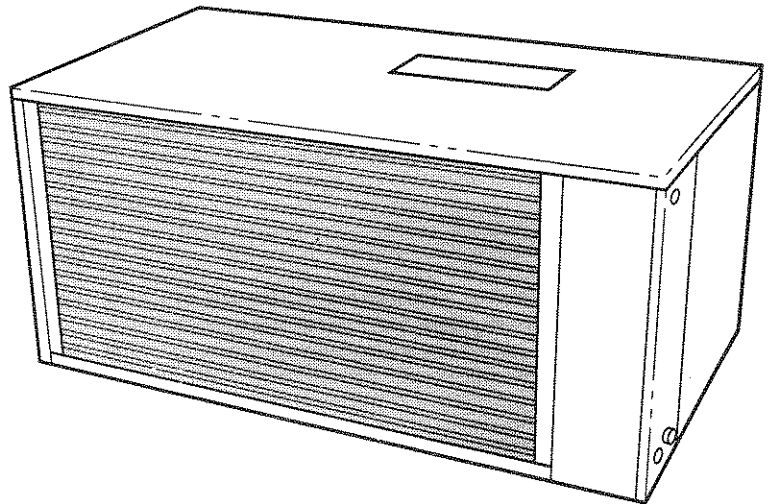
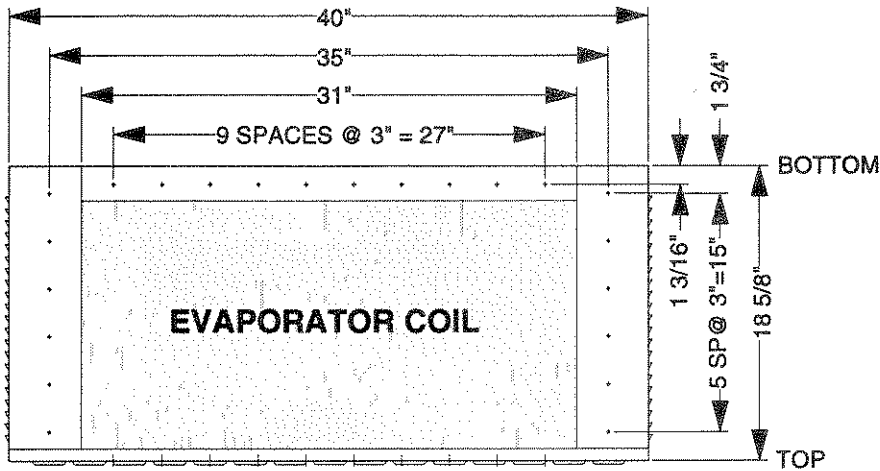


INSTALLATION INSTRUCTIONS RV CENTRAL AIR CONDITIONER MODEL 2702



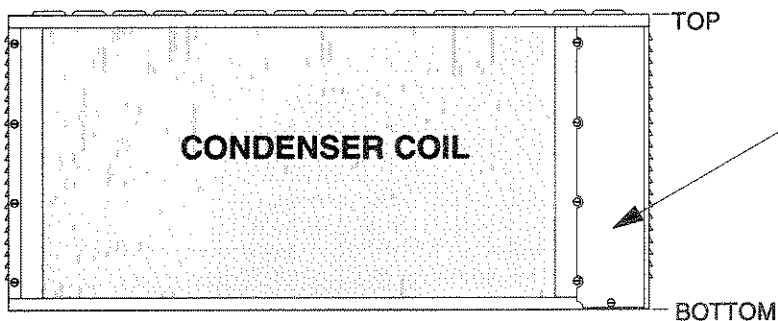
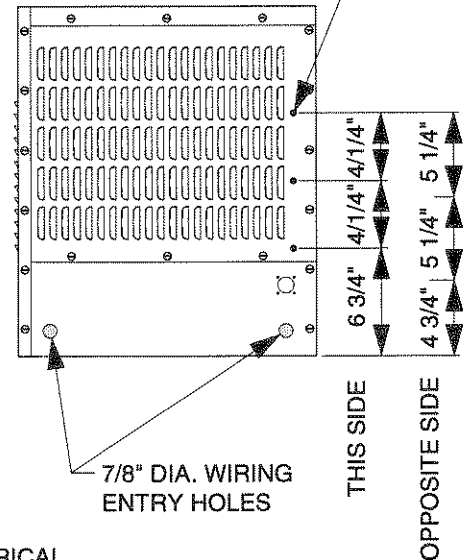
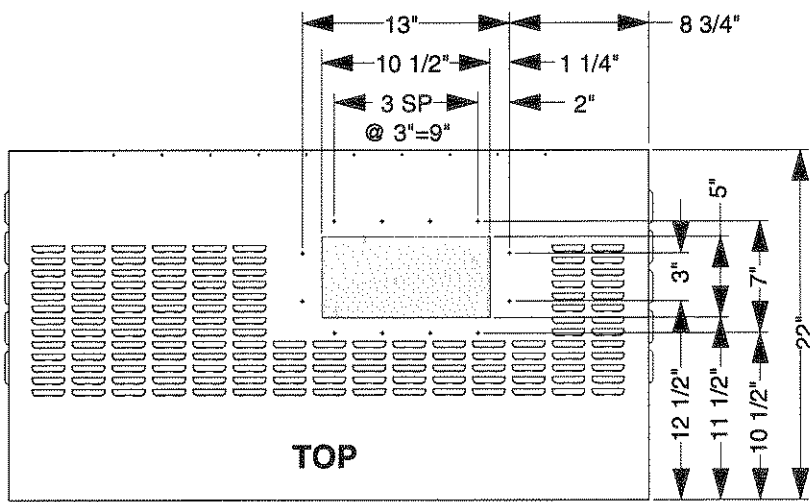
**SPECIFIC CLIMATE SYSTEMS, INC.
1200 WEST RISINGER ROAD
FORT WORTH, TX 76134
TEL. (817) 293-5313
FAX (817) 568-1287**

UNIT OUTLINE DRAWING

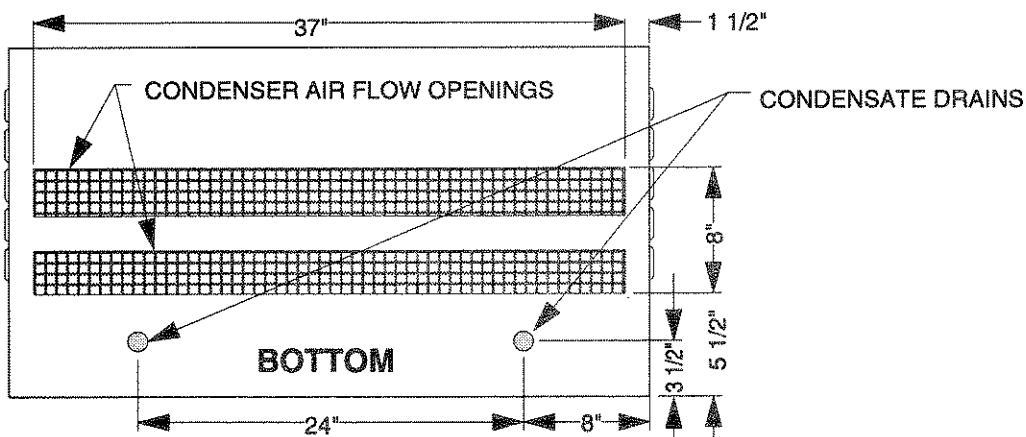


UNIT NET WEIGHT 192 LBS.

UNIT MOUNTING WELD NUTS
1/4" - 20 THREAD
CAUTION: WIRING AND REFRIG-
ERATION COMPONENTS INSIDE.
DO NOT ALLOW MOUNTING
BOLTS TO PENETRATE CAB-
INET MORE THAN 1/4"



ELECTRICAL
BOX COVER



WARNING:

THE MANUFACTURER'S WARRANTY DOES NOT COVER ANY DAMAGE OR DEFECT TO THE AIR CONDITIONER CAUSED BY THE ATTACHMENT OR USE OF ANY COMPONENTS, ACCESSORIES, OR DEVICES NOT TESTED BY A NATIONALLY RECOGNIZED TESTING LABORATORY. YOU SHOULD BE AWARE THAT THE USE OF SUCH COMPONENTS, ACCESSORIES, OR DEVICES MAY ADVERSELY AFFECT THE OPERATION OF THE AIR CONDITIONER AND MAY ALSO ENDANGER LIFE AND PROPERTY. THE MANUFACTURER DISCLAIMS ANY RESPONSIBILITY FOR SUCH LOSSES OR INJURY RESULTING FROM THE USE OF SUCH COMPONENTS, ACCESSORIES, OR DEVICES.

UNIT SPECIFICATIONS

		CIRCUIT #1 ONLY POWERED	CIRCUITS #1 AND #2 POWERED	
			CIRCUIT #1	CIRCUIT #2
*COMPRESSOR	RLA	11.5	11.5	11.5
*COMPRESSOR	LRA	59.0	59.0	59.0
I.D. BLOWER MOTOR 1/3 H.P.	FLA	3.5	4.9	0
O.D. BLOWER MOTOR 1/4 H.P.	FLA	2.2	0	3.1

*COMPRESSOR MOTORS THERMALLY PROTECTED

		CIRCUIT #1	CIRCUIT #2
MINIMUM CIRCUIT AMPACITY	AMP	20.0	17.4
MAX. OVERCURRENT PROTECTIVE DEVICE	AMP	20	20
R-22 CHARGE WEIGHT	OZ	36	36

MINIMUM EXTERNAL STATIC PRESSURE I.D. BLWR. 0.5 IN. W.C.
MAXIMUM EXTERNAL STATIC PRESSURE O.D. FAN 0.1 IN. W.C.
DESIGN PRESSURES: 300 PSIG HIGH SIDE, 150 PSIG LOW SIDE

GENERAL

The information contained in this manual has been prepared to assist in the proper installation and operation of the air conditioning system. Improper installation, or installation not made in accordance with these instructions, can result in unsatisfactory operation and/or dangerous conditions.

Read this manual and any instructions packaged with separate equipment required to complete the system prior to installation. Upon receiving the unit, inspect it for any shipping damage. Claims for damage, either apparent or concealed, should be filed immediately with the shipping company.

The model 2702 central air conditioner is intended to be permanently installed in a recreational vehicle by the RV manufacturer. The manufacturer must provide an installation area that allows for floor cutouts and unit mounting without cutting vital frame members or electrical wiring. Conditioned air is delivered from the air conditioner to the interior of the vehicle through ducting that is supplied and installed by the vehicle manufacturer. The system return air duct and filter are also supplied by the vehicle manufacturer.

The air conditioner is powered by two separate 115 volt 20 AMP electrical services. It can be controlled by SCS Part No. 033-00020 electronic wall mounted thermostat. The vehicle manufacturer must provide a fused power source for the thermostat. Other thermostats may be used only if they have been tested by a Nationally Recognized Testing Laboratory. Refer to the Wiring Schematic for installation of thermostats other than Part No. 033-00020.



DANGER-SHOCK HAZARD

To prevent the possibility of severe personal injury or equipment damage due to electrical shock, always be sure the electrical power source to the appliance is disconnected.

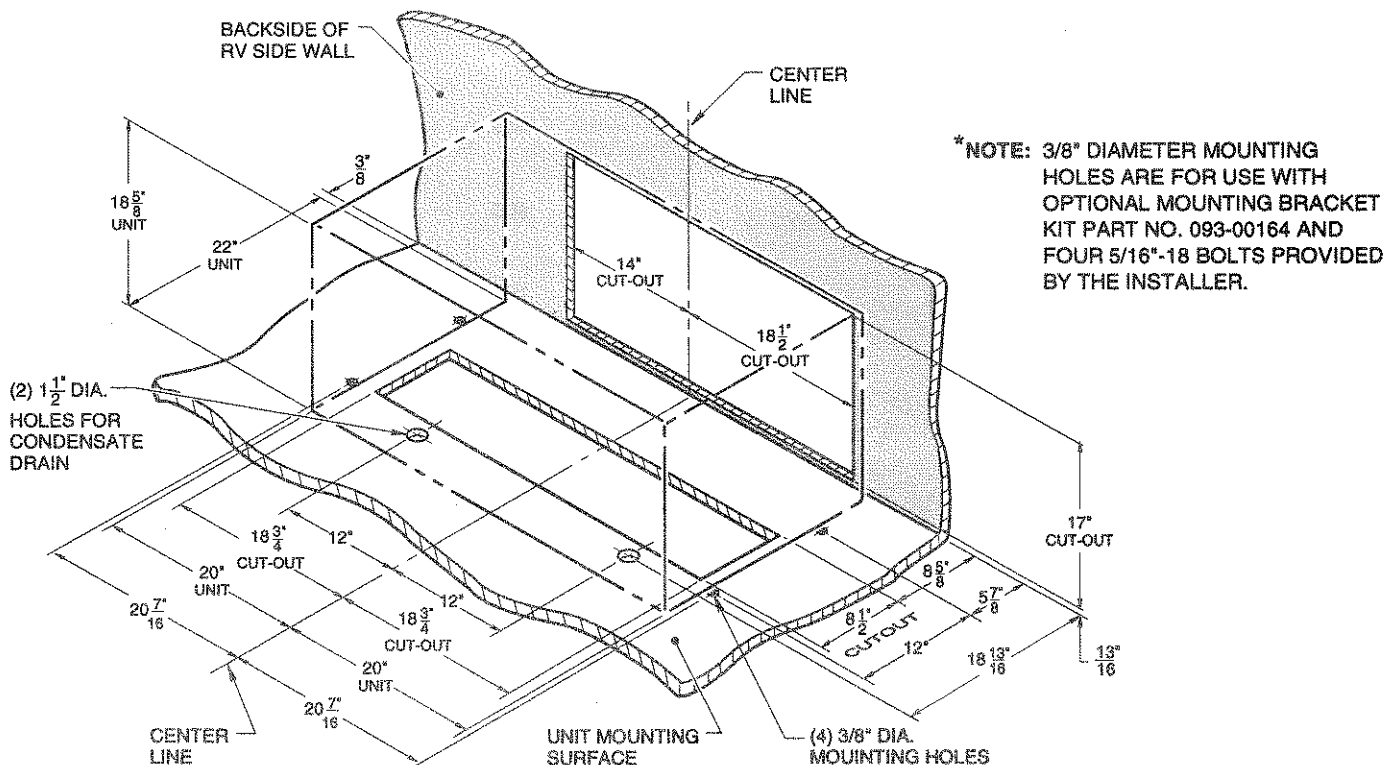


FIG. 1

UNIT LOCATION

The model 2702 is to be installed within the overall enclosure of the RV. It is normally installed beneath the vehicle floor. It must be supported from below by the storage bay floor or by rigid frame members. These supports must not interfere with either the condenser air flow or the condensate drain. It should be installed with the side that houses both the condenser coil and the electrical box, facing the outer skin of the vehicle. The area between the unit and the vehicle skin should be sealed to prevent recirculation of hot condenser exhaust air. A decorative grille having an open area of at least 50% (288 square inches) should be installed over the entire face of the condenser. For reduced noise and heat on the "patio" side of the vehicle, the unit is normally installed on the "street" side. The unit has a condenser air opening on the bottom side. It must not be restricted in any manner. Refer to Fig. 1 for the proper cutout size.

Do not install any other heat generating appliance in the same cavity as the air conditioner. Ensure that neither the vehicle engine exhaust or onboard generator engine exhaust is pulled into the condenser's cooling air flow. Additional heat in this cavity will decrease system performance and equipment life.

Overall unit dimensions are shown in Figures 1 and 2. A minimum of 4 additional inches must be allowed at the wiring box end of the air conditioner to allow for the installation of both the low and high voltage wiring. If the unit is equipped with louvered side panels, allow a minimum of 4 inches on both sides.

AIR DISTRIBUTION SYSTEM

DANGER-SHOCK HAZARD

DO NOT DRILL ANY OPENINGS INTO THE UNIT. Use only the pilot holes shown in Fig. 2. Drilling new openings and inserting screws may damage either the refrigeration circuit or electrical wiring causing possible equipment damage, personal injury, or death. Do not allow duct mounting screws to penetrate cabinet more than 3/8".

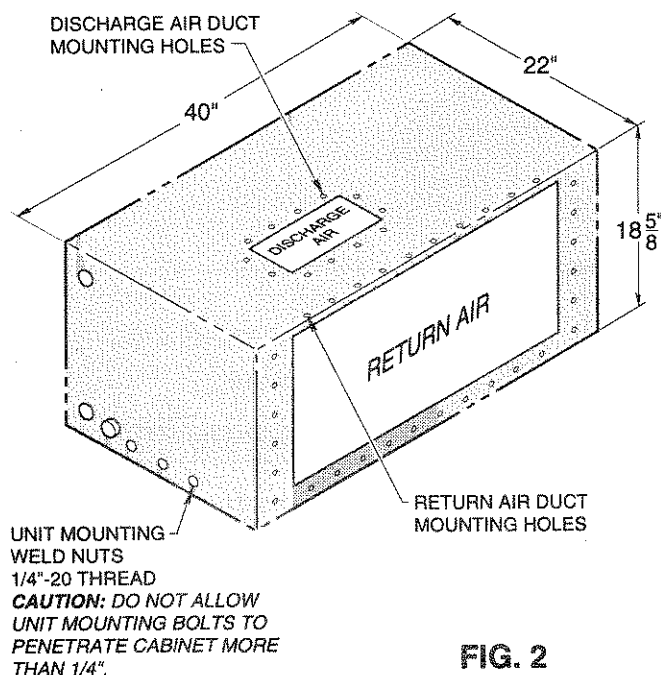


FIG. 2

All supply air ducts, registers, return air ducts, return air filters and filter retainers must be supplied by the vehicle manufacturer. The entire duct system, including registers and filter, should be assembled and tested prior to final installation. An inexpensive manometer having a range of 0" to 2" water column can be used to measure the total static pressure of the duct system. Refer to the instructions packaged with the manometer and to Fig. 3 for proper connection of the instrument.

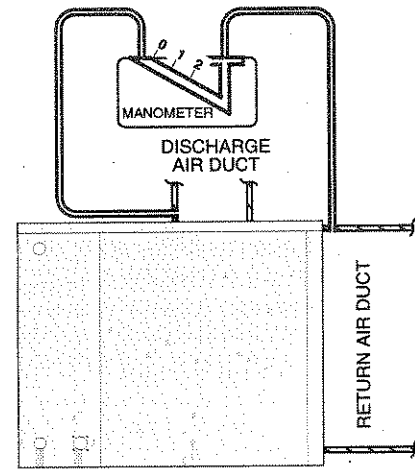


FIG. 3

After measuring the total duct static, refer to the graph shown in Fig. 4 to determine the volume of air being delivered. To prevent excessive amperage draw, the minimum external static pressure for the indoor blower is 0.5 inches W.C. The design rated air flow on high fan speed is 700 SCFM (standard cubic feet per minute), with approximately 1.2 inches of static restriction in the ducting. An increase in duct static pressure will reduce system performance and increase vehicle cool down time.

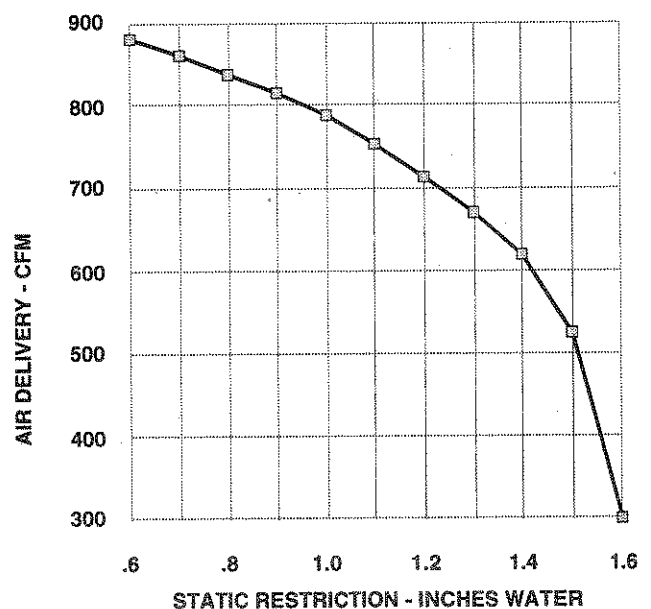


FIG. 4

The cool air discharge ducts should be insulated to prevent condensation that could damage the vehicle interior or cause odors. Any ducting (supply or return) exposed to a heat source or outdoor environment must be sealed and insulated to prevent heat gain and decreased system performance.

WARNING:

The cool air discharge opening on top of the unit must be covered by a duct to prevent personal injury by contact with the blower wheel. Regardless of installation configuration, ensure that all duct connections are air tight. Loose or leaking connections can reduce system performance and allow gases, odors, and dirt to be drawn in from outside the vehicle.

115 VAC ELECTRICAL WIRING

DANGER-SHOCK HAZARD

To prevent the possibility of severe personal injury or equipment damage due to electrical shock, always be sure the electrical power is disconnected or off before beginning installation.

The unit contains dual compressors. Each compressor is connected to a separate refrigeration circuit and a separate 20 Amp electrical circuit. The two separate circuits connect to the printed wiring board in the air conditioners' electrical box. The printed wiring board is specifically labeled for the two separate electrical connections "LINE 1" or "CIRCUIT #1" and "LINE 2" or "CIRCUIT #2". High voltage wiring lugs for both circuits are provided on the printed wiring board. Each lug is identified as "BLK" or "WT". The printed wiring board may be equipped with a third high voltage lug labeled "INVERTER" and a low voltage connector marked "J1". These connectors control SCS optional "Over the Road" air conditioning equipment and are not to be used at this time.

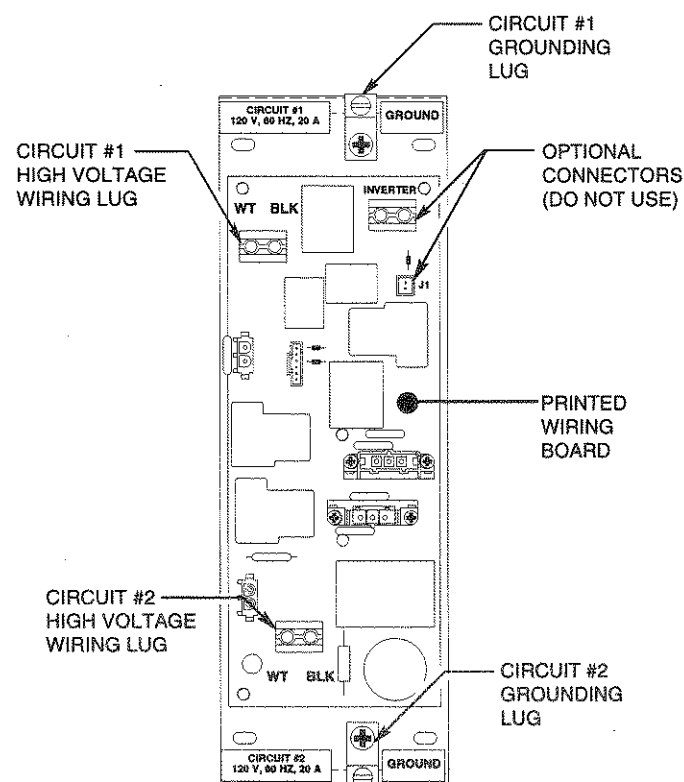


FIG. 5

DANGER - SHOCK HAZARD

Verify that the high voltage wiring conforms to all applicable local and national Wiring Codes. Consult a qualified specialist for proper connection and routing of the BLACK, WHITE, and GROUND supply wires.

HIGH VOLTAGE WIRING SPECIFICATIONS

Use only UL listed wire with copper conductors. Minimum size is #12 AWG. If the length of the supply wiring is more than 25 feet, use #10 AWG. To prevent excessive voltage drops, each circuit's supply wiring should not be longer than 40 feet.

CIRCUIT PROTECTION

Time Delay Fuse:	20 AMP Maximum
Circuit Breaker: (H.A.C.R. Type)	20 AMP Maximum
(C.S.A.)	20 AMP Maximum

HIGH VOLTAGE WIRING CONNECTION

Route all wiring per applicable local and national electrical codes.

Route each circuit's high voltage wiring through the 7/8" diameter wiring entry holes shown in Fig. 6. Use a UL listed "Rain Tight" or equivalent electrical conduit fitting in each hole to secure the wiring.

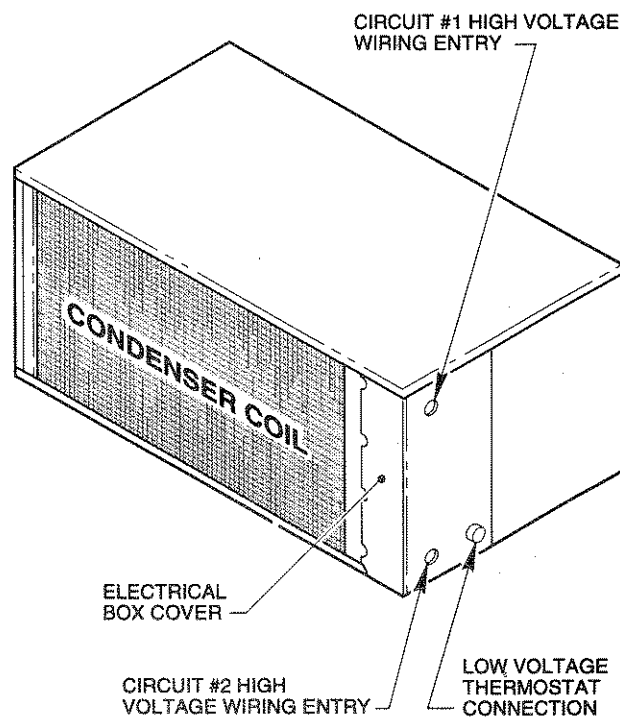


FIG. 6



DANGER-SHOCK HAZARD

WHEN USING NONMETALLIC SHEATH SUPPLY CABLES (ROMEX, ETC.) STRIP THE OUTER SHEATH BACK TO EXPOSE 4"-6" OF THE INDIVIDUAL LEADS. STRIP THE INDIVIDUAL WIRE LEAD ENDS (ABOUT 3/8" BARE WIRE) FOR CONNECTION TO THE WIRING LUGS. INSERT THE SUPPLY WIRES THROUGH THE ELECTRICAL CONNECTOR CLAMPS. MAKE SURE THE CABLE IS CENTERED IN THE CLAMP AND THE OUTER SHEATH PROTRUDES PAST THE CLAMP BUSHING BEFORE TIGHTENING. DO NOT OVER TIGHTEN! THIS COULD RESULT IN PINCHING THROUGH THE PLASTIC WIRE INSULATION AND CAUSE SHORTING.

IF OTHER THAN NONMETALLIC CABLES ARE USED FOR SUPPLY CONDUCTORS, APPROPRIATE STRAIN RELIEF CONNECTORS OR CLAMPS SHOULD BE USED.

IN NO CASE SHOULD CLAMPING OR PINCHING ACTION BE APPLIED TO THE INDIVIDUAL SUPPLY LEADS.

Do not allow excess wiring to contact electrical terminals, sharp screw ends or edging that can cut or damage the wiring insulation.

Connect each circuit's black power lead to the high voltage lug marked "BLK".

Connect each circuit's white power lead to the high voltage lug marked "WT".

Connect each circuit's green or bare copper ground wire to the lugs marked "GROUND" located adjacent to the high voltage lugs.

After connecting the ground wire (which in some instances will be bare copper) to the grounding lug, verify that it cannot come into contact with any high voltage component.

CIRCUITS 1 AND 2 ORIENTATION POINTS

When both compressors cannot be powered from a single shore line, then the system must be wired as follows:

Connect "CIRCUIT 1" to the circuit that is powered from the vehicle shore line. This allows one compressor to operate any time the shore line is connected to either the local utility or the onboard generator.

Connect "CIRCUIT 2" to the circuit that is powered from the onboard generator. When wired in this fashion, the second compressor will operate only when the onboard generator is in operation.



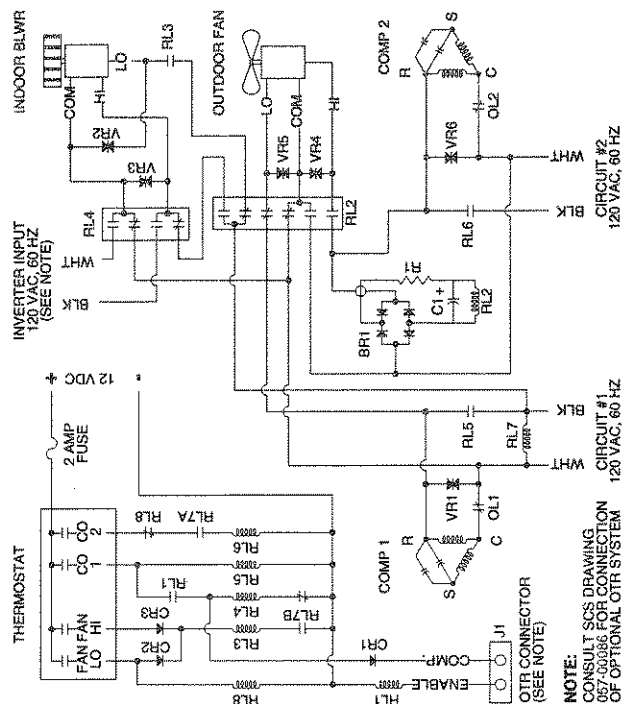
DANGER-SHOCK HAZARD

TO PREVENT THE POSSIBILITY OF SHOCK INJURY FROM APPLIANCE OPERATION:

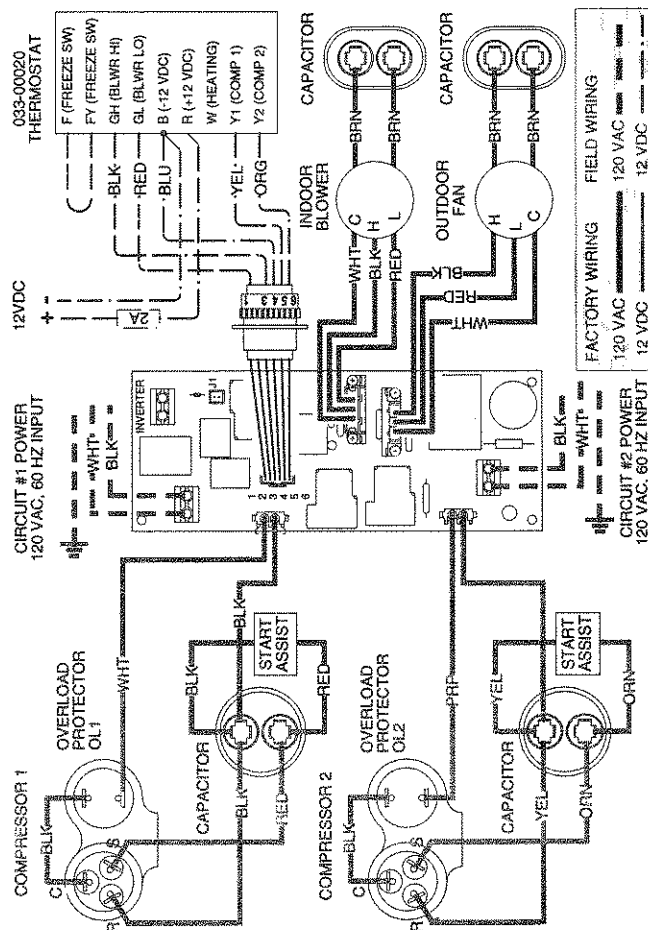
THE WHITE FROM EACH CIRCUIT WIRE MUST BE CONNECTED TO NEUTRAL IN THE SERVICE BOX AND THE MECHANICAL GROUND MUST BE CONNECTED TO A GROUNDING LUG EITHER IN THE SERVICE BOX OR THE MOTOR GENERATOR COMPARTMENT.

REPLACE THE UNIT WIRING BOX COVER AFTER ALL HIGH VOLTAGE CONNECTIONS ARE COMPLETED AND INSPECTED.

SCHEMATIC



WIRING DIAGRAM



THERMOSTAT INSTALLATION

The following instructions describe the installation of SCS Part No. 033-00020. Refer to the manufacturer's information and the Wiring Schematic for other thermostats.

WARNING: _____

Read instructions before proceeding with installation of thermostat. Only the procedures outlined are approved by the manufacturer. Disconnect electricity to the air conditioner, furnace, vehicle converter and thermostat power source before installation or servicing. Reconnect when completely finished. Maximum current draw of any device, including the furnace control wire, **MUST NOT EXCEED ONE AMP. DO NOT** short circuit terminals or wires at any time to test the system. Shorting the control terminals will damage the thermostat and void the warranty. Wiring must comply with all local codes and ordinances.

The 033-00020 thermostat is a sensitive instrument. For the best performance and temperature control, the correct location of the thermostat is very important. The following conditions should be followed as closely as possible.

- A jumper wire must be installed between thermostat terminals FY and F.
- Locate the thermostat on the wall about five feet above the floor where it will be easy to view, adjust, service and install. It should be in the room most often used.
- Do not install the thermostat where there are unusual heating conditions, such as direct sunlight or close proximity to heat producing appliances or heating/cooling registers.
- Do not locate where air circulation is poor, such as in a corner, alcove or behind an opened door.
- This thermostat doesn't require leveling.
- Locate thermostat mounting holes using the template provided with the thermostat.
- Using one of the two mounting screws provided, screw the fastener into the top screw location on the wall. Turn this screw down to just over 1/16" from the wall. This will allow sufficient gap for the thermostat mounting slot to slide under the screw head.
- Connect the low voltage wiring from the air conditioner to the thermostat and from the thermostat to a fused 12 volt DC power as shown in the Wiring Diagram. Refer to the heater manufacturer's information for connection of the heater low voltage wiring.
- Push excess cable back into the wall. Fill wall opening with non combustible material to prevent drafts which will affect thermostat operation.
- Slide the thermostat's case mounting slot under the screw head by pulling gently downward. Align bottom screw hole in the wall with the bottom mounting hole on the thermostat. Tighten until snug.
- Put thermostat SYSTEM switch in the OFF position before turning on power.

FINAL TESTING

Place the thermostat system switch into the OFF position. Once all safety precautions have been met, reinstate power to all systems; thermostat, cooling, and heating.

OFF _____

Starting with the system switch in the OFF position, the display will be blank and no part of either the cooling or heating systems will be operating.

FAN _____

Move the system switch to FAN. The display indicates room temperature. The cooling system fan operates continuously. No other components or systems are operating.

HEATING _____

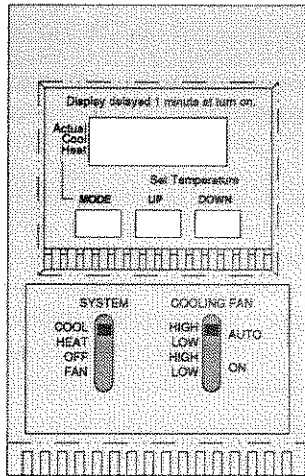
After compliance with all of the heater manufacturer's instructions and precautions, move the system switch to HEAT. The display will indicate room temperature. Adjust the Heat Set set point of the thermostat above the room temperature displayed and return the arrow to the ACTUAL position. After 15 to 30 seconds, the heat circuit of the thermostat will activate the heating controls. Once the heat has turned on and is running, adjust the HEAT SET set point below the room temperature displayed and return the arrow to the ACTUAL position. After 15 to 30 seconds, the heat circuit of the thermostat will turn off and deactivate the heating controls.

COOLING _____

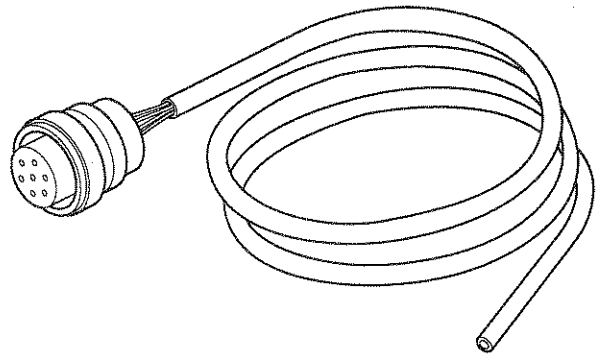
Move the system switch to COOL, the display will indicate room temperature. Adjust the COOL SET set point 3 to 5 degrees above room temperature and return to actual. Move the fan switch to LOW ON, the fan operates continuously at low speed. Move the fan switch to HIGH ON, the fan operates continuously at high speed. Move the fan switch to LOW AUTO, the fan will stop. Move the fan switch to HIGH AUTO, the fan will remain off. Adjust the COOL SET set point 5 degrees below room temperature and return to actual (If the thermostat has been powered for more than 3 minutes, first stage cooling and the cooling fan will come on approximately 1 minute later).

If the thermostat has not been powered for more than 3 minutes, first stage cooling and the cooling fan will come on anywhere from 30 seconds to 3 minutes later. (Second stage cooling will come on approximately 30 seconds after first stage.) With the fan switch in HIGH AUTO, the fan will operate at high speed and cycle with stage 1 compressor. Move the fan switch to LOW AUTO, the fan will operate at low speed and cycle with stage 1 compressor. Once both stages of cooling and both fan speeds have been verified, adjust COOL SET set point to a temperature above room temperature and return to actual. After 15 to 30 seconds, both first stage cooling and the cooling fan will cycle off. First stage cooling can not be restarted until a 3 to 3 1/2 minute time delay has occurred.

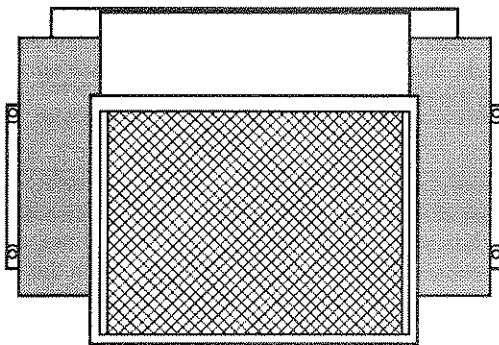
ACCESSORIES



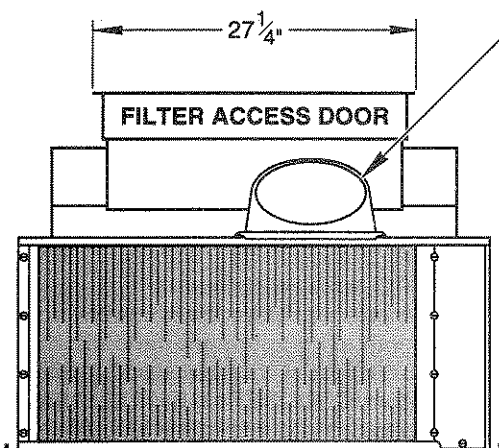
033-00020 DIGITAL 12 VOLT THERMOSTAT



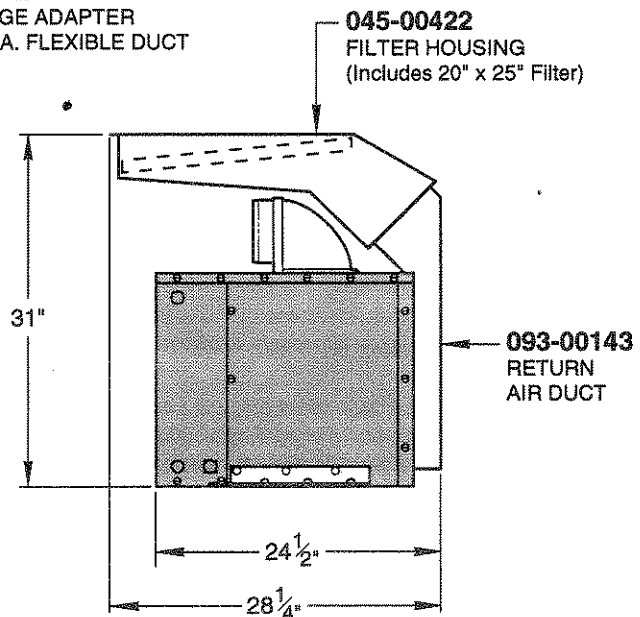
036-00157 THERMOSTAT CABLE (35')



**093-00164
MOUNTING BRACKET KIT**



**093-00412
DISCHARGE ADAPTER
FOR 8" DIA. FLEXIBLE DUCT**



**093-00143
RETURN
AIR DUCT**