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# Split Cooling System Installation, Operation & Care Manual

**WM-1500SS** 



WM-1900SS



By Vinotemp.

www.vinotemp.com

Read and save these instructions

## **Important Safety Information**

#### **WARNING:**

- Do not use a ground fault interrupter (GFI).
- A dedicated 20 AMP circuit is required.

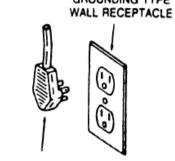
# **A** WARNING



# To avoid the risk of electrical shock, property damage, personal injury or death:

- The power cord must be plugged into a 3-prong grounding-type wall receptacle, grounded in accordance with the National Electrical Code, ANSI/NFPA 70 - latest edition and local codes and ordinances.
- It is the personal responsibility of the consumer to have a proper 3-prong wall receptacle installed by a qualified electrician.

  GROUNDING TYPE
- DO NOT, UNDER ANY CIRCUMSTANCES, REMOVE THE POWER CORD GROUNDING PRONG.
- A separate adequately fused and grounded circuit should be available for this appliance.
- Do not remove any grounding wires from individual components while servicing, unless the component is to be removed and replaced. It is extremely important to replace all grounding wires when components are replaced.



POWER SUPPLY CORD WITH 3-PRONG GROUNDING PLUG

# **A** WARNING



#### **ELECTRIC SHOCK HAZARD**

Disconnect electric supply from appliance before servicing.

Replace all panels before operating.

Failure to do so could result in death or electrical shock.

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### **Cellar Construction**

This is only a guide and shall be considered as minimum requirements.

All interior walls and floors shall have a vapor barrier and a minimum of R13 insulation. All exterior walls and ceiling shall have a vapor barrier and a minimum of R19 insulation. The vapor barrier shall be installed on the warm side of the insulation. All joints, door frames, electrical outlets or switches and any pipes or vents that go through the cellar shall be sealed to prevent air and moisture leakage into the cellar. Concrete, rock, and brick are not insulation or vapor barriers.

Doors shall be of a minimum size, insulated to at least R13 and tightly sealed with high quality weather stripping. Be sure to seal the bottom of the door and fill gap between the door's frame and wall before installing the cap molding. In order to maintain 55 °F in the wine cellar, the ambient temperature surrounding the enclosure shall not exceed the temperature of the cellar by more than 25 °F. No cellar wall shall receive direct sun or strong wind.

Lighting shall be of low wattage, with a timer to insure lights are not left on when the cellar is not occupied.

The cooling system will not be able to maintain the proper temperature if fresh moisture-laden air is constantly being introduced to the cellar. Symptoms of this condition are; cooling unit runs all the time with only a slight reduction in temperature and/or water overflows from the unit. Because of the temperature difference between the inside and outside, very small cracks can allow large amounts of outside air to enter into the cellar. Please be aware that moisture can pass through solid concrete, paint and wood. Often a newly constructed cellar contains fresh wood, paint, concrete and other building materials. These materials contain large amounts of moisture. When placed into operation in this type of environment, the system will work harder to remove this extra moisture resulting in increased "run" time.

## **Features and Specifications**

- Wine-Mate split cooling systems WM-1500SS and WM-19000SS are designed and used to provide a cold temperature between 50~65 °F for a properly insulated wine cellar.
- The wine cellar will maintain humidity range within 50~70% RH.
- These temperature and humidity ranges like in natural caves are optimized for long term storage of wine.
- SS unit consists of a condensing unit and an evaporator unit; they are connected by a liquid line and an insulated suction line.
- SS condensing unit can be located away from the wine cellar 50 ft so that noise and compressor vibration are isolated.
- WM-1500SS evaporator unit can be installed on the ceiling and WM-1900SS evaporator unit can be installed on the wall inside a wine cellar.

#### NOTE:

Capacity is determined under the cellar, the cellar ambient and the condensing unit ambient temperatures of 55°F, 75°F and 90°F, with R13 interior and R19 exterior insulations. Any higher ambient temperatures, lower insulations will cause reducing capacity and the cellar temperature may not be maintained at 55°F.

#### **CAUTION:**

If the installation area will be below 50°F, purchase a low ambient condition kit.

#### NOTE:

To prepare rough-in, leave minimum 4" clearances for electrical wiring and refrigeration piping.

The specifications and dimensions are listed as follows:

Model No	Evap Unit L"xD"xH"	Cond Unit L"xD"xH"	Btu/h CFM	Cellar Size (cu ft)	Refrigerant	Electrical Evap Unit/ Cond Unit	Weight (lb) Evap Unit/ Cond Unit
WM-	WM-15SFC	WM-150SCU	1500	150	R134a	115V-60HZ-1.0A	15/30
1500SS	16.75x14.5x4.75	18x14x12	180	150	K154a	115V-60HZ-3.1A	13/30
WM-	WM-19SFC	WM-150SCU	1500	150	R134a	115V-60HZ-2.2A	20/30
1900SS	17.75x4.5x13.125	18x14x12	180	130	K134a	115V-60HZ-3.1A	20/30

Also see Fig. 1, 2 & 3 for further info.

# **Temperature Control**

### 1. Temperature Setting

- Set the temperature at 55 °F for the optimum aging of wine
- On initial start-up, the time required to reach the desired temperature will vary, depending on the quantity of bottles, temperature setting and surrounding temperature.
- Allow 24 hours to stabilize the temperature for each new temperature setting operation

#### 2. Use of the thermostat

- Turn clockwise to decrease temperature.
- Turn counter clockwise to increase temperature.

## **Care Guide**





#### **ELECTRIC SHOCK HAZARD**

Disconnect the electrical power before servicing any components. Failure to do so can result in death or electrical shock.

In general, always unplug system or disconnect power while doing care.

#### 1. Coil Cleaning

- Clean the condenser coil regularly. Coil may need to be cleaned at least every 6 months.
- Use a vacuum cleaner with an extended attachment to clean the coil when it is dusty or dirty.

#### 2. Condensate Removing

• Remove the excessive condensate if it is accumulated in the wine cellar at high humidity conditions.

# **User's Troubleshooting**

This Troubleshooting Chart is not prepared to replace the training required for a professional refrigeration service person, not is it comprehensive.

Complaint	Possible Causes	Response
1. Unit not	a. Power cord not plugged	a. Check power cord
running	<ul> <li>b. No power from supply</li> <li>c. Incorrect or loose wirings</li> <li>d. Low voltage</li> <li>e. Setting higher than ambient temperature</li> <li>f. Waiting for cut-in</li> <li>g. Defrost light blinking</li> <li>h. Compressor light blinking</li> <li>i. Defective controller</li> </ul>	<ul> <li>b. Check receptacle and fuses</li> <li>c. Check all wirings and connections</li> <li>d. Contact an authorized electrician</li> <li>e. Lower temperature setting</li> <li>f. Wait</li> <li>g. Unit is under defrost mode</li> <li>h. Unit is under anti-short cycle delay</li> <li>i. Call service for diagnosis</li> </ul>
2. Unit not starting , but temperature rising high	a. Anti-short cycle	a. Reset AC
3. Temperature fluctuating	a. Air probe	a. When using an air probe, the wine bottle temperature is mainly controlled by the average air temperature. If the set-point is 55°F with the differential 4F, the cooling unit turns on at 59°F of air temperature (It may be higher than 59°F if it is in anti-short cycle or defrost cycle) and turns off at 55°F of air temperature. The average air temperature is 57°F, and then the wine temperature is around 57+/-0.5°F. The air is light enough to change so quickly that it maintains relatively constant average temperature that would prevent wine bottle temperature from fluctuating.
4. Temperature high, unit stopping and starting normally	a. Temperature setting high	a. Lower the setting
5. Temperature high, unit stopping and starting with short running time	<ul> <li>a. Air probe touching the evaporator coil, displaying temperature ok</li> <li>b. Air probe in cold-air supply, displaying temperature ok</li> <li>c. Failed controller and probe</li> </ul>	<ul><li>a. Move the air probe away from the evaporator</li><li>b. Move the air probe away from the cold-air supply</li><li>c. Call service for diagnosis</li></ul>
6. Temperature	a. Improper cellar insulation & seal	a. Check insulation, gasket and door opening

high or not cooling and running continually	<ul><li>b. Cellar too large</li><li>c. Ambient temperature too high</li><li>d. Exhaust restricted</li></ul>	<ul> <li>b. Check for excessive size</li> <li>c. Check installation location</li> <li>d. Leave minimum 3 feet clearance for the hot air exhaust side and leave minimum 1 foot clearance for the ambient air intake side</li> </ul>
	e. Malfunctioning fans	e. Check for both evaporator and condenser fans
	f. Evaporator or condenser airflow	f. Check for air restrictions, air short- circulation, grille directions
	g. Dirty Condenser h. Iced evaporator	<ul><li>g. Clean condenser</li><li>h. Defrost and reset temperature</li></ul>
	i. Refrigeration system restriction	i. Call service
	j. Refrigerant leak	j. Call service
	k. Undercharge or overcharge	k. Call service
	I. Failed components	I. Check compressor windings, start relay and overload protector
7. Unit running	a. Improper cellar insulation & seal	a. Check insulation, gasket and door
too long	b. Exhaust restricted	opening b. Leave minimum 3 feet clearance for
	b. Exhaust restricted	the hot air exhaust side and leave
		minimum 1 foot clearance for the
	c. Collar too large	ambient air intake side c. Check for excessive size
	c. Cellar too large d. Ambient temperature > 90°F	d. Check for installation location
	e. Dirty Condenser	
	f. Improper condenser air flow	e. Clean condenser f. Check for fan and air short
		circulation
8. Condenser	a. Incorrect or loose wirings	a. Check all wirings and connections
fan running	b. Failed components	b. Check start relay, start capacitor, overload protector, compressor.
but	c. Liquid refrigerant in the	c. Call service.
compressor	compressor	
not running	a. Fan blade stuck	a. Check for proper clearance
9. Compressor running but	b. Incorrect or loose wirings	b. Check all wirings
condenser	c. Failed motors	c. Call service
fan not	d. Fan cycle control	d. Check for setting
running		
10.Temperature	a. Failed components	a. Check compressor windings, start
high,	b. Improper condenser airflow	relay and overload protector. b. Check for condenser fan
compressor	c. Dirty condenser	c. Clean condenser
stopping	d. Overcharge of refrigerant	d. Call service for removing refrigerant
and starting	e. Discharge or suction pressure too high	e. Call service for information
but very short	too niigii	
running time		
11.Evaporator	a. Post-compressor fan running	a. Reset FON
fan running	mode for humidity modulation	
too long		
12. Evaporator	a. Incorrect or loose wirings	a. Check all wirings and connections

fan running	b. Failed components	b. Check start relay, start capacitor,
but	and compensite	overload protector, compressor.
10 010	c. Low refrigerant	c. Call service
condensing	g .	
unit not		
running		
13.Evaporator	a. Evaporator air flow restriction	a. Check for fans and CFM
freezing up	b. Condenser air flow restriction	b. Check for fans and CFM
gp	c. Not stopping due to air leak, hig	
	ambient temperature or lo	
	temperature setting	temperature setting
	d. Defective controller or probe	d. Check for controller and probe
	e. Low ambient temperature	e. Change defrost cycle
	f. Initially working then stopping	g, f. Call service
	moisture in the system g. Refrigerant low or leaking	g. Call service
	h. Expansion valve blockage	h. Call service
14.Water leak	a. Air leak in the wine cellar causin	
17. Water Ican	excessive condensate	g a. Oncorror an loak
	b. High humidity causing excessive	e b. Use drain line
	condensate	
	c. Evaporator air flow restriction	c. Check supply air flow or air TD
	d. Drain restricted or unit not leve	I, d. Clean the drip tray and drain line
	and water overflowing	
	e. Drip tray leak (No overflow bu	ut e. Seal the leak using silicone sealant
leak)		a Chook for any air look
a. Air leak in the wine cellar causing excessive condensate		g a. Check for any air leak
condensate	b. High humidity causing excessive	e b. Use drain line
in wine	condensate	e b. Ose diam inte
cellar	c. Drain restricted	c. Clean the drip tray and drain line
16.Condensate	a. Drain line restricted	a. Check for drain
inside ducts	b. Continually running not stopping	
		increase defrost cycle
	c. Too cold supply air	c. Increase air flow or raise
47.0	a Dust not insulated	temperature setting
17.Condensate	a. Duct not insulated b. High humidity	<ul><li>a. Check for insulation</li><li>b. Use dehumidifier</li></ul>
outside	c. Too cold supply air	c. Increase air flow or raise
ducts	o. Too oola cappiy all	temperature setting
18.Circuit	a. Incorrect fuse or breaker	a. Check for proper fuse or breaker
tripping	b. Incorrect wirings	b. Check for wirings and connections
шрршу	c. Failed components	c. Call service
19.Noisy	a. Mounting area not firm	a. Add support to improve installation
operation	b. Loose parts	b. Check fan blades, bearings,
•		washers, tubing contact and loose
	a Compressor such adad due t	SCrews.
	c. Compressor overloaded due t	
	high ambient temperatures of airflow restriction	
	d. Defective components	d. Call service for checking internal
	a. Dorodivo domponento	loose, inadequate lubrication and
		incorrect wirings
i	L	<del>y</del> -

### Installer's Instructions

# WARNING



Always check wiring harness connections before initiating any test procedures.

Disconnect electric power from the appliance before performing any maintenance or repairs.

Voltage checks should be made by inserting meter probes beside the wires in the connector blocks with the electric power source on and the connector block plugged in.

Resistance checks should be made on components with the electric power off and the connector block disconnected.

# Federal law requires that WINE-MATE split cooling systems be installed by an EPA certified refrigeration technician.

#### 1. General Instructions

WINE-MATE split system is shipped as components and is ready for use only after a certified refrigeration technician has properly installed the system. Proper installation is critical. Vinotemp can only warrant the quality of the components. The installation and proper operation of the system must be warranted by the installer. Installation of the system must be done in accordance with all state and local building and electrical codes.

The condensing unit and evaporator unit are connected by a liquid line and an insulated suction line that are supplied by the installer. These lines must be properly sized for the distance between the two units. After the units and lines are connected, the system must be checked for restriction, pressurization and leak. Then the system must be evacuate and charged with refrigerant. Refrigerant amount will vary depending on the length of line set.

#### Parts included:

Evaporator Unit (liquid line solenoid valve and expansion valve, thermostat installed)

Condensing Unit (discharge and suction valves installed)
Liquid Filter

Liquid Indicator

#### Parts not included:

Liquid line copper tubing Suction line copper tubing

#### **CAUTION:**

Liquid and suction line locations may differ from what are shown here, please check on the units for proper installation.

Fig. 1 WM15SFC Evaporator Unit

- 1. Air Return 2. Air Supply
- 3. Thermostat 4. Liquid Line
- 5. Suction Line 6. Drain Line

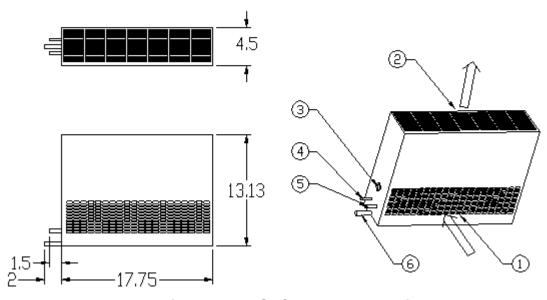
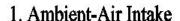
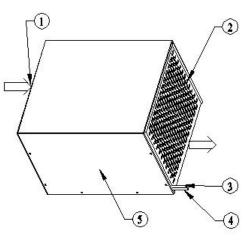
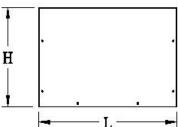


Fig. 2 WM-19SFC Evaporator Unit



- 2. Hot-Air Exhaust
- 3. Liquid Line
- 4. Suction Line
- 5. Outdoor Enclosure





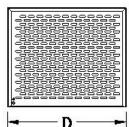


Fig. 3 WM-150SCU Condensing Unit





Fig. 4 Liquid Filter

Fig.5 Liquid Indicator

#### 2. Evaporator Unit Installation

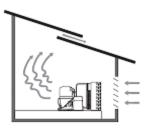
- 1) The WM-15SFC evaporator units shall be installed for ceiling mount with the air supply towards horizontally and air return on the bottom.
- 2) The WM-19SFC evaporator unit shall be installed for wall mount with the air supply towards top and air return on the sides.
- 3) Air supply shall be unobstructed minimum 12" for a direct blow installation; air return shall be unobstructed minimum 6".
- 4) A grille can be used to cover the supply and return with 0~2" clearance; or 2-3 ft long duct can be added.
- 5) There is a gravity drain system used, so the unit shall be installed level or with a slight slope downward the drain connection and the drain line shall be installed slope down toward the drain. If rise-up is needed, a condensation pump must be used.

#### 3. Condensing Unit Installation

#### CAUTION:

Low ambient condition kit is required if the installation area will be below 50°F. If the condensing unit is equipped with a low ambient condition kit, do not turn on the compressor until the condensing unit has been powered for minimum 12 hours.

- Place the condensing unit WM-150SCU in a properly ventilated location. If it is not, heat exhausted by the condensing unit will build up and the cooling system will not operate properly.
- 2) Condensing unit shall be elevated to avoid possible flooding and shaded from direct sun. It shall not be exposed to temperatures higher than 110 °F or lower than 50 °F.



- 3) Leave minimum 5 ft clearance for the exhaust side and leave minimum 1 foot clearance for the ambient air intake side.
- 4) Service valve operations
  - 1 Process or Manometer
  - 2 Receiver Discharge or Compressor Suction
  - 3 Liquid Line or Suction Line
  - 4 Pressure Control

Back Position: Normal operation, process and manometer port closed

Front Position: Liquid/suction line connection closed

Middle Position: All ports open for evacuation, charge and manometer

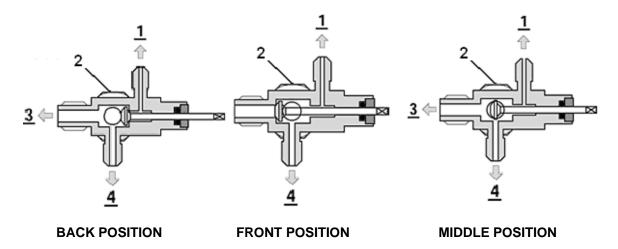


Fig. 6 ROTALOCK Valve Operation

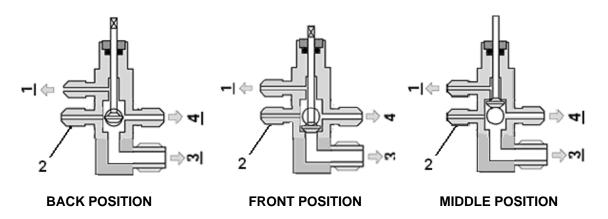


Fig. 7 Base Valve Operation

#### 4. Checking Pressure Control Settings

### 1) Use of the encapsulated pressure control (if applicable, sold separately)

Fixed suction pressure setting: Cut in = 32 psig; Cut out = 10 psig

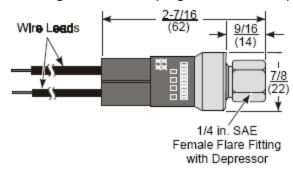


Fig. 8 Fixed Pressure Control

#### 2) Low ambient condition kit (if applicable)

#### A. Use of the crankcase heater

The crankcase heater is installed around the lower part of the compressor and shall be turned on all the time. The heater is self-regulated.

#### B. Use of the condenser fan control

Head pressure setting: Cut in=170 psig; Cut out=110 psig; Differential=60 psig It closes on rise of pressure. It may need to adjust the setting in the field to avoid fan short cycle.

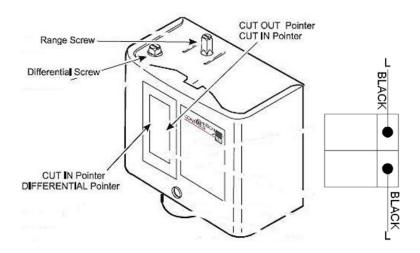


Fig. 9 Condenser Fan Cycle Control

#### 5. Refrigeration Piping and Leak Testing

#### NOTES:

- The line connection sizes of liquid filter & indicator, the valve connection sizes of condensing unit and the line connection sizes of evaporator unit are not necessary the same as the listed refrigeration line sizes.
- If the condensing unit is installed above the evaporator unit, use the suction line one listed size smaller.
- Expansion and solenoid valves have been installed on the liquid line in the evaporator unit.
- 1) The installation order starts from condensing unit (including receiver and discharge valve), liquid line filter-drier, moisture-liquid indicator, liquid line, to evaporator unit (including liquid line connection, solenoid valve, expansion valve, and suction line connection), returning to insulated suction line, suction valve and then back to condensing unit.
- 2) If the condensing unit is located below the evaporator unit, use inverted U trap to prevent liquid from flooding back to the compressor; if the elevation difference is more than 10 ft or the line set exceeds 75 ft, use both inverted U trap and suction accumulator.
- 3) If the condensing unit is located more than 10 ft above the evaporator unit, use U trap to aid oil returning to the compressor.
- 4) Complete pipe brazing, check solenoid valve and expansion valve restrictions and test leak.
- 5) Hook up the drain line and check if water drains.

The line sizes and refrigerant charges are listed as follows.

Model No	Equivalent Line Set	Liquid Line	Suction Line	Drain Line	Recommended Charge

WM-1500SS	<= 75 FT	1/4" OD	3/8" OD	1/2" OD	R134a/15 OZ
WM-1900SS	<= 75 FT	1/4" OD	3/8" OD	1/2" OD	R134a/15 OZ

#### 6. Connecting Electrical Wires

Connect all electrical components using the wiring diagrams in accordance with all state and local codes.

#### 7. Evacuating, Charging and Starting the system

#### CAUTION:

- Always use the superheat and subcooling, pressure readings to charge refrigerant properly; the listed charge amounts are used for reference only.
- If the unit is equipped with a low ambient condition kit and installed in the summer, charge 15% more refrigerant.
- If the low ambient condition kit is used, turn off the compressor before power the condensing unit. Only turn on the compressor after the condensing unit has been powered for 12 hours.
- 1) Evacuate the system; both discharge and suction valves must be in the middle positions during evacuating.
- 2) Charge the system through both suction and discharge valves with refrigerant using the recommended initial amount; both discharge and suction valves must be in the middle positions during charging.
- 3) Turn on the power to start the system and check the following temperatures and pressures.

### 8. Adjusting and Completing the Installation

- 1) The subcooling at the condensing unit shall be around 10°F. The charge may be complete when there are no more bubbles forming in the liquid indicator.
- 2) Head pressure range: 120 ~ 150 psig at 70 ~ 90 °F condensing unit ambient temperature.
- The evaporator's superheat is set at the factory between 8~10°F.
- 4) The temperature split across the evaporator shall be 8 ~ 10°F at 55°F wine cellar temperature.
- 5) Both discharge and suction valves must be in the back positions before disconnecting.
- 6) Close all service valves and disconnect all manifolds and hoses.

#### 9. Pressure, Superheat and Subcooling Readings

#### CAUTION:

To read properly the service valves must be in the middle positions.

	Complaint		Possible Causes	
1) High	suction pressure and low head pressure		1)	Compressor may be bad
Zero	superheat and zero subcooling			
2) High	suction pressure and low head pressure			Expansion valve opened, too
Low	superheat and low subcooling			much oil
	suction pressure and high head pressure		3)	Overcharge
	superheat and high subcooling			
4) High	to normal suction pressure and high	head	4)	Non-condensable gas
press				
	subcooling			
	suction pressure and high head pressure		5)	Air restricted, dirty condenser,
	superheat and low subcooling			bad condenser fans
	suction pressure and high head pressure		,	High cellar temperature, high
	superheat			evaporator load
	suction pressure and low head pressure		7)	Undercharge
	superheat and low subcooling			
,	suction pressure and low to normal	head	,	Liquid line restricted after
press				receiver, solenoid valve restricted
	superheat and high subcooling		٥)	O office the manufacture.
	suction pressure and low head pressure		9)	Suction line restricted
	nal to high superheat and low subcooling		40\	Air restricted at sysperator
	suction pressure and low head pressure		10)	
	superheat and low subcooling	bood		evaporator iced
,	suction pressure and low to normal	nead	11)	Evaporator restricted
press	superheat and normal to high subcooling			
	suction pressure and normal head pressur		12)	Expansion valve restricted
	superheat and normal subcooling	C	12)	Expansion valve restricted
	suction pressure and high head pressure		13)	Both evaporator and condenser
	superheat and high subcooling		10)	restricted; liquid and suction lines
ı ııgıı	ouponiout and riight oubocoming			connected wrong
14) Low	suction pressure and high head pressure			Liquid line restricted before
	superheat and high subcooling		,	receiver
	to normal suction pressure and high	head	15)	Condenser restricted
press	·	·	,	
•	nal to high superheat and high subcooling			

# 10. Condensing Unit Troubleshooting

Unit not running							
Incorrect power supply	Check for proper voltage						
Incorrect or loose wirings	<ol><li>Check all wirings and connections</li></ol>						
3) Failed components	<ol> <li>Check start relay, start capacitor, overload protector, compressor.</li> </ol>						
Low pressure switch shutting down the system	<ol> <li>Check for system restriction or low refrigerant</li> </ol>						
5) high pressure switch shutting down the system	5) Check for the condenser fan						

# **Electrical Wiring Diagrams**

#### **CAUTION:**

- Hidden lines are the field wirings
- Use minimum 14 gauge wires for power lines.
- If equipped with low ambient condition kit, use low ambient temperature wiring diagrams.
- A safety switch is always recommended for the condensing unit.

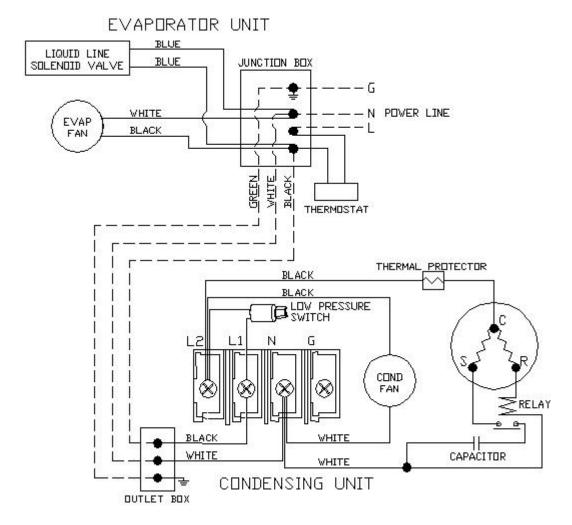


Fig. 10 WM-1500&1900SS Wiring Diagram (Mechanical Thermostat)

#### EVAPORATOR UNIT BLUE LIQUID LINE SOLENOID VALVE BLUE JUNCTION BOX ---N POWER LINE WHITE EVAP BLACK FAN THERMOSTAT CONDENSING UNIT THERMAL PROTECTOR BLACK LOV PRESSURE HIGH CONTROL/ PRESSURE TIME DELAY CONTROL FAN CYCLING CONTROL SVITCH 0 G COND ₹RELAY FAN WHITE WHITE POWER LINE N BLACK CAPACITOR WHITE DUTLET BOX CRANKCASE HEATER

Fig. 11 Low Ambient Temperature WM-1500&1900SS-LA Wiring Diagram (Mechanical Thermostat)

# **Customer Support**

If you need further assistance, please contact us at:

Vinotemp International 17631 South Susana Road Rancho Dominguez, CA 90221

Tel: (310) 886-3332 Fax: (310) 886-3310

Email: info@vinotemp.com

# Warranty

### Thank you for choosing a Vinotemp cooling unit.

Please enter the complete model and serial numbers in the space provided:

Model			
Serial No			

Attach your purchase receipt to this owner's manual.

#### 1. Limited Warranty

VINOTEMP warrants its products, parts only, to be free from defects due to workmanship or materials under normal use and service for twelve months after the initial sale. If the product is defective due to workmanship or materials, is removed within twelve months of the initial sale and is returned to VINOTEMP, in the original shipping carton, shipping prepaid, VINOTEMP will at its option, repair or replace the product free of charge.

This warranty constitutes the entire warranty of the VINOTEMP with respect to its products and is in lieu of all other warranties, express or implied, including any of fitness for a particular purpose. In no event shall VINOTEMP be responsible for any consequential damages what is so ever. Any modification of VINOTEMP products shall void this warranty.

#### **Service under Warranty**

This service is provided to customers within the continental UNITED STATES only. VINOTEMP cooling units are warranted to produce the stated number of BTU/H. While every effort has been made to provide accurate guidelines, VINOTEMP can not warranty its units to cool a particular enclosure.

In case of failure, VINOTEMP cooling units must be repaired by the factory or its authorized agent. Repairs or modifications made by anyone else will void the warranty.

Shall a VINOTEMP cooling unit fail, contact the dealer for instructions, do not return the unit to the factory without authorization from VINOTEMP. If the unit requires repair, re-pack it in the original shipping carton and return it to the factory, shipping prepaid. VINOTEMP will not accept COD shipments. If the unit is determined to be faulty and is within the twelve month warranty period

VINOTEMP will, at its discretion, repair or replace the unit and return it free of charge to the original retail customer. If the unit is found to be in good working order, or beyond the initial twelve month period, it will be returned freight collect.

#### 2. Limitation of Implied Warranty

VINOTEMP'S SOLE LIABILITY FOR ANY DEFECTIVE PRODUCT IS LIMITED TO, AT OUR OPTION, REPAIRING OR REPLACING OF UNIT.

#### **VINOTEMP SHALL NOT BE LIABLE FOR:**

DAMAGE TO OTHER PROPERTY CAUSED BY ANY DEFECTS IN THE UNIT, DAMAGES BASED UPON INCONVENIENCE, LOSS OF USE OF THE UNIT, LOSS OF TIME OR COMMERCIAL LOSS, ANY OUTER DAMAGES, WHETHER INCIDENTAL, CONSEQUENTIAL OR OTHERWISE.

THIS WARRANTY IS EXCLUSIBE AND IS IN LIEU OF ALL OTHER WARRANTIES, EXPRESSED OR INPLIED, INCLUDING BUT NOT LIMITED TO, IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE.

While great effort has been made to provide accurate guidelines VINOTEMP cannot warrant its units to properly cool a particular enclosure. Customers are cautioned that enclosure construction, unit location and many other factors can affect the operation and performance of the unit. There for suitability of the unit for a specific enclosure or application must be determined by the customer and cannot be warranted by VINOTEMP.