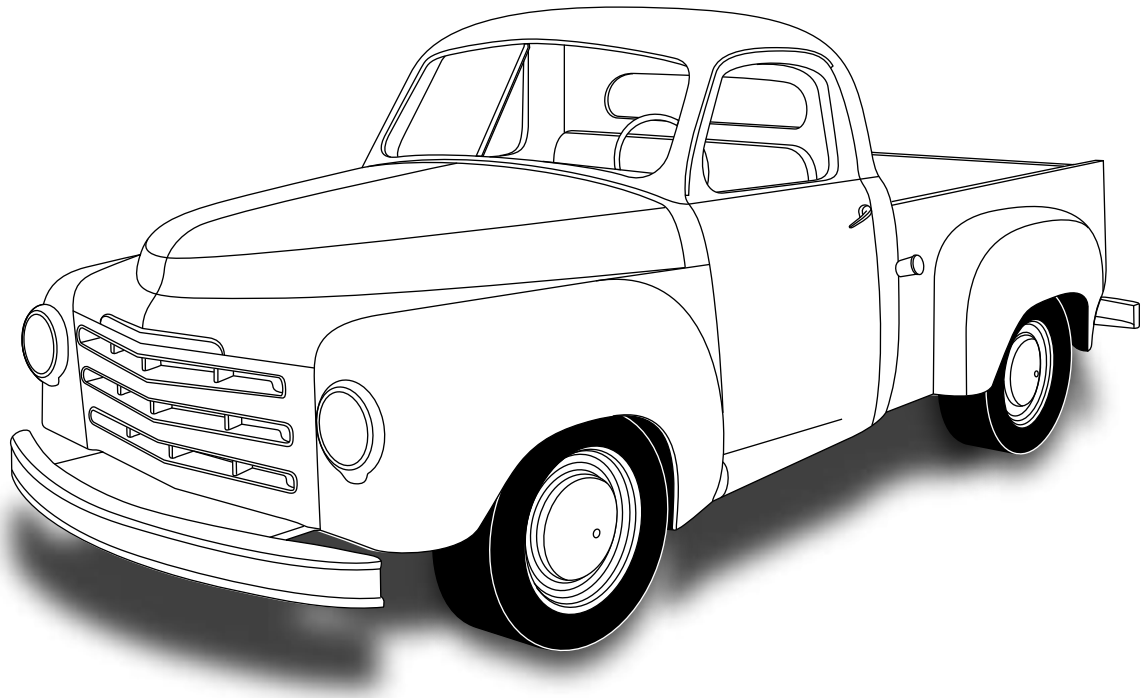
an ISO 9001:2008 Registered Company

1949-59 Studebaker C-Cab Truck

Evaporator Kit 681001



18865 Goll St. San Antonio, TX 78266 ph: 210-654-7171 fax: 210-654-3113

Table of Contents

Packing List: 1949-59 Studebaker C-Cab Truck Evaporator Kit (681001)

No.	Qty.	Part No.	Description
1.	1	746010	Studebaker Evaporator Sub Case
2.	1	799000	Accessory Kit, 1949-59 Studebaker C-Cab Truck

**** Before beginning installation, open all packages and check contents of shipment. Please report any shortages directly to Vintage Air within 15 days. After 15 days, Vintage Air will not be responsible for missing or damaged items.**

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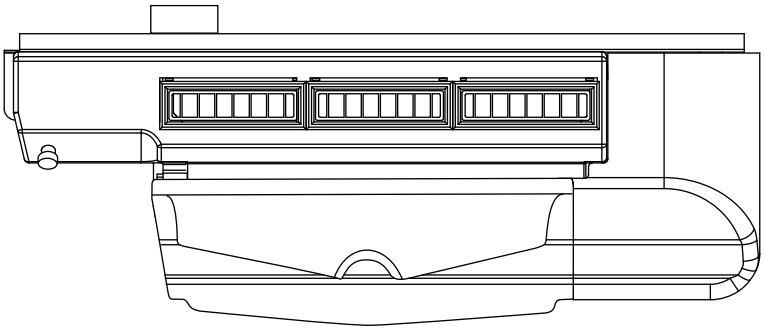

Studebaker Evaporator Sub Case 746010

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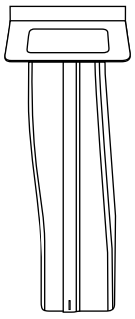
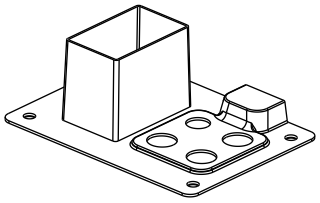
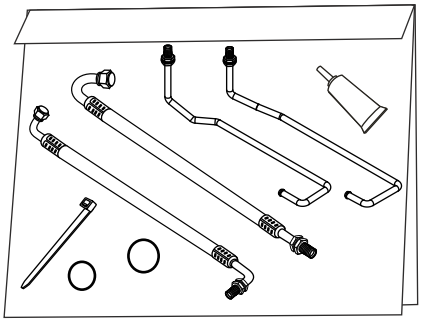
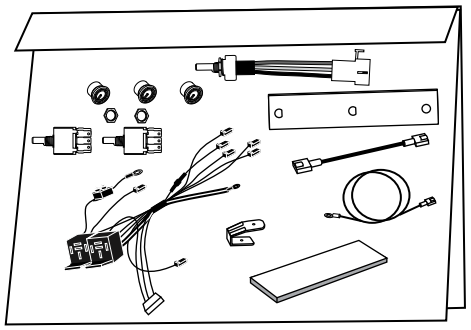
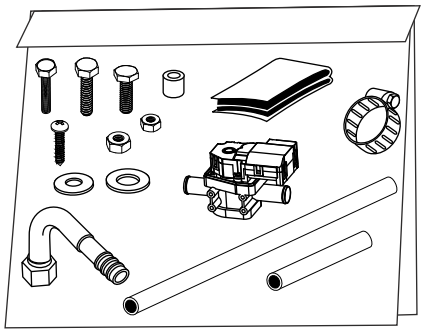










Accessory Kit 799000

NOTE: Images may not depict actual parts and quantities. Refer to packing list for actual parts and quantities.

Engine Compartment

NOTE: Before starting the installation, check the function of the vehicle (horn, lights, etc.) for proper operation, and study the instructions, illustrations & diagrams.

Perform the Following:

1. Disconnect battery.
2. Remove battery & battery tray (retain).
3. Drain radiator.
4. Remove OEM heater assembly.
5. Remove OEM heater hoses (discard).

Condenser Assembly & Installation

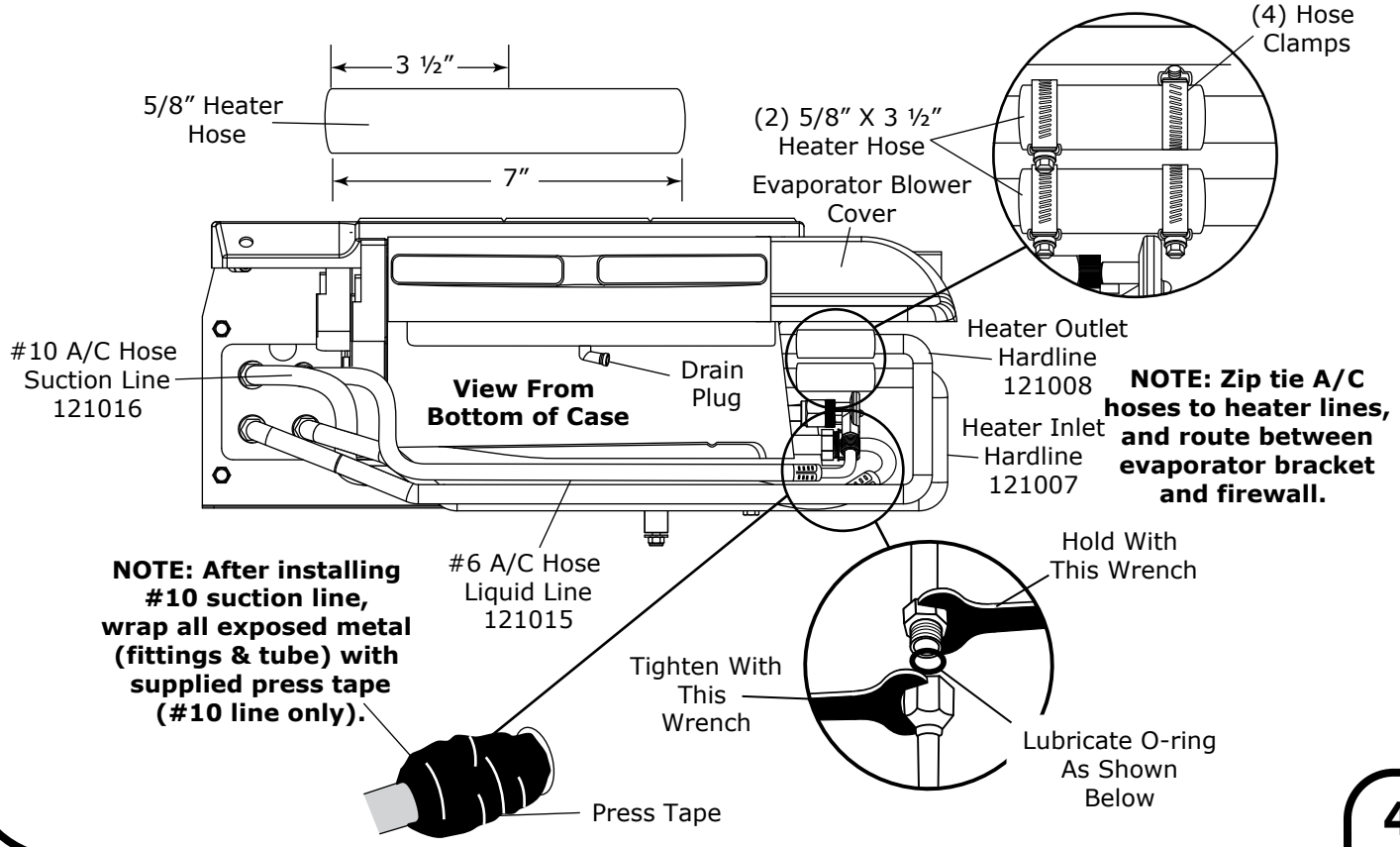
1. Refer to separate instructions included with the condenser kit to install the condenser.
2. Binary switch installation (Refer to condenser instructions).

Compressor & Brackets

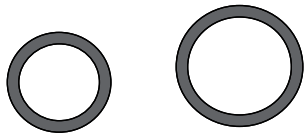
1. Refer to separate instructions included with the bracket kit to install the compressor bracket.

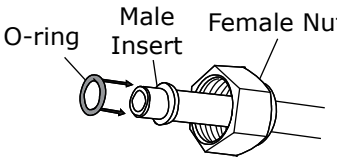
Evaporator Line Installation

1. Remove evaporator blower cover.
2. Install #6 liquid line and #10 suction line with properly lubricated O-rings (See Page 5). **NOTE: Wrap the #10 fitting connections with press tape.**
3. Cut 5/8" heater hose 3 ½" as shown.
4. Install (2) heater lines using 5/8" heater hose, and secure with (4) hose clamps as shown below. **NOTE: Before tightening hose clamps, check for proper clearance between hose clamps and blower cover.**

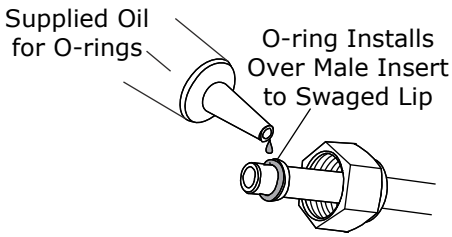


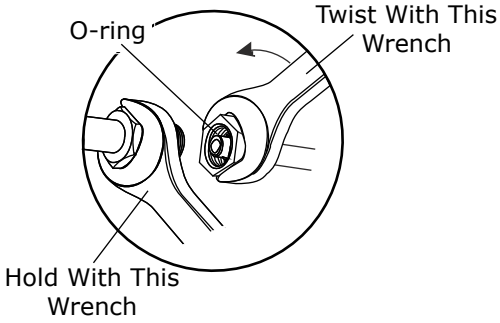
Lubricating O-rings





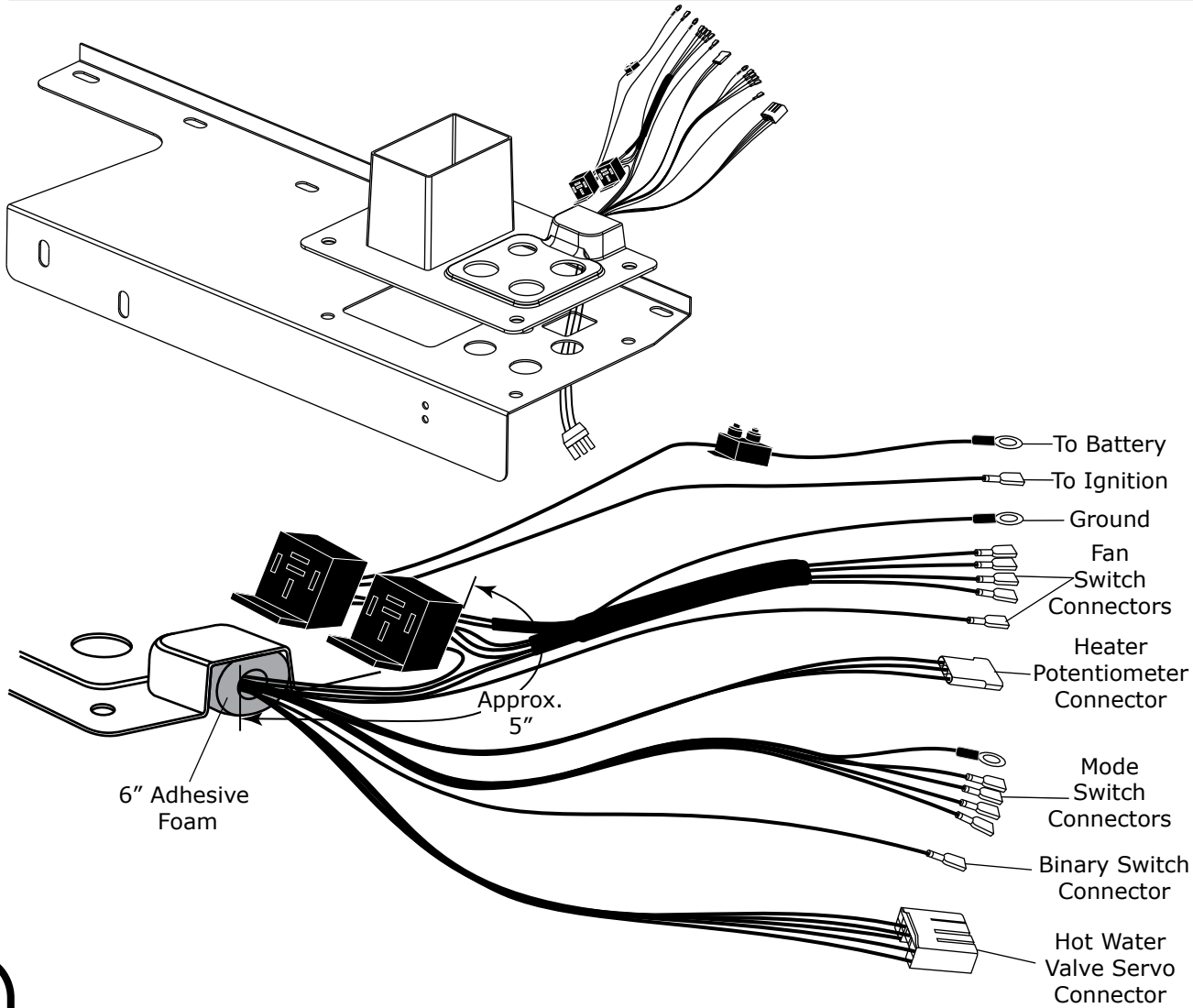
For a proper seal of fittings: Install supplied O-rings as shown, and lubricate with supplied oil.





Wiring Harness Routing

1. Pre-route evaporator unit wiring before installing unit.
2. Measure and mark harness approximately 5” back from relay socket. Measurement will be used to locate and install wiring seal around evaporator unit wiring and defrost duct cover.



Evaporator Installation

1. Enlarge the OEM passenger side firewall hole from 3/16” to 11/32” as shown in Figure 1a, Page 7.
2. With the help of an assistant, raise the evaporator into position below the dashboard, and insert the forward-facing bolt through the 11/32” hole. Install nut and washer.
3. Temporarily install two bolts through the left holes in the evaporator bracket and firewall, and then install nuts.
4. Now that the evaporator is loosely installed below the dash, adjust the fit as needed to align the front of the evaporator bracket with the face of the dashboard.
5. Using the evaporator bracket as a guide, mark and drill an 11/32” hole through the underside of the firewall into the glove box as shown in Figure 1b, Page 7. Install 5/16” bolt, washer, spacer and nut as shown.
6. Adjust wiring harness fit as desired, and then wrap adhesive foam around the harness where it routes through the defrost duct cover as shown on Page 5.
7. Block up the left side of the evaporator in preparation for removing the left-hand bolts.
8. Apply RTV silicone sealant to the mating surface of the firewall pass-through where the defrost duct cover will seat, and to the upper surfaces of the bulkhead nuts as shown in Figure 1c, Page 7.
9. Apply silicone sealant to the top mating surface of the defrost duct, and slip duct over the defrost duct cover as shown in Figure 1c, Page 7.
10. Remove temporarily installed bolts on left of unit and install defrost duct cover/defrost duct assembly with three 5/16” bolts, washers, and nuts as shown in Figure 1c, Page 7. With 5/16” bolts loosely assembled, install 10-32 bolt and washer through the cover and then tighten all four bolts.
11. Install two #8 sheet metal screws through the upper flange in the defrost duct and into the OEM duct as shown in Figure 1c, Page 7. Once the duct is securely attached at the top, seal the joint between the defrost duct and the defrost duct cover with silicone.
12. Reinstall evaporator blower cover.

Evaporator Installation

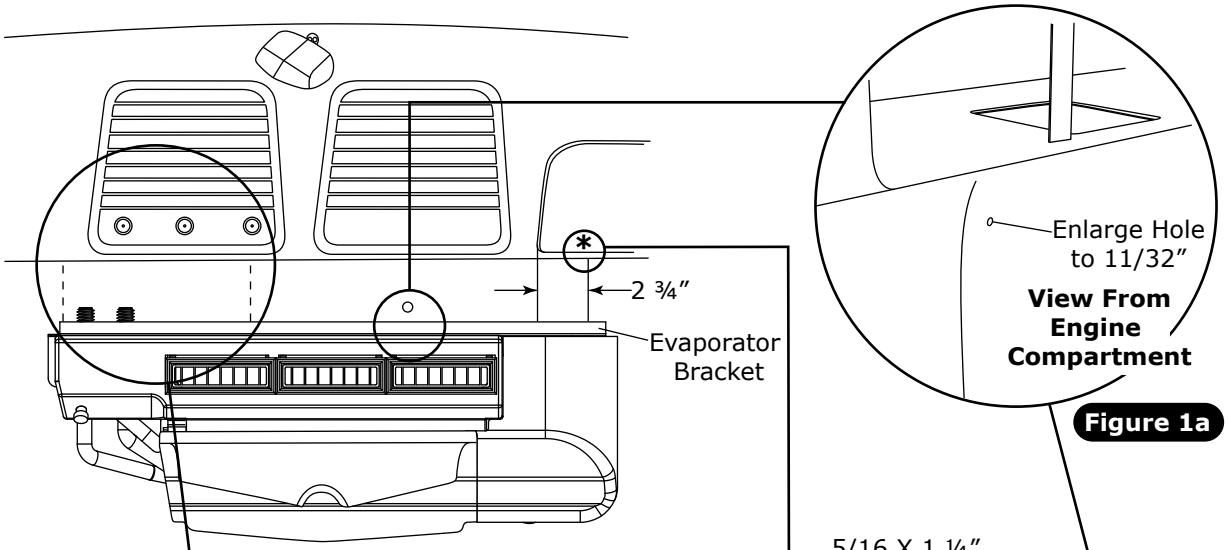
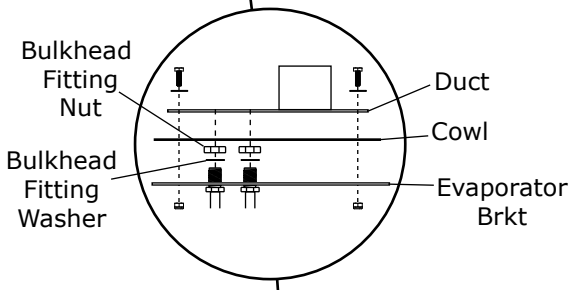


Figure 1

Figure 1a



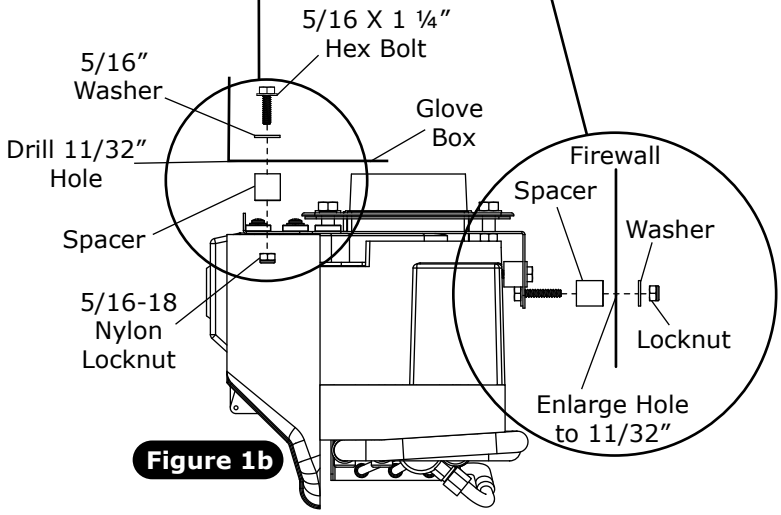
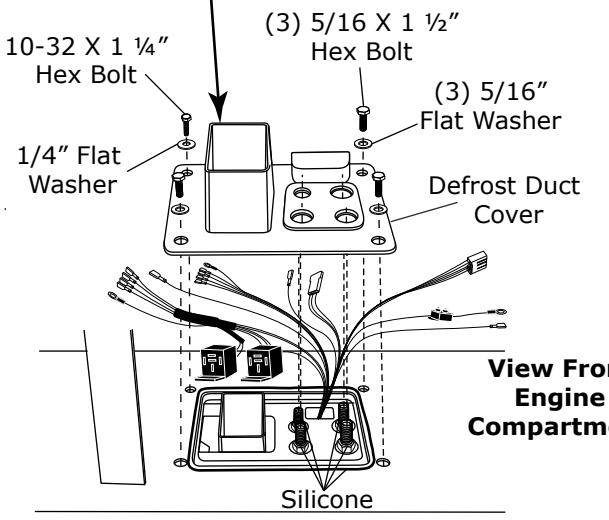


Figure 1b



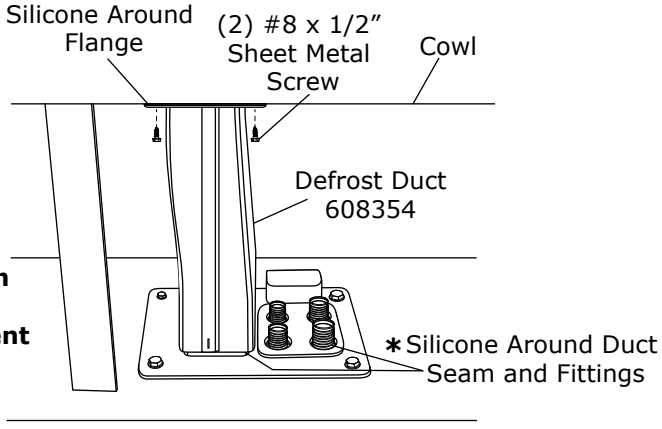


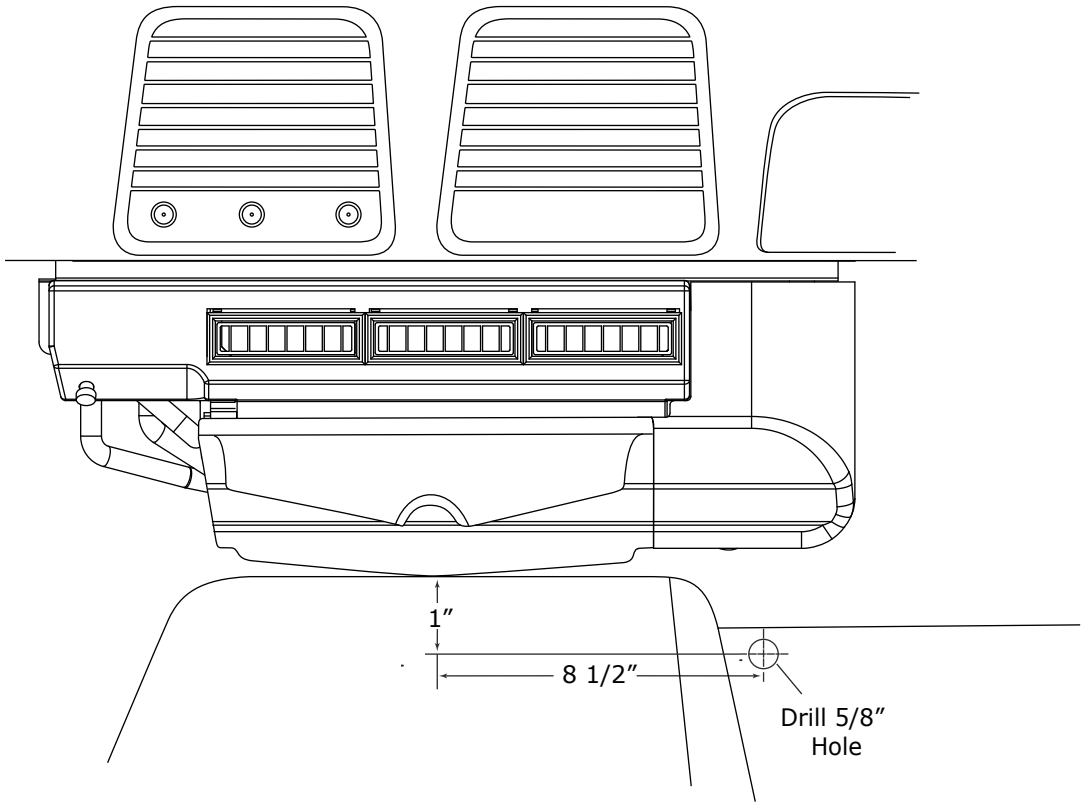
Figure 1c

Drain Hose Installation

1. Locate the evaporator drain on the bottom of the evaporator case.

2. In line with the drain, lightly make a mark on the firewall. Measure 1" down, 8 ½" over, and drill a 5/8" hole through the firewall.

3. Install the drain hose to the bottom of the evaporator unit, and route through the firewall. Install 1/2" 90° drain elbow on the drain hose.



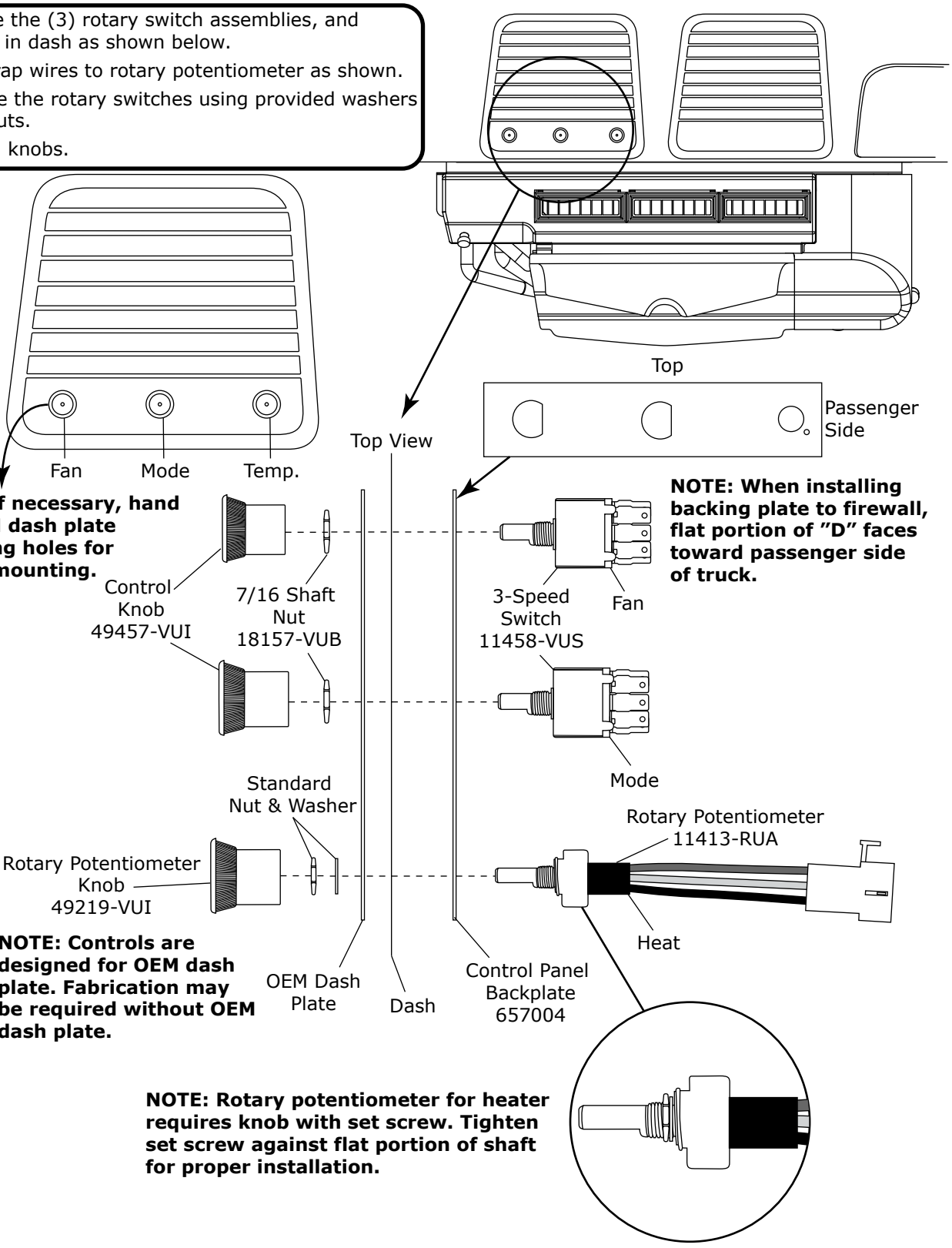
Rotary Switch Installation

1. Locate the (3) rotary switch assemblies, and install in dash as shown below.

2. Tie wrap wires to rotary potentiometer as shown.

3. Secure the rotary switches using provided washers and nuts.

4. Install knobs.



Heater Hose & Heater Control Valve Installation

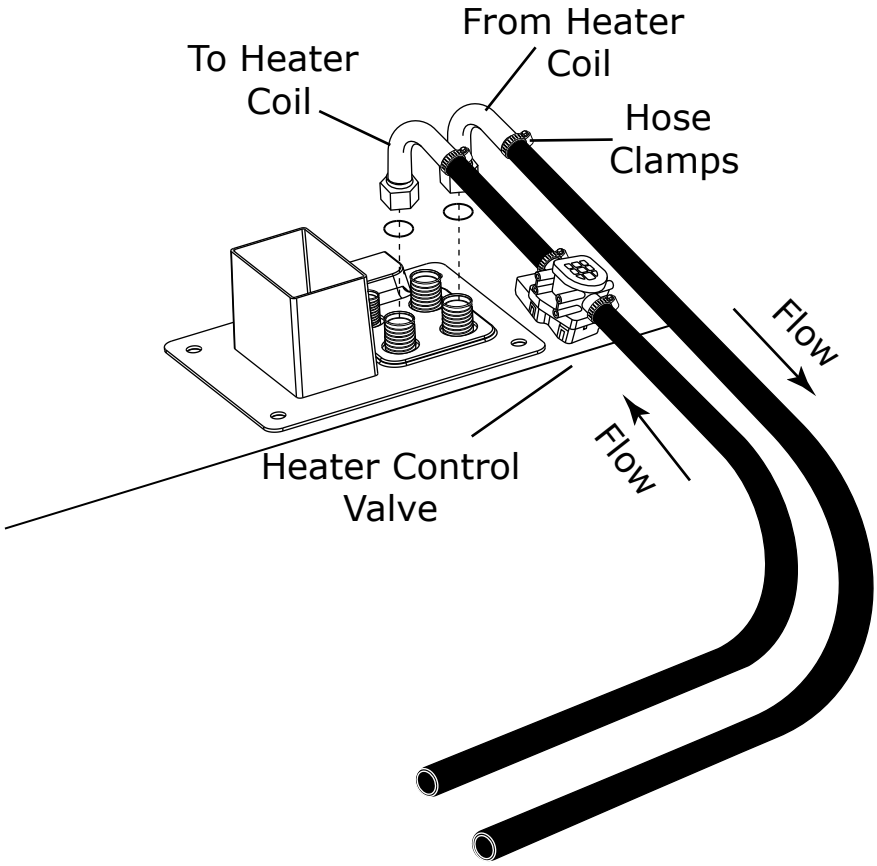
1. Install heater hose fittings using properly lubricated O-rings (See Page 5).

2. Route and attach heater hoses and heater control valve, as shown below. Secure with hose clamps.

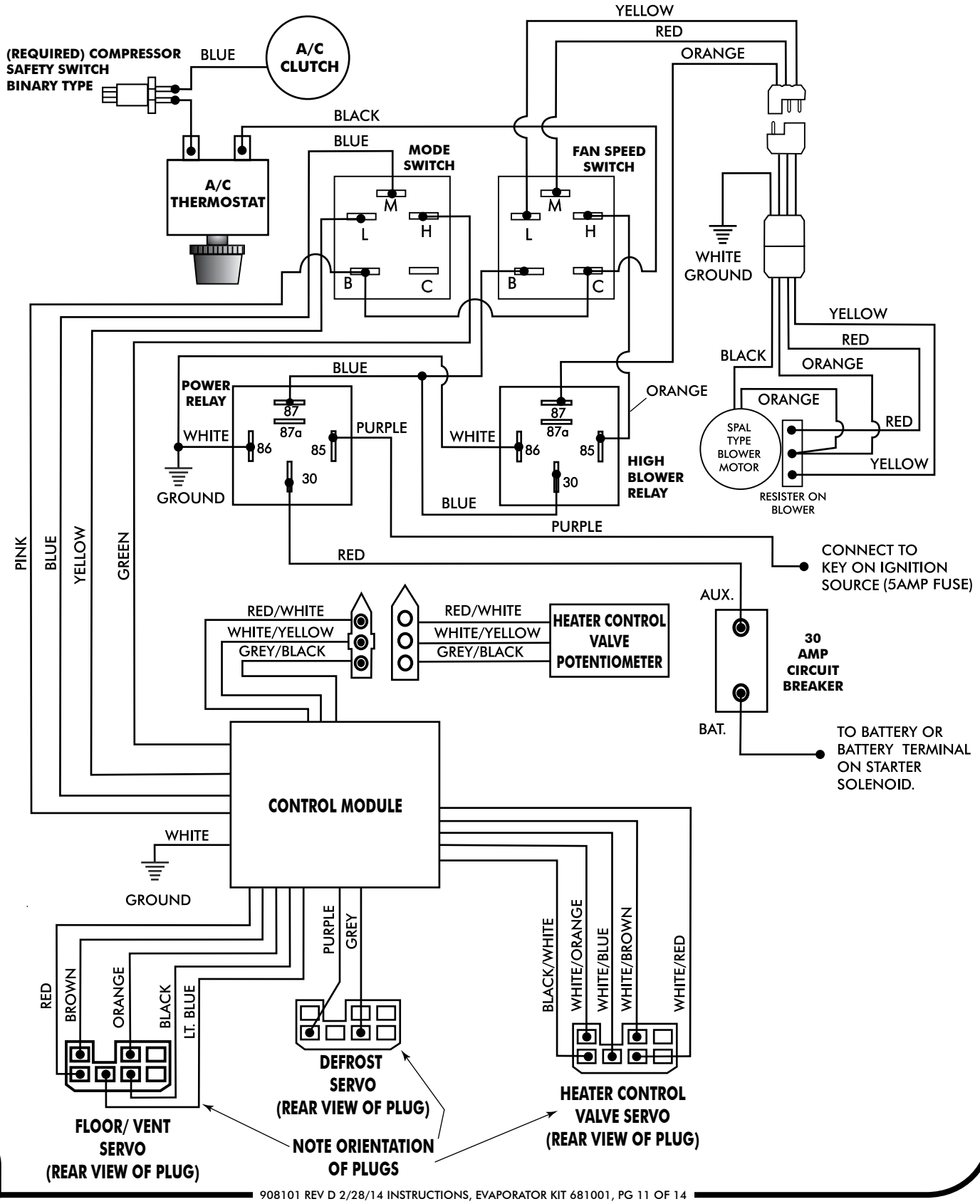
3. Fill radiator with at least a 50/50 mixture of approved antifreeze and distilled water. It is the owner's responsibility to keep the freeze protection at the proper level for the climate in which the vehicle is operated. Failure to follow antifreeze recommendations will cause heater core to corrode prematurely and possibly burst in A/C mode and/or freezing weather, voiding your warranty.

4. Start engine and run until normal operating temperature is reached. Turn Heat Knob all the way to Hot (See Page 12), and select desired blower speed. The system will heat the vehicle. **NOTE: Be sure the engine thermostat has opened, and the approved antifreeze mixture has been circulated through the heater core before testing A/C operation.**

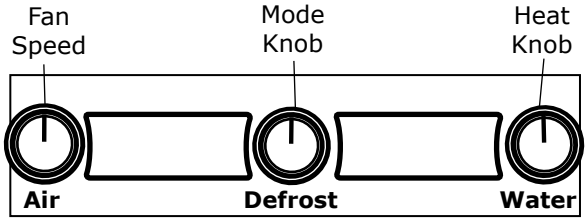
5. Check heater control valve operation. When the valve is closed, the inlet side of the valve should be hot, and the outlet side should be cool. When the valve is open, both the inlet and outlet sides should be hot.

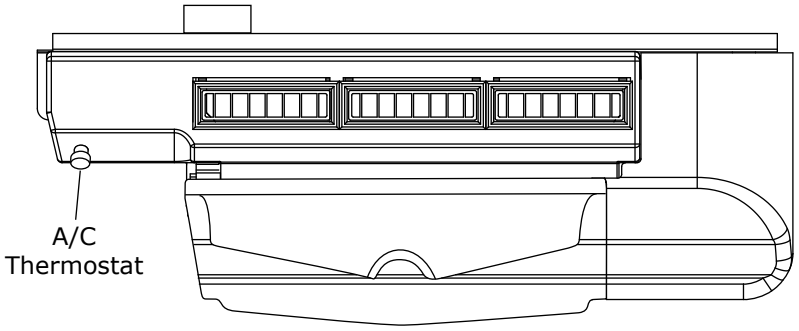


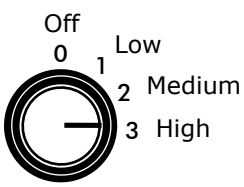
Wiring Diagram: Evaporator Kit
1949-59 Studebaker C Cab Truck



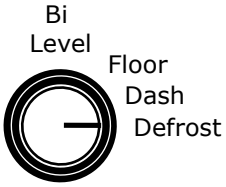
Operation of Controls



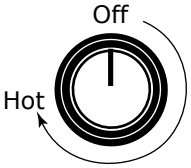




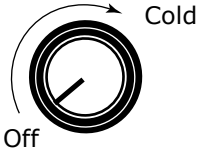
Fan Speed



Mode



Heat



A/C Thermostat

1. Any vent temperature is available in any mode.

2. Select desired mode, then adjust air temperature for comfort.

3. Heat knob adjusts flow of hot water through the heater. Counterclockwise is off. Clockwise is for increasing heat.

4. A/C thermostat knob controls the evaporator coil temperature. Counterclockwise is off. Full clockwise is maximum cold (28°).

5. For A/C operation, rotate thermostat clockwise to its stop, then back off slightly (1/8 turn) to prevent coil freeze-up. To warm up vent temperature during A/C operation, slightly increase the heat knob setting.

6. For heat operation, rotate thermostat counterclockwise to its stop (off), then adjust heat knob for desired temperature.

7. For defrost operation, adjust A/C thermostat to 3/4 cold, then adjust heat knob to attain proper temperature for de-fog/defrost.

Air Conditioning Adjustments

NOTE: Your system may have a rotary or slide type thermostat. If you are upgrading to a new control panel, use the thermostat included with the new panel. Remove and discard your original thermostat.

1. The air conditioner thermostat controls coil temperature. Rotary type thermostats are shipped adjusted fully cold (clockwise) and, in most cases, the air conditioner will operate correctly as shipped.

2. On rotary type thermostats, turning the knob to the right (clockwise) makes the system operate colder. On slide type thermostats, moving the lever toward Colder (left) makes the system operate colder. **NOTE: If the thermostat is set too cold, the evaporator coil will "ice up," meaning the evaporator coil is restricted with ice, and cold air flow will be reduced.**

3. On rotary type thermostats, turning the knob to the left (counterclockwise) makes the system operate warmer. On slide type thermostats, moving the lever toward the red lines (right) makes the system operate warmer. **NOTE: The warmer the thermostat is set, the more frequently the compressor clutch will cycle off. As a result, the evaporator will not get as cold, and the air temperature will be warmer.**

A/C Thermostat Troubleshooting

1. Symptom: The A/C works well at first, and then quits cooling. The air flow from the vents is low, and the compressor clutch cycles infrequently.

Solution: The thermostat is set too cold, and the evaporator is "icing up" and restricting air flow. Allow the ice to melt, and then do the following:

A. For rotary type thermostats, set the thermostat warmer (counterclockwise) 1/8 of a turn each adjustment until the symptoms diminish.

B. For slide type thermostats, set the thermostat warmer (right) in 1/8" increments until the symptoms diminish.

2. Symptom: The A/C never gets cold, and the compressor clutch cycles frequently.

Solution: The thermostat is set too warm. Do the following:

A. For rotary type thermostats, set the thermostat colder (clockwise) 1/8 of a turn each adjustment until the desired air temperature is reached. **NOTE: Avoid setting the thermostat too cold.**

B. For slide type thermostats, set the thermostat warmer (right) in 1/8" increments until the desired air temperature is reached. **NOTE: Avoid setting the thermostat too cold.**

3. Symptom: The A/C never gets cold, sometimes even blows hot, and the compressor clutch infrequently cycles off.

Solution: The heater may be on at all times. *Carefully* feel both heater hoses. During A/C operation, the hoses should not be hot. If the hoses are hot:

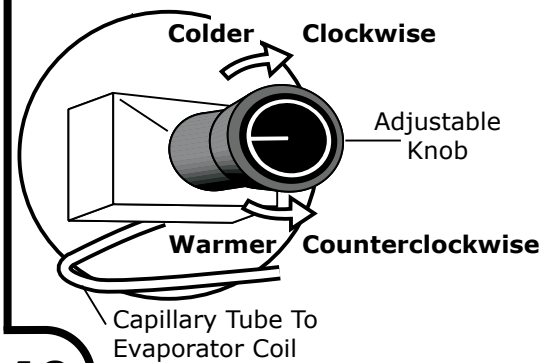
A. The heater control valve may be installed backwards. Check the flow direction arrow on the valve against the illustration in your installation instructions.

B. If cable operated, the valve may be misadjusted.

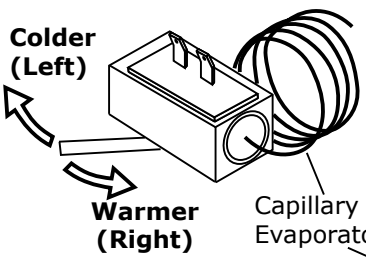
C. If vacuum operated, the valve may be getting vacuum at all times (check electric solenoid).

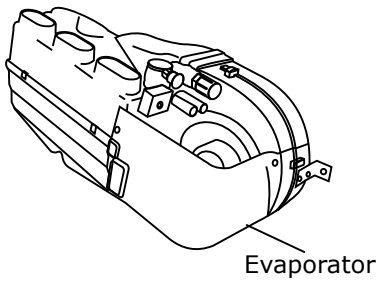
D. The heater control valve may be installed in the wrong hose. It must be installed in the hose coming from the intake manifold engine coolant pressure port.

Rotary Type Thermostat



Slide Type Thermostat





This Sticker Is Located On the Top Side of the Evaporator Case

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Checked By: _____
Packed By: _____
Date: _____

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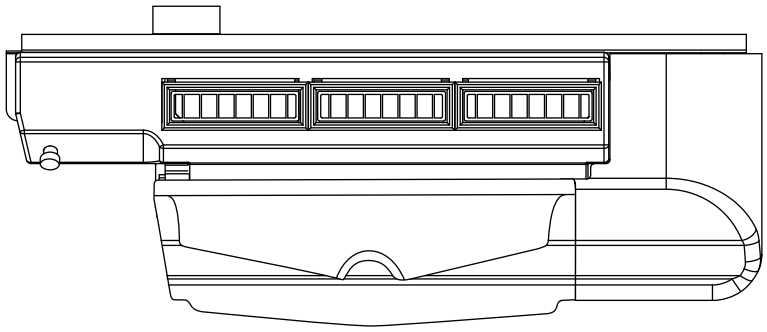

Studebaker
Evaporator Sub Case
746010

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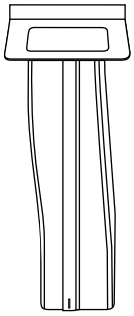

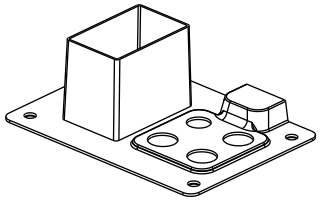

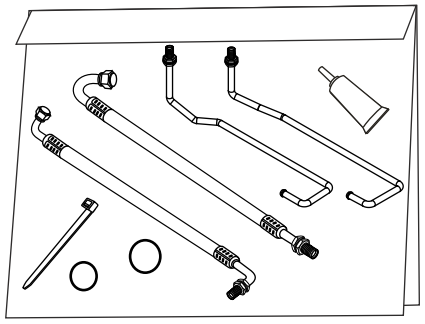

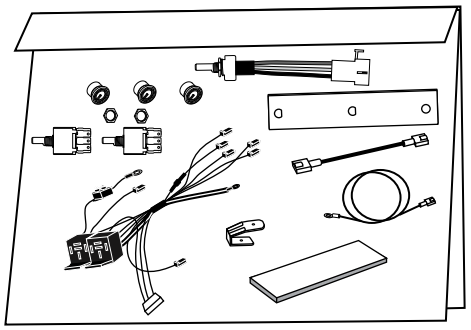

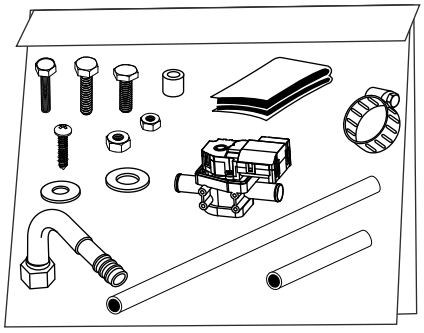

Accessory Kit
799000

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