INSTALLATION INSTRUCTIONS

ALL-ELECTRIC
IN-DASH CUSTOM
HEATER AIR-CONDITIONER

P/N 090-00622

MANUFACTURED IN THE USA BY

Southern Air
EVAPORATOR INSTALLATION

This heat/cool evaporator is designed to be installed inside the cabin, under the dash and near the firewall. These instructions are to be used as a guideline and in no definite order.

Disconnect the battery ground cable. Remove and discard all original heater/defroster components not to be used with this system. Position this evaporator under the dash for correct placement and clearance (determine the defroster ducts mounting locations at this time). Once the evaporator mounting location has been determined, it may be an advantage to remove the dash for ease of securing the evaporator into position.

Ensure that all holes and openings in the firewall are sealed to prevent the introduction of outside air. This will enhance the cooling/heating performance and prevent condensation forming during air conditioning operation.

Secure the mounting brackets to the evaporator and position the evaporator into the desired mounting location. Locate the drain hose exit location on the floorboard and mark. Mark the mounting brackets attachment locations on the firewall/kick panel. Remove the evaporator, drill or punch a 5/8 hole in the floorboard for the drain hose and drill the evaporator mounting holes or attach weld studs at the mounting locations.

Secure the defroster ducts. Attach the evaporator and mark suitable hole locations for the refrigerant and heater hoses (ensure adequate space is available on each side of the firewall for the refrigerant hoses and heater hoses routing). Drill 1.25 (1 ¼) inch holes in the firewall ensuring no objects will interfere with the routing of the hoses. Install the hose grommets in the firewall. Route the refrigerant hoses and heater hoses thru the grommets to the evaporator. Wrap the suction fitting at the evaporator with the black “Presstite” tape to prevent condensation from forming. Route the drain hose thru the floorboard hole and attach to the evaporator drain tube.

Locate where the louvers are to be installed; in the dash, under the dash or on the side kick panels. If the louvers are to be installed in the dash, make sure there is no interference with wiring, cables, braces, etc. behind the dash.
Install the louvers and connect a suitable length of the 2.5” flexible air duct to each louver and to the appropriate outlet on the evaporator case. Please note that the best air flow results from the shortest and straightest route of the flexible air duct from the evaporator to the louver. Install a suitable length of the 2” flexible air hose to the defroster ducts and to the appropriate outlet on the evaporator with the same attention as above.

Locate the desired position for the control panel and secure in place. Connect the red power wire to an IGNITION pin on the fuse panel. Route the wire harness with the water valve connector and blue clutch lead along the refrigerant hoses thru the firewall to the engine compartment. Secure the black wire with a ring terminal to a suitable ground location. Connect the wire harness to the controls.

**ENGINE COMPARTMENT**

Install the compressor and compressor bracket to the engine per the instructions supplied with the compressor bracket.

Install the condenser in front of the engine radiator with the larger condenser fitting (inlet) at the top, the smaller condenser fitting (outlet) at the bottom with the condenser side tanks vertical and the inner tubes running horizontally. Position the condenser to the top of the radiator ensuring the condenser, the mounting brackets and the attachment hardware do not touch the radiator. The condenser should be secured as close to the radiator as possible, allowing for a slight movement and vibration clearance. Any contact of metal components to the radiator can cause the radiator to leak.

Secure the receiver/drier (in a vertical position) between the condenser and the firewall.

Secure the refrigerant hoses to the compressor, the condenser, the receiver/drier. Always lubricate the o-rings and fitting threads prior to attachment.
Secure the heater control valve in the engine compartment. Route the heater "supply" hose from the intake manifold to the heater control valve inlet port, then connect the supply heater hose on the evaporator to the heater control valve outlet port. Route the heater "return" hose from the evaporator to the water pump port. Ensure all hoses connected to the engine have proper slack for engine torque movement.

Connect the six pin connector on the wire harness to the water control valve. Route the blue clutch wire from the evaporator to the pressure switch on the receiver/drier and connect, then route to the compressor clutch and connect.

If the MODE switch is removed from the control panel, insure the index washer is installed properly as illustrated below.