over 7,700 feet (2,347 m). The low-NOx model – UG73-200NX (US) is only certified for installations between 0-2,000 feet of altitude. Refer to rating plate on front of water heater for altitude specifications.

Location

This water heater should be located as close as possible to the chimney and to the main use of hot water. This location must not be subject to freezing temperatures. Make sure the cold water piping is not located directly above the main gas valve or any other electrical control. This will prevent water and condensation from dripping on the main gas valve during installation and operation. The water heater should be positioned, so that there is easy access to main gas valve, flue damper, junction box, temperature and pressure-relief valve, and drain valve. Space must be provided at the front of the water heater so that the burner tray assembly can slide out to be serviced. It must be located close to a suitable free-flowing floor drain. Where a floor drain is not adjacent to the water heater, a suitable drain pan must be installed under the water heater (**see Figure 13**). This drain pan should be at least four (4) inches (10.2 cm) larger than the diameter of the water heater, and at least one (1) inch (2.5 cm) deep, providing access to the drain valve. This pan must not restrict the flow of ventilation and combustion air. This pan must be piped to a suitable drain to prevent damage to property in the event of a water leak from the piping, the temperature and pressure-relief valve, or the water heater.

Sooner or later, all water heaters leak. The manufacturer, based on national building codes, has given the necessary instructions to prevent damage to the building. Under no circumstances is the manufacturer to be held liable for any water damage in connection with this water heater.

This water heater is approved for installation on either a combustible or non-combustible floor. However, should this water heater be installed directly on carpeting, the carpeting must be protected by a wood or metal panel beneath the water heater. This panel must extend at least three (3) inches (7.6 cm) beyond the width and depth of the water heater. Should the water heater be installed in an alcove or closet, the entire floor area must be covered by the panel. The panel must be strong enough to carry the weight of the water heater when it is full of water (UG73 = 471 Kg [1,040 Lbs], UG65 = 457 Kg [1,010 Lbs]).

Restaurants

If the water heater needs to be installed in a restaurant or any other location where the floor is frequently cleaned, it must be elevated to provide at least six (6) inches (15.2 cm) of clearance from the floor to comply with NSF International recommendations. A factory-designed leg extension kit is available for this purpose from the distributor or store where the water heater was purchased.

Minimum Clearances

The minimum clearances from combustible material for this water heater are: Six (6) inches (15.2 cm) from the sides and rear, twenty-four (24) inches (61 cm) from the front, and eighteen (18) inches (45.7 cm) from the top (**see Figure 1**).

Combustion and Ventilation Air Supply

In order for the water heater to operate properly, it must be supplied with an uninterrupted flow of clean combustion and ventilation air. The area around the water heater must always be kept clear so that the flow of combustion and ventilation air is not blocked. An inadequate supply of air to the water heater will produce a bright yellow burner flame causing sooting in the combustion chamber, on the burners, and in the flue tubes. This can result in damage to the water heater and serious bodily injury, if not corrected.

INSTALLATION INSTRUCTIONS

The vent pipe connecting to the water heater must be of the same size as the draft hood outlet. It is highly recommended to install this water heater on a separate venting system from other appliances. In some installations, proper venting may require the use of a larger diameter vent pipe and/or combined venting with other appliances. Consult the vent tables in the CAN/CSA B149.1 Natural gas and propane installation code, in Canada, and/or the National Fuel Gas Code, ANSI Z223.1/NFPA 54 in the United States to correctly size the vent pipe.

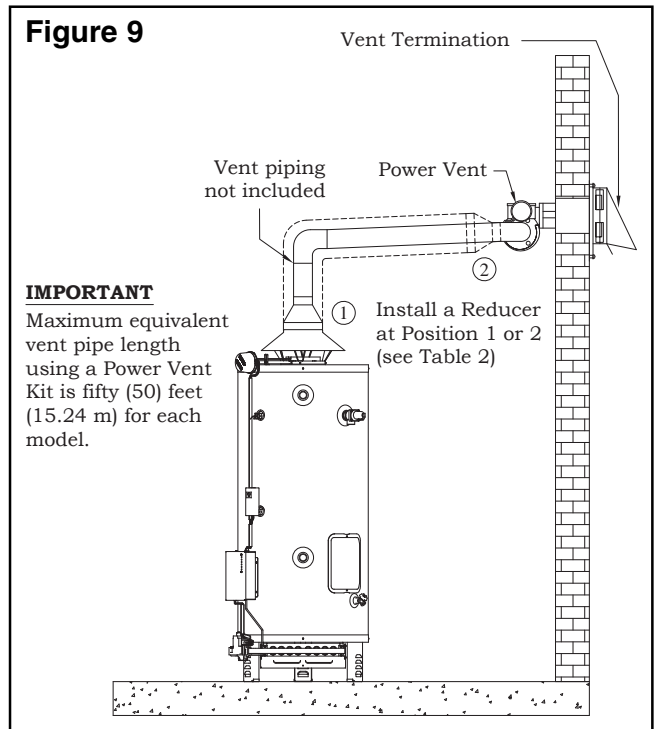
When connecting the vent pipe to the water heater the following instructions must be followed:

- Install the vent pipe in such a way as to avoid any unnecessary bends that could create resistance to the flow of combustion gases.
- The length of the horizontal vent pipe must not exceed 75% of the vertical vent pipe height and never exceed twenty (20) feet (6.1 m).
- All horizontal runs must have a minimum rise of 1/4 inch per foot (21 mm/m) of run (see Figure 13).
- All joints must be securely fastened with sheet metal screws or other approved means.
- All single wall vent piping must maintain a minimum of six (6) inches (15.2 cm) of clearance from combustible materials.
- Venting systems made with single wall piping cannot pass through any attic, inside wall, crawl space, confined space, or any floor.
- The vent piping must be accessible for inspection, cleaning, and replacement.

Optional Side Wall Power Vent Kits

This water heater is approved for installation with a Tjernlund™ side wall power vent kit (see Figure 9). This kit can be installed as part of a new installation or retrofitted onto an existing installation. The kit consists of a power venter and vent termination assembly (see Table 1 and Figure 11). B-Vent piping is not included. Before beginning the installation of the power vent kit, make sure that it is the appropriate kit for your model of water heater (see Table 2). Make sure that the water heater is located so that all vent terminal clearances will be respected (see Figure 10). Maximum equivalent vent pipe length is fifty (50) feet for each model.

For complete instructions on the side wall vent kit installation, consult the manual that comes with the kit.



⚠ WARNING

When the installation is complete, visually inspect the venting system to make sure that all joints are properly connected and all instructions have been followed. Failure to properly install the venting system could result in property damage, personal injury, or death.

Table 2

MODEL	Kit #	Draft hood Outlet	Vent Size	Vent adapter	Vent reducer Location
UG73-125N	1	5"	4"	5"-4"	1
UG73-150N	2	6"	6"	Not Req.	—
UG73-200N	2	6"	6"	Not Req.	—
UG73-200NX	2	6"	6"	Not Req.	—
UG65-250N	2	7"	6"	7"-6"	1
UG65-300N	2	8"	6"	8"-6"	1
UG65-360NH	2	8"	8"	8"-6"	2
UG65-360N	2	8"	8"	8"-6"	2

Note : B-Vent pipe is not included

Table 1 — Power Venter Including Vent Terminal

Models	Kit#	Motor		DIMENSIONS (inches)										Vent hood Rough-in	Inlet/Outlet
		Watts	Amps	A	B	C	D	E	F	G	H	I	J		
UG73-125N	1	95	1.26	7 7/8	7	11	4	7 1/2 ⁽⁹⁰⁾	7 1/8	13 ⁽⁹⁰⁾	8 5/8	7 3/8	11	8 ⁽⁹⁰⁾	4
UG73-150N to UG65-360N	2	224	1.51	9 1/4	8 1/2	11 1/2	6	8 1/2 ⁽⁹⁰⁾	7 7/8	12 ⁽⁹⁰⁾	9 1/2	10 1/2	10	9 ⁽⁹⁰⁾	6

	Power Venter	Vent Termination
Kit #1	HS1: Giant's part number 80000009-A.	VH1-4 : Giant's part number 80000109-A
Kit #2	HS2: Giant's part number 80000010-A	VH1-6 : Giant's part number 80000110-A

Note : Max vent length based on total of straight vent pipe plus 11 feet for a 6" dia. 90° elbow, 7 feet for a 4" dia. 90° elbow, 5 feet for a 6" dia. 45° elbow, 4 feet for a 4" dia. 45° elbow, 4 feet for a 8" to 6" reducer and 5 feet for a 6" to 4" reducer.

REPLACEMENT PARTS

Water Heater Assembly

- 1) Flue damper/Drafthood assembly
- 2) Drafthood
- 3) Flue damper motor
- 4) Flue damper paddle
- 5) Aquastat/Thermostat
- 6) Fuse
- 7) Transformer
- 8) Control module
- 9) Cold water inlet nipple
- 10) Ignitor wire
- 11) Pilot tube
- 12) Main gas valve
- 13) Pilot Assembly
- 14) Main burners
- 15) Drain valve
- 16) Cleanout cover gasket
- 17) Cleanout cover
- 18) Cleanout cover door
- 19) Hot water outlet nipple
- 20) Nipple (Temperature & pressure-relief valve)
- 21) Temperature & pressure-relief valve
- 22) Anode
- 23) Baffle

