CEPL
WeatherMaker Two-Zone

Installation and Start-Up Instructions

NOTE: Read the entire instruction manual before starting the installation.

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SAFETY CONSIDERATIONS

Improper installation, adjustment, alteration, service, maintenance, or use can cause fire, electrical shock, or other conditions which may cause personal injury or property damage. Consult a qualified installer, service agency, or your distributor or branch for information or assistance. The qualified installer or agency must use factory-authorized kits or accessories when modifying this product. Refer to the individual instructions packaged with the kits or accessories when installing.

Follow all safety codes and wear safety glasses. Have fire extinguisher available. Read these instructions thoroughly and follow all warnings or cautions attached to the unit. Consult local and state building codes and Sheet Metal and Air Conditioning National Association (SMACNA) for special installation requirements.

Recognize safety information. This is the safety-alert symbol ⚠ . When you see this symbol on the unit or in instructions and manuals, be alert to the potential for personal injury.

Understand the signal word DANGER, WARNING, or CAUTION. These words are used with the safety-alert symbol. DANGER identifies the most serious hazards which **will** result in severe personal injury or death. WARNING signifies hazards that **could** result in personal injury or death. CAUTION is used to identify unsafe practices which **would** result in minor personal injury or product and property damage.

INSTALLATION CONSIDERATIONS

1. Install in non-condensing area with ambients between 32°F and 120°F.
2. Use vibration isolators (flex connectors) on the zone dampers and ductwork to minimize noise.
3. Place dampers away from areas that may be noise sensitive.
4. TXV is required in air conditioning and heat pump applications.
5. Use separate isolated transformer to supply power to WeatherMaker Two-Zone Center. (40va minimum, class 2, transformer, field supplied)

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Fig. 1—WeatherMaker Two-Zone System

INTRODUCTION

The WeatherMaker Two-Zone System allows the air conditioning and heating equipment to control temperatures in 2 distinct spaces or zones within a building. Each zone has independent temperature settings controlled by a thermostat.

NOTE: Thermostats are purchased separately.

The comfort temperature settings can change automatically through the use of schedules if programmable thermostats are selected. This allows WeatherMaker Two-Zone to change the temperature settings in zones to reflect occupancy or usage. The WeatherMaker Two-Zone System uses motorized air volume control dampers (also called zone dampers) to regulate the flow of conditioned air into the zones.

INSTALLATION

Step 1—Check Equipment and Jobsite

INSPECT EQUIPMENT — File claim with shipping company, prior to installation, if shipment is damaged or incomplete.

Step 2—Wiring

⚠ WARNING

To prevent personal injury or possible equipment damage, disconnect the power supply before routing wire.

All wiring must comply with local, state, and national codes.

NOTE: Use No. 18 AWG color-coded, insulated (35°C min) wire. If thermostats are to be located more than 100 ft from the WeatherMaker Two-Zone Center as measured along the control voltage wires, use 16 AWG colored-coded wires to avoid excessive voltage drop. All wiring is run back to the WeatherMaker Two-Zone Center.

Step 3—Install WeatherMaker Two-Zone

NOTE: WeatherMaker Two-Zone is approved for indoor use only and should never be installed with any of its components exposed to the elements. . Do not mount the the WeatherMaker Two-Zone Center where it will be accessible to children. Do not locate the center in areas of the home that are noise sensitive since relays are energized and and de-energized during operation and may be an annoyance. Install WeatherMaker Two-Zone in an area with a temperature range between 32°F and 120°F.

Install the WeatherMaker Two-Zone center in a vertical position. Locate in an area that is easily accessible in case servicing should be required.

⚠ CAUTION

To prevent possible damage to the WeatherMaker Two-Zone Center, do not mount on plenum, ductwork, or flush against furnace.

Step 4—Install Zone Dampers

IMPORTANT: If conditions exist for possible condensing, the motor must be positioned for adequate draining. (See Fig. 2.)

NOTE: If a multi-damper enabler is used to link dampers together, then add 5va per damper to the transformer power supply rating. Reference multi-damper enabler Installation Instructions.

Zone dampers may be installed in any direction.

Position the dampers so that the actuator is visible for inspection and accessible in the event it would ever need to be replaced. The black mark on the end of the damper shaft represents the position of the damper.

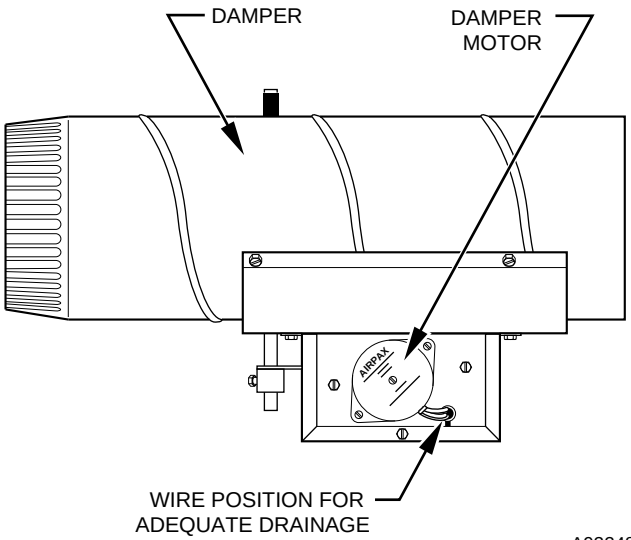

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Fig. 2—Damper Motor Positioning

NOTE: In some areas where excessive condensing may occur, carefully insulate over the actuator assembly. Make sure insulation does not bind crank arm or interfere with operation of actuator.

Before insulating the ductwork, check for proper damper operation. Apply 24vac between COM and OP to open the damper and COM and CL to close the damper. (See Fig. 3.) The damper will modulate counter-clockwise to open and clockwise to close. In the full-open position, the crank arm connection on the motor's threaded shaft will be closest to the motor. In full-closed position, it will be furthest away from the motor.

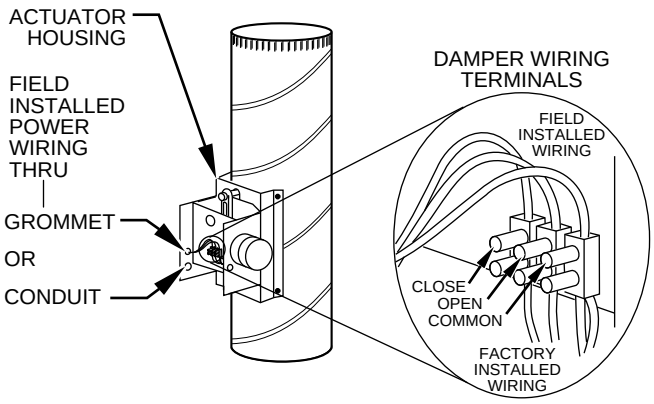

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Fig. 3—Damper 24-vac Connections

If in an emergency it becomes necessary to force a damper open manually, loosen the setscrews located on the crank and then turn the damper shaft. To realign, apply 24vac between COM and OP. Adjust and tighten screws.

To avoid noise and vibration, do not hard mount dampers to any solid structure such as joists.

NOTE: There is a limit switch at the full-open position and the full-closed position to stop damper travel.

ROUND METAL DUCTWORK

IMPORTANT: If application exists with all metal ductwork without insulation, flex connectors must be used on each end of the zone dampers to avoid noise and vibration.

1. Crimp end of branch duct.
2. Slip end of flex connector over zone damper and use self-tapping sheet metal screw to secure. (See Fig. 4.)

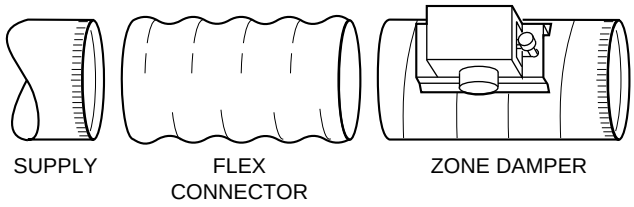

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Fig. 4—Round Metal Ductwork

3. Properly seal joint using duct tape, mastic, or other approved method.
4. Insulate damper using 1-1/2-in. to 2-in. insulation. (Check your local codes.) (See Fig. 5.)

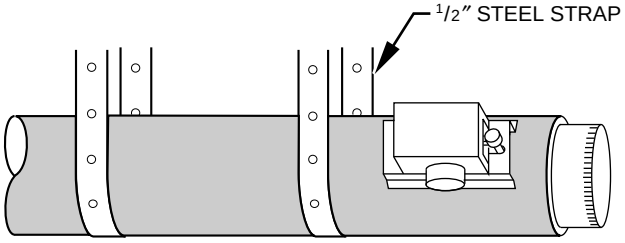

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Fig. 5—Insulated Round Metal Ductwork

NOTE: All zone dampers and ductwork must be properly supported according to local codes or SMACNA standards.

RECTANGULAR METAL DUCTWORK

1. Make connections using S-lock and drives. (See Fig. 6.)

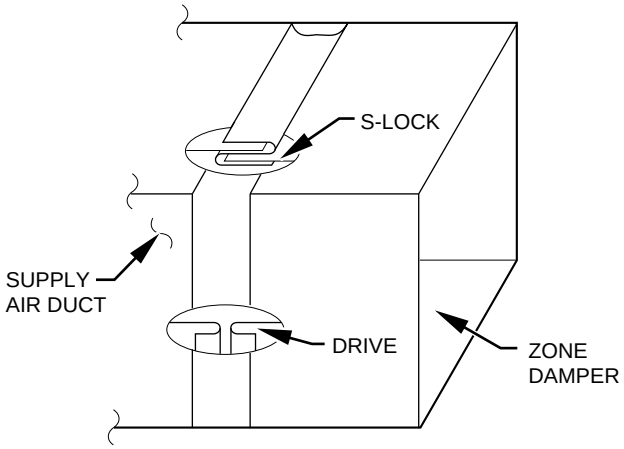


Fig. 6—Rectangular Metal Ductwork

2. Properly seal joint using duct tape, mastic, or other approved method.
3. Insulate damper using 1-1/2-in. to 2-in. insulation. (Check your local codes.) (See Fig. 7.)

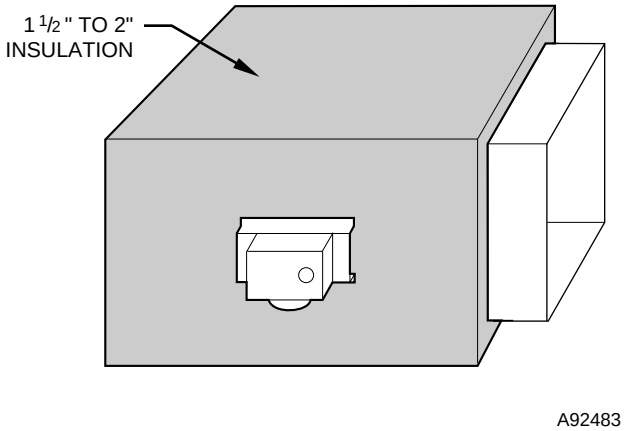


Fig. 7—Insulated Rectangular Metal Ductwork

NOTE: All zone dampers and ductwork must be properly supported according to local codes or SMACNA standards.

NOTE: There should be a minimum of 4 ft between the zone damper and the first branch duct if more than 1 branch duct is downstream of the zone damper.

ROUND FLEXIBLE DUCTWORK

1. Slip 1 end of flexible ductwork over 1 end of zone damper. (See Fig. 8.)
2. Secure the flexible duct to zone damper using SMACNA or other approved method.
3. Properly seal joint using duct tape, mastic, or other approved method.
4. Insulate damper using 1-1/2-in. to 2-in. insulation. (Check your local codes.) (See Fig. 9.)

NOTE: All zone dampers and ductwork must be properly supported according to local codes or SMACNA standards.

RECTANGULAR FIBROUS GLASS DUCTWORK

1. Insert 1 end of zone damper into 1 end of fibrous glass ductwork approximately 2 to 3 in. (See Fig. 10.)

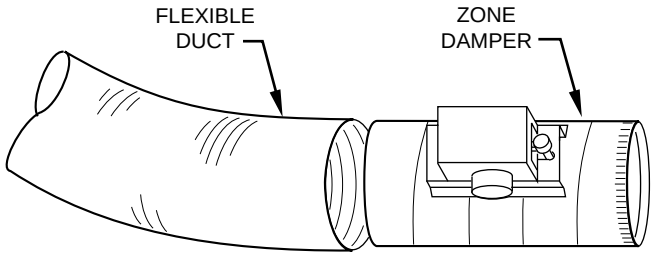


Fig 8—Round Flexible Ductwork

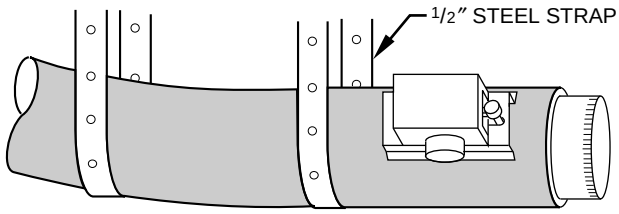


Fig. 9—Insulated Round Flexible Ductwork

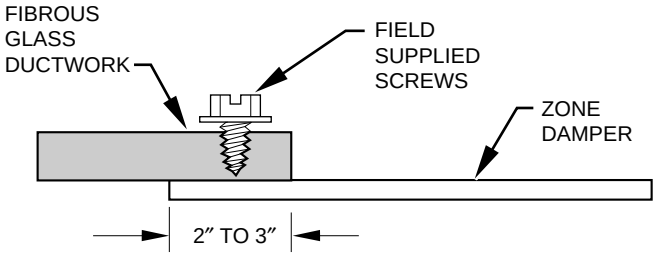


Fig. 10—Rectangular Fibrous Glass Ductwork

2. Screw field-supplied screws and tabs into zone damper.
3. Properly seal joint using duct tape, mastic, or other approved method.
4. Insulate damper using 1-1/2-in. to 2-in. insulation. (Check your local codes.) (See Fig. 11.)

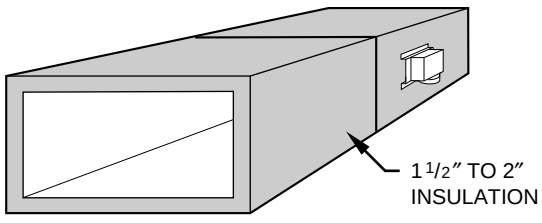


Fig. 11—Insulated Rectangular Fibrous Glass Ductwork

Step 5—Install Barometric Bypass Damper

NOTE: The barometric bypass damper is a critical part of the WeatherMaker Two-Zone System for control of minimum airflow and noise reduction. It is recommended that the bypass be installed.

The bypass should be installed according to local codes and SMACNA standards. Be sure the bypass is properly supported.

For proper installation, refer to the Installation Instructions packaged with the barometric bypass.

⚠ CAUTION

Failure to properly install the bypass damper can cause permanent damage to the HVAC equipment. For single-speed furnace applications, the bypass air must never exceed 25 percent.

Step 6—Install Duct Temperature Sensor

Locate the duct temperature sensor in the main supply trunk after the bypass damper and before the first branch. The duct temperature sensor must be radiant shielded to prevent heat from affecting the correct air temperature.

1. Drill a 7/8-in. hole at location in unit where sensor will be installed.
2. Remove cover and insert sensor probe through 7/8-in. hole.
3. Drill two 1/16-in. holes to accept No. 6 screws through pre-drilled holes in the duct temperature sensor back plate.
4. Use the 2 No. 6 sheet metal screws included with sensor to mount duct temperature sensor back plate to unit.
5. Insert 2-conductor wiring through 1 of the pre-drilled holes in side of back plate.
6. Connect sensor to 2-wire conductor using wire nuts provided. (See Fig. 12 for connection to WeatherMaker Two-Zone Center.)

Step 7—Install Dx Coil Sensor

The Dx coil temperature sensor is recommended for use in heat pump applications and should be installed after the Dx coil and before the heater elements. It measures the Dx coil temperature through a temperature sensor, and adds extra protection for high/low temperature limits. The Dx coil sensor interfaces to the WeatherMaker Two-Zone Center on terminal marked DX. To activate the Dx coil temperature sensor, remove factory supplied resistor from Dx terminal block and replace with sensor leads. When activated, the Dx sensor has built in non-adjustable heat LAT setpoints of 105°F and 110°F.

SEQUENCE OF OPERATION

Step 1—Sequence of Events for a Normal Heating or Cooling Cycle

The thermostats will determine if active heating or cooling is required. If so, the WeatherMaker Two-Zone system will perform the following:

- Make sure all zone dampers are fully open.
- Energize the HVAC equipment fan.
- Energize the heating or cooling equipment. The equipment may be a compressor, furnace, strip heater, etc.
- Set the zone damper to the open or closed position based upon the individual zone demand.
- Energize additional stages of heating or cooling if the thermostat demand warrants.
- Turn off the heating or cooling equipment when all zones are satisfied.
- Open all zone dampers when the equipment is turned off (after 90 sec delay).

This is the basic sequence of operation for the WeatherMaker Two-Zone System. The actual control of the dampers, HVAC equipment, and system fan will change with the configuration of the system. Depending upon the configuration, WeatherMaker Two-Zone can control heat pumps, furnaces, and dual fuel (this may require a third party relay interface, depending on equipment configuration) applications.

Step 2—Selection of a System Mode

The first step in any heating or cooling cycle requires WeatherMaker Two-Zone to receive an input from any thermostat located in a zone. WeatherMaker Two-Zone will then prepare to operate the heating or cooling equipment as requested by the thermostat. (See Fig. 12.)

Step 3—Pre-Positioning Dampers and Starting The System Fan

In order to minimize noise and enhance the system operation, WeatherMaker Two-Zone maintains fully open zone dampers prior to starting the system fan or the heating/cooling equipment. The intent is to provide the HVAC equipment with unrestricted ductwork and to reduce pressure surges. WeatherMaker Two-Zone also fully opens the dampers whenever a heating or cooling cycle is completed (this is done after a 90 sec delay). All the zone dampers will remain fully open until the next heating or cooling cycle.

The other reason for opening the dampers is to provide unrestricted ductwork to other equipment which is not directly controlled by WeatherMaker Two-Zone. One example may be Heating Recovery Ventilator. If WeatherMaker Two-Zone is not actively controlling the HVAC system, then it must not impose any control influences (such as closed zone dampers) on the system and prevent proper operation of other devices.

Only the zone 1 thermostat controls continous fan operation. When the zone 1 thermostat has the fan selector switch in the AUTO position, the fan will operate only when the heating and cooling equipment is operating. When the zone 1 thermostat has the fan selector switch in the ON position, the fan will operate continuously. Zone 2 will not control this.

Step 4— HVAC Equipment Connections

The WeatherMaker Two-Zone relay outputs are shown in Table 1. The Y1 and Y2 contacts are used for the compressor contactor only. WeatherMaker Two-Zone operates the heat pump by energizing the compressor contactor and controlling the reversing valve through the O relay output. The W1 and W2 contacts are always used for heat sources. These are heating only units such as furnaces, strip heaters, etc. The relay outputs for WeatherMaker Two-Zone are shown in Table 1.

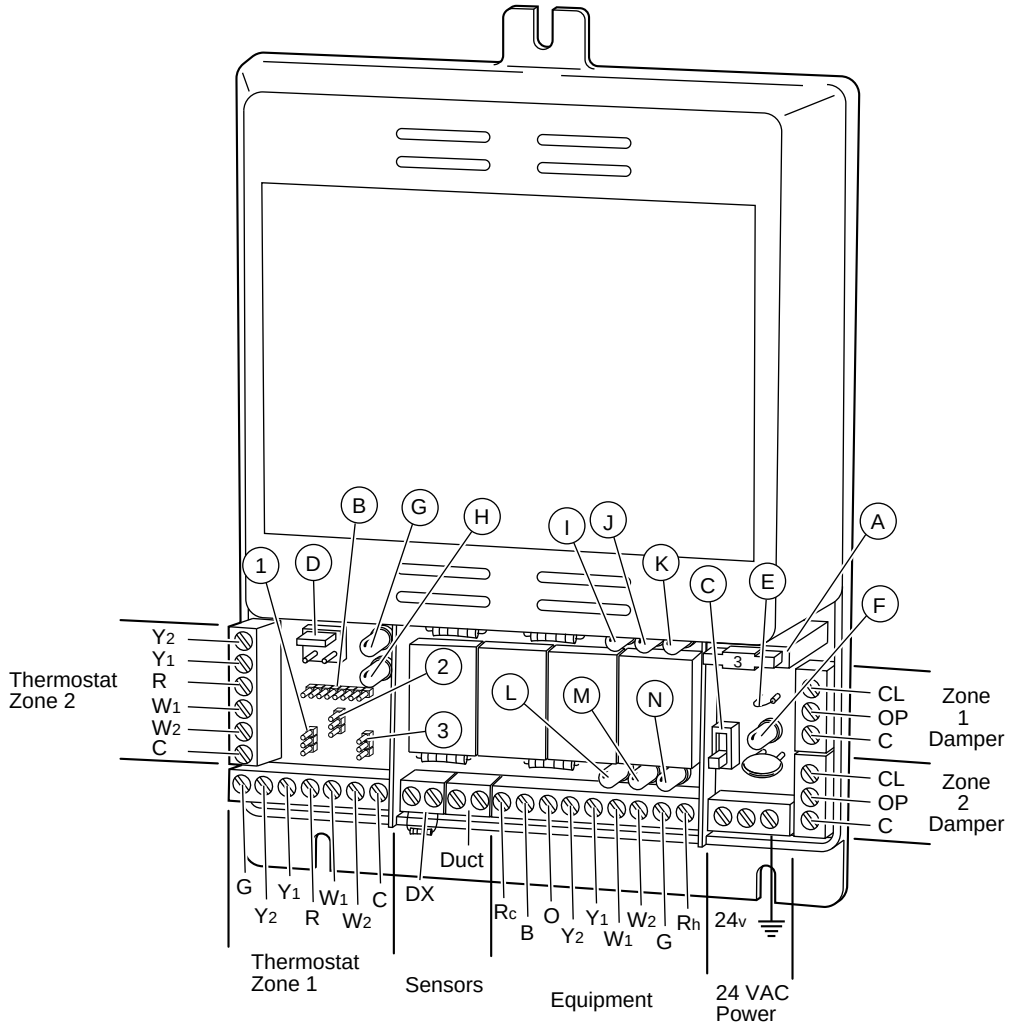
In automatic changeover, the zoning system works on a first come first serve basis. If 1 zone is calling for heating and the other for cooling, the zone which sent its demand to the I/O center first will operate the equipment in that mode until that zone is satisfied.

Step 5—Duct Temerature Optimizer (LAT−Leaving Air Temperature)

As the WeatherMaker Two-Zone system operates through a heating or cooling cycle, the zone demands will change. This

Table 1—Available Heating and Cooling Stages Versus System Type

TYPE OF HVAC EQUIPMENT USED	COOLING STAGE 1	COOLING STAGE 2	REVERSING VALVE O	HEAT STAGE 1	HEAT STAGE 2	REVERSING VALVE O
Single-Stage Heat Pump	Y1	—	Energized	Y1/W1	W2	De-energized
2-Stage Heat Pump	Y1	Y2	Energized	Y1/W1	W2	De-energized
Cooling Only, any Heater Type	Y1	Y2	—	W1	W2	—



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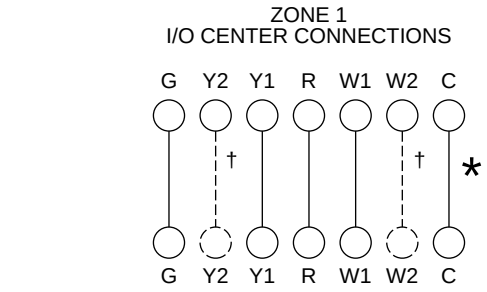

* ONLY HOOKUP "C" WHEN SUPPLIED BY THERMOSTAT

† HOOKUP WHEN USING TWO-STAGE THERMOSTATS WITH TWO-STAGE EQUIPMENT

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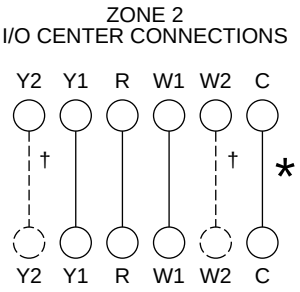

* ONLY HOOKUP "C" WHEN SUPPLIED BY THERMOSTAT

† HOOKUP WHEN USING TWO-STAGE THERMOSTATS WITH TWO-STAGE EQUIPMENT

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Fig. 12—WeatherMaker Two-Zone Circuit Board

changes the actual load that is applied to the HVAC equipment. If the zone airflows decrease, the cooling equipment will tend to lower the supply-air temperatures which could tend to exceed the LAT trip limits. Conversely, the heating equipment will tend to raise the supply-air temperatures which could exceed high trip limits. In cooling, when the LAT reaches the non-adjustable low temperature trip limit (50°F) the LAT algorithm begin operating, closed dampers are initially opened 3 positions, then 1 position every 20 sec therafter until full open. WeatherMaker Two-Zone will not shut down second stage cooling (if used); however, if the temperature continues to drop to 45°F the zoning system will turn off both stages of cooling. If the temperature improves the system will stay in the duct temperature optimizer mode until the LAT reaches 55°F or higher. At 55°F the LAT algorithm will reset and return dampers to their original position. In the heating mode, WeatherMaker Two-Zone will perform the same duct temperature optimization. The trip limits will be determined by the jumper setting. (See Fig. 12.) This will continue until the leaving air temperature (LAT) problem is corrected.

This control helps WeatherMaker Two-Zone System cope with installations where the air conditioning system may suffer from poor ductwork, improperly sized heating or cooling equipment, and/or improper settings of the barometric bypass damper. This control is especially useful in retrofit applications where the size and routing of the ductwork may not be entirely known or satisfactory.

The duct temperature optimizer works by controlling how cold or hot the air inside the supply-air duct gets by monitoring the temperature of the air inside the supply-air system.

Whenever WeatherMaker Two-Zone is providing heating or cooling, the zone within the home that is asking for the conditioned air will always have its damper fully open. The other zone in the system may or may not have an open damper depending upon its particular needs. If the ductwork is too small (or the air conditioner/heater is too large), then the zone requiring the conditioned air may not be able to take enough air to allow your equipment to operate properly. WeatherMaker Two-Zone will detect this, and open up the closed damper allowing the equipment to continue to operate.

⚠ CAUTION

The duct temperature optimizer may be disabled on the control center. A 10k resistor can be installed in place of the duct sensor at the terminal block. By disabling the duct temperature optimizer, the LAT safety algorithm is removed from the system.

It is highly recommended that you use this control option. The heating LAT is adjustable for the duct sensor. In this Installation Instruction, you will find the section showing an adjustment for the heating LAT. (See Fig. 12.) It is very important that this temperature is properly set. For gas or oil furnaces, the temperature limit will be in the higher temperature range. For heat pumps the temperature setting should always be in the lower temperature range.

If you encounter a situation where 1 zone seems to have poor ductwork, then the WeatherMaker Two-Zone system is capable of reverting back to a fully-open, constant-volume system. If this condition persists, it should always be looked upon as an indication of a HVAC problem, not a WeatherMaker Two-Zone problem.

Step 1—TROUBLESHOOTING

This section contains information to assist you in troubleshooting problems and errors associated with the WeatherMaker Two-Zone system.

Step 2—System Diagram, Jumpers, and Switches

NOTE: The duct and Dx onputs must have either a sensor or a 10k resistor connected. 10K ohm resistor in place or with a Dx coil temperature sensor attached.

1

F STAT—Gas/electric thermostat is installed in each zone.
Must be in this position to function properly.

HP STAT—Heat pump thermostat is installed in each zone.
This setting not used.

2

FURNACE—Air conditioning equipment installed is a cooling only unit.

HT PUMP—Air conditioning equipment installed is a heat pump.

3

W/O FAN—When demand for heating exists, fan is controlled by gas/electric furnace.

W/FAN—When demand for heating exists, fan comes on immediately (heat pump only).

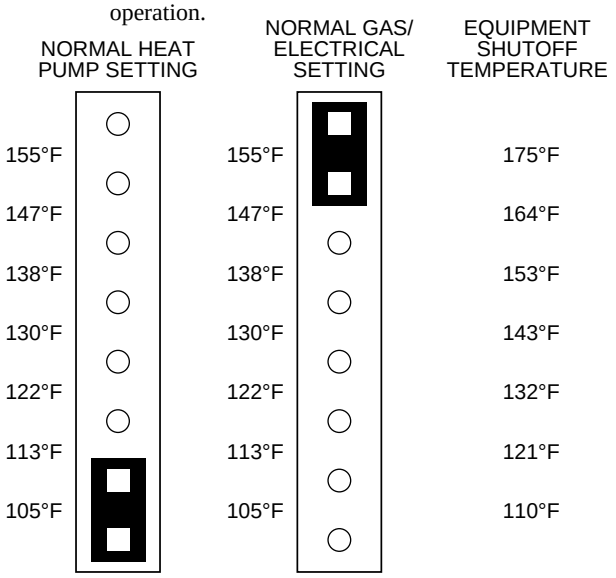
A

Damper Fuse—Protects damper from electrical damage (3 Amp).

B

High Heating Temperature Trip Limit Setting—Temperature sensed by duct temperature sensor. When the duct temperature reaches this temperature setting, the duct temperature optimizer is enabled.
If the LAT is exceeded then heating will turn off.

NOTE: Dx coil sensor recommended for heat pump operation.



C

Emergency Heat Switch—This switch should remain in the OFF position for both furnace and heat pump operation. It should be switched to the ON position only upon heat pump compressor failure to provide emergency heat.

D

Comprotec Override—Momentarily short pins together for temporary equipment time delay override. Will change compressor lockout time form 5 minutes to 30 sec for 1 cycle.

E

J6 jumper−Connects Rc and Rh internally.

F

Emergency heat LED−Will turn on when emergency Heat is on.

G

Red LED−Used for diagnostic error's.

Table 2—Troubleshooting

LED CODES	ERROR DESCRIPTION	ACTION REQUIRED
Green flashes 1 time every second and no other LED's are flashing.	Normal operation.	None.
Green flashes 1 time and Red flashes 1 time	Duct temperature sensor. First stage heat limit exceeded; heat will be locked out.	Wait until duct temperature cools below exceeded temperature trip. (Heat leaving air temperature trip limits set at LAT limits POT on central control circuit board; range is 110 to 175°F.)
Green flashes 1 time and Red flashes 2 times	Duct temperature sensor. Second stage heat limit exceeded.	Wait until duct temperature cools below exceeded temperature trip. Range is 105 to 155°F.
Green flashes 1 time and Red flashes 3 times	Duct temperature sensor. First stage cool limit exceeded; cool will be locked out.	Wait until duct temperature raises above exceeded temperature trip (45°F).
Green flashes 1 time and Red flashes 4 times	Duct temperature sensor. Second stage cool limit exceeded.	Wait until duct temperature raises above exceeded temperature trip (50°F).
Green flashes 1 time and Red flashes 5 times	DX temperature sensor. First stage heat limit exceeded; heat will be locked out.	Wait until Dx temperature cools below exceeded temperature trip. Fixed at 110°F.
Green flashes 2 times and Red flashes 1 time	DX temperature sensor error. Second stage heat limit exceeded.	Wait until Dx temperature cools below exceeded temperature trip. Fixed at 105°F.
Grenn flashes 2 times and Red flashes 2 times	DX temperature sensor. First stage cool limit exceeded; cool will be locked out.	Wait until duct temperature raises above exceeded temperature trip (45°F).
Green flashes 2 times and Red flashes 3 times	DX temperature sensor. Second stage coo limit exceeded.	Wait until duct temperature raises above exceeded temperature trip (50°F).
Green flashes 2 times and Red flashes 4 times	1. Duct temperature sensor. 2. Temperature sensor is shorted.	1. Verify that duct temperature sensor or 10K ohm resistor is attached to control center at duct temperature connectors. 2. Replace duct temperature sensor.
Green flashes 2 times and Red flashes 5 times	1. Duct temperature sensor. 2. Temperature sensor is open.	1. Verify that duct temperature sensor or 10K ohm resistor is attached to control center at duct temperature connectors. 2. Replace duct temperature sensor.
Green flashes 3 times and Red flashes 1 time	1. Dx temperature sensor. 2. Temperature sensor is shorted.	1. Verify that Dx temperature sensor or 10K ohm resistor is attached to control center at Dx temperature connectors. 2. Replace Dx temperature sensor.
Green flashes 3 times and Red flashes 2 times	1. Dx temperature sensor. 2. Temperature sensor is open.	1. Verify that Dx temperature sensor or 10K ohm resistor is attached to control center at Dx temperature connectors. 2. Replace Dx temperature sensor.
Green flashes 3 times and Red flashes 3 times	Damper fuse blown.	1. Check for short circuits on damper wire connections at the dampers and control center. 2. Replace damper fuse. 3. Check damper operation, may need to be replaced.
Green flashes 3 times and Red flashes 4 times	Fatal control center circuit board failure.	Replace control center.

H Green LED−Flashes once every second for normal operation, alternates with red led for diagnostic error's.

I Red LED−Displays ON when fan is energized.

J Red LED−Displays ON when firststage cooling is energized.

K Red LED−Displays ON when second stage cooling is energized.

L Red LED−Displays ON when reversing valve is energized.

M Red LED−Displays ON when first stage of heat is energized.

N Red LED−Displays ON when second stage heat is energized.

O J2 (Not Shown)−Cut for 50 hz operation. Located under plastic housing approximately 1-in. above comprotec override.

Step 1—Wiring Diagrams

Table 3—Wiring Diagram Reference For Fig. 13 and 14

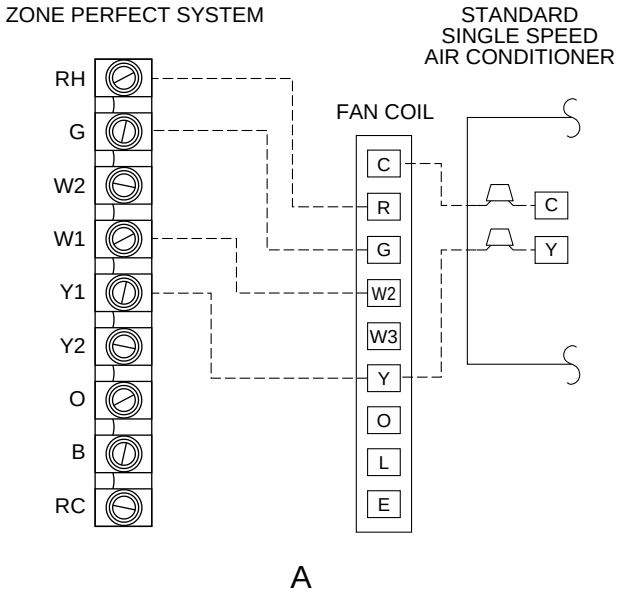
FAN COIL WITH AIR CONDITIONER			
OUTDOOR UNIT	Indoor Unit (Fig. 13)		
	FA4A FB4A FC4B	FK4A	FK4B
Single-Stage Air Conditioner	A	A	B
Two-Speed Air Conditioner (38TD)	C*	D	E
Fan Coil With Heat Pump			
OUTDOOR UNIT	Indoor Unit (Fig. 14)		
	FA4A FB4A FC4B	FK4A	FK4B
Single-Stage Heat Pump	A	A	B
Two-Speed Heat Pump (38YD)	C*	D	E

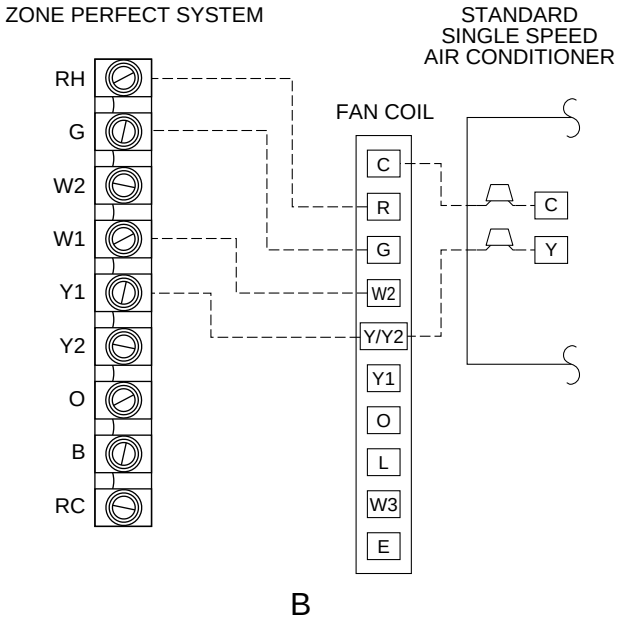
* Latent Capacity Control−Required, field supplied. See 2-speed Installation Instructions.

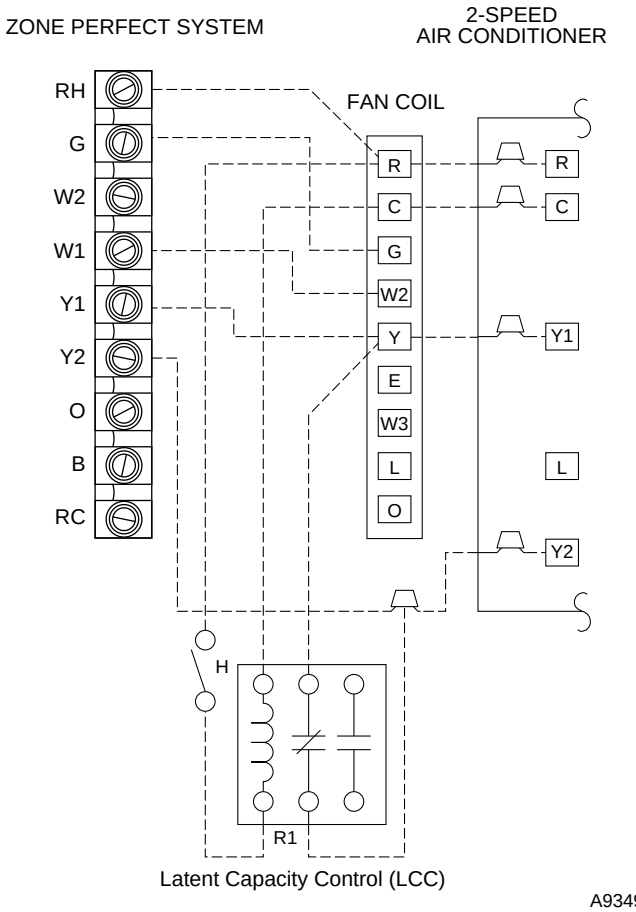
Table 4—Wiring Diagram Reference For Fig. 15

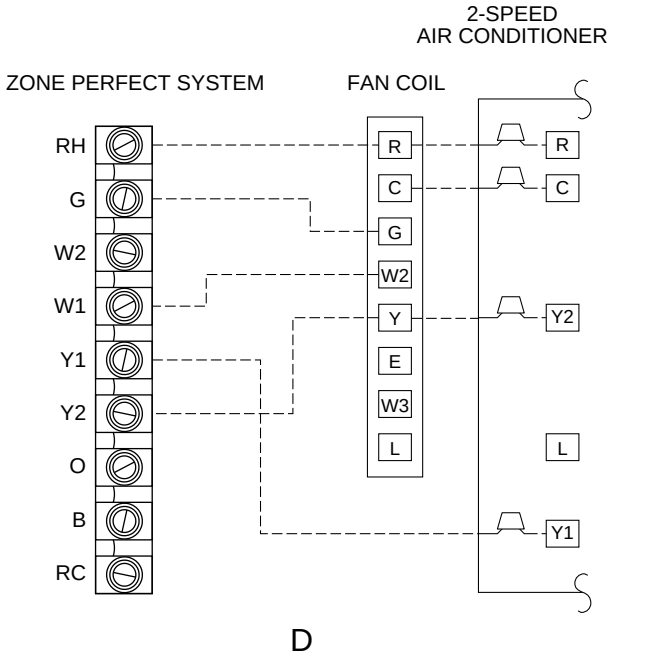
FURNACE WITH AIR CONDITIONER							
OUTDOOR UNIT	Indoor Unit (Fig. 15)						
	58SXB	58VUA 58VCA	58RAP 58PAP 58GFA 58DFA 58EFA 58SXA 58DXA	58WAV 58ZAV 58PAV 58RAV 58SXC 58DXC 58EJA	58MXA 58MCA	58MVP	58TUA 58TMA
Single-Speed Air Conditioner	A* B		B	B	B	I	I
Two-Speed Air Conditioner (38TD)	C† D*	E F*	G‡	H‡	H‡	J	J

* KGATT0101VSP (Optional) 2-stage relay kit−May help to control over-conditioning.
† KSAIF01012SP B Furnace Interface kit−This is required to allow 2-speed outdoor units to select indooe airflow.
‡ Latent Capacity Control−Required, field supplied. See 2-speed Installation Instructions.









R1 = Relay DPST, Pilot Duty,
24-v coil (HN61KK324) or Equivalent.
H = Humidistat, opens on humidity
rise (HL38MG026)

C

Fig. 13−Wiring Diagrams (Fan Coil With Air Conditioner)

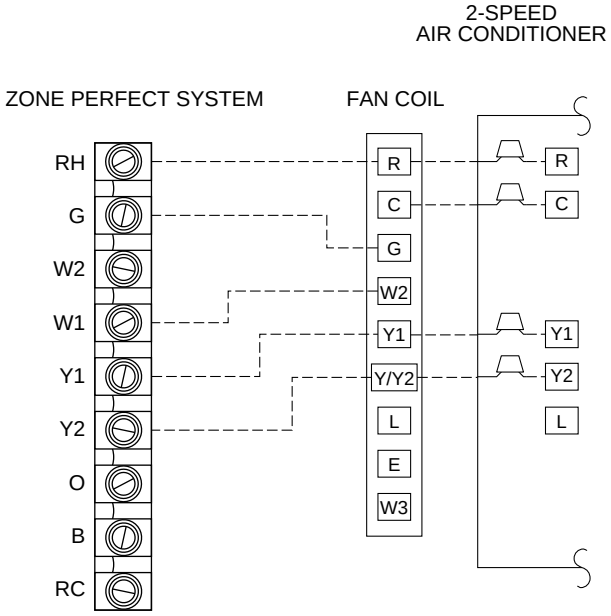


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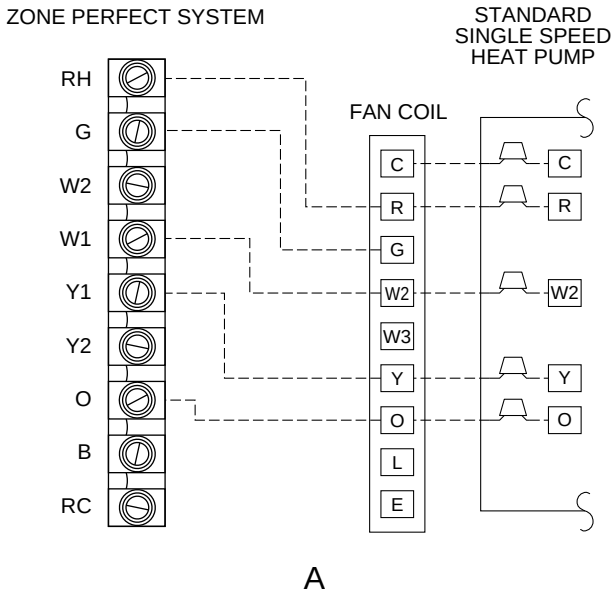
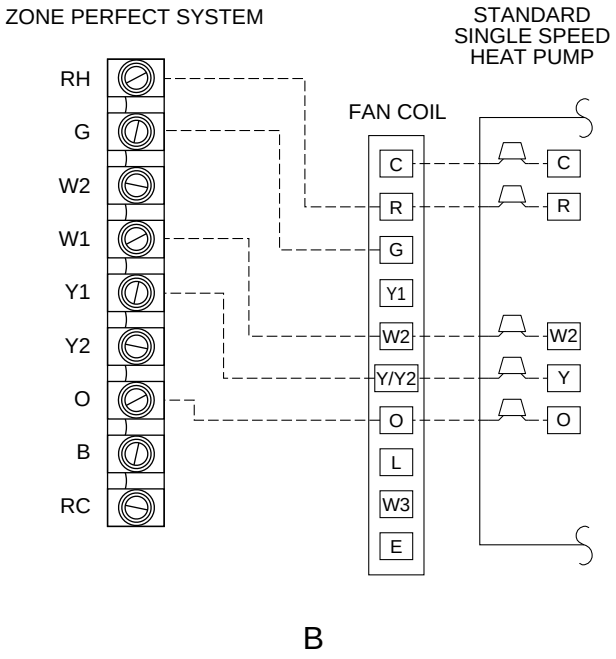
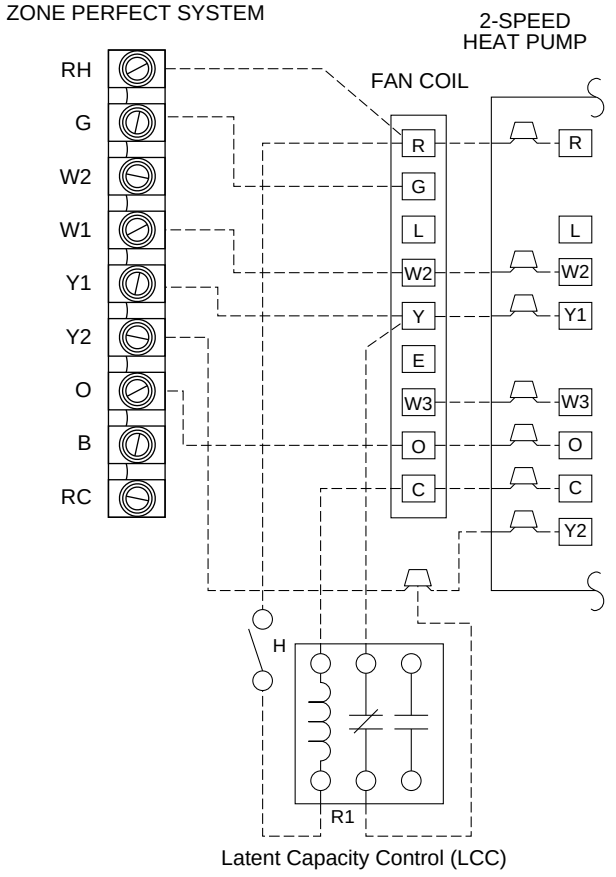
Fig. 13−Wiring Duagrams (Fan Coil With Air Conditioner) Continued







R1 = Relay DPST, Pilot Duty, 24-v coil (HN61KK324) or Equivalent.
H = Humidistat, opens on humidity rise (HL38MG026)

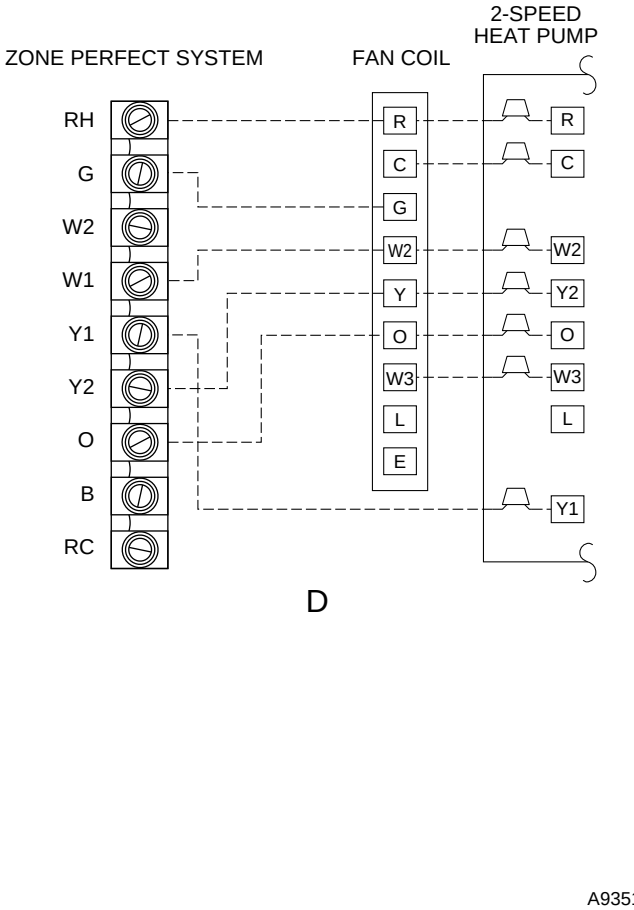


Fig. 14−Wiring Diagrams (Fan Coil With Heat Pump)

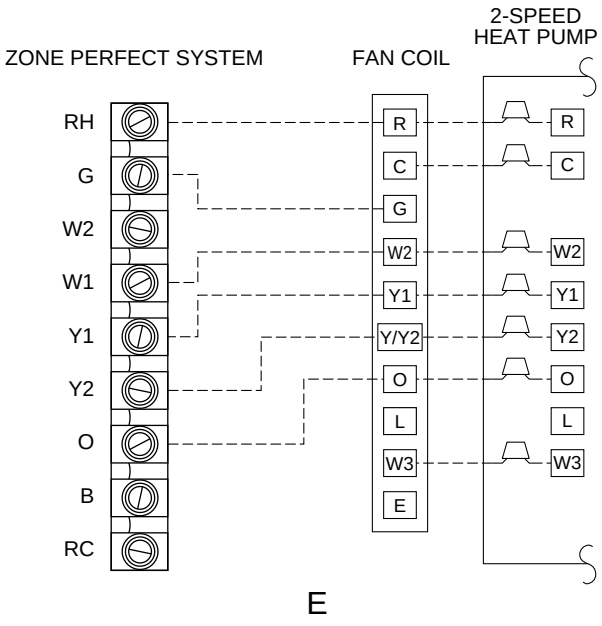


Fig. 14−Wiring Duagrams (Fan Coil With Heat Pump) Continued

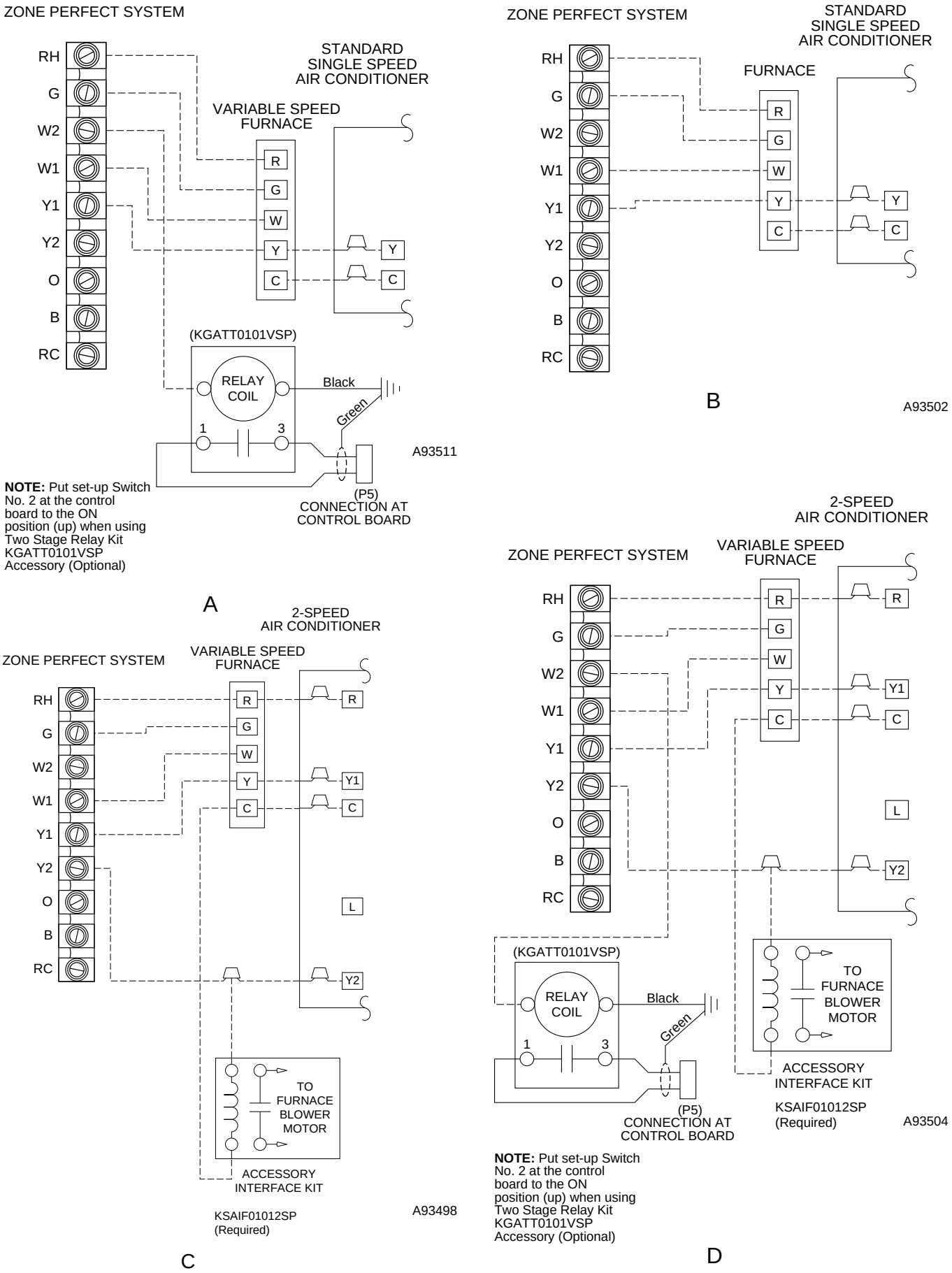
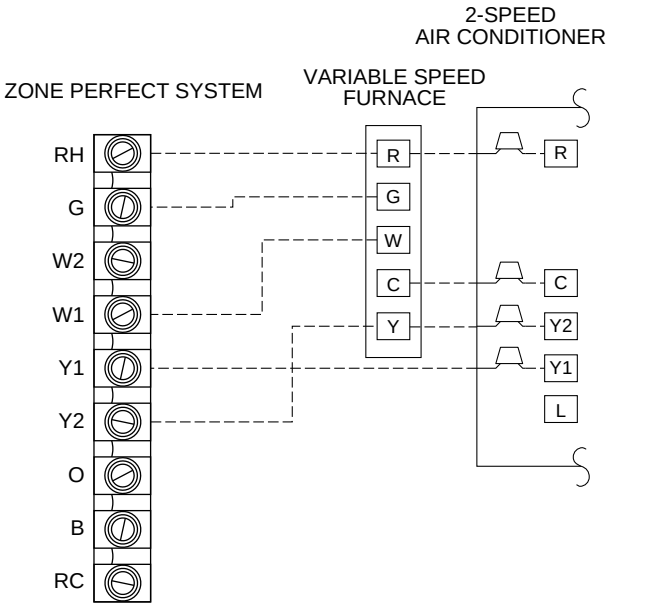


Fig. 15−Wiring Diagrams (Furnace With Air Conditioner)



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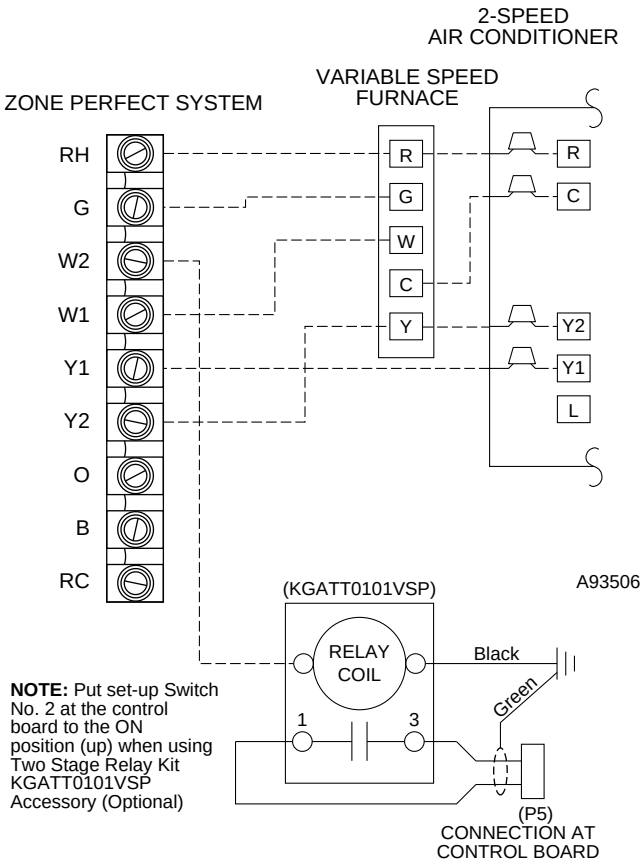

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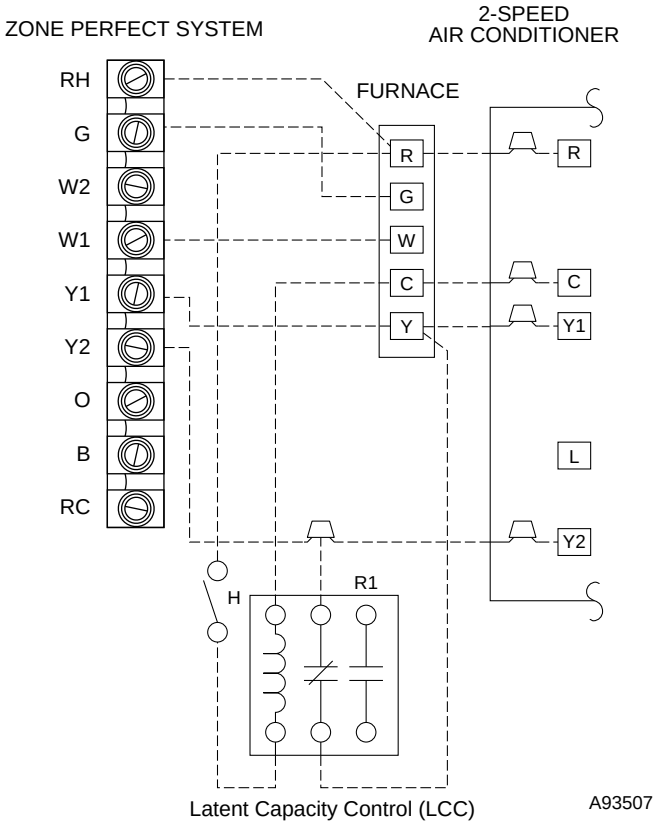
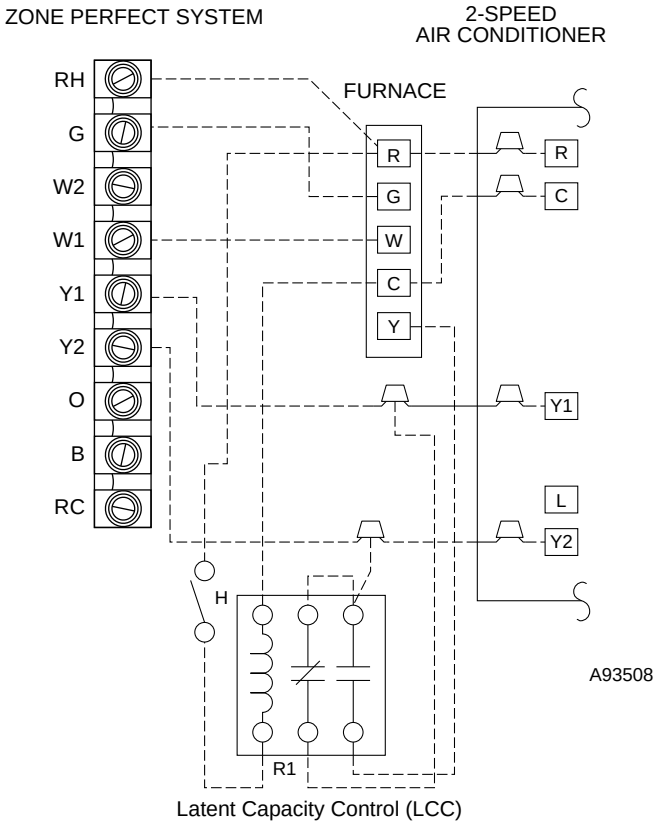


R1 = Relay DPST, Pilot Duty, 24-v coil (HN61KK324) or Equivalent.
H = Humidistat, opens on humidity rise (HL38MG026)

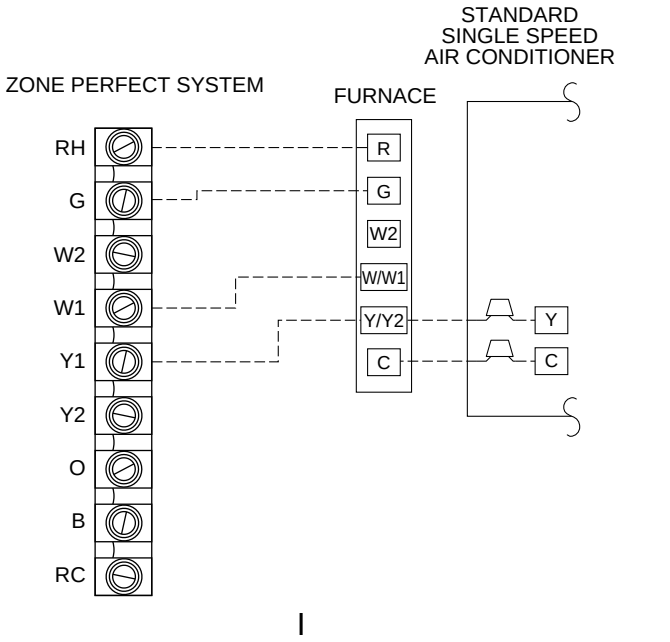
G



R1 = Relay DPST, Pilot Duty, 24-v coil (HN61KK324) or Equivalent.
H = Humidistat, opens on humidity rise (HL38MG026)

H

Fig. 15−Wiring Diagrams (Furnace With Air Conditioner) Continued



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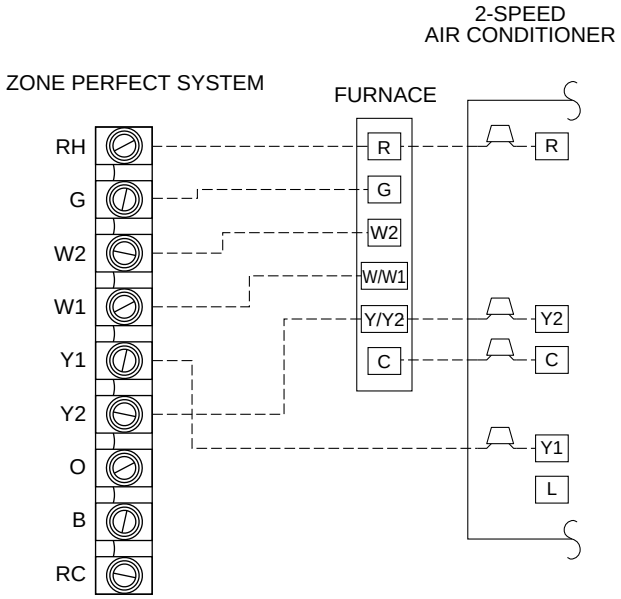

NOTE: See Furnace Installation Instructions

(Variable Speed models) – Put set-up Switch No. 2 in the ON position at the furnace control board

(2-Speed models) – Put set-up Switch No. 2 in the ON position, Switch No. 1 must be in the OFF position at the furnace control board

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J

Fig. 15−Wiring Diagrams (Furnace WIth Air Conditioner) Continued

CARE AND MAINTENANCE

For continuing optimum performance and to minimize possible equipment failure, it is essential that periodic maintenance be performed on this equipment. Consult your servicing contractor or User's Manual for the proper frequency of maintenance. Frequency may vary depending upon geographic areas.

Step 1—Leave User's Manual With Homeowner

Explain system operation and maintenance procedures outlined in User's Manual.

Book 1 1 4 4
Tab 3a 5a 2a 5a PC 101 Catalog No. 809-549 Printed in U.S.A. Form CEPL-1SI Pg 16 10-93 Replaces: New