

# **MINI-TEMP**

## **INSTALLATION/OPERATION & MAINTENANCE MANUAL**

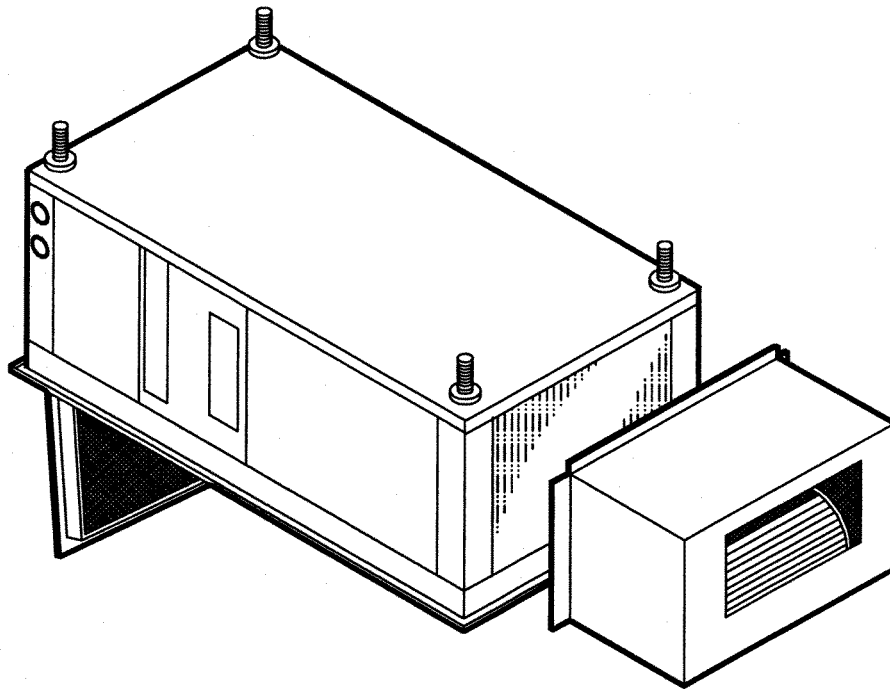
### **1, 1.5, & 2 TON**

◇ AIR-COOLED (MTA)

◇ WATER-COOLED (MTW)

◇ GLYCOL-COOLED (MTG)

◇ CHILLED WATER (MTC)



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ISO 9002 Registered Company

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## GENERAL INTRODUCTION

Mini-temp systems are provided for either air-cooled (MTA) or water cooled (MTW) installations. In addition, the water-cooled model may be operated as a closed-circuit system. The MTG with the addition of a dry-cooler.

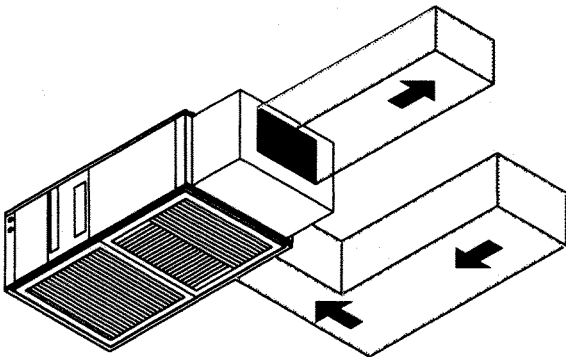
Optional accessories include a humidifier, electric re-heat assembly, condensate pump, remote control panel, rigging device, and remote condenser. In addition; a condenser fan assembly is supplied with all air-cooled MTA equipment.

All glycol-cooled MTG models include a dry-cooler, expansion tank (optional), pump and control box. (See separate installation manual).

## DIFFERENT CONFIGURATIONS

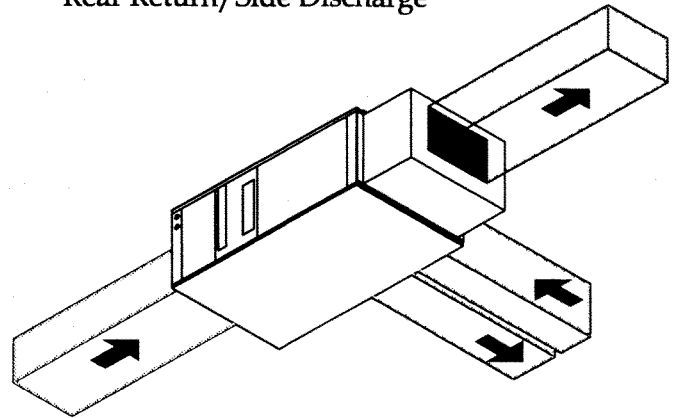
### AIR COOLED

- \* Bottom Supply/Return with Grille Frame Assembly (Standard)



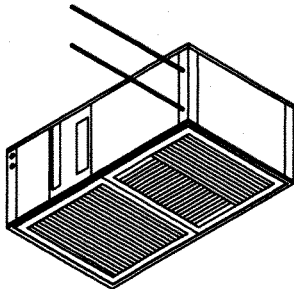
### AIR COOLED

- \* Ducted System (Optional)  
Rear Return/Side Discharge



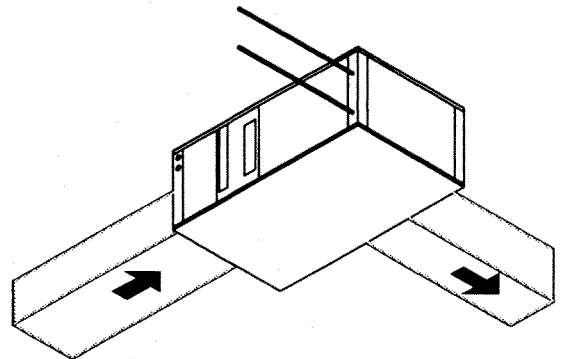
### WATER/GLYCOL COOLED/CHILLED WATER

- \* Bottom Supply/Return with Grille Frame Assembly (Standard)



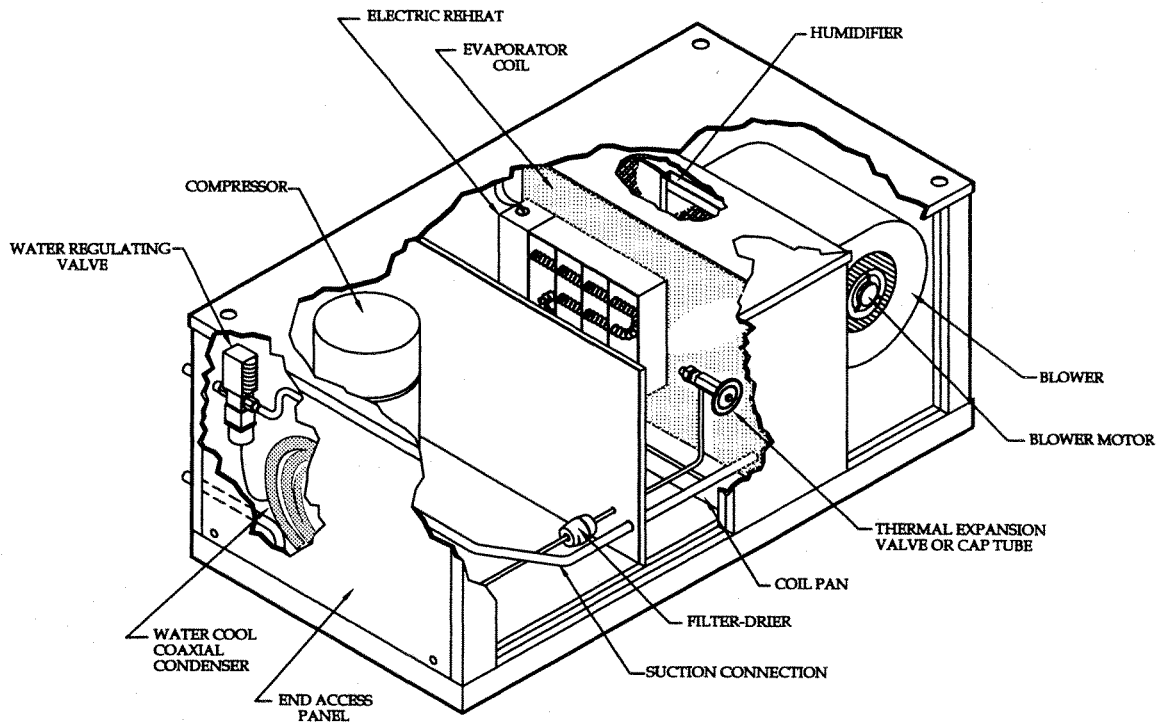
### WATER/GLYCOL COOLED/CHILLED WATER

- \* Ducted System (Optional)  
Rear Return/Side Discharge

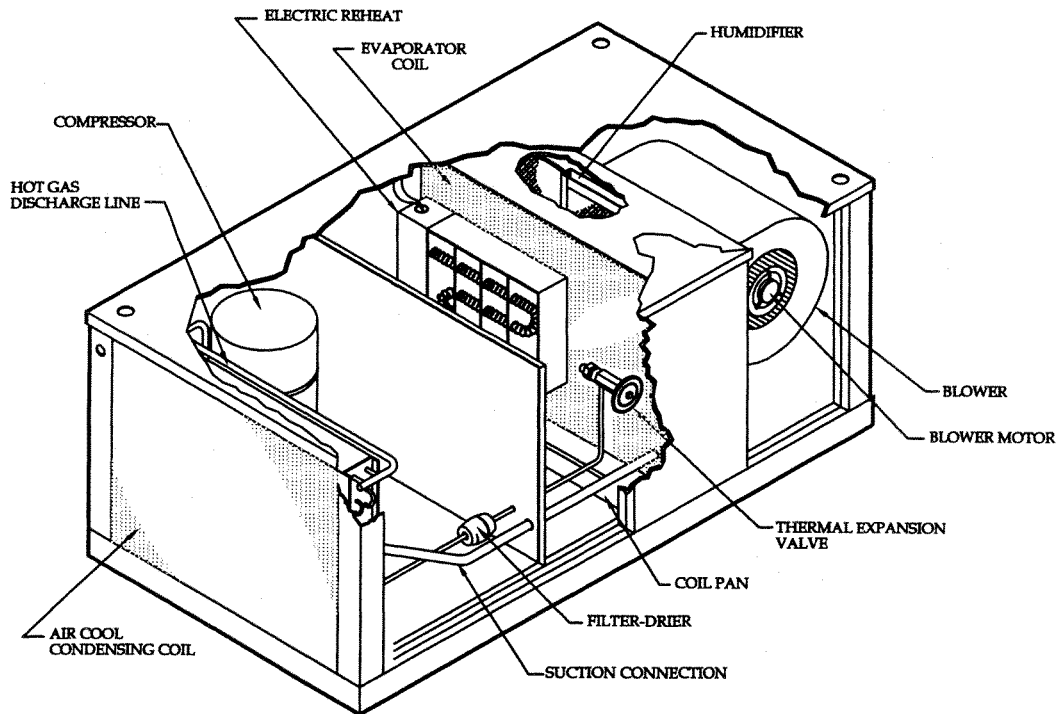


# COMPONENTS LAYOUT

## WATER COOLED (MTW/MTG) SYSTEM

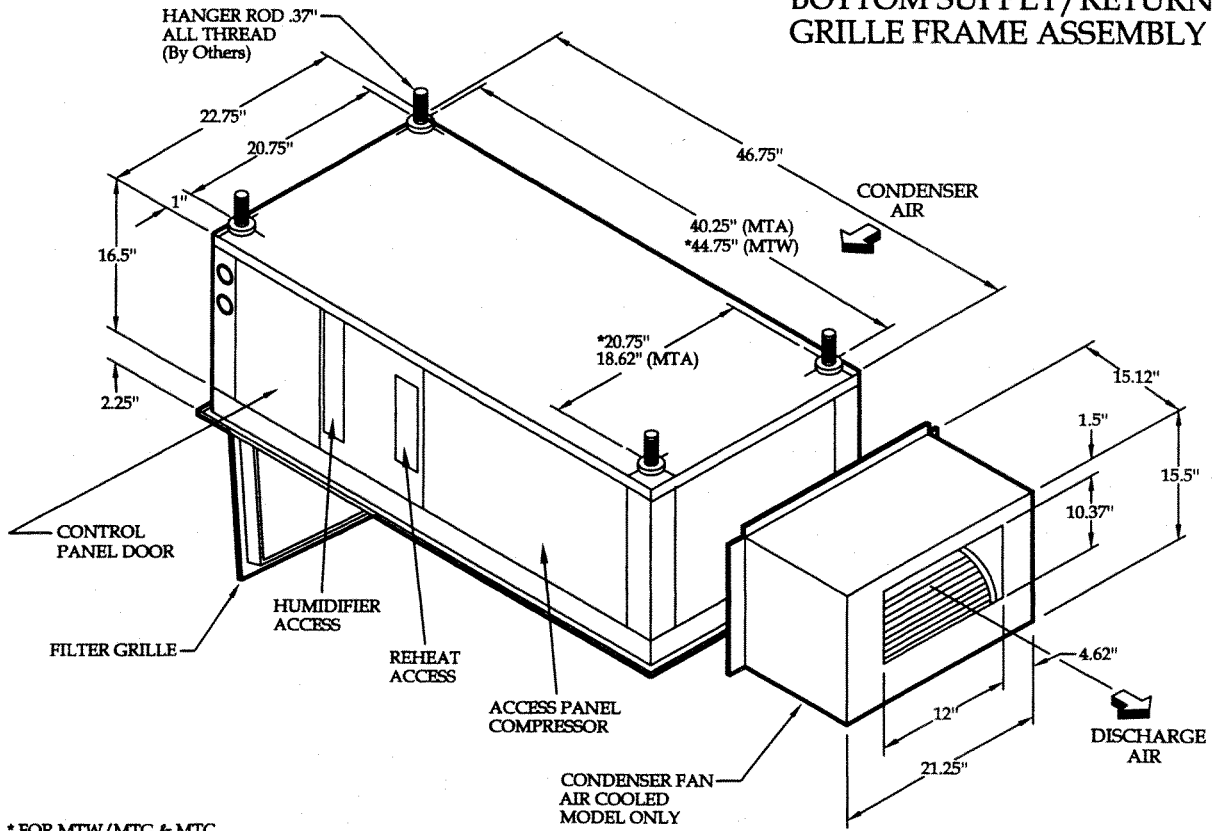


## AIR COOLED (MTA) SYSTEM



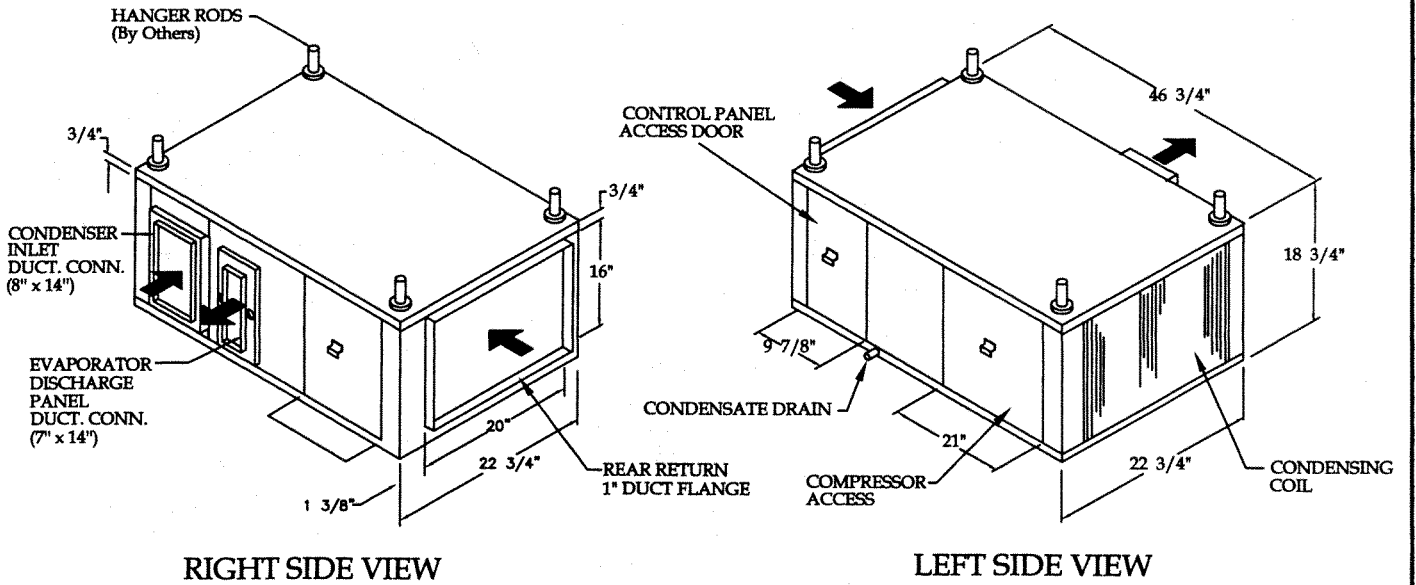
# DIMENSIONAL DATA: MINI-TEMP

## BOTTOM SUPPLY/RETURN WITH GRILLE FRAME ASSEMBLY



NOTE: \* FOR MTW/MTG & MTC

## REAR RETURN/SIDE DISCHARGE WITH DUCT CONNECTIONS



## RECEIVING INSPECTION:

Each MINI-TEMP system is operated and completely tested to assure that the equipment is fully operational and meets factory specifications before packaging for shipment. The carrier assumes responsibility for the equipment when he accepts the shipment and retains responsibility until the shipment is complete and accepted at the job site. As a consequence, it is essential that a careful inspection be made on delivery. If there is visible damage or a shortage, this information should be noted on the delivery slip and an immediate claim should be made with the carrier.

Should additional damage become evident when the equipment is uncrated, this information should be reported immediately to the carrier, with a request for inspection of damage by the carrier's insurance representative. Shipping damage is the sole responsibility of the carrier.

Compu-Aire, Inc. is not responsible for filing any claims. All needed inspection and claim filing is the responsibility of the Receiver.

## LOCATION:

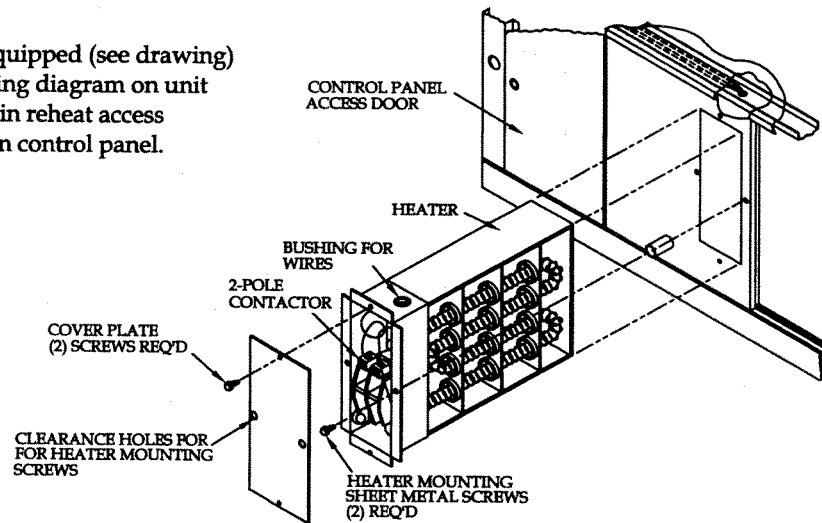
The MINI-TEMP system is designed for installation in a standard - 2 X 4 feet ceiling tile opening. All controls and normal service access are on one side of the unit together with electric and piping access.

It is desirable to allow at least 24 inches clearance on all sides although clearance on one side is sufficient for normal service. Certain locations may require the unit to be lowered for major service. Routine maintenance can be done through the filter grill.

Avoid locating the system in confined areas that affect the air flow as down drafts, short cycles and air noise may result.

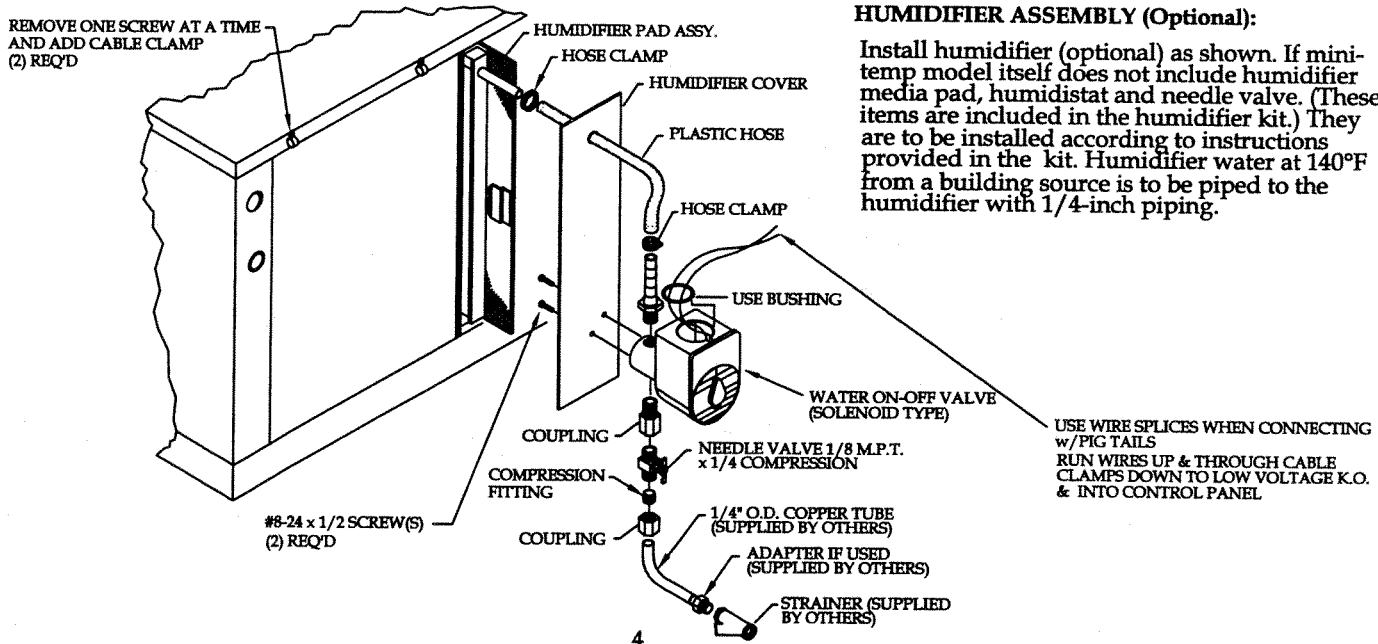
## REHEAT ASSEMBLY (Optional):

Install optional reheat assembly if so equipped (see drawing) and connect wiring as indicated in wiring diagram on unit door and as marked on wire terminals in reheat access section and at electrical terminal strip in control panel.



## HUMIDIFIER ASSEMBLY (Optional):

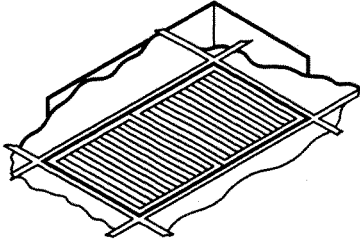
Install humidifier (optional) as shown. If mini-temp model itself does not include humidifier media pad, humidistat and needle valve. (These items are included in the humidifier kit.) They are to be installed according to instructions provided in the kit. Humidifier water at 140°F from a building source is to be piped to the humidifier with 1/4-inch piping.



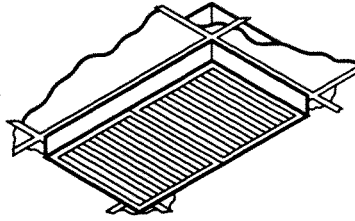
## APPLICATION

Normally mounted flush with the ceiling, the mini-temp unit may also be partially recessed or surface mounted if a

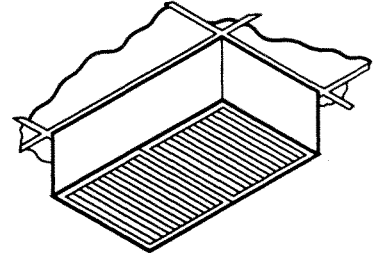
20 inch clearance area above the ceiling is not available.



**Flush**

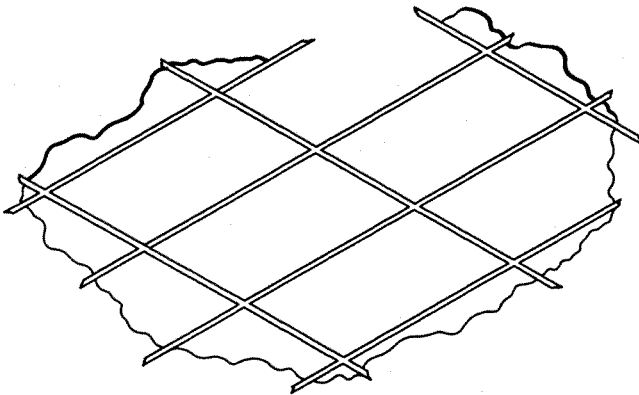


**Partially Recessed**

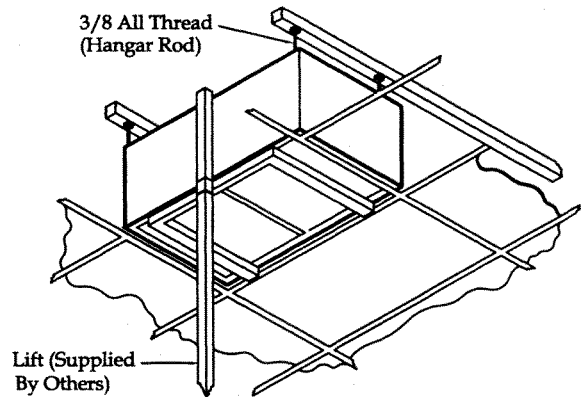


**Surface**

## INSTALLATION

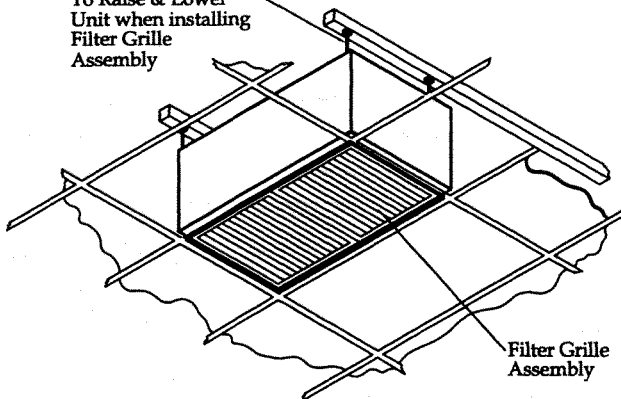


**1. Remove Ceiling tile**



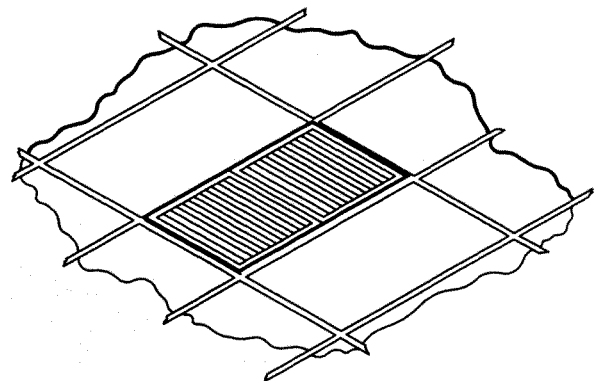
**2. Raise Unit**

Use Hanger Rod  
To Raise & Lower  
Unit when installing  
Filter Grille  
Assembly



**3. Install Filter Grille Assembly**

On flush-mount installations, position filter-grill above ceiling T-bars and lower mini-temp unit to compress gasket by 1/8 inch, assuring a tight seal. On partially recessed or surface

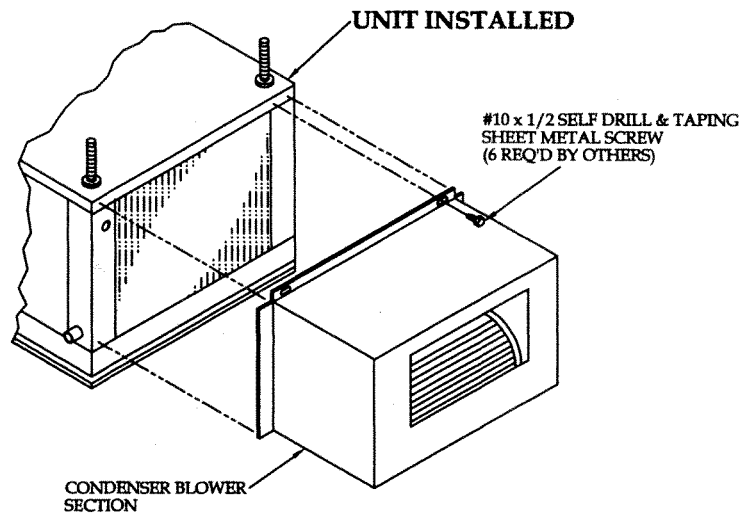


**4. Reinstall Ceiling Tile**

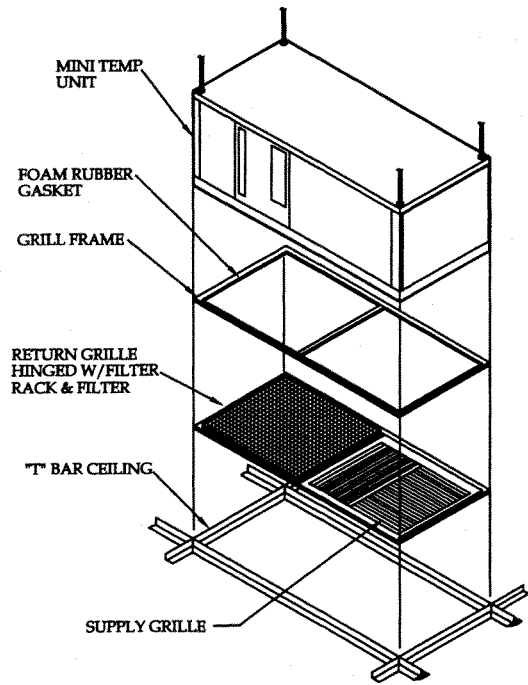
installations, remove and discard filter-grille frame. Fasten filter-grill directly to unit frame with sheet metal screws (by others).

### CONDENSER BLOWER

If system is air-cooled, install condenser blower using six (6) #10 x 1/2 inch self-tapping sheet metal screws. Connect wire ends with wire nuts.



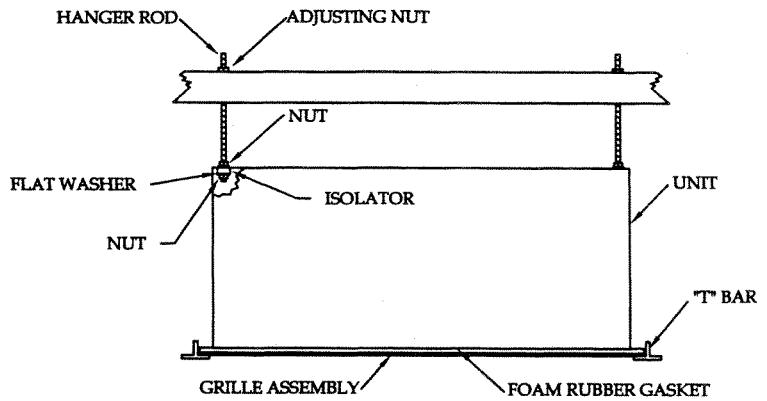
### FILTER-GRILLE ASSEMBLY



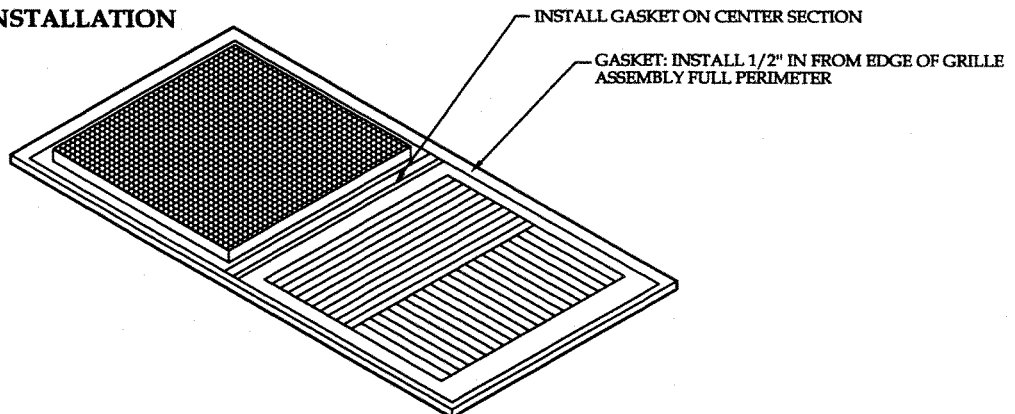
### FLUSH MOUNT INSTALLATION

As the system is designed for suspension mounting, structural members capable of supporting 400 pounds must be made available. Predrill holes in support members for four (4) 3/8" suspension rods. Bring piping and wiring service to ceiling opening. Use factory-supplied isolators to install all-thread rods. Raise unit above ceiling tiles and secure with locknuts.

Make sure unit is level to prevent water damage.

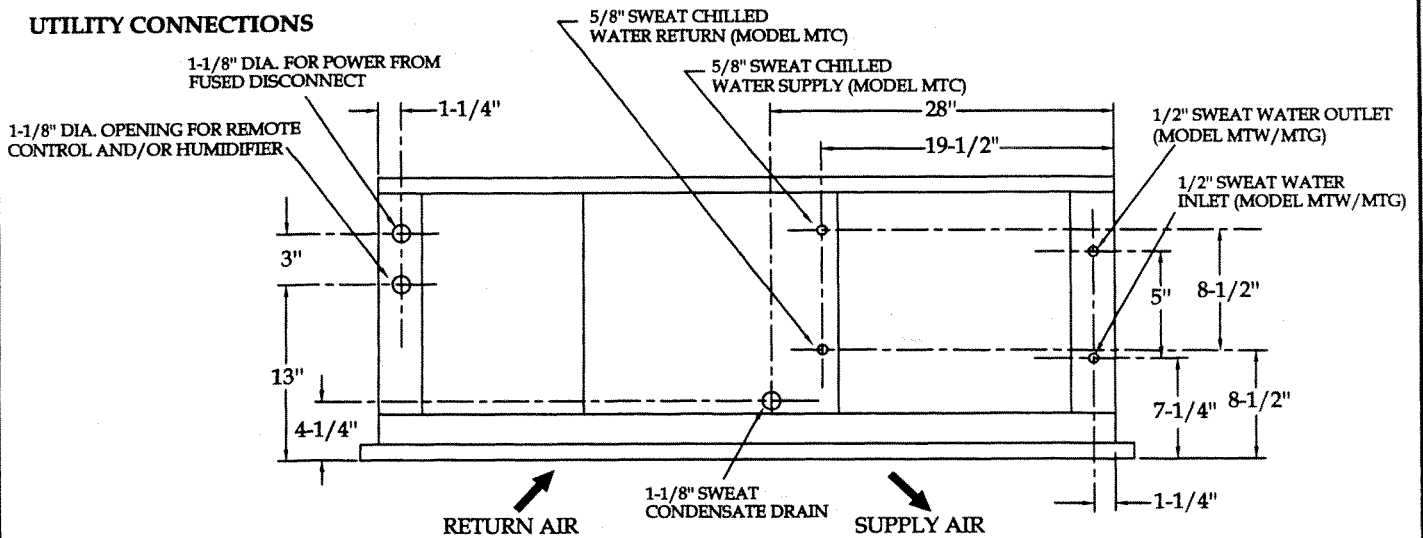


### FILTER-GRILLE GASKET INSTALLATION





## UTILITY CONNECTIONS



## ELECTRICAL

Provide external fused disconnect or circuit breaker for 208/230/277v/1Ph/60Hz service as required by local code. Refer to specification data sheet for rated current requirement. Connect power wiring in accordance per electrical diagram in the control compartment door, and local code.

24 volt control power is provided through unit transformer.

If system is to be equipped with an optional humidifier, install both manual and solenoid valve provided and wire in accordance with electrical diagram on unit control door.

If optional remote control panel is supplied, follow instructions shipped with those components for proper connection.

## PIPING:

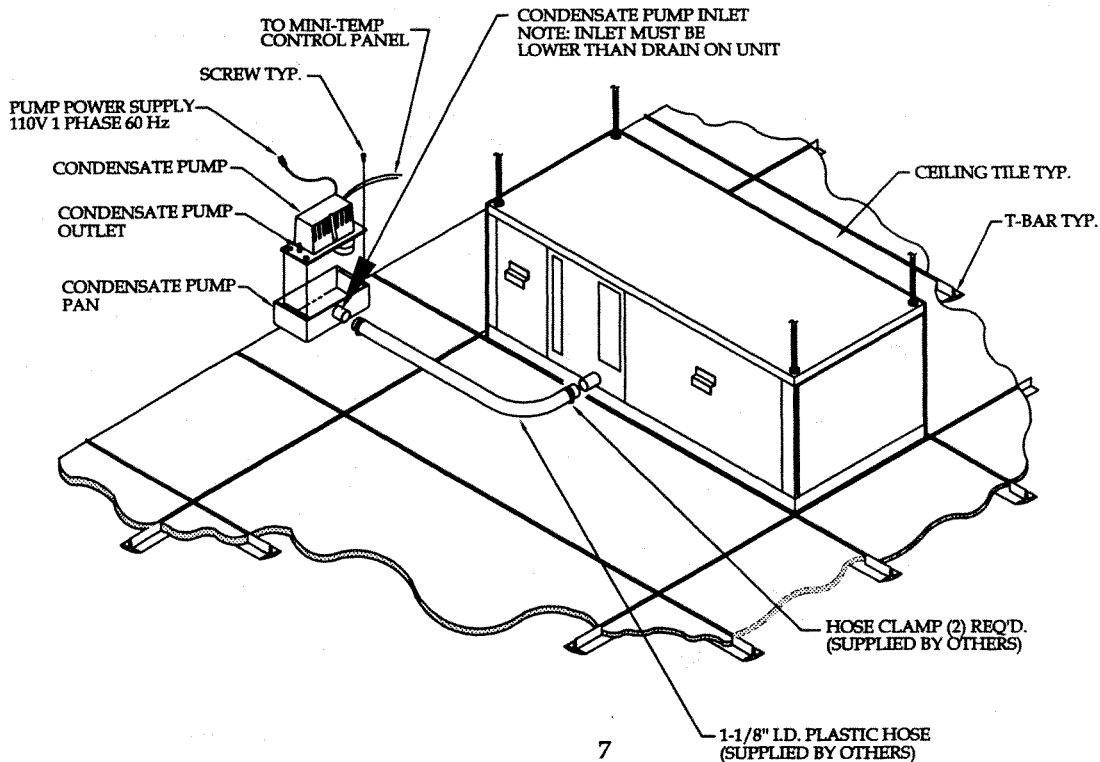
### Condenser-Water-Cooled

Supply and return connections for water-cooled MTW/MTG equipment are 1/2" sweat. The inlet is at the bottom with the outlet at the top. Do not transpose these connections at either end. Install water shut-off valves and unions (by others) on both supply and return lines. Do not exceed 125 PSIG working pressure.

### Drain:

Connect 1-1/8" line to condensate drain. Note that drain line must run separately to the building drain or a drain receptacle. If a condensate pump is used, all drains must terminate in the tank.

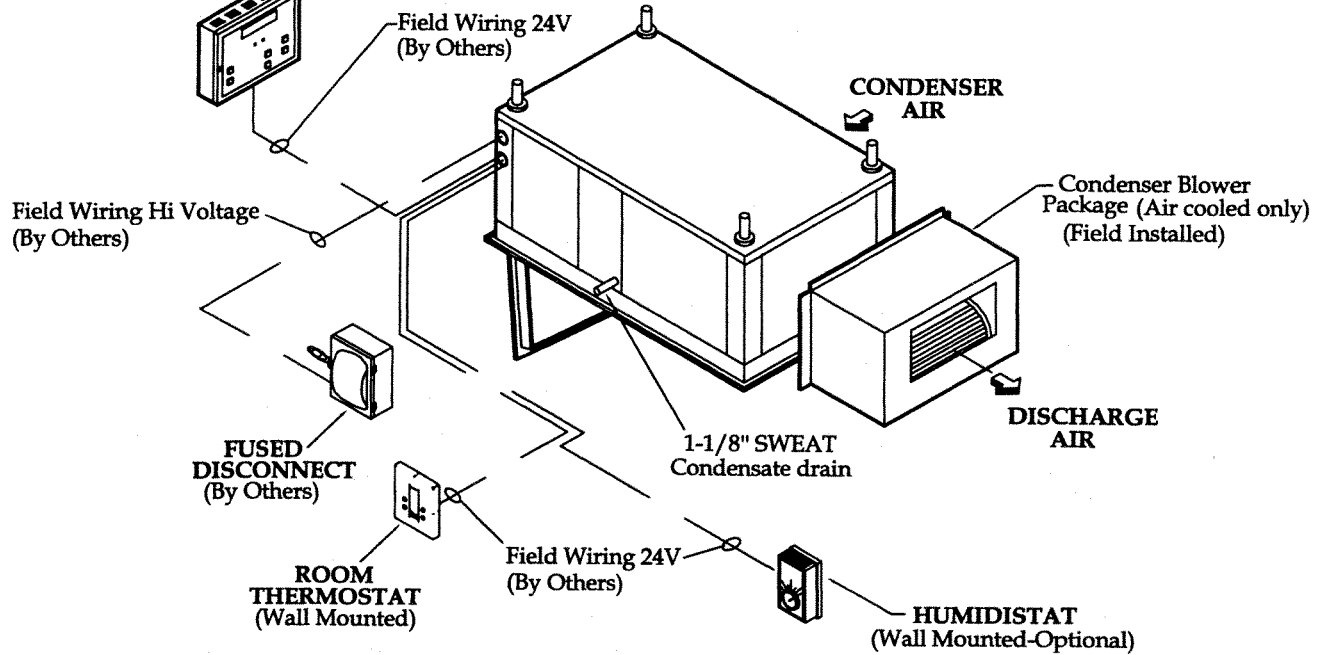
## CONDENSATE PUMP - Installation



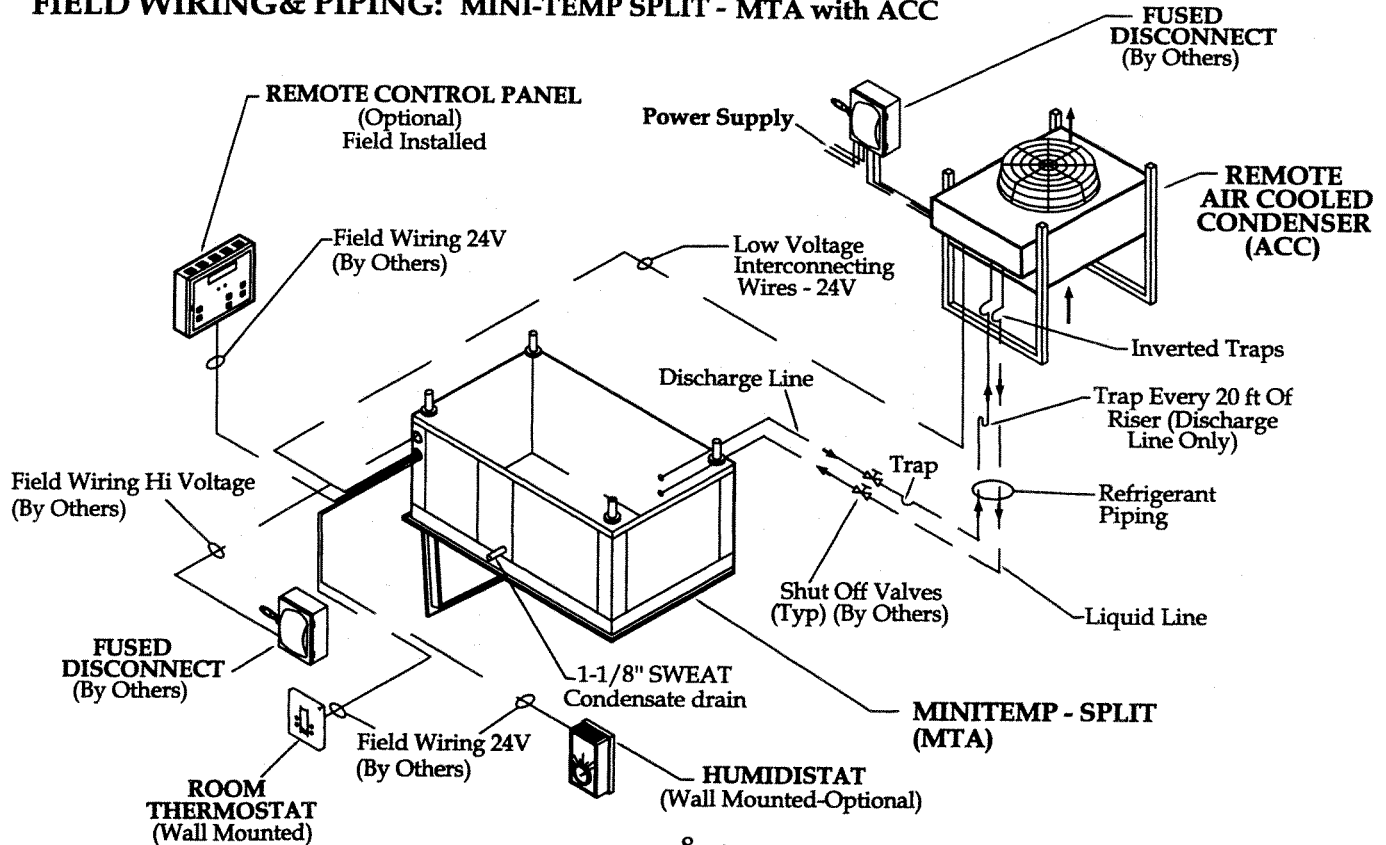
## FIELD WIRING: MINI-TEMP PACKAGED - MTA/MTW/MTG/MTC

### REMOTE CONTROL PANEL

(Optional)  
Field Installed



## FIELD WIRING & PIPING: MINI-TEMP SPLIT - MTA with ACC



**WIRING DIAGRAMS: PLEASE REFER THE SEPARATE FILE.**

## METHODS OF DUCTING CONDENSER AIR

Air-cooled mini-temp is designed for 1500 CFM at a maximum of 0.25" ESP, and a minimum temperature of 35° for entering condenser air. For year-round operation of the mini-temp unit, it is suggested that air direct from the space above the sub-ceiling be used.

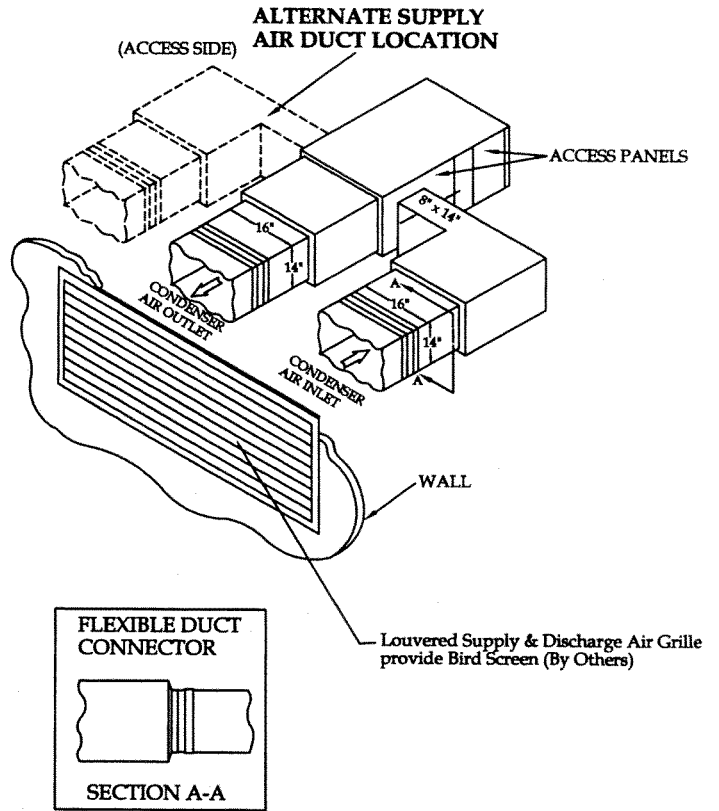
The warm discharge air can then be ducted away from the unit to prevent it from being recirculated back to the condenser. Air can be ducted to an airshaft or outdoors through a grill depending on the building

Air intake duct, if used, may be connected to either side of the unit by transferring the blocking plate. It is suggested that the access side of the unit be left clear

Always use canvas connectors to isolate resonating noise from the system.

### NOTE:

All ductwork, grills and canvas connectors by others.



## CHECK-TEST-START

**Electrical.** Tighten all connections. Check and record amperage of all components.

**Piping** Check all connections for leaks. Pour water through drain to assure free flow.

**Fan** Assure that wheel turns freely and does not touch housing. Tighten motor mount. Check rotation direction.

**Compressor** Tighten expansion bulb. Free vibration isolators. Check for signs of oil leaks. Make sure piping is not touching components. Reset high pressure switch at 400 pounds. Check and record suction and discharge pressure. Leak-test system.

## OPERATION

With voltage supplied to the unit, this energizes the evaporator fan motor.

If an increase in room temperature is sensed by the thermostat (in the room), it will start the compressor. As the room temperature drops, the temperature controller will shut the compressor off.

If the room temperature drops below the set point, the reheat (if so equipped) will be energized.

**It is important to note that cooling and heating may be on at the same time when the unit is calling for dehumidification.**

Room humidity is controlled by the humidistat (in the room). If the room humidity drops below the set point, the humidifier (if so equipped) is energized. If room humidity rises beyond the set point, the high humidistat will energize the compressor.

### IMPORTANT

Unit is equipped with condensate (water) sensor placed in the condensate drain pan. The probe is extremely sensitive to moisture. If water is present the unit will not start.

## MAINTENANCE-MONTHLY

(Disconnect power before performing maintenance)

- Check filter and humidifier pad and replace as required. (Filter Size: 20" x 20" x 1")
- Check drain for unobstructed flow
- Tighten all electrical connections
- Clean both interior and exterior of system

# STEAM GENERATING HUMIDIFIER

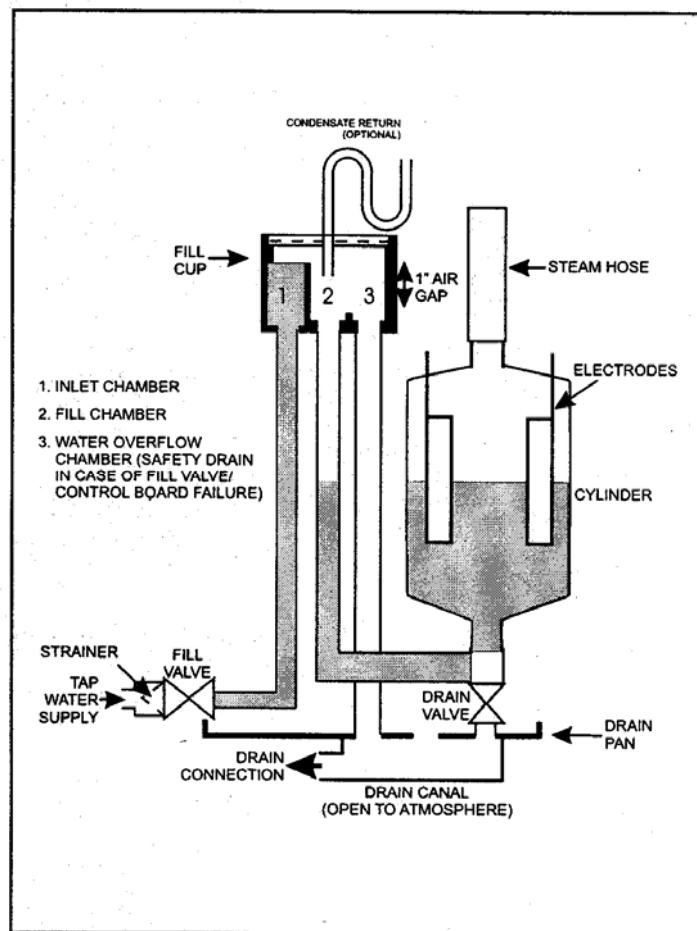
## PRINCIPLE OF OPERATION:

When the humidistat calls, the cylinder fills to 110% of the full amperage (F.L.A.) or to the top of the cylinder, whichever comes first.

If it reaches 110% F.L.A. the water heats and boils away to a level giving only 90% F.L.A.

An electronic timer uses the rate of fall to determine the water level. The objective is to concentrate current-carrying minerals in the cylinder so that a smaller volume of water is required to produce the rated steam output.

This achieves the longest life for the disposable cylinder because of minimum electrode coverage and uses less energy because the high concentration allows minimal drain rate.



When it reaches 90% F.L.A. the fill valve will open, refilling cylinder to 110% F.L.A. On occasion, the drain valve will also come on if water level is too high a concentration and the requirement for a dilution of the water in the cylinder.

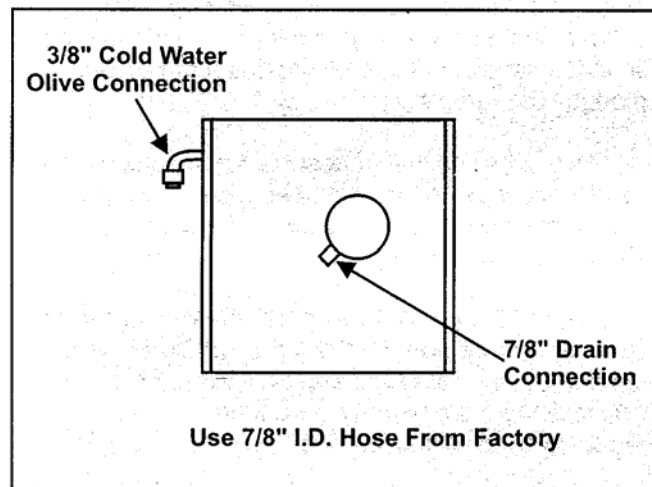
If the water reaches top of cylinder before 110% F.L.A. The fill valve shuts off via the sensor and fill boil-fill-boil cycle continues, cycling off the red full cylinder light until the concentration becomes high enough to reach 100% F.L.A. Then the following described control process takes over.

### **WATER SUPPLY AND PLUMBING:**

1. The orifice in the fill valve(s) is sized for an extended water pressure range of 30 to 85 psi.
2. For water pressure between 15 and 30 psi, notify the factory and the next larger size of fill valve will be supplied.
3. For cases below 15 psi, notify the factory and fill valve with largely oversized orifice will be supplied.
4. For cases above 85 psi, install a pressure reducing valve in the water feed line to the unit. Otherwise insufficient cylinder water will drain when fill and drain mix during the automatic dilution cycle.
5. With extremely dirty or muddy water sources, e.g. some well sources, ensure proper filtration by adding an external filter to the water line entering the Unit. (Consult factory for accessories such as filters).
6. DO NOT soften water with this humidifier unit because it is much too conductive.
7. DO NOT use completely demineralized water with this humidifier unit as it is the minerals that allows electrode principle to work.
8. DO NOT use a hot water source, as it will cause deposits to eventually block the fill valve orifice.

## WATER CONNECTION

1. A copper compression olive type coupling for 1/4" soft copper is provided with unit and requires no soldering for the water connection to the unit.
2. An isolating gate valve should ALWAYS be placed in feed water line allowing service if the fill valve.
3. Each unit is fitted with a fill solenoid valve located on the base drain pan. Flow orifices are designed for water pressures from 30-85 psi and protected by the built-in strainer.
4. For inlet water pressure outside this range, the factory should be contacted. (See also water supply section.)



**Bottom view of MES-U unit**

## **HUMIDIFIER START-UP:**

Check to see that the unit is securely mounted on a level surface with the proper drain and water supply. Check for correct voltage with appropriately sized service. Check that the steam distributor, steam supply hose and condensate line are correctly installed and routed back to the unit. Ensure that the external control humidistat is located in an area to properly sense the relative humidity to be maintained by the humidifier, and that the inter-connecting low voltage wires between the humidistat and unit's control terminal strip are in accordance with the wiring diagram.

Check **all electrical connections** for wires, which may have become **loose in shipping**. Components burnt due to loose connection are **NOT** under warranty.

Check electrode plugs to ensure they are pressed firmly onto the electrode pins.

**Important:** Loose connections will cause overheating of the cylinder plugs and probably melting of the plugs and/or cylinder.

Open the isolating gate valve in the feed water line to the unit.

Make sure the humidistat is set high enough to call for humidification.

Turn on the main disconnect in the primary service feeding the unit and check, that unit has power at the primary terminal block.

“PUSH THE AUTO ON/OFF/DRAIN SWITCH TO “ON”.

Water will start to enter the cylinder through its bottom port and rise in the cylinder to a point determined by the solid-state control circuitry.

**It is not unusual upon initial start-up for the water to fill the cylinder an cycle on the red high water sensor light.**

The red light simply acts as a safety to shut off the fill valve and prevent over fitting. With the red light on, the water in the cylinder will continue to heat and after a few minutes start to boil. After the boiling action of the water has lowered the water level below the sensor at the top of the cylinder, the red light will go out and the fill solenoid will again open until the cylinder is again full.

This cycling of the red light and fill valve will continue until the unit's full output capacity is reached after which the water level will automatically lower itself in the cylinder. (The increased concentration allows for lower electrode coverage while maintaining the same output). When a stabilized condition is reached, the water will be boiling close to the cylinder seam level. The solid-state circuitry will maintain the proper concentration in the cylinder by introducing short drains only when necessary.

If the cylinder is manually drained, the above process will repeat itself.



## LOW WATER CONDUCTIVITY

Should normalization of the unit be required immediately after start-up, the installer may speed up the process by artificially increasing water conductivity. The installer should dissolve half a teaspoon of table salt (no more) in a cup of water and add it to the cylinder by means of the fill cup attached to the plumbing section.

Open the plumbing compartment and add salt solution through cylinder outlet. Excessive amounts of salt will result in erratic operation of the unit; however, normalization of the unit will occur automatically through the solid-state control sequence.

## CAPACITY ADJUSTMENT

The M.E.S. series of humidifiers are factory set to cover most normal conditions. If an extreme situation is encountered, notify the factory for instructions.

## CYLINDER REPLACEMENT

After an extended period of operation in accordance with life expectancy information, the cylinder is completely used as indicated by a red light illuminated on the face of the cabinet. When this condition is reached, a new replacement cylinder is to be installed.

**NOTE:** Red light may come on during initial start-up but does not mean cylinder replacement. See "Humidifier Start-up" Section.

Consult factory or agent for replacement. Quote the cylinder model from the white 3-digit label on the cylinder or quote model, voltage and serial number from unit specification label.

### **When to replace the steam cylinder:**

The steam cylinder is disposable and must be replaced at the end of cylinder life. Cylinder life is dependent on water supply conditions and humidifier usage. Failure to replace the cylinder at the end of cylinder life may result in unit damage.

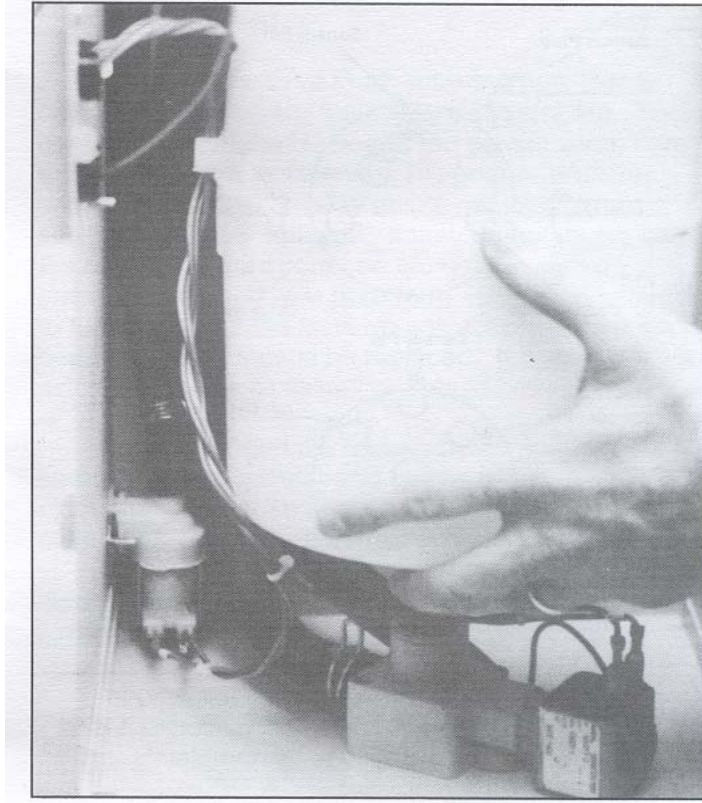
### **Extended Shutdown:**

Any time that the unit is going to be shut down for an extended period of time, including summer shutdown, **ALWAYS Drain** down the cylinder before disconnecting power. Otherwise, the electrodes are subject to harmful corrosion, which drastically shortens the cylinder life. Do not leave the switch in the **DRAIN** position indefinitely as the drain coil could burn out. Leave the switch in the **OFF** position and

## REMOVING THE CYLINDER

1. Turn off the water supply to the unit
2. The old cylinder must be drained completely before removing. This is done by pushing the auto on/off drain switch to the "drain" position.

3. When completely drained, push the auto/on/off drain switch to the "off" position.
4. Open the main disconnect during the entire cylinder change operation.
5. The power wires to the cylinder are attached by cylinder plugs to the electrode pins on top of the cylinder. Pull these plugs vertically off the pins.
6. Using slot screwdriver, loosen the steam hose clamp(s) and pull steam hose off vertically.



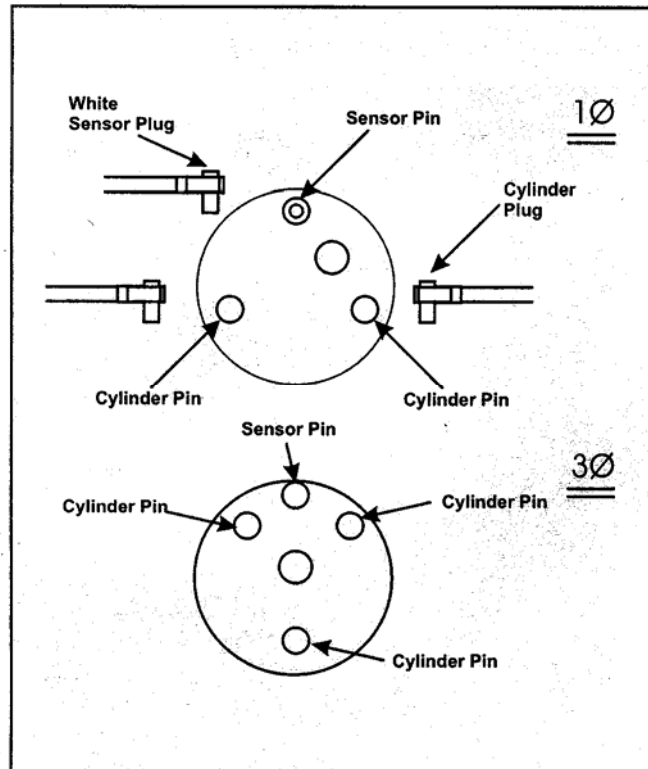
### **Cylinder Removal**

7. The cylinder is now ready to be lifted out of the unit.

### **INSTALLING THE NEW CYLINDER**

1. The reverse procedure should be followed to install a new cylinder. The main disconnect is to be left open until the cylinder is completely installed and reconnected.

2. Ensure that the cylinder mounting stubs are seated properly in the allotted side mounting slots within the unit.
3. The white cylinder plug on all units is for the sensor electrode, which always goes on the single pin offset from the others.
4. Ensure that cylinder plugs are very snug on the pins.



### Cylinder Plugs

5. For loose fitting plugs, a temporary solution is to squeeze plugs with a pair of pliers before installing. Since loose plugs may generate enough heat to melt and destroy the plug and cylinder new plugs must be ordered.

## **TROUBLE-SHOOTING HUMIDIFIER**

### **Auto on/off/drain switch in "on" position-unit will not fill:**

When the on/off control circuit is made and the "auto on/off/drain" switch is pushed to "on", the 24 volt holding coil of the primary contactor should energize. The resulting magnetic pull closes the high voltage contacts with a distinct and audible "clunk". If the contactor will not make, then inspect the following while referring to the wiring diagram.

1. Check for 24VAC across pins 18 and 26.
2. Jumper the humidistat on external control terminal strip. If contactor operates then control system is at fault.
3. The low voltage 3 amp fuse located in the control box could be blown.
4. The contactor holding coil could be open or shorted.
5. The switch could be defective.

Recheck that the "auto/on/off drain" switch is still at "on". If it is, then shut off the main disconnect and check fuses or breaker of the main disconnect. If they are serviceable, turn power back on.

To test for a defective "auto/on/off drain" switch, connect a wire from the fuse directly to terminal 6 on the external control strip. If the contactor activates, the "on" side of the switch is defective. If the contactor does not activate, then the basic unit p.c. board could be defective.

If the 3 amp control fuse blows when the wire from the fuse touches terminal 6 on the external controls strip, contactor holding coil could be shorted. Replace the contactor if necessary.

Return wires to normal.

After the necessary components have been replaced and the contactors pull in, there is high voltage to the cylinder and the control sequence can begin.

Approximately 30 seconds after the contactor pulls in, the fill valve coil should energize. There is also a visible fill relay on the basic printed circuit board. It is the one located farthest from the C.T. core. The points on this relay must be touching in order for the fill valve could be energized.

If the points will not touch after the built-in time delay, then the sensor input may be interfering. To confirm, remove the red and black sensor wires from the terminal 6 and 10 on the PC board. Wait 30 seconds and if the fill relay point now touch, then sensor should be replaced. If they do not touch, then the PC board could be faulty. To confirm, disconnect the red wire from terminal 18 and touch it to terminal 14. If the fill valve coil activates then the basic PC board should be replaced. If it still does not activate then the fill valve coil should be replaced.

Having changed the necessary components, water starts filling the cylinder and begins to submerge the electrodes. Because of the high voltage across the electrodes, the water can now conduct electricity.

**Red “Change Cylinder” light on - Water at top of cylinder:**

- Common occurrence on start-up - See “Humidifier start up and Operation” section.
- If cylinder is old, it indicates replacement time (can be ordered from factory). See “When to replace steam cylinder” section...

**Red “Change Cylinder” light on - water NOT at top of cylinder:**

- Water foaming to top of cylinder to activate red light, also may be accompanied by arcing (flashing) inside cylinder

**Water remains at high level and won't concentrate:**

- Normal on cold start-up, can be accelerated by adding maximum 1 tsp. of salt to the cylinder (through the plastic fill cup) on fill cycle. “See Low Water Conductivity” section.
- If the unit has been operating extensively, observe for normal fill-boil-fill-boil cycle; no drain should be occurring. Check for leaking drain valve or backpressure.

**Water beyond top of cylinder up into spout:**

- Red light not on and fill still activated; jumper across connection of sensor on basic unit PC board, if fill remains on when connection is jumped, then basic PC board is faulty.
- If fill shuts off, then verify primary voltage to cylinder (contactor energized). If primary voltage is present, the high water sensor PCB is defective.

**Unit drains continually:**

- May be caused by foaming and/or backpressure, or leaking drain valve.
- Cylinder is almost empty, check for magnetic pull on drain solenoid indicating miswiring. If no pull, drain actuator is blocked open, remove, disassemble and clean.
- If drain is occurring through activated drain valve, valve is miswired or electronics are faulty – consult factory.
- If drain is occurring through the overflow on the fill cup, this is due to abnormal restriction on the steam line and back `pressure forces water out of the cylinder, therefore, water cannot concentrate and level must stay high, review installation of steam line to ensure no blockages or excessive static pressure in air system.

## TROUBLE SHOOTING

SYMPTON	PROBABLE CAUSE	CHECK OR REMEDY
High head pressure	Condenser fan not operating	Check power to motor.
	Dirty condenser coil	Clean coil.
	Insufficient open area around condenser	Clear area 3 feet all around condenser air inlet and discharge duct.
	Condenser discharge air recirculation	Duct discharge air way from inlet to condenser.
	Condenser water not circulating	Check pump and water regulating valve.
Room Temperature too high	Thermostat set too high	Reset thermostat to lower setting. Check for fan and compressor symptoms.
Room Temperature too low	Thermostat set too low	Reset thermostat to higher setting.
Low air flow	Dirty air filter	Replace air filter
Compressor not operating	Thermal overloads in in compressor open	Wait 5 minutes for automatic reset. Open disconnect. Remove cover from compressor. Check with ohm meter on the control circuit leads and isolate the defective overload.
Compressor will not operate when cooling is called for	Compressor out on high head pressure	See symptom "high head pressure".
	Low head pressure, out of refrigerant, or dirty filter	Change filter or recharge after fixing leak.
	Low pressure switch defective	Check low pressure switch for continuity, by disconnecting one of the wires on the switch and using an ohm meter to read continuity.
	Water sensor in the condensate pan senses high condensate level. Entire system shuts down.	Check for restriction in condenser drain line. Adjust humidifier needle valve if water run-off too high.
Main fan not operating	Power not on	Check high voltage disconnect.
	Overload tripped on motor	Wait 5 min. for auto. reset & determine the cause.
	Water sensor in condensate pan senses water. Entire system shuts down.	check for restriction in condensate drain line. Adjust humidifier needle valve if water run off too high.
Reheat not operating	Heater safety open	Check continuity through safety.
	Defective holding coil	Check for 24 v at holding coil.
	Thermostat not operating	Check thermostat on heating.
High humidity	Compressor not operating on dehumidistat	Check compressor for operation as in previous steps. Check dehumidistat.
	Humidistat set too high	Reset humidistat lower.
	Poor vapor seal in room	If the control is functioning properly by calling for dehumidification, check the room for proper vapor seal.
High humidity	No water flowing	Turn on water. Check strainer, valve & solenoid.
	Pad not clean	Clean/replace pad.
	Humidistat set too low	Reset humidistat Higher.
	Cold water	Heat water to 140 F.



**COMPU-AIRE, inc.**

8167 BYRON ROAD, WHITTIER, CA 90606

PHONE: (562) 945-8971 FAX: (562) 696-0724

## SPARE PARTS LIST

PART No.	DESCRIPTION	Qty per Unit Size(Ton)		
		1	1.5	2
200-010-003	COMPRESSOR 1-TON, 208/1/60	1	-	-
200-015-001	COMPRESSOR 1.5-TON, 208/1/60	-	1	-
200-020-001	COMPRESSOR 2-TON, 208/1/60	-	-	1
201-020-001	COMPRESSOR 2-TON, 208/3/60	-	-	1
200-010-002	COMPRESSOR 1-TON, 277/1/60	1	-	-
200-015-002	COMPRESSOR 1.5-TON, 277/1/60	-	1	-
200-020-002	COMPRESSOR 2-TON 277/1/60	-	-	1
236-223-002	HP SWITCH, MG21-2060	1	1	1
236-121-002	LP SWITCH, MG20-1229	1	1	1
233-030-001	FILTER DRIER, 3/8" ODF	1	1	1
239-010-001	EXPANSION VALVE, IVE-1-GA	1	-	-
239-020-001	EXPANSION VALVE, IVE-2-GA	-	1	1
208-009-021	BLOWER, DD9-9AT	2	2	2
206-002-002	MOTOR 1/4 HP, 208/1/60	2	1	1
206-007-002	MOTOR 3/4 HP, 208/1/60	-	1	1
206-002-008	MOTOR 1/4 HP, 277/1/60	2	1	1
206-007-007	MOTOR 3/4 HP, 277/1/60	-	1	1
220-020-200	1" FILTER, SIZE: 20" X 20"	1	1	1
249-211-011	HEAD PRESS. REG. VALVE, 2 Way, 3/8"	1	1	1
248-022-212	CW VALVE ASSEY.-24V, 2-Way, NC, 1/2"	1	1	1
275-640-021	TRANSFORMER 40VA-24V, PRI-208V	1	1	1
275-040-015	TRANSFORMER 40VA-24V, PRI-277V	1	1	1
276-400-014	RELAY-24 VAC	1	1	1
274-020-212	CONTACTOR 2 POLE/20 AMPS	2	2	2
278-370-008	CAPACITOR 7.5Mfd @370 Vac	2	1	1
278-370-010	CAPACITOR 10MFD @370 Vac	-	1	1
255-102-031	CONDENSATE PROBE-WAFER	1	1	1
255-103-051	CONDENSATE PROBE-MODULE	1	1	1
250-300-022	NEEDLE VALVE (HUM), 1/4 X 1/4	1	1	1
250-400-014	SOLENOID VALVE 2-WAY (PAD HUM)	1	1	1
262-000-001	PAD FOR HUMIDIFIER - 10 X 10	1	1	1
258-501-201	STRIP HEATING ELE 5KW, 208V/1Ph	1	1	1
258-503-201	STRIP HEATING ELE 5KW, 208V/3Ph	1	1	1
258-501-701	STRIP HEATING ELE 5KW, 277V/1Ph	1	1	1
252-021-041	THERMOSTAT - NON PROGRAMMABLE	1	1	1
252-011-011	THERMOSTAT - PROGRAMMABLE	1	1	1
253-024-111	HUMIDISTAT	1	1	1
277-100-011	SPEED CONTROL SW. 5-10A	1	1	1



COMPU-AIRE INC.

8167 Byron Rd., Whittier, CA 90606  
PH (562) 945-8971 FAX (562) 696-0724

## STANDARD ONE YEAR WARRANTY

Job Name \_\_\_\_\_ Job No. \_\_\_\_\_ Date \_\_\_\_\_

We warranty this Compu-Aire, Inc. computer room unit to be free from defects in material and workmanship; our obligation being limited to repairing or replacing at our factory any part (except as noted below) within one year from the date of start-up and not exceeding \_\_\_\_\_ months from the date of shipment to the original purchaser. Parts to be returned to us PREPAID. Proof of start-up date must be submitted to the factory.

This warranty is effective only if the unit has been installed in accordance with our instructions and connected to proper and adequate electric, water and drain services, correctly dehydrated and placed into operation by a competent service representative.

Fan motor compressor warranty is covered by original manufacturer's warranty and any repair or replacement should be made by the local authorized service facility as listed the telephone book.

Maintenance and service such as replacing filters, humidifier cylinder, infra-red lamps, float valve assemblies, belts, cleaning, lubrication, calibration and adjusting are NOT INCLUDED in this warranty.

Replacement or repair parts shall be shipped from the factory pre-paid and invoiced for the full amount. Upon receipt of warranted parts within 30 days with prepayment of the component and which our inspection discloses the parts are defective, and show no signs of misuse, alterations, or abuse, full credit will be issued.

Compu-Aire, Inc. does not assume any responsibility for the labor expense for changing defective parts or replacement of any refrigerant or other cooling medium such as glycol etc.

All parts and goods are thoroughly inspected and packed to meet the requirements of railroad freight classifications bureaus, and under standard shippers risk, when they leave our factory. SHOULD GOODS ARRIVE DAMAGED, call the agents attention to damage, and have same noted on freight bill. For concealed damage, demand immediate inspection from agent of the shipping company and insist on a notation being made on freight bill.

\_\_\_\_\_  
Purchaser-User

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Model Number

\_\_\_\_\_  
Serial Number

\_\_\_\_\_  
Serial Number

\_\_\_\_\_  
Serial Number

\_\_\_\_\_  
Serial Number

\_\_\_\_\_  
Serial Number



Authorized by \_\_\_\_\_  
QUALITY MANAGER