



# Universal Cab Heater Installation Guide



## Contents Included:

- 1) Heater Assembly
- 1) Instruction Sheet
- 2) 5/8" Y Splice Hose Connectors
- 8) Hose Clamps
- 1) Fuse and Fuse Holder
- 1) Fan On/Off Switch

## Additional Required Materials:

- 5/8" heater hose
- Mounting fasteners
- 14 GA automotive electrical wire
- Automotive electrical terminals  
(Installer provided - not included)

## Choosing Your Mounting Location

Common locations include cab side, floor, dash or overhead. The heater can be mounted in any orientation; however, for best performance allow 1" minimum of clearance for circulation aiming the grill side to the area of the cab to be heated. Choose a location where the hoses and wiring can be routed so they will not be damaged during regular use of the vehicle. When determining the best location choose one that is closest to the engine for best overall performance. The longer the hoses are run, there is a correlating pressure drop and direct heat lost as the coolant travels through the hose. For instance a heater in the rear of a bus won't have as much flow and heat output as the same unit mounted under the dash with all other things assumed to be equal.

## Making the Hose Connections

1. Determine which of the existing heater hoses are the hot and return lines and make note of the direction of flow of each.
2. Drain the Coolant Circuit.
3. Locate the existing heater hose lines in the engine compartment and determine a spot where they can be cut and spliced, but don't cut yet!
4. Route two new 5/8" heater hoses from this spot to the cab heater allowing for some extra hose to be trimmed later. Plan the hose route carefully with smooth curves and no sharp bends. When passing through panels, protect the hoses from sharp edges.
5. Connect to the Heater first by putting the hose clamps on then the hoses.
6. Hand tighten only. Allow for some extra hose for bends and slack to dampen vibrations to the unit.
7. Now return to the under hood location for the hose splicers. Use the cab heater hoses to determine the best spot. Cut the existing heater hoses, but do not trim any extra hose yet.
8. Install the Y splicers into the main heater lines. It is very important that you install the Y splicers with the direction of the coolant flow - see Figure 1 on Page 2.
9. Trim the cab heater hoses to length, install and clamp in place.

**\*\*IMPORTANT - DO NOT overtighten the hose clamps!!\*\***

# Universal Cab Heater Installation Guide, Continued

*PRO TIP: Pre-lubricating the connections with coolant will aid in slipping the hose on.*

## Refilling the System

Start with fresh new coolant recommend by the vehicle manufacture. Always follow the OEM manufactures method for refilling. Extra coolant will be required to fill the heater and lines.

## Making Electrical Connections

Start at the Battery or Main power supply and install the Inline Fuse holder with the fuse removed. Route the (+) power line to the switch and then continue to the (+) connection on the cab heater fan. The Black (-) lead on the cab heater fan needs to be connected to chassis ground or the (-) negative side of the battery. After all connections are properly terminated and insulated install the fuse for testing. 14 GA wire is recommended. SEE Electrical Connections Figure 2.

## Mounting the Heater Assembly

Dependent on model, the mounting brackets are either included in the box as on blower wheel models or the pancake fan models have integral slot mounts built into the case. Mount the unit last, after testing the electrical connections and checking the system for leaks.

**Important Note:** For overhead mounting of the cab heater (above the radiator) requires the heater hoses to be purged of air to prevent an air lock condition. To do so, connect the hoses first and keep the heater unit and hoses loose and below the level of the vehicles radiator, fill and purge then permanently mount afterwards. This allows the air bubble to naturally flow upwards.

In vehicles not equipped with heater lines or ports a cab heater can still installed with an optional auxiliary inline pump (sold elsewhere) to provide the required coolant flow to the cab heater.

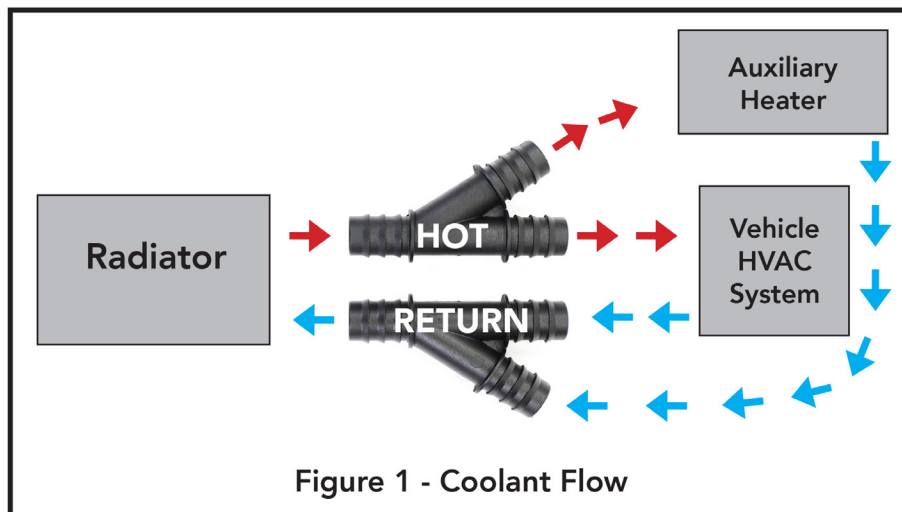


Figure 1 - Coolant Flow

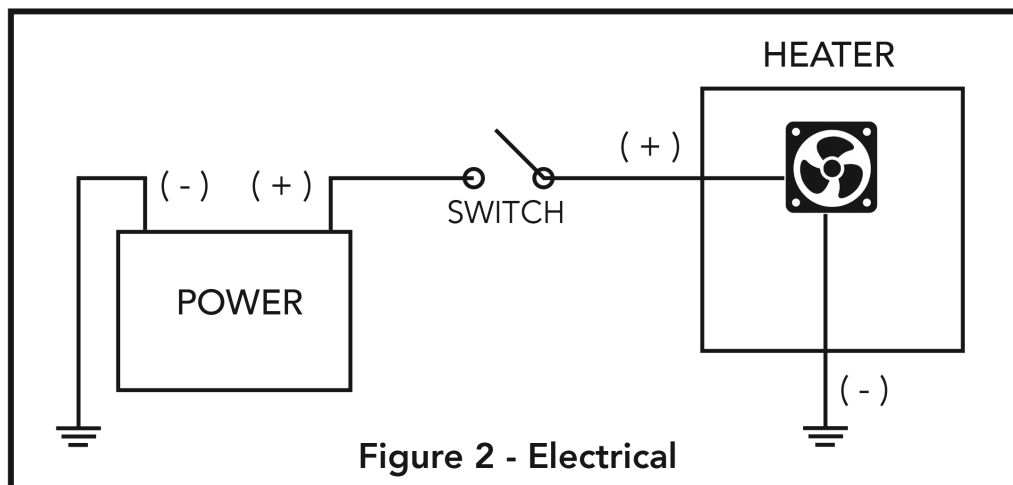


Figure 2 - Electrical