AUGUST 1, 2007

CONSUMERS' DIRECTORY OF CERTIFIED EFFICIENCY RATINGS

for

Heating and Water Heating Equipment

INCLUDES:

RESIDENTIAL HEATING EQUIPMENT

- Gas Central Furnaces
- Oil Central Furnaces
- Gas Boilers
- Oil Boilers
- Gas Room Heaters
- Gas Floor Furnaces
- Gas Wall Furnaces

COMMERCIAL HEATING EQUIPMENT

- Gas Central Furnaces
- Oil Central Furnaces

RESIDENTIAL WATER HEATING EQUIPMENT

- Gas Water Heaters
- Oil Water Heaters
- Electric Water Heaters
  including Heat Pump Type

COMMERCIAL WATER HEATING EQUIPMENT

- Gas Water Heaters
- Oil Water Heaters
- Electric Water Heaters

EFFICIENCY RATING CERTIFIED ama

An Association of Appliance and Equipment Manufacturers

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"Chapter I and Chapter III (Sections 1 - 3) of this directory have been approved by the California Energy Commission (CEC) for determining compliance with its energy efficiency standards for buildings. (See Section 100 (g), title 24, California Code of Regulations). For information about models for sale in California that are beyond the scope of the GAMA program or are produced by manufacturers that have chosen not to participate in the GAMA program, please call the CEC Hotline at (916) 654-5106 or (toll free in California) at (800) 772-3300."

AUGUST 1, 2007
CONSUMERS DIRECTORY OF CERTIFIED EFFICIENCY RATINGS FOR RESIDENTIAL HEATING AND WATER HEATING EQUIPMENT AND COMMERCIAL WATER HEATING EQUIPMENT

PROGRAM SPONSOR AND ADMINISTRATOR:

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FOREWORD

The Gas Appliance Manufacturers Association (GAMA) is a national trade association whose members manufacture over 90 percent of all the residential, commercial and industrial gas appliances made in the United States. GAMA also represents manufacturers of certain products that use oil or electricity as their energy source. There are a number of product divisions within GAMA. Four of those, the Furnace Division, Hydronics Institute Division, Direct Heating Division and Water Heater Division, have developed separate efficiency certification programs which verify manufacturers' equipment efficiency ratings in accordance with federally mandated test procedures.

The GAMA Furnace and Hydronics Institute Divisions sponsor the certification program for residential gas and oil central furnaces and boilers. The GAMA Direct Heating Division sponsors the efficiency certification program for vented gas room heaters, floor furnaces and wall furnaces. The GAMA Water Heater Division sponsors the efficiency certification program for residential gas, oil, electric (including heat pump type) water heaters, and commercial water heaters. Each of these programs operates independently of each other. This Directory lists the models for all participating manufacturers in each of the programs. The following is the format for those listings:

CHAPTER I Gas and Oil Central Heating Equipment

CHAPTER II Gas Vented Direct Heating Equipment

CHAPTER III Gas, Oil, Electric, Combination, & Instantaneous Water Heaters

CHAPTER IV Commercial Gas, Oil, Electric, & Instantaneous Water Heaters

CHAPTER V Commercial Gas and Oil Central Heating Equipment

Each participant in the GAMA Efficiency Certification Program is entitled to display the GAMA Certification Symbol (Seal), Figure 1, on units of models covered by the program. The seal may be affixed to the unit only at the time and place of manufacture. The seal may also be displayed on specification sheets, advertising and on other literature that either specifies ratings or claims participation in the program. The seal and listing in this Directory are an indication that the equipment's efficiency rating as well as output heating capacity for heating equipment and first hour rating for water heating equipment have been determined and are accurately stated in accordance with the applicable efficiency test method; no other warranty, representation, endorsement or other statement, expressed or implied, is made.

Figure 1. GAMA Certification Seal

EFFICIENCY
RATING
CERTIFIED
ama

CHAPTER III

GAS, OIL AND ELECTRIC WATER HEATERS, AND COMBINATION WATER HEATERS/SPACE HEATERS

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USE OF CHAPTER III AND DESCRIPTION OF GAMA WATER HEATER EFFICIENCY CERTIFICATION PROGRAM

Introduction

This chapter will assist the dealer in selling, and the consumer in selecting, the best water heating buy. The best buy is always a properly sized unit since with an undersized unit there will be times of insufficient hot water and oversized units are more costly to buy and operate. Once the proper size is determined, the best buy is almost always a more efficient unit which will usually cost more to purchase but less to operate.

How the Chapter is Set up

This Chapter is divided into sections based on the type of residential water heater: gas, oil, electric, heat pump with a storage tank, heat pump without a storage tank, and combination water heaters/space heaters. The columns of each listing (shown below*) provide the essential information needed to select an efficient and properly sized water heater.

*(with the exception of the combination listing)

Model Number (1)	Footnotes (2)	1st Hour Rating (3)	Energy Factor (4)

Column 1 — Model Number identifies each model. (The model number on a water heater can be found on the manufacturer's nameplate.)

Column 2 — Footnotes further identify the model or its intended use.

Column 3 — 1st Hour Rating is a measure of the water heater's ability to provide hot water.

Column 4 — Energy Factor is a measure of the overall efficiency rating of the water heater.

For gas and oil models, the last column lists recovery efficiency. The recovery efficiency only represents how efficiently energy is transferred to the water when the burner is firing. It should not be used in place of the Energy Factor to compare water heater efficiencies. Recovery efficiencies for electric models are not listed because they have a recovery efficiency of 98%.

How to Use This Chapter

The First Hour Rating and Energy Factor (EF) can be used to select the right size water heater for your needs and, at the same time, select an energy efficient model.

FIRST: Find the right size water heater for your needs by finding those models with a First Hour Rating that matches (within one or two gallons) your peak hour demand.

To estimate your peak hour demand:

1. Determine during what general time of day (morning, noon, evening) there is usually the most use of hot water in your home, keeping in mind the number of people in your home.

2. Using the following table, determine what your maximum usage of hot water in one hour could be; this is your peak hour demand:

NOTE: This table does not estimate total daily hot water usage. As an example, an average of 4 gallons of hot water is used each time dishes are washed by hand but, dishes washed by hand are usually done 3 times a day. The average daily hot water usage for hand dishwashing, 12 gallons, is about the same as the average hot water usage for an automatic dishwasher, used once a day.

Use	Average Gallons of Hot Water per Usage		Times Used During One Hour		Gallons Used in One Hour
Shower	20	x	_____	=	_____
Bath	20	x	_____	=	_____
Shaving	2	x	_____	=	_____
Hands and Face Washing	4	x	_____	=	_____
Hair Shampoo	4	x	_____	=	_____
Hand Dishwashing	4	x	_____	=	_____
Automatic Dishwasher	14	x	_____	=	_____
Food Preparation	5	x	_____	=	_____
Wringer Clothes Washer	26	x	_____	=	_____
Automatic Clothes Washer	32	x	_____	=	_____
			TOTAL (Peak Hour Demand)		_____

EXAMPLE: Your household uses the most hot water in the morning. In the busiest one hour period of the morning, the usage is

3 showers - 20 x 3 = 60
1 shave- 2 x 1 = 2
1 shampoo - 4 x 1 = 4
Handwashing
of Dishes - 4 x 1 = 4
(Peak Hour Demand) 70

In this case, the peak hour demand is 70 gallons and you should look in the third column of each listing for those models of water heaters with a first hour rating of 68 to 72 gallons.

NOTE: Models under each manufacturer's name are listed from the lowest to the highest first hour rating.

SECOND: Look at the EF listed in the fourth column for those models that have the first hour rating that you need. The higher the EF, the more energy efficient the water heater. The EF can be used to estimate a yearly cost of operation for a water heater. Tables 1 through 5 provide estimated yearly costs of operation for various fuel costs and various Energy Factors. Once you know the cost of fuel in your area, you can find the estimated annual cost of operation for any model using its EF and the appropriate table. (The cost of fuel in your area should be available from your fuel supplier.)

EXAMPLE:

Fuel Cost (Per Therm)	Energy Factor .54	.55	.56	.57	.58
1.08	$300	$294	$289	$284	$279
1.10	$305	$300	$294	$289	
1.12	$311	$305	$300		
1.14	$316	$311			
1.16	$322				

(Excerpt from Table 1. Estimated Annual Operating Cost for Gas Water Heater using Natural Gas)

At a fuel cost of $1.10/therm, a gas water heater with an EF of .55 has an estimated annual operating cost of $300.

If your choice of water heater is restricted to one fuel type (gas, oil or electric), you need only compare the EF values for that type. If you have a choice of more than one type of water heater, you should compare both the EF and the estimated cost of operation for the fuel rates in your area for each type of water heater that you can use. In all cases, keep in mind that the determination of the EF is based on a particular set of test conditions. Actual conditions of water heater use in a residence will differ from these test conditions. Consequently, the actual annual cost of operation will differ from the values on Tables 1 through 5.

THIRD: Determine the payback period. Doing this will help you decide what model water heater is most economical for you. Tables 1 through 5 illustrate that the higher the EF, the lower the annual operating cost. However, a more efficient water heater generally has a higher purchase price. Therefore, there is a period of time before the savings in the lower operating cost of a more efficient water heater make up for the increased price of that water heater as compared to a less efficient water heater, this is the payback period. It is only after the payback period that you obtain a net savings with the more efficient water heater.

Accordingly, the shorter the payback period, the better.

EXAMPLE: Assume you are intending to buy a gas water heater and your local gas cost is .60 per therm. You are comparing two water heaters, Model A and Model B, which both have the same first hour rating.

	Price of Water Heater	EF	Estimated Annual Cost of Operation
Model A	$165	.54	$166
Model B	$210	.58	$155
Additional Cost of More Efficient Model (Model B)			$210-165 = $45
Estimated Annual Savings in Operating cost for Model B			$166-155 = $11 (per year)
Payback Period			$45/$11 per year = 4.1 years

NOTE: As fuel prices increase, the greater the savings obtained from a more efficient water heater and the shorter the payback period becomes.

Information About the GAMA Water Heater Efficiency Certification Program

Chapter III is a product of the Water Heater Efficiency Certification Program sponsored by the Gas Appliance Manufacturers Association, Inc. (GAMA) in cooperation with its industry members. The GAMA Water Heater Efficiency Certification Program provides for independent verification of the water heater manufacturer's stated efficiency rating, represented by the Energy Factor (EF). The complete details of the GAMA Water Heater Efficiency Certification Program are contained in the Program Procedural Guide which is available from GAMA.

Testing Laboratories and Test Procedures

Intertek Testing Services of Cortland, New York, has been retained as the program administrator and independent testing laboratory responsible for conducting efficiency verification tests on water heaters. Randomly selected units of residential gas, electric and oil water heaters are tested in accordance with the U.S. Department of Energy (DOE) Test Procedure for Water Heaters as published in the May 11, 1998 Federal Register Notice, to verify the Energy Factor and First Hour Rating. Federal law requires that manufacturers' efficiency claims be based on Department of Energy test procedures; the Energy Factor is the descriptor that is determined by those test procedures. Copies of the water heater test procedure are available from GAMA.

In October 1990, DOE issued the following amended federal minimum efficiency requirements for residential water heaters which are based on the test procedures.

Type	Minimum Energy Factor
Gas-fired	0.67 – 0.0019V
Oil-fired	0.59 – 0.0019V
Electric	0.97 – 0.00132V
Tabletop	0.93 – 0.00132V
Instantaneous Gas-fired	0.62 – 0.0019V
Instantaneous Electric	0.93 – 0.00132V

Where “V” = Rated Volume

Use of Heat Traps

The listings in this Directory include water heater models factory equipped with heat traps on the inlet and outlet water connections. The efficiency (Energy Factor) of models not factory equipped with heat traps and having vertical water pipe connections can be increased by the addition of heat traps on the inlet and outlet water connections. To determine whether a specific model is factory equipped with heat traps, review the footnotes for that model.

Scope of the Program

The Program is open to all manufacturers of water heaters and to all firms that market private brand models. Participation in the Program is voluntary, but all models of residential water heaters marketed by a participant in the United States must be included in the Efficiency Certification Program. The residential water heaters covered by this program are defined by the following parameters:

Electric storage water heaters with energy input ratings of 12 kilowatts or less and with a storage capacity of not less than 20 gallons nor more than 120 gallons.

Heat pump water heaters with maximum current ratings of 24 amperes at a voltage no greater than 250 volts. The heat pump water heater may either include a storage tank or be intended for connection to an existing residential water heater or storage tank installation.

Gas storage water heaters with energy input ratings of 75,000 Btu's per hour or less and with a storage capacity of not less than 20 gallons nor more than 100 gallons.

Oil storage water heaters with energy input ratings of 105,000 Btu's per hour or less and with a storage capacity of 50 gallons or less.

Gas instantaneous water heaters with input ratings greater than 50,000 Btu's per hour but less than 200,000 Btu's per hour designed to deliver water at a controlled temperature of less than 180°F.

The Directory and the Federal Trade Commission EnergyGuide

The Federal Trade Commission (FTC) requires that gas, electric and oil residential, automatic storage water heaters be labeled to show 1) an estimated annual cost of operation for that particular model, based on a national average cost of fuel specified by FTC, and 2) how the efficiency of that model compares to all other comparable models. Currently, FTC does not require that heat pump water heaters or residential instantaneous water heaters be labeled.

The listing in this chapter is another means of providing the same information. The sample FTC "EnergyGuide" label on page 138 has explanations as to how the directory listing provides the same information as the FTC "EnergyGuide" label.

Model Number

The model number listed in the Directory identifies the essential model number designation of the water heater. All the numbers and letters of the listed model number will appear on the rating plate of units of that model, otherwise the units are not that model. As noted, other letters and numbers may also be on the rating plate, but they are not required to identify the basic model.

Please note that as the national average energy cost is changed by FTC, the estimated annual cost of operation will change even though the efficiency of the water heater has remained the same.

Based on standard U.S. Government tests

ENERGYGUIDE

The First Hour Rating is shown in the third column of the listing. →

Water Heater – Natural Gas
Capacity (first hour rating):
60 gallons

XYZ Corporation
Model(s) RP23,
RP38

← The model numbers for all models to which the label applies, are listed. The model number is given in the first column of the listing.

Compare the Energy Use of this Water Heater with Others Before You Buy.

This section shows how this model compares to all other similar models which have a First Hour Rating within the range noted. Chapter III allows for the comparison of the Energy Factor, and consequently, estimated annual energy consumption for each model within a narrower range of First Hour Ratings based on the consumer's particular hot water needs. ←

This is the estimated annual energy consumption for this model. This estimated annual energy consumption can be adequately approximated using the Energy Factor (EF) shown in the fourth column of the listing and employing the formula as described in the "Definitions and Calculations" section. →

This Model Uses
240 therms/year

Energy Use (therms/year) range of all similar models

Uses Least Energy	**Uses Most Energy**
245	295

Therms/year is a measure of energy use. Your utility company uses it to compute your bill. Only models with first hour ratings of **56** to **64** gallons are used in this scale. ← Range of First Hour Ratings.

Natural Gas water heaters that use fewer therms/year cost less to operate. This model's estimated yearly operating cost is:

$ 145

← This is the estimated annual operating cost for this model using the national average fuel cost noted.

National average unit cost of fuel. →

Based on a 1994 U.S. Government national average cost of $0.604 per therm for Natural Gas. Your actual operating cost will vary depending on your local utility rates and your use of the product.

Important Removal of this label before customer purchase is a violation of Federal law (42 USC 6302)

CORRELATION OF CHAPTER III LISTING
TO FTC "EnergyGuide" LABEL

Definitions and Sample Calculations

The measure of water heater efficiency listed is:

Energy Factor (EF) - A measure of the overall efficiency of a water heater determined by comparing the energy supplied in heated water to the total daily consumption of the water heater.

The measure used for the purpose of comparing models of similar hot water delivery capabilities is:

First Hour Rating (1st Hour Rating) - The amount of hot water that the water heater can supply in the first hour of operation. It is a combination of how much water is stored in the water heater and how quickly the water heater can heat cold water to the desired temperature.

The estimated yearly cost of operation for a water heater shown in Tables 1 through 5, is calculated by using one of the following formulas, as appropriate:

For gas and oil water heaters:

$$\frac{41045\ \text{Btu}}{\text{EF}} \times \begin{matrix}\text{Unit Cost}\\ \text{of Fuel}\end{matrix}\ \$/\text{Btu} \times 365 = \begin{matrix}\text{Estimated Annual}\\ \text{Cost of Operation}\end{matrix}$$

For electric water heaters, including heat pump units:

$$\frac{12.03\ \text{kWh}}{\text{EF}} \times \begin{matrix}\text{Unit Cost}\\ \text{of Fuel}\end{matrix}\ \$/\text{kWh} \times 365 = \begin{matrix}\text{Estimated Annual}\\ \text{Cost of Operation}\end{matrix}$$

EXAMPLES:

Using the national average unit costs of fuel, as determined by the U.S. Department of Energy, the following show how the estimated annual cost of operation is determined for each of the various fuels used for heating water:

Assume a gas water heater, using natural gas, has an EF of .57. Its estimated annual cost of operation is:

$$\frac{41045\ \text{Btu}}{.57} \times \$0.00000619/\text{Btu} \times 365 = \$163$$

If this same model of gas water heater uses LP gas, its estimated annual cost of operation is:

$$\frac{41045\ \text{Btu}}{.57} \times \$0.00001040/\text{Btu} \times 365 = \$273$$

Assume an oil water heater has an EF of .52. Its estimated annual cost of operation is:

$$\frac{41045\ \text{Btu}}{.52} \times \$0.00000685/\text{Btu} \times 365 = \$197$$

Assume an electric water heater has an EF of .88. Its estimated annual cost of operation is:

$$\frac{12.03\ \text{kWh}}{.88} \times \$0.0842/\text{kWh} \times 365 = \$420$$

Assume a heat pump water heater has an EF of 2.0. Its estimated annual cost of operation is:

$$\frac{12.03\ \text{kWh}}{2.0} \times \$0.0842/\text{kWh} \times 365 = \$185$$

The following unit conversions have been used in the sample calculations:

1 therm	=	100,000 Btu's
1 gallon LP Gas	=	91,333 Btu's
1 gallon Fuel Oil	=	138,700 Btu's
1 kWh	=	3,412 Btu's

Table 1: Estimated Annual Operating Costs for Natural Gas Water Heaters

Energy Factor

Fuel Cost per Therm	0.44	0.45	0.46	0.47	0.48	0.49	0.50	0.51	0.52	0.53	0.54	0.55	0.56	0.57	0.58	0.59	0.60	0.61	0.62	0.63	0.64	0.65	0.66	0.67	0.68
$1.20	$409	$400	$391	$383	$375	$367	$360	$353	$346	$339	$333	$327	$321	$315	$310	$305	$300	$295	$290	$285	$281	$277	$272	$268	$264
$1.22	$415	$406	$397	$389	$381	$373	$366	$358	$351	$345	$338	$332	$326	$321	$315	$310	$305	$300	$295	$290	$286	$281	$277	$273	$269
$1.24	$422	$413	$404	$395	$387	$379	$372	$364	$357	$351	$344	$338	$332	$326	$320	$315	$310	$305	$300	$295	$290	$286	$281	$277	$273
$1.26	$429	$419	$410	$402	$393	$385	$378	$370	$363	$356	$350	$343	$337	$331	$325	$320	$315	$309	$304	$300	$295	$290	$286	$282	$278
$1.28	$436	$426	$417	$408	$400	$391	$384	$376	$369	$362	$355	$349	$342	$336	$331	$325	$320	$314	$309	$304	$300	$295	$291	$286	$282
$1.30	$443	$433	$423	$414	$406	$397	$390	$382	$375	$367	$361	$354	$348	$342	$336	$330	$325	$319	$314	$309	$304	$300	$295	$291	$286
$1.32	$449	$439	$430	$421	$412	$404	$396	$388	$380	$373	$366	$360	$353	$347	$341	$335	$330	$324	$319	$314	$309	$304	$300	$295	$291
$1.34	$456	$446	$436	$427	$418	$410	$402	$394	$386	$379	$372	$365	$358	$352	$346	$340	$335	$329	$324	$319	$314	$309	$304	$300	$295
$1.36	$463	$453	$443	$434	$424	$416	$407	$400	$392	$384	$377	$370	$364	$357	$351	$345	$340	$334	$329	$323	$318	$313	$309	$304	$300
$1.38	$470	$459	$449	$440	$431	$422	$413	$405	$398	$390	$383	$376	$369	$363	$356	$350	$345	$339	$333	$328	$323	$318	$313	$309	$304
$1.40	$477	$466	$456	$446	$437	$428	$419	$411	$403	$396	$388	$381	$375	$368	$362	$355	$350	$344	$338	$333	$328	$323	$318	$313	$308
$1.42	$483	$473	$462	$453	$443	$434	$425	$417	$409	$401	$394	$387	$380	$373	$367	$361	$355	$349	$343	$338	$332	$327	$322	$318	$313
$1.44	$490	$479	$469	$459	$449	$440	$431	$423	$415	$407	$400	$392	$385	$378	$372	$366	$360	$354	$348	$342	$337	$332	$327	$322	$317
$1.46	$497	$486	$475	$465	$456	$446	$437	$429	$421	$413	$405	$398	$391	$384	$377	$371	$365	$359	$353	$347	$342	$337	$331	$326	$322
$1.48	$504	$493	$482	$472	$462	$453	$443	$435	$426	$418	$411	$403	$396	$389	$382	$376	$370	$363	$358	$352	$346	$341	$336	$331	$326
$1.50	$511	$499	$489	$478	$468	$459	$449	$441	$432	$424	$416	$409	$401	$394	$387	$381	$375	$368	$362	$357	$351	$346	$340	$335	$330
$1.52	$518	$506	$495	$485	$474	$465	$455	$447	$438	$430	$422	$414	$407	$400	$393	$386	$380	$373	$367	$361	$356	$350	$345	$340	$335
$1.54	$524	$513	$502	$491	$481	$471	$461	$452	$444	$435	$427	$419	$412	$405	$398	$391	$385	$378	$372	$366	$360	$355	$350	$344	$339
$1.56	$531	$519	$508	$497	$487	$477	$467	$458	$449	$441	$433	$425	$417	$410	$403	$396	$390	$383	$377	$371	$365	$360	$354	$349	$344
$1.58	$538	$526	$515	$504	$493	$483	$473	$464	$455	$447	$438	$430	$423	$415	$408	$401	$395	$388	$382	$376	$370	$364	$359	$353	$348
$1.60	$545	$533	$521	$510	$499	$489	$479	$470	$461	$452	$444	$436	$428	$421	$413	$406	$400	$393	$387	$380	$375	$369	$363	$358	$353
$1.62	$552	$539	$528	$516	$506	$495	$485	$476	$467	$458	$449	$441	$433	$426	$418	$411	$404	$398	$391	$385	$379	$373	$368	$362	$357
$1.64	$558	$546	$534	$523	$512	$501	$491	$482	$472	$464	$455	$447	$439	$431	$424	$416	$409	$403	$396	$390	$384	$378	$372	$367	$361
$1.66	$565	$553	$541	$529	$518	$508	$497	$488	$478	$469	$461	$452	$444	$436	$429	$422	$414	$408	$401	$395	$389	$383	$377	$371	$366
$1.68	$572	$559	$547	$536	$524	$514	$503	$494	$484	$475	$466	$458	$449	$442	$434	$427	$419	$413	$406	$400	$393	$387	$381	$376	$370
$1.70	$579	$566	$554	$542	$531	$520	$509	$499	$490	$481	$472	$463	$455	$447	$439	$432	$424	$418	$411	$404	$398	$392	$386	$380	$375

Table 2: Estimated Annual Operating Costs for Propane Water Heaters

Energy Factor

Fuel Cost per Gallon	0.44	0.45	0.46	0.47	0.48	0.49	0.50	0.51	0.52	0.53	0.54	0.55	0.56	0.57	0.58	0.59	0.60	0.61	0.62	0.63	0.64	0.65	0.66	0.67	0.68
$1.75	$652	$638	$624	$611	$598	$586	$574	$563	$552	$542	$532	$522	$513	$504	$495	$487	$478	$471	$463	$456	$449	$442	$435	$428	$422
$1.77	$660	$645	$631	$618	$605	$593	$581	$569	$558	$548	$538	$528	$518	$509	$501	$492	$484	$476	$468	$461	$454	$447	$440	$433	$427
$1.79	$667	$652	$638	$625	$612	$599	$587	$576	$565	$554	$544	$534	$524	$515	$506	$498	$489	$481	$474	$466	$459	$452	$445	$438	$432
$1.81	$675	$660	$645	$632	$619	$606	$594	$582	$571	$560	$550	$540	$530	$521	$512	$503	$495	$487	$479	$471	$464	$457	$450	$443	$437
$1.83	$682	$667	$653	$639	$625	$613	$600	$589	$577	$566	$556	$546	$536	$527	$518	$509	$500	$492	$484	$476	$469	$462	$455	$448	$441
$1.85	$690	$674	$660	$646	$632	$619	$607	$595	$584	$573	$562	$552	$542	$532	$523	$514	$506	$497	$489	$482	$474	$467	$460	$453	$446
$1.87	$697	$682	$667	$653	$639	$626	$613	$601	$590	$579	$568	$558	$548	$538	$529	$520	$511	$503	$495	$487	$479	$472	$465	$458	$451
$1.89	$705	$689	$674	$660	$646	$633	$620	$608	$596	$585	$574	$564	$554	$544	$535	$525	$517	$508	$500	$492	$484	$477	$470	$463	$456
$1.91	$712	$696	$681	$667	$653	$639	$627	$614	$602	$591	$580	$570	$559	$550	$540	$531	$522	$514	$505	$497	$490	$482	$475	$468	$461
$1.93	$719	$704	$688	$674	$660	$646	$633	$621	$609	$597	$586	$576	$565	$555	$546	$537	$528	$519	$511	$503	$495	$487	$480	$473	$466
$1.95	$727	$711	$695	$681	$666	$653	$640	$627	$615	$604	$592	$582	$571	$561	$551	$542	$533	$524	$516	$508	$500	$492	$485	$477	$470
$1.97	$734	$718	$702	$688	$673	$659	$646	$634	$621	$610	$598	$588	$577	$567	$557	$548	$539	$530	$521	$513	$505	$497	$490	$482	$475
$1.99	$742	$725	$710	$695	$680	$666	$653	$640	$628	$616	$604	$593	$583	$573	$563	$553	$544	$535	$526	$518	$510	$502	$495	$487	$480
$2.01	$749	$733	$717	$701	$687	$673	$659	$646	$634	$622	$611	$599	$589	$578	$568	$559	$550	$540	$532	$523	$515	$507	$500	$492	$485
$2.03	$757	$740	$724	$708	$694	$680	$666	$653	$640	$628	$617	$605	$595	$584	$574	$564	$555	$546	$537	$529	$520	$512	$505	$497	$490
$2.05	$764	$747	$731	$715	$701	$686	$673	$659	$647	$634	$623	$611	$600	$590	$580	$570	$560	$551	$542	$534	$525	$517	$509	$502	$495
$2.07	$772	$755	$738	$722	$707	$693	$679	$666	$653	$641	$629	$617	$606	$596	$585	$575	$566	$557	$548	$539	$531	$522	$514	$507	$499
$2.09	$779	$762	$745	$729	$714	$700	$686	$672	$659	$647	$635	$623	$612	$601	$591	$581	$571	$562	$553	$544	$536	$527	$519	$512	$504
$2.11	$787	$769	$752	$736	$721	$706	$692	$679	$666	$653	$641	$629	$618	$607	$597	$587	$577	$567	$558	$549	$541	$532	$524	$517	$509
$2.13	$794	$776	$760	$743	$728	$713	$699	$685	$672	$659	$647	$635	$624	$613	$602	$592	$582	$573	$564	$555	$546	$538	$529	$521	$514
$2.15	$802	$784	$767	$750	$735	$720	$705	$692	$678	$665	$653	$641	$630	$619	$608	$598	$588	$578	$569	$560	$551	$543	$534	$526	$519
$2.17	$809	$791	$774	$757	$742	$726	$712	$698	$685	$672	$659	$647	$636	$624	$614	$603	$593	$584	$574	$565	$556	$548	$539	$531	$523
$2.19	$816	$798	$781	$764	$748	$733	$718	$704	$691	$678	$665	$653	$641	$630	$619	$609	$599	$589	$579	$570	$561	$553	$544	$536	$528
$2.21	$824	$806	$788	$771	$755	$740	$725	$711	$697	$684	$671	$659	$647	$636	$625	$614	$604	$594	$585	$575	$566	$558	$549	$541	$533
$2.23	$831	$813	$795	$778	$762	$747	$732	$717	$703	$690	$677	$665	$653	$642	$631	$620	$610	$600	$590	$581	$572	$563	$554	$546	$538
$2.25	$839	$820	$802	$785	$769	$753	$738	$724	$710	$696	$683	$671	$659	$647	$636	$626	$615	$605	$595	$586	$577	$568	$559	$551	$543

Table 3: Estimated Annual Operating Costs for Oil Water Heaters

Energy Factor

Fuel Cost per Gallon	0.50	0.51	0.52	0.53	0.54	0.55	0.56	0.57	0.58	0.59	0.60	0.61	0.62	0.63	0.64	0.65
$1.75	$378	$371	$364	$357	$350	$344	$338	$332	$326	$320	$315	$310	$305	$300	$295	$291
$1.80	$389	$381	$374	$367	$360	$353	$347	$341	$335	$330	$324	$319	$314	$309	$304	$299
$1.85	$400	$392	$384	$377	$370	$363	$357	$351	$345	$339	$333	$328	$322	$317	$312	$307
$1.90	$410	$402	$395	$387	$380	$373	$366	$360	$354	$348	$342	$336	$331	$326	$321	$316
$1.95	$421	$413	$405	$397	$390	$383	$376	$370	$363	$357	$351	$345	$340	$334	$329	$324
$2.00	$432	$424	$415	$408	$400	$393	$386	$379	$372	$366	$360	$354	$348	$343	$338	$332
$2.05	$443	$434	$426	$418	$410	$403	$395	$388	$382	$375	$369	$363	$357	$351	$346	$341
$2.10	$454	$445	$436	$428	$420	$412	$405	$398	$391	$384	$378	$372	$366	$360	$354	$349
$2.15	$464	$455	$447	$438	$430	$422	$415	$407	$400	$394	$387	$381	$375	$369	$363	$357
$2.20	$475	$466	$457	$448	$440	$432	$424	$417	$410	$403	$396	$390	$383	$377	$371	$366
$2.25	$486	$477	$467	$459	$450	$442	$434	$426	$419	$412	$405	$398	$392	$386	$380	$374
$2.30	$497	$487	$478	$469	$460	$452	$444	$436	$428	$421	$414	$407	$401	$394	$388	$382
$2.35	$508	$498	$488	$479	$470	$462	$453	$445	$438	$430	$423	$416	$409	$403	$397	$391
$2.40	$518	$508	$499	$489	$480	$471	$463	$455	$447	$439	$432	$425	$418	$411	$405	$399
$2.45	$529	$519	$509	$499	$490	$481	$473	$464	$456	$449	$441	$434	$427	$420	$413	$407
$2.50	$540	$529	$519	$509	$500	$491	$482	$474	$466	$458	$450	$443	$436	$429	$422	$415
$2.55	$551	$540	$530	$520	$510	$501	$492	$483	$475	$467	$459	$452	$444	$437	$430	$424
$2.60	$562	$551	$540	$530	$520	$511	$501	$493	$484	$476	$468	$460	$453	$446	$439	$432
$2.65	$572	$561	$550	$540	$530	$520	$511	$502	$494	$485	$477	$469	$462	$454	$447	$440
$2.70	$583	$572	$561	$550	$540	$530	$521	$512	$503	$494	$486	$478	$470	$463	$456	$449
$2.75	$594	$582	$571	$560	$550	$540	$530	$521	$512	$503	$495	$487	$479	$471	$464	$457
$2.80	$605	$593	$582	$571	$560	$550	$540	$531	$521	$513	$504	$496	$488	$480	$473	$465
$2.85	$616	$604	$592	$581	$570	$560	$550	$540	$531	$522	$513	$505	$497	$489	$481	$474
$2.90	$626	$614	$602	$591	$580	$570	$559	$550	$540	$531	$522	$514	$505	$497	$489	$482
$2.95	$637	$625	$613	$601	$590	$579	$569	$559	$549	$540	$531	$522	$514	$506	$498	$490
$3.00	$648	$635	$623	$611	$600	$589	$579	$568	$559	$549	$540	$531	$523	$514	$506	$499

Table 4: Estimated Annual Operating Costs for Electric Water Heaters

Energy Factor

Fuel Cost per kWh	0.80	0.81	0.82	0.83	0.84	0.85	0.86	0.87	0.88	0.89	0.90	0.91	0.92	0.93	0.94	0.95	0.96	0.97	0.98	0.99
5.0 ¢	$274	$271	$268	$265	$261	$258	$255	$252	$249	$247	$244	$241	$239	$236	$234	$231	$229	$226	$224	$222
5.5 ¢	$302	$298	$295	$291	$288	$284	$281	$278	$274	$271	$268	$265	$263	$260	$257	$254	$252	$249	$246	$244
6.0 ¢	$329	$325	$321	$317	$314	$310	$306	$303	$299	$296	$293	$290	$286	$283	$280	$277	$274	$272	$269	$266
6.5 ¢	$357	$352	$348	$344	$340	$336	$332	$328	$324	$321	$317	$314	$310	$307	$304	$300	$297	$294	$291	$288
7.0 ¢	$384	$379	$375	$370	$366	$362	$357	$353	$349	$345	$342	$338	$334	$331	$327	$324	$320	$317	$314	$310
7.5 ¢	$412	$407	$402	$397	$392	$387	$383	$379	$374	$370	$366	$362	$358	$354	$350	$347	$343	$340	$336	$333
8.0 ¢	$439	$434	$428	$423	$418	$413	$408	$404	$399	$395	$390	$386	$382	$378	$374	$370	$366	$362	$358	$355
8.5 ¢	$467	$461	$455	$450	$444	$439	$434	$429	$424	$419	$415	$410	$406	$401	$397	$393	$389	$385	$381	$377
9.0 ¢	$494	$488	$482	$476	$470	$465	$460	$454	$449	$444	$439	$434	$430	$425	$420	$416	$412	$407	$403	$399
9.5 ¢	$521	$515	$509	$503	$497	$491	$485	$479	$474	$469	$463	$458	$453	$449	$444	$439	$435	$430	$426	$421
10.0 ¢	$549	$542	$535	$529	$523	$517	$511	$505	$499	$493	$488	$483	$477	$472	$467	$462	$457	$453	$448	$444
10.5 ¢	$576	$569	$562	$555	$549	$542	$536	$530	$524	$518	$512	$507	$501	$496	$490	$485	$480	$475	$470	$466
11.0 ¢	$604	$596	$589	$582	$575	$568	$562	$555	$549	$543	$537	$531	$525	$519	$514	$508	$503	$498	$493	$488
11.5 ¢	$631	$623	$616	$608	$601	$594	$587	$580	$574	$567	$561	$555	$549	$543	$537	$532	$526	$521	$515	$510
12.0 ¢	$659	$651	$643	$635	$627	$620	$613	$606	$599	$592	$585	$579	$573	$567	$561	$555	$549	$543	$538	$532
12.5 ¢	$686	$678	$669	$661	$653	$646	$638	$631	$624	$617	$610	$603	$597	$590	$584	$578	$572	$566	$560	$554
13.0 ¢	$714	$705	$696	$688	$680	$672	$664	$656	$649	$641	$634	$627	$620	$614	$607	$601	$595	$588	$582	$577
13.5 ¢	$741	$732	$723	$714	$706	$697	$689	$681	$674	$666	$659	$651	$644	$637	$631	$624	$617	$611	$605	$599
14.0 ¢	$768	$759	$750	$741	$732	$723	$715	$707	$699	$691	$683	$676	$668	$661	$654	$647	$640	$634	$627	$621
14.5 ¢	$796	$786	$776	$767	$758	$749	$740	$732	$724	$715	$707	$700	$692	$685	$677	$670	$663	$656	$650	$643
15.0 ¢	$823	$813	$803	$794	$784	$775	$766	$757	$748	$740	$732	$724	$716	$708	$701	$693	$686	$679	$672	$665
15.5 ¢	$851	$840	$830	$820	$810	$801	$791	$782	$773	$765	$756	$748	$740	$732	$724	$716	$709	$702	$694	$687
16.0 ¢	$878	$867	$857	$846	$836	$827	$817	$808	$798	$789	$781	$772	$764	$755	$747	$740	$732	$724	$717	$710
16.5 ¢	$906	$894	$884	$873	$863	$852	$842	$833	$823	$814	$805	$796	$788	$779	$771	$763	$755	$747	$739	$732
17.0 ¢	$933	$922	$910	$899	$889	$878	$868	$858	$848	$839	$829	$820	$811	$803	$794	$786	$778	$770	$762	$754

Table 5: Estimated Annual Operating Costs for Heat Pump Water Heaters With and Without Tank

Energy Factor

Fuel Cost per kWh	1.5	1.6	1.7	1.8	1.9	2.0	2.1	2.2	2.3	2.4	2.5	2.6	2.7	2.8	2.9	3.0	3.1	3.2	3.3	3.4
5.0 ¢	$146	$137	$129	$122	$116	$110	$105	$100	$95	$91	$88	$84	$81	$78	$76	$73	$71	$69	$67	$65
5.5 ¢	$161	$151	$142	$134	$127	$121	$115	$110	$105	$101	$97	$93	$89	$86	$83	$81	$78	$75	$73	$71
6.0 ¢	$176	$165	$155	$146	$139	$132	$125	$120	$115	$110	$105	$101	$98	$94	$91	$88	$85	$82	$80	$77
6.5 ¢	$190	$178	$168	$159	$150	$143	$136	$130	$124	$119	$114	$110	$106	$102	$98	$95	$92	$89	$86	$84
7.0 ¢	$205	$192	$181	$171	$162	$154	$146	$140	$134	$128	$123	$118	$114	$110	$106	$102	$99	$96	$93	$90
7.5 ¢	$220	$206	$194	$183	$173	$165	$157	$150	$143	$137	$132	$127	$122	$118	$114	$110	$106	$103	$100	$97
8.0 ¢	$234	$220	$207	$195	$185	$176	$167	$160	$153	$146	$141	$135	$130	$125	$121	$117	$113	$110	$106	$103
8.5 ¢	$249	$233	$220	$207	$196	$187	$178	$170	$162	$156	$149	$144	$138	$133	$129	$124	$120	$117	$113	$110
9.0 ¢	$263	$247	$232	$220	$208	$198	$188	$180	$172	$165	$158	$152	$146	$141	$136	$132	$127	$123	$120	$116
9.5 ¢	$278	$261	$245	$232	$220	$209	$199	$190	$181	$174	$167	$160	$154	$149	$144	$139	$135	$130	$126	$123
10.0 ¢	$293	$274	$258	$244	$231	$220	$209	$200	$191	$183	$176	$169	$163	$157	$151	$146	$142	$137	$133	$129
10.5 ¢	$307	$288	$271	$256	$243	$231	$220	$210	$200	$192	$184	$177	$171	$165	$159	$154	$149	$144	$140	$136
11.0 ¢	$322	$302	$284	$268	$254	$242	$230	$220	$210	$201	$193	$186	$179	$173	$167	$161	$156	$151	$146	$142
11.5 ¢	$337	$316	$297	$281	$266	$252	$240	$230	$220	$210	$202	$194	$187	$180	$174	$168	$163	$158	$153	$149
12.0 ¢	$351	$329	$310	$293	$277	$263	$251	$240	$229	$220	$211	$203	$195	$188	$182	$176	$170	$165	$160	$155
12.5 ¢	$366	$343	$323	$305	$289	$274	$261	$249	$239	$229	$220	$211	$203	$196	$189	$183	$177	$172	$166	$161
13.0 ¢	$381	$357	$336	$317	$300	$285	$272	$259	$248	$238	$228	$220	$211	$204	$197	$190	$184	$178	$173	$168
13.5 ¢	$395	$370	$349	$329	$312	$296	$282	$269	$258	$247	$237	$228	$220	$212	$204	$198	$191	$185	$180	$174
14.0 ¢	$410	$384	$362	$342	$324	$307	$293	$279	$267	$256	$246	$236	$228	$220	$212	$205	$198	$192	$186	$181
14.5 ¢	$424	$398	$375	$354	$335	$318	$303	$289	$277	$265	$255	$245	$236	$227	$220	$212	$205	$199	$193	$187
15.0 ¢	$439	$412	$387	$366	$347	$329	$314	$299	$286	$274	$263	$253	$244	$235	$227	$220	$212	$206	$200	$194
15.5 ¢	$454	$425	$400	$378	$358	$340	$324	$309	$296	$284	$272	$262	$252	$243	$235	$227	$220	$213	$206	$200
16.0 ¢	$468	$439	$413	$390	$370	$351	$335	$319	$305	$293	$281	$270	$260	$251	$242	$234	$227	$220	$213	$207
16.5 ¢	$483	$453	$426	$403	$381	$362	$345	$329	$315	$302	$290	$279	$268	$259	$250	$242	$234	$226	$220	$213
17.0 ¢	$498	$467	$439	$415	$393	$373	$355	$339	$325	$311	$299	$287	$276	$267	$257	$249	$241	$233	$226	$220

SECTION 1 - GAS WATER HEATERS

RANGES OF COMPARABILITY FOR GAS WATER HEATERS

As described on pages 144 and 145 the first criteria for selecting a water heater is First Hour Rating. Only after you know what First Hour Rating is needed to meet your hot water needs should consideration be given to the efficiency of the water heater. To assist in this selection process, the following chart shows the range of efficiency (lowest and highest Energy Factor) and corresponding range of estimated energy consumption for all the gas water heaters listed in this chapter within a range of First Hour Rating as specified by the Federal Trade Commission for use on water heater EnergyGuide labels.

The Federal Trade Commission also specifies the following national average energy costs for use on water heater EnergyGuide labels:

Electricity	8.60¢ per kWh
Natural Gas	91.0¢ per therm
Propane Gas	$1.23 per gallon ($1.35 per therm)
No. 2 Heating Oil	$1.28 per gallon ($0.92 per therm)

GAS WATER HEATERS

First Hour Rating	Range (EF)				Range (of Estimated Annual Energy Consumption)			
	Natural Gas		Propane		Natural Gas		Propane	
Less than 21	*	*	*	*	*	*	*	*
21 to 24	*	*	*	*	*	*	*	*
25 to 29	*	*	*	*	*	*	*	*
30 to 34	*	*	*	*	*	*	*	*
35 to 40	*	*	*	*	*	*	*	*
41 to 47	*	*	*	*	*	*	*	*
48 to 55	.59	.64	.59	.64	254	234	278	256
56 to 64	.59	.62	.59	.62	254	242	278	265
65 to 74	.58	.67	.58	.67	258	224	283	245
75 to 86	.55	.67	.58	.67	272	224	283	245
87 to 99	.55	.63	.55	.65	272	238	298	252
100 to 114	.55	.66	.55	.66	272	227	298	249
115 to 131	.48	.66	.53	.66	312	227	309	249
Over 131	.48	.59	.48	.59	312	254	342	278

* No models in this range listed in this edition

By referring to the sample calculation on page 149 and using the national average energy costs above, you can estimate the annual energy cost of a water heater at a given Energy Factor. Tables 1 through 5 on pages 150 through 154 show the estimated annual energy cost calculated for various fuel costs and various Energy Factors.

AMERICAN WATER HEATER COMPANY

Trade Name(s): Ace, American, American Hardware, Americas Best, A.O. Smith, Apex, Aquamatic, Aqua Temp, Aqua Therm, Best, Best Deluxe, Champion, Craftmaster, De-Limer, Deluxe, Eagle, Envirotemp, Four Most, Hotmaster, Hotstream, King-Kleen, King-Line, Master Plumber, Nationaline, Neptune, Penquin, Polaris, Premier Plus, Premier Plus Self Cleaning Prestige, Prestige, Pro-Line, Pro-Line Plus, Quaker, Quick-Flo, Raywall, Revere, Riveria, Sands, Sentinal, Servi-Star, Shamrock, Special Deluxe, Standard, State, Super Eagle, Super-Flo, Supreme, Sure-Fire, The Earls Energy, The Earls Energy Conservation Water Heater, The Earls Energy Saver Plus, The Energy Saver Plus, Thoro-Clean, True-Test, Tru Value, U.S. Craftmaster, U.S. Supply, Whirlpool, XCL Energy Saver

NATURAL GAS

Model Number	Footnotes	1st Hr Rating Gals.	Energy Factor	Rated Storage Vol. Gals.	Input MBTUH	Recovery Effcy. %
UG*130T303N***	1,13,17	50	0.61	30	30.0	77
UG*140T403N***	1,13,17	65	0.59	40	40.0	77
UG*240T403N***	1,13,17	65	0.60	40	40.0	77
UG*150T403N***	1,13,17	75	0.58	50	50.0	77
UG*250T403N***	1,13,17	75	0.60	50	50.0	77

Trade Name(s): Ace, American, American Hardware, Americas Best, Apex, Aqua Temp, Aqua Therm, Aquamatic, Best, Best Deluxe, Champion, Craftmaster, De-Limer, Deluxe, Eagle, Envirotemp, Four Most, Hotmaster, Hotstream, King-Kleen, King-Line, Master Plumber, Nationaline, Neptune, Penquin, Polaris, Premier Plus, Premier Plus Self Cleaning Prestige, Prestige, Pro-Line, Pro-Line Plus, Quaker, Quick-Flo, Raywall, Revere, Riveria, Sands, Sentinal, Servi-Star, Shamrock, Special Deluxe, Standard, Super Eagle, Super-Flo, Supreme, Sure-Fire, The Earls Energy, The Earls Energy Conservation Water Heater, The Earls Energy Saver Plus, The Energy Saver Plus, Thoro-Clean, Tru Value, True-Test, U.S. Craftmaster, U.S. Supply, Whirlpool, XCL Energy Saver

NATURAL GAS

Model Number	Footnotes	1st Hr Rating Gals.	Energy Factor	Rated Storage Vol. Gals.	Input MBTUH	Recovery Effcy. %
PDVG*240T42N	1,3,4,5,17	67	0.63	40	42.0	76
PVG*240T42N***	1,3,5,13,17	70	0.62	40	42.0	76
PVG*250T42N***	1,3,5,13,17	70	0.62	50	42.0	76
SG*140T403N***	1,13,17	77	0.62	40	40.0	76
PDVG*250T42N	1,3,4,5,17	78	0.63	50	42.0	76
SG*150T403N***	1,13,17	90	0.61	50	40.0	76
PVG*250T60N***	1,3,5,13,17	95	0.62	50	60.0	76
PDVG*250T60N***	1,3,4,5,13,17	95	0.63	50	60.0	76

PROPANE GAS

Model Number	Footnotes	1st Hr Rating Gals.	Energy Factor	Rated Storage Vol. Gals.	Input MBTUH	Recovery Effcy. %
PDVG*240T42P	1,3,4,5,17	67	0.63	40	42.0	76
PVG*240T42P***	1,3,5,13,17	70	0.62	40	42.0	76
PVG*250T42P***	1,3,5,13,17	70	0.62	50	42.0	76
PDVG*250T42P	1,3,4,5,17	78	0.63	50	42.0	76
PVG*250T60P***	1,3,5,13,17	95	0.62	50	60.0	76
PDVG*250T60P***	1,3,4,5,13,17	95	0.63	50	60.0	76

Trade Name(s): Ace, American, American Hardware, Americas Best, Apex, Aqua Temp, Aqua Therm, Aquamatic, Best, Best Deluxe, Champion, Craftmaster, De-Limer, Deluxe, Eagle, Envirotemp, Four Most, Hotmaster, Hotstream, King-Kleen, King-Line, Master Plumber, Nationaline, Neptune, Penquin, Premier Plus, Premier Plus Self Cleaning Prestige, Prestige, ProLine, ProLine Plus, Quaker, Quick-Flo, Raywall, Revere, Riveria, Sands, Sentinal, Servi-Star, Shamrock, Special Deluxe, Standard, Super Eagle, Super-Flo, Supreme, Sure-Fire, The Earls Energy Conservation Water Heater, The Earl's Energy Saver Plus, Thoro-Clean, Tru Value, True-Test, U.S. Supply, XCL Energy Saver

NATURAL GAS

Model Number	Footnotes	1st Hr Rating Gals.	Energy Factor	Rated Storage Vol. Gals.	Input MBTUH	Recovery Effcy. %
FG*140T343N***	1,7,13,17	53	0.59	40	34.0	77
MHG*1-30T31-3N***	1,2,13,17	53	0.61	30	31.0	75
FG*240T343N***	1,7,13,17	53	0.61	40	34.0	77
FG*130S303N***	1,7,13,16	54	0.61	30	30.0	76
FG*130T303N***	1,7,13,17	54	0.61	30	30.0	76
DVG*2-40S38-N***	1,4,13,16	60	0.59	40	38.0	76
MHG*1-40T31-3N***	1,2,13,17	60	0.59	40	31.0	75
FG*140S403N***	1,7,13,17	67	0.59	40	40.0	76
FG*240S403N***	1,7,13,17	67	0.62	40	40.0	76
FG*140T403N***	1,7,13,17	69	0.59	40	40.0	76
FG*240T403N***	1,7,13,17	69	0.63	40	40.0	76
DVG*2-50T42-N***	1,4,13,17	70	0.58	50	42.0	76
PVG*2-40T50-3N***	1,3,13,17	72	0.62	40	50.0	76
FG*150T403N***	1,7,13,17	80	0.58	50	40.0	76
FG*250T403N***	1,7,13,17	80	0.62	50	40.0	76
FG*150T504N***	1,7,13,17	87	0.58	50	50.0	76
FG*250T504N***	1,7,13,17	87	0.60	50	50.0	76
*PVG*2-50T63-3NH***	1,3,13,17	95	0.60	50	63.5	76

PROPANE GAS

Model Number	Footnotes	1st Hr Rating Gals.	Energy Factor	Rated Storage Vol. Gals.	Input MBTUH	Recovery Effcy. %
FG*140T343P***	1,7,13,17	53	0.59	40	33.0	77
MHG*1-30T31-3P***	1,2,13,17	53	0.61	30	31.0	75
FG*240T343P***	1,7,13,17	53	0.61	40	33.0	77
FG*130S303P***	1,7,13,16	54	0.61	30	29.0	76
FG*130T303P***	1,7,13,16	54	0.61	30	29.0	76
DVG*2-40S38-P***	1,4,13,17	60	0.59	40	36.0	76
MHG*1-40T31-3P***	1,2,13,17	60	0.59	40	31.0	75
FG*140S403P***	1,7,13,17	67	0.59	40	36.0	76
FG*240S403P***	1,7,13,17	67	0.62	40	40.0	76
FG*140T403P***	1,7,13,17	69	0.59	40	36.0	76
FG*240T403P***	1,7,13,17	69	0.63	40	36.0	76
DVG*2-50T42-P***	1,4,13,17	70	0.58	50	36.0	76
PVG*2-40T50-3P***	1,3,13,17	72	0.62	40	48.0	76
FG*150T403P***	1,7,13,17	80	0.58	50	40.0	76
FG*250T403P***	1,7,13,17	80	0.62	50	40.0	76
FG*150T504P***	1,7,13,17	87	0.58	50	47.0	76
FG*250T504P***	1,7,13,17	87	0.60	50	47.0	76
*PVG*2-50T63-3PH***	1,3,13,17	95	0.60	50	60.0	76

Trade Name(s): American

NATURAL OR PROPANE GAS

Model Number	Footnotes	1st Hr Rating Gals.	Energy Factor	Rated Storage Vol. Gals.	Input MBTUH	Recovery Effcy. %
MHSCG62-30T30-3NV	2,12	54	0.61	30	30.0	76
MHSCG62-40T32-3NV	2,12	64	0.59	40	32.0	76
MHSCG62-50T38-3NV	2,12	77	0.59	50	38.0	76

Additional Footnotes

7. FG models may have prefix "B".
12. Insulation supplied for Inlet & Outlet connections.
13. First asterisk after letter "G" may be replaced with any number (1, 3, 5, 6, 8, 9, 10, or 12) signifying warranty period.
16. May have any combination of the following suffixes: M, V, or X.
17. May have any combination of the following suffixes: X, V, O, or M.

APOLLO COMFORT PRODUCTS

Trade Name(s): Apollo

NATURAL GAS

Model Number	Footnotes	1st Hr Rating Gals.	Energy Factor	Rated Storage Vol. Gals.	Input MBTUH	Recovery Effcy. %
✠A10 40 XAPDT L	1,3,4,5,12	62	0.59	40	40.0	76
✠A10 40 XBPDT L	1,3,4,5,12	62	0.59	40	40.0	76
✠A6 40 XAPDT L	1,3,4,5,12	62	0.59	40	40.0	76
✠A6 40 XBPDT L	1,3,4,5,12	62	0.59	40	40.0	76
A10 40 YART L4	1,12,13	71	0.59	40	40.0	74
A10 40 YBRT L4	1,12,13	71	0.59	40	40.0	74
A6 40 YARTL 4	1,12,13	71	0.59	40	40.0	74
A6 40 YBRTL 4	1,12,13	71	0.59	40	40.0	74
A10 50 XQPDT L5	1,3,5,12	80	0.58	50	65.0	73
A10 50 XRPDT L5	1,3,5,12	80	0.58	50	65.0	73
A6 50 XQPDT L5	1,3,5,12	80	0.58	50	65.0	73
A6 50 XRPDT L5	1,3,5,12	80	0.58	50	65.0	73
A10 40 YQVIT L2* 100	3,5,13,19	80	0.65	40	50.0	78
A10 40 YRVIT L2* 100	3,5,13,19	80	0.65	40	50.0	78
A6 40 YQVIT L2* 100	3,5,13,19	80	0.65	40	50.0	78
A6 40 YRVIT L2* 100	3,5,13,19	80	0.65	40	50.0	78
A10 40 YXRT L	1,12,13	81	0.63	40	40.0	76
A6 40 YXRT L	1,12,13	81	0.63	40	40.0	76
A10 50 YQVIT L2* 100	3,5,13,19	83	0.65	50	50.0	79
A10 50 YRVIT L2* 100	3,5,13,19	83	0.65	50	50.0	79
A6 50 YQVIT L2* 100	3,5,13,19	83	0.65	50	50.0	79
A6 50 YRVIT L2* 100	3,5,13,19	83	0.65	50	50.0	79
A10 40 YQRT L	1,12,13	88	0.60	38	50.0	71
A10 40 YRRT L	1,12,13	88	0.60	38	50.0	71
A6 40 YQRT L	1,12,13	88	0.60	38	50.0	71
A6 40 YRRT L	1,12,13	88	0.60	38	50.0	71

STANDARD FOOTNOTES:

1. Heat Traps
2. Manufactured (Mobile) Home Model
3. Power Combustion Or Power Vent
4. Direct Vent
5. Electronic Ignition (No Standing Pilot)

Rating Voluntarily Revised Since Last Directory
✠ Rating Revised By Program Since Last Directory

APOLLO COMFORT PRODUCTS

Trade Name(s): Apollo

Model Number	Footnotes	1st Hr Rating Gals.	Energy Factor	Rated Storage Vol. Gals.	Input MBTUH	Recovery Effcy. %
NATURAL GAS						
A10 50 YQRT L	1,12,13	90	0.58	48	50.0	76
A10 50 YRRT L	1,12,13	90	0.58	48	50.0	76
A6 50 YQRT L	1,12,13	90	0.58	48	50.0	76
A6 50 YRRT L	1,12,13	90	0.58	48	50.0	76
A10 50 YQRT L5	1,12,13	93	0.58	50	65.0	77
A10 50 YRRT L5	1,12,13	93	0.58	50	65.0	77
A6 50 YQRT L5	1,12,13	93	0.58	50	65.0	77
A6 50 YRRT L5	1,12,13	93	0.58	50	65.0	77
A10 50 YXRT L	1,12,13	97	0.63	50	40.0	81
A6 50 YXRT L	1,12,13	97	0.63	50	40.0	81
A** 50 SCVIT L5 200	1,3,5,12	107	0.62	50	65.0	76
A** 50 XSVIT L5 200	1,3,5,12	107	0.62	50	65.0	76
A10 50 YQVIT L5* 100	3,13,19	114	0.65	50	62.5	79
A6 50 YQVIT L5* 100	3,13,19	114	0.65	50	62.5	79
PROPANE GAS						
✠A10 40 CAPDT L	1,3,4,5,12	62	0.59	40	36.0	76
✠A10 40 CBPDT L	1,3,4,5,12	62	0.59	40	36.0	76
✠A6 40 CAPDT L	1,3,4,5,12	62	0.59	40	36.0	76
✠A6 40 CBPDT L	1,3,4,5,12	62	0.59	40	36.0	76
A10 40 HART L4	1,12,13	71	0.59	40	37.0	74
A10 40 HBRT L4	1,12,13	71	0.59	40	37.0	74
A6 40 HARTL 4	1,12,13	71	0.59	40	37.0	74
A6 40 HBRTL 4	1,12,13	71	0.59	40	37.0	74
A10 50 CQPDT L5	1,3,5,12	80	0.58	50	60.0	73
A10 50 CRPDT L5	1,3,5,12	80	0.58	50	60.0	73
A6 50 CQPDT L5	1,3,5,12	80	0.58	50	60.0	73
A6 50 CRPDT L5	1,3,5,12	80	0.58	50	60.0	73
A10 40 HQVIT L2* 101	3,5,13,19	80	0.65	40	50.0	78
A10 40 HRVIT L2* 101	3,5,13,19	80	0.65	40	50.0	78
A6 40 HQVIT L2* 101	3,5,13,19	80	0.65	40	50.0	78
A6 40 HRVIT L2* 101	3,5,13,19	80	0.65	40	50.0	78
A10 40 HXRT L	1,12,13	81	0.63	40	36.0	76
A6 40 HXRT L	1,12,13	81	0.63	40	36.0	76
A10 50 HQVIT L2* 101	3,5,13,19	83	0.65	50	50.0	79
A10 50 HRVIT L2* 101	3,5,13,19	83	0.65	50	50.0	79
A6 50 HQVIT L2* 101	3,5,13,19	83	0.65	50	50.0	79
A6 50 HRVIT L2* 101	3,5,13,19	83	0.65	50	50.0	79
A10 40 HQRT L	1,12,13	88	0.60	38	47.0	71
A10 40 HRRT L	1,12,13	88	0.60	38	47.0	71
A6 40 HQRT L	1,12,13	88	0.60	38	47.0	71
A6 40 HRRT L	1,12,13	88	0.60	38	47.0	71
A10 50 HQRT L	1,12,13	90	0.58	48	47.0	76
A10 50 HRRT L	1,12,13	90	0.58	48	47.0	76
A6 50 HQRT L	1,12,13	90	0.58	48	47.0	76
A6 50 HRRT L	1,12,13	90	0.58	48	47.0	76
A10 50 HQVIT L5* 101	3,13,19	92	0.65	50	55.0	79
A6 50 HQVIT L5* 101	3,13,19	92	0.65	50	55.0	79
A10 50 HQRT L5	1,12,13	93	0.58	50	55.0	77
A10 50 HRRT L5	1,12,13	93	0.58	50	55.0	77
A6 50 HQRT L5	1,12,13	93	0.58	50	55.0	77
A6 50 HRRT L5	1,12,13	93	0.58	50	55.0	77
A10 50 HXRT L	1,12,13	97	0.63	50	36.0	81
A6 50 HXRT L	1,12,13	97	0.63	50	36.0	81
A** 50 CCVIT L5 201	1,3,5,12	107	0.62	50	53.0	76
A** 50 CSVIT L5 201	1,3,5,12	107	0.62	50	53.0	76
Discontinued Models						
NATURAL GAS						
A**40XQVITL2	1,3,5,14	81	0.59	40	50.0	76
A**40XRVITL2	1,3,5,14	81	0.59	40	50.0	76
A**50XQVITL2	1,3,5,14	89	0.59	50	52.5	76
A**50XRVITL2	1,3,5,14	89	0.59	50	52.5	76
A**75XQVITL	3,5,14	128	0.53	75	75.0	76
A**75XRVITL	3,5,14	128	0.53	75	75.0	76
PROPANE GAS						
A**40CQVITL2	1,3,5,14	81	0.59	40	50.0	76
A**40CRVITL2	1,3,5,14	81	0.59	40	50.0	76
A**50CQVITL2	1,3,5,14	89	0.59	50	52.5	76
A**50CRVITL2	1,3,5,14	89	0.59	50	52.5	76
A**75CQVITL	1,3,5,14	128	0.53	75	70.0	76
A**75CRVITL	1,3,5,14	128	0.53	75	70.0	76

Trade Name(s): Maytag

Model Number	Footnotes	1st Hr Rating Gals.	Energy Factor	Rated Storage Vol. Gals.	Input MBTUH	Recovery Effcy. %
NATURAL GAS						
A**75XADS L	1,5,12	109	0.53	75	55.0	70
A**75XBDS L	1,5,12	109	0.53	75	55.0	70
Discontinued Models						
NATURAL GAS						
A**40XADAL	1,5,12	71	0.59	40	40.0	75
A**40XBDAL	1,5,12	71	0.59	40	40.0	75
A**50XADAL	1,5,12	87	0.58	50	48.0	76
A**50XBDAL	1,5,12	87	0.58	50	48.0	76
PROPANE GAS						
A**40CADAL	1,5,12	71	0.59	40	40.0	75
A**40CBDAL	1,5,12	71	0.59	40	40.0	75
A**50CADAL	1,5,12	87	0.58	50	44.0	76
A**50CBDAL	1,5,12	87	0.58	50	44.0	76

Additional Footnotes

12. Insulation supplied for Inlet & Outlet connections.
13. FVIR Compliant
14. Insulation supplied for Inlet and Outlet connections.
19. * additional Letters may be placed here to indicate Trim Packages.

BRADFORD WHITE CORPORATION

Trade Name(s): Bradford White

Model Number	Footnotes	1st Hr Rating Gals.	Energy Factor	Rated Storage Vol. Gals.	Input MBTUH	Recovery Effcy. %
NATURAL GAS						
M1TW40S*FBN(A)	1,3,5,6,25	72	0.63	40	40.0	80
M1TW50S*FBN(A)	1,3,5,6,25	86	0.63	50	40.0	80
M2TW50T*FBN(A)	1,3,5,6,25	108	0.66	48	67.0	81
M2TW65T*FBN(A)	1,3,5,6,25	126	0.66	65	70.0	82
PROPANE GAS						
M1TW40S*FCX(A)	1,3,5,6,25	72	0.63	40	38.0	80
M1TW50S*FCX(A)	1,3,5,6,25	86	0.63	50	38.0	80
M2TW50T*FCX(A)	1,3,5,6,25	108	0.66	48	60.0	81
M2TW65T*FCX(A)	1,3,5,6,25	126	0.66	65	63.0	82

Trade Name(s): Bradford White, Jetglas

Model Number	Footnotes	1st Hr Rating Gals.	Energy Factor	Rated Storage Vol. Gals.	Input MBTUH	Recovery Effcy. %
NATURAL GAS						
MIMS30T***N13-ATO**	1,2,4,6,9	52	0.61	30	30.0	77
MIMS30T**N13	1,2,4,6,9	52	0.61	30	30.0	77
MIMS30T*LN(A)	1,2,4,6,25	52	0.61	30	30.0	79
MIMS30T*LN(B)	1,2,4,6,25	52	0.61	30	30.0	79
MI30S***N4	6	54	0.61	30	30.0	77
MI30S***N7	1,6,9	54	0.61	30	30.0	77
MI30S***N7-ATO*****	1,6,9	54	0.61	30	30.0	77
MI30S*FBN(A)	1,6,25	54	0.61	30	30.0	79
MI30S*FBN(B)	1,6,25	54	0.61	30	30.0	79
M-4-30T***N-11	1,9,15,16	55	0.61	30	32.0	78
M-4-30T**FBN2		55	0.61	30	32.0	78
MI30T***N4	6	55	0.61	30	32.0	77
MI30T***N7	1,6,9	55	0.61	30	32.0	77
MI30T***N7-ATO*****	1,6,9	55	0.61	30	32.0	77
MI30T*FBN(A)	1,6,25	55	0.61	30	32.0	79
MI30T*FBN(B)	1,6,25	55	0.61	30	32.0	79
M430T***N7	1,6,9	55	0.62	30	32.0	79
M430T***N7-ATO*****	1,6,9	55	0.62	30	32.0	79
M430T*FBN(A)	1,6,25	55	0.62	30	32.0	80
M430T*FBN(B)	1,6,25	55	0.62	30	32.0	80
M430T***N5	1,6	55	0.64	30	32.0	79
MIMH30T**N12	6	56	0.61	30	32.0	77
MIMH30T**N13	1,2,6,9	56	0.61	30	32.0	77

STANDARD FOOTNOTES:

1. Heat Traps
2. Manufactured (Mobile) Home Model
3. Power Combustion Or Power Vent
4. Direct Vent
5. Electronic Ignition (No Standing Pilot)

Rating Voluntarily Revised Since Last Directory
✠ Rating Revised By Program Since Last Directory

BRADFORD WHITE CORPORATION

Trade Name(s): Bradford White, Jetglas

NATURAL GAS

Model Number	Footnotes	1st Hr Rating Gals.	Energy Factor	Rated Storage Vol. Gals.	Input MBTUH	Recovery Effcy. %
MIMH30T**N13-ATO**	1,2,6,9	56	0.61	30	32.0	77
MIMH30T*LN(A)	1,2,6,25	56	0.61	30	32.0	79
MIMH30T*LN(B)	1,2,6,25	56	0.61	30	32.0	79
MIMS40T**N12	6	59	0.59	40	30.0	77
MIMS40T**N13	1,2,4,6,9	59	0.59	40	30.0	77
MIMS40T**N13-ATO***	1,2,4,6,9	59	0.59	40	30.0	77
MIMS40T*LN(A)	1,2,4,6,25	59	0.59	40	30.0	78
MIMS40T*LN(B)	1,2,4,6,25	59	0.59	40	30.0	78
MIMH40T**N12	6	60	0.59	40	34.0	77
MIMH40T**N13	1,2,6,9	60	0.59	40	34.0	77
MIMH40T**N13-ATO**	1,2,6,9	60	0.59	40	34.0	77
MIMH40T*LN(A)	1,2,6,25	60	0.59	40	34.0	78
MIMH40T*LN(B)	1,2,6,25	60	0.59	40	34.0	78
M-4-40T***N-11	1,9,15,16	67	0.59	40	34.0	79
M-4-40T***N-10	9,15,16	67	0.60	40	34.0	79
MI303T***N4	6	67	0.61	29	40.0	78
MI303T***N7	1,6,9	67	0.61	29	40.0	78
MI303T***N7-ATO****	1,6,9	67	0.61	29	40.0	78
MI303T*FBN(A)	1,6,25	67	0.61	29	40.0	79
MI303T*FBN(B)	1,6,25	67	0.61	29	40.0	79
M-4-40T***N-12	9,15,16	67	0.63	40	34.0	79
M-4-40T***N-13	1,9,15,16	67	0.64	40	34.0	79
DS140S***N-11	1,9,15,16	71	0.59	40	38.0	80
DS140S***N15	1,4,6,9	71	0.59	40	38.0	80
DS140S***N15-ATO***	1,4,6,9	71	0.59	40	38.0	80
DS140S**N12	4,6	71	0.59	40	38.0	80
DS140S*BN(A)	1,4,6,25	71	0.59	40	38.0	80
DS140S*BN(B)	1,4,6,25	71	0.59	40	38.0	80
M1XR403S***N4	6	72	0.59	40	40.0	79
M1XR403S***N7	1,6,9	72	0.59	40	40.0	79
M1XR403S***N7-ATO**	1,6,9	72	0.59	40	40.0	79
M1XR403S*FBN(A)	1,6,25	72	0.59	40	40.0	79
M1XR403S*FBN(B)	1,6,25	72	0.59	40	40.0	79
MI403S***N4	6	72	0.59	40	40.0	77
MI403S***N7	1,6,9	72	0.59	40	40.0	77
MI403S***N7-ATO*****	1,6,9	72	0.59	40	40.0	77
MI403S*FBN(A)	1,6,25	72	0.59	40	40.0	79
MI403S*FBN(B)	1,6,25	72	0.59	40	40.0	79
M1TW40S*BN1	1,3,6,9	72	0.62	40	40.0	79
M4403S***N5	1,6	72	0.62	40	40.0	79
M4403S***N7	1,6,9	72	0.62	40	40.0	79
M4403S***N7-ATO****	1,6,9	72	0.62	40	40.0	79
M4403S*FBN(A)	1,6,25	72	0.62	40	40.0	79
M4403S*FBN(B)	1,6,25	72	0.62	40	40.0	80
M-I-TW40L***N-12	3,5,9,15,16	72	0.62	40	40.0	80
MITW40L***N15	1,3,6,9	72	0.62	40	40.0	80
MITW40L***N15-ATO**	1,3,6,9	72	0.62	40	40.0	80
M-I-TW40L***N-13	1,3,5,9,15,16	72	0.64	40	40.0	80
MI40T***N4	6	75	0.59	40	40.0	77
MI40T***N7	1,6,9	75	0.59	40	40.0	77
MI40T***N7-ATO*****	1,6,9	75	0.59	40	40.0	77
MI40T*FBN(A)	1,6,25	75	0.59	40	40.0	79
MI40T*FBN(B)	1,6,25	75	0.59	40	40.0	79
M440T***N5	1,6	75	0.62	40	40.0	79
M440T***N7	1,6,9	75	0.62	40	40.0	79
M440T***N7-ATO*****	1,6,9	75	0.62	40	40.0	79
M440T*FBN(A)	1,6,25	75	0.62	40	40.0	79
M440T*FBN(B)	1,6,25	75	0.62	40	40.0	80
M-II-40T***N-12	9,15,16	78	0.59	40	40.0	78
M-II-40T***N-13	1,9,15,16	78	0.60	40	40.0	78
M-4-403T***N-12	9,15,16	79	0.63	40	40.0	82
M-4-403T***N-13	1,9,15,16	79	0.64	40	40.0	82
M-4-50S***N-10	9,15,16	85	0.60	50	36.0	78
M-4-50S***N-11	1,9,15,16	85	0.60	50	36.0	78
M-I-TW50L***N-12	3,5,9,15,16	85	0.62	48	40.0	80
MITW50L***N15	1,3,6,9	85	0.62	48	40.0	80
MITW50L***N15-ATO**	1,3,6,9	85	0.62	48	40.0	80
M1TW50S*BN1	1,3,6,9	85	0.62	50	40.0	79
M-4-50S***N-12	9,15,16	85	0.62	50	40.0	80
M-4-50S**FBN2		85	0.62	50	40.0	78
M-I-TW50L***N-13	1,3,5,9,15,16	85	0.63	48	40.0	80
M-4-50S***N-13	1,9,15,16	85	0.63	50	40.0	80
MI50L***N4	6	86	0.58	48	40.0	78
MI50L***N7	1,6,9	86	0.58	48	40.0	78
MI50L***N7-ATO*****	1,6,9	86	0.58	48	40.0	78
MI50L*FBN(A)	1,6,25	86	0.58	48	40.0	79
MI50L*FBN(B)	1,25	86	0.58	48	40.0	79
M-4-503***N-11	1,9,15,16	86	0.58	50	40.0	77
MI503***N7	1,6,9	86	0.58	50	40.0	78
MI503***N7-ATO*****	1,6,9	86	0.58	50	40.0	78
MI503*FBN(A)	1,6,25	86	0.58	50	40.0	79
MI503*FBN(B)	1,6,25	86	0.58	50	40.0	79
MI404T***N4	6	86	0.59	40	50.0	78
MI404T***N7	1,6,9	86	0.59	40	50.0	78
MI404T***N7-ATO****	1,6,9	86	0.59	40	50.0	78
MI404T*FBN(A)	1,6,25	86	0.59	40	50.0	78
MI404T*FBN(B)	1,6,25	86	0.59	40	50.0	78
MI503***N4	6	86	0.59	50	40.0	78
M4503*FBN(A)	1,6,25	86	0.62	50	40.0	79
M4503*FBN(B)	1,6,25	86	0.62	50	40.0	79
M4503***N5	1,6	86	0.63	50	40.0	79
M4503***N7-ATO*****	1,6,9	86	0.63	50	40.0	79
DS150S***N15	1,4,6,9	88	0.58	50	42.0	80
DS150S***N15-ATO***	1,4,6,9	88	0.58	50	42.0	80
DS150S**N12	4,6	88	0.58	50	42.0	80
DS150S*BN(A)	1,4,6,25	88	0.58	50	42.0	79
DS150S*BN(B)	1,4,6,25	88	0.58	50	42.0	79
DS150S***EN-11	1,9,15,16	91	0.59	50	42.0	80
DH1504T***N15	1,4,6,9	92	0.58	48	50.0	78
DH1504T***N15-ATO**	1,4,6,9	92	0.58	48	50.0	78
DH1504T**N12	6	92	0.58	48	50.0	78
DH1504T*BN(A)	1,4,6,25	92	0.58	48	50.0	79
DH1504T*BN(B)	1,4,6,25	92	0.58	48	50.0	79
MI504S***N4	6	92	0.58	50	50.0	78
MI504S***N7	1,6,9	92	0.58	50	50.0	78
MI504S***N7-ATO*****	1,6,9	92	0.58	50	50.0	78
MI504S*FBN(A)	1,6,25	92	0.58	50	50.0	78
MI504S*FBN(B)	1,6,25	92	0.58	50	50.0	78
M160T*FBN(A)	1,6,25	96	0.56	60	40.0	78
M160T*FBN*(B)	1,6,25	96	0.56	60	40.0	78
M460T*FBN(A)	1,6,25	96	0.59	60	40.0	79
M460T*FBN(B)	1,6,25	96	0.59	60	40.0	79
M1TW60T*FBN(A)	1,3,5,6,25	100	0.62	60	42.0	79
M1XR504T***N5	1,6	101	0.58	48	65.0	79
M2XR504T***N5	1,6	101	0.59	48	65.0	79
M2XR504T***N7	1,6,9	101	0.59	48	65.0	79
M2XR504T*FBN(A)	1,6,25	101	0.59	48	65.0	79
M2XR504T*FBN(B)	1,6,25	101	0.59	48	65.0	79
PDX250T***N10	3,5,9,15,16	105	0.62	48	60.0	80
PDX250T***N13	1,3,5,6,9	105	0.62	48	65.0	80
PDX250T***N13-ATO**	1,3,5,6,9	105	0.62	48	65.0	80
PDX250T*BN(A)	1,3,5,6,25	105	0.62	48	65.0	79
M2TW50T*BN1	1,3,6,9	105	0.64	48	65.0	80
MIITW50T***N12	3,5,9,15,16	105	0.64	48	65.0	80
MIITW50T***N15	1,3,6,9	105	0.64	48	65.0	80
MIITW50T***N15-ATO*	1,3,6,9	105	0.64	48	65.0	80
M-II-TW50T***N-10	3,5,9,15,16	105	0.65	48	65.0	80
DH165T***N15	1,4,6,9	112	0.55	65	55.0	78
DH165T***N15-ATO***	1,4,6,9	112	0.55	65	55.0	78
DH165T**N12	6	112	0.55	65	55.0	78
DH165T*BN(A)	1,4,6,25	112	0.55	65	55.0	78
DH165T*BN(B)	1,4,6,25	112	0.55	65	65.0	78

STANDARD FOOTNOTES:

1. Heat Traps
2. Manufactured (Mobile) Home Model
3. Power Combustion Or Power Vent
4. Direct Vent
5. Electronic Ignition (No Standing Pilot)

Rating Voluntarily Revised Since Last Directory

✠ Rating Revised By Program Since Last Directory

BRADFORD WHITE CORPORATION

Trade Name(s): Bradford White, JetGlas

Model Number	Footnotes	1st Hr Rating Gals.	Energy Factor	Rated Storage Vol. Gals.	Input MBTUH	Recovery Effcy. %
NATURAL GAS						
PDX265T***N10	3,5,9,15,16	120	0.60	65	65.0	80
PDX265T***N13	1,3,5,6,9	120	0.60	65	65.0	80
PDX265T***N13-ATO**	1,3,5,6,9	120	0.60	65	65.0	80
PDX265T*BN(A)	1,3,5,6,25	120	0.60	65	65.0	79
DH175S***N15	1,4,6,9	124	0.53	75	60.0	78
DH175S***N15-ATO***	1,4,6,9	124	0.53	75	60.0	78
DH175S**N12	6	124	0.53	75	60.0	78
DH175S*BN(A)	1,4,6,25	124	0.53	75	60.0	78
DH175S*BN(B)	1,4,6,25	124	0.53	75	60.0	78
M2TW65T*BN1	1,3,6,9	124	0.62	65	65.0	80
MIITW65T***N12	3,5,9,15,16	124	0.62	65	65.0	80
MIITW65T***N15	1,3,6,9	124	0.62	65	65.0	80
MIITW65T***N15-ATO*	1,3,6,9	124	0.62	65	65.0	80
M1XR65T***N15	1,6,9	126	0.55	65	65.0	78
M1XR65T***N15-ATO*[illegible]	1,7	126	0.55	65	65.0	78
M1XR65T**N12	6	126	0.55	65	65.0	78
M1XR65T*BN(A)	1,6,25	126	0.55	65	65.0	79
M1XR65T*BN(B)	1,6,25	126	0.55	65	65.0	79
PDX275T***N10	3,5,9,15,16	140	0.59	75	70.0	80
PDX275T***N13	1,3,5,6,9	140	0.59	75	70.0	80
PDX275T***N13-ATO**	1,3,5,6,9	140	0.59	75	70.0	80
PDX275T*BN(A)	1,3,5,6,25	140	0.59	75	70.0	79
PROPANE GAS						
MIMS30T**X12	6	52	0.61	30	30.0	77
MIMS30T**X13	1,2,4,6,9	52	0.61	30	30.0	77
MIMS30T**X13-ATO***[illegible]	1,2,4,6,9	52	0.61	30	30.0	77
MIMS30T*LX(A)	1,2,4,6,25	52	0.61	30	30.0	79
MIMS30T*LX(B)	1,2,4,6,25	52	0.61	30	30.0	79
MI30S***X4	6	54	0.61	30	26.0	77
MI30S***X7	1,6,9	54	0.61	30	26.0	77
MI30S***X7-ATO*****[illegible]	1,6,9	54	0.61	30	26.0	77
MI30S*FCX(A)	1,6,25	54	0.61	30	26.0	79
MI30S*FCX(B)	1,6,25	54	0.61	30	26.0	79
M-4-30T**CX-11	9,15,16	55	0.61	30	32.0	79
M-4-30T**FCX2		55	0.61	30	31.0	78
MI30T***X4	6	55	0.61	30	31.0	77
MI30T***X7	1,6,9	55	0.61	30	31.0	77
MI30T***X7-ATO*****[illegible]	1,6,9	55	0.61	30	31.0	77
MI30T*FCX(A)	1,6,25	55	0.61	30	31.0	79
MI30T*FCX(B)	1,6,25	55	0.61	30	31.0	79
M430T***X7	1,6,9	55	0.62	30	31.0	79
M430T***X7-ATO*****	1,6,9	55	0.62	30	31.0	79
M430T*FCX(A)	1,6,25	55	0.62	30	31.0	79
M430T*FCX(B)	1,6,25	55	0.62	30	31.0	79
M430T***X5	1,6	55	0.64	30	31.0	79
MIMH30T**X12	6	56	0.61	30	32.0	77
MIMH30T**X13	1,2,6,9	56	0.61	30	32.0	77
MIMH30T**X13-ATO**	1,2,6,9	56	0.61	30	32.0	77
MIMH30T*LX(A)	1,2,6,25	56	0.61	30	32.0	79
MIMH30T*LX(B)	1,2,6,25	56	0.61	30	32.0	79
MIMS40T**X12	6	59	0.59	40	30.0	77
MIMS40T**X13	1,2,4,6,9	59	0.59	40	30.0	77
MIMS40T**X13-ATO***[illegible]	1,2,4,6,9	59	0.59	40	30.0	77
MIMS40T*LX(A)	1,2,4,6,25	59	0.59	40	30.0	78
MIMS40T*LX(B)	1,2,4,6,25	59	0.59	40	30.0	78
MIMH40T**X12	6	60	0.59	40	34.0	77
MIMH40T**X13	1,2,6,9	60	0.59	40	34.0	77
MIMH40T**X13-ATO**	1,2,6,9	60	0.59	40	34.0	77
MIMH40T*LX(A)	1,2,6,25	60	0.59	40	34.0	79
MIMH40T*LX(B)	1,2,6,25	60	0.59	40	34.0	79
M-4-40T**CX-11	1,9,15,16	67	0.59	40	34.0	79
M-4-40T**CX-10	9,15,16	67	0.60	40	34.0	79
MI303T***X4	6	67	0.61	29	35.0	78
MI303T***X7	1,6,9	67	0.61	29	35.0	78
MI303T***X7-ATO*****[illegible]	1,6,9	67	0.61	29	35.0	78
MI303T*FCX(A)	1,6,25	67	0.61	29	35.0	79
MI303T*FCX(B)	1,6,25	67	0.61	29	35.0	79
DS140S***CX-11	1,9,15,16	71	0.59	40	36.0	80
DS140S***X15	1,4,6,9	71	0.59	40	36.0	80
DS140S***X15-ATO***[illegible]	1,4,6,9	71	0.59	40	36.0	80
DS140S**X12	4,6	71	0.59	40	36.0	80
DS140S*CX(A)	1,4,6,25	71	0.59	40	36.0	79
DS140S*CX(B)	1,4,6,25	71	0.59	40	36.0	79
M1XR403S***X4	6	72	0.59	40	38.0	79
M1XR403S***X7	1,6,9	72	0.59	40	38.0	79
M1XR403S***X7-ATO*[illegible]	1,6,9	72	0.59	40	38.0	79
M1XR403S*FCX(A)	1,6,25	72	0.59	40	38.0	79
M1XR403S*FCX(B)	1,6,25	72	0.59	40	38.0	79
MI403S***X4	6	72	0.59	40	38.0	77
MI403S***X7	1,6,9	72	0.59	40	38.0	77
MI403S***X7-ATO*****[illegible]	1,6,9	72	0.59	40	38.0	77
MI403S*FCX(A)	1,6,25	72	0.59	40	38.0	79
MI403S*FCX(B)	1,6,25	72	0.59	40	38.0	79
M1TW40S*CX1	1,3,6,9	72	0.62	40	37.5	79
M4403S***X5	1,6	72	0.62	40	38.0	79
M4403S***X7	1,6,9	72	0.62	40	38.0	79
M4403S***X7-ATO****	1,6,9	72	0.62	40	38.0	79
M4403S*FCX(A)	1,6,25	72	0.62	40	38.0	78
M4403S*FCX(B)	1,6,25	72	0.62	40	38.0	78
MITW40L***X15	1,3,6,9	72	0.62	40	37.5	80
MITW40L***X15-ATO*[illegible]	1,3,6,9	72	0.62	40	37.5	80
M-I-TW40L**CX-12	3,5,9,15,16	72	0.62	40	37.5	80
M-I-TW40L**CX-13	1,3,5,9,15,16	72	0.64	40	37.5	80
MI40T***X4	6	75	0.59	40	36.0	77
MI40T***X7	1,6,9	75	0.59	40	36.0	77
MI40T***X7-ATO*****[illegible]	1,6,9	75	0.59	40	36.0	77
MI40T*FCX(A)	1,6,25	75	0.59	40	36.0	79
MI40T*FCX(B)	1,6,25	75	0.59	40	36.0	79
M440T***X5	1,6	75	0.62	40	36.0	79
M440T***X7	1,6,9	75	0.62	40	36.0	79
M440T***X7-ATO*****	1,6,9	75	0.62	40	36.0	79
M440T*FCX(A)	1,6,25	75	0.62	40	36.0	79
M440T*FCX(B)	1,6,25	75	0.62	40	36.0	79
M-II-40T**CX-12	9,15,16	78	0.59	40	40.0	78
M-II-40T**CX-13	1,9,15,16	78	0.60	40	40.0	78
M-4-403T**CX-12	9,15,16	78	0.63	40	40.0	82
M-4-403T**CX-13	1,9,15,16	78	0.64	40	40.0	82
M-I-50L6LX-11	1,9,15,16	85	0.58	48	38.0	78
MITW50L***X15	1,3,6,9	85	0.62	48	37.5	80
MITW50L***X15-ATO*[illegible]	1,3,6,9	85	0.62	48	37.5	80
M-I-TW50L**CX-12	3,5,9,15,16	85	0.62	48	37.5	80
M1TW50S*CX1	1,3,6,9	85	0.62	50	37.5	79
M-4-50S**CX-12	9,15,16	85	0.62	50	36.0	80
M-4-50S**CX-13	1,9,15,16	85	0.62	50	36.0	78
M-4-50S**FCX2		85	0.62	50	38.0	78
M-I-TW50L**CX-13	1,3,5,9,15,16	85	0.63	48	37.5	80
MI50L***X4	6	86	0.58	48	38.0	78
MI50L***X7	1,6,9	86	0.58	48	38.0	78
MI50L***X7-ATO*****[illegible]	1,6,9	86	0.58	48	38.0	78
MI50L*FCX(A)	1,6,25	86	0.58	48	38.0	79
MI50L*FCX(B)	1,6,25	86	0.58	48	38.0	79
MI503***X7	1,6,9	86	0.58	50	36.0	78
MI503***X7-ATO******[illegible]	1,6,9	86	0.58	50	36.0	78
MI503*FCX(A)	1,6,25	86	0.58	50	36.0	79
MI503*FCX(B)	1,6,25	86	0.58	50	36.0	79
MI404T***X4	6	86	0.59	40	48.0	78
MI404T***X7	1,6,9	86	0.59	40	48.0	78
MI404T***X7-ATO****[illegible]	1,6,9	86	0.59	40	48.0	78
MI404T*FCX(A)	1,6,25	86	0.59	40	48.0	78
MI404T*FCX(B)	1,6,25	86	0.59	40	48.0	78
MI503***X4	6	86	0.59	50	36.0	78
M4503*FCX(A)	1,6,25	86	0.62	50	36.0	79

STANDARD FOOTNOTES:

1. Heat Traps
2. Manufactured (Mobile) Home Model
3. Power Combustion Or Power Vent
4. Direct Vent
5. Electronic Ignition (No Standing Pilot)

\# Rating Voluntarily Revised Since Last Directory

✠ Rating Revised By Program Since Last Directory

BRADFORD WHITE CORPORATION

Trade Name(s): Bradford White, Jetglas

Model Number	Footnotes	1st Hr Rating Gals.	Energy Factor	Rated Storage Vol. Gals.	Input MBTUH	Recovery Effcy. %
PROPANE GAS						
M4503*FCX(B)	1,6,25	86	0.62	50	36.0	79
M4503***X5	1,6	86	0.63	50	36.0	79
M4503***X7-ATO*****[illegible]	1,6,9	86	0.63	50	36.0	79
DS150S***X15	1,4,6,9	88	0.58	50	40.0	80
DS150S***X15-ATO***[illegible]	1,4,6,9	88	0.58	50	40.0	80
DS150S**X12	4,6	88	0.58	50	40.0	80
DS150S*CX(A)	1,4,6,25	88	0.58	50	40.0	79
DS150S*CX(B)	1,4,6,25	88	0.58	50	40.0	79
DS150S***CX-11	1,9,15,16	91	0.59	50	40.0	80
DH1504T***X15	1,4,6,9	92	0.58	48	48.0	78
DH1504T***X15-ATO**	1,4,6,9	92	0.58	48	48.0	78
DH1504T**X12	6	92	0.58	48	48.0	78
DH1504T*CX(A)	1,4,6,25	92	0.58	48	48.0	79
DH1504T*FCX(B)	1,4,6,25	92	0.58	48	48.0	79
MI504S***X4	6	92	0.58	50	48.0	78
MI504S***X7	1,6,9	92	0.58	50	48.0	78
MI504S***X7-ATO*****[illegible]	1,6,9	92	0.58	50	48.0	78
MI504S*FCX(A)	1,6,25	92	0.58	50	48.0	79
MI504S*FCX(B)	1,6,25	92	0.58	50	48.0	79
M160T*FCX(A)	1,6,25	96	0.56	60	38.0	79
M160T*FCX(B)	1,6,25	96	0.56	60	38.0	79
M460T*FCX(A)	1,6,25	96	0.59	60	38.0	79
M460T*FCX(B)	1,6,25	96	0.59	60	38.0	79
M1TW60T*FCX(A)	1,3,6,25	100	0.62	60	40.0	79
M1XR504T***X5	1,6	101	0.58	48	61.0	79
M2XR504T***X5	1,6	101	0.59	48	61.0	79
M2XR504T***X7	1,6,9	101	0.59	48	61.0	79
M2XR504T*FCX(A)	1,6,25	101	0.59	48	65.0	79
M2XR504T*FCX(B)	1,6,25	101	0.59	48	65.0	79
PDX250T***CX10	3,5,9,15,16	105	0.62	48	60.0	80
PDX250T***X13	1,3,5,6,9	105	0.62	48	60.0	80
PDX250T***X13-ATO**	1,3,5,6,9	105	0.62	48	60.0	80
PDX250T*CX(A)	1,3,5,6,25	105	0.62	48	60.0	79
M2TW50T*CX1	1,3,6,9	105	0.64	48	60.0	80
MIITW50T***X15	1,3,6,9	105	0.64	48	65.0	80
MIITW50T***X15-ATO*	1,3,6,9	105	0.64	48	65.0	80
MIITW50T**CX12	3,5,9,15,16	105	0.64	48	65.0	80
M-II-TW50T**CX-10	3,5,9,15,16	105	0.65	48	63.0	80
DH165T***X15	1,4,6,9	112	0.55	65	52.0	78
DH165T***X15-ATO***	1,4,6,9	112	0.55	65	52.0	78
DH165T**X12	6	112	0.55	65	52.0	78
DH165T*CX(A)	1,4,6,25	112	0.55	65	52.0	79
DH165T*CX(B)	1,4,6,25	112	0.55	65	52.0	79
PDX265T***CX10	3,5,9,15,16	120	0.60	65	60.0	80
PDX265T***X13	1,3,5,6,9	120	0.60	65	60.0	80
PDX265T***X13-ATO**	1,3,5,6,9	120	0.60	65	60.0	80
PDX265T*CX(A)	1,3,5,6,25	120	0.60	65	60.0	79
DH175S***X15	1,4,6,9	124	0.53	75	57.0	78
DH175S***X15-ATO***	1,4,6,9	124	0.53	75	57.0	78
DH175S**X12	6	124	0.53	75	57.0	78
DH175S*CX(A)	1,4,6,25	124	0.53	75	57.0	79
DH175S*CX(B)	1,4,6,25	124	0.53	75	57.0	79
M2TW65T*CX1	1,3,6,9	124	0.62	65	63.0	80
MIITW65T***X15	1,3,6,9	124	0.62	65	65.0	80
MIITW65T***X15-ATO*	1,3,6,9	124	0.62	65	65.0	80
MIITW65T**CX12	3,5,9,15,16	124	0.62	65	65.0	80
M1XR65T***X15	1,6,9	126	0.55	65	65.0	78
M1XR65T***X15-ATO*[illegible]	1,6,9	126	0.55	65	65.0	78
M1XR65T**X12	6	126	0.55	65	65.0	78
M1XR65T*CX(A)	1,6,25	126	0.55	65	65.0	79
M1XR65T*CX(B)	1,6,25	126	0.55	65	65.0	79
PDX275T***CX10	3,5,9,15,16	140	0.59	75	70.0	80
PDX275T***X13	1,3,5,6,9	140	0.59	75	70.0	80
PDX275T***X13-ATO**	1,3,5,6,9	140	0.59	75	70.0	80
PDX275T*CX(A)	1,3,5,6,25	140	0.59	75	70.0	79

Discontinued Models

Model Number	Footnotes	1st Hr Rating Gals.	Energy Factor	Rated Storage Vol. Gals.	Input MBTUH	Recovery Effcy. %
NATURAL GAS						
M4503***N7	1,6,9	86	0.59	50	40.0	79
M2XR504T***N7-ATO*[illegible]	1,6,9	101	0.59	48	65.0	79
PROPANE GAS						
M4503***X7	1,6,9	86	0.59	50	36.0	79
M2XR504T***X7-ATO*[illegible]	1,6,9	101	0.59	48	61.0	79

Additional Footnotes

6. * Indicates a letter A-Z or a number 0-9.
7. * Indicates a number 0-9
9. An additional number suffix may be added to indicate an engineering change.
15. The asterisks may be replaced by the numbers: 1, 2, 3, 4, 5, 6, 7, 8, 9, or 10.
16. The -8 and -9 may be substituted for -10, -11, -12, or -13.
25. Letter inside ( ) is Engineering Revision Level

GSW WATER HEATING COMPANY

Trade Name(s): Medal, Superflue, Moffat, GSW, John Wood

Model Number	Footnotes	1st Hr Rating Gals.	Energy Factor	Rated Storage Vol. Gals.	Input MBTUH	Recovery Effcy. %
NATURAL GAS						
40SNVH	1,3	62	0.59	40	30.0	75
40S38FV	1,8	66	0.59	40	38.0	76
50SNVH	1,3	84	0.58	50	34.0	75
50TBFNA	1,4	86	0.58	50	42.0	73
50S40FV	1,8	88	0.58	50	40.0	76
6058 NA	1,8	108	0.56	60	58.0	75
753NCV	1,8	140	0.53	75	75.0	75
753NC	1,8	150	0.53	75	75.0	74

Trade Name(s): Superflue

Model Number	Footnotes	1st Hr Rating Gals.	Energy Factor	Rated Storage Vol. Gals.	Input MBTUH	Recovery Effcy. %
NATURAL GAS						
40SNVH-FV	1,3,5,6,9	65	0.60	40	30.0	75
50SNVH-FV	1,3,5,6,9	84	0.60	50	34.0	75
PROPANE GAS						
40SPVH-FV	1,3,5,6,9	65	0.60	40	30.0	75
50SPVH-FV	1,3,5,6,9	84	0.60	50	34.0	75

Additional Footnotes

6. All models may have a prefix number to indicate warranty period, and G or JW to indicate brand.
8. Includes Pipe Insulation
9. Suffix-02, -04, -05, and -06 may be added to indicate altitude

LOCHINVAR CORPORATION

Trade Name(s): Energy Saver, Golden Knight, Knight

Model Number	Footnotes	1st Hr Rating Gals.	Energy Factor	Rated Storage Vol. Gals.	Input MBTUH	Recovery Effcy. %
NATURAL GAS						
LTN030G		51	0.61	30	32.0	77
XTN030G		51	0.61	30	32.0	77
LTN030G-EF	1	51	0.62	30	32.0	79
XTN030G-EF	1	51	0.62	30	32.0	79
LSN030G		52	0.61	30	30.0	77
XSN030G		52	0.61	30	30.0	77
LTN040G		63	0.59	40	34.0	77
XTN040G		63	0.59	40	34.0	77
LTN040G-EF	1	63	0.62	40	34.0	79
XTN040G-EF	1	63	0.62	40	34.0	79
LSN041G		68	0.59	40	40.0	77
XSN041G		68	0.59	40	40.0	77
DVN041		69	0.62	40	40.0	79
LTN041G		72	0.59	40	40.0	77
XTN041G		72	0.59	40	40.0	77
LTN040G-4	1	74	0.59	40	48.0	78
XTN040G-4	1	74	0.59	40	48.0	78
LTN050G		80	0.58	50	40.0	78
XTN050G		80	0.58	50	40.0	78
DVN051		80	0.62	48	40.0	79
LTN050G-EF	1	80	0.62	50	40.0	79
XTN050G-EF	1	80	0.62	50	40.0	79
LTN050G-4		86	0.58	50	48.0	78
XTN050G-4		86	0.58	50	48.0	78

STANDARD FOOTNOTES:

1. Heat Traps
2. Manufactured (Mobile) Home Model
3. Power Combustion Or Power Vent
4. Direct Vent
5. Electronic Ignition (No Standing Pilot)

Rating Voluntarily Revised Since Last Directory
✠ Rating Revised By Program Since Last Directory

LOCHINVAR CORPORATION

Trade Name(s): Energy Saver, Golden Knight, Knight

Model Number	Footnotes	1st Hr Rating Gals.	Energy Factor	Rated Storage Vol. Gals.	Input MBTUH	Recovery Effcy. %
NATURAL GAS						
LTN051G	1	87	0.58	48	65.0	77
XTN051G	1	87	0.58	48	65.0	77
PVN050	3,5	96	0.62	46	65.0	79
DVN052-2	3,5	100	0.64	48	65.0	80
DVN065-2	3,5	117	0.62	65	65.0	80
ETN065G		120	0.55	65	65.0	79
STN065G		120	0.55	65	65.0	79
PVN075		130	0.60	73	75.0	80
PROPANE GAS						
LTL030G		51	0.61	30	31.0	77
XTL030G		51	0.61	30	31.0	77
LTL030G-EF	1	51	0.62	30	31.0	79
XTL030G-EF	1	51	0.62	30	31.0	79
LSL030G		52	0.61	30	26.0	77
XSL030G		52	0.61	30	26.0	77
LTL040G		63	0.59	40	34.0	77
XTL040G		63	0.59	40	34.0	77
LTL040G-EF	1	63	0.62	40	34.0	79
XTL040G-EF	1	63	0.62	40	34.0	79
LSL0416		68	0.59	40	38.0	77
XSL041G		68	0.59	40	38.0	77
DVL041	3,5	69	0.62	40	37.5	79
LTL041G		72	0.59	40	38.0	77
XTL041G		72	0.59	40	38.0	77
LTL040G-4	1	74	0.59	40	46.0	78
XTL040G-4	1	74	0.59	40	46.0	78
LTL050G		80	0.58	50	36.0	78
XTL050G		80	0.58	50	36.0	78
DVL051	3,5	80	0.62	48	37.5	79
LTL050G-EF	1	80	0.62	50	36.0	79
XTL050G-EF	1	80	0.62	50	36.0	79
LTL050G-4		86	0.58	50	46.0	78
XTL050G-4		86	0.58	50	46.0	78
LTL051G	1	87	0.58	48	61.0	77
XTL051G	1	87	0.58	48	61.0	77
PVL050	3,5	96	0.62	46	63.0	79
DVL052-2	3,5	100	0.64	48	65.0	80
DVL065-2	3,5	117	0.62	65	65.0	80
ETL065G		120	0.55	65	65.0	79
STL065G		120	0.55	65	65.0	79
PVL075	3,5	130	0.60	73	73.0	80

Trade Name(s): Energy Saver, Golden Knight, Knight, Lochinvar

Model Number	Footnotes	1st Hr Rating Gals.	Energy Factor	Rated Storage Vol. Gals.	Input MBTUH	Recovery Effcy. %
NATURAL GAS						
MDN030G	2,4	48	0.61	30	30.0	77
MHL030	2	50	0.61	30	32.0	77
MDN040G	2,4	51	0.59	40	30.0	77
MHL040	2	56	0.59	40	34.0	77
BFN040G	4	65	0.59	40	38.0	80
SFN040G	4	65	0.59	40	38.0	80
DVN041	3,5	69	0.62	40	40.0	80
SVN041	3,5	69	0.62	40	40.0	80
BFN050G	4	80	0.58	50	42.0	80
SFN050G	4	80	0.58	50	42.0	80
DVN051	3,5	80	0.62	48	40.0	80
SVN051	3,5	80	0.62	48	40.0	80
XDN050G		87	0.58	47	65.0	77
PVN050		96	0.62	47	65.0	80
PRN050	3,4,5	100	0.60	48	60.0	80
DVN052	3,5	100	0.62	48	65.0	80
SVN052	3,5	100	0.62	48	65.0	80
DVN065	3,5	112	0.61	65	65.0	80
SVN065	3,5	112	0.61	65	65.0	80
PRN065	3,4,5	114	0.59	65	65.0	80
PVN075		130	0.60	73	75.0	80
PRN075	3,4,5	132	0.58	75	70.0	80
PROPANE GAS						
SDN030G	2,4	48	0.61	30	30.0	77
MHN030	2	50	0.61	30	32.0	77
SDN040G	2,4	51	0.59	40	30.0	77
MHN040	2	56	0.59	40	34.0	77
BFL040G	4	65	0.59	40	36.0	80
SFL040G	4	65	0.59	40	36.0	80
DVL041	3,5	69	0.62	40	37.5	80
SVL041	3,5	69	0.62	40	37.5	80
BFL050G	4	80	0.58	50	40.0	80
SFL050G	4	80	0.58	50	40.0	80
DVL051	3,5	80	0.62	48	37.5	80
SVL051	3,5	80	0.62	48	37.5	80
XDL050G		87	0.58	47	63.0	77
PVL050		96	0.62	47	63.0	80
PRL050	3,4,5	100	0.60	48	60.0	80
DVL052	3,5	100	0.62	48	63.0	80
SVL052	3,5	100	0.62	48	63.0	80
DVL065	3,5	112	0.61	65	63.0	80
SVL065	3,5	112	0.61	65	63.0	80
PRL065	3,4,5	114	0.59	65	60.0	80
PVL075		130	0.60	73	73.0	80
PRL075	3,4,5	132	0.58	75	70.0	80

Trade Name(s): Lochinvar

Model Number	Footnotes	1st Hr Rating Gals.	Energy Factor	Rated Storage Vol. Gals.	Input MBTUH	Recovery Effcy. %
NATURAL GAS						
LVN041	1,3,5	69	0.62	40	40.0	79
LVN041G	1,3,5	69	0.62	40	40.0	80
XVN041	1,3,5	69	0.62	40	40.0	79
XVN041G	1,3,5	69	0.62	40	40.0	80
LTN050G(B)	1,25	80	0.58	50	40.0	80
LVN051	1,3,5	80	0.62	50	40.0	79
LVN051G	1,3,5	80	0.62	50	40.0	80
XVN051	1,3,5	80	0.62	50	40.0	79
XVN051G	1,3,5	80	0.62	50	40.0	80
LVN052	1,3,5	100	0.64	48	65.0	80
XVN052	1,3,5	100	0.64	48	65.0	80
LVN052G	1,3,5	102	0.65	48	67.0	81
XVN052G	1,3,5	102	0.65	48	67.0	81
LVN065	1,3,5	117	0.62	65	65.0	80
XVN065	1,3,5	117	0.62	65	65.0	80
LVN065G	1,3,5	118	0.65	65	70.0	81
XVN065G	1,3,5	118	0.65	65	70.0	81
PROPANE GAS						
LVL041	1,3,5	69	0.62	40	37.5	79
LVL041G	1,3,5	69	0.62	40	38.0	80
XVL041	1,3,5	69	0.62	40	37.5	79
XVL041G	1,3,5	69	0.62	40	38.0	80
LVL051	1,3,5	80	0.62	50	37.5	79
LVL051G	1,3,5	80	0.62	50	38.0	80
XVL051	1,3,5	80	0.62	50	37.5	79
XVL051G	1,3,5	80	0.62	50	38.0	80
LVL052	1,3,5	100	0.64	48	60.0	80
XVL052	1,3,5	100	0.64	48	60.0	80
XVL052G	1,3,5	102	0.62	48	60.0	81
LVL052G	1,3,5	102	0.65	48	60.0	81
LVL065	1,3,5	117	0.62	65	63.0	80
XVL065	1,3,5	117	0.62	65	63.0	80
LVL065G	1,3,5	118	0.65	65	63.0	81
XVL065G	1,3,5	118	0.65	65	63.0	81

Additional Footnotes

MAYTAG

Trade Name(s): Maytag

STANDARD FOOTNOTES:
1. Heat Traps
2. Manufactured (Mobile) Home Model
3. Power Combustion Or Power Vent
4. Direct Vent
5. Electronic Ignition (No Standing Pilot)

Rating Voluntarily Revised Since Last Directory
✠ Rating Revised By Program Since Last Directory

MAYTAG

Trade Name(s): Maytag

Model Number	Footnotes	1st Hr Rating Gals.	Energy Factor	Rated Storage Vol. Gals.	Input MBTUH	Recovery Effcy. %
NATURAL GAS						
HR6 30 YORT	1	59	0.61	30	35.5	73
HR6 40 HORT		62	0.59	40	35.5	74
✠HR6 40 XBPDT	1,3,4,5,12	62	0.59	40	40.0	76
HR6 40 YORT		62	0.59	40	35.5	74
✠HRX 40 XBPDT*	1,3,4,5,12	62	0.59	40	40.0	76
HRN49 30T	1,12,13	66	0.62	28	40.0	76
HV6 40 YBVIT* 100	3,5,13,19	69	0.65	40	40.0	81
HVN412 40P 100	3,5,13,19	70	0.67	40	40.0	82
HVN512 40P 100	3,5,13,19	70	0.67	40	40.0	82
HR6 40 YBRS	1,12,13	71	0.59	40	40.0	76
HRN49 40S	1,12,13	71	0.59	40	40.0	76
HRX 40 YARS	1,12,13	71	0.59	40	40.0	76
HR** 40 YBRT N*	1,12,13	71	0.60	38	40.0	73
HR6 40 YBRT	1,12,13	71	0.60	38	40.0	73
HRN49 40T	1,12,13	71	0.60	38	40.0	73
HRN49 40TN	1,12,13	71	0.60	38	40.0	73
HRX 40 YART	1,12,13	71	0.60	38	40.0	73
HR6 40 YOCT	1,12,13	71	0.62	40	40.0	76
HR6 50 XBPDT	1,3,4,5,12	80	0.58	50	40.0	76
HR6 50 YBRS	1,12,13	80	0.58	50	40.0	76
HRN49 50S	1,12,13	80	0.58	50	40.0	76
HRX 50 XBPDT*	1,3,4,5,12	80	0.58	50	40.0	76
HRX 50 YBRS*	1,12,13	80	0.58	50	40.0	76
HRN112 40X	1,12,13	81	0.63	40	40.0	76
HRN412 40X	1,12,13	81	0.63	40	40.0	76
HRN412 40XN	1,12,13	81	0.63	40	40.0	76
HV6 50 YBVIT* 100	3,5,13,19	83	0.65	50	40.0	82
HVN412 50V 100	3,5,13,19	83	0.65	50	50.0	79
HVN412 50P 100	3,5,13,19	83	0.67	50	40.0	82
HR6 50 YOCT	1,12,13	86	0.62	50	40.0	76
HRX 50 YOCT*	1,12,13	86	0.62	50	40.0	76
HRX 40 YQRT	1,12,13	88	0.60	38	50.0	71
HR650 YRRT	1,12,13	90	0.58	48	50.0	76
HRX 50 YQRT	1,12,13	90	0.58	48	50.0	76
HR6 50 YBRT	1,12,13	91	0.58	50	40.0	76
HR6 50 YBRT N*	1,12,13	91	0.58	50	40.0	76
HRN49 50T	1,12,13	91	0.58	50	40.0	76
HRN49 50TN	1,12,13	91	0.58	50	40.0	76
HRX 50 YART	1,12,13	91	0.58	50	40.0	76
HRX 50 YBRT N*	1,12,13	91	0.58	50	40.0	76
HR6 50 YQRT 5	1,12,13	93	0.58	50	65.0	77
HR6 50 YRRT 5	1,12,13	93	0.58	50	65.0	77
HRN112 50Q	1,12,13	93	0.58	50	65.0	77
HRN41250Q	1,12,13	93	0.58	50	65.0	77
HRX 50 YQRT 5*	1,12,13	93	0.58	50	65.0	77
HRX 50 YRRT 5*	1,12,13	93	0.58	50	65.0	77
✠HR6 65 XRRT	1,12	94	0.55	65	65.0	76
✠HRX 65 XRRT	1,12	94	0.55	65	65.0	76
HRN112 50X	1,12,13	97	0.63	50	40.0	81
PROPANE GAS						
HR6 30 HORT	1	59	0.61	30	35.5	73
✠HR6 40 CBPDT	1,3,4,5,12	62	0.59	40	36.0	76
✠HRX 40 CBPDT*	1,3,4,5,12	62	0.59	40	36.0	76
HV6 40 HBVIT* 101	3,5,13,19	69	0.65	40	40.0	81
HVP412 40P 101	3,5,13,19	70	0.67	40	40.0	82
HVP512 40P 101	3,5,13,19	70	0.67	40	40.0	82
HR6 40 HBRS	1,12,13	71	0.59	40	37.0	76
HRP49 40S	1,12,13	71	0.59	40	37.0	76
HR6 40 HBRT	1,12,13	71	0.60	38	37.0	73
HRP49 40T	1,12,13	71	0.60	38	37.0	73
HR6 40 HOCT	1,12,13	71	0.62	40	37.0	76
HR6 50 CBPDT	1,3,4,5,12	80	0.58	50	38.0	76
HR6 50 HBRS	1,12,13	80	0.58	50	37.0	76
HRP49 50S	1,12,13	80	0.58	50	37.0	76
HRX 50 CBPDT*	1,3,4,5,12	80	0.58	50	38.0	76
HRX 50 HBRS*	1,12,13	80	0.58	50	37.0	76
HRP112 40X	1,12,13	81	0.63	40	36.0	76
HV6 50 HBVIT* 101	3,5,13,19	83	0.65	50	40.0	82
HVP412 50V 101	3,5,13,19	83	0.65	50	50.0	79
HVP412 50P 101	3,5,13,19	83	0.67	50	40.0	82
HR6 50 HOCT	1,12,13	86	0.62	50	37.0	76
HRX 50 HOCT*	1,12,13	86	0.62	50	37.0	76
HR6 50 HRRT	1,12,13	90	0.58	48	47.0	76
HR6 50 HBRT	1,12,13	91	0.58	50	37.0	76
HRP49 50T	1,12,13	91	0.58	50	37.0	76
HR6 50 HQRT 5	1,12,13	93	0.58	50	55.0	77
HR6 50 HRRT 5	1,12,13	93	0.58	50	55.0	77
HRP112 50Q	1,12,13	93	0.58	50	55.0	77
HRX 50 HQRT 5*	1,12,13	93	0.58	50	55.0	77
HRX 50 HRRT 5*	1,12,13	93	0.58	50	55.0	77
✠HR6 65 CRRT	1,12	94	0.55	65	55.0	76
✠HRX 65 CRRT	1,12	94	0.55	65	55.0	76
HRP112 50X	1,12,13	97	0.63	50	36.0	81

Discontinued Models

Model Number	Footnotes	1st Hr Rating Gals.	Energy Factor	Rated Storage Vol. Gals.	Input MBTUH	Recovery Effcy. %
NATURAL GAS						
HR**40XBDS	1,5,12	71	0.59	40	40.0	75
HR** 40 YBRT N*	1,12,13	71	0.60	38	40.0	73
HR**40XOVIT	1,3,5,17	74	0.60	40	40.0	78
HN4**40P	6,7,8	74	0.62	40	40.0	78
HN5**40P	6,7,8	74	0.62	40	40.0	78
HN4**40X	6,7,8	76	0.64	40	40.0	85
HN5**40X	6,7,8	76	0.64	40	40.0	85
HN4**50P	6,7,8	80	0.59	50	40.0	77
HN5**50P	6,7,8	80	0.59	50	40.0	77
HVN412-40X		81	0.59	40	40.0	76
HN4**50X	6,7,8	84	0.64	50	40.0	85
HN5**50X	6,7,8	84	0.64	50	40.0	85
HR**50XBDS	1,5,12	87	0.58	50	48.0	76
HRN412 50V	1,3,5,14	89	0.59	50	52.5	76
HN4**50V	6,7,8	91	0.58	50	52.5	76
HN5**50V	6,7,8,9	91	0.58	50	52.5	76
HN4**50Q	6,7,8	93	0.60	50	52.5	85
HN5**50Q	6,7,8	93	0.60	50	52.5	85
HRN412 50X	1,12,13	97	0.63	50	40.0	81
HRN412 50XN	1,12,13	97	0.63	50	40.0	81
HR**75XRPDT	3,4,5,12	123	0.53	75	70.0	73
HR6 75 XRPDT	3,4,5,12	123	0.53	75	70.0	73
HRX 75 XRPDT	3,4,5,12	123	0.53	75	70.0	73
HR**75XRVIT	3,5,14	128	0.53	75	75.0	76
HRN412 75P	3,5,14	128	0.53	75	75.0	76
NATURAL OR PROPANE GAS						
HM**30NHDST2	2,12	54	0.61	30	30.0	76
HM**30NHMT2	2,12	54	0.61	30	30.0	76
HJ630NORT2W	1,6,7,8,9	58	0.61	30	33.5	76
HM**40NHMT2	2,12	63	0.59	40	30.0	76
HM**40NHDST2	2,12	64	0.59	40	32.0	76
HJ640NBRT2W	1,6,7,8,9	73	0.60	40	40.0	76
HJ640NOVET2	3,4,5,6,7,8,9	73	0.60	40	40.0	76
HJ640NOVETW	1,3,4,5,6,7,8,9	73	0.60	40	40.0	76
HJ640NOCT42W	1,6,7,8,9	73	0.61	40	40.0	77
HJ640NOVET2W	1,3,4,5,6,7,8	73	0.62	40	40.0	76
HJ640NOCT52W	1,6,7,8,9	73	0.63	40	35.0	77
HJ650NOCT32W	1,6,7,8,9	76	0.60	50	36.0	78
HM**50NHDST2	2,12	77	0.59	50	38.0	76
HM**50NHMT2	2,12	77	0.60	50	38.0	76
HJ650NOVETW	1,3,5,6,7,8,9	80	0.58	50	40.0	76
HJ650NOVET2W	1,3,5,6,7,8,9	80	0.59	50	40.0	76
HX50NARTW	1,6,7,8,9	80	0.59	50	40.0	76
HJ650NRRTW	1,6,7,8	91	0.58	50	52.5	76
PROPANE GAS						
HRNP49 30T	1,12,13	66	0.62	28	37.0	76

STANDARD FOOTNOTES:
1. Heat Traps
2. Manufactured (Mobile) Home Model
3. Power Combustion Or Power Vent
4. Direct Vent
5. Electronic Ignition (No Standing Pilot)

\# Rating Voluntarily Revised Since Last Directory
✠ Rating Revised By Program Since Last Directory

MAYTAG

Trade Name(s): Maytag

Discontinued Models

Model Number	Footnotes	1st Hr Rating Gals.	Energy Factor	Rated Storage Vol. Gals.	Input MBTUH	Recovery Effcy. %
PROPANE GAS						
HJ640PORT2	6,7,8	68	0.59	40	35.5	76
HJ640PORT2W	1,6,7,8,9	68	0.60	40	35.5	76
HR**40CBDS	1,5,12	71	0.59	40	40.0	75
HRX 40 HARS	1,12,13	71	0.59	40	37.0	76
HRX 40 HART	1,12,13	71	0.60	38	37.0	73
HR**40COVIT	1,3,5,17	74	0.60	40	40.0	78
HP4**40P	6,7,8	74	0.62	40	40.0	78
HP5**40P	6,7,8,9	74	0.62	40	40.0	78
HP4**40X	6,7,8	76	0.64	40	40.0	85
HP5**40X	6,7,8	76	0.64	40	40.0	85
HP4**50P	6,7,8	80	0.59	50	40.0	77
HP5**50P	6,7,8,9	80	0.59	50	40.0	77
HR**50COVIT	1,3,5,17	80	0.61	50	40.0	77
HRP412 40X	1,12,13	81	0.63	40	36.0	76
HJ650PBDS	4,6,7,8	84	0.58	50	44.0	76
HJ650PBDSW	1,4,6,7,8	84	0.60	50	44.0	76
HP4**50X	6,7,8	84	0.64	50	39.0	85
HP5**50X	6,7,8	84	0.64	50	39.0	85
HR**50CBDS	1,5,12	87	0.58	50	44.0	76
HRX 40 HQRT	1,12,13	88	0.60	38	47.0	71
HRP412 50V	1,3,5,14	89	0.59	50	52.5	76
HRX 50 HQRT	1,12,13	90	0.58	48	47.0	76
HRX 50 HART	1,12,13	91	0.58	50	37.0	76
HRN41250H	1,12,13	93	0.58	50	55.0	77
HP4**50Q	6,7,8	93	0.60	50	48.0	85
HP5**50Q	6,7,8	93	0.60	50	48.0	85
HRP412 50X	1,12,13	97	0.63	50	36.0	81
HR**75CRPDT	3,4,5,12	123	0.53	75	65.0	73
HR6 75 CRPDT	3,4,5,12	123	0.53	75	65.0	73
HRX 75 CRPDT	3,4,5,12	123	0.53	75	65.0	73
HR**75CRVIT	1,3,5,14	128	0.53	75	70.0	76
HRP412 75P	1,3,5,14	128	0.53	75	70.0	76

Additional Footnotes

6. (*) indicates 8 or 9 for warranty.
7. (**) indicates X or 12 for warranty.
8. All models may have one or more of the following suffixes: A, D, F, J, W or Z.
9. Letter "N" in suffix may be replaced by "P" to denote propane models.
12. Insulation supplied for Inlet & Outlet connections.
13. FVIR Compliant
14. Insulation supplied for Inlet and Outlet connections.
17. Insulation supplied for Inlet & Outlet connections.
19. * additional Letters may be placed here to indicate Trim Packages.

RELIANCE WATER HEATER COMPANY

Trade Name(s): Reliance

Model Number	Footnotes	1st Hr Rating Gals.	Energy Factor	Rated Storage Vol. Gals.	Input MBTUH	Recovery Effcy. %
NATURAL GAS						
6 30 YORS	1,12,13	54	0.61	30	32.0	71
1 30 YOPT	1	59	0.61	30	35.5	73
6 30 YORT	1	59	0.61	30	35.5	73
9 30 YKRT	1	59	0.61	30	35.5	73
✠6 40 XBPDT	1,3,4,5,12	62	0.59	40	40.0	76
9 40 HKRT		62	0.59	40	35.5	74
9 40 YKRT		62	0.59	40	35.5	74
9 40 YKRT W	1	62	0.59	40	35.5	74
6 40 YORS	1,12,13	63	0.59	40	35.5	74
9 40 YKRS	1,12,13	63	0.59	40	35.5	74
12 30 YART	1,12,13	66	0.61	30	40.0	77
6 30 YBRT 4N*	1,12,13	66	0.61	30	40.0	77
6 30 YOCT	1,12,13	66	0.63	30	40.0	76
6 40 XODS	1,4,12	68	0.59	40	36.0	75
6 40 YBVIT* 100	3,5,13,19	69	0.65	40	40.0	81
8 40 YAVIT* 100	3,5,13,19	69	0.65	40	40.0	81
6 40 YORT	1,12,13	70	0.59	40	32.0	73
12 40 YARS	1,12,13	71	0.59	40	40.0	76
12 40 YART	1,12,13	71	0.59	40	40.0	74
12 40 YART N*	1,12,13	71	0.59	40	40.0	74
6 40 YBRS	1,12,13	71	0.59	40	40.0	76
6 40 YBRT	1,12,13	71	0.59	40	40.0	74
6 40 YBRT 4N*	1,12,13	71	0.59	40	40.0	74
6 40 YOCT	1,12,13	71	0.62	40	40.0	76
6 40 YOCT N*	1,12,13	71	0.62	40	40.0	76
6 50 YORT	1,12,13	73	0.58	50	32.0	73
**40XOVIT	1,3,5,17	74	0.60	40	40.0	78
6 40 XAVIT	1,3,5,17	74	0.60	40	40.0	78
6 50 XODS	1,4,12	77	0.58	50	38.0	77
6 50 XBPDT	1,3,4,5,12	80	0.58	50	40.0	76
12 40 YXRT	1,12,13	81	0.63	40	40.0	76
6 50 YBVIT* 100	3,5,13,19	83	0.65	50	40.0	82
8 50 YAVIT* 100	3,5,13,19	83	0.65	50	40.0	82
6 50 YOCT	1,12,13	86	0.62	50	40.0	76
6 50 YOCT N*	1,12,13	86	0.62	50	40.0	76
9 50 YKRT		87	0.58	50	35.5	74
9 50 YKRT W	1	87	0.58	50	35.5	74
12 40 YQRT	1,12,13	88	0.60	38	50.0	71
12 50 YQRT	1,12,13	90	0.58	48	50.0	76
12 50 YART	1,12,13	91	0.58	50	40.0	76
12 50 YART N*	1,12,13	91	0.58	50	40.0	76
6 50 YBRT	1,12,13	91	0.58	50	40.0	76
6 50 YBRT N*	1,12,13	91	0.58	50	40.0	76
12 50 YXRT	1,12,13	97	0.63	50	40.0	81
NATURAL OR PROPANE GAS						
6 30 NHDST2	2,12	54	0.61	30	30.0	76
6 30 NOMT2	2,12	54	0.61	30	30.0	76
6 40 NOMT2	2,12	63	0.59	40	30.0	76
6 40 NHDST2	2,12	64	0.59	40	32.0	76
PROPANE GAS						
6 30 HORS	1,12,13	54	0.61	30	30.0	71
1 30 HOPT	1	59	0.61	30	35.5	73
6 30 HORT	1	59	0.61	30	35.5	73
9 30 HKRT	1	59	0.61	30	35.5	73
✠6 40 CBPDT	1,3,4,5,12	62	0.59	40	36.0	76
9 40 HKRT W	1	62	0.59	40	35.5	74
6 40 HORS	1,12,13	63	0.59	40	35.5	74
9 40 HKRS	1,12,13	63	0.59	40	35.5	74
12 30 HART	1,12,13	66	0.61	30	37.0	77
6 30 HOCT	1,12,13	66	0.63	30	37.0	76
6 40 CODS	1,4,12	68	0.59	40	36.0	75
6 40 HBVIT* 101	3,5,13,19	69	0.65	40	40.0	81
8 40 HAVIT* 101	3,5,13,19	69	0.65	40	40.0	81
6 40 HORT	1,12,13	70	0.59	40	30.0	73
12 40 HARS	1,12,13	71	0.59	40	37.0	76
12 40 HART	1,12,13	71	0.59	40	37.0	74
6 40 HBRS	1,12,13	71	0.59	40	37.0	76
6 40 HBRT	1,12,13	71	0.59	40	37.0	74
6 40 HOCT	1,12,13	71	0.62	40	37.0	76
6 50 HORT	1,12,13	73	0.58	50	30.0	73
**40COVIT	1,3,5,17	74	0.60	40	40.0	78
6 40 CAVIT	1,3,5,17	74	0.60	40	40.0	78
6 50 CODS	1,4,12	77	0.58	50	38.0	77
6 50 CBPDT	1,3,4,5,12	80	0.58	50	38.0	76
**50COVIT	1,3,5,17	80	0.61	50	40.0	77
12 40 HXRT	1,12,13	81	0.63	40	36.0	76
6 50 HBVIT* 101	3,5,13,19	83	0.65	50	40.0	82
8 50 HAVIT* 101	3,5,13,19	83	0.65	50	40.0	82
6 50 HOCT	1,12,13	86	0.62	50	37.0	76
9 50 HKRT		87	0.58	50	35.5	74
9 50 HKRT W	1	87	0.58	50	35.5	74
12 40 HQRT	1,12,13	88	0.60	38	47.0	71
12 50 HQRT	1,12,13	90	0.58	48	47.0	76
12 50 HART	1,12,13	91	0.58	50	37.0	76
6 50 HBRT	1,12,13	91	0.58	50	37.0	76

STANDARD FOOTNOTES:

1. Heat Traps
2. Manufactured (Mobile) Home Model
3. Power Combustion Or Power Vent
4. Direct Vent
5. Electronic Ignition (No Standing Pilot)

Rating Voluntarily Revised Since Last Directory
✠ Rating Revised By Program Since Last Directory

RELIANCE WATER HEATER COMPANY

Trade Name(s): Reliance

Model Number	Footnotes	1st Hr Rating Gals.	Energy Factor	Rated Storage Vol. Gals.	Input MBTUH	Recovery Effcy. %
PROPANE GAS						
12 50 HXRT	1,12,13	97	0.63	50	36.0	81
Discontinued Models						
NATURAL GAS						
**40XXRT		81	0.59	40	40.0	76
6 75 XRVIT	3,5,14	128	0.53	75	75.0	76
8 75 XQVIT	3,5,14	128	0.53	75	75.0	76
PROPANE GAS						
**50CORT		73	0.58	50	30.0	73
**50CAVIT	1,3,5,17	80	0.61	50	40.0	77
6 75 CRVIT	1,3,5,14	128	0.53	75	70.0	76
8 75 CQVIT	1,3,5,14	128	0.53	75	70.0	76

Trade Name(s): State

Model Number	Footnotes	1st Hr Rating Gals.	Energy Factor	Rated Storage Vol. Gals.	Input MBTUH	Recovery Effcy. %
Discontinued Models						
NATURAL GAS						
PR**40XRVIT	1,3,5,14	81	0.59	40	50.0	76
PR**50XRVIT	1,3,5,14	89	0.59	50	52.5	76
PR**75XRVIT	3,5,14	128	0.53	75	75.0	76
PROPANE GAS						
PR**40CRVIT	1,3,5,14	81	0.59	40	50.0	76
PR**50CRVIT	1,3,5,14	89	0.59	50	52.5	76
PR**75CRVIT	1,3,5,14	128	0.53	75	70.0	76

Additional Footnotes

12. Insulation supplied for Inlet & Outlet connections.
13. FVIR Compliant
14. Insulation supplied for Inlet and Outlet connections.
17. Insulation supplied for Inlet & Outlet connections.
19. * additional Letters may be placed here to indicate Trim Packages.

RHEEM MFG. CO., WATER HEATER DIVISION

Trade Name(s): General Electric

Model Number	Footnotes	1st Hr Rating Gals.	Energy Factor	Rated Storage Vol. Gals.	Input MBTUH	Recovery Effcy. %
NATURAL GAS						
GG30S06AVG00	1,6,21	50	0.61	30	30.0	76
GG30T06AVG00	1	50	0.62	30	30.0	76
GG40S06AVG00	1,6,21	67	0.59	40	36.0	76
GG40T06AVG00	1,6,21	67	0.59	40	36.0	76
GG40T06AVG01	1,6,21	67	0.59	40	36.0	76
PG40S09AVG00	1,6,17,21	68	0.59	40	40.0	76
PG40T09AVG00	1,6,17,21	68	0.59	40	40.0	76
PG40T09HVG00	1,6,17,21	68	0.59	40	40.0	76
SG40T12AVH00	1,6,17,21	68	0.59	40	40.0	76
SG40T12HVH00	1,6,17,21	68	0.59	40	40.0	76
GG40T06TVG00	1,6,17	68	0.62	40	40.0	76
SG40T12AVG00	1,6,17	68	0.62	40	40.0	76
SG40T12HVG00	1,6	68	0.62	40	40.0	76
GG40T06PVJ	1,3,6	68	0.64	40	40.0	76
GG50T06AVG00	1,6,21	72	0.58	50	36.0	76
GG40S06AQJ01	1,6,21	72	0.59	40	36.0	76
GG40S06AVJ00	1,6,21	72	0.59	40	36.0	76
GG50T06AVH00	1,6,21	80	0.58	50	38.0	76
GG50T06HVG00	1,6,17,21	82	0.58	50	40.0	76
PG50T09AVG00	1,5,6,21	82	0.58	50	40.0	76
PG50T09HVG00	1,6,17,21	82	0.58	50	40.0	76
SG50T12AVH00	1,5,6,21	82	0.58	50	40.0	76
SG50T12HVH00	1,6,17,21	82	0.58	50	40.0	76
GG50T06TVG00	1,6,17	83	0.62	50	40.0	76
SG50T12AVG00	1,6,17	83	0.62	50	40.0	76
SG50T12HVG00	1,6	83	0.62	50	40.0	76
GG50S06AQJ00	1,6,21	84	0.59	50	40.0	76
GG50S06AVJ00	1,6,21	84	0.59	50	40.0	76
GP50S06AVJ00	1,6,21	84	0.59	50	40.0	76
GG50T06PVJ	1,3,6	87	0.64	50	42.0	76
SG60T12YVK00	1,6,21	105	0.57	60	50.0	76
SG60T12YNG00	1	107	0.56	60	50.0	76
GG75T06ANF00	1,6,17	130	0.53	75	70.0	76
GG75T06HNF00	1,6	130	0.53	75	70.0	76
PROPANE GAS						
GP40T06AVG00	1,6,21	66	0.59	40	34.0	76
GP40T06HVG00	1,6,21	66	0.59	40	34.0	76
GP40T06PVJ	1,3,6	67	0.63	40	40.0	76
GP50T06AVG00	1,6,21	80	0.58	50	36.0	76
GP50T06HVG00	1,6,21	80	0.58	50	36.0	76
GP50T06PVJ	1,3,6	89	0.63	50	42.0	76
SP60T12YVK00	1,6,21	105	0.57	60	45.0	76

Trade Name(s): Hotpoint

Model Number	Footnotes	1st Hr Rating Gals.	Energy Factor	Rated Storage Vol. Gals.	Input MBTUH	Recovery Effcy. %
NATURAL GAS						
HG30T01AVG00	1	50	0.62	30	30.0	76
HG40S01AVG00	1,6,21	67	0.59	40	36.0	76
HG40T01AVG00	1,6,21	67	0.59	40	34.0	76
HG40T01AVG01	1,6,21	67	0.59	40	34.0	76
HG40S01AQJ00	1,6,21	72	0.59	40	36.0	76
HG40S01AVJ00	1,6,21	72	0.59	40	36.0	76

Trade Name(s): Professional

Model Number	Footnotes	1st Hr Rating Gals.	Energy Factor	Rated Storage Vol. Gals.	Input MBTUH	Recovery Effcy. %
NATURAL GAS						
42V40-40PROF	1,6,17,21	68	0.59	40	40.0	76
42V40-40PROHF	1,6,17,21	68	0.59	40	40.0	76
42V40S-40PROF	1,6,17,21	68	0.59	40	40.0	76
42V38-40F	1,6,7,21	68	0.60	38	40.0	76
42V38-40HF	1,6,21	68	0.60	38	40.0	76
42V38-40PROF	1,6,21	68	0.60	38	40.0	76
42V38-40PROHF	1,6,21	68	0.60	38	40.0	76
42V40F	1,6,21	68	0.60	38	40.0	76
42V40HF	1,6,21	68	0.60	38	40.0	76
42V40PROF	1,6,21	68	0.60	38	40.0	76
42V40PROHF	1,6,21	68	0.60	38	40.0	76
RHGPRO40-40F	1,6,17	68	0.62	40	40.0	76
RHGPRO40-40HF	1,6	68	0.62	40	40.0	76
RHGPRO50-50F	1,6,21	81	0.58	50	50.0	76
42V50-40PROF	1,5,6,21	82	0.58	50	40.0	76
42V50-40PROHF	1,6,17,21	82	0.58	50	40.0	76
RHGPRO50-40F	1,6,17	83	0.62	50	40.0	76
RHGPRO50-40HF	1,6	83	0.62	50	40.0	76
42V50SFM1	1,6,21	84	0.59	50	40.0	76
42V50SPROF	1,6,21	84	0.59	50	40.0	76
42V50SPROFSQ	1,6,21	84	0.59	50	40.0	76
RHG PRO60F	1,6,21	105	0.57	60	50.0	76
RHG PRO60-50NT	1	107	0.56	60	50.0	76
RHG PRO60-50T	1	107	0.56	60	50.0	76
RHGPRO100-73N		116	0.48	100	73.0	76
RHGPRO75-70H	1,6	130	0.53	75	70.0	76
RHGPRO75-70N-1	1,6,17	130	0.53	75	70.0	76
RHGPRO 100-75		135	0.48	100	75.0	76
PROPANE GAS						
42V40S-36PROPF	1,6,21	65	0.59	40	36.0	76
RHGPRO40-34PF	1,6	66	0.60	40	34.0	76
RHGPRO40-34PHF	1,6	66	0.60	40	34.0	76
42V38-34PF	1,6,21	67	0.60	38	34.0	76
42V38-34PHF	1,6,21	67	0.60	38	34.0	76
42V38-34PROPF	1,6,21	67	0.60	38	34.0	76
42V40PF	1,6,21	67	0.60	38	34.0	76
42V40PHF	1,6,21	67	0.60	38	34.0	76
42V40PROPF	1,6,21	67	0.60	38	34.0	76
42V50-36PROPF	1,6,21	80	0.58	50	36.0	76
42V50-36PROPHF	1,6,21	80	0.58	50	36.0	76
RHGPRO50-36PF	1,6	83	0.62	50	36.0	76
RHGPRO50-36PHF	1,6	83	0.62	50	36.0	76
RHG PRO60PF	1,6,21	105	0.57	60	45.0	76
RHG PRO60-50PT	1	107	0.56	60	50.0	76
RHG PRO60-50PTH	1	107	0.56	60	50.0	76

STANDARD FOOTNOTES:

1. Heat Traps
2. Manufactured (Mobile) Home Model
3. Power Combustion Or Power Vent
4. Direct Vent
5. Electronic Ignition (No Standing Pilot)

Rating Voluntarily Revised Since Last Directory
✠ Rating Revised By Program Since Last Directory

RHEEM MFG. CO., WATER HEATER DIVISION

Model Number	Footnotes	1st Hr Rating Gals.	Energy Factor	Rated Storage Vol. Gals.	Input MBTUH	Recovery Effcy. %
Trade Name(s): Professional						
PROPANE GAS						
RHGPRO75-69P-1	1,6,17	130	0.53	75	69.0	76
RHGPRO 100-69P		135	0.48	100	69.0	76
Trade Name(s): Professional, Ruud						
NATURAL GAS						
22V40 PROF	1,6,21	73	0.59	40	38.0	76
22V50 PROF	1,6,21	90	0.58	50	38.0	76
Trade Name(s): Rheem						
NATURAL GAS						
22V30S-30F	1,6,21	50	0.61	30	30.0	76
22V30-30F	1	50	0.62	30	30.0	76
22V30F	1,6,21	50	0.63	30	32.0	76
22V30FSQ	1,6,21	50	0.63	30	32.0	76
22V30PF	1,6,21	50	0.63	30	30.0	76
41VRP40NT	1,3,5,11	66	0.64	40	40.0	76
41VRP40PT	1,3,5,11	66	0.64	40	40.0	76
22V40-34F	1,6,21	67	0.59	40	34.0	76
22V40-34F1	1,6,21	67	0.59	40	34.0	76
22V40-36F	1,6,21	67	0.59	40	36.0	76
22V40-36F1	1,6,21	67	0.59	40	36.0	76
42V40S-36F	1,6,21	67	0.59	40	36.0	76
42V40-40F	1,6,17,21	68	0.59	40	40.0	76
42V40-40HF	1,6,17,21	68	0.59	40	40.0	76
42V40S-40F	1,6,17,21	68	0.59	40	40.0	76
42VR40-40F	1,6,17	68	0.62	40	40.0	76
42VR40-40HF	1,6	68	0.62	40	40.0	76
42VP40F	1,3,6	68	0.64	40	40.0	76
42VP40SF	1,3,6	71	0.64	40	40.0	76
42V50-36F	1,6,21	72	0.58	50	36.0	76
22V40SF	1,6,21	72	0.59	40	36.0	76
22V40SFSQ	1,6,21	72	0.59	40	36.0	76
22X40SF	1,6,21	72	0.59	40	36.0	76
22X40SFSQ	1,6,21	72	0.59	40	36.0	76
22V40F1	1,6,7,21	73	0.59	40	38.0	76
42V50-50F	1,6,21	81	0.58	50	50.0	76
42V50-40F	1,5,6,21	82	0.58	50	40.0	76
42V50-40HF	1,6,17,21	82	0.58	50	40.0	76
42VR50-40F	1,6,17	83	0.62	50	40.0	76
42VR50-40HF	1,6	83	0.62	50	40.0	76
42V50SF	1,6,21	84	0.59	50	40.0	76
42V50SF1SQ	1,6,21	84	0.59	50	40.0	76
42V50SFM1	1,6,21	84	0.59	50	40.0	76
42V50SPF	1,6,21	84	0.59	50	40.0	76
41VRP50NT	1,3,5,11	84	0.65	50	40.0	76
41VRP50PT	1,3,5,11	84	0.65	50	40.0	76
22DV50-38	4,20	85	0.58	50	38.0	76
22DV50-40(N)	4,20	85	0.58	50	40.0	76
42VP50SF	1,3,6	85	0.62	50	42.0	76
42VP50F	1,3,6	87	0.64	50	42.0	76
22V50F1	1,6,7,21	90	0.58	50	38.0	76
42V60F	1,6,21	105	0.57	60	50.0	76
42V60-50NT	1	107	0.56	60	50.0	76
42V60-50T	1	107	0.56	60	50.0	76
21*100N	11	116	0.48	100	73.0	76
22VRP75	1,3,6	121	0.53	75	75.0	76
22VR75-69PH	1,6	130	0.53	75	69.0	76
22VR75-70H	1,6	130	0.53	75	70.0	76
22VR75-70N	1,6,17	130	0.53	75	70.0	76
21*100-1	11	135	0.48	100	75.0	76
NATURAL OR PROPANE GAS						
21VR30DV	2,4,17	48	0.61	30	30.0	76
21VR30T	2,6,11	49	0.61	30	34.0	76
21VR40DV	2,4,17	60	0.59	40	30.0	76
21VR40T	2,6,11	64	0.59	40	34.0	76
21VR50DV	2,4,17	67	0.59	50	32.0	76
22V40SDVX	2,4	68	0.59	40	34.0	76
PROPANE GAS						
42V40S-36PF	1,6,21	65	0.59	40	36.0	76
42V40-34PF	1,6,21	66	0.59	40	34.0	76
42V40-34PHF	1,6,21	66	0.59	40	34.0	76
42VR40-34PF	1,6	66	0.60	40	34.0	76
42VR40-34PHF	1,6	66	0.60	40	34.0	76
42VP40PF	1,3,6	67	0.63	40	40.0	76
22V40SPF	1,6,21	72	0.59	40	34.0	76
42VP40SPF	1,3,6	72	0.63	40	40.0	76
42VP50SPF	1,3,6	75	0.62	50	42.0	76
42V50-36PF	1,6,21	80	0.58	50	36.0	76
42V50-36PHF	1,6,21	80	0.58	50	36.0	76
42VR50-36PF	1,6	83	0.62	50	36.0	76
42VR50-36PHF	1,6	83	0.62	50	36.0	76
42VP50PF	1,3,6	89	0.63	50	42.0	76
42V60PF	1,6,21	105	0.57	60	45.0	76
42V60-50PT	1	107	0.56	60	50.0	76
42V60-50PTH	1	107	0.56	60	50.0	76
22VRP75P	1,3,6	121	0.53	75	75.0	76
22VR75-69P	1,6,17	130	0.53	75	69.0	76
21*100-1P	11	135	0.48	100	69.0	76
Discontinued Models						
NATURAL GAS						
22V40F1	1,6,7,21	73	0.59	40	38.0	76
Trade Name(s): Rheem-Ruud Light Duty Gas						
NATURAL GAS						
G60-50N	1	107	0.56	60	50.0	76
G100-75N		116	0.48	100	73.0	76
GPV75-75E-1	1,3,6	121	0.53	75	75.0	76
G75-75N-1	1,6,17	130	0.53	75	70.0	76
PROPANE GAS						
G60-50	1	107	0.56	60	50.0	76
GPV75-75E-1P	1,3,6	121	0.53	75	75.0	76
G75-75P-1	1,6,17	130	0.53	75	69.0	76
Trade Name(s): Richmond						
NATURAL GAS						
6G50S-40F1	1,6,21	84	0.59	50	40.0	76
6G50S-40FSQ	1,6,21	84	0.59	50	40.0	76
NATURAL OR PROPANE GAS						
22DV40S-36(N)	4	70	0.59	40	36.0	76
Trade Name(s): Vanguard						
NATURAL GAS						
3WA59	1,6,21	50	0.61	30	30.0	76
3WA57	1	50	0.62	30	30.0	76
3WA61	1,6,21	67	0.59	40	36.0	76
3WA62	1,6,21	67	0.59	40	36.0	76
4UB46	1,6,21	67	0.59	40	36.0	76
3WA63	1,6,17,21	68	0.59	40	40.0	76
1HA13	1,3,6	68	0.64	40	40.0	76
3WA64	1,6,21	72	0.58	50	36.0	76
3WA65	1,5,6,21	82	0.58	50	40.0	76
1HA14	1,3,6	87	0.64	50	42.0	76
5AU70	1,6,7,21	90	0.58	50	38.0	76
5AU60	1,3,6	121	0.53	75	75.0	76
3WA54	1,6,17	130	0.53	75	70.0	76
PROPANE GAS						
3WA61	1,6,21	66	0.59	40	34.0	76

Additional Footnotes

STANDARD FOOTNOTES:
1. Heat Traps
2. Manufactured (Mobile) Home Model
3. Power Combustion Or Power Vent
4. Direct Vent
5. Electronic Ignition (No Standing Pilot)

Rating Voluntarily Revised Since Last Directory
✠ Rating Revised By Program Since Last Directory

6. Pipe insulation.
7. First * denotes warranty period and may be replaced with the characters: V or X
11. The "*" denotes the warranty period and may be replaced by the letters: V, I, X, or a dash.
17. * in the model number denotes warranty and may be replaced: I, -, V, or X.
20. (N) as a suffix denotes Lo-NOx model also available.
21. T&P Insulation

RICHMOND WATER HEATERS

Trade Name(s): Rheem

Model Number	Footnotes	1st Hr Rating Gals.	Energy Factor	Rated Storage Vol. Gals.	Input MBTUH	Recovery Effcy. %
NATURAL GAS						
6G40S-36F1	1,6,21	72	0.59	40	36.0	76
6G40S-36F1SQ	1,6,21	72	0.59	40	36.0	76
6G60-50F	1,6,21	105	0.57	60	50.0	76
PROPANE GAS						
6G40S-34PF1	1,6,21	72	0.59	40	34.0	76
6G60-45PF	1,6,21	105	0.57	60	45.0	76

Trade Name(s): Richmond

Model Number	Footnotes	1st Hr Rating Gals.	Energy Factor	Rated Storage Vol. Gals.	Input MBTUH	Recovery Effcy. %
NATURAL GAS						
6G30S-30F	1,6,21	50	0.61	30	30.0	76
6G30-30F	1	50	0.62	30	30.0	76
5VRP40NT	1,3,5	66	0.64	40	40.0	76
5VRP40PT	1,3,5	66	0.64	40	40.0	76
6G40-36F	1,6,21	67	0.59	40	36.0	76
6G40-36F1	1,6,21	67	0.59	40	36.0	76
6G40S-36F	1,6,21	67	0.59	40	36.0	76
*G40-40F	1,6,17,21	68	0.59	40	40.0	76
*G40-40HF	1,6,17,21	68	0.59	40	40.0	76
9G40S-40F	1,6,17,21	68	0.59	40	40.0	76
6G38-40F	1,6,21	68	0.60	38	40.0	76
6G38-40HF	1,6,21	68	0.60	38	40.0	76
12G40-40F	1,6,17	68	0.62	40	40.0	76
12G40-40HF	1,6	68	0.62	40	40.0	76
6G40PV-40F	1,3,6	68	0.64	40	40.0	76
6G40SPV-32PF	1,3,6	71	0.64	40	40.0	76
6G50-36F	1,6,21	72	0.58	50	36.0	76
*G50-38F1	1,6,21	80	0.58	50	38.0	76
*G50-50F	1,6,21	81	0.58	50	50.0	76
*G50-40F	1,5,6,21	82	0.58	50	40.0	76
*G50-40HF	1,6,17,21	82	0.58	50	40.0	76
12G50-40F	1,6,17	83	0.62	50	40.0	76
12G50-40HF	1,6	83	0.62	50	40.0	76
6G50S-36PF1	1,6,21	84	0.59	50	40.0	76
9G50S-36PF	1,6,21	84	0.59	50	40.0	76
9G50S-40F1	1,6,21	84	0.59	50	40.0	76
9G50S-40FSQ	1,6,21	84	0.59	50	40.0	76
5VRP50NT	1,3,5	84	0.65	50	40.0	76
5VRP50PT	1,3,5	84	0.65	50	40.0	76
6GDV50-38	20	85	0.58	50	38.0	76
6GDV50-40(N)	20	85	0.58	50	40.0	76
6G50SPV-36F	1,3,6	85	0.62	50	42.0	76
6G50PV-42F	1,3,6	87	0.64	50	42.0	76
6G60-50NT	1	107	0.56	60	50.0	76
6G60-50T	1	107	0.56	60	50.0	76
5V100N		116	0.48	100	73.0	76
6GVRP75	1,3,6	121	0.53	75	75.0	76
6G75-69PH	1,6	130	0.53	75	69.0	76
6G75-70H	1,6	130	0.53	75	70.0	76
6G75-70N	1,6,17	130	0.53	75	70.0	76
5V100-1		135	0.48	100	75.0	76
NATURAL OR PROPANE GAS						
MVR30DV	2,4,17	48	0.61	30	30.0	76
5VR30T	2,6,11	49	0.61	30	34.0	76
MVR40DV	2,4,17	60	0.59	40	30.0	76
5VR40T	2,6,11	64	0.59	40	34.0	76
MVR50DV	2,4,17	67	0.59	50	32.0	76
6GDV40S-36(N)	4	70	0.59	40	36.0	76
PROPANE GAS						
*G40S-36PF	1,6,21	65	0.59	40	36.0	76
6G40-34PF	1,6,21	66	0.59	40	34.0	76
6G40-34PHF	1,6,21	66	0.59	40	34.0	76
12G40-34PF	1,6	66	0.60	40	34.0	76
6G38-34PF	1,6,21	67	0.60	38	34.0	76
6G40PV-40PF	1,3,6	67	0.63	40	40.0	76
6G40SPV-32PF	1,3,6	72	0.63	40	40.0	76
6G50SPV-32PF	1,3,6	75	0.62	50	42.0	76
*G50-36PF	1,6,21	80	0.58	50	36.0	76
6G50-36PHF	1,6,21	80	0.58	50	36.0	76
6G50PV-42PF	1,3,6	89	0.63	50	42.0	76
6G60-50PT	1	107	0.56	60	50.0	76
6G60-50PTH	1	107	0.56	60	50.0	76
6GVRP75P	1,3,6	121	0.53	75	75.0	76
6G75-69P	1,6,17	130	0.53	75	69.0	76
5V100-1P		135	0.48	100	69.0	76

Trade Name(s): Richmond Light Duty

Model Number	Footnotes	1st Hr Rating Gals.	Energy Factor	Rated Storage Vol. Gals.	Input MBTUH	Recovery Effcy. %
NATURAL GAS						
TPV75-75E-1	1,3,6	121	0.53	75	75.0	76
T75-75N-1	1,6,17	130	0.53	75	70.0	76
PROPANE GAS						
TPV75-75EP-1	1,3,6	121	0.53	75	75.0	76
T75-75-1	1,6,17	130	0.53	75	69.0	76

Trade Name(s): Richmond Light Duty Gas

Model Number	Footnotes	1st Hr Rating Gals.	Energy Factor	Rated Storage Vol. Gals.	Input MBTUH	Recovery Effcy. %
NATURAL GAS						
T100-75N		116	0.48	100	73.0	76
T100-75		135	0.48	100	75.0	76
PROPANE GAS						
T100-75P		135	0.48	100	69.0	76

Additional Footnotes

6. Pipe insulation.
11. The "*" denotes the warranty period and may be replaced by the letters: V, I, X, or a dash.
17. * in the model number denotes warranty and may be replaced: I, -, V, or X.
20. (N) as a suffix denotes Lo-NOx model also available.
21. T&P Insulation

RUUD WATER HEATER DIVISION

Model Number	Footnotes	1st Hr Rating Gals.	Energy Factor	Rated Storage Vol. Gals.	Input MBTUH	Recovery Effcy. %
NATURAL GAS						
PVP40F	1,3,6	68	0.64	40	40.0	76
PVP40SF	1,3,6	71	0.64	40	40.0	76
PVP50SF	1,3,6	85	0.62	50	42.0	76
PVP50F	1,3,6	87	0.64	50	42.0	76
PROPANE GAS						
PVP40PF	1,3,6	67	0.63	40	40.0	76
PVP40SPF	1,3,6	72	0.63	40	40.0	76
PVP50SPF	1,3,6	75	0.62	50	42.0	76
PVP50PF	1,3,6	89	0.63	50	42.0	76

Trade Name(s): Professional

Model Number	Footnotes	1st Hr Rating Gals.	Energy Factor	Rated Storage Vol. Gals.	Input MBTUH	Recovery Effcy. %
NATURAL GAS						
PH2-40-40PROF	1,6,17,21	68	0.59	40	40.0	76
PH2-40-40PROHF	1,6,17,21	68	0.59	40	40.0	76
PH2-40S-40PROF	1,6,17,21	68	0.59	40	40.0	76
RUGPRO40-40F	1,6,17	68	0.62	40	40.0	76
RUGPRO40-40HF	1,6	68	0.62	40	40.0	76
RUGPRO50-50F	1,6,21	81	0.58	50	50.0	76
PH2-50-40PROF	1,5,6,21	82	0.58	50	40.0	76
PH2-50-40PROHF	1,6,17,21	82	0.58	50	40.0	76
RUGPRO50-40F	1,6,17	83	0.62	50	40.0	76
RUGPRO50-40HF	1,6	83	0.62	50	40.0	76
PH2-50SPROF	1,6,21	84	0.59	50	40.0	76
RUG PRO60F	1,6,21	105	0.57	60	50.0	76
RUGPRO100-73N		116	0.48	100	73.0	76
RUGPRO75-70H	1,6	130	0.53	75	70.0	76
RUGPRO75-70N-1	1,6,17	130	0.53	75	70.0	76
RUGPRO100-75	6	135	0.48	100	75.0	76
NATURAL OR PROPANE GAS						

STANDARD FOOTNOTES:
1. Heat Traps
2. Manufactured (Mobile) Home Model
3. Power Combustion Or Power Vent
4. Direct Vent
5. Electronic Ignition (No Standing Pilot)

Rating Voluntarily Revised Since Last Directory
✠ Rating Revised By Program Since Last Directory

RUUD WATER HEATER DIVISION

Trade Name(s): Professional

Model Number	Footnotes	1st Hr Rating Gals.	Energy Factor	Rated Storage Vol. Gals.	Input MBTUH	Recovery Effcy. %
NATURAL OR PROPANE GAS						
PH2DV40S-36(N)	4	70	0.59	40	36.0	76
PROPANE GAS						
PH2-40S-36PROF	1,6,21	65	0.59	40	36.0	76
RUGPRO40-34PF	1,6	66	0.60	40	34.0	76
PH2-50-36PROPF	1,6,21	80	0.58	50	36.0	76
RUGPRO50-36PF	1,6	83	0.62	50	36.0	76
RUG PRO60PF	1,6,21	105	0.57	60	45.0	76
RUGPRO75-69P-1	1,6,17	130	0.53	75	69.0	76
RUGPRO100-69P		135	0.48	100	69.0	76

Trade Name(s): Rheem

Model Number	Footnotes	1st Hr Rating Gals.	Energy Factor	Rated Storage Vol. Gals.	Input MBTUH	Recovery Effcy. %
NATURAL GAS						
M2-40SF	1,6,21	72	0.59	40	36.0	76
M2-40SFSQ	1,6,21	72	0.59	40	36.0	76
P2-40SF	1,6,21	72	0.59	40	36.0	76
P2-40SFSQ	1,6,21	72	0.59	40	36.0	76
PH2-60F	1,6,21	105	0.57	60	50.0	76
PROPANE GAS						
P2-40SPF	1,6,21	72	0.59	40	34.0	76
PH2-60PF	1,6,21	105	0.57	60	45.0	76

Trade Name(s): Ruud

Model Number	Footnotes	1st Hr Rating Gals.	Energy Factor	Rated Storage Vol. Gals.	Input MBTUH	Recovery Effcy. %
NATURAL GAS						
P2-30S-30F	1,6,21	50	0.61	30	30.0	76
P2-30-30F	1	50	0.62	30	30.0	76
PVRP40NT	1,3,5,9	66	0.64	40	40.0	76
PVRP40PT	1,3,5,9	66	0.64	40	40.0	76
P40-36F1	1,6,21	67	0.59	40	36.0	76
PH2-40-40F	1,6,17,21	68	0.59	40	40.0	76
PH2-40-40HF	1,6,17,21	68	0.59	40	40.0	76
PH2-40S-40F	1,6,17,21	68	0.59	40	40.0	76
PH2-40F	1,6,21	68	0.60	38	40.0	76
PH2-40HF	1,6,21	68	0.60	38	40.0	76
PH2-40PROF	1,6,21	68	0.60	38	40.0	76
PH2-40PROHF	1,6,21	68	0.60	38	40.0	76
*HR40T	1,6,9	68	0.62	40	40.0	76
PH2R-40-40F	1,6,17	68	0.62	40	40.0	76
PH2R-40-40HF	1,6	68	0.62	40	40.0	76
P2-40 PROF	1,6,7,21	73	0.59	40	38.0	76
PH2-50-50F	1,6,21	81	0.58	50	50.0	76
PH2-50-40F	1,6,16,21	82	0.58	50	40.0	76
PH2-50-40HF	1,6,17,21	82	0.58	50	40.0	76
PH2R-50-40F	1,6,17	83	0.62	50	40.0	76
PH2R-50-40HF	1,6	83	0.62	50	40.0	76
PH2-50SF	1,6,21	84	0.59	50	40.0	76
PH2-50SF1SQ	1,6,21	84	0.59	50	40.0	76
PH2-50SPF	1,6,21	84	0.59	50	40.0	76
PH2-50SPROPF	1,6,21	84	0.59	50	40.0	76
PVRP50NT	1,3,5,9	84	0.65	50	40.0	76
PVRP50PT	1,3,5,9	84	0.65	50	40.0	76
PH2DV50-38	20	85	0.58	50	38.0	76
PH2DV50-40(N)	20	85	0.58	50	40.0	76
P2-50 PROF	1,6,7,21	90	0.58	50	38.0	76
P2-50F1	1,6,21	90	0.58	50	38.0	76
PH2-60-50NT	1	107	0.56	60	50.0	76
PH2-60-50T	1	107	0.56	60	50.0	76
RUG PRO60-50NT	1	107	0.56	60	50.0	76
P100N	9	116	0.48	100	73.0	76
PVRP75	1,3,6	121	0.53	75	75.0	76
PR75-70H	1,6	130	0.53	75	70.0	76
PR75-75N	1,6,17	130	0.53	75	70.0	76
*100-1	9	135	0.48	100	75.0	76
PROPANE GAS						
PH2-40S-36PF	1,6,21	65	0.59	40	36.0	76
PH2-40-34PF	1,6,21	66	0.59	40	34.0	76
PH2-40-34PHF	1,6,21	66	0.59	40	34.0	76
PH2R-40-34PF	1,6	66	0.60	40	34.0	76
PH2-40PF	1,6,21	67	0.60	38	34.0	76
PH2-40PHF	1,6,21	67	0.60	38	34.0	76
PH2-4-PROPF	1,6,21	67	0.60	38	34.0	76
PH2-50-36PF	1,6,21	80	0.58	50	36.0	76
PH2-50-36-PHF	1,6,21	80	0.58	50	36.0	76
PH2R-50-36PF	1,6	83	0.62	50	36.0	76
PH2-60-50PT	1	107	0.56	60	50.0	76
PH2-60-50PTH	1	107	0.56	60	50.0	76
RUG PRO60-50PT	1	107	0.56	60	50.0	76
RUG PRO60-50PTH	1	107	0.56	60	50.0	76
PVRP75P	1,3,6	121	0.53	75	75.0	76
PR75-69P	1,6,17	130	0.53	75	69.0	76
*100-1P	9	135	0.48	100	69.0	76

Additional Footnotes

6. Pipe insulation.
7. First * denotes warranty period and may be replaced with the characters: V or X
9. The "*" denotes the warranty period and may be replaced by the letters: P or M.
16. Electronic Ignition (No Standing Pilot)
17. * in the model number denotes warranty and may be replaced: I, -, V, or X.
20. (N) as a suffix denotes Lo-NOx model also available.
21. T&P Insulation

SEARS, ROEBUCK AND COMPANY

Trade Name(s): Kenmore

Model Number	Footnotes	1st Hr Rating Gals.	Energy Factor	Rated Storage Vol. Gals.	Input MBTUH	Recovery Effcy. %
NATURAL GAS						
153.332660	4	68	0.59	40	36.0	76
153.332670HA	4	68	0.59	40	36.0	76
153.330401 HA	1	76	0.63	40	40.0	85
153.330402HA	1	76	0.63	40	40.0	85
153.330451	1	76	0.63	40	40.0	85
153.330452	1	76	0.63	40	40.0	85
153.332760	4	77	0.59	50	38.0	76
153.332770HA	4	77	0.59	50	38.0	76
153.330501 HA	1	84	0.62	50	40.0	85
153.330502HA	1	84	0.62	50	40.0	85
153.330551	1	84	0.62	50	40.0	85
153.330552	1	84	0.62	50	40.0	85
PROPANE GAS						
153.339961	1,7,8	71	0.60	40	37.0	74
153.339962	1,7,8	71	0.60	40	37.0	74

Trade Name(s): Sears

Model Number	Footnotes	1st Hr Rating Gals.	Energy Factor	Rated Storage Vol. Gals.	Input MBTUH	Recovery Effcy. %
NATURAL GAS						
153.336161	1,12,13	54	0.61	30	32.0	71
153.336162	1,12,13	54	0.61	30	32.0	71
✠153.333316 HA	1,7,8	59	0.61	30	35.5	73
✠153.333346	1,7,8	59	0.61	30	35.5	73
153.333347	1	59	0.61	30	35.5	73
153.336301 HA	1	59	0.61	30	35.5	73
153.336320	1	59	0.61	30	35.5	73
153.336361	1	59	0.61	30	35.5	73
153.336362	1	59	0.61	30	35.5	73
153.336401 HA	1	62	0.59	40	35.5	74
153.336420		62	0.59	40	35.5	74
153.336465	1	62	0.59	40	35.5	74
153.336466	1	62	0.59	40	35.5	74
153.336261	1,12,13	63	0.59	40	35.5	74
153.336262	1,12,13	63	0.59	40	35.5	74
153.339320	1,12,13	66	0.61	30	40.0	77
153.339361	1,12,13	66	0.61	30	40.0	77
153.339362	1,12,13	66	0.61	30	40.0	77
152.332670HA	1,4,12	68	0.59	40	36.0	75
153.332660	1,4,12	68	0.59	40	36.0	75
153.332040	3,5,13,19	69	0.65	40	40.0	81
153.333416 HA	1,12,13	70	0.59	40	32.0	73

STANDARD FOOTNOTES:

1. Heat Traps
2. Manufactured (Mobile) Home Model
3. Power Combustion Or Power Vent
4. Direct Vent
5. Electronic Ignition (No Standing Pilot)

Rating Voluntarily Revised Since Last Directory
✠ Rating Revised By Program Since Last Directory

SEARS, ROEBUCK AND COMPANY

Trade Name(s): Sears

Model Number	Footnotes	1st Hr Rating Gals.	Energy Factor	Rated Storage Vol. Gals.	Input MBTUH	Recovery Effcy. %
NATURAL GAS						
153.334430	1,7,8	70	0.63	40	40.0	82
153.339211 HA	1,7,8	71	0.60	40	40.0	76
153.339212 HA	1,7,8	71	0.60	40	40.0	76
153.339260	1,7,8	71	0.60	40	40.0	76
153.339261	1,7,8	71	0.60	40	40.0	76
153.339262	1,7,8	71	0.60	40	40.0	76
153.339411 HA	1,7,8	71	0.60	40	40.0	74
153.339412 HA	1,7,8	71	0.60	40	40.0	74
153.339460	1,7,8	71	0.60	40	40.0	74
153.339461	1,7,8	71	0.60	40	40.0	74
153.339462	1,7,8	71	0.60	40	40.0	74
153.332960	1,3,5,17	74	0.60	40	40.0	78
153.332970 HA	1,3,5,17	74	0.60	40	40.0	78
153.332760	1,4,12	77	0.58	50	38.0	77
153.332770 HA	1,4,12	77	0.58	50	38.0	77
153.339610 HA	1,7,8	79	0.55	65	40.0	76
153.339660	1,7,8	79	0.55	65	40.0	76
153.339360	1,7,8	79	0.62	30	40.0	77
153.339361	1,7,8	79	0.62	30	40.0	77
153.339111 HA	1,7,8	80	0.59	40	40.0	76
153.339160	1,7,8	80	0.59	50	40.0	76
153.339161	1,7,8	80	0.59	50	40.0	76
153.331413 HA	1,12,13	81	0.63	40	40.0	76
153.331420	1,12,13	81	0.63	40	40.0	76
153.331443	1,12,13	81	0.63	40	40.0	76
153.331444	1,12,13	81	0.63	40	40.0	76
153.339610 HA	1,7,8	83	0.55	65	40.0	76
153.339660	1,7,8	83	0.55	65	40.0	76
153.332050	3,5,13,19	83	0.65	50	40.0	82
153.336501 HA	1	87	0.58	50	35.5	74
153.336565	1	87	0.58	50	35.5	74
153.336566	1	87	0.58	50	35.5	74
153.339620	1,12,13	90	0.58	48	50.0	76
153.339761	1,12,13	90	0.58	48	50.0	76
153.339762	1,12,13	90	0.58	48	50.0	76
153.334530	1,7,8	90	0.64	50	40.0	82
153.339511 HA	1,7,8	91	0.59	50	40.0	76
153.339512 HA	1,7,8	91	0.59	50	40.0	76
153.339520	1,7,8	91	0.59	50	40.0	76
153.339561	1,7,8	91	0.59	50	40.0	76
153.339562	1,7,8	91	0.59	50	40.0	76
153.331514 HA	1,12,13	97	0.63	50	40.0	81
153.331520	1,12,13	97	0.63	50	40.0	81
153.331543	1,12,13	97	0.63	50	40.0	81
153.331544	1,12,13	97	0.63	50	40.0	81
NATURAL OR PROPANE GAS						
153.333844	2,12	54	0.61	30	30.0	76
153.333944	2,12	63	0.59	40	30.0	76
PROPANE GAS						
153.336761	1	59	0.61	30	35.5	73
153.336762	1	59	0.61	30	35.5	73
153.336801 HA	1	62	0.59	40	35.5	74
153.336861	1	62	0.59	40	35.5	74
153.336862	1	62	0.59	40	35.5	74
153.332060	3,5,13,19	69	0.65	40	40.0	81
153.332861	1,3,5,17	74	0.60	40	40.0	78
153.332870 HA	1,3,5,17	74	0.60	40	40.0	78
153.332880	1,3,5,17	80	0.61	50	40.0	77
153.332890 HA	1,3,5,17	80	0.61	50	40.0	77
153.332070	3,5,13,19	83	0.65	50	40.0	82
153.336901 HA	1	87	0.58	50	35.5	74
153.336961	1	87	0.58	50	35.5	74
153.336962	1	87	0.58	50	35.5	74

Discontinued Models

Model Number	Footnotes	1st Hr Rating Gals.	Energy Factor	Rated Storage Vol. Gals.	Input MBTUH	Recovery Effcy. %
NATURAL GAS						
153.333446	1,12,13	70	0.59	40	32.0	73
153.333447	1,12,13	70	0.59	40	32.0	73
153.333546	1,12,13	73	0.58	50	32.0	73
153.333547	1,12,13	73	0.58	50	32.0	73

Additional Footnotes

7. Insulation supplied for Inlet & Outlet connections.
8. FVIR Compliant
12. Insulation supplied for Inlet & Outlet connections.
13. FVIR Compliant
17. Insulation supplied for Inlet & Outlet connections.
19. * additional Letters may be placed here to indicate Trim Packages.

A.O. SMITH WATER PRODUCTS CO.

Trade Name(s): A.O. Smith

Model Number	Footnotes	1st Hr Rating Gals.	Energy Factor	Rated Storage Vol. Gals.	Input MBTUH	Recovery Effcy. %
NATURAL GAS						
GVGL-30-100	1,12,13	54	0.61	30	32.0	71
✠GPDH-40-100	1,3,4,5,12	62	0.59	40	40.0	76
✠GPDH-40L-100	1,3,4,5,12	62	0.59	40	40.0	76
✠GPDH-40Q-100	1,3,4,5,12	62	0.59	40	40.0	76
GVGL-40-100	1,12,13	63	0.59	40	35.5	74
GCVH-30-100	1,12,13	66	0.61	30	40.0	77
GCVL-30-100	1,12,13	66	0.61	30	40.0	74
GCV-30-100	1,12,13	66	0.62	28	40.0	76
GVR-30-100	1,12,13	66	0.63	30	40.0	76
GPSH-40-200	3,5	67	0.62	40	40.0	76
GVRA-40-100	1,6,7	67	0.62	40	40.0	76
GDVS-40-100	1,4,12	68	0.59	40	36.0	75
GPCR-40-200	3,5	68	0.64	40	40.0	78
GPVH 40* 100	3,5,13,19	69	0.65	40	40.0	81
GVG-40-100	1,12,13	70	0.59	40	32.0	73
GPVR 40* 100	3,5,13,19	70	0.67	40	40.0	82
GCVH-40-100	1,12,13	71	0.59	40	40.0	74
GCVH-40L-100	1,12,13	71	0.59	40	40.0	74
GCVH-40Q-100	1,12,13	71	0.59	40	40.0	74
GCVL-40-100	1,12,13	71	0.59	40	40.0	76
GCV-40-100	1,12,13	71	0.60	38	40.0	73
GVR-40-100	1,12,13	71	0.62	40	40.0	76
GVG-50-100	1,12,13	73	0.58	50	32.0	73
XGVL-40-100	1,12,13	74	0.63	40	40.0	79
GDVS-50-100	1,4,12	77	0.58	50	38.0	77
GCVL-50-100	1,12,13	80	0.58	50	40.0	76
GPDH-50-100	1,3,4,5,12	80	0.58	50	40.0	76
GPDT-50-100	1,3,5,12	80	0.58	50	65.0	73
GPDT-50L-100	1,3,5,12	80	0.58	50	65.0	73
GPDT-50Q-100	1,3,5,12	80	0.58	50	65.0	73
GPVT 40* 100	3,5,13,19	80	0.65	40	50.0	78
XGV-40-100	1,12,13	81	0.63	40	40.0	76
XGV-40L-100	1,12,13	81	0.63	40	40.0	76
GPSH-50-200	3,5	83	0.62	50	40.0	76
GPVH 50* 100	3,5,13,19	83	0.65	50	40.0	82
GPVT 50* 100	3,5,13,19	83	0.65	50	50.0	79
GPVR 50* 100	3,5,13,19	83	0.67	50	40.0	82
GPCR-50-200	3,5	84	0.64	50	40.0	78
GVR-50-100	1,12,13	86	0.62	50	40.0	76
GCVT-40-100	1,12,13	88	0.60	38	50.0	71
GCVT-40L-100	1,12,13	88	0.60	38	50.0	71
GCVT-40Q-100	1,12,13	88	0.60	38	50.0	71
GCVT-50-100	1,12,13	90	0.58	48	50.0	76
GCVT-50L-100	1,12,13	90	0.58	48	50.0	76
GCVT-50Q-100	1,12,13	90	0.58	48	50.0	76
GCV-50-100	1,12,13	91	0.58	50	40.0	76
GCV-50T-100	1,12,13	91	0.58	50	40.0	76
GCVX-50-100	1,12,13	93	0.58	50	65.0	77
GCVX-50L-100	1,12,13	93	0.58	50	65.0	77
GCVX-50Q-100	1,12,13	93	0.58	50	65.0	77
✠GCG-65-100	1,12	94	0.55	65	65.0	76

STANDARD FOOTNOTES:

1. Heat Traps
2. Manufactured (Mobile) Home Model
3. Power Combustion Or Power Vent
4. Direct Vent
5. Electronic Ignition (No Standing Pilot)

Rating Voluntarily Revised Since Last Directory
✠ Rating Revised By Program Since Last Directory

A.O. SMITH WATER PRODUCTS CO.

Trade Name(s): A.O. Smith

Model Number	Footnotes	1st Hr Rating Gals.	Energy Factor	Rated Storage Vol. Gals.	Input MBTUH	Recovery Effcy. %
NATURAL GAS						
✠GCG-65L-100	1,12	94	0.55	65	65.0	76
✠GCG-65Q-100	1,12	94	0.55	65	65.0	76
XGV-50-100	1,12,13	97	0.63	50	40.0	81
XGV-50L-100	1,12,13	97	0.63	50	40.0	81
GPSX 50 200	1,3,5,12	107	0.62	50	65.0	76
GPSX 50L 200	1,3,5,12	107	0.62	50	65.0	76
GPSX 50Q 200	1,3,5,12	107	0.62	50	65.0	76
GDVH-75-100	1,4,5,12	109	0.53	75	55.0	70
GDVH-75L-100	1,4,5,12	109	0.53	75	55.0	70
GDVH-75Q-100	1,4,5,12	109	0.53	75	55.0	70
GPVX 50* 100	3,13,19	114	0.65	50	62.5	79
GPDX-75-100	3,4,5,12	123	0.53	75	70.0	73
GPDX-75L-100	3,4,5,12	123	0.53	75	70.0	73
GPDX-75Q-100	3,4,5,12	123	0.53	75	70.0	73
NATURAL OR PROPANE GAS						
FMD-30-100	2,12	54	0.61	30	30.0	76
FMG-30-100	2,12	54	0.61	30	30.0	76
FMG-40-100	2,12	63	0.59	40	30.0	76
FMD-40-100	2,12	64	0.59	40	32.0	76
FMD-50-100	2,12	77	0.59	50	38.0	76
FMG-50-100	2,12	77	0.60	50	38.0	76
PROPANE GAS						
GVGL-30-101	1,12,13	54	0.61	30	30.0	71
✠GPDH-40-101	1,3,4,5,12	62	0.59	40	36.0	76
✠GPDH-40L-101	1,3,4,5,12	62	0.59	40	36.0	76
✠GPDH-40Q-101	1,3,4,5,12	62	0.59	40	36.0	76
GVGL-40-101	1,12,13	63	0.59	40	35.5	74
GCVH-30-101	1,12,13	66	0.61	30	37.0	77
GCVL-30-101	1,12,13	66	0.61	30	37.0	74
GCV-30-101	1,12,13	66	0.62	28	37.0	76
GVR-30-101	1,12,13	66	0.63	30	37.0	76
GPSH-40-201	3,5	67	0.62	40	40.0	76
GVRA-40-101	1,6,7	67	0.62	40	40.0	76
GDVS-40-101	1,4,12	68	0.59	40	36.0	75
GPCR-40-201	3,5	68	0.64	40	40.0	78
GPVH 40* 101	3,5,13,19	69	0.65	40	40.0	81
GVG-40-101	1,12,13	70	0.59	40	30.0	73
GPVR 40* 101	3,5,13,19	70	0.67	40	40.0	82
GCVH-40-101	1,12,13	71	0.59	40	37.0	74
GCVH-40L-101	1,12,13	71	0.59	40	37.0	74
GCVH-40Q-101	1,12,13	71	0.59	40	37.0	74
GCVL-40-101	1,12,13	71	0.59	40	37.0	76
GCV-40-101	1,12,13	71	0.60	38	37.0	73
GVR-40-101	1,12,13	71	0.62	40	37.0	76
GVG-50-101	1,12,13	73	0.58	50	30.0	73
XGVL-40-101	1,12,13	74	0.63	40	36.0	79
GDVS-50-101	1,4,12	77	0.58	50	38.0	77
GCVL-50-101	1,12,13	80	0.58	50	37.0	76
GPDH-50-101	1,3,4,5,12	80	0.58	50	38.0	76
GPDT-50-101	1,3,5,12	80	0.58	50	60.0	73
GPDT-50L-101	1,3,5,12	80	0.58	50	60.0	73
GPDT-50Q-101	1,3,5,12	80	0.58	50	60.0	73
GPVT 40* 101	3,5,13,19	80	0.65	40	50.0	78
XGV-40-101	1,12,13	81	0.63	40	36.0	76
XGV-40L-101	1,12,13	81	0.63	40	36.0	76
GPSH-50-201	3,5	83	0.62	50	40.0	76
GPVH 50* 101	3,5,13,19	83	0.65	50	40.0	82
GPVT 50* 101	3,5,13,19	83	0.65	50	50.0	79
GPVR 50* 101	3,5,13,19	83	0.67	50	40.0	82
GPCR-50-201	3,5	84	0.64	50	40.0	78
GVR-50-101	1,12,13	86	0.62	50	37.0	76
GCVT-40-101	1,12,13	88	0.60	38	47.0	71
GCVT-40L-101	1,12,13	88	0.60	38	47.0	71
GCVT-40Q-101	1,12,13	88	0.60	38	47.0	71
GCVT-50-101	1,12,13	90	0.58	48	47.0	76
GCVT-50Q-101	1,12,13	90	0.58	48	47.0	76
GCV-50-101	1,12,13	91	0.58	50	37.0	76
GCV-50T-101	1,12,13	91	0.58	50	37.0	76
GPVX 50* 101	3,13,19	92	0.65	50	55.0	79
GCVX-50-101	1,12,13	93	0.58	50	55.0	77
GCVX-50L-101	1,12,13	93	0.58	50	55.0	77
GCVX-50Q-101	1,12,13	93	0.58	50	55.0	77
✠GCG-65-101	1,12	94	0.55	65	55.0	76
✠GCG-65L-101	1,12	94	0.55	65	55.0	76
✠GCG-65Q-101	1,12	94	0.55	65	55.0	76
XGV-50-101	1,12,13	97	0.63	50	36.0	81
XGV-50L-101	1,12,13	97	0.63	50	36.0	81
GPSX 50 201	1,3,5,12	107	0.62	50	53.0	76
GPSX 50L 201	1,3,5,12	107	0.62	50	53.0	76
GPSX 50Q 201	1,3,5,12	107	0.62	50	53.0	76
GPDX-75-101	3,4,5,12	123	0.53	75	65.0	73
GPDX-75L-101	3,4,5,12	123	0.53	75	65.0	73
GPDX-75Q-101	3,4,5,12	123	0.53	75	65.0	73
Discontinued Models						
NATURAL GAS						
GDVH-40-100	1,4,5,12	71	0.59	40	40.0	75
GDVH-40L-100	1,4,5,12	71	0.59	40	40.0	75
GDVH-40Q-100	1,4,5,12	71	0.59	40	40.0	75
GPST-40L-100	1,3,5,14	81	0.59	40	50.0	76
GPST-40Q-100	1,3,5,14	81	0.59	40	50.0	76
PGV-40-100		81	0.59	40	40.0	76
GDVH-50-100	1,4,5,12	87	0.58	50	48.0	76
GDVH-50L-100	1,4,5,12	87	0.58	50	48.0	76
GDVH-50Q-100	1,4,5,12	87	0.58	50	48.0	76
GPST-50L-100	1,3,5,14	89	0.59	50	52.5	76
GPST-50Q-100	1,3,5,14	89	0.59	50	52.5	76
GPSX-50L-100	1,3,5,14	89	0.59	50	52.5	76
GPSX-50Q-100	1,3,5,14	89	0.59	50	52.5	76
BT-65-100	1,12	112	0.55	65	65.0	76
BPD-75-100	3,4,5,12	123	0.53	75	70.0	73
FPSH 75L 270	3,5,14	128	0.53	75	75.0	76
FPSH 75Q 270	3,5,14	128	0.53	75	75.0	76
PROPANE GAS						
GDVH-40-101	1,4,5,12	71	0.59	40	40.0	75
GDVH-40L-101	1,4,5,12	71	0.59	40	40.0	75
GDVH-40Q-101	1,4,5,12	71	0.59	40	40.0	75
FVG-50-101		73	0.58	50	30.0	73
GPST-40L-101	1,3,5,14	81	0.59	40	50.0	76
GPST-40Q-101	1,3,5,14	81	0.59	40	50.0	76
GDVH-50-101	1,4,5,12	87	0.58	50	44.0	76
GDVH-50L-101	1,4,5,12	87	0.58	50	44.0	76
GDVH-50Q-101	1,4,5,12	87	0.58	50	44.0	76
GPST-50L-101	1,3,5,14	89	0.59	50	52.5	76
GPST-50Q-101	1,3,5,14	89	0.59	50	52.5	76
GPSX-50L-101	1,3,5,14	89	0.59	50	52.5	76
GPSX-50Q-101	1,3,5,14	89	0.59	50	52.5	76
BPD-75-101	3,4,5,12	123	0.53	75	65.0	73
FPSH 75L 271	1,3,5,14	128	0.53	75	70.0	76
FPSH 75Q 271	1,3,5,14	128	0.53	75	70.0	76

Trade Name(s): Sandblaster

Model Number	Footnotes	1st Hr Rating Gals.	Energy Factor	Rated Storage Vol. Gals.	Input MBTUH	Recovery Effcy. %
Discontinued Models						
PROPANE GAS						
FDV-40-219	6	68	0.59	40	36.0	75
FDV-50-219	6	77	0.59	50	38.0	75

Trade Name(s): Sears

Model Number	Footnotes	1st Hr Rating Gals.	Energy Factor	Rated Storage Vol. Gals.	Input MBTUH	Recovery Effcy. %
NATURAL GAS						
153.336161 HA	1,12,13	54	0.61	30	32.0	71
153.336261	1,12,13	63	0.59	40	35.5	74

STANDARD FOOTNOTES:
1. Heat Traps
2. Manufactured (Mobile) Home Model
3. Power Combustion Or Power Vent
4. Direct Vent
5. Electronic Ignition (No Standing Pilot)

Rating Voluntarily Revised Since Last Directory
✠ Rating Revised By Program Since Last Directory

A.O. SMITH WATER PRODUCTS CO.

Trade Name(s): Sears

Model Number	Footnotes	1st Hr Rating Gals.	Energy Factor	Rated Storage Vol. Gals.	Input MBTUH	Recovery Effcy. %
NATURAL GAS						
153.339361	1,12,13	66	0.61	30	40.0	77
153.33416 HA	1,12,13	70	0.59	40	32.0	73
153.339211 HA	1,12,13	71	0.59	40	40.0	76
153.339261	1,12,13	71	0.59	40	40.0	76
153.339411 HA	1,12,13	71	0.59	40	40.0	74
153.339461	1,12,13	71	0.59	40	40.0	74
153.339761	1,12,13	90	0.58	48	50.0	76
153.339561	1,12,13	91	0.58	50	40.0	76
PROPANE GAS						
153.339211 HA	1,12,13	71	0.59	40	37.0	76
153.339961	1,12,13	71	0.59	40	37.0	74
153.339961 HA	1,12,13	71	0.59	40	37.0	74
153.339512	1,12,13	91	0.58	50	37.0	76
153.339512 HA	1,12,13	91	0.58	50	37.0	76

Additional Footnotes

6. (*) indicates I, 6, or X for warranty.
7. FG models may have prefix "B".
12. Insulation supplied for Inlet & Outlet connections.
13. FVIR Compliant
14. Insulation supplied for Inlet and Outlet connections.
19. * additional Letters may be placed here to indicate Trim Packages.

STATE INDUSTRIES, INC.

Trade Name(s): State

Model Number	Footnotes	1st Hr Rating Gals.	Energy Factor	Rated Storage Vol. Gals.	Input MBTUH	Recovery Effcy. %
NATURAL GAS						
GC1 30 YORS	1,12,13	54	0.61	30	32.0	71
✠PR6 40 XBPDT	1,3,4,5,12	62	0.59	40	40.0	76
GC1 40 YORS	1,12,13	63	0.59	40	35.5	74
GS6 30 YBRS	1,12,13	66	0.61	30	40.0	74
GS6 30 YBRT4	1,12,13	66	0.61	30	40.0	77
GSX 30 YBRS	1,12,13	66	0.61	30	40.0	74
GS6 30 YBRT	1,12,13	66	0.62	28	40.0	76
GSX 30 YBRT	1,12,13	66	0.62	28	40.0	76
IN1 30 YBRT	1,12,13	66	0.62	28	40.0	76
GS6 30 YOCT	1,12,13	66	0.63	30	40.0	76
GSX 30 YOCT	1,12,13	66	0.63	30	40.0	76
GS640YOCA 100	1,6,7	67	0.62	40	40.0	76
PR6 40 XCVIT 200	3,5	67	0.62	40	40.0	76
PR6 40 XODS	1,4,12	68	0.59	40	36.0	75
PR6 40 XCVIT2 200	3,5	68	0.64	40	40.0	78
GS6 40 YBVIT* 100	3,5,13,19	69	0.65	40	40.0	81
GC1 40 YORT	1,12,13	70	0.59	40	32.0	73
GS6 40 YBVIT2* 100	3,5,13,19	70	0.67	40	40.0	82
GS6 40 YBRS	1,12,13	71	0.59	40	40.0	76
GS6 40 YBRT4	1,12,13	71	0.59	40	40.0	74
GSX 40 YBRS	1,12,13	71	0.59	40	40.0	76
GS6 40 YBRT	1,12,13	71	0.60	38	40.0	73
GSX 40 YBRT	1,12,13	71	0.60	38	40.0	73
IN1 40 YBRT	1,12,13	71	0.60	38	40.0	73
GS6 40 YOCT	1,12,13	71	0.62	40	40.0	76
GSX 40 YOCT	1,12,13	71	0.62	40	40.0	76
GC1 50 YORT	1,12,13	73	0.58	50	32.0	73
GPX 40 YXRS	1,12,13	74	0.63	40	40.0	79
PR6 50 XODS	1,4,12	77	0.58	50	38.0	77
GS6 50 YBRS	1,12,13	80	0.58	50	40.0	76
GS6 50 YBRS 5	1,14,15	80	0.58	50	45.0	75
GSX 50 YBRS	1,12,13	80	0.58	50	40.0	76
PR6 50 XBPDT	1,3,4,5,12	80	0.58	50	40.0	76
PR6 50 XRPDT5	1,3,5,12	80	0.58	50	65.0	73
GS6 40 YRVIT* 100	3,5,13,19	80	0.65	40	50.0	78
GPX 40 YXRT	1,12,13	81	0.63	40	40.0	76
PR6 50 XCVIT 200	3,5	83	0.62	50	40.0	76
GS6 50 YBVIT* 100	3,5,13,19	83	0.65	50	40.0	82
GS6 50 YRVIT* 100	3,5,13,19	83	0.65	50	50.0	79
GS6 50 YBVIT2* 100	3,5,13,19	83	0.67	50	40.0	82
PR6 50 XCVIT2 200	3,5	84	0.64	50	40.0	78
GS6 50 YOCT	1,12,13	86	0.62	50	40.0	76
GSX 50 YOCT	1,12,13	86	0.62	50	40.0	76
GS6 40 YRRT	1,12,13	88	0.60	38	50.0	71
GSX 40 YRRT	1,12,13	88	0.60	38	50.0	71
GS6 50 YRRT	1,12,13	90	0.58	48	50.0	76
GSX 50 YRRT	1,12,13	90	0.58	48	50.0	76
GS6 50 YBRT	1,12,13	91	0.58	50	40.0	76
GSX 50 YBRT	1,12,13	91	0.58	50	40.0	76
IN1 50 YBRT	1,12,13	91	0.58	50	40.0	76
IN1 50 YBRTW	1,12,13	91	0.58	50	40.0	76
GS6 50 YRRT5	1,12,13	93	0.58	50	65.0	77
GSX 50 YRRT 5	1,12,13	93	0.58	50	65.0	77
✠GS6 65 XRRT	1,12	94	0.55	65	65.0	76
✠GSX 65 XRRT	1,12	94	0.55	65	65.0	76
GPX 50 YXRT	1,12,13	97	0.63	50	40.0	81
PR6 50 XCVIT 5 200	1,3,5,12	107	0.62	50	65.0	76
PR**75XODS	1,5,12	109	0.53	75	55.0	70
GS6 50 YRVIT5* 100	3,13,19	114	0.65	50	62.5	79
PR6 75 NRRSL	8	126	0.62	73	75.0	76
NATURAL OR PROPANE GAS						
IN1 30NHDST2	2,12	54	0.61	30	30.0	76
IN1 30NHMT2	2,12	54	0.61	30	30.0	76
PR6 30 NHDST2	2,12	54	0.61	30	30.0	76
PR6 30 NOMT2	2,12	54	0.61	30	30.0	76
IN1 40NHMT2	2,12	63	0.59	40	30.0	76
PR6 40 NOMT2	2,12	63	0.59	40	30.0	76
***40NOMDS	2,14,15	64	0.59	40	32.0	75
IN1 40NHDST2	2,12	64	0.59	40	32.0	76
PR6 40 NHDST2	2,12	64	0.59	40	32.0	76
***50NOMDS	2,14,15	77	0.58	50	34.0	75
IN1 50NHDST2	2,12	77	0.59	50	38.0	76
PR6 50 NHDST2	2,12	77	0.59	50	38.0	76
IN1 50NHMT2	2,12	77	0.60	50	38.0	76
PR6 50 NOMT2	2,12	77	0.60	50	38.0	76
PROPANE GAS						
GC1 30 HORS	1,12,13	54	0.61	30	30.0	71
✠PR6 40 CBPDT	1,3,4,5,12	62	0.59	40	36.0	76
GC1 40 HORS	1,12,13	63	0.59	40	35.5	74
GS6 30 HBRS	1,12,13	66	0.61	30	37.0	74
GS6 30 HBRT4	1,12,13	66	0.61	30	37.0	77
GSX 30 HBRS	1,12,13	66	0.61	30	37.0	74
GS6 30 HBRT	1,12,13	66	0.62	28	37.0	76
GSX 30 HBRT	1,12,13	66	0.62	28	37.0	76
IN1 30 HBRT	1,12,13	66	0.62	28	37.0	76
GS6 30 HOCT	1,12,13	66	0.63	30	37.0	76
GSX 30 HOCT	1,12,13	66	0.63	30	37.0	76
GS640HOCA 101	1,6,7	67	0.62	40	40.0	76
PR6 40 CCVIT 201	3,5	67	0.62	40	40.0	76
PR6 40 CODS	1,4,12	68	0.59	40	36.0	75
PR6 40 CCVIT2 201	3,5	68	0.64	40	40.0	78
GS6 40 HBVIT* 101	3,5,13,19	69	0.65	40	40.0	81
GC1 40 HORT	1,12,13	70	0.59	40	30.0	73
GS6 40 HBVIT2* 101	3,5,13,19	70	0.67	40	40.0	82
GS6 40 HBRS	1,12,13	71	0.59	40	37.0	76
GS6 40 HBRT4	1,12,13	71	0.59	40	37.0	74
GSX 40 HBRS	1,12,13	71	0.59	40	37.0	76
GS6 40 HBRT	1,12,13	71	0.60	38	37.0	73
GSX 40 HBRT	1,12,13	71	0.60	38	37.0	73
IN1 40 HBRT	1,12,13	71	0.60	38	37.0	73
GS6 40 HOCT	1,12,13	71	0.62	40	37.0	76
GSX 40 HOCT	1,12,13	71	0.62	40	37.0	76
GC1 50 HORT	1,12,13	73	0.58	50	30.0	73
GPX 40 HXRS	1,12,13	74	0.63	40	36.0	79
PR6 50 CODS	1,4,12	77	0.58	50	38.0	77
GS6 50 HBRS	1,12,13	80	0.58	50	37.0	76
GS6 50 HBRS 5	1,14,15	80	0.58	50	42.0	75

STANDARD FOOTNOTES:

1. Heat Traps
2. Manufactured (Mobile) Home Model
3. Power Combustion Or Power Vent
4. Direct Vent
5. Electronic Ignition (No Standing Pilot)

Rating Voluntarily Revised Since Last Directory
✠ Rating Revised By Program Since Last Directory

STATE INDUSTRIES, INC.

Trade Name(s): State

Model Number	Footnotes	1st Hr Rating Gals.	Energy Factor	Rated Storage Vol. Gals.	Input MBTUH	Recovery Effcy. %
PROPANE GAS						
GSX 50 HBRS	1,12,13	80	0.58	50	37.0	76
PR6 50 CBPDT	1,3,4,5,12	80	0.58	50	38.0	76
PR6 50 CRPDT5	1,3,5,12	80	0.58	50	60.0	73
GS6 40 HRVIT* 101	3,5,13,19	80	0.65	40	50.0	78
GPX 40 HXRT	1,12,13	81	0.63	40	36.0	76
PR6 50 CCVIT 201	3,5	83	0.62	50	40.0	76
GS6 50 HBVIT* 101	3,5,13,19	83	0.65	50	40.0	82
GS6 50 HRVIT* 101	3,5,13,19	83	0.65	50	50.0	79
GS6 50 HBVIT2* 101	3,5,13,19	83	0.67	50	40.0	82
PR6 50 CCVIT2 201	3,5	84	0.64	50	40.0	78
GS6 50 HOCT	1,12,13	86	0.62	50	37.0	76
GSX 50 HOCT	1,12,13	86	0.62	50	37.0	76
GS6 40 HRRT	1,12,13	88	0.60	38	47.0	71
GSX 40 HRRT	1,12,13	88	0.60	38	47.0	71
GS6 50 HRRT	1,12,13	90	0.58	48	47.0	76
GSX 50 HRRT	1,12,13	90	0.58	48	47.0	76
GS6 50 HBRT	1,12,13	91	0.58	50	37.0	76
GSX 50 HBRT	1,12,13	91	0.58	50	37.0	76
IN1 50 HBRT	1,12,13	91	0.58	50	37.0	76
IN1 50 HBRTW	1,12,13	91	0.58	50	37.0	76
GS6 50 HRVIT5* 101	3,13,19	92	0.65	50	55.0	79
GS6 50 HRRT5	1,12,13	93	0.58	50	55.0	77
GSX 50 HRRT 5	1,12,13	93	0.58	50	55.0	77
✠GS6 65 CRRT	1,12	94	0.55	65	55.0	76
✠GSX 65 CRRT	1,12	94	0.55	65	55.0	76
GPX 50 HXRT	1,12,13	97	0.63	50	36.0	81
PR6 50 CCVIT 5 201	1,3,5,12	107	0.62	50	53.0	76
PR6 75 PRRSL	8	109	0.62	73	55.0	76
Discontinued Models						
NATURAL GAS						
PR**40XBDS	1,5,12	71	0.59	40	40.0	75
PR640NBJT42GJW	6,8	76	0.63	40	37.0	76
GP*40XXRT		81	0.59	40	40.0	76
PR**40XRVIT	1,3,5,14	81	0.59	40	50.0	76
PR* 50 NXRT***	6,8	84	0.60	50	40.0	85
PR* 50 NXRT*** W	1,6,8	84	0.60	50	40.0	85
PR*50NXRTL	6,8	84	0.60	50	40.0	76
PR*50NXRTLW	1,6,8	84	0.60	50	40.0	76
PR* 50 NXRT*** 2	6,8	84	0.61	50	40.0	85
PR* 50 NXRT*** 2W	1,6,8	84	0.61	50	40.0	85
PR*50NXRTL2	6,8	84	0.61	50	40.0	76
PR650NBJT42GJW	6,8	84	0.62	50	37.0	76
PR*50NXRTL2W	1,6,8	84	0.63	50	40.0	76
PR* 50 NBDSL*** W	1,4,6,8	87	0.58	50	48.0	79
PR**50XBDS	1,5,12	87	0.58	50	48.0	76
PR**50XRVIT	1,3,5,14	89	0.59	50	52.5	76
GS**50YQRT5	1,12,13	93	0.58	50	65.0	77
SBS6565 NE	1,12	112	0.55	65	65.0	76
PR**75XRPDT	3,4,5,12	123	0.53	75	70.0	73
PR6 75 XRPDT	3,4,5,12	123	0.53	75	70.0	73
PR**75XRVIT	3,5,14	128	0.53	75	75.0	76
NATURAL OR PROPANE GAS						
PR* 30 NORT*** 2W	1,6,8,11	58	0.61	30	33.5	76
PR* 40 NODS***	4,6,8,11	68	0.59	40	36.0	75
PR* 40 NODS*** W	1,4,6,8,11	68	0.61	40	36.0	75
PR* 40 NBDS***	4,6,8,11	71	0.59	40	40.0	75
PR* 40 NBDSL***	4,6,8,11	71	0.59	40	40.0	75
PR* 40 NBRT*** 2W	1,6,8,11	73	0.60	40	40.0	76
PR* 40 NBRTL*** 2W	1,6,8,11	73	0.60	40	40.0	76
PR* 40 NOCT*** 42W	1,6,8,11	73	0.61	40	40.0	77
PR* 40 NOCT*** 52	6,8,11	73	0.62	40	35.0	77
PR* 40 NOCT*** 52W	1,6,8,11	73	0.63	40	35.0	77
PR* 40 NOVT*** 2	3,6,8,11	74	0.60	40	40.0	78
PR* 40 NOVT*** W	1,3,6,8,11	74	0.60	40	40.0	78
PR*40NOVET2	3,5,6,8,11	74	0.60	40	40.0	78
PR*40NOVETW	1,3,5,6,8,11	74	0.60	40	40.0	78
PR* 40 NOVT*** 2W	1,3,6,8	74	0.62	40	40.0	78
PR*40NOVET2W	1,3,5,6,8,11	74	0.62	40	40.0	78
PR* 40 NXRT*** W	1,6,8,11	76	0.60	40	40.0	85
PR*40NXRTLW	1,6,8	76	0.60	40	40.0	76
PR* 50 NOCT*** 32W	1,6,8,11	76	0.60	50	36.0	78
PR* 40 NXRT***	6,8,11	76	0.61	40	40.0	85
PR* 40 NXRT*** 2	6,8,11	76	0.61	40	40.0	85
PR* 50 NOCT*** 42W	1,6,8,11	76	0.61	50	36.0	78
PR* 40 NXRT*** 2W	1,6,8,11	76	0.62	40	40.0	85
PR* 50 NODS***	4,6,8,11	77	0.59	50	38.0	75
PR* 50 NODS*** W	1,4,6,8,11	77	0.61	50	38.0	75
PR* 50 NOVT*** W	1,3,6,8,11	80	0.58	50	40.0	77
PR*50NOVETW	1,3,5,6,8,11	80	0.58	50	40.0	77
PR* 50 NOVT*** 2W	1,3,6,8	80	0.59	50	40.0	77
PR*50NOVET2W	1,3,5,6,8,11	80	0.59	50	40.0	77
SSX 50 NART*** W	1,6,8,11	80	0.59	50	40.0	76
PR* 40 NRVT*** W	1,3,6,8,11	81	0.59	40	50.0	76
PR*40NRVETW	1,3,5,6,8,11	81	0.59	40	50.0	76
PR* 40 NRVT*** 2W	1,3,6,8,11	81	0.60	40	50.0	76
PR* 40 NRVTL*** 2W	1,3,6,8,11	81	0.60	40	50.0	76
PR*40NRVET2W	1,3,5,6,8,11	81	0.60	40	50.0	76
PR*40NRVETL2W	1,3,5,6,8,11	81	0.60	40	50.0	76
PR*40NRRT2	6,8,11	84	0.59	40	52.5	76
PR* 40 NRRTL*** 2W	1,6,8,11	84	0.61	40	52.5	76
PR*40NRRT2W	1,6,8,11	84	0.61	40	52.5	76
SSX 40 NQRT*** 2W	1,6,8,11	84	0.61	40	52.5	76
PR* 50 NRRT*** W	1,6,8,11	91	0.58	50	52.5	77
PR* 50 NRRTL*** W	1,6,8,11	91	0.58	50	52.5	77
PR* 50 NRVT*** 2W	1,3,6,8,11	91	0.58	50	52.5	76
PR* 50 NRVTL*** 2W	1,3,6,8,11	91	0.58	50	52.5	76
PR*50NRVET2W	1,3,5,6,8,11	91	0.58	50	52.5	76
PR*50NRVETL2W	1,3,5,6,8	91	0.58	50	52.5	76
PR* 50 NRRT*** 2W	1,6,8,11	91	0.59	50	52.5	76
PR* 50 NRRTL*** 2W	1,6,8,11	91	0.59	50	52.5	76
PROPANE GAS						
PR*40 PODS	4,6	68	0.59	40	36.0	75
PR*40PORT2W	6,8	68	0.60	40	35.5	76
PR**40CBDS	1,5,12	71	0.59	40	40.0	75
PR*50 PODS	4,6	77	0.59	50	38.0	75
PR**40CRVIT	1,3,5,14	81	0.59	40	50.0	76
PR* 50 PXRT***	6,8	82	0.60	50	39.0	85
PR*50PXRTL	6,8	82	0.60	50	39.0	76
PR* 50 PXRT*** 2	6,8	82	0.61	50	39.0	85
PR*50PXRTL2	6,8	82	0.61	50	39.0	76
PR* 50 PXRT*** W	1,6,8	82	0.62	50	39.0	85
PR*50PXRTLW	1,6,8	82	0.62	50	39.0	76
PR* 50 PXRT*** 2W	1,6,8	82	0.63	50	39.0	85
PR*50PXRTL2W	1,6,8	82	0.63	50	39.0	76
PR* 50 PBDS***	4,6,8	84	0.58	50	44.0	76
PR* 50 PBDS*** W	1,4,6,8	84	0.60	50	44.0	76
PR* 50 PBDSL*** W	1,4,6,8	84	0.60	50	44.0	76
PR**50CBDS	1,5,12	87	0.58	50	44.0	76
PR**50CRVIT	1,3,5,14	89	0.59	50	52.5	76
GS**50HQRT5	1,12,13	93	0.58	50	55.0	77
PR**75CRPDT	3,4,5,12	123	0.53	75	65.0	73
PR6 75 CRPDT	3,4,5,12	123	0.53	75	65.0	73
PR**75CRVIT	1,3,5,14	128	0.53	75	70.0	76

Additional Footnotes

STANDARD FOOTNOTES:

1. Heat Traps
2. Manufactured (Mobile) Home Model
3. Power Combustion Or Power Vent
4. Direct Vent
5. Electronic Ignition (No Standing Pilot)

Rating Voluntarily Revised Since Last Directory

✠ Rating Revised By Program Since Last Directory

6. (*) indicates I, 6, or X for warranty.
7. FG models may have prefix "B".
8. All models may have one or more of the following suffixes: A, D, F, J, NC, R, U, W or Z.
11. Letter "N" in suffix may be replaced by "P" to denote propane models.
12. Insulation supplied for Inlet & Outlet connections.
13. FVIR Compliant
14. Insulation supplied for Inlet and Outlet connections.
15. FVIR Compliant
19. * additional Letters may be placed here to indicate Trim Packages.

U.S. CRAFTMASTER WATER HEATERS

Trade Name(s): Ace, American Hardware, Americas Best, Apex, Aqua Temp, Aqua Therm, Aquamatic, Best, Best Deluxe, Craftmaster, De-Limer, Deluxe, Eagle, Envirotemp, Four Most, Hotmaster, Hotstream, King-Kleen, King-Line, Master Plumber, Nationaline, Neptune, Penquin, Prestige, Pro-Line, Pro-Line Plus, Quaker, Quick-Flo, Raywall, Revere, Riveria, Sands, Sentinal, Servi-Star, Shamrock, Special Deluxe, Standard, Super Eagle, Super-Flo, Supreme, Sure-Fire, The Earls Energy Conservation Water Heater, The Earls Energy Saver Plus, Thoro-Clean, Tru Value, True-Test, U.S. Craftmaster, U.S. Supply, Whirlpool, XCL Energy Saver

Model Number	Footnotes	1st Hr Rating Gals.	Energy Factor	Rated Storage Vol. Gals.	Input MBTUH	Recovery Effcy. %
NATURAL GAS						
FG1*4034T3N***	1,6,10,15	53	0.59	40	34.0	77
MHG1*3031T3N***	1,2,6,10	53	0.61	30	31.0	75
FG2*4034T3N***	1,6,10,15	53	0.61	40	34.0	77
FG1*3030S3N***	1,6,10,15	54	0.61	30	30.0	76
FG1*3030T3N***	1,6,7,10	54	0.61	30	30.0	76
DVG2*4038SN***	1,4,6,10	60	0.59	40	38.0	76
MHG1*4031T3N***	1,2,6,10	60	0.59	40	31.0	75
FG1*4040S3N***	1,6,10,15	67	0.59	40	40.0	76
FG2*4040S3N***	1,7,10	67	0.62	40	40.0	76
FG1*4040T3N***	1,6,10,15	69	0.59	40	40.0	76
FG2*4040T3N***	1,6,10,15	69	0.63	40	40.0	76
DVG2*5042TN***	1,4,6,10	70	0.58	50	42.0	76
PVG2*4050T3N***	1,3,6,10	72	0.62	40	50.0	76
FG1*5040T3N***	1,6,10,15	80	0.58	50	40.0	76
FG2*5040T3N***	1,6,10,15	80	0.62	50	40.0	76
FG1*5050T4N***	1,6,10,11,15	87	0.58	50	50.0	76
FG2*5050T4N***	1,6,10,11,15	87	0.60	50	50.0	76
*PVG2*5063T3NH***	1,3,6,10,11	95	0.60	50	63.5	76
PROPANE GAS						
FG1*4034T3P***	1,6,10,15	53	0.59	40	33.0	77
MHG1*3031T3P***	1,2,6,10	53	0.61	30	31.0	75
FG2*4034T3P***	1,6,10,15	53	0.61	40	33.0	77
FG1*3030S3P***	1,6,10,15	54	0.61	30	29.0	76
FG1*3030T3P***	1,6,7,10	54	0.61	30	29.0	76
DVG2*4038SP***	1,4,6,10	60	0.59	40	36.0	76
MHG1*4031T3P***	1,2,6,10	60	0.59	40	31.0	75
FG1*4040S3P***	1,6,10,15	67	0.59	40	36.0	76
FG2*4040S3P***	1,7,10	67	0.62	40	40.0	76
FG1*4040T3P***	1,6,10,15	69	0.59	40	36.0	76
FG2*4040T3P***	1,6,10,15	69	0.63	40	36.0	76
DVG2*5042TP***	1,4,6,10	70	0.58	50	36.0	76
PVG2*4050T3P***	1,3,6,10	72	0.62	40	48.0	76
FG1*5040T3P***	1,6,10,15	80	0.58	50	40.0	76
FG2*5040T3P***	1,6,10,15	80	0.62	50	40.0	76
FG1*5050T4P***	1,6,10,11,15	87	0.58	50	47.0	76
FG2*5050T4P***	1,6,10,11,15	87	0.60	50	47.0	76
*PVG2*5063T3PH***	1,3,6,10,11	95	0.60	50	60.0	76

Trade Name(s): Ace, American, American Hardware, Americas Best, A.O. Smith, Apex, Aquamatic, Aqua Temp, Aqua Therm, Best, Best Deluxe, Champion, Craftmaster, De-Limer, Deluxe, Eagle, Envirotemp, Four Most, Hotmaster, Hotstream, King-Kleen, King-Line, Master Plumber, Nationaline, Neptune, Penquin, Polaris, Premier Plus, Premier Plus Self Cleaning Prestige, Prestige, Pro-Line, Pro-Line Plus, Quaker, Quick-Flo, Raywall, Revere, Riveria, Sands, Sentinal, Servi-Star, Shamrock, Special Deluxe, Standard, State, Super Eagle, Super-Flo, Supreme, Sure-Fire, The Earls Energy, The Earls Energy Conservation Water Heater, The Earls Energy Saver Plus, The Energy Saver Plus, Thoro-Clean, True-Test, Tru Value, U.S. Craftmaster, U.S. Supply, Whirlpool, XCL Energy Saver

Model Number	Footnotes	1st Hr Rating Gals.	Energy Factor	Rated Storage Vol. Gals.	Input MBTUH	Recovery Effcy. %
NATURAL GAS						
UG1*3030T3N***	1,13,17	50	0.61	30	30.0	77
UG1*4040T3N***	1,13,17	65	0.59	40	40.0	77
UG2*4040T3N***	1,13,17	65	0.60	40	40.0	77
UG1*5040T3N***	1,13,17	75	0.58	50	50.0	77
UG2*5040T3N***	1,13,17	75	0.60	50	50.0	77

Trade Name(s): Ace, American, American Hardware, Americas Best, Apex, Aqua Temp, Aqua Therm, Aquamatic, Best, Best Deluxe, Champion, Craftmaster, Deluxe, Eagle, Envirotemp, Four Most, Hotmaster, Hotstream, King-Kleen, King-Line, Nationaline, Neptune, Penquin, Polaris, Premier Plus, Premier Plus Self Cleaning Prestige, Prestige, Pro-Line, Pro-Line Plus, Quaker, Quick-Flo, Raywall, Revere, Riviera, Sands, Sentinel, Servistar, Shamrock, Special Deluxe, Super Eagle, Super-Flo, Supreme, Sure-Fire, The Earls Energy Conservation Water Heater, The Earls Energy Saver Plus, Thoro-Clean, Tru Value, True-Test, U.S. Craftmaster, U.S. Supply, Whirlpool, XCL Energy Saver

Model Number	Footnotes	1st Hr Rating Gals.	Energy Factor	Rated Storage Vol. Gals.	Input MBTUH	Recovery Effcy. %
NATURAL GAS						
SG1*4040T3N***	1,6,10	77	0.62	40	40.0	76
SG1*5040T3N***	1,6,10	90	0.61	50	40.0	76

Additional Footnotes

6. Second * can be replaced with warranty period
7. FG models may have prefix "B".
10. The first "*" may be replaced with letter "C".
11. May have prefix "C".
13. First asterisk after letter "G" may be replaced with any number (1, 3, 5, 6, 8, 9, 10, or 12) signifying warranty period.
15. FG models may have prefix "B".
17. May have any combination of the following suffixes: X, V, O, or M.

STANDARD FOOTNOTES:

1. Heat Traps
2. Manufactured (Mobile) Home Model
3. Power Combustion Or Power Vent
4. Direct Vent
5. Electronic Ignition (No Standing Pilot)

Rating Voluntarily Revised Since Last Directory
✠ Rating Revised By Program Since Last Directory