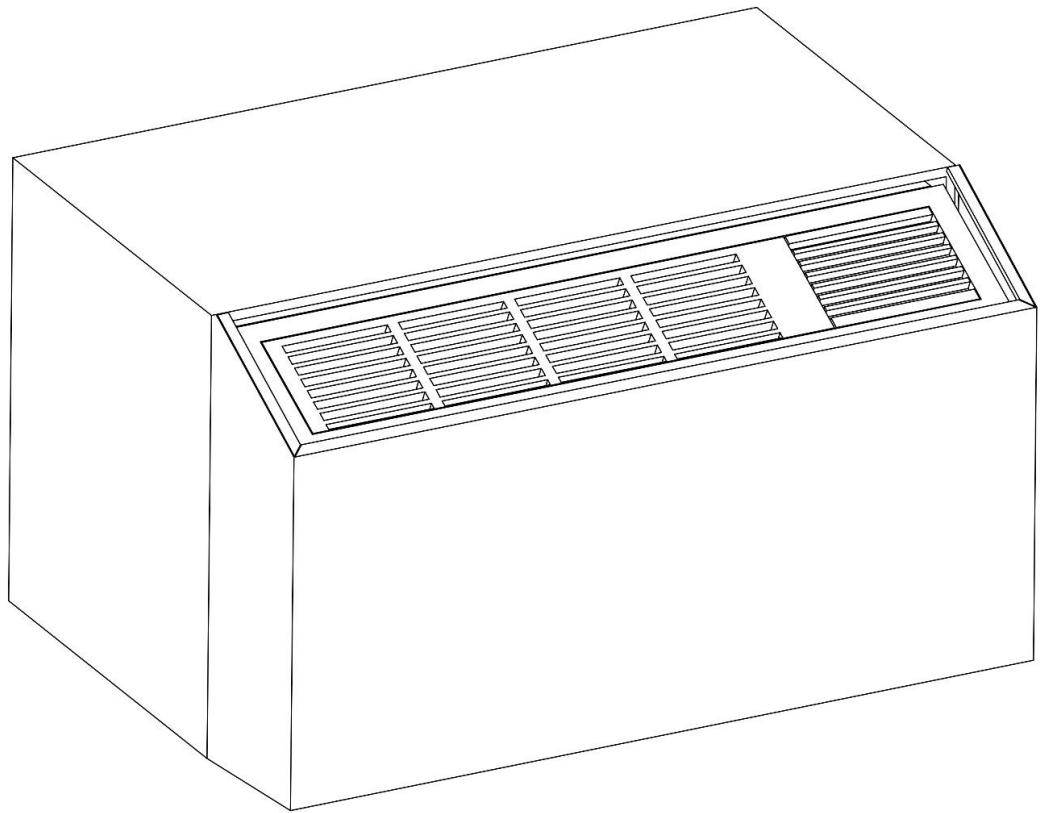


# **PCDM SERIES PACKAGED TERMINAL AIR CONDITIONER/HEAT PUMP WITH UNIVERSAL HEATER**

## **Installation, Operation and Maintenance Manual**



MODELS: PCDM09K235HTM4, PCDM12K235HTM4, PCDM15K235HTM4

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### TO THE INSTALLER

Retain this manual for future reference. For further assistance please call **1-866-233-4022**.

Before leaving the premises, review this manual to be sure the unit has been installed correctly and run the unit for one complete cycle to make sure it functions properly. To obtain technical service or warranty assistance during or after the installation of this unit, contact your local representative.

When calling for assistance, please have the following information ready:

1. Model number
2. Serial number
3. Date of installation

### NOTICE

Due to ongoing product development, product designs and specifications may change without notice. Please contact Perfect Comfort for more information.

## **WARNING**

Electric shock hazard

Turn off electric power before service or installation.

Don't use this unit if it has damaged wiring, is not working properly, or has been damaged or dropped.

Read these instructions carefully and completely before attempting installation. Unit should **ONLY** be installed by qualified service technician.

Failure to do so can result in property damage, personal injury and/or death.

## **DANGER**

**WIRE SIZE:** Use **ONLY** recommended wiring size for single outlet branch circuit.

**FUSE/CIRCUIT BREAKER:** Use **ONLY** type and size fuse or HACR circuit breaker indicated on receptacles and fuse type (see Table 01). Proper current protection to the unit is the responsibility of the owner.

**GROUNDING:** Unit **MUST** be grounded from branch circuit through service cord to unit, or through separate ground wire provided on permanently connected units. Be sure that branch circuit or general-purpose outlet is grounded.

### **Do not modify the PERFECT COMFORT PTAC POWER CORD**





The **power cord** should be checked before every use. Do not use the product if the cord has failed the test. A damaged power cord must be replaced with a new cord from the manufacturer and not

repaired. The use of extension cords is prohibited.

**RECEPTACLE:** The field supplied outlet must match plug on service cord and be within reach of service cord. Refer to TABLE 1 for proper receptacle and fuse type

Failure to follow these instructions can result in a fire, explosion or electrical shock, causing property damage, personal injury or death.

**Table 01: Receptacles and Fuse Type**

Table 1	250V			265/277V
AMPS	15	20	30	20
RECEPTACLE				
TIME - DELAY TYPE FUSE  (or HACR circuit breaker)	15	20	30	20
<p><b>HACR</b> — Heating, Air Conditioning, Refrigeration</p> <p>May be used for 15 Amp applications if fused for 15 Amp</p> <p><b>Note:</b> 265/277 – volt units require use of accessory subbase to meet NEC and local codes.</p>				

## CAUTION

Sheet metal parts, self-tapping screws, clips and such items inherently have sharp edges, and it is necessary that the installer exercise caution.

This equipment is to be installed only by experienced installation company which employs trained technicians.

PTAC chassis are heavy. To avoid injury, use assistance when lifting.

### Check List

When the equipment is received, all items should be carefully checked - refer to typical configuration (see Fig.01). All units should be carefully inspected for damage when received. If any damage is noticed, the carrier should make the proper notation on the delivery receipt acknowledging the damage.

Please call 1-866-233-4022 for customer service.

Fig.01: Typical Configuration

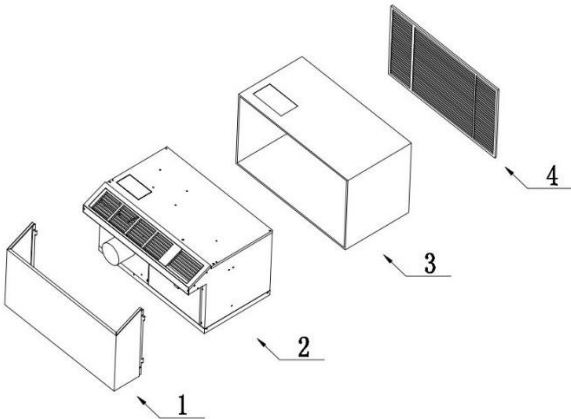


Fig.02: Universal Power Cord

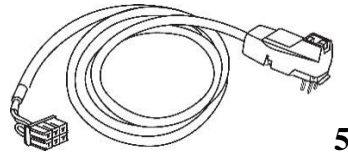
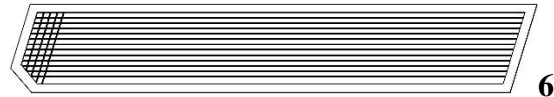


Fig.03: Filter



**1. Front Cover**

- The tabs on the cover and inserts on the sleeve should be checked for correct placement and fitting.

**2. Cooling Chassis**

- The unit nameplate should be checked to make sure the voltage aligns with the power supply available.
- Verify your equipment by using “Model Coding” on page 6.
- Verify that the indoor blower wheels and outdoor fan are rotating freely.
- Verify the compressor and tubing in proper position and perfect status.

**3. Sleeve**

- The sleeve should be checked that the inside dimensions will fit the PTAC. (Sold separately)

**4. Louver**

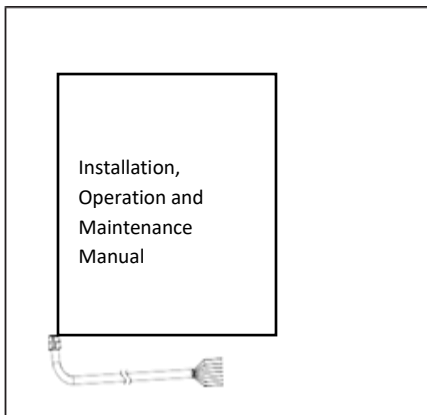
- The dimensions for the louver should be checked and compared with the sleeve. It must match and fit inside the sleeve. (Sold separately)

**5. Power Cord**

- The power cord should be checked to comply with the receptacle available. (Sold separately)

**6. Filter**

- Filter is placed within Front Cover near bottom



Thermostat Wiring Harness and Manual located in plastic bag.

**For this replacement PTAC only 1 (Front Cover), 2 (Cooling Chassis) & 6 (Filter) are provided.**

## General Product Information

### Product Description

Perfect Comfort replacement package terminal air conditioners have a cooling chassis with electric heat.

The PERFECT COMFORT PTAC unit

1. Use R410A refrigerant. This refrigerant is not affected by a phase out schedule. R410 is environment friendly.
2. Include high-efficiency rotary compressors protected by a 6-year warranty
3. Offer three speed for evaporator fan motor, and one speed for condenser fan motor
4. Condensate removal system with dual drain hose, re- evaporation to improve efficiency
5. Heat Pump efficient operation
6. Digital control with optional thermostat hookup
7. Universal electric heat

2.0 KW heat can be obtained when 15A power cord is used at 230V. Part Number PC15UP.

3.0 KW heat can be obtained when 20A power cord is used at 230V. Part Number PC20UP.

5.0 KW heat can be obtained when 30A power cord is used at 230V. Part Number PC30UP.

PTAC units are available in nominal sizes of 9,000BTU, 12,000BTU or 15,000BTU

### Standard control and components

#### Construction

1. 18-gauge galvanized steel and powder-coated for base pan and bulkhead, 20gauge galvanized steel and powder-coat for construction.
2. Centrifugal evaporator fan with galvanized steel
3. Plastic fan blade for condenser
4. 20-gauge galvanized steel and powder coated for drain pan
5. Easily removable electric heater and easy access electrical box
6. Motors are thermally protected.
7. Intelligent Control Board with digital control and optional thermostat control (thermostat sold separately).
8. Washable filter
9. Aluminum discharge grille

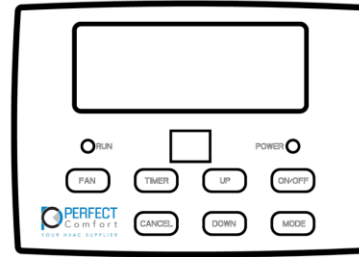
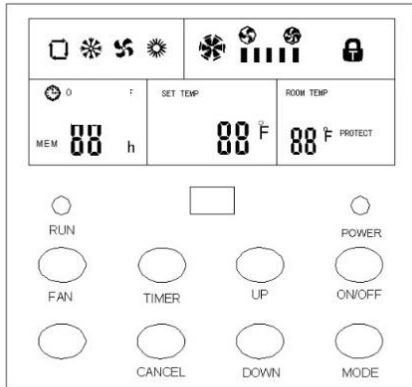
### Condensate removal system

1. Dual drain hose lead the condensate to outside base pan.

Slinger ring of plastic fan blade throw the condensate to the condenser coil, where it evaporates, improving system performance.

## Operation Instructions

### Controls

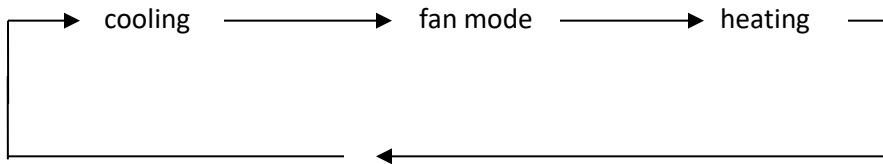


#### ON/OFF

ON/OFF button: When unit is off; press this key to turn the machine on. When the machine is on, press this key to turn off the unit. Use the mode button to select heat/cooling or fan options.

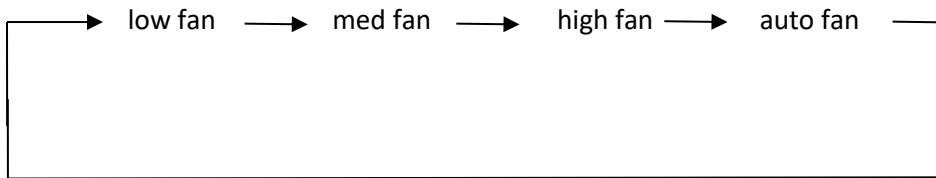
#### MODE

MODE button: Mode selecting key, press the key, mode change as follows.



#### FAN

Fan button: Fan selecting key, fan speed as followed.



#### TIMER

Timer button; Pressing further will forward 1hr increase, each press adds 1hr, up to 24hr.

#### UP/DOWN

UP & Down button: used to adjust the up and down of temperature. Press once to increase the set temperature by 1°F, Press once to DOWN, the set temperature by 1°F.

#### CANCEL

Cancel button: Canceling timing setting

#### ROOM TEMPERATURE

Press + hold "Down" button for 15 seconds to display Room Temperature.

#### Degree's C to F

Press and hold "Up" and "Down" buttons together for 15 seconds to switch from C to F.

## How to Change from Manual control to Thermostat for PCDM

Please follow the instructions and pictures.

Step 1. Take the unit out of its sleeve

Step 2. Remove the front grill to access the display panel (DO NOT drop anything in fan unit )



Step 3. Remove the control panel to reach to the main board.



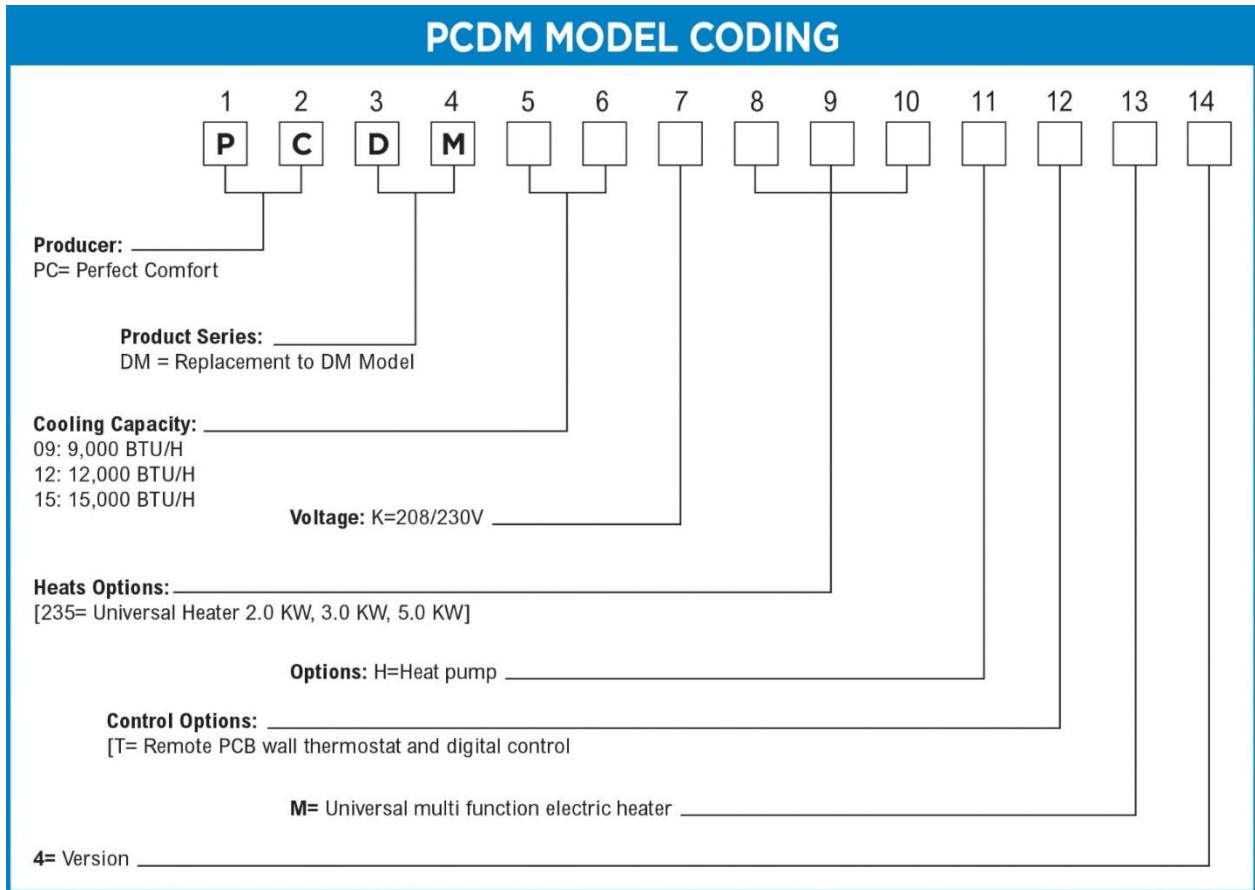


Step 4. Turn Dip Switch No. 1 from OFF to ON. (Only switch with "2" options).

Dip Switch **OFF** (Switch #1)



Dip Switch **ON** (Switch #1)



## PREPARING FOR THE INSTALLATION

### Safety Precautions

1. This unit should be installed by a factory certified technician or a licensed mechanical contractor to ensure proper operation and avoid any safety hazards.
2. Power supply wires must be located in areas where they will not be damaged or cut.
3. Never insert any type of object into the machine inside. Because the fan rotates at a high speed, this may cause injury.
4. Disconnect the power supply from socket-outlet when the machine units are not in use.
5. Disconnect all electric power supplies before servicing.
6. Any type of repairs or maintenance done to the units must be done by a professionally licensed contractor. Any unqualified person should not attempt to repair the units themselves.
7. **WARNING: RISK OF ELECTRIC SHOCK: CAN CAUSE INJURY OR DEATH.**
8. Be sure that the unit is free and clear of any debris around the outside of the unit. Do not place or lean any items on the unit.



Moving parts can cause personal injury. Avoid contact with moving parts when testing or servicing the unit.

### Electrical supply

Each unit must have a separate branch circuit protected by a fuse or breaker. Refer to the unit rating plate for the proper wire and breaker or fuse size

Use of extension cords is prohibited

DO NOT connect the PERFECT COMFORT unit to a circuit with an incorrectly sized overcurrent-protection device

### Electrical short hazard

Before opening the existing unit:

Open the power supply disconnect switch. Secure it in an open position during installation. Attach a sign stating, "DO NOT TURN ON"

On a plug and receptacle connection, unplug the existing unit at the wall outlet.

DO NOT plug in the new unit until installation is complete and the start-up check list has been completed. Failure to comply with the above could result in severe personal injury, death or substantial property damage.

**Remove the old chassis**

1. Disconnect power or unplug cord before proceeding
2. Remove the front panel to expose the old chassis
3. Loosen any tie-down bolts or screws and remove the old chassis

**Check existing wall sleeve**

PERFECT COMFORT replacement PTAC's are to be used with a metal wall sleeve:

- a) Clean the wall sleeve of any dirt
- b) Repair any damage or rust
- c) Ensure proper drainage of condensate or rainwater to exterior of building
- d) Check the back of sleeve is pitched to the outside ¼ bubble on level
- e) Check the sleeve is leveled left to right
- f) Make sure the wall sleeve is secured in the wall

**Check existing outdoor louver**

Check whether the type of the outdoor louver match the baffle and insulation on the chassis, adjust if it doesn't match.

Remove any obstructions

**INSTALLATION INSTRUCTIONS**

**CHASSIS INSTALLATION**

1. Check the seal foam on the rear of chassis, make sure to avoid ventilation recirculation
2. Slide the chassis into the sleeve tight to the end of the sleeve.
3. Secure the chassis –tighten any tie down bolts or screws if necessary.

WIRE COLOR CODE		
G1	GRN	LOW FAN
G2	BLU	MED FAN
G3	BRN	HIGH FAN
C	BLK	N 24VAC
R	RED	L 24VAC
Y	YEL	COOLING
W	WHT	EHEATER or HOT WATER
O	ORG	HEAT PUMP

**Fig. 04**

### WALL THERMOSTAT INSTALLATION

Connect the wall thermostat cable with the chassis. See Fig.04 for wire colour coding.

Install the wall thermostat as per instructions from thermostat manufacturer. Connect cable from chassis to the existing wires in the wall as Fig.05

Ensure to wrap and make protection at the joint points.

If thermostat is still not working, please refer to page #8-9

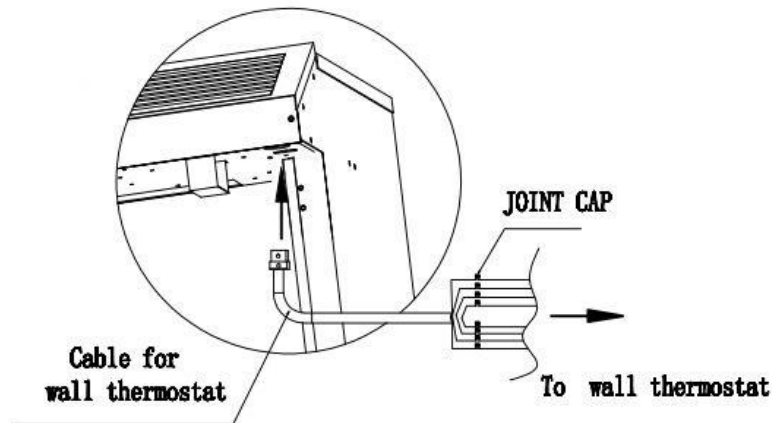


Fig.05 Cable Connection for Wall Thermostat

### POWER CORD INSTALLATION

Connect Universal Power Cord to female connection on unit. See Fig 06. The connection will clip in place and can be removed in future by compressing the sides and pulling the cord free.

Once the cord is connected securely to the unit plug cord into wall outlet. Once cord is plugged in, confirm the LED light on the head of the plug is on.

Power Cords are already installed when installing a **new** Perfect Comfort unit

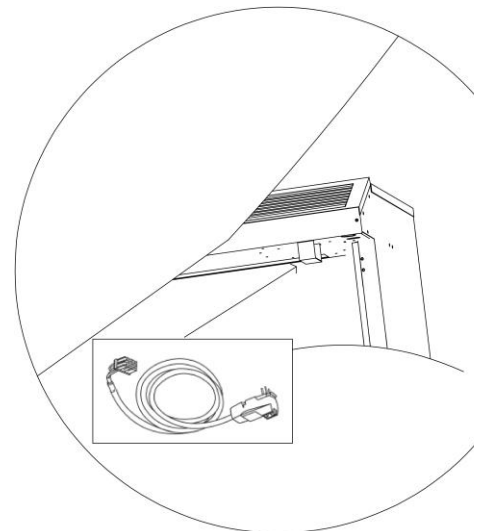


Fig. 06 Connection for Universal Power Cord

### **FILTER INSTALLTION**

Filter is installed inside cover near the bottom. It rests on the metal that protrudes around the bottom of the over.

Make note to have the angled corner near the power cord. This small section is for the power cord to exit the unit.

Once the filter is in place, the cover can now be installed.

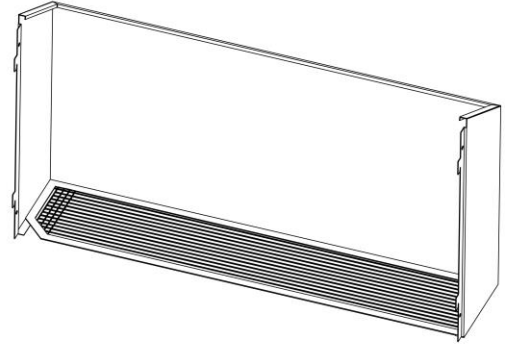


Fig. 07

### **COVER INSTALLATION**

Cover will have two tabs on each side which enters into the sleeve's entry points for each tab. Lock in place by inserting and pushing down.

The cover should fit comfortably with the unit inside the sleeve.

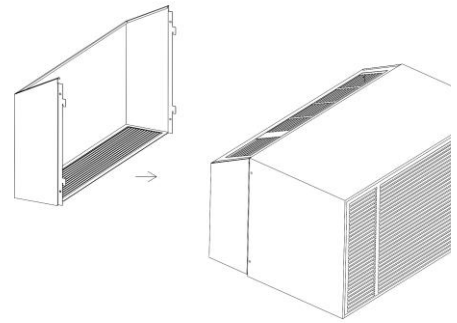


Fig. 08

## FINAL INSPECTION AND START-UP

### Check list

1. Ensure the chassis is secured with the sleeve
2. Unit is installed in compliance with all codes
3. Circuit breakers and wire sizes are correct
4. Ensure the electrical supply matches the electrical requirements of the unit, and that the unit is properly grounded
5. Check whether the electric heat match the power cord
6. Filter clean and in place
7. All panels in place
8. Make sure the chassis is leveled 1/4 bubble towards exterior
9. Verify that nothing will interfere with the room discharge air or the return air of the units

### Examples:

- Check for curtains or drapes that obstruct the air flow
- Check for plush carpeting that can obstruct the return air
- Items like these can cause serious damage to the chassis
- Ensure work area clean and free of debris

### Start-up

- Plug the power cord to the receptacle
- Turn on the chassis, and operate all functions

### Wall Thermostat

See wall thermostat instructions to operate thermostat. Test all functions to confirm PTAC unit is working properly.

## Maintenance and Troubleshooting

Monthly inspection and maintenance

### **DANGER**

Electrical shock hazard. Disconnect power to the PERFECT COMFORT replacement PTAC before servicing or accessing the control compartment. Failure to do so could result in severe personal injury or death.

### **WARNING**

It is illegal to discharge refrigerant into the atmosphere. Use proper reclaiming methods and equipment when servicing a perfect comfort replacement PTAC.

For optimum performance and reliability of your PERFECT COMFORT replacement PTAC, PERFECT COMFORT recommends performing the following sections and maintenance on a monthly basis.

Units that are installed in harsh or dirty environments will require more frequent inspections and maintenance.

- Clean or replace the indoor air filter
- Vacuum return air grille surface
- Inspect & clean the chassis interior for rodent or insect infestation
- Clean & flush condensate drain pan and chassis base pan
- If applicable, ensure the condensation drain is functioning properly
- Inspect refrigeration tubing; especially braze joints, for signs of refrigerant leaks. (oil residue) repair if necessary
- Inspect indoor and outdoor coils. Ensure dirt or debris has not collected on the fins. Clean if necessary. Be careful not to damage coil fins when cleaning. Use a fin comb to straighten any bent fins.
- Examine control box. Ensure all wire connections are secure
- Ensure indoor blower wheel and outdoor fan blades are secured to their motor shafts
- Ensure dirt or debris has not collected on the indoor blower wheels and outdoor fan blades. Use a vacuum and soft brush
- Clean the exterior of the cabinet as desired with a mild soap or household cleaner

## **WARNING**

Clean or replace the return air filter as needed. Allowing dust to collect on the filter will cause the unit to lose efficiency and eventually malfunction. Check the filter at least once a month. Some environments may require more frequent replacement, depending on particulate in the air stream.

### **NOTICE**

If a new air filter is needed for your PERFECT COMFORT replacement PTAC, consult supplier for availability and/or proper sizing.

### **SEASONAL START-UP AND MAINTENANCE**

At the beginning of the cooling and heating seasons, a complete mechanical check should be performed and maintenance/inspections performed as described below.

**Disconnect power to unit** and remove necessary access panels

1. Performing the inspections and maintenance defined in “Monthly start-up and Maintenance”
2. Do a visual check of the equipment. Look for obvious changes in the unit such as damaged coils or evidence of extended wear on any moving parts.
3. Check for unusual odors, oil leaks, or stains on or around the coils and refrigerant lines. The presence of oil here may indicate a potentially serious problem such as a refrigerant leak.
4. Make sure the base pan is clean
5. Inspect all electrical connections. Look for frayed wires and poor connections. Terminal ends that are loose will eventually fail, causing a loss of performance or worse.
6. Check fan motors and blower assemblies. Some units may require a drop of light oil to motors and/or bearing assemblies (look for oil cups) ensure setscrews and motor mounting hardware are tight.
7. Brush and/or Vacuum the centrifugal fan blades and blower cage assemblies as they must be clean to operate efficiently. **WARNING:** Do not use a solvent-based cleaner to clean coils, as some solvents will produce a noxious odor when the unit is in operation.
8. Inspect both indoor and outdoor coils. Use a fin comb to straighten out any damaged fins. These coils must be straight and free of any debris.
9. Inspect and clean the drain pan and drain line(s). The use of anti-fungicide tablet to keep the condensate system free from bacterial contaminants is recommended.
10. Check the pitch of the unit. Over time the building and equipment may settle, causing a shift in the direction of the condensate flows. Ideally the unit should pitch a minimum of ¼ bubble on level to the outside to allow for proper drainage.
11. Check drainage holes along rear flange of the base pan to ensure they are free of debris.
12. Check to ensure the seal around the unit is not broken or damaged. **Notice:** Air leaks may make the conditioned area uncomfortably drafty or produce noises. Visually inspect the foam gasket between the wall and the unit, especially taking note of the separation between the air inlet for the condenser and the condenser coil discharge. These two areas must be sealed off from each other. If you experience poor cooling operation or erratic operation, check for air recirculation at the condenser coil.
13. Replace the access panels and reconnect the electrical power.
14. Test the unit operation.



## TROUBLE SHOOTING GUIDE

SYMPTOM	CAUSE	CHECK/CORRECTION
Thermostat does not properly control room temperature, runs continuously or causes abnormal cycles in heating or cooling mode	Sleeve seals are worn or missing allowing outdoor air to be passed over the thermostat sensing bulb	Inspect and replace if necessary
	Defective thermostat	Test and replace if necessary
	Thermostat bulb/sensor not properly located	Ensure bulb is clipped to evaporator coil at original factory specified location
	Thermostat/sensor temperature limiting option not set up properly	Set up the temperature limiting option according to the unit installation instructions
Compressor Short Cycles	Low Voltage	Check voltage with unit running and ensure it is within nameplate limits
	Restricted condenser air	Check for dirt or other condenser coil restriction. Clean as necessary
	Recycling of condenser air	Check for inadequate discharge air installation clearances. Coil not sealed against grille, unit may not be completely pushed into sleeve
	Condenser fan motor operating intermittently, rotating slowly, or not at all	Check to see if fan or shaft is being rubbed or experiencing external friction. Check free rotation of the motor shaft. Check voltage to the motor. Check motor capacitor. Check for mis-wiring. Motor may have open windings, or internal overload is defective. If so, replace motor
	Thermostat bulb/sensor not properly located	Ensure bulb is clipped to evaporator coil at original factory specified location
	Faulty or incorrect compressor overload	Check for correct overload model number and replace if incorrect. Otherwise, if running amps seem normal, replace overload.

SYMPTOM	CAUSE	CHECK/CORRECTION
Compressor Short Cycles (Cont.)	Indoor coil frozen	See "Evaporator Coil Frosts"
	Recycling of indoor air	Ensure that curtains or other obstructions are not short circuiting air between the outlet grille and return air intake
	Compressor running too slow and drawing high amps	Compressor may be mis-wired. Check capacitor. Compressor may be seizing – if so, replace compressor
Compressor will not run	Fuse or circuit breaker tripped	Replace or reset as necessary
	Defective switch	Test and replace if necessary
	Defective thermostat/sensor	Test and replace if necessary
	Indoor room temperature below thermostat set point	Lower thermostat setting if comfort is not yet achieved
	Indoor room temperature below 65°F	Cooling will not operate if the room temperature is below 65°F
	Outdoor temperature too cold	Compressor is not intended to operate at cold outdoor temperatures
	Broken, shorted, loose or mis-wired wiring	Inspect and correct
	Defective compressor capacitor	Test and replace if necessary
	Defective compressor overload	Test and replace if necessary
	Low voltage or no voltage to compressor	Check voltage and ensure it is within nameplate limits

SYMPTOM	CAUSE	CHECK/CORRECTION
Compressor will not run (Cont.)	Compressor windings open	Disconnect overload from compressor terminals. Check for winding resistance across all winding pairs. C-S, C-R, S-R and check each terminal to the compressor shell for ground faults. Replace compressor if any windings are open-circuited or short circuited to the shell
	Seized compressor	If all of the above check out OK and if pressures are equalized, and compressor draws high amps and will not start, the compressor is seized and needs to be replaced
Unit Trips Fuse/ Circuit Breaker	Shorted or incorrect wiring	Check all connections. Also check for shorts within devices such as motors, switches, heater, etc.
	Shorted capacitor	Test and replace if necessary
	Compressor short cycling	See "Compressor Short Cycles"
	Power was interrupted to the unit	Wait three minutes before starting
	Fuse or breaker setting too low	Check nameplate fuse size
	Broken, shorted, loose or mis-wired wiring	Inspect and correct
	Low voltage or no voltage	Check voltage with unit running and ensure it is within nameplate limits
	Seized or slow running compressor	See above

SYMPTOM	CAUSE	CHECK/CORRECTION
Evaporator Coil Frosts	Dirty air filter	Clean or replace
	Dirty evaporator coil	Clean as necessary
	Blower motor operating intermittently, rotating slowly, or not at all	Check to see if blower wheel or shaft is being rubbed or experiencing external friction. Check free rotation of the motor shaft. Check voltage to the motor. Check motor capacitor. Check for mis-wiring. Motor may be seizing. Motor may have open windings, or internal overload is defective – if so, replace the motor
	Low refrigerant charge	Look for telltale signs of low charge. For example, check the frosting pattern starting from defrosted condition. If the whole evaporator face frosts uniformly at the same time, it indicates that the unit has insufficient indoor airflow. If the frost works its way up the face of the evaporator during operation over time, it indicates low charge, low running amps, low or no sub cooling and excessive superheat are other signs of undercharge. Find and fix the leak and recharge R410A to the nameplate charge
	Faulty thermostat	Test and replace if necessary

SYMPTOM	CAUSE	CHECK/CORRECTION
Unit Rattles or is Noisy	Defective compressor	Check and replace if necessary
	Refrigerant line hitting surroundings	Bend tube slightly to obtain clearance
	Loose fan, blower, or motor mounts	Check and tighten if necessary
	Rubbing of fan or blower on housing	Ascertain cause and correct. Check during operation
No Heating	Faulty thermostat	Test and replace if necessary
	Fuse or circuit breaker tripped	Replace or reset as necessary
	Cord not plugged in	Plug in
	Defective switch	Test and replace if necessary
	Defective heater	Inspect and replace if necessary
	One-time thermal fuse is blown	Check thermal fuse for open circuit and replace if necessary
	Automatic reset high limit control will not reset	Check high limit for open circuit and replace if necessary
	Broken, shorted, loose or mis-wired	Inspect and correct
	Indoor room temperature above thermostat set point	Raise thermostat setting if comfort not yet achieved

SYMPTOM	CAUSE	CHECK/CORRECTION
Heater Output Intermittent or Insufficient	Faulty thermostat	Test and replace if necessary
	Automatic reset high limit control calibration defective	Replace high limit
	Dirty air filter	Clean or replace
	Dirty evaporator coil	Clean as necessary
	Blower motor operating intermittently, rotating slowly, or not at all	Check to see if blower wheel or shaft is being rubbed or experiencing external friction. Check free rotator of the motor shaft. Check voltage to the motor. Check motor capacitor. Check for mis-wiring. Motor may be seizing internally or internal overload is defective – if so, replace motor
Water Drips from Unit	Sleeve not properly mounted	Check sleeve for the required 3/8" pitch down from indoor to outdoor side and level side-to-side. Re-adjust as required.
	Condensate drain plugged	Clean condensate drain spout passing through the dividing wall
	Evaporator drain pan cracked or improperly mounted	Inspect, re-align or replace plastic drain pan as required.
	Unusually high moisture content in the indoor and/or outdoor air	Under certain ambient conditions excessive condensate can be generated beyond the capacity for the unit to reject via evaporation to the outdoor airstream. If objectionable of frequent, connect to an internal drain system with available optional drain kit.
	Drain holes plugged in bottom edge of sleeve on outdoor side	Inspect and clear blockage

## Error Codes

Error code	Error Presentation
E1	Indoor temperature sensor broken/short circuit
E2	Temperature sensor of indoor condenser coil broken/short circuit
E3	Outdoor environment temperature sensor broken/short circuit
E4	Protection of lack cooling liquid
E6	Pressure switch protection
E7	Position of DIP switch error
E8	Low temperature and low-pressure protection of outdoor cold water

PCDM Air Conditioner with Electric Heat																		
Model	Power Supply Volt		Compressor		Indoor Fan Motor		Outdoor Fan Motor		Electric Heat			Unit Electrical Ratings						
	Volt	Min	RLA	LRA	FLA	HP	ELA	HP	HTR#	Volt	W	HA	A/Cooling	Heat Pump	A/Heating	Max.A	MAX HACR BRKR	Plug
PCDM09K235HTM4	208/230	197	3.9	20	0.5	0.1	0.55	0.12	2KW	208	1725	8.2	4.1	4.3	8.8	9.5	15	6-15P
										230	2000	8.8						
									3KW	208	2525	12.1	4.1	4.3	13	14	15	6-20P
										230	3000	13						
									5KW	208	4050	20.5	4.1	4.3	22	23	26	6-25P
										230	5000	22						

PCDM Air Conditioner with Electric Heat																		
Model	Power Supply Volt		Compressor		Indoor Fan Motor		Outdoor Fan Motor		Electric Heat			Unit Electrical Ratings						
	Volt	Min	RLA	LRA	FLA	HP	ELA	HP	HTR#	Volt	W	HA	A/Cooling	Heat Pump	A/Heating	Max.A	MAX HACR BRKR	Plug
PCDM12K235HTM4	208/230	197	5.26	28	0.5	0.1	0.55	0.12	2KW	208	1725	8.2	5.2	5.35	8.8	9.5	15	6-15P
										230	2000	8.8						
									3KW	208	2525	12.1	5.2	5.35	13	14	15	6-20P
										230	3000	13						
									5KW	208	4050	20.5	5.2	5.35	22	23	26	6-25P
										230	5000	22						

PCDM Air Conditioner with Electric Heat																		
Model	Power Supply Volt		Compressor		Indoor Fan Motor		Outdoor Fan Motor		Electric Heat			Unit Electrical Ratings						
	Volt	Min	RLA	LRA	FLA	HP	ELA	HP	HTR#	Volt	W	HA	A/Cooling	Heat Pump	A/Heating	Max.A	MAX HACR BRKR	Plug
PCDM15K235HTM4	208/230	197	6.55	39	0.5	0.1	0.55	0.12	2KW	208	1725	8.2	7.8	8.05	8.8	9.5	15	6-15P
										230	2000	8.8						
									3KW	208	2525	12.1	7.8	8.05	13	14	15	6-20P
										230	3000	13						
									5KW	208	4050	20.5	7.8	8.05	22	23	26	6-25P
										230	5000	22						

**PERFECT COMFORT REPLACEMENT PACKAGED TERMINAL AIR CONDITIONER  
WARRANTY FOR PRODUCTS PURCHASED AND USED  
IN CANADA & USA**

**SAVE THIS CERTIFICATE.**

**BEFORE CALLING FOR SERVICE**, carefully read your instruction booklet. In the event your Perfect Comfort product requires servicing, contact your nearest authorized service centre. If you do not know the nearest service centre, contact the company you purchased your Perfect Comfort product from or call Perfect Comfort at 1-866-233-4022. When requesting service, please have the model number, serial number, date of purchase and a description of the problem available. Service will be provided during normal working hours.

**ESTABLISHING PROOF OF PURCHASE DATE**

For warranty purposes, it is the customer's responsibility to retain the bill of sale as proof of purchase. Failing to do so, the effective date will be based upon the date of manufacture plus thirty (30) days or the date of shipment from Perfect Comfort.

**STANDARD WARRANTY**

Within **one year** of original purchase, Perfect Comfort will supply a replacement for any component part(s) found to be defective in materials or workmanship. All replacement part(s) assume the unused portion of the original warranty. Within **one year** of original purchase, Perfect Comfort will pay for labour costs for such repair work at our established labour rates. See Labour Warranty Rates & Codes sheet for labour allowance. In the **second through sixth year** of warranty from the date of original purchase, if the compressor is found to be defective, Perfect Comfort will supply a replacement part only. All replacement compressor(s) assume the unused portion of the original warranty. No payments will be made without a Perfect Comfort approval number. All approval numbers are issued prior to doing any warranty work.

**EXTENDED 1 YEAR PARTS WARRANTY**

After the first year starting from original purchase, for (1) additional year Perfect Comfort will supply a replacement for any component part(s) found to be defective in materials or workmanship. All replacement part(s) assume the unused portion of the original warranty. The extended warranty is **not included** with the unit and must be purchased within 30 days from purchase date from Perfect Comfort.

**EXTENDED 5 YEAR PARTS WARRANTY**

After the first year starting from original purchase, for (5) additional years Perfect Comfort will supply a replacement for any component part(s) found to be defective in materials or workmanship. All replacement part(s) assume the unused portion of the original warranty. The extended warranty is **not included** with the unit and must be purchased within 30 days from purchase date from Perfect Comfort.

**LIMIT OF LIABILITY**

The aggregate of all coverage and benefits paid or payable under this Limited Warranty shall not exceed the original price paid for the product, less installation charges. If the aggregate limit is met, or if the product is replaced in its entirety, the maximum liability will have been met under the Limited Warranty.

What is NOT included in the Warranty

- Charges for shipping, overtime rates, diagnosing equipment, and truck/vehicle usage.
- Replace house/facility fuses and/or circuit breakers, reset circuit breakers or correct house/facility wiring.
- Clean or replace air filters.
- Correct improper installations.
- All expenses where the Perfect Comfort product is subjected to improper installation, inadequate maintenance, abuse or misuse, neglect, accident, fire, flood, or incorrect power source.
- The removal and reinstallation of the Perfect Comfort product, if it is installed in an overhead or other inaccessible location.
- Perfect Comfort products that have unauthorized modifications to electrical and/or mechanical components.
- Shipping charges to deliver the Perfect Comfort product to an authorized service depot and return to installation.
- Perfect Comfort products that have been moved from the original site of installation.
- All labour and service call charges incurred after the Standard Limited One Year Warranty has expired.
- Cost of replacement refrigerant and all other charges incurred after the Standard Limited One Year Warranty has expired.
- Service work by unauthorized technicians.

Service must be provided by a Perfect Comfort authorized service depot. All service calls and labour charges will be at our rate in effect at the time of the service.

This warranty applies only while the Perfect Comfort product remains at the original site and only to Perfect Comfort products installed in Canada & USA. Perfect Comfort shall not be liable for any indirect, incidental, consequential, or special damages in connection with any use or failure of this product. No one is authorized to change this warranty or to create for us on our behalf any other obligation or liability in connection with our product(s). There is no other warranty or condition in any respect, expressed or implied, made by or binding upon us other than the above or as provided by provincial law and which cannot be limited or excluded by such law.

Model # \_\_\_\_\_ Serial # \_\_\_\_\_ Install Date \_\_\_\_\_