



Whirlpool GOLD W4GH6 Installation Instructions Manual

Whirlpool heat pump user manual

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We have provided many important safety messages in this manual and on your appliance. Always read and obey all safety messages.

This is the safety alert symbol.

This symbol alerts you to potential hazards that can kill or hurt you and others.

All safety messages will follow the safety alert symbol and either the word "DANGER" or "WARNING."

These words mean:



All safety messages will tell you what the potential hazard is, tell you how to reduce the chance of injury, and tell you what can

happen if the instructions are not followed.

These instructions are intended as a general guide only for use by qualified persons and do not supersede any national or local codes in any way. The installation must comply with all state and local codes as well as the National Electrical Code

Whirlpool Gold

Model W4GH6

48488A006

HEAT PUMP SAFETY

Your safety and the safety of others are very important.

INSTALLATION REQUIREMENTS

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You can be killed or seriously injured if you don't immediately follow instructions.

You can be killed or seriously injured if you don't follow instructions.

The heat pump is designed and approved for outdoor use only.

The heat pump must be installed with no ductwork in the airstream. The outdoor fan is not designed to operate against

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any additional static pressure.

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Related Manuals for Whirlpool GOLD W4GH6

[Heat Pump Whirlpool WGP45 AM Installation Instructions Manual](#)

Package heat pump or package cooling unit (20 pages)

[Heat Pump Whirlpool WHP44 Installation Instructions Manual](#)

(16 pages)

[Heat Pump Whirlpool W4GH8 Installation Instructions Manual](#)

(20 pages)

[Heat Pump Whirlpool WHP43 Installation Instructions Manual](#)

(16 pages)

[Heat Pump Whirlpool W2GH3 Installation Instructions Manual](#)

(12 pages)

[Heat Pump Whirlpool W2H3 Installation Instructions Manual](#)

(12 pages)

[Heat Pump Whirlpool W2PH3 Installation Instructions Manual](#)

Whirlpool w2ph3; w2pc3; w4ph4; w4pc4 heat pump (16 pages)

Summary of Contents for Whirlpool GOLD W4GH6

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These instructions are intended as a general guide only for use by qualified persons and do not supersede any national or local codes in any way. The installation must comply with all state and local codes as well as the National Electrical Code Whirlpool Gold™ Model W4GH6 48488A006 Table of Contents SEQUENCE OF OPERATION ...12...

[Page 2: Tools And Parts](#)

Tools and Parts Gather the required tools and parts before starting installation. Read and follow the instructions provided with any tools listed here. Tools Needed Torch " nut driver " nut driver Adjustable wrench Parts Needed Check local codes and HVAC supplier. Check existing electrical supply, and read "Electrical Requirements,"...

[Page 3](#) Minimum Clearances A B C Power Supply 48" Overhead Clearance (Discharge Air) 12" Clearance (Inlet Air) 30" Service 36" Clearance Access Clearance (Inlet Air) A. Weatherproof disconnect switch D. House thermostat B. NEC class 1 wiring C. NEC class 2 wiring Line Set Isolation The following illustrations demonstrate procedures which ensure proper refrigerant line set isolation.

[Page 4: Electrical Requirements](#)

Electrical Requirements WARNING Electrical Shock Hazard Electrically ground condensing unit or heat pump. Connect ground wire to ground lug. Use copper wire for supply connection. Correct wire gauge is shown in the chart below. Failure to follow these instructions can result in death or electrical shock.

[Page 5](#) 1. Disconnect power. 2. Remove the refrigerant from the existing system per the manufacturer's instructions provided with the recovery system being used. Connect the R-22 gauge set is connected to both sides of the refrigerant system (as shown), and verify that the entire system is void of refrigerant in accordance with the manufacturer's instructions provided with the recovery system being used.

[Page 6: Connect Refrigerant Lines](#)

17. Install the valve cores. A. Suction pressure tap B. Liquid pressure tap Refrigerant lines must be connected by a licensed, EPA certified refrigerant technician in accordance with established

procedures. **IMPORTANT:** Connecting refrigerant lines must be clean, dehydrated, refrigerant-grade copper lines. Heat pumps should be installed only with specified line sizes for approved system combinations with elevation differences up to 15 ft and total length of up to 50 ft.

[Page 7](#) 6. Tighten to 20 to 30 ft lbs. Use backup wrench on all wrench flats. **NOTE:** Overtightening may crush the Teflon a leak. 7. Connect the external equalizer line to the equalizer port on the suction line. 8. Tighten to 8 ft lbs. 9.

[Page 8](#) Normal Operating Pressures **NOTE:** Values provided in chart are typical pressures. Indoor unit matchup, indoor air quality and indoor load will cause pressures to vary. Model Temperature of the Air Entering the Outdoor Coil Liquid Cooling—1st Stage (Low Capacity) 65°F 75°F 85°F 95°F...

[Page 9: Make Electrical Connections](#)

Suction Line Sizes Installations exceeding 100 ft are not recommended. Btu/h Line Set Size (in. OD) 24,000 36,000 48,000 60,000 Line Set Length Less than 25 ft 25 ft **WARNING** Electrical Shock Hazard Electrically ground condensing unit or heat pump. Connect ground wire to ground lug.

[Page 10](#) 4. Connect ground wire to ground lug. A. Ground lug B. Field supply ground wire C. 208/230 volt field supply wires 5. Connect low voltage circuit. Typical Wiring Connection (low voltage circuit) **NOTE:** Some connections may not apply. Refer to specific thermostat and indoor unit. Thermostat Thermostat A.

[Page 11: Complete Installation](#)

Outdoor Unit Typical Wiring Diagram Outdoor Compressor Crankcase Heater Crankcase Thermostat Defrost Thermostat Compressor 208-230/60/1 Crankcase Heater Crankcase Equipment Thermostat Ground Line Voltage Factory Installed Line Voltage Field Installed 24 Volt Factory Installed Class II Voltage Field Installed 1. Operate the heat pump for a period of at least 15 minutes to allow for pressures and temperatures to stabilize.

[Page 12: Sequence Of Operation](#)

Cooling Cycle Upon cooling demand, the thermostat closes circuit R to O and Y. Closing R to O and Y energizes the reversing valve for cooling operation and closes the heat pump contactor, starting the compressor and outdoor fan. The thermostat automatically closes R to G circuit, which also brings on the indoor fan at the same time.

[Page 13: Adjust Defrost System](#)

Time Delay The time delay is 5 minutes long. The delay helps to protect the compressor from short cycling in case the power to the heat pump is interrupted or a pressure switch opens. The delay is bypassed by placing the timer select jumper across the TEST pins for 0.5 seconds.

[Page 14: Troubleshoot The Defrost System](#)

2. Remove the heater compartment access panel. 3. Adjust the time period between defrost cycles by placing the defrost time plug in the proper position. See "Defrost Control Board." For 30-minute intervals between defrost cycles, connect the Defrost Time Setting Plug to the pins corresponding to 30.

[Page 15: Troubleshooting](#)

Heat Pump Fails to Operate Properly Review "Sequence of Operation" and visually inspect the heat pump before troubleshooting: **WARNING** Electrical Shock Hazard Disconnect power before servicing. Replace all parts and panels before operating. Failure to do so can result in death or electrical shock. System Diagnostic Module W4GH6 heat pumps contain a diagnostic module for troubleshooting heat pump system failures.

[Page 16](#) Flash Codes LED Status Fault Description Alert (Yellow) Flash Code 3 Short Cycling: Compressor is running only briefly. Alert (Yellow) Flash Code 4 Locked Rotor Alert (Yellow) Flash Code 5 Open circuit Alert (Yellow) Flash Code 6 Open Start Circuit: Current only in run circuit.

[Page 17: System Maintenance](#)

Whirlpool ® 14610 Breakers Drive Jacksonville, FL 32258 Please include a daytime phone number in your correspondence. To order accessories contact your Whirlpool Heating dealer.

Home Cooling and Heating Accessories ® Home Cooling and...

[Page 19](#) Keep this book and your sales slip together for future reference. You must provide proof of purchase or installation date for in-warranty service. Write down the following information about your Split System Heat Pump—Outdoor Section to better help you obtain assistance or service if you ever need it.

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This manual is also suitable for:

Gold w4gh624Gold w4gh636Gold w4gh648Gold w4gh660