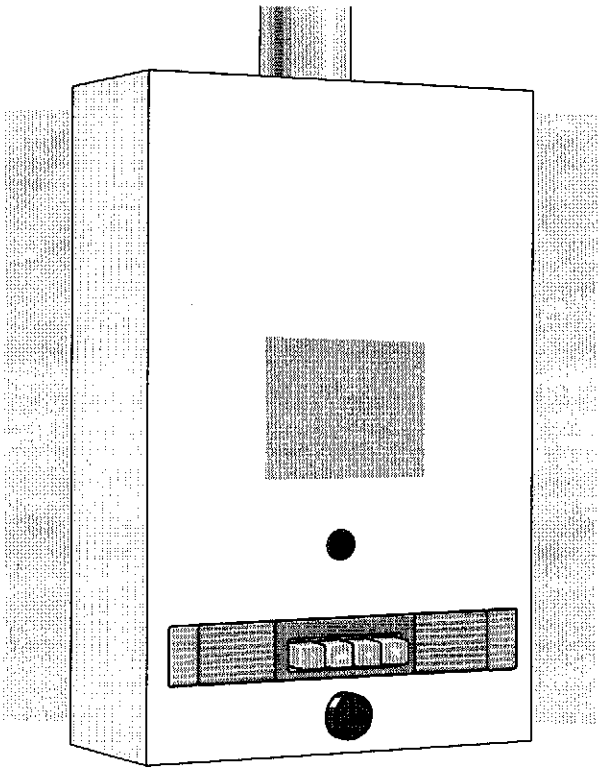
BOSCH

Instantaneous gas water heater

Models
WR325 K...T1
WR400 K...T2

- **Installation**
- **Operation**
- **Maintenance**



The Bosch instantaneous water heater is a high efficiency, space saving answer to your water heating needs.
All Bosch instantaneous water heaters heat water only as required; no energy is lost maintaining a large volume of water at elevated temperatures as in tank-type storage water heaters.

Suitable for heating potable water only. Not approved for space heating purposes.

READ INSTRUCTIONS CAREFULLY BEFORE INSTALLING

NOTICE TO INSTALLER: Please leave this manual with the owner or affix adjacent to appliance.

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

- **Do not store or use gasoline or other flammable vapors and liquids in the vicinity of this or any other appliance.**
- **WHAT TO DO IF YOU SMELL GAS**
- **Do not try to light any appliance**
- **Do not touch any electrical switch; do not use any phone in your building.**
- **Immediately call your gas supplier from a neighbor's phone. 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.**

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ASTRAVAN DISTRIBUTORS, LTD.
123 Charles Street
North Vancouver, BC. V7H 1S1

Phone Canada: (604) 929-5488
Phone USA: (206) 860-8448
Web Site: www.astravan.com

Note: In case of problems please contact your salesman or installer.

DIMENSIONS

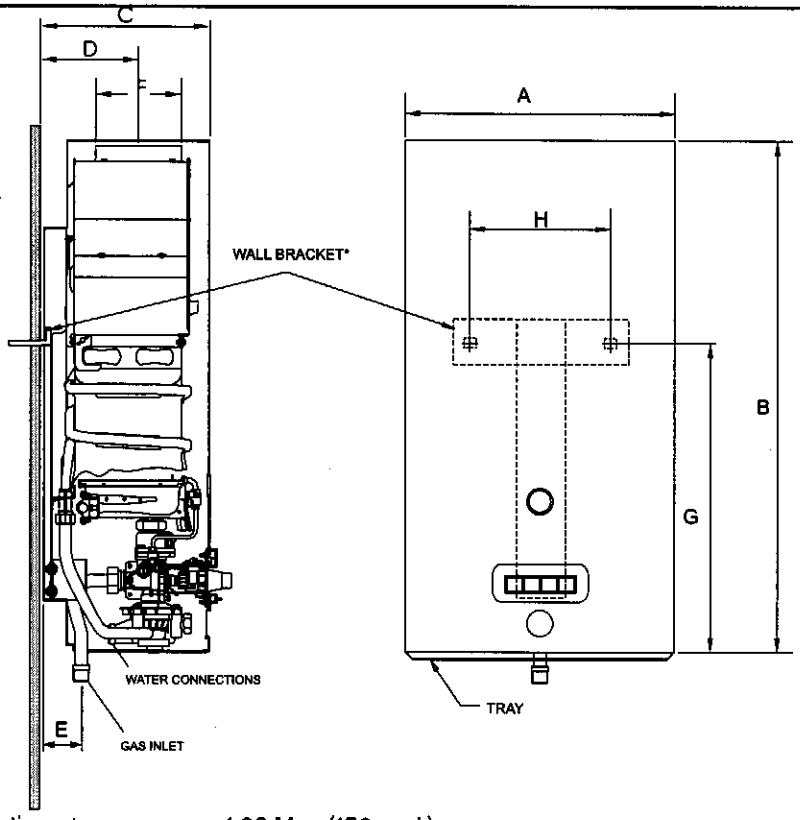


Figure 1

Maximum hydrostatic water pressure – 1.03 Mpa (150 p.s.i.)
Maximum recommend working pressure – 0.69 Mpa (100 p.s.i.)
Minimum working pressure – 0.0138 Mpa (2 p.s.i.) at 2 Litres/min. (0.5 U.S. Gallons/min) free discharge
Minimum recommended inlet water pressure for use with showers 40 p.s.i.g.

Dimensions in Milimetres (inches)

Model	A	B	C	D	E	F	G	H
WR325	400 17 1/4"	755 29 3/4"	250 9 3/4"	155 6"	85 3 1/4"	130 diam. 5" diam.	410 16 1/8"	320 12 5/8"
WR400	460 18 1/8"	760 29 7/8"	225 8 7/8"	130 5 1/8"	52 2"	130 diam. 5" diam.	NA	NA

Model	Type of gas	Altitude	Input	Main Burner orifices	
				Size, mm	Qt.
WR325	Natural	standard (0 - 2,000 ft.)	29.30kW (100,000Btu/hr)	1.25 diam.	14
	Propane		27.83 kW (95,000Btu/hr)	0.79 diam.	14
WR325	Natural	high** (2,000 - 4,500 ft.)	26.37kW (90,000Btu/hr)	1.25 diam.	14
	Propane		25.05 kW (85,000Btu/hr)	0.79 diam.	14
WR400	Natural	standard (0 - 2,000 ft.)	34.28 Kw (117,000Btu/hr)	1.20 diam.	18
	Propane			0.79 diam.	18
WR400	Natural	high** (2,000 - 4,500 ft.)	30.85 kW (105,000Btu/hr)	1.20 diam.	18
	Propane			0.79 diam.	18

* The wall bracket is only required for the WR 325 K ... when mounted directly to combustible construction. The WR 400 K... T2 may be mounted directly to combustible construction.

** The high altitude ratings listed are Canadian Gas Association high altitude ratings and are only valid in Canada. In the U.S., the National Fuel Gas Code, ANSI Z223.1/NFPA 54, recommends for high altitude installations above 2,000 feet, that the input rate be reduced 4% for each 1,000 feet above sea level. – See page 8.

FOREWORD

This design complies with CAN1-4.3-77 and ANS1Z21.10.3b 1994 as an instantaneous gas water heater. In addition the unit complies with CAN1-2.17- M80 use at high altitude, 2.000- 4.500 feet above sea level.

Installation, operation and maintenance information is provided in this manual . Installation and operation instructions should be thoroughly reviewed before proceeding with installation of the BOSCH instantaneous gas water heater.

The BOSCH instantaneous gas water heater is designed to operate on natural or propane gas; however **make sure** that gas on which heter is to operate is the same as specified on the heater's model/rating plate.

In addition of these instructions, the water heater shall be installed in accordance with CAN1-B149 Installation Code (in Canada) or ANSI Z223-1/NFFA 54 National Fuel Gas Code (in U.S.) and/or local installation codes.
These shall be carefully followed in all cases.

INSTALLATION INSTRUCTIONS

Note: Proper plumbing, venting, gas connections and an adequate supply of combustion air are required for safe and reliable operation. Ability equivalent to that of a licensed tradesman in the field involved is required for installation and/or service of these water heaters.

LOCATION

Before installing the BOSCH instantaneous water heater consideration must be given to proper location. The location should be as close to a chimney or gas vent as practicable, in an area with an adequate air supply and as centralized with the piping system as possible. The heater should not be located in an area where it will be subject to freezing.
The heater should be located in an area where leakage of the heater or its connections will not result in damage to the area adjacent to the heater or to lower floors of the structure.

Note: When such locations cannot be avoided, it is recommended that a suitable drain pan, adequately drained, be installed under the water heater. The pan must no restrict combustion air flow.

AIR REQUIREMENTS

For safe operation, sufficient air combustion, ventilation and dilution of the flue gas must be available. An insufficient supply of air will result in a yellow luminous burner flame, causing carboning or sooting of the heat exchanger.

In unconfined spaces, in buildings of normal construction, infiltration normally is adequate to provide air for combustion, ventilation and dilution of the flue gases. However, a confined space must be provided with two permanent openings to provide combustion and ventilation air to the appliance. Each opening shall have a free area on one square inch per 1,000 BTU/Hr* of total input rating of all the appliances in the enclosure. One opening shall be within 12 inches of the top and one within 12 inches of the bottom of the enclosure.

***Special Note**

When the WR400 K..T2 is installed in a confined space of minimum size the openings described above must be increased in to a size of 1 ½ square inches per 1,000 BTU/Hr. In order words, when the WR400 K..T2 is installed in a minimum sized confined space the two openings that are to be made in the enclosure within 12 inches of the top and 12 inches of the bottom must each have a minimum free area of (1 ½ ") x (117) = 175.5 square inches.

For either a confined or unconfined space in a building of tight construction with inadequate infiltration, air must be drawn from the outdoors or from spaces that freely communicate with the outdoors. Two permanent openings located as indicated above are to be provided as follows:

1. **When communicating with outdoors directly or by means of vertical ducts,** each opening shall have a free area of not less than one square inch per 4,000 BTU/Hr of total input of all appliances in the space.
2. **When communicating with outdoors by means of horizontal ducts,** each opening shall have a free area of not less than one square inch per 2,000 BTU/Hr of total input of all appliances in the space.

For detailed requirements see:

- In Canada, CAN/CGA- B149 Installation Codes
- In U.S.A., ANSI Z223.1/NFPA 54, National Fuel Gas Code.

WARNING!

1. **Flammable materials gasoline, pressurized containers, or any other items or articles that are potentially fire hazards must never be placed on or adjacent to the heater. The appliance area must be kept free of all combustible materials, gasoline and other flammable vapors and liquids.**
2. **Do not obstruct the flow of combustion and ventilation air to the appliance.**

CLEARANCE

In Canada

The WR 325 and the WR 400 are design certified for installation on a combustible wall (for the WR 325 the wall bracket supplied with the unit must be used for mounting to combustible construction), and for installation in an alcove or closet with minimum clearances to 0 mm from back, 102 mm (4 inches) from sides, 305 mm (12 inches) from top and bottom, and 102 mm (4 inches) from front. A minimum of 305 mm (12 inches) shall be allowed for maintenance of serviceable parts.

Clearence from vent is dependant upon the clearence rating of the venting material used; that is, type B-1 vent is approved for 1 inch clearence, B-2 vent for 2 inch, etc.

In United States

The WR 325 and the WR 400 are design certified for installation on a combustible wall (for the WR 325 the wall bracket supplied with the unit must be used for mounting to combustible construction), and for installation in an alcove with minimum clearences to combustible construction of 0 mm from back, 102 mm (4 inches) from sides, 305 mm (12 inches) from top and bottom. In addition, the WR 325 has also been design certified for closet installation with minimum clearences to combustible construction of 0 mm from back, 102 mm (4 inches) from sides, 305 mm (12 inches) from top and bottom, and 102 (4 inches) from front. A minimum of 305 mm (12 inches) shall be allowed for maintenance of serviceable parts.Clearence from vent is dependent upon the clearence rating of the venting material used, that is, type B-1 vent is approved for 1 inch clearence, B-2 vent for 2 inch, etc.

MOUNTING

The WR325 K and WR400 K are design certified for mounting to a wall. A wall bracket, see figure 1 is provided with the WR 325 K.. and must be used when the heater mounted on a combustible wall. Heaters may not be installed directly on a carpeted wall.

The heater, or the wall bracket, must be mounted to the wall using appropriate anchoring materials.

WARNING

Failure to use the wall bracket with the WR 325 K... when installing the unit on combustible construction will cause an unsafe condition and possible fire. In addition, failure to use the wall bracket when installing the WR 325 K... on combustible construction will be in violation of A.G.A. and C.G.A. certification of the unit.

Note: If wall is a stud wall sheathed with plasterboard it is recommended that support board(s), either 1 x 4's or ½ " (minimum) plywood first be attached across a pair of studs and then the heaters should be attached to the support boards. See Figure 2.

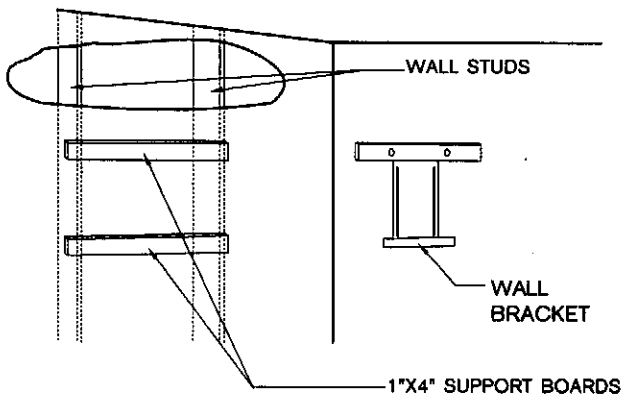


Figure 2

Expansion and contraction of piping due to changing water temperature in the pipes imparts movement to the heater which, if mounted directly to a brittle, friable board, such as plasterboard, can cause failure of mounting.

DRIP TRAY

If the water heater is being mounted above a floor of combustible construction the drip tray (shipped loose in the carton with the water heater) must be attached to the bottom of the front cover of the water heater at the time of installation. The drip tray should be attached to the front cover, using screws provided, as shown in figure 3.

Failure to use drip tray when installing unit above a floor of combustible construction will cause an unsafe condition and possible fire and will be in violation of A.G.A. and C.G.A certification of the unit.

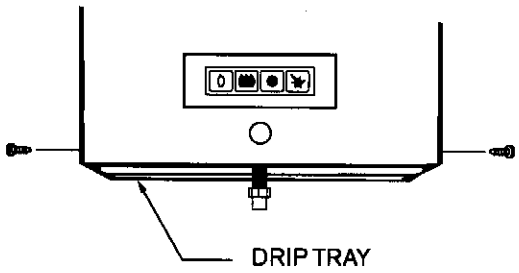


Figure 3

VENTING

The BOSCH instantaneous water heaters have built-in draft diverters and are designed for indoor installation **only.** The draft diverter outlet must be connected to a clear, unobstracted vent of the same size, or larger, refer to:

- In Canada, CAN/CGA- B149 Installation Codes for detailed requirements.
- In U.S.A., ANSI Z223.1/NFPA 54, National Fuel Gas Code for detailed requirements.

The flue connection for both the WR325 K.. and WR400 K.. is 130 mm (5 inches); however, in Canada for installations at high altitude (2,000-4,500 ft. above sea level) a six inch (6") flue is required for WR400 K.. In Canada a 5" x 6" adapter is supplied with the WR400 K for high altitude ibstallations.

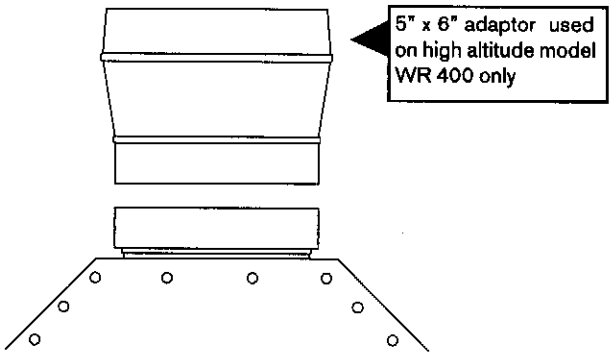


Figure 4

For high altitude use the adaptor must be installed as shown in Figure 4, without alteration, before connecting the six inch flue to the unit. The adaptor must be secured to the draft diverter outlet with a minimum of two screws.

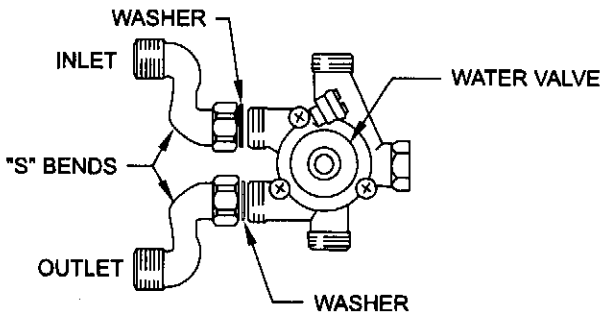
Also, in Canada, the gas pressure regulator supplied with the water heater is factory preset to deliver gas to the water heater at the proper pressure setting for high altitude operation, see PRESSURE REGULATION section of this manual.

WARNING!

Failure to increase the vent size of the WR400 to six inches and/or to assure that manifold pressure is set to proper value listed on rating plate for applications at altitudes in range of 2,000 to 4,500 ft. above sea level will cause unsafe venting, asphyxiation, and voids C.G.A. Certification.

WATER CONNECTIONS

The WR series instantaneous water heaters are provided with two S- bend water connectors/adaptors that must be connected to inlet and outlet connections on water valve assembly, see figure 1 and figure 5, below.



Water valve and S-bends, top view

Figure 5

The purpose of the S- bend water connectors/ adaptors is to provide threaded water connections that meet standards used in North America, ANSI Standard Taper Pipe Thread (1/2 " NPT). The cold water supply should be connected to S- bend attached to inlet of water valve and the hot water connection should be made to S- bend attached to the outlet of water valve.

Note: A shut-off valve should be placed in the cold water supply line to the heater to facilitate servicing the heater.

RELIEF VALVE

The listed pressure relief valve supplied must be installed near the hot water outlet at time of installation of the heater. No valve is to be placed between the relief valve and the heater. A drain line must be connected to the relief valve to direct discharge to a safe location. Do not install reducing coupling or any other restriction in the discharge line. The discharge line must be installed so as to allow complete drainage of both the valve and the line. See figure 6.

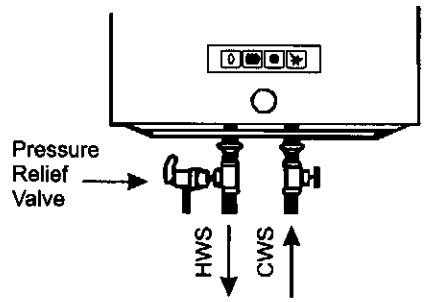


Figure 6

GAS CONNECTIONS

Before connecting the gas supply to the heater, check heater's model/rating plate to make sure that the gas on which heater is to operate is the same as specified on the model/rating plate.

The WR400 K and the WR325 K instantaneous gas water heaters are supplied with a gas pressure regulator that must be installed on the heater before attaching the gas supply line, See figure 7. Failure to install the gas pressure regulator, or the failure to install it in the sequence shown in figure 7 will be in violation of A.G.A. and C.G.A. certification of the unit.

BOSCH water heaters are shipped from the factory with the gas pressure regulators preset for the gas shown on the rating plate to the correct pressure:

- In Canada, for high altitude operation;
- In U.S.A., for standard altitude operation unless specifically marked as a high altitude unit.

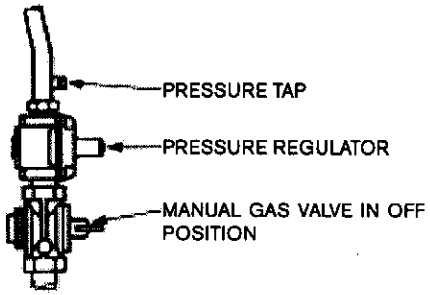


Figure 7

Check to make sure that the gas listed on the rating plate is the same as the gas listed on the pressure regulator. See PRESSURE REGULATION section of this manual for information regarding gas pressure settings.

Note: Before attaching the gas supply line, be sure that all gas pipe is clean on the inside. To trap any dirt or foreign material in the gas supply line, a drip leg must be readily accessible and not subject to freezing conditions. Install in accordance with the recommendations of the serving gas supplier.

Joint compounds (pipe dope) shall be applied sparingly and only to the male threads of pipe joints. Do not apply compound to the first two threads. The joint compound used must be resistant to the action of liquified petroleum gases.

Before placing water heater in operation check for gas leakage. Soap and water solution, or other material acceptable for this purpose, shall be used in locating gas leaks. Matches, candles, lighters, or other ignition sources shall not be used for this purpose.

WARNING!

The heater and its individual shutoff valve must be disconnected from the gas supply piping system during any pressure testing of that system at test pressures in excess of 3.45 kPa (1/2 psig).

The water heater 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 3.45 kPa (1/2 psig).

The water heater, including the pressure regulator provided with in, must not be operated at gas supply pressures in excess of 3.45 kPa (1/2 psig). If overpressure has occurred such as through improper testing of the gas lines or emergency malfunction of the supply system, the gas valve and regulator must be checked for safe operation. Make sure that the outside vent valves are protected against blockage. These are part of the gas supply system, not the water heater. Vent blockage may occur during ice storms.

OPERATING INSTRUCTIONS

WARNING!

If the water heater has been damaged or exposed to fire or sooting, or if any part has been underwater, do not use. Immediately call a qualified service technician to inspect the appliance and to replace any part of the control system and any gas control which has been underwater and to clean the heat exchanger assembly and water valve.

FILLING

Before proceeding with operation of the water heater make sure that the system is filled with water:

- Make sure drain is closed. See figure 8, below.
- Open a nearby hot water faucet to permit the water to fill the heater and piping.
- Close the hot water faucet after the water flows freely and all air has escaped from the system.

The water heater is now ready to be lit.

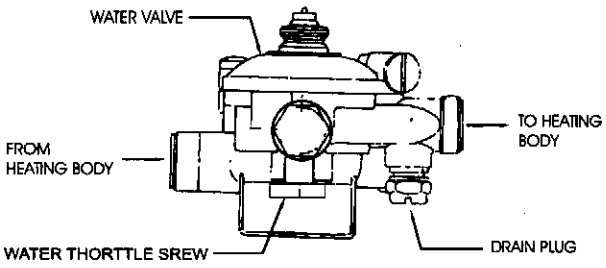


Figure 8

SERVICE HINT

The strainer (screen) in the water valve, located in the inlet of the water valve, may require occasional cleaning due to foreign material in the water supply. This will restrict the flow of water and may effect heater operation and prolong filling time. To inspect the strainer, close the cold water supply valve ahead of the heater, disconnect the S- bend from the inlet of the water valve and remove strainer from inlet. Clean if required, replace strainer in inlet to the water valve, reconnect S- bend and turn on water supply.

Light the water heater in accordance with the instructions on the Lighting and Operating Plate on the water heater. For your convenience, the instructions are repeated below:

LIGHTING INSTRUCTIONS

1. STOP! Read the safety information, first section of the Lighting Instruction Plate on the cover.
2. The main manual gas valve must be closed (turn valve handle clockwise) and the gas valve OFF button depressed . See figure 9.
3. Wait five (5) minutes to clear out any gas. If you then smell gas, STOP! Follow "B" in the safety information given above on this plate. If you don't smell gas, go to next step.
4. The pilot burner is located behind the peephole located in the front center of the jacket directlybelow this instrution plate.
5. Open main manual gas valve by turning valve handle counterclockwise .
6. Depress PILOT button and light pilot by pushing PILOT IGNITER button . This may have to be repeated.
7. Observe pilot flame though peephole. The PILOT button - should be held down at least 10 seconds with pilot burning. When the PILOT button is released the pilot should continue to burn.

- If the PILOT button does not pop up when released stop and immediately call your service technician or gas supplier.
- If the pilot will not stay repeat lighting procedure steps 1 through 8.
- If the pilot will not stay lit after several tries, depress the OFF button , turn the manual gas valve handle clockwise to OFF position and call your service technician or gas supplier.

8. Depress the ON button . The heater will now fire when water is drawn at arate greater than the threshold flow rate (see manual)*.

Note: If main burner should fail to ignite make sure pilot is burning. If not repeat lighting procedure steps 1 through 8.

TO TURN OFF GAS TO APPLIANCE

1. Depress OFF buton and close the main gas valve by turning handle clockwise to OFF position. See figure 9.

*see TEMPERATURE REGULATION section.

PRESSURE REGULATION

The pressure regulator supplied with the water heater is adjusted to operate on the gas specified on the rating plate, and:

- In Canada, is factory preset to deliver gas at the high altitude pressure setting listed on the rating plate and as shown below;
- In the U.S.A., is factory preset to deliver gas at the standard altitude setting listed on the rating plate and as shown below.

The pressure setting of the gas pressure regulator should be checked at installation to assure that the setting is correct for the gas being used and the altitude at which the appliance is installed. See rating plate of the unit, or Table 1, below, for proper setting.

In Canada, for a heater being installed at standard altitude (0- 2,000 ft. above sea level), the manifold pressure should be reset at installation to value shown on the rating plate, or Table 1, below, for standard altitude.

The gas pressure specified below refer to flow pressuretaken at the pressure tap in the gas inlet pipe (just above pressure regulator), figure 9, while the heater is operating at full input.

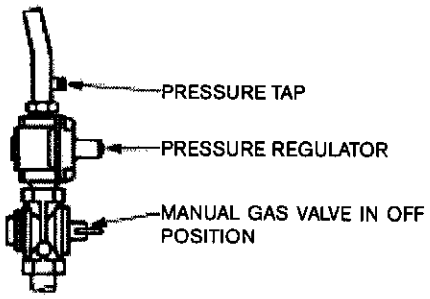


Figure 9

Appliance Regulator Pressure Setting

Model	Type of Gas	Pressure tap		Altitude
		kPa	Inches, W.C.	
WR325	natural	1.36	5.5	standard (0-2,000 ft.)
	propane	2.61	10.5	
WR325	natural	1.09	4.4	high * (2,000 - 4,500 ft.)
	propane	2.11	8.5	
WR400	natural	1.41	5.7	standard (0-2,000 ft.)
	propane	2.61	10.5	
WR400	natural	1.14	4.6	high * (2,000 - 4,500 ft.)
	propane	2.09	8.4	

* Note: The high altitude ratings listed are Canadien Gas Association high altitude ratings for the appliances and are only valid in Canada. In the U.S.A. the National Fuel Gas Code, ANSI Z223.1/NFPA 54, recommends for high altitude installations, above 2,000 feet, that the input rate be reduced 4% for each 1,000 feet above sea level.

Your appliance dealer and/or your local gas supplier should be consulted in regard to any high altitude installation. If filed adjustment is required it should be performed by a qualified serviceman experienced in such work.

TEMPERATURE REGULATION

The BOSCH WR325 K and WR400 K are wall mounted, high efficiency, thermostatically controlled instantaneous gas water heaters designed to provide approximately 60° C (140 ° F) water temperature at flow rates from as low as 2 litres/ min. (0.5 U.S. gals./min.) to 8 litres/min. (2.1 U.S. gals./min.) for the WR400 K model or 6.5 litres/min. (1.7 U.S. gals./ min.) for the WR325 K model.

If flow rate through the heater is lower than 2 litres/min. (0.5 U.S. gal./min.) the main burner will not fire. The minimum flow rate for main burner operation is the "THRESHOLD FLOW RATE" referred to in the lighting instructions.

If flow rate through the heaters exceeds 8 litres/min. on WR400, or 6.5 litres/min. for WR325, the temperature exiting the heater will be flow rate dependent, decreasing with increasing flow.

To assure that full gas input is obtained open faucet fully to a min. flow of 10 litres/min. (2.6 U.S. gals./min.).

Should overheating occur or the gas supply fail to shut off, turn off the manual gas control valve to the appliance and have the heater checked by a qualified serviceman to determine the reason for the malfunction.

WATER FLOW ADJUSTMENT

Maximum flow rate through the heater can be adjustment by turning the water throttle screw (see figure 8).

HIGH TEMPERATURE LIMIT SWITCH

The BOSCH WR series instantaneous gas water heaters are equipped with a high temperature limit switch with a set point of approximately 90°C (194°F). If the water temperature at the sensing points exceeds the set point the switch will open, interrupting the safety circuit and stopping gas flow to the pilot and main burner.

Outage as the result of high limit operation indicates that the heater is not functioning properly. The heater should be checked by a qualified serviceman and the reason for the malfunction is corrected. To relight the pilot, follow instructions provided on the unit.

PREVENTIVE MAINTENANCE

PILOT AND MAIN BURNER

Check pilot and main burners at least every 12 months for proper flame characteristics.

The pilot flame should envelop approximately 10 mm (3/8 inch) of tip of thermocouple.

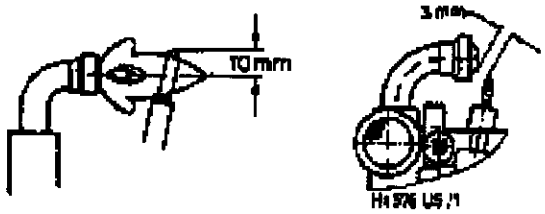


Figure 10

If the pilot flame is too small, then the pilot burner must be cleaned. The position of the igniter electrode should also be checked to assure that electrode is approximately 3 mm (1/8 inch) from pilot. See Figure 10.

The main burner should exhibit the following characteristics:

- Provide complete combustion of gas.
- Cause rapid ignition and carryover of flame across burners.
- Operate quickly during ignition, burning, and extinction.
- Burner flames should be blue and there should be no lifting of flames from burner ports. See figure 11.

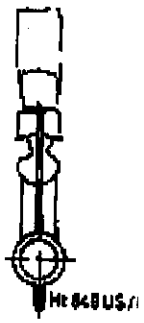


Figure 11

If the main burners fail to exhibit they must be cleaned, either by blowing them off with compressed air or by washing them in soap and water and rinsing.

If it proves necessary to wash the main burner assembly the following procedure should be used:

1. Turn off the gas supply to the water heater by closing the heaters individual shutoff valve.
2. Disconnect pilot gas tube at the gas valve and unscrew the gas manifold assembly unit nut, where the gas manifold inlet pipe connects to the gas valve, and remove the gas burner assembly.
3. Wash in soap and water and then rinse.
4. Reassemble. – Check for gas leaks after reassembly and correct as required.
5. Refer to LIGHTING INSTRUCTIONS to relight the heater.

VENTING

The vent piping and finned heat exchanger should be checked at least once a year for dust and carbon deposits, and cleaned as necessary.

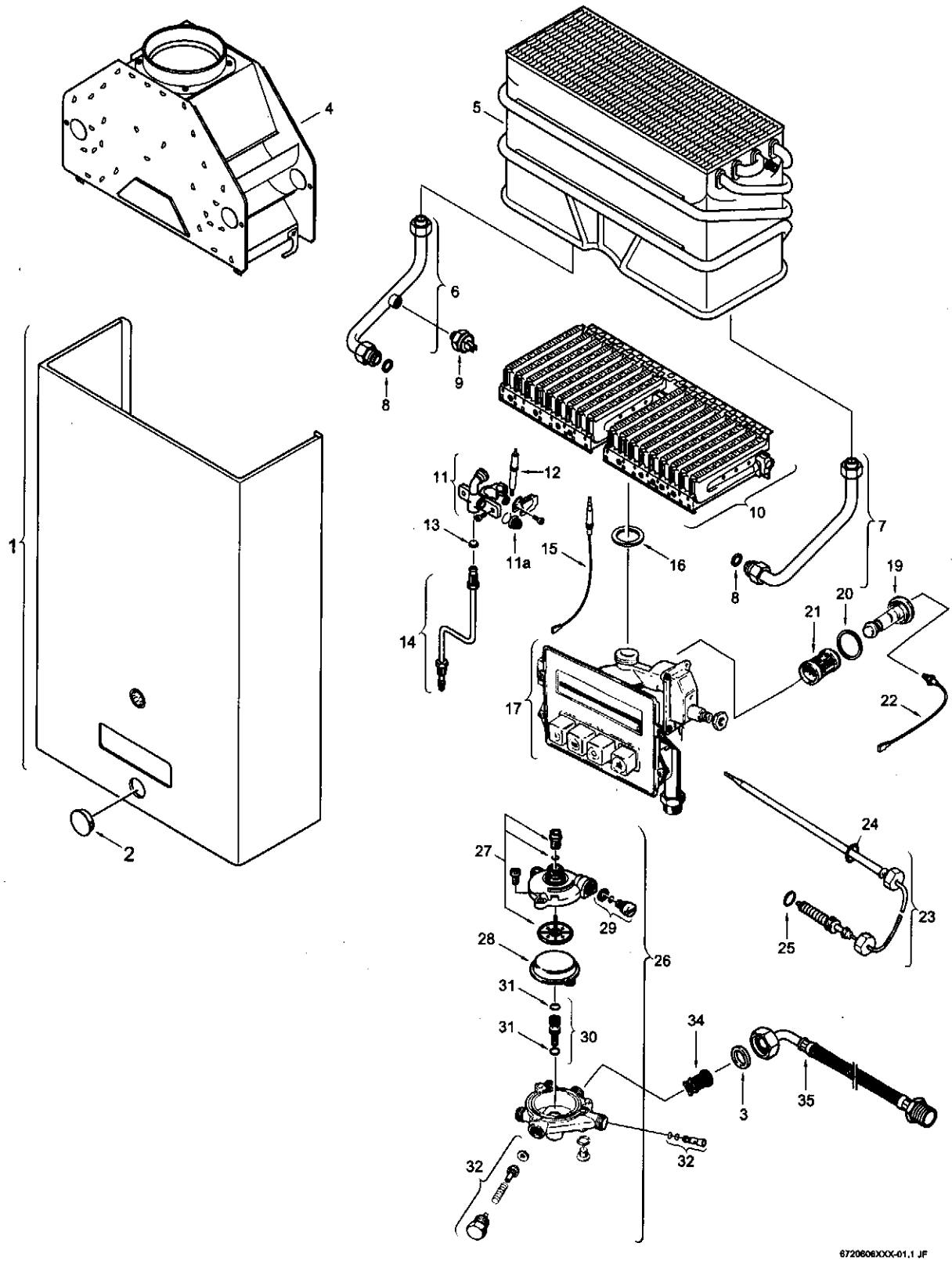
PRESSURE RELIEF VALVE

At least once a year the pressure relief valve should be checked to insure that it is in operating condition. Before testing the relief valve take necessary precautions to prevent water damage. Lift the lever on the valve several times until the valve seats properly and operates freely. Do **not** check the relief valve when hot water is being drawn and the main burner is on. Water exiting the valve under these conditions would be hot.

If the pressure relief valve on the appliance discharges this is an indication of water pressure above the pressure rating of the relief valve. If the pressure relief valve continually discharges on a periodic basis, contact the water supplier or local plumbing inspector on how to correct the situation. Do not plug the pressure relief valve.

PERIODIC REMOVAL OF LIME DEPOSITS

After 12 or 24 months of service, depending on frequency of use and water hardness, the heater should be checked for accumulation of calcium carbonate (lime) and delimed, if necessary. Thereafter a regular schedule, based on initial inspection findings, should be set- up to delime the heater.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N°	Description		Part Number for Models WR325 K...T1	WR400K...T2
1	Front shell		8705401618	8705411262
2	Cover		8703304011	8703304011
3	Washer 3/4"		8710103043	8710103043
4	Draught diverter		8705505307	8705505354
5	Heat exchanger		8705406132	8705406189
6	Connecting pipe hot		8700705431	8700705431
7	Cold water pipe		8700705294	8700705294
8	Washer 1/2"		8710103045	8710103045
9	Temperature limit		8707206017	8707206017
10	Main burner	LP	8708120469	8708120296
10	Main burner	NG	8708120198	8708120298
11	Pilot burner (75)		8708105337	8708105337
11a	Filter		8700507055	8700507055
12	Sparking plug		8708107002	8708107002
13	Pilot injector (5)	NG	8708200005	8708200005
13	Pilot orifice (49)	LP	8748200173	8748200173
14	Pilot gas pipe		8710707166	8710707166
15	Thermocouple		8747202083	8747202083
16	Washer 1"		8710103060	8710103060
17	Gas valve	LP	8707001897	8707001933
17	Gas valve	NG	8707001890	8707001927
18	Gas supply pipe		8700705464	8700705464
19	Magnetic unit		8747201094	8747201094
20	Washer		8700103144	8700103144
21	Gas filter		8700507051	8700507051
22	Termo connection		8747202078	8747202078
23	Flow thermostat		8707206039	8707206039
24	O-ring		8700205101	8700205101
25	O-ring		8700205041	8700205041
26	Water valve		8707002393	8707002393
27	Repair set for water valve cover		8703406204	8703406204
28	Diaphragm		8700503050	8700503050
29	Slow-ignition valve		8708503062	8708503062
30	Setting screw		8703404092	8703404092
31	O-ring		8700205050	8700205050
32	Venturi (12)		8708205235	8708205235
33	Valve		8708500230	8708500230
34	Water strainer		8700507059	8700507059