



Water Heaters ***and Accessories***



Property of Sears, Roebuck and Company

**MERCHANDISE LIST D/42
PREFIX "WH" ISSUED 4/04**

POWS#3442

SOURCE LISTING

SOURCE LISTING

Source listing for water heater technical questions. **FOR USE BY SEARS PERSONNEL ONLY.**

<u>SOURCE NUMBER</u>	<u>SOURCE</u>	<u>PHONE</u>	<u>EMAIL ID</u>
153	STATE INDUSTRIES, INC. 500 LINDAHL PARKWAY ASHLAND CITY, TN 37015	1-800-365-8170	
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	Sears Water Heater Sales Center Sales Help	1-800-877-6420	
	Sears Water Heater Rapid Resolution Center Technical Help	1-877-800-5804	

NOTE: Product specifications are subject to change without prior notice.

GUIDE TO INFORMATION

	PAGE
GENERAL WATER HEATER KNOWLEDGE	
Guide To Information	1
Discover The Customer's Needs	2
Sizing Guide	3
ELECTRIC WATER HEATERS	
Electric Water Heater Features	4
Electric Water Heater Sizes and Dimensions	5
Kenmore® Specialty Compact Electric Water Heaters	6
Kenmore® Specialty Table Top Electric Water Heaters.....	7
Power Miser 6 Electric Water Heaters.....	8
Power Miser 9 Electric Water Heaters.....	9
Power Miser 12 Electric Water Heaters	10
Dualwatt™ Convertible Elements	11
Electric Water Heater Typical Installation	12
Electric Water Heater Troubleshooting	13
GENERAL WATER HEATER INFORMATION	
Self Cleaning Roto-Swirl™	14
Cobalt Blue Ultra Coat™ Glass Lining	15
GAS WATER HEATERS	
C3 Technology™ Gas Water Heaters	16
Gas Water Heater Features	17
Gas Water Heater Sizes and Dimensions.....	18
Power Miser 6 Gas Water Heaters	19
Power Miser 9 Gas Water Heaters	20
Power Miser 12 High Performance Gas Water Heaters	21
Kenmore® Mobile Home Gas Water Heaters.....	22
Kenmore® Power Vent Gas Water Heaters	23 to 24
Commercial Gas Water Heaters	25
Gas Water Heater Typical Installation.....	26
Gas Water Heater Troubleshooting.....	27
ACCESSORIES AND UNIVERSAL PARTS	
Element Types.....	28
Universal Replacement Parts and Accessories	29 to 30
GENERAL INFORMATION	
Thermal Expansion and Weeping T&P Valves	31
Glossary of Terms and Sears Warranties	32
Commonly Asked Questions	33

DISCOVER THE WATER HEATER CUSTOMER'S NEEDS

CORRECT TANK SIZE AND INPUT TO PROVIDE ENOUGH USABLE HOT WATER TO FIT THE CUSTOMERS' NEEDS CAN BE QUICKLY DETERMINED BY ASKING A FEW SIMPLE QUESTIONS.

■ **TYPE OF FUEL? ELECTRIC: VOLTS/WATTS?**

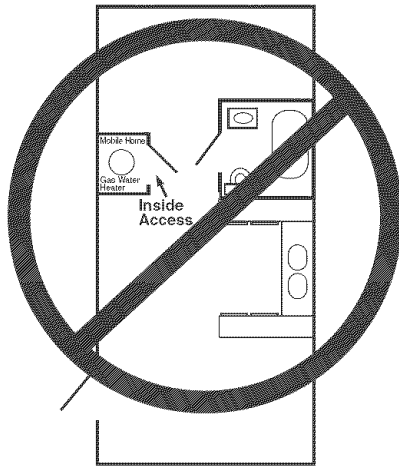
120V (1700 Watts or less) = Compacts.....240V (Over 2000 Watts) = Residential Tall & Shorts

GAS: NATURAL or PROPANE(LP)? MOBILE HOME?

NATURAL = Residential All Series.....PROPANE = Residential PM 6 and PM 9 Series

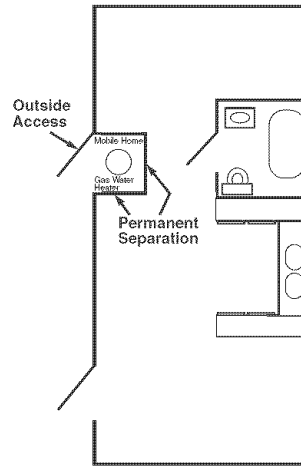
MOBILE HOME = The Kenmore® 6 Mobile Home Gas ONLY! (**NOTE:** Mobile Home gas water heaters sold by Sears are for installation ONLY where there is a permanent separation between the water heater compartment and the inside of the mobile home. Access to the gas water heater compartment of the mobile home must be from the outside.)

Mobile Home with inside access to the water heater closet.



In this case Sears does not have a gas water heater that will safely work. Refer the customer to the mobile home industry for the proper "sealed combustion" mobile home water heater.

Mobile Home with outside access only to the water heater closet and permanent separation from the living area of the home.



Sears Item No. 33384 or 33394 only.

■ **WHERE IS THE WATER HEATER LOCATED IN THE HOME?**

Answers may indicate possible space restrictions and/or special installation requirements.

IF RESTRICTED SPACE IS SUSPECTED, ASK: WIDTH OF DOOR, CLOSET, SHED, ETC.?

HEIGHT OF AREA? ATTIC, CRAWL SPACE, CEILING, ETC.

IF RESTRICTED SPACE, size based on space available - not the physical size of the old water heater.

GARAGE INSTALLATIONS: Gas water heaters may be required to be elevated 18" above floor level to comply with local or National Fuel Gas Code.

■ **WHY IS THE OLDER WATER HEATER BEING REPLACED AND DID IT PROVIDE ENOUGH HOT WATER?**

■ **WHAT CAPACITY AND INPUT WAS THE OLD WATER HEATER?**

If the old water heater provided enough hot water, match the capacity and input.

If the old water heater did not provide enough hot water or the customer has increased hot water needs, a larger capacity or increased input are necessary. Verify that the larger capacity unit will fit the space available for the new water heater!

■ **HOW MANY PEOPLE IN THE FAMILY?**

A quick check of the proper minimum combination of tank size and input needed.

SELL ENOUGH HOT WATER! CAPACITY IS NOT THE ONLY ANSWER! – HEAT INPUT COUNTS!

SIMPLIFIED SIZING GUIDE

IMPORTANT: When sizing a new water heater for your customer, it is important to remember that all water heaters of the same capacity are not created equally and do not perform equally.

The Simplified Sizing Guide recommends the **minimum** tank capacity and input of the water heater necessary to satisfy a typical family’s hot water requirements. In some instances, the customer may be given a choice of tank sizes and inputs that will provide their **minimum** hot water requirements.

ELECTRIC WATER HEATERS		
NUMBER PEOPLE	CAPACITY IN GALS.	WATTAGE INPUT
1	30	3800W
2	40	3800W
3	40	5500W
4	50	5500W
	66	3800W
5	80	3800W
6	80	5500W

GAS WATER HEATERS		
NUMBER PEOPLE	CAPACITY IN GALS.	BTU INPUT
1	30	32,000
2	40	35,500
	30	40,000
3	40	35,500
	50	40,000
4	50	35,500
	40	40,000
5	50	40,000
6	50	40,000
	65	40,000
7	50	50,000
	65	50,000
8	65	50,000
	75	55,000

Generally a whirlpool bath requires a water heater with a capacity of 2/3 the capacity of the whirlpool bath - if the thermostat is set at 140° - and no other hot water using appliances are in use.

Example: When sizing an electric water heater for a typical family of four, the Sizing Guide recommends either a 50 gallon (or larger) capacity tank with a minimum 5500 watt heating element OR a 66 gallon (or larger) capacity tank with a minimum 3800 watt heating element.

The customer may choose a Power Miser 9 or 12 series 66 gallon capacity tank or a 50 gallon capacity from the Power Miser 6, Power Miser 9 or Power Miser 12 series, which are equipped with Dualwatt lower heating elements capable of operation at 5500 watts.

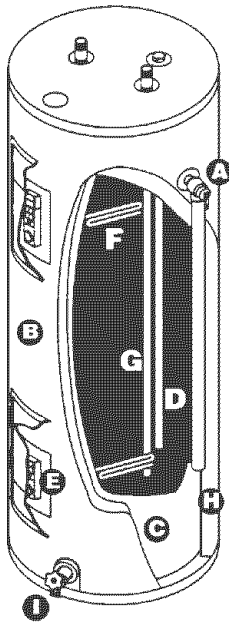
Example: When sizing a gas water heater for a typical family of four, the Sizing Guide recommends either a 40 gallon water heater with a minimum 40,000 Btu/hr input OR a 50 gallon water heater with a minimum input of 35,500 Btu/hr.

The customer may choose a 50 gallon capacity tank from Power Miser 6 series OR a 40 gallon tank capacity from either the Power Miser 9 or Power Miser 12 series.

The hot water delivery capabilities resulting from a combination of tank capacity and input allow both recommendations to meet the family’s minimum hot water requirements.

NOTE: IN MOST OLDER WATER HEATERS THE “HOT” SETTING WAS APPROXIMATELY 140°. TODAY’S “HOT” SETTING IS APPROXIMATELY 120°. IF THE NEW WATER HEATER IS OPERATED AT 120°, A LARGER SIZE WILL BE NEEDED.

ELECTRIC WATER HEATER COMMON FEATURES



- A. FACTORY INSTALLED TEMPERATURE AND PRESSURE RELIEF VALVE.
- B. LONG-LIFE BAKED ENAMEL FINISH.
- C. GLASS LINED STEEL TANK.
- D. ANODE ROD IN GLASS-LINED TANKS helps prevent corrosion caused by electrolytic action.
- E. THERMOSTAT WITH AUTOMATIC SAFETY cut-off shuts power off if thermostat fails.
- F. REPLACEABLE SCREW-IN IMMERSION TYPE HEATING ELEMENTS. Available in single and dual element models.
- G. NON-CORROSIVE HIGH TEMPERATURE COLD WATER INLET TUBE.
- H. POLYURETHANE INSULATION helps keep water hot to save energy.
- I. NON-CORROSIVE DRAIN VALVE for emptying or flushing tank.

Temperature Range.

Setting.....Approximate

HOT	120°F
A	130°F
B	140°F
C	150°F
Very Hot	160°F



All Kenmore electric water heaters are listed by Underwriter's Laboratories, Inc.



ELECTRIC WATER HEATER FEATURE COMPARISON CHART (Tall Models Only)

SERIES		POWER MISER 6	POWER MISER 9	POWER MISER 12
TYPE OF TANK		Glasslined	Glasslined	Glasslined
Warranty	TANK	6 Years	9 Years	12 Years
	PARTS	6 Years	9 Years	12 Years
	LABOR	1 Year Exclusive Kenmore® Labor Warranty	1 Year Exclusive Kenmore® Labor Warranty	1 Year Exclusive Kenmore® Labor Warranty
Insulation (R-Value)		2" Foam (R 16.0)	2 1/2" Foam (R 20.0)	3" Foam (R 24.0)
Recovery at 90° Rise	3800 watt	17.3 G.P.H.	17.3 G.P.H.	17.3 G.P.H.
	5500 watt	25.0 G.P.H.	25.0 G.P.H.	25.0 G.P.H.
Number of elements		TWO	TWO	TWO
Type of Element	UPPER	LIMEGUARD™ Low Watt Density	SUPER-LIMEGUARD™ Low Watt Density	SUPER-LIMEGUARD™ Low Watt Density
	LOWER	LIMEGUARD™ DUALWATT™	SUPER-LIMEGUARD™ DUALWATT™	SUPER-LIMEGUARD™ DUALWATT™
Dip Tube (cold water inlet tube)		PEX ROTO-SWIRL™	PEX ROTO-SWIRL™	PEX ROTO-SWIRL™
Heat Traps		NO	YES	YES
Jacket type		Steel	Textured Steel	Textured Steel
Anodes		One	One Large	Two Large
Factory installed T&P relief valve		YES	YES	YES

All Kenmore water heaters comply with the 2004 energy efficiency requirements of the National Appliance Energy Conservation Act (NAECA).

ELECTRIC WATER HEATER SIZES AVAILABLE

SERIES	KENMORE SPECIALTY			POWER MISER 6	POWER MISER 9	POWER MISER 12
	1650W (120V)	2000W (240V)	Table Top	DUALWATT 3800W/5500W (240V)	DUALWATT 3800W/5500W (240V)	DUALWATT 3800W/5500W (240V)
ELEMENT WATTAGE (VOLTAGE)						
TANK SIZE						
6 Compact	31663					
10 Compact	31613					
19.9 Short Compact	31623	32623				
19.9 Compact	31603	32603				
27 Table Top			DUALWATT™ 31803			
30 Compact	31733	32633				
30 Short				32616		
30 Gallon				32636	32936	32134
40 Table Top			DUALWATT™ 31813			
40 Short				32626	32926	
40 Medium				32676		
40 Gallon				32646	32946	32144
47 Short				32686		
50 Medium				32666		
55 Gallon				32656	32956	32154
66 Gallon					32966	32164
80 Gallon					32986	32184

DUALWATT elements can be easily converted from 3800W to 5500W operation using parts and instructions included; if the customer's wiring and fusing permit.

NOTE: IN MOST OLDER WATER HEATERS THE "HOT" SETTING WAS APPROXIMATELY 140°. TODAY'S "HOT" SETTING IS APPROXIMATELY 120°. IF THE NEW WATER HEATER IS OPERATED AT 120°, A LARGER SIZE WILL BE NEEDED.

ELECTRIC WATER HEATER DIMENSIONS

SERIES	KENMORE SPECIALTY		POWER MISER 6		POWER MISER 9		POWER MISER 12	
	Dia./Width	Height	Diameter	Height	Diameter	Height	Diameter	Height
TANK SIZE								
6 Compact	16"	18"						
10 Compact	18"	18"						
19.9 Short Compact	22"	22 1/2"						
19.9 Compact	18"	31 1/2"						
27 Table Top	21"	36" Depth 25"						
30 Compact	22"	30"						
30 Short	22"	30"	22"	30"				
30 Gallon	17 1/2"	45 1/2"	18"	46 1/2"	19"	47"	19"	47"
40 Table Top	24"	36" Depth 25"						
40 Short	24"	31 1/2"	25"	32 1/4"	25"	32 1/2"		
40 Medium			20 1/2"	44"				
40 Gallon	17 1/2"	59 1/4"	18"	59 1/2"	19"	60"	20"	60 1/2"
47 Short			26 1/2"	34"				
50 Medium			23"	49"				
55 Gallon			20 1/2"	60 1/4"	21 1/2"	61"	22 1/2"	62"
66 Gallon					23"	60"	24"	62"
80 Gallon					25"	61 1/2"	26"	62"

*Height with backsplash 39 1/2"

KENMORE SPECIALTY COMPACT ELECTRIC WATER HEATER



- 6 YEAR LIMITED TANK WARRANTY
1 YEAR PARTS WARRANTY
1 YEAR EXCLUSIVE KENMORE® LABOR WARRANTY
- Cobalt Blue Ultra Coat™ Glass Lined tank with a single anode rod for tank protection.
- 2" of ENERGY EFFICIENT FOAM INSULATION (R-Value 16.00)
- SINGLE STANDARD ZINC COATED COPPER ELEMENT
- ON-OFF SWITCH (Except 240 Volt Models)
- DRAIN VALVE
- Side water inlet and outlet
- FACTORY INSTALLED TEMPERATURE and PRESSURE RELIEF VALVE
- Meets energy efficiency requirements of Federal NAECA and all states.



ITEM NO.	GALLON SIZE	WATTAGE AT 120V	MAXIMUM FUSE REQUIRED	MINIMUM WIRE SIZE	RECOVERY @90° RISE	1ST HOUR RATING	ANNUAL COST OF OPERATION	ENERGY FACTOR	DIMENSIONS		WT (LBS.)
									DIAMETER	HEIGHT	
31663	6	1650W	20 AMP	12 GA.	7.5 GPH	N/A	N/A	N/A	16"	18"	45
31613	10	1650W	20 AMP	12 GA.	7.5 GPH	N/A	N/A	N/A	18"	18"	50
31623	19.9 Short	1650W	20 AMP	12 GA.	7.5 GPH	N/A	N/A	N/A	22"	22 1/2"	85
31603	19.9	1650W	20 AMP	12 GA.	7.5 GPH	N/A	N/A	N/A	18"	31 1/2"	88
31633	30	1650W	20 AMP	12 GA.	7.5 GPH	37 GAL	\$397	.93	22"	30"	110

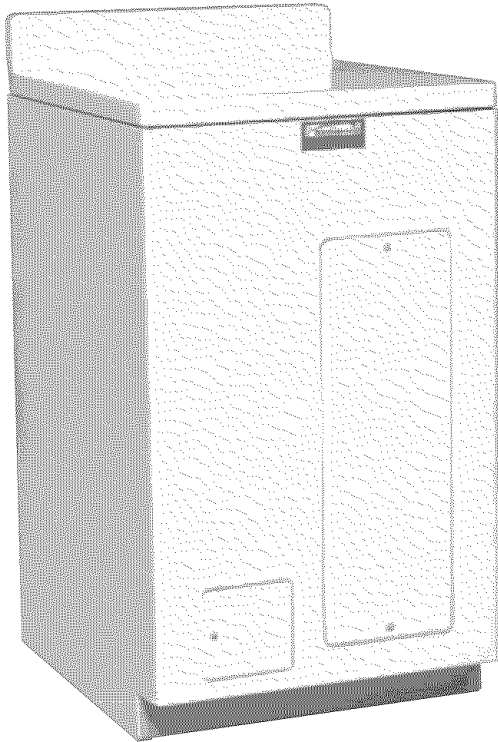
Models With No On/Off Switch

ITEM NO.	GALLON SIZE	WATTAGE AT 240V	MAXIMUM FUSE REQUIRED	MINIMUM WIRE SIZE	RECOVERY @90° RISE	1ST HOUR RATING	ANNUAL COST OF OPERATION	ENERGY FACTOR	DIMENSIONS		WT (LBS.)
									DIAMETER	HEIGHT	
32603	19.9	2000W	15 AMP	14 GA.	9.1 GPH	N/A	N/A	N/A	18"	31 1/2"	88
32623	19.9 Short	2000W	15 AMP	14 GA.	9.1 GPH	N/A	N/A	N/A	22"	22 1/2"	85
32633	30	2000W	15 AMP	14 GA.	9.1 GPH	37 GAL	\$397	.93	22"	30"	110

WATER CONNECTIONS: SIDE PLUMBED 3/4" NPT(National Pipe Thread)

150 PSI working pressure

KENMORE TABLE TOP ELECTRIC WATER HEATER



- 6 YEAR LIMITED TANK WARRANTY
1 YEAR PARTS WARRANTY
1 YEAR EXCLUSIVE KENMORE® LABOR WARRANTY
- Cobalt Blue Ultra Coat™ Glass Lined tank with a single anode rod for tank protection
- 2" of ENERGY EFFICIENT FOAM INSULATION (R-Value 16.00)
- LIMEGUARD™ ELEMENT...low watt density, zinc coated copper; resists lime build-up. Lasts longer than standard elements.
- DUALWATT™ ELEMENT: EASILY CONVERTS from 3800 watt to 5500 watt...FITS THE CUSTOMER'S WIRING!
- FACTORY INSTALLED TEMPERATURE and PRESSURE RELIEF VALVE
- APPLIANCE WHITE BAKED ENAMEL FINISH, PORCELAIN TOP
- Meets energy efficiency requirements of Federal NAECA and all state laws for replacement water heaters.

NOTE: Use 21" wide 31803 to replace 21" wide 40 gallon Table Top models.
Operation at 5500 Watts will provide the same first hour rating.



Factory set for 3800 watt operation, requires a minimum 12 gauge wire and 20 amp fusing... provides 17.3 gallons per hour of recovery at a 90° temperature rise. With parts and instructions included, the element EASILY converts to 5500 watt operation which requires 10 gauge wire and 30 amp fusing. 5500 watt element operation provides 25.0 gallons per hour of recovery at 90° temperature rise.

ITEM NO.	GALLON SIZE	WATTAGE AT 240V	MAXIMUM FUSE REQUIRED	MINIMUM WIRE SIZE	RECOVERY @90° RISE	1ST HOUR RATING	ANNUAL COST OF OPERATION	ENERGY FACTOR	DIMENSIONS			WT (LBS.)
									WIDTH	DEPTH	HEIGHT	
31803	27	3800W	20 AMP	12 GA.	17.3 GPH	42 GAL	\$410	.89	21"	25"	*36"	141
		5500W	30 AMP	10 GA.	25.0 GPH	49 GAL	\$410					
31813	40	3800W	20 AMP	12 GA.	17.3 GPH	49 GAL	\$415	.88	24"	25"	*36"	183
		5500W	30 AMP	10 GA.	25.0 GPH	57 GAL	\$415					

*39 1/2" to top of backsplash

150 PSI working pressure

WATER CONNECTIONS: TOP PLUMBED 3/4" NPT(National Pipe Thread)

BENEATH REMOVABLE TOP

KENMORE POWER MISER 6 ELECTRIC WATER HEATER



- 6 YEAR LIMITED TANK AND PARTS WARRANTY
1 YEAR EXCLUSIVE KENMORE® LABOR WARRANTY
- Cobalt Blue Ultra Coat™ Glass Lined tank with a single anode rod for internal tank protection.
- 2" of ENERGY EFFICIENT FOAM INSULATION (R-Value 16.00)
- TWO ELEMENTS... lower handles normal needs while the upper element responds to heavy demands.
- LIMEGUARD™ ELEMENTS... low watt density, zinc coated copper; resist lime build-up. Last longer than standard elements.
- DUALWATT™ LOWER ELEMENT: EASILY CONVERTS from 3800 watt to 5500 watt... FITS THE CUSTOMER'S WIRING!
- SELF CLEANING ROTO-SWIRL™ cold water inlet tube... helps maintain efficiency by swirling water to help prevent mineral build-up in tank.
- FACTORY INSTALLED TEMPERATURE and PRESSURE RELIEF VALVE
- Meets energy efficiency requirements of Federal NAECA and all state laws for replacement water heaters.



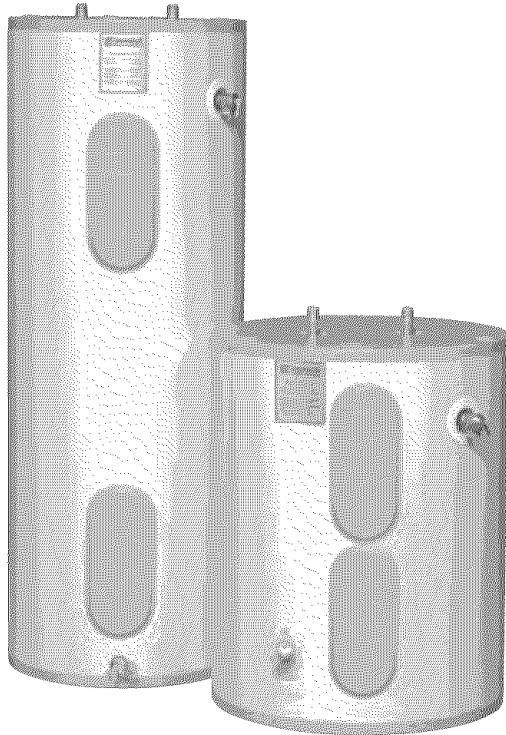
Factory set for 3800 watt operation, requires a minimum 12 gauge wire and 20 amp fusing... provides 17.3 gallons per hour of recovery at a 90° temperature rise. With parts and instructions included, the element EASILY converts to 5500 watt operation which requires 10 gauge wire and 30 amp fusing. 5500 watt element operation provides 25.0 gallons per hour of recovery at 90° temperature rise.

ITEM NO.	GALLON SIZE	WATTAGE AT 240V	MAXIMUM FUSE REQUIRED	MINIMUM WIRE SIZE	RECOVERY @90° RISE	1ST HOUR RATING	ANNUAL COST OF OPERATION	ENERGY FACTOR	DIMENSIONS		WT (LBS.)
									DIAMETER	HEIGHT	
32616	30 Short	3800W	20 AMP	12 GA.	17.3 GPH	38 GAL	\$397	.89	22"	30"	103
		5500W	30 AMP	10GA.	25.0 GPH	45 GAL	\$397				
32636	30	3800W	20 AMP	12 GA.	17.3 GPH	40 GAL	\$397	.93	18"	46 1/2"	94
		5500W	30 AMP	10 GA.	25.0 GPH	44 GAL	\$397				
32626	40 Short	3800W	20 AMP	12 GA.	17.3 GPH	45 GAL	\$401	.92	25"	32 1/4"	120
		5500W	30 AMP	10 GA.	25.0 GPH	48 GAL	\$401				
32646	40	3800W	20 AMP	12 GA.	17.3 GPH	49 GAL	\$401	.92	18"	59 1/2"	116
		5500W	30 AMP	10 GA.	25.0 GPH	52 GAL	\$401				
32676	40 Medium	3800W	20 AMP	12 GA.	17.3 GPH	49 GAL	\$401	.92	20 1/2"	44"	115
		5500W	30 AMP	10 GA.	25.0 GPH	52 GAL	\$401				
32686	47 Short	3800W	20 AMP	12 GA.	17.3 GPH	52 GAL	\$410	.90	26 1/2"	34"	142
		5500W	30 AMP	10 GA.	25.0 GPH	55 GAL	\$410				
32666	50 Medium	3800W	20 AMP	12 GA.	17.3 GPH	59 GAL	\$397	.93	23"	49"	145
		5500W	30 AMP	10 GA.	25.0 GPH	62 GAL	\$397				
32656	55	3800W	20 AMP	12 GA.	17.3 GPH	61 GAL	\$410	.90	20 1/2"	60 1/4"	130
		5500W	30 AMP	10 GA.	25.0 GPH	64 GAL	\$410				

WATER CONNECTIONS: TOP PLUMBED 3/4" NPT(National Pipe Thread)

150 PSI working pressure

KENMORE POWER MISER 9 ELECTRIC WATER HEATER



- **9 YEAR LIMITED TANK AND PARTS WARRANTY**
1 YEAR EXCLUSIVE KENMORE® LABOR WARRANTY
- Cobalt Blue Ultra Coat™ Glass Lined tank with one large anode rod for increased internal tank protection.
- **2 1/2" of ENERGY EFFICIENT FOAM INSULATION (R-Value 20.0)**
- TWO ELEMENTS... lower handles normal needs while the upper element responds to heavy demands.
- **SUPER LIMEGUARD™ ELEMENTS:** last longer... superior resistance to lime build-up.
- **DUALWATT™ LOWER ELEMENT:** easily CONVERTS from 3800 watt to 5500 watt... FITS THE CUSTOMER'S WIRING!
- **SELF CLEANING ROTO-SWIRL™ cold water inlet tube...** helps maintain efficiency by swirling water to help prevent mineral build-up in tank.
- **TEXTURED STEEL JACKET**
- **FACTORY INSTALLED TEMPERATURE and PRESSURE RELIEF VALVE**
- Meets energy efficiency requirements of Federal NAECA and all state laws for replacement water heaters.

NOTE: Bold type indicates additional features and benefits over The Power Miser 6 Series.

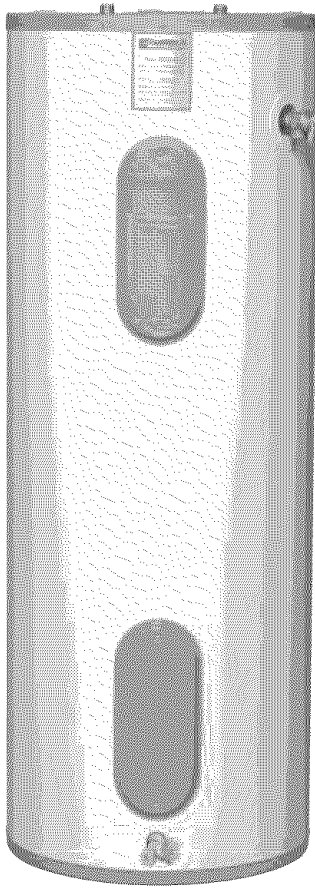


Factory set for 3800 watt operation, requires a minimum 12 gauge wire and 20 amp fusing... provides 17.3 gallons per hour of recovery at a 90° temperature rise. With parts and instructions included, the element EASILY converts to 5500 watt operation which requires 10 gauge wire and 30 amp fusing. 5500 watt element operation provides 25.0 gallons per hour of recovery at 90° temperature rise.

ITEM NO.	GALLON SIZE	WATTAGE AT 240V	MAXIMUM FUSE REQUIRED	MINIMUM WIRE SIZE	RECOVERY @90° RISE	1ST HOUR RATING	ANNUAL COST OF OPERATION	ENERGY FACTOR	DIMENSIONS		WT (LBS.)
									DIAMETER	HEIGHT	
32936	30	3800W	20 AMP	12 GA.	17.3 GPH	44 GAL	\$393	.94	19"	47"	100
		5500W	30 AMP	10 GA.	25.0 GPH	47 GAL	\$393				
32926	40 Short	3800W	20 AMP	12 GA.	17.3 GPH	49 GAL	\$397	.93	25"	32 1/2"	120
		5500W	30 AMP	10 GA.	25.0 GPH	52 GAL	\$397				
32946	40	3800W	20 AMP	12 GA.	17.3 GPH	51 GAL	\$397	.93	19"	60"	115
		5500W	30 AMP	10 GA.	25.0 GPH	54 GAL	\$397				
32956	55	3800W	20 AMP	12 GA.	17.3 GPH	62 GAL	\$397	.93	21 1/2"	61"	127
		5500W	30 AMP	10 GA.	25.0 GPH	65 GAL	\$397				
32966	66	3800W	20 AMP	12 GA.	17.3 GPH	73 GAL	\$401	.92	23"	61"	172
		5500W	30 AMP	10 GA.	25.0 GPH	76 GAL	\$401				
32986	80	3800W	20 AMP	12 GA.	17.3 GPH	84 GAL	\$397	.93	25"	61 1/2"	202
		5500W	30 AMP	10 GA.	25.0 GPH	86 GAL	\$397				

WATER CONNECTIONS: TOP PLUMBED 3/4" NPT(National Pipe Thread)

150 PSI working pressure



KENMORE POWER MISER 12 ELECTRIC WATER HEATER

- **12 YEAR LIMITED TANK AND PARTS WARRANTY**
1 YEAR EXCLUSIVE KENMORE® LABOR WARRANTY
- Cobalt Blue Ultra Coat™ Glass Lined tank with two large anode rods for superior internal tank protection.
- **3' of ENERGY EFFICIENT FOAM INSULATION (R-Value 24.0)**
(30 Gallon, 2 1/2" of Foam Insulation, R-Value 20.0)
- TWO ELEMENTS... lower handles normal needs while the upper element responds to heavy demands
- SUPER LIMEGUARD™ ELEMENTS: last longer... superior resistance to lime build-up.
- DUALWATT™ LOWER ELEMENT: EASILY CONVERTS from 3800 watt to 5500 watt... FITS THE CUSTOMER'S WIRING!
- SELF CLEANING ROTO-SWIRL™ cold water inlet tube... helps maintain efficiency by swirling water to help prevent mineral build-up in tank
- **FACTORY INSTALLED HEAT TRAP NIPPLES...** keeps hot water in tank when hot water not in use... reduces energy cost!
- TEXTURED STEEL JACKET
- FACTORY INSTALLED TEMPERATURE and PRESSURE RELIEF VALVE
- Meets energy efficiency requirements of Federal NAECA and all state laws for replacement water heaters.

NOTE: Bold type indicates additional features and benefits over The Power Miser 9 Series.



Factory set for 3800 watt operation, requires a minimum 12 gauge wire and 20 amp fusing... provides 17.3 gallons per hour of recovery at a 90° temperature rise. With parts and instructions included, the element EASILY converts to 5500 watt operation which requires 10 gauge wire and 30 amp fusing. 5500 watt element operation provides 25.0 gallons per hour of recovery at 90° temperature rise.

ITEM NO.	GALLON SIZE	WATTAGE AT 240V	MAXIMUM FUSE REQUIRED	MINIMUM WIRE SIZE	RECOVERY @90° RISE	1ST HOUR RATING	ANNUAL COST OF OPERATION	ENERGY FACTOR	DIMENSIONS		WT (LBS.)
									DIAMETER	HEIGHT	
32134	30	3800W	20 AMP	12 GA.	17.3 GPH	44 GAL	\$393	.94	19"	47"	112
		5500W	30 AMP	10 GA.	25.0 GPH	47 GAL	\$393				
32144	40	3800W	20 AMP	12 GA.	17.3 GPH	53 GAL	\$389	.95	20"	60 1/2"	118
		5500W	30 AMP	10 GA.	25.0 GPH	57 GAL	\$389				
32154	55	3800W	20 AMP	12 GA.	17.3 GPH	64 GAL	\$389	.95	22 1/2"	62"	130
		5500W	30 AMP	10 GA.	25.0 GPH	67 GAL	\$389				
32164	66	3800W	20 AMP	12 GA.	17.3 GPH	69 GAL	\$389	.95	24"	62"	175
		5500W	30 AMP	10 GA.	25.0 GPH	71 GAL	\$389				
32184	80	3800W	20 AMP	12 GA.	17.3 GPH	78 GAL	\$389	.95	26"	62"	207
		5500W	30 AMP	10 GA.	25.0 GPH	81 GAL	\$389				

WATER CONNECTIONS: TOP PLUMBED 3/4" NPT(National Pipe Thread)

150 PSI working pressure

SEARS DUALWATT™ CONVERTIBLE ELEMENTS

Sears DUALWATT™ convertible lower heating elements are standard on all Power Miser 6, Power Miser 9 and Power Miser 12 electric water heaters in the lower element position and on the Kenmore® 6 Table Top models.

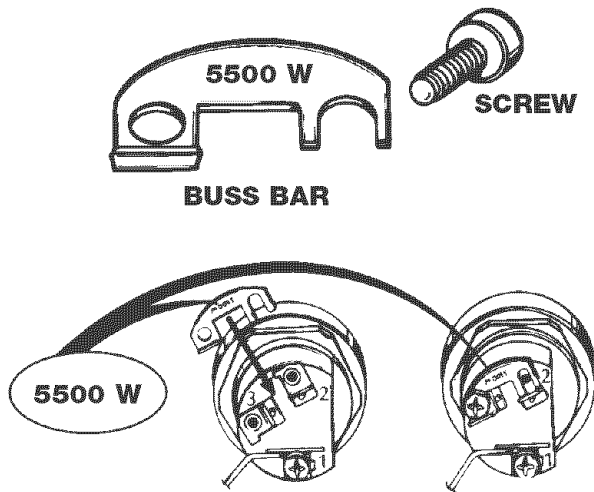
The DUALWATT™ convertible elements operate at either 3800 watts or 5500 watts and allow the water heater to be safely installed on either 12 gauge wire with 20 amp fusing OR on 10 gauge wire with 30 amp fusing.

When shipped, the water heater's DUALWATT™ element is set to operate in the 3800 watt mode. It is suitable for fitting to 12 gauge wire and 20 amp fusing. If 10 gauge wire and 30 amp fusing are present, the element can easily be converted to operate at 5500 watts by simply installing the buss bar and screw supplied with each heater. When converted from 3800 watt operation to 5500 watt operation the recovery rate increases from 17.3 gallons per hour to 25 gallons per hour.

To provide the higher recovery rate and more usable hot water, THE ELEMENT SHOULD BE CONVERTED WHENEVER PROPER WIRE SIZE AND FUSING ARE PRESENT.

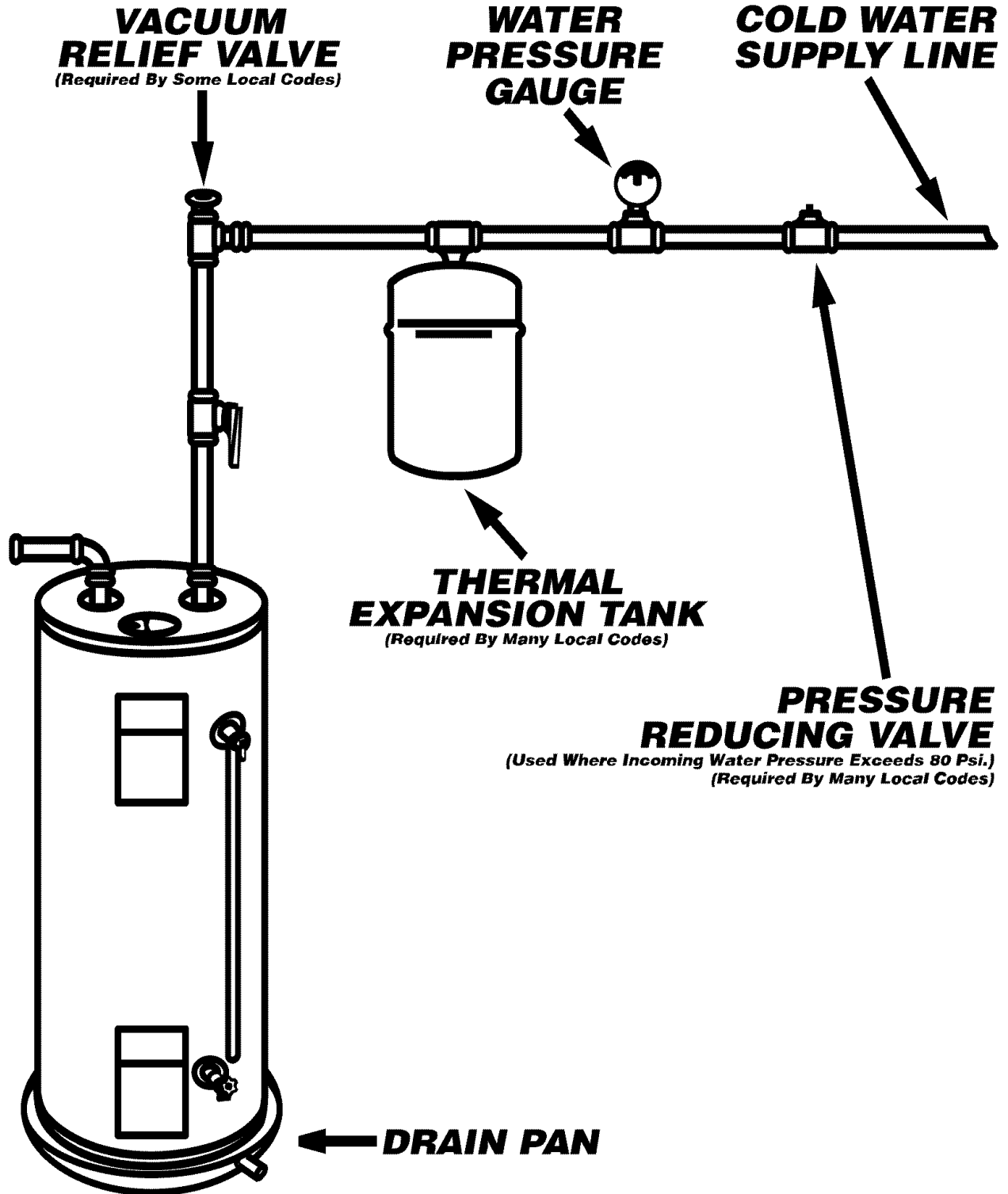
The annual cost of operation is virtually the same whether the element is used in the 3800 or 5500 watt mode.

ELEMENT CONVERSION PARTS FOR 5500 WATT OPERATION



**SEARS DUALWATT™
ELEMENT**

TYPICAL ELECTRIC WATER HEATER INSTALLATION



ELECTRIC TROUBLESHOOTING

CUSTOMER SAYS:

ELECTRIC WATER HEATERS

HEATER LEAKS WATER CHECK FOR CONDENSATION: Condensation can form on the pipes, run down to the top of the water heater and give the appearance of a leak. This may occur during hot, humid days or in the winter with very cold incoming water temperatures.

MAKE SURE DRAIN VALVE IS CLOSED

CHECK PLUMBING FITTINGS: A small leak at the top of the heater will run down tank and collect in bottom pan or floor. Refer customer to leak checklist in Owners manual. Check tightness of T&P, heat traps, nipples and flexible water connectors or pipe joints.

CHECK FOR LOOSE ELEMENT OR DAMAGED OR UNSEATED ELEMENT GASKET.

T & P WEEPING OR LEAKING: Thermal expansion along with high water pressure or a "closed" water system due to check valve or "backflow preventer" are the cause. A pressure reducing valve and/or a thermal expansion tank are the cure. NOTE: Colder incoming water temperatures increase thermal expansion - thus the problem is more severe in the late winter months. See page 30 for more information.

VERIFY WARRANTY STATUS IF ACTUALLY LEAKING

ASK THE CUSTOMER FOR THE WARRANTY EXPIRATION DATE FROM THE KENMORE TANK WARRANTY CERTIFICATE. If the customer cannot read the expiration date, the water heater was probably provided as a replacement. The following statement appears when the Tank Warranty Certificates has been removed.

"This replacement water heater was supplied by Sears, Roebuck and Co. in accordance with the original tank warranty. This replacement is warranted for the same period of time from the date of the original purchase. A new Tank Warranty Certificate will be sent to you by mail. Please affix the new label here."

IN THIS CASE THE DATE OF PURCHASE OF THE ORIGINAL WATER HEATER DETERMINES WARRANTY STATUS, THE CUSTOMER'S RECEIPT MUST BE USED TO VALIDATE WARRANTY STATUS.

NO HOT WATER CHECK OPERATION OF FUSES OR BREAKERS: two fuses or breakers on 240 volt heaters; one on 120 volt - reset if necessary. NOTE: if fuses or breakers continually trip check wire size and fuse size: 10 gauge wire, 30 amp fuses for 4500 watt to 5500 watt heaters; 12 gauge wire and 20 amp fuses for 1650 watt to 3800 watt heaters.

CHECK ECO: red reset button on upper thermostat of a dual element heater or lower thermostat on single element heater - push to reset. NOTE: If there is a label near the junction box on top of a two element water heater that shows "wiring for 3 lead water heaters" there will be a BLUE, YELLOW AND A BLACK wire from the water heater to the junction box. These water heaters have a reset button on both the upper and lower thermostats. Check for proper wiring per the label and make sure a timer or "OFF PEAK" control has not turned OFF the power.

NOT ENOUGH HOT WATER CAREFULLY RAISE THE THERMOSTAT SETTING: Hot = 120°, A = 130°, B = 140° (Temperatures are approximate) NOTE: If 3 wire lead water heater make sure that wires are connected properly... also make sure that an "off peak" timer or control has not turned off the power to one element.

WATER TOO HOT: DECREASE THE THERMOSTAT SETTING

HEATER MAKES SOUNDS TICKING OR METALLIC SOUNDS are normal and caused by expansion and contraction of metal parts.

RUMBLING OR PERCOLATING NOISES can be caused by sediment accumulation - tank should be drained periodically to prevent build-up.

A LOUD POUNDING can happen when a faucet is turned off or washer valve is closed - this is called "water hammer" - usually caused by high water pressure. An expansion tank may be needed.

SMELLY WATER

DETERMINE IF THE ODOR IS IN BOTH THE HOT AND COLD WATER - Test cold water by heating in a pan with a lid. Just before boiling, have the customer lift the lid and CAREFULLY smell. If the odor is present, the problem is in the water source. A taste and odor filter are needed.

If odor is not present in the cold water test, water conditions and sulfate reducing bacteria (Harmless to humans) may be reacting to hydrogen given off by the protective action of the anode rod in a glasslined tank. Chlorination of the tank and changing the anode rod will likely resolve the problem. Since this is caused by a water condition and not the water heater this procedure is not covered by the Limited Warranty. SEE SERVICE FLASH SF 42-481 dated 5/26/89. THE ANODE ROD MUST BE REPLACED! NEVER LEAVE A GLASSLINED WATER HEATER WITHOUT ANODE PROTECTION!

ALWAYS REFER THE CUSTOMER TO THE OWNERS MANUAL FOR SPECIFIC INSTRUCTIONS.

The Self Cleaning RotoSwirl™

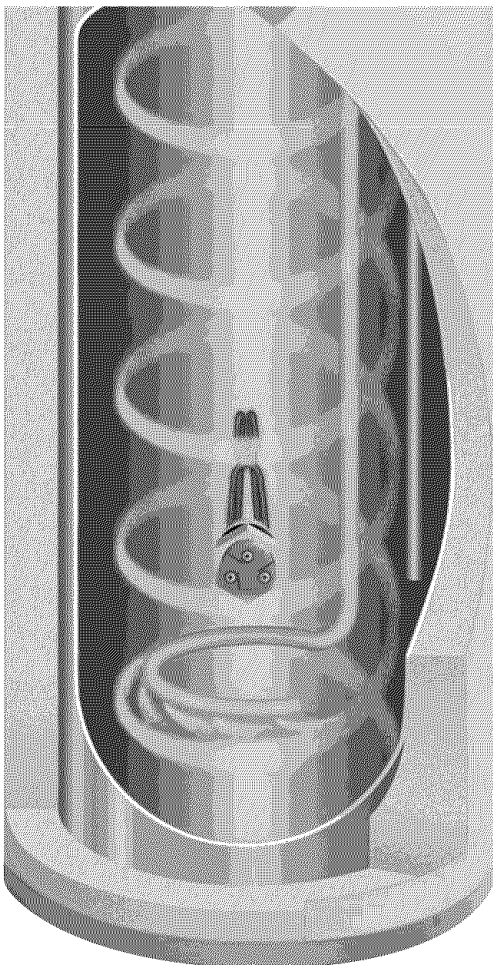
Cold Water Inlet Tube

Sears' Self Cleaning Roto-Swirl™ cold water inlet tube features multiple water outlet jets that automatically create a self cleaning turbulence in the bottom of the water heater tank every time a hot water faucet is opened.

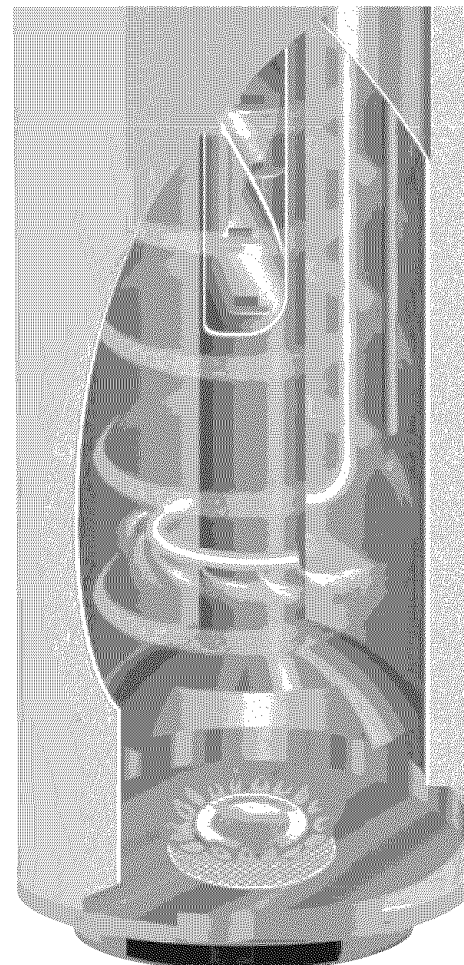
Minerals will normally precipitate out of a water supply when it is heated. If these deposits are allowed to settle on the tank bottom or internal component parts of the water heater, they create an insulating barrier between the heat source and the water. The Self-Cleaning Roto-Swirl™ inlet tube keeps these deposits in suspension so they are flushed out of the water heater with the hot water.

The Sears Self-Cleaning Roto-Swirl™ inlet tube prolongs the water heater's tank life and helps maintain its energy efficiency. Maintained efficiency means low operating costs throughout the life of the water heater.

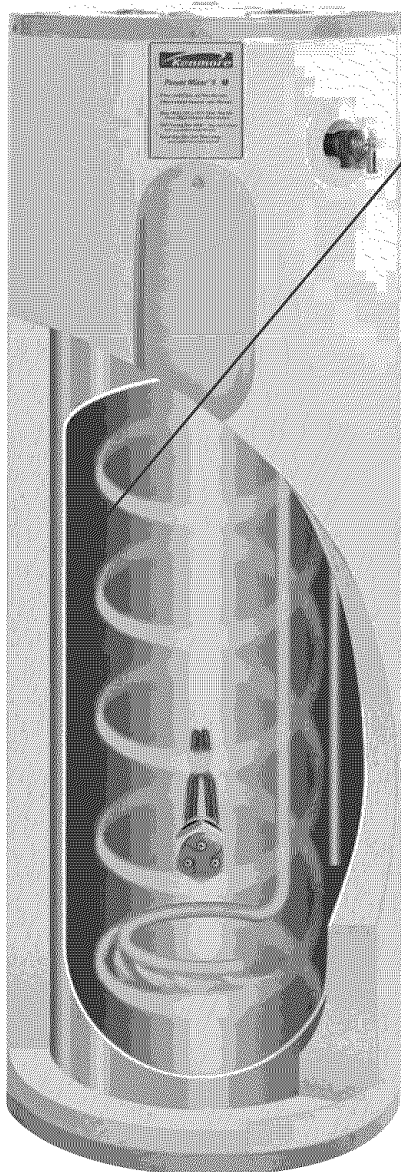
The Self Cleaning Roto-Swirl™ cold water inlet tube is a standard feature on all Power Miser 6, Power Miser 9 and Power Miser 12 gas and electric water heaters.



Self-Cleaning Electric Water Heater

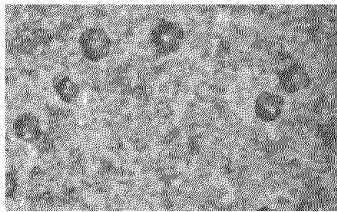


Self-Cleaning Gas Water Heater

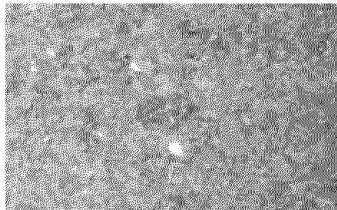


Self-Cleaning Electric Water Heater

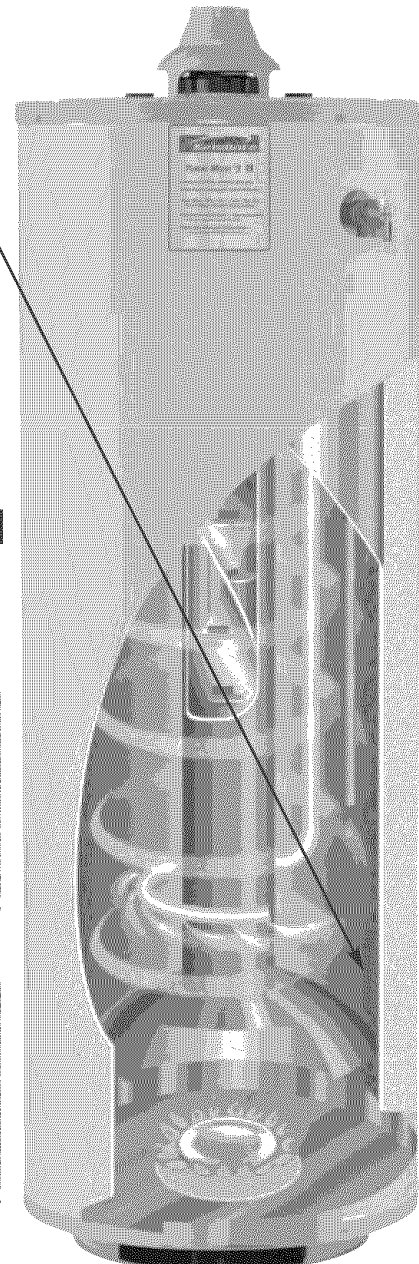
Cobalt Blue Ultra Coat™ Glass Lining Provides 56% Better Internal Tank Protection Than Standard Glass Lining!



Standard Glass Lining

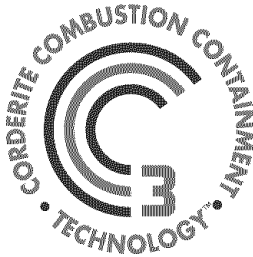


Cobalt Blue Ultra Coat™ Glass Lining



Self-Cleaning Gas Water Heater

KENMORE® FLAMMABLE VAPOR IGNITION RESISTANT C3 TECHNOLOGY™ GAS WATER HEATERS



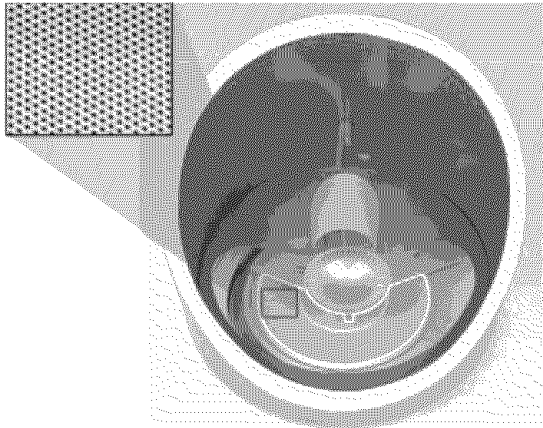
The Corderite Combustion Containment (C3) design meets American National Standards Institute standards (ANS Z21.10.1) that deal with the accidental or unintended ignition of flammable vapors, such as those emitted by gasoline.

Covered by four U.S. patents, C3 Technology™ gas water heaters feature a sealed combustion chamber with air intake screen and a fireproof Corderite flame arrestor built into the water heater base. In addition, a Thermal Cutoff (TCO) device, integral with the thermocouple, is designed to shut off gas flow to the burner and pilot if poor combustion is detected.

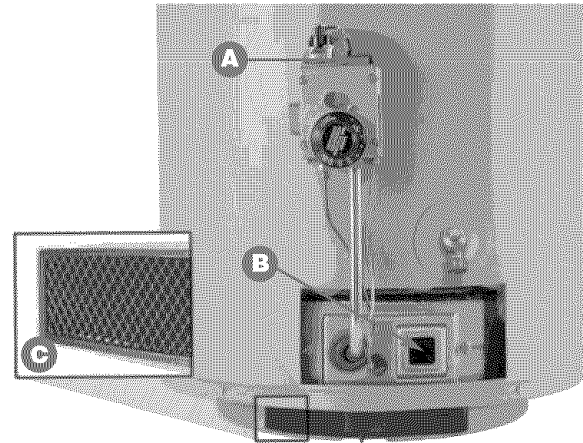
How Kenmore C3 Technology™ Gas Water Heaters Work

The only place where air for combustion may enter the patented, sealed combustion chamber is through a port in the water heater base. From there, combustion air flows one way—up through the flame arrestor. The air inlet port is equipped with a removable easy to clean intake screen. This helps insure the Flame Arrestor (see below) will not require cleaning in harsh environments.

The flame arrestor is built into the water heater base and is made from Corderite, a low thermal conductive fireproof material. Incoming air flows through the flame arrestor, which distributes the air evenly to the gas burner. In the unlikely event that flammable vapors are introduced accidentally into the combustion chamber, the flame arrestor is designed so any flames burn off the top surface and cannot escape down through the flame arrestor.



Pictured above is a cutaway view of the Corderite flame arrestor which is built into the water heater base. Corderite is a low thermal conductivity fireproof material.



- A.** Easy-to-light Piezo Ignitor
- B.** View port for easy inspection of burner inside sealed combustion chamber
- C.** Closeup view of the air intake screen – In the unlikely event that flammable vapors accidentally enter the combustion chamber, the Corderite flame arrestor is designed so any flames burn off the top surface and cannot escape down through the arrestor.

C3 Technology™ Gas Water Heaters Introduction Schedule

PHASE I: July 1, 2003

30, 40 and 50-gallon atmospheric vent models.

(Manufactured housing models are excluded.)

PHASE II: January 1, 2005
(Originally Scheduled July 1, 2004)

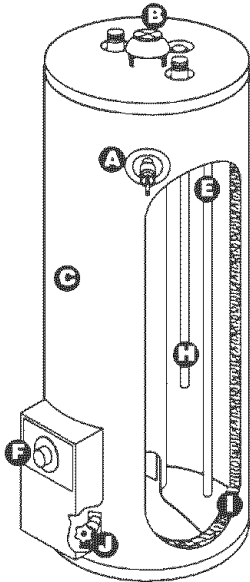
30, 40 and 50-gallon power-vented models.

(Manufactured housing models are excluded.)

PHASE III: July 1, 2005

All other gas-fired models with inputs of 75,000 BTU or less.

GAS WATER HEATER COMMON FEATURES



- A. FACTORY INSTALLED TEMPERATURE AND PRESSURE RELIEF VALVE.
- B. DRAFT DIVERTER helps insure proper venting of combustion gases
- C. LONG-LIFE BAKED ENAMEL FINISH.
- D. GLASSLINED TANK.
- E. ANODE ROD IN GLASS-LINED TANKS helps prevent corrosion caused by electrolytic action.
- F. THERMOSTAT WITH AUTOMATIC SAFETY cut-off shuts power off if thermostat fails, or if pilot flame goes out. EASY ADJUSTMENT KNOB
- H. NON-CORROSIVE HIGH TEMPERATURE COLD WATER INLET TUBE.
- I. POLYURETHANE INSULATION helps keep water hot to save energy.
- J. NON-CORROSIVE DRAIN VALVE for emptying or flushing tank.

Temperature Range.
Setting.....Approximate

HOT	120°F
A	130°F
B	140°F
C	150°F
Very Hot	160°F

All Kenmore gas water heaters are design certified by The Canadian Standards Association.



GAS WATER HEATER FEATURE COMPARISON CHART (Tall Models Only)

SERIES		POWER MISER 6	POWER MISER 9	POWER MISER 12
TYPE OF TANK		Glasslined	Glasslined	Glasslined
Warranty	TANK	6 Years	9 Years	12 Years
	PARTS	6 Years	9 Years	12 Years
	LABOR	1 Year Exclusive Kenmore® Labor Warranty	1 Year Exclusive Kenmore® Labor Warranty	1 Year Exclusive Kenmore® Labor Warranty
Insulation (R-Value)		1" Foam (R 8.00)	1" Foam (R 8.00)	2" Foam (R 16.00)
BTU Input (40 gal.Tall)		35,500	40,000	40,000
Recovery at 90 degree rise		35.4 G.P.H.	39.9 G.P.H.	40.9 G.P.H.
Required vent size		3"	3" or 4"	3" or 4"
Dip Tube (cold water inlet tube)		PEX ROTO-SWIRL™	PEX ROTO-SWIRL™	PEX ROTO-SWIRL™
Heat Traps		NO	YES	YES
Jacket type		Steel	Textured Steel	Textured Steel
Anodes		one	one large	two large
Factory Installed T&P relief valve		YES	YES	YES

HIGH RECOVERY MODELS

SERIES SIZE	POWER MISER 9 48 GALLON	POWER MISER 9 65 GALLON	POWER MISER 12 75 GALLON
BTU Input	50,000	50,000	55,000
Recovery	51.2 G.P.H.	51.2 G.P.H.	54.8 G.P.H.
Required vent size	4" Only	4" Only	4" Only

GAS WATER HEATER SIZES AVAILABLE

TANK SIZE	SERIES	KENMORE 6 MOBILE HOME	POWER MISER 6		POWER MISER 9		POWER MISER 12	
	TYPE OF FUEL	CONVERTIBLE	NATURAL	PROPANE	NATURAL	PROPANE	NATURAL	PROPANE
30 Short	Standard		33616					
30 Gallon	Standard		33636	33676	33936			
	High Alt.		33630					
	Mobile Hme #	33384 #						
40 Short	Standard		33626		33926			
	High Alt.				33921			
40 Gallon	Standard		33646	33686	33946	33996	33144	
	High Alt.		33640	33680	33941		33141	
	Mobile Hme #	33394 #						
40 Gallon Power Vent	Standard		33296	33286				
	High Alt.		33297	33287				
50 Short	Standard				33916			
	High Alt.				33911			
50 Gallon	Standard		33656	33696	33956		33154	
	High Alt.		33650	33690	33951		33151	
48 Gallon	High Recv.				33976			
50 Gallon Power Vent	Standard		33298	33288				
	High Alt.		33299	33289				
65 Gallon	Standard				33966			
	High Alt.				33961			
	High Recv.				33986			
75 Gallon High Recv.	Standard						33174	
	High Alt.						33171	

The ONLY gas models for use in a Mobile Home. Designed for use in utility closets with exterior doors only.

ALTITUDE IS IMPORTANT... when a standard water heater is installed over 3300 feet above sea level, poor combustion, over firing and excessive sooting can occur, causing unsafe conditions. Sears has special high altitude models de-rated for use when installed between 3300 and 5500 feet above sea level which will insure proper operation. If a gas water heater is to be installed above 5500 feet, the special high altitude model should be used and further necessary modifications made by Sears Service or the local gas utility.

GAS WATER HEATER DIMENSIONS

TANK SIZE	THE ECONOMIZER 6 MH			POWER MISER 6			POWER MISER 9			POWER MISER 12		
	DIA. (INCHES)	HEIGHT W/ DIVERTER (INCHES)	HEIGHT (INCHES)	DIA. (INCHES)	HEIGHT W/ DIVERTER (INCHES)	HEIGHT (INCHES)	DIA. (INCHES)	HEIGHT W/ DIVERTER (INCHES)	HEIGHT (INCHES)	DIA. (INCHES)	HEIGHT W/ DIVERTER (INCHES)	HEIGHT (INCHES)
30 Short				18	48 1/4	43 3/4						
30 Gallon	18	59 1/2	56	16	61	57 1/2	16	61	57 1/2			
40 Short				20	51 3/4	47 1/4	20	51 3/4	47 1/4			
40 Gallon	20	60	56 1/2	18 1/2	60	55 1/2	18 1/2	60	55 1/2	20 1/2	63 1/2	58
40 Gallon Power Vent				18	75	59 1/2						
50 Short							24	53 1/4	48 3/4			
50 Gallon				20	61	56 1/2	20	61	56 1/2	22	65	59 1/2
50 Gallon Power Vent				20	75 1/2	60						
48 Gallon High Recv.							20	61	56 1/2			
65 Gallon							22	64	59 1/2			
65 Gallon High Recv.							22	63 1/4	59 1/2			
75 Gallon										24	63 3/4	60

HEIGHT ALLOWANCE FOR VENTING: Allow about 18" ceiling clearance above the jacket top for vent pipe and elbow. A vertical rise of 1/4" per foot of horizontal run must be maintained.

Over the years water heater dimensions have changed. In many cases the old water heater has been installed in a restricted location such as a closet, a crawl space, on a platform in a garage or in a water heater shed. ASK where the current water heater is located and if a confined space is indicated; find out how wide the door or opening is and how tall the space available for the new water heater is. Size the water heater based on available space - not on the physical size of the old water heater.

KENMORE POWER MISER 6 GAS WATER HEATER



- **6 YEAR LIMITED TANK AND PARTS WARRANTY
1 YEAR EXCLUSIVE KENMORE® LABOR WARRANTY**
- 35,500 Btu/Hour Input, 35.4 GPH Recovery Rate (40 Gallon)
- C3 Technology™ Sealed Combustion Chamber
- Cobalt Blue Ultra Coat™ Glass Lined tank with one anode rod for superior internal tank protection
- 1" of ENERGY EFFICIENT FOAM INSULATION (R-Value 8.00)
- Roto Swirl™ Self Cleaning Cold Water Inlet Tube - helps maintain efficiency by swirling water to help prevent mineral buildup in tank.
- Propane (L.P.) and Short Models Available
- Factory Installed Temperature & Pressure Relief Valve

NOT FOR USE IN MOBILE HOMES



ITEM NO.	ALTITUDE (SEE NOTE BELOW)	GALLON SIZE	TYPE GAS	BTU INPUT	RECOVERY @90° RISE	1ST HOUR RATING	ANNUAL COST OF OPERATION	ENERGY FACTOR	DIMENSIONS			VENT SIZE	WT (LBS.)
									DIAMETER	HT./W. DIVERTER	HEIGHT		
33616	STANDARD	30 Short	NAT	32,000	30.6 GPH	54 GAL	\$148	.61	18 1/2"	48 1/4"	43 3/4"	3"	122
33636	STANDARD	30	NAT	35,500	34.9 GPH	66 GAL	\$148	.61	16"	61"	57 1/2"	3"	129
33630	HIGH ALT.												
33676	STANDARD	30	LP	35,500	34.9 GPH	66 GAL	\$265	.61	16"	61"	57 1/2"	3"	129
33626	STANDARD	40 Short	NAT	35,500	35.4 GPH	63 GAL	\$153	.59	20"	51 3/4"	47 1/4"	3"	139
33646	STANDARD	40	NAT	35,500	35.4 GPH	69 GAL	\$153	.59	18 1/2"	60"	55 1/2"	3"	135
33640	HIGH ALT.												
33686	STANDARD	40	LP	35,500	35.4 GPH	69 GAL	\$274	.59	18 1/2"	60"	55 1/2"	3"	135
33680	HIGH ALT.												
33656	STANDARD	50	NAT	35,500	35.4 GPH	80 GAL	\$156	.58	20"	61"	56 1/2"	3"	160
33650	HIGH ALT.												
33696	STANDARD	50	LP	35,500	35.4 GPH	80 GAL	\$279	.58	20"	61"	56 1/2"	3"	160
33690	HIGH ALT.												

WATER CONNECTIONS: TOP PLUMBED 3/4" NPT

150 PSI working pressure

NOTE: For installation up to 3300 feet above sea level - use standard model. Over 3300 feet up to 5500 feet above sea level use high altitude model only. Over 5500 feet - use high altitude model and contact local gas utility or Sears Service for further necessary modifications.



KENMORE POWER MISER 9 GAS WATER HEATER

- **9 YEAR LIMITED TANK AND PARTS WARRANTY**
1 YEAR EXCLUSIVE KENMORE® LABOR WARRANTY
- **40,000 Btu/Hour Input, 39.9 GPH Recovery Rate (40 Gallon)**
12.7% faster heating of water than our Power Miser 6 Series
- C3 Technology™ Sealed Combustion Chamber
- Cobalt Blue Ultra Coat™ Glass Lined tank with one large anode rod for superior internal tank protection
- **1" of ENERGY EFFICIENT FOAM INSULATION**
(R-Value 8.00)
- Roto Swirl™ Self Cleaning Cold Water Inlet Tube - helps maintain efficiency by swirling water to help prevent mineral buildup in tank.
- **Heat Trap Nipples Included - keeps hot water in tank when hot water is not in use, reduces energy costs!**
- Textured Steel Jacket
- Propane (L.P.) and Short Models Available
- Factory Installed Temperature & Pressure Relief Valve

NOTE: Bold type indicates additional features and benefits over The Power Miser 6 Series.

NOT FOR USE IN MOBILE HOMES

Draft Diverter accepts 3" or 4" vent

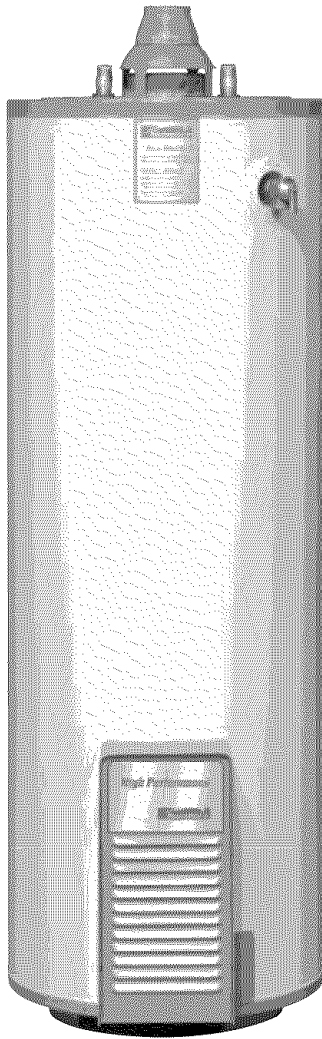


ITEM NO.	ALTITUDE (SEE NOTE BELOW)	GALLON SIZE	TYPE GAS	BTU INPUT	RECOVERY @90° RISE	1ST HOUR RATING	ANNUAL COST OF OPERATION	ENERGY FACTOR	DIMENSIONS			VENT SIZE	WT (LBS.)	
									DIAMETER	HT/W/ DIVERTER	HEIGHT			
33936	STANDARD	30	NAT	40,000	41.5 GPH	66 GAL	\$146	.62	16"	61"	57 1/2"	3"or4"	129	
33926	STANDARD	40 Short	NAT	40,000	40.9 GPH	71 GAL	\$151	.60	20"	51 3/4"	47 1/4"	3"or4"	139	
33921	HIGH ALT.													
33946	STANDARD	40	NAT	40,000	39.9 GPH	71 GAL	\$151	.60	18 1/2"	60"	55 1/2"	3"or4"	135	
33941	HIGH ALT.													
33996	STANDARD	40	LP	37,000	36.9 GPH	71 GAL	\$270	.60	18 1/2"	60"	55 1/2"	3"or4"	135	
33916	STANDARD	50 Short	NAT	40,000	42.0 GPH	80 GAL	\$153	.59	24"	53 1/4"	48 3/4"	3"or4"	190	
33911	HIGH ALT.													
33956	STANDARD	50	NAT	40,000	40.9 GPH	80 GAL	\$153	.59	20"	61"	56 1/2"	3"or4"	160	
33951	HIGH ALT.													
33966	STANDARD	65	NAT	40,000	40.9 GPH	91 GAL	\$162	.56	22"	64"	59 1/2"	3"or4"	209	
33961	HIGH ALT.													
HIGH RECOVERY MODELS (BTU inputs 50,000 and over require 4" venting)														
33976	STANDARD	48	NAT	50,000	51.2 GPH	90 GAL	\$153	.59	20"	61"	56 1/2"	4"	172	
33986	STANDARD	65	NAT	50,000	51.2 GPH	98 GAL	\$162	.56	22"	63 1/4"	59 1/2"	4"	215	

WATER CONNECTIONS: TOP PLUMBED 3/4" NPT

150 PSI working pressure

NOTE: For installation up to 3300 feet above sea level - use standard model. Over 3300 feet up to 5500 feet above sea level use high altitude model only. Over 5500 feet - use high altitude model and contact local gas utility or Sears Service for further necessary modifications.



KENMORE POWER MISER 12 HIGH PERFORMANCE GAS WATER HEATER

- **12 YEAR LIMITED TANK AND PARTS WARRANTY
1 YEAR EXCLUSIVE KENMORE® LABOR WARRANTY**
- **40,000 Btu/Hour Input, 49.0 GPH Recovery Rate (40 Gallon)
16% faster heating of water than our Power Miser 6 Series**
- C3 Technology™ Sealed Combustion Chamber
- Cobalt Blue Ultra Coat™ Glass Lined tank with two large anode rods for superior internal tank protection.
- **2" of ENERGY EFFICIENT FOAM INSULATION
(R-Value 16.00)**
- Roto Swirl™ Self Cleaning Cold Water Inlet Tube - helps maintain efficiency by swirling water to help prevent mineral buildup in tank
- Heat Trap Nipples Included - keeps hot water in tank when hot water is not in use, reduces energy costs!
- Textured Steel Jacket
- Factory Installed Temperature & Pressure Relief Valve

NOTE: Bold type indicates additional features and benefits over The Power Miser 9 Series.

NOT FOR USE IN MOBILE HOMES

Draft diverter accepts 3" or 4" vent.



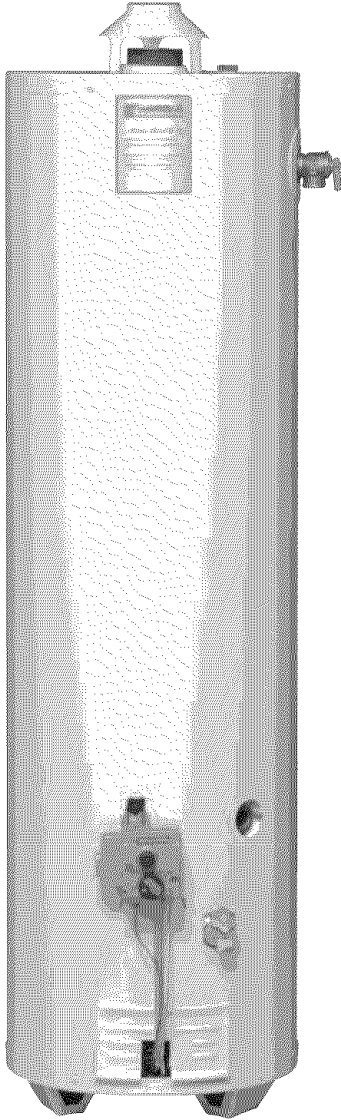
ITEM NO.	ALTITUDE (SEE NOTE BELOW)	GALLON SIZE	TYPE GAS	BTU INPUT	RECOVERY @90° RISE	1ST HOUR RATING	ANNUAL COST OF OPERATION	ENERGY FACTOR	DIMENSIONS			VENT SIZE	WT (LBS.)
									DIAMETER	HT./W. DIVERTER	HEIGHT		
33144	STANDARD	40	NAT	40,000	40.9 GPH	81 GAL	\$144	.63	20 1/2"	63 1/2"	58"	3" or 4"	166
33141	HIGH ALT.												
33154	STANDARD	50	NAT	40,000	43.6 GPH	97 GAL	\$144	.63	22"	65"	59 1/2"	3" or 4"	195
33151	HIGH ALT.												
HIGH RECOVERY MODELS (BTU inputs 50,000 and over require 4" venting) RECOVERY EFFICIENCY 80%													
33174	STANDARD	75	NAT	55,000	54.8 GPH	114 GAL	\$171	.53	24"	63 1/4"	60"	4"	240
33171	HIGH ALT.												

WATER CONNECTIONS: TOP PLUMBED 3/4" NPT

150 PSI working pressure

NOTE: For installation up to 3300 feet above sea level - use standard model. Over 3300 feet up to 5500 feet above sea level use high altitude model only. Over 5500 feet - use high altitude model and contact local gas utility or Sears Service for further necessary modifications.

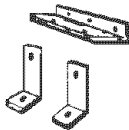
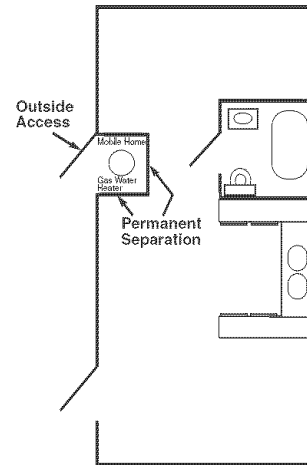
KENMORE MOBILE HOME GAS WATER HEATER



- **6 YEAR LIMITED TANK WARRANTY**
- **1 YEAR PARTS WARRANTY**
- **1 YEAR EXCLUSIVE KENMORE® LABOR WARRANTY**
- Cobalt Blue Ultra Coat™ Glass Lined tank with two large anode rods for superior internal tank protection.
- 2" of ENERGY EFFICIENT FOAM INSULATION (R-Value 16.00)
- CONVERTS FROM NATURAL TO PROPANE (LP) GAS... all necessary parts and instructions included.
- SIDE COLD WATER INLET, TOP HOT WATER OUTLET
- TOP AND FLOOR HOLD-DOWN BRACKETS INCLUDED
- FACTORY INSTALLED TEMPERATURE and PRESSURE RELIEF VALVE
- Meets energy efficiency requirements of Federal NAECA. Also meets H.U.D. 3280.707 (d) and ANSI Z21.10.1 standards

FOR MOBILE HOME USE ONLY.

NOTE: Mobile home gas water heaters sold by Sears are for installation ONLY where there is a permanent separation between the water heater compartment and the inside of the mobile home. Access to the gas water heater compartment must be from the outside.



TOP AND FLOOR
HOLD-DOWN BRACKETS



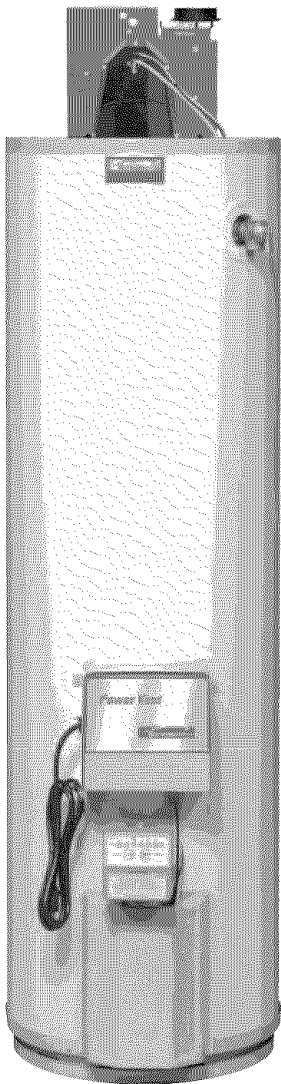
ITEM NO.	ALTITUDE (SEE NOTE BELOW)	GALLON SIZE	TYPE GAS	BTU INPUT	RECOVERY @90° RISE	1ST HOUR RATING	ANNUAL COST OF OPERATION	ENERGY FACTOR	DIMENSIONS			VENT SIZE	WT (LBS.)
									DIAMETER	HT./W DIVERTER	HEIGHT		
33384	N/A	30	NAT	30,000	31.0 GPH	54 GAL	\$148	.61	18"	59 1/2"	56"	3"	114
			LP				\$265						
33394	N/A	40	NAT	30,000	31.0 GPH	63 GAL	\$153	.59	20"	60"	56 1/2"	3"	133
			LP				\$274						

WATER CONNECTIONS: 3/4" NPT

150 PSI working pressure

NOTE: For installation over 5500 feet above sea level contact local gas utility or Sears Service for further necessary modifications.

KENMORE POWER VENT GAS WATER HEATER



REQUIRES NO CHIMNEY. . . VENTS THROUGH THE WALL!

Perfect for conversion from electric to gas water heating and where highly energy efficient furnaces are used.

Energy saving, Hot Surface Ignition System... No standing pilot!

No chimney required... Vents through outside wall or roof.

Vents up to 115 feet using 3" PVC, CPVC or ABS Schedule 40 pipe or up to 50 feet using 2" vent pipe option.

Equipped with draft hood, hi-limit cut-off with manual reset and positive draft sensor.

Requires a 120 Volt, grounded power supply.

- 6 YEAR LIMITED TANK WARRANTY
1 YEAR LIMITED PARTS WARRANTY
1 YEAR EXCLUSIVE KENMORE® LABOR WARRANTY
- Glasslined steel tank with one anode rod for tank protection.
- 1" of ENERGY EFFICIENT FOAM INSULATION (R-Value 8.00)
- 40,000 BTU/HR INPUT... 42.0 GALLONS PER HOUR RECOVERY
- Self-Diagnostic, INTELLIVENT Control System
- Factory Installed Temperature and Pressure Relief Valve



NOT FOR USE IN MOBILE HOMES

ITEM NO.	ALTITUDE (SEE NOTE BELOW)	GALLON SIZE	TYPE GAS	BTU INPUT	RECOVERY @90° RISE	1ST HOUR RATING	ANNUAL COST OF OPERATION	ENERGY FACTOR	DIMENSIONS			WT (LBS.)
									DIAMETER	MIN. HT. W/VENT	HEIGHT	
33296	STANDARD	40	NAT	40,000	42.0 GPH	74 GAL	\$148	.61	18"	75"	59 1/2"	175
33297	HIGH ALT.											
33286	STANDARD	40	LP	40,000	42.0 GPH	74 GAL	\$265	.61	18"	75"	59 1/2"	175
33287	HIGH ALT.											
33298	STANDARD	50	NAT	40,000	41.5 GPH	80 GAL	\$148	.61	20"	75 1/2"	60"	195
33299	HIGH ALT.											
33288	STANDARD	50	LP	40,000	41.5 GPH	80 GAL	\$265	.61	20"	75 1/2"	60"	195
33289	HIGH ALT.											

WATER CONNECTIONS: TOP PLUMBED 3/4" NPT

150 PSI working pressure

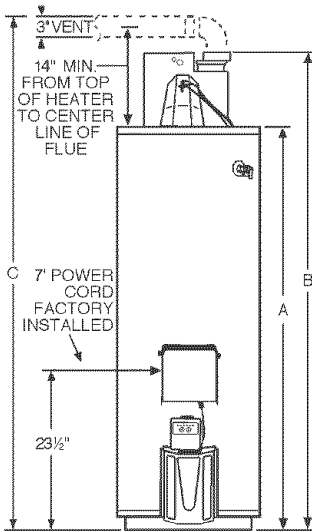
NOTE: For installation up to 3300 feet above sea level - use standard model. Over 3300 feet up to 5500 feet above sea level use high altitude model only. Over 5500 feet - use high altitude model and contact local gas utility or Sears Service for further necessary modifications.

KENMORE POWER VENT GAS WATER HEATER

The Power Vent is designed to use Schedule 40 PVC, CPVC or ABS pipe installed with 0" clearance from combustible materials. This permits many venting options when the following requirements are observed...

VENTING SYSTEM REQUIREMENTS

- The water heater must have an independent vent system from the water heater to the exterior of the building.
- Venting CANNOT be connected to existing vent pipe or chimney.
- Venting MUST terminate horizontally to the outdoors.
- USE ONLY 3" or 2" PVC, CPVC or ABS pipe and fittings.
- Vertical and horizontal runs must be secured at 3½' intervals.
- Horizontal runs REQUIRE a ¼" rise per five (5) feet.
- Vent piping CANNOT be run downhill.
- Total length of venting from water heater to vent cap CANNOT exceed 115 feet when using 3" pipe or 50 feet when using optional 2" vent pipe.
- Each 90° elbow reduces maximum allowable vent length by five (5) feet.



These Power Vent water heaters are design certified by the Canadian Standards Association (CSA) and comply with the 2004 energy efficiency requirements of the National Appliance Energy Conservation Act (NAECA).



NOT FOR USE IN MOBILE HOMES

ITEM NO.	ALTITUDE (SEE NOTE BELOW)	GALLON SIZE	TYPE GAS	BTU INPUT	RECOVERY @90° RISE	DIAMETER	DIMENSIONS			120 V ELECTRICAL AMP DRAW
							A HEIGHT	B HEIGHT W/ DIVERTER	C MIN. HT.* WITH VENT	
33296	STANDARD	40	NAT	40,000	42.0 GPH	18"	59 1/2"	70"	75"	2 Amps or Less
33297	HIGH ALT.									
33286	STANDARD	40	LP	40,000	42.0 GPH	18"	59 1/2"	70"	75"	2 Amps or Less
33287	HIGH ALT.									
33298	STANDARD	50	NAT	40,000	41.5 GPH	20"	60"	70 1/2"	75 1/2"	2 Amps or Less
33299	HIGH ALT.									
33288	STANDARD	50	LP	40,000	41.5 GPH	20"	60"	70 1/2"	75 1/2"	2 Amps or Less
33289	HIGH ALT.									

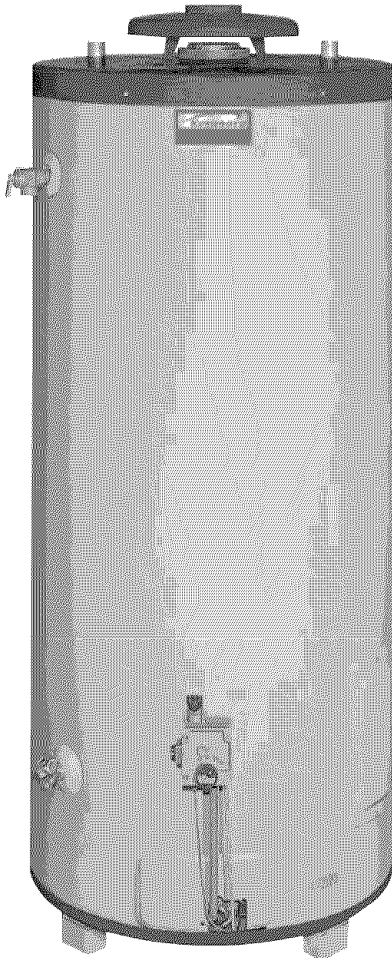
WATER CONNECTIONS: TOP PLUMBED 3/4" NPT

150 PSI working pressure

*Minimum height required for water heater and venting.

NOTE: For installation up to 3300 feet above sea level - use standard model. Over 3300 feet up to 5500 feet above sea level use high altitude model only. Over 5500 feet - use high altitude model and contact local gas utility or Sears Service for further necessary modifications.

KENMORE COMMERCIAL GAS WATER HEATERS



- 3 YEAR LIMITED TANK WARRANTY
1 YEAR LIMITED PARTS WARRANTY
- Glasslined steel tank... for protection against corrosion
- Anode rod... provides electrolytic protection for longer tank life
- Energy Efficient Foam Insulation... helps keep the water hot
- 180°F Thermostat... for applications where higher water temperatures may be required
- Non-Electric control system... shuts off gas supply in the event of pilot outage
- Long life burner and energy saving pilot
- Factory Installed Temperature and Pressure Relief Valve... protects against excessive temperature or pressure

THESE MODELS MEET OR EXCEED THE FEDERAL EFFICIENCY REQUIREMENTS PRESCRIBED BY THE ENERGY POLICY AND CONSERVATION ACT OF 1992 (EPACT) FOR COMMERCIAL WATER HEATERS. THEY ALSO MEET OR EXCEED ASHRAE 90.1b-1992.

Design Certified by the Canadian Standards Association.



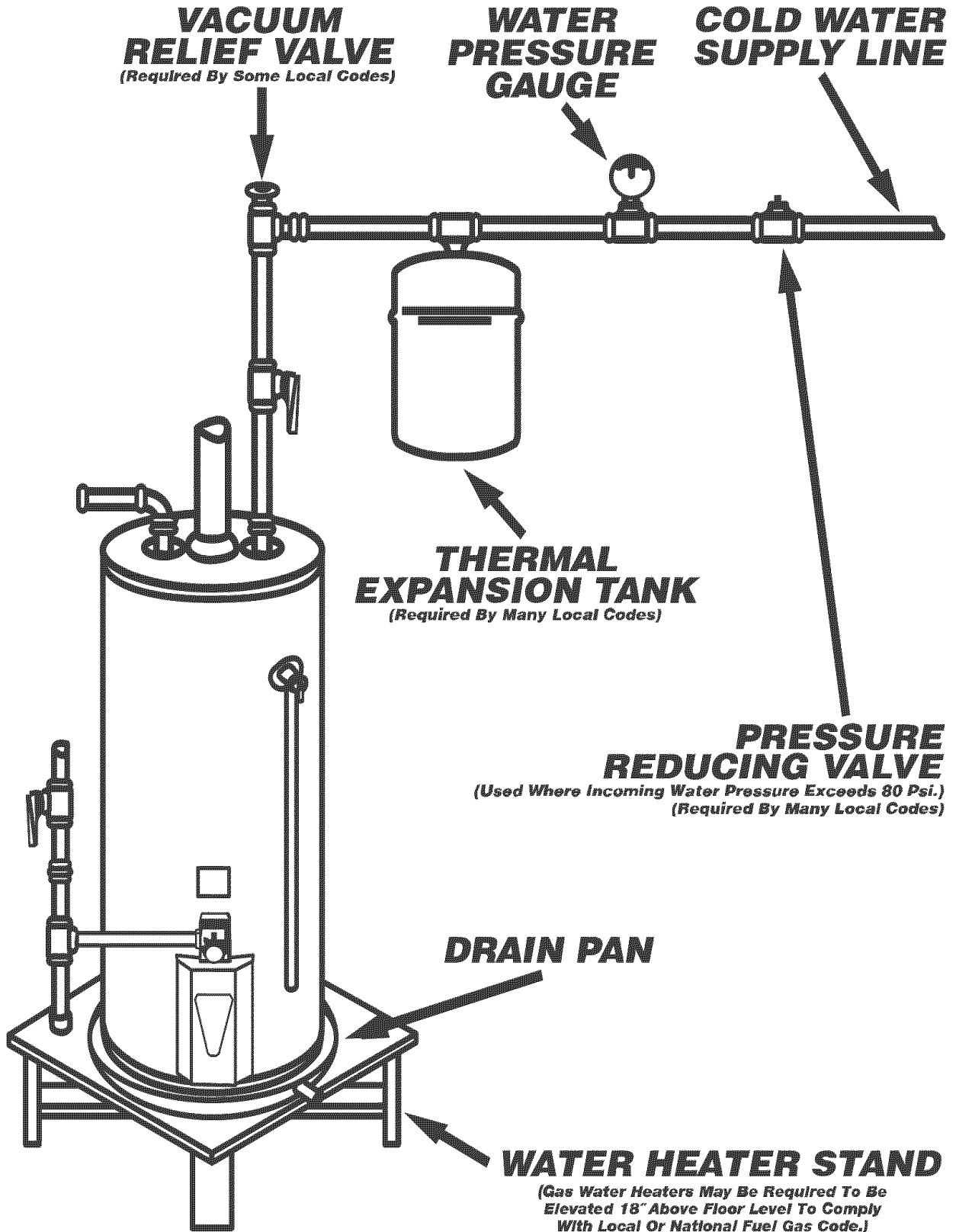
Note: Some areas require National Sanitation Foundation (NSF) listing for water heaters used in food service applications. Due to the leg height and construction, these models are not NSF approved.

ITEM NO.	GALLON SIZE	TYPE GAS	BTU INPUT	RECOVERY @ 90° RISE	INLET WATER PIPE SIZE	DIMENSIONS			VENT SIZE	WT. LBS.
						DIAMETER	HEIGHT WITH DIVERTER	HEIGHT		
33807	73	NAT	75,100	78.8 GPH	1"	24"	62 1/4"	58 1/2"	4"	245
33800	100	NAT	75,100	78.8 GPH	1"	26 3/4"	71 3/4"	68"	4"	580

WATER CONNECTIONS: TOP PLUMBED 1" NPT

150 PSI WORKING PRESSURE

TYPICAL GAS WATER HEATER INSTALLATION



GAS TROUBLESHOOTING

GAS WATER HEATERS

CUSTOMER SAYS:

HEATER LEAKS WATER CHECK FOR CONDENSATION: When large amounts of cold water are in the tank (such as at installation) condensation may form on the tank and run to the bottom pan or floor. This normally stops within a day or two; if it does not the water heater is probably undersized. NOTE: The colder the incoming water temperature the more condensation.

MAKE SURE DRAIN VALVE IS CLOSED.

CHECK PLUMBING FITTINGS: A small leak at the top of the heater will run down tank and collect in bottom pan or floor. Refer customer to leak checklist in Owners manual. Check tightness of T&P, heat traps, nipples and flexible water connectors or pipe joints.

T & P WEEPING OR LEAKING: Thermal expansion along with high water pressure or a "closed" water system due to check valve or "backflow preventer" are the cause. A pressure reducing valve and/or a thermal expansion tank are the cure. NOTE: Colder incoming water temperatures increase thermal expansion - thus the problem is more severe in the late winter months. See page 30 for more information.

VERIFY WARRANTY STATUS IF ACTUALLY LEAKING

ASK THE CUSTOMER FOR THE WARRANTY EXPIRATION DATE FROM THE KENMORE TANK WARRANTY CERTIFICATE. If the customer cannot read the expiration date, the water heater was probably provided as a replacement. The following statement appears when the Tank Warranty Certificates has been removed.

"This replacement water heater was supplied by Sears, Roebuck and Co. in accordance with the original tank warranty. This replacement is warranted for the same period of time from the date of the original purchase. A new Tank Warranty Certificate will be sent to you by mail. Please affix the new label here."

IN THIS CASE THE DATE OF PURCHASE OF THE ORIGINAL WATER HEATER DETERMINES WARRANTY STATUS, THE CUSTOMER'S RECEIPT MUST BE USED TO VALIDATE WARRANTY STATUS.

NO HOT WATER

CHECK GAS SHUT OFF and GAS CONTROL TO MAKE SURE OPEN. MAKE SURE PILOT IS LIT.

NOT ENOUGH HOT WATER

CAREFULLY RAISE THE THERMOSTAT SETTING: Hot = 120°, A = 130°, B = 140° (Temperatures are approximate). NOTE: On older water heaters the "HOT" setting was approximately 140°.

WATER TOO HOT:

DECREASE THE THERMOSTAT SETTING

HEATER MAKES SOUNDS

TICKING OR METALLIC SOUNDS are normal and caused by expansion and contraction of metal parts.

RUMBLING OR PERCOLATING NOISES can be caused by sediment accumulation - tank should be drained periodically to prevent build-up.

A LOUD POUNDING can happen when a faucet is turned off or washer valve is closed - this is called "water hammer" - usually caused by high water pressure. An expansion tank may be needed.

SIZZLING usually caused by condensation contacting the flame or burner. If a new installation, this should go away within a few days. If it continues the water heater is undersized in either capacity or BTU input, or both.

SMELLY WATER

DETERMINE IF THE ODOR IS IN BOTH THE HOT AND COLD WATER - Test cold water by heating in a pan with a lid. Just before boiling, have the customer lift the lid and CAREFULLY smell. If the odor is present, the problem is in the water source. A taste and odor filter are needed.

If odor is not present in the cold water test, water conditions and sulfate reducing bacteria (Harmless to humans) may be reacting to hydrogen given off by the protective action of the anode rod in a glasslined tank. Chlorination of the tank and changing the anode rod will likely resolve the problem. Since this is caused by a water condition and not the water heater this procedure is not covered by the Limited Warranty. SEE SERVICE FLASH SF 42-481 dated 5/26/89. THE ANODE ROD MUST BE REPLACED! NEVER LEAVE A GLASSLINED WATER HEATER WITHOUT ANODE PROTECTION!

ALWAYS REFER THE CUSTOMER TO THE OWNERS MANUAL FOR SPECIFIC INSTRUCTIONS.

TYPE OF ELEMENTS

STANDARD ELEMENT...

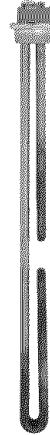


High watt density;
zinc coated copper.

USED ON:

THE ECONOMIZER 6
TALL, SHORT
AND COMPACTS.

SUPER LIMEGUARD™ DUALWATT™ ELEMENT...



Very low watt density;
stainless steel, superior resistance to
lime buildup, longest life and
maintained efficiency.

**USED IN THE LOWER ELEMENT
POSITION ON:**

THE POWER MISER 9, 12 AND
ENDURA SERIES.

LIMEGUARD™ ELEMENT...



Low watt density;
zinc coated copper, resists
lime buildup for longer life and
maintained efficiency.

USED ON:

POWER MISER 6 SERIES IN THE
UPPER ELEMENT POSITION AND
FOR REPLACEMENT.

SUPER LIMEGUARD™ ELEMENT...



Very low watt density; stainless steel,
superior resistance to lime buildup,
longest life and maintained efficiency.
1" Diameter Threads

USED ON:

POWER MISER 8+ & 10+ SERIES
HEATERS
BUILT PRIOR TO FEBRUARY, 1997.
(Code dates E97 and before)
& POWER MISER 9, 12 & ENDURA
SERIES HEATERS AFTER
DECEMBER 2000.
(Code date C01)

LIMEGUARD™ DUALWATT™ ELEMENT...

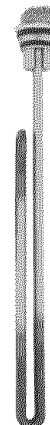


Low watt density;
zinc coated copper, resists
lime buildup for longer life and
maintained efficiency.

**USED IN THE LOWER
ELEMENT POSITION ON:**

THE POWER MISER 6 SERIES.

SUPER LIMEGUARDII™ ELEMENT...



Very low watt density; stainless steel,
superior resistance to lime buildup,
longest life and maintained efficiency.
1 3/8" Diameter Threads

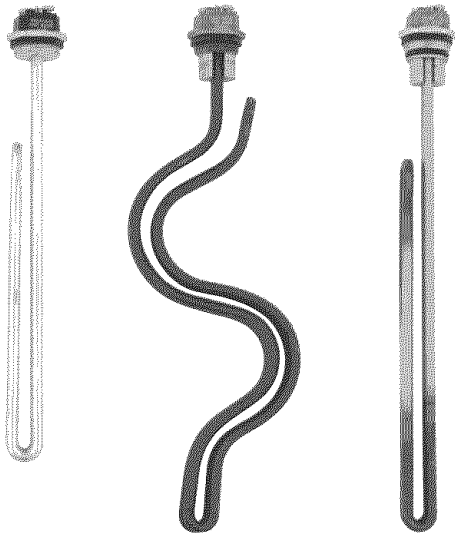
USED ON:

POWER MISER 8+, 9+, 10+, 12+ &
ENDURA SERIES HEATERS
BUILT AFTER FEBRUARY, 1997
THROUGH DECEMBER 2000.
(Code dates F97 through C01)

Water heaters using 1 3/8"
elements will display a red ○
on element access panel.

UNIVERSAL REPLACEMENT PARTS

Fit Kenmore and most other brands.

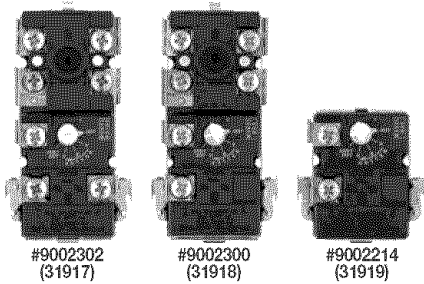


LIMEGUARD™ ELEMENT (1" Threads) **SUPER-LIMEGUARD™ ELEMENT** (1" Threads) **SUPER-LIMEGUARD II™ ELEMENT** (1 3/8" Threads)

LIMEGUARD™ HEATING ELEMENTS... zinc coated copper, low watt density. Resists lime build-up for long life. 1" diameter threaded elements.		
ITEM NO.	SEARS PART NO.	WATTS/VOLTS
31901	9000139	1650 watt/120 volt
31903	9000260	3800 watt/240 volt
31905	9000151	5500 watt/240 volt

SUPER-LIMEGUARD™ HEATING ELEMENTS... stainless steel, very low watt density provides superior resistance to lime build-up for longest life and maintained efficiency. 1" diameter threaded elements.		
ITEM NO.	SEARS PART NO.	WATTS/VOLTS
31906	9000049	3800 watt/240 volt
31908	9000396	5500 watt /240 volt

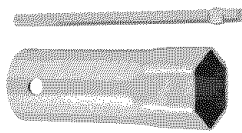
SUPER-LIMEGUARD II™ "AMALLOY" HEATING ELEMENTS... very low watt density, variable resistance coil wire provides for long element life and maintained efficiency. 1 3/8" diameter threaded elements used on PM 8+, PM 9+, PM 10+, PM 12+ and Endura heaters displaying a red ○. These models were introduced into the line approximately February 1, 1997.		
ITEM NO.	SEARS PART NO.	WATTS/VOLTS
32906	9002500	3800 watt/240 volt
32908	9002501	5500 watt /240 volt



#9002302 (31917) #9002300 (31918) #9002214 (31919)

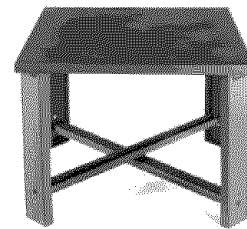
WATER HEATER THERMOSTATS					
ITEM NO.	PART NO.	DESCRIPTION		OLD PART NO.	OLD ITEM NO.
31917	9002302	Upper Adjustable Thermostat (Used on all double element models)	Replaces	9000510 & 9001954	31911
31918*	9002300	Lower Thermostat with ECO (Used on single element and three wire lead models)	Replaces	9000509 & 9000523	31910
31919	9002214	Lower Thermostat (Used on all double element water heaters except three wire lead models)	Replaces	9000507 & 9000512	31912

*Not for use in Point-Of-Use models.



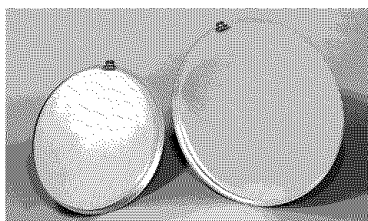
HEATING ELEMENT WRENCH KIT... eases replacement of elements. 1 1/2" and 1 7/8" hex.

ITEM NO.	SEARS PART NO.
31913	9000429 (1 1/2")



WATER HEATER STAND... Raises gas water heater 18" above floor level when installed in garage as required by many codes. Constructed of high strength steel.

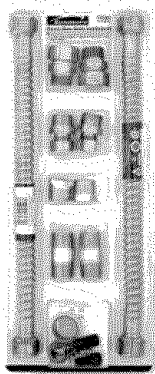
ITEM NO.	SIZE
33010	18"H x 24"W x 24"D



DRAIN PAN... helps to avoid possible water damage to home if tank leaks. 1" drain connection. Aluminum.

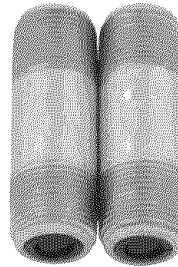
ITEM NO.	SIZE
33014	20" Diameter drain pan for water heaters 18" in diameter and under.
33015	22" Diameter drain pan for water heaters 20" in diameter and under.
33016	24" Diameter drain pan for water heaters 22" in diameter and under.
33017	28" Diameter drain pan for water heaters 26" in diameter and under.

31924 - Electric Installation Kit



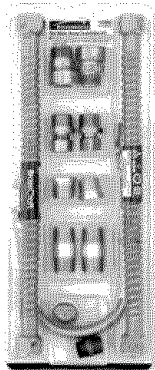
- Use kit for installation of electric water heaters
- Kit contains parts necessary for connection to 1/2" or 3/4" threaded or copper pipe
- Kit includes: 15" flexible water connectors, 3/4" compression couplings, 1/2" compression couplings, 3/4" x 1/2" reducer bushings, 3/4" pipe nipples, wiring connectors and teflon tape
- Ideal for the Do-It-Yourself customer

33904 - Heat Trap Nipples (PAIR)



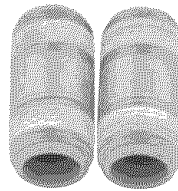
- Helps reduce heat transfer from water heater to pipes
- Use in place of standard connecting nipples
- Use of both heat traps can help you save energy dollars.
- Qualifies as dielectric fittings in most municipalities

33902 - Gas Installation Kit



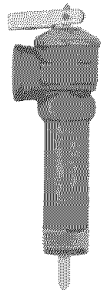
- Use kit for installation of gas water heaters
- Kit contains parts necessary for connection to 1/2" or 3/4" threaded or copper pipe
- Kit includes: 15" flexible water connectors, 18" flexible gas connector, 3/4" compression couplings, 1/2" compression couplings, 3/4" x 1/2" reducer bushings, 3/4" pipe nipples, 1/2" all-thread pipe nipple for gas valve and teflon tape
- Ideal for the Do-It-Yourself customer

33903 - 2" PEX Nipples (PAIR)



- Two 3/4" NPT plastic lined pipe nipples for hot and cold water connections on top plumbed water heaters

33086 - Temperature And Pressure Relief Valve



- Meets most municipal and state code requirements
- 4" thermostat probe
 - Hand test lever
 - Factory set to relieve temperature at 210°; pressure at 150 lbs.
 - 3/4" male thread inlet
 - 3/4" female thread outlet
 - A.G.A./A.S.M.E. listed

33102 & 33105 - Water Heater Expansion Tanks



- Used to prevent thermal expansion of water in a closed system from causing the T & P to weep.
- 3/4" Male NPT fitting
- Rated for residential water heater use only.
- Maximum working pressure is 150 PSI at a maximum of 160°F.
- 2 Gallon for up to 66 gallon water heater.
- 5 Gallon for over 66 gallon water heater.

Item Number	Description
31924	Electric Installation Kit
33086	Temperature and Pressure Relief Valve
33102	2 Gallon Water Heater Expansion Tank, 8" diameter x 12" Tall
33105	5 Gallon Water Heater Expansion Tank, 11" diameter x 14" Tall
33902	Gas Installation Kit
33903	3/4" Plasticert Nipples
33904	Heat Trap Nipples

THERMAL EXPANSION AND WEeping TEMPERATURE AND PRESSURE RELIEF VALVES

As water is heated it expands. If this expansion takes place within a confined space pressure increases.

In the past several years, certain things have occurred which have effectively “closed” the water systems in many homes leaving little or no room for the water to expand when heated by the water heater.

- New water meters contain a check valve to prevent backflow of water into the main; or a separate backflow device has been installed by the utility or customer.
- Water pressures have been increased by the water utility to serve more customers; in many cases these pressures may reach 120 to 140 PSI during low water use times. Water pressure over 80 PSI is generally considered high and can cause premature failure of faucets, fittings and other plumbing items.
- Pressure reducing valves without bypass valves have been installed.

With any one of these conditions; as the water is heated by the water heater it tries to expand in size, and since there is no room for it to expand, pressure increases. When the pressure reaches approximately 150 PSI the temperature and pressure relief valve (T & P) does its job and opens allowing water to escape, lowering the water pressure. In most cases the new water heater heats water faster than the old, which means that there is less time for someone to use water and lower pressure, before the T & P opens. Since the old water heater probably leaked, it prevented pressure from reaching the T & P opening pressure.

TEMPERATURE AND PRESSURE RELIEF VALVES ARE NOT DESIGNED FOR CONSTANT WEeping OR DISCHARGE OF WATER.

Solutions to this problem are covered in Service Flash SF42/65-493 dated June 8, 1990.

AFTER CHECKING THE HIGHEST INCOMING WATER PRESSURE:

- If the pressure does not exceed 80 PSI, install a water heater expansion tank (# 33102 or 33105) in the cold water line near the water heater. The expansion tank’s air charge must be adjusted to match the incoming water pressure.

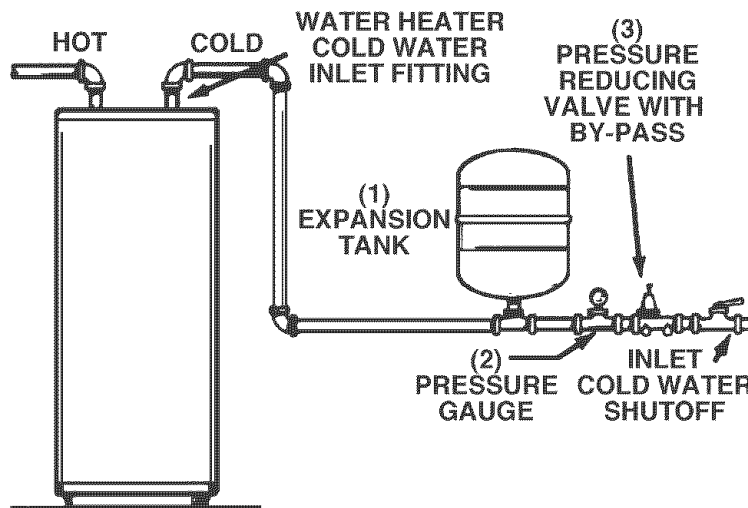
OR

Install a pressure only relief valve (rated at 125 PSI) in a location so that its discharge of water will cause no damage.

- If the pressure exceeds 80 PSI install a pressure reducing valve with built-in bypass in the cold water line; in cases of very high incoming water pressure this may not totally solve the problem and a water heater expansion tank will also be required.

Follow the instructions with the valve or valves and the water heater expansion tank.

TYPICAL INSTALLATION OF WATER HEATER EXPANSION TANK (VERTICAL MOUNTING)



WATER HEATER WARRANTIES

Sears warranties are different... parts, tank and installation are covered for the first year... most competitive warranties cover only parts and tank... not the installation costs of replacing a leaking tank during the first year. For example, The Power Miser 9 warranty is shown below. The actual warranty can be found on the back of the owner's manual.

After the first year and through the balance of the warranty period the customer is responsible for installation costs of replacing a leaking water heater or part.

FULL ONE YEAR WARRANTY ON WATER HEATER

For one year from the date of purchase, when your Sears Kenmore water heater is installed and operated in a single-family residence in accordance with the instructions in this manual, Sears will:

1. Repair defects in material or workmanship in this water heater, free of charge.
2. Furnish and install a new current model water heater of equal capacity and quality, free of charge, if a leak occurs in the tank.

LIMITED WARRANTY ON TANKS THAT LEAK

After one year and through 9 years from the date of purchase for water heaters used in a single-family residence, if a leak occurs in the tank, Sears will furnish a new current model water heater of equal capacity and quality. You will be charged for any installation.

LIMITED WARRANTY ON PARTS

After one year and through 9 years from the date of purchase, when your Sears Kenmore water heater is used in a single-family residence and is installed and operated in accordance with the information in this manual, if a part fails due to a materials or workmanship, Sears will furnish a replacement free of charge. You will be charged for labor.

If the water heater is subjected to commercial, institutional, industrial or use in residences of two families or more, the above warranty coverage for tanks that leak is effective for 2 years from the date of purchase and the above parts warranty is effective for 1 year from the date of purchase.

To obtain warranty service, SIMPLY CALL 1-800-4MY-HOME (1-800-469-4663). "This warranty applies only while this product is in use in the United States."

This warranty gives you specific legal rights and you may also have other rights which vary from state to state.

SEARS, ROEBUCK AND CO., Dept. 817 WA, Hoffman Estates, IL 60179

GLOSSARY OF TERMS

ANNUAL COST OF OPERATION...the estimated cost of operation from FTC label on the water heater...calculated based on energy costs and average usage published by the Federal Trade Commission...used to compare different water heaters.

ASHRAE 90A...efficiency standards set by the American Society of Heating, Refrigeration and Air Conditioning Engineers...a voluntary standard. Superseded by NAECA.

BOCA...Building Officials and Code Administrators International, Inc.

BTU...British Thermal Unit...the amount of heat required to raise the temperature of one pound of water one degree Fahrenheit... used to measure the input rate of a gas water heater.

CSA...Canadian Standards Association...an independent laboratory for testing and certification of appliances which meet standards set by the American National Standards Institute.

ECO...energy cut-off...a safety cut-off switch built into thermostat of a water heater to shut off the flow of gas or electricity before temperatures reach un-safe levels. ALL Sears water heaters have an ECO.

ENERGY FACTOR...a measure of the overall efficiency rating of a water heater...the higher the number the more efficient the water heater.

1ST HOUR RATING...the calculated amount of hot water a fully heated water heater can deliver in the first hour.

GAMA...Gas Appliance Manufacturers Association...the certification agency for energy efficiency of all residential water heaters. Covers electric water heaters with capacities from 20 to 120 gallons; with inputs of 12KW or less and voltage of 250 or less. Covers gas water heaters from 20 to 100 gallons with inputs of 75,000 BTU or less.

INPUT RATE...a measure of heat input to a water heater; BTUs per hour of gas, WATTS per hour of electricity.

NAECA...National Appliance Energy Conservation Act of 1987... sets minimum energy efficiency standards for water heaters and other products. Effective with water heaters produced on or after January 1, 1990.

RECOVERY...Gallons of water per hour a water heater can raise the temperature of by 90°... a higher recovery rate on the same size water heater increases the first hour rating.

RECOVERY EFFICIENCY %... the percent of heat value recovered from fuel used in a gas water heater. Only one measure of efficiency...the ENERGY FACTOR is the best overall measure of a water heater's efficiency.

R-VALUE...a measure of insulating value...the higher the R-Value the greater the resistance to heat transfer.

UL...Underwriters Laboratory...an independent laboratory for testing and listing products which meet standards set by UL and the American National Standards Institute.

ANSWERS TO SOME COMMONLY ASKED QUESTIONS

Where can I find answers to questions concerning water heaters?

- Water Heater ML Book
- 1-800-877-6420 Water Heater Sales Center
- E-Learning

Where can I go if I need a merchandise list book or water heater tear pad?

- POWS
ML Book 3442
Tear Pad 3443

Where can I find answers to questions concerning merchandise protection agreements?

- 1-800-767-2000

Where can I find information about choosing the correct water heater for my customer?

- ML Book

What is the Sears Product Services phone number?

- 1-800.4.myhome (1-800-469-4663)

Where do I find technical information about water heaters?

- 1-877-800-5804

Where do I find information on Sears professional installation of water heaters?

- 1-800-887-6420
- Your District Contractor Services Manager "DCSM"

What are the Retail Replenishment Center (RRC) customer service phone numbers?

- Columbus, OH (420)800-326-1465
- Manteno, IL (440)888-468-2151
- Memphis, TN (446).....800-726-4475
- Delano, CA (449)800-795-5895
- Jacksonville, FL (425).....800-767-0425
- Wilkes-Barre, PA (443)800-669-6974
- Garland, TX (447)800-488-2411

