



Owner Manual

YUKON

Tall Floor Split Systems

36,000 - 120,000 Btu/h

Cooling Only

MCV Series 50/60 Hz



**50 Hz Models
Cooling Only
MCV 036 BB
MCV 048 BB
MCV 060 BB
MCV 090 BB
MCV 120 BB**

**60 Hz Models
Cooling Only
MCV 036 B1
MCV 048 B1
MCV 060 B1
MCV 090 B1
MCV 120 B1**

June 2006

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General Information

General Information

Congratulations on your choice of a Trane MCV vertical floor mounted split system. These systems have been carefully designed and manufactured according to strict **Trane Worldwide Quality Standards** to provide you with years of comfort convenient cooling with minimal service.

This Owner Manual is provided as a guide for the start-up, operation and periodic maintenance by the user of the MCV floor mounted split system. It does not contain the full service procedures necessary for the continued successful operation of this equipment. The services of a qualified service technician should be employed, through a maintenance contract with a reputable service company.

Please read this Manual completely before doing anything with your air conditioning system.

About this Manual

Cautions appear at appropriate places in this instruction manual. Your personal safety and the proper operation of this machine require that you follow them carefully. The Trane Company assumes no liability for inappropriate use of the unit.

About the Unit

Trane These MCV units are assembled, pressure tested, dehydrated, charged and run-tested prior to shipment from the factory. The information contained in this manual applies to MCV units designed to operate in the cooling mode only.

The Trane MCV series, is equipped with a microprocessor control to provide flexibility and energy savings.

Reception

On arrival, please inspect the unit before signing the delivery note. Specify any damage of the unit on the delivery note, and send a registered letter of protest to the last carrier of the goods within 72 hours of delivery. Notify the dealer at the same time.

The unit should be totally inspected within 7 days of delivery. If any concealed damage is discovered, send a registered letter of protest to the carrier within 7 days of delivery and notify the dealer.

Warning

Warnings are provided at appropriate places in this manual to indicate to installers, operators and service personnel of potentially hazardous situations which, if not avoided, COULD result in death or serious injury.

Caution

Cautions are provided at appropriate places in this manual to indicate to installers, operators, and service personnel of potentially hazardous situations which, if not avoided, MAY result in minor or moderate injury or malfunction of the unit.

Your personal safety and the proper operation of this unit require that you follow them carefully. The Trane Company assumes no liability for installations or servicing performed by unqualified personnel.

Warranty

Warranty is based on the general terms and conditions in each country. The warranty is void if the equipment is modified or repaired without the written approval of The Trane Company, if the operating limits are exceeded or if the control system or the electrical wiring is modified.

Damage due to misuse, lack of maintenance or failure to comply with the manufacturer s instructions, is not covered by the warranty obligation. If the user does not conform to the rules described in Owner Manual, it may entail cancellation of warranty and liabilities by The Trane Company.

Important

These instructions do not cover all variations in systems, nor do they provide for every possible contingency to be met. Should further information be desired or should particular problems arise which are not covered sufficiently for the purchaser s purposes, the matter should be referred to your authorized Trane dealer.



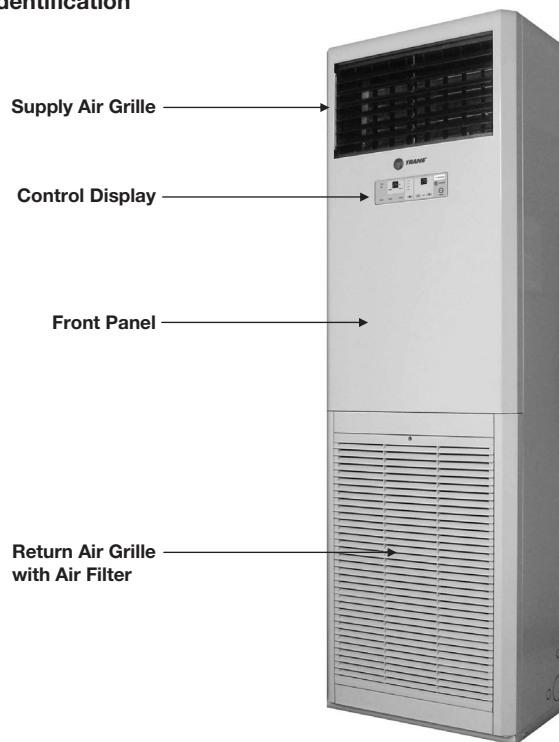
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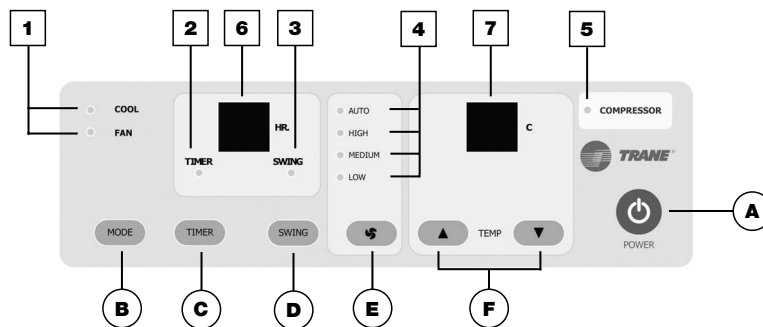
Unit Appearance

Part Identification





Control Operation



Digital Control

By means of advanced microprocessor technology, Trane brings convenient and accurate room temperature control to its user. It also provides many energy saving features such as the auto fan function.

Indicators on Display Unit

1. SYSTEM MODE lamp

Display the current operation mode. In cooling only (COOL or FAN).

2. TIMER lamp

A timer lamp lights when system operation is being controlled by the timer.

3. SWING lamp

A swing lamp lights when sweep motor is operating.

4. FAN SPEED lamp

Display the selected fan speed. Fan speed level, LOW, MEDIUM, HIGH and AUTO will be indicated.

5. COMPRESSOR lamp

A compressor lamp lights when compressor is operating.

6. TIMER 7-segment lamp

The hours set for timer on/off operation is indicated (between 1 to 15 hours).

7. TEMPERATURE 7-segment lamp

Display the current room temperature or temperature setting.

Name and Function of Buttons

A. POWER

Press POWER button to turn the air conditioner on and off, it will operate according to the last program setting.

B. MODE

Press this button to select system operating mode. The air conditioner can be put in 2 modes, COOL and FAN.

C. TIMER

The air conditioner can be timed to switch "on" or "off" up to 15 hours in advance.

TIMER OFF : To set timer off, press TIMER button when air conditioning is on, TIMER 7-segment lamp will display the last hour time setting (blinking). Press TIMER button to change hour digit (1 to 15 hours) for timer off setting. When press TIMER button until "--" appears, the timer off setting will be canceled then TIMER lamp and 7-segment lamp will stop display.

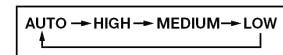
TIMER ON : Use same procedure to set timer off except press TIMER button when air conditioning is off.

D. SWING

Press this button to activate sweep motor to adjust the direction (left or right) of air flow.

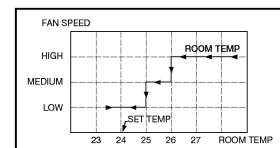
E. FAN

Three fan speeds (HIGH, MEDIUM, LOW) can be selected and the fan speed can also be put in AUTO fan mode.



In AUTO fan mode, the fan speed will change automatically according to the difference between room temperature and setting temperature.

- If the difference is 3°C or more, the speed is HIGH
- If the difference is 2°C, the speed is MEDIUM
- If the difference is 1°C or less, the speed is LOW



F. TEMP

The TEMP ▲ and ▼ buttons are used to adjust the setting temperature from 15°C to 30°C. When the button is pressed, the control unit will display the setting temperature (blinking) instead of the room temperature. After the process is finished, the display will stop blinking and revert back to display the room temperature.



System Operation

Watchdog

The microprocessor occasionally malfunctions due to voltage fluctuation or other abnormalities. The "Watchdog" circuit will reset and restart the microprocessor if this happens.

Compressor Delay Protection

Each time the compressor is off, there will always be a time delay 3 minutes before the compressor can restart. In case of power interruption, the system will delay the operation of compressor in the range of 3-4 minutes in random order.

Freeze Protection

When the air conditioner is operating in COOL mode and the temperature is very low, there is a chance that the coil might freeze. The freeze protection function will operate when the coil temperature is less than 0°C and compressor runs continuously more than 10 minutes. During the freeze protection operation, the compressor stops running and operate the unit at a low fan speed in order to defrost the coil then the temperature lamp blinks and display "Fr". The system will go back to the normal stage if the coil temperature is above 7°C or turn off and on the air conditioner.

Sensor Error Detection

When the room sensor is failed (open/short circuit), the temperature lamp will display "rE" in blinking and the compressor will be turned on and off in 5 minutes cycle.

When the indoor coil sensor is failed (open/short circuit), the temperature lamp will display "FE" in blinking and the system still operates as if there is no such sensor connected.

Memory

The system keeps the setting parameters such as on/off status, fan speed, etc. in its non-volatile memory. If there is a power interruption and back to normal, the control will automatically resume its operation with the same setting parameters (except the TIMER function which will be canceled). If there is any change in the parameter, it will be saved in the non-volatile memory 5 seconds later

Compressor Minimum On Time

Once the compressor starts, it will operate at least 24 seconds.

Adjust Air Flow Direction

Adjust the air flow direction properly, otherwise it may cause discomfort and make the room temperature uneven. The supply air grille can be adjusted manually for up or down directions and automatically adjust by using SWING mode for left or right directions.

Operating air conditioner safety

- Do not insert a bar or similar object into the supply air outlet. In particular, advise small children not to insert anything in the grille.
- Do not pour water directly on the air conditioner to clean it. If the air conditioner is operating as wet, grounding may occur, damaging the unit.
- Adjust the air flow so it does not blow directly on room occupants.
- Do not use flammable sprays near the air conditioner because of danger of fire.
- Do not use a steel or copper wire in place of fuses.
- Do not inspect or service the air conditioner while it is operating. Turn off the power supply before doing any inspection or service work.

- The power cord should be kept away from furniture with sharp corners. It may cause fire or electric shock.
- When the air conditioner will not be used for a long time, be sure to turn **OFF** the power supply.

If you have any questions or problems with your air conditioning system, please consult your nearest **Trane** dealer.

Stop the air conditioner at once if any the following occurs:

- The power cord is too hot to be touched by hand.
- The insulation of the power cord is exposed at any point.
- The fuse is blown or circuit breaker trips frequently.
- The functions of the switches are inaccurate.



Maintenance

Regular Maintenance

Be sure to disconnect the power before inspection or maintenance of air conditioner.

Cleaning the Front Panel

Do not pour the water directly on the front panel to clean it. Wipe the outside with a soft dry cloth. Use of a neutral liquid cleaner is also recommended, but it should carefully be wiped off with a separate dry cloth afterwards.

Cautions

- Do not use water over 50°C to clean the front panel or it may become discolored.
- Do not use benzine, gasoline, thinner, polishing compound, machine oil, etc. when cleaning the front panel, or paint may peel off, or it may become deformed or damaged.

Cleaning the Air Filter

When the filter become dirty, air volume decreases and performance drops. Dirty filter can also be the cause of noise. Clean the filter at the beginning of each cooling or heating season. During regular use, periodic cleaning should be performed at approximate two week intervals.

1. Removing the Air Filter

- Remove a mounting screw at return air grille. (Figure 1)
- Open the return air grille by pulling down and pull up the air filter from the return air grille. (Figure 2)

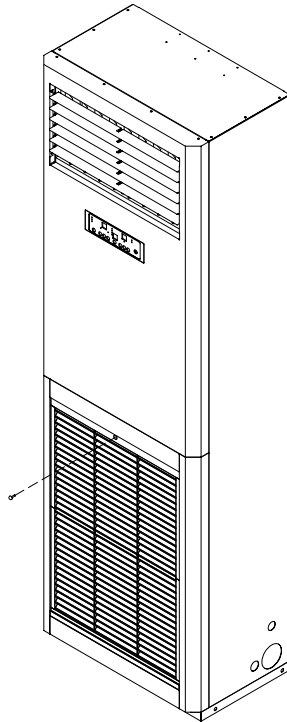


Figure 1

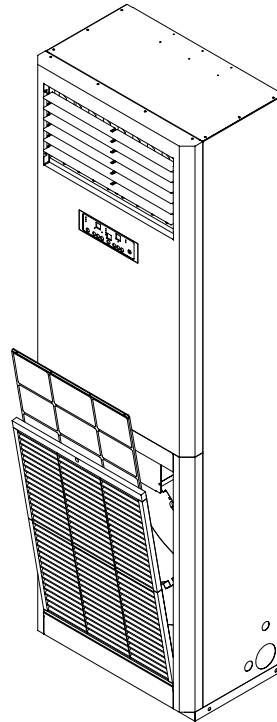
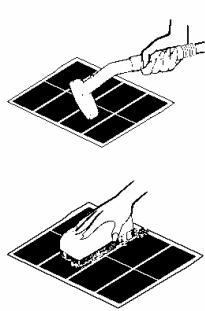


Figure 2



Maintenance



2. Cleaning the Air Filter

Cleaning is easiest with a vacuum cleaner.

Either use a vacuum cleaner to remove accumulated dust, or wash in a neutral detergent solution.

When washing the filter, allow it to dry well in a shaded location before re-installing it in the air conditioner.

Cautions

- Do not wash the air filter in water that is over 40°C or it may shrink.
- Do not expose the air filter to fire.
- Do not expose the air filter to direct sunlight for a long period of time.
- Clean the air filter more frequently when the air is very dirty.



Troubleshooting

Before requesting service, perform the following checks:

	Symptom	Problem
Functioning normally, but	Doesn't operate immediately	<ul style="list-style-type: none"> If the unit is stopped and then immediately started again, the compressor will not operate for about 3 minutes, in order to prevent fuse actuation. Whenever the power plug is disconnected and then reconnected to a power outlet, the protection circuit will operate for about 3 minutes, preventing unit operation during that period.
	Noise is heard	<ul style="list-style-type: none"> During operation and immediately after stopping the unit, the sound of coolant flowing in the air conditioner's piping may be heard. Also, noise may be particularly noticeable for about 2-3 minutes after starting operation (sound of coolant flowing). During operation, a slight squeaking sound may be heard. This is the result of minute expansion and contraction of the supply grille due to temperature changes.
	Smells bad	<ul style="list-style-type: none"> Some smell may be emitted from the indoor unit. These smells are the result of room smells (furniture, tobacco, etc) which have been taken into the air conditioner.
	Mist or steam are emitted	<ul style="list-style-type: none"> During cooling or dry operation, a thin mist may be seen coming from the indoor unit. This results from the sudden cooling of room air by the air from the air conditioner, resulting in condensation and misting.
Check once more if:	Doesn't operate at all	<ul style="list-style-type: none"> Is the power plug disconnected from its outlet? Has there been a power failure? Has a fuse blown out, or a circuit breaker been tripped?
	Poor cooling performance	<ul style="list-style-type: none"> Is the air filter dirty? Are the air conditioner's intake or outlet vents blocked? Did you adjust the room temperature settings correctly? Is there a window or a door open? In the case of cooling operation, is a window allowing bright sunlight to enter? (Close the curtains). In the case of cooling operation, is there a heat source operating inside the room, or are there too many people in the room?



Note



Note



Trane
A business of American Standard Companies

<http://www.trane.com>

For more information, contact your local district office

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Stocking Location Thailand

Trane has a policy of continuous product and product data improvement and reserves the right to change design and specifications without notice. Only qualified technicians should perform the installation and servicing of equipment referred to in this publication.