Low-Cost Ways To Fix Common Control Head Problems In Chevy-GMC Trucks and C/K Pickups

By Ignacio (Nacho) Corella

This article covers two of the most common A/C repairs needed on some very popular Chevy and GMC trucks: **1) erratic or no airflow through the vents**, and **2) a compressor that is reluctant to turn off**.

Problem #1: Erratic airflow

In the A/C mode, vent airflow is often erratic in 1996-99 GM Suburbans, Tahoes, Yukons and the 1996-98 line of Chevrolet and GMC C/K Pickups.

Problem #2: Compressor Run on

In the years and models above, the A/C compressor will not turn off. In addition, you'll find it happening to the 1995 Chevrolet and GMC C/K trucks.

A more complete description of malfunction #1 is where most of the airflow, with or without the A/C compressor running, is directed to the floor registers; airflow through dashboard vents is greatly diminished. Note that the control will usually function correctly in the other knob positions, however.

Two diagnostic steps for Problem #1:

Step 1) Check to see if a plastic bag, paper or other trash has been sucked in by the recirculation door located at the bottom of the HVAC module. This is just above the passengers' feet area, next to the blower motor.

Step 2) If material is found blocking the airflow, clean out the doorway and recheck the system; airflow will probably resume to normal; the problem is solved.

However, if no physical interference was found, or if there was junk in the way but removing it did not help, proceed to repairing the control head as below.

Low-cost way to stop erratic airflow

Material Needed:

1)* Standard 5-terminal Bosh relay or equivalent
2)* Approximately 2 ft. of 18 ga. wire*
3) Tin solder
4) Long nosed pliers
5) Electronic spray (optional)
6) Toothbrush (optional)
7) Magnifying glass (optional)
8) 5 female relay terminals, or,

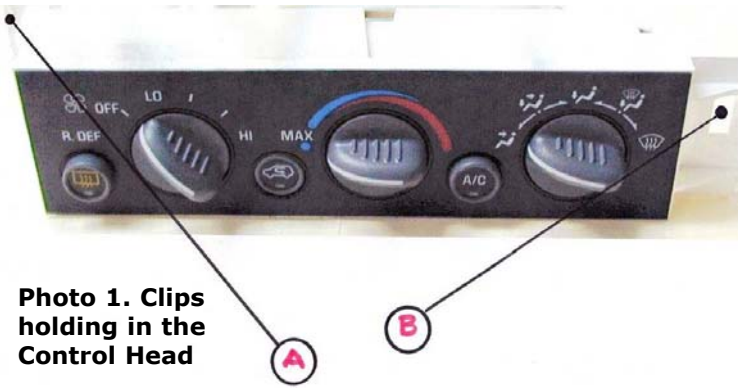

Photo 1. Clips holding in the Control Head

Low-cost way to "fix" a common A/C problem on 1995 and 1996-99 Chevy and GMC light trucks

8a) Standard relay connector
(* Not needed if 8) or 8a) is used)

Procedure:

1. Remove the dashboard molding (press-on staples hold it in place). No tools needed other than prying it carefully with your hands.

2. Once the molding is safely out of the dash assembly, disconnect the headlight switch (left of steering wheel). If the vehicle is equipped with rear wiper and fog lamps (right of steering wheel), push out and disconnect those switches too. If necessary, save and mark all removed parts.

Hint: all these parts use a one-way snap connector. So have no fear, you will not re-connect them incorrectly.

3. With the molding out of the way, insert a flat screwdriver on the control head plastic retainers A and B (Photo 1).

4. Referring to Photo 2, pull the entire control out and disconnect it from the dashboard wire harness (#1, #2, and #4).

(Note: Connector #1 applies only to vehicles with rear window defroster found on Suburbans, Tahoes and Yukons. If it's connected, disconnect it.)

5. Using an electronic cleaner spray (available at Radio Shack), clean the whole green printed circuit board, but especially around area #3 in Photo 2. If it's too oily, use an old toothbrush to remove the dirt.

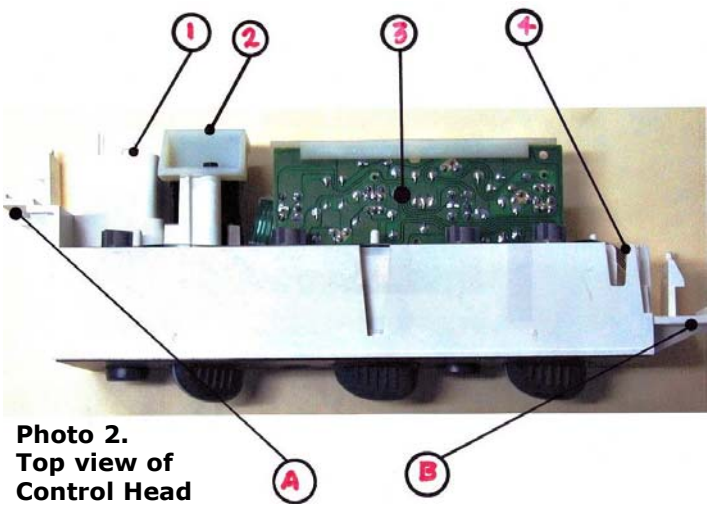

Photo 2. Top view of Control Head

6. Reference photos #2 and #3. This is where you will be working; **it's the "repair."** Photo #3 shows a close-up of the area because you'll need to be very precise.

If necessary, use a magnifying glass to locate continued on page 2

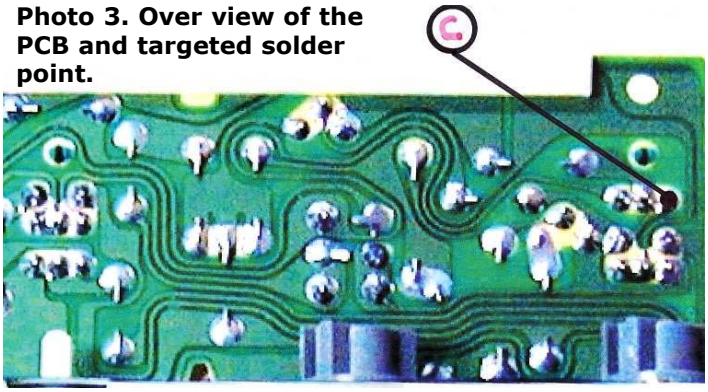

Photo 3. Over view of the PCB and targeted solder point.

point "C" in photos #3 and 4. This is the third soldered spot towards the position knob (with the control head facing you). It's below and right of a small green spot, and below a reference hole in the the green printed circuit board (PCB).

7. After checking with Photo 4, solder the stripped wire to point "C." If you're using a relay connector, you only need to strip one end.

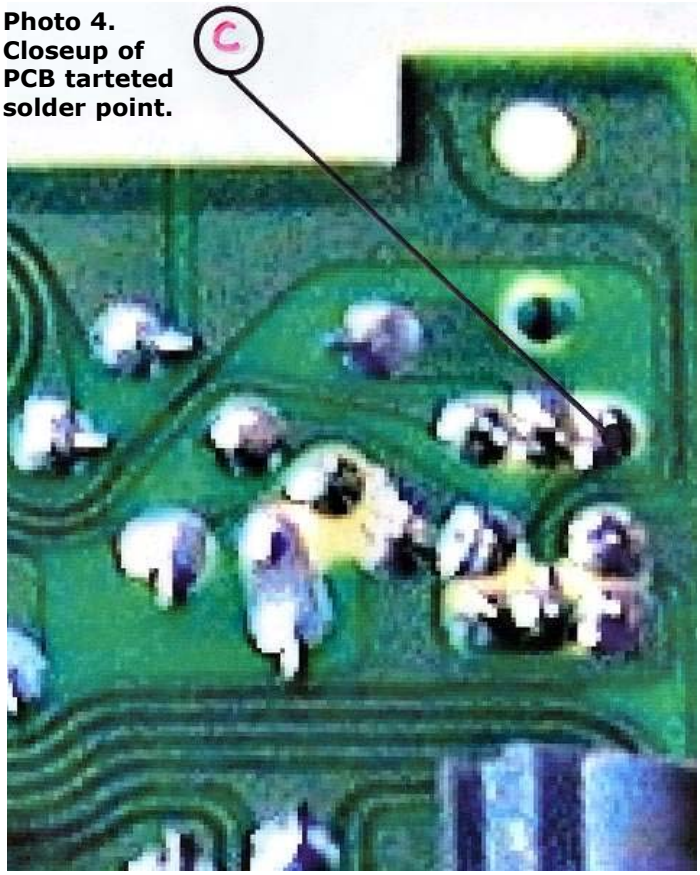

Photo 4. Closeup of PCB tarteted solder point.

Wiring options:

8. You have two ways to tackle the next step. You can use either **8a)** a standard relay connector (the best way), or **8b)** five 10-inch pieces of 18-ga wire.

8a) Using a standard relay connector will make things a lot easier (see Photo 5). Using a relay, along with Photo 6, from the relay you'll need to make the following connections with the relay's five wires:

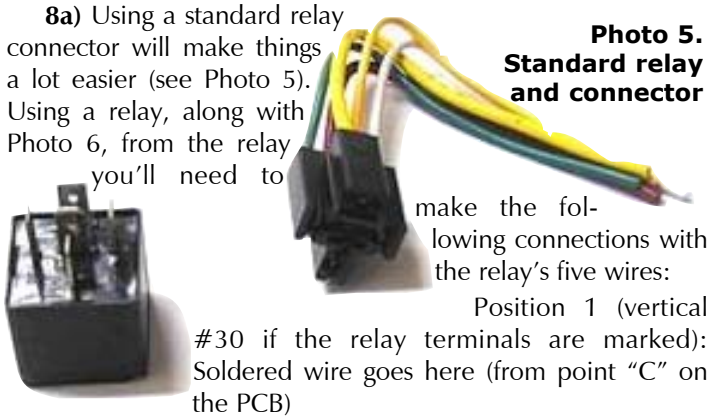

Photo 5. Standard relay and connector

Position 1 (vertical #30 if the relay terminals are marked): Soldered wire goes here (from point "C" on the PCB)

Quick note: Relay connector wire colors (if used) are irrelevant. Positions are, however, essential for the success of the repair. Relay connectors are also one-way type, so you can't go wrong either. Some relays have a number on each terminal.

Position 2 (vertical #85): Ground source

Position 3 (horizontal #87): Splice into brown wire (B+ vehicle's harness)

Position 4 (vertical #86) Splice into yellow wire (blower's 1st. speed)

Position 5 (horizontal #87): Splice into orange wire (blower's 4th speed)

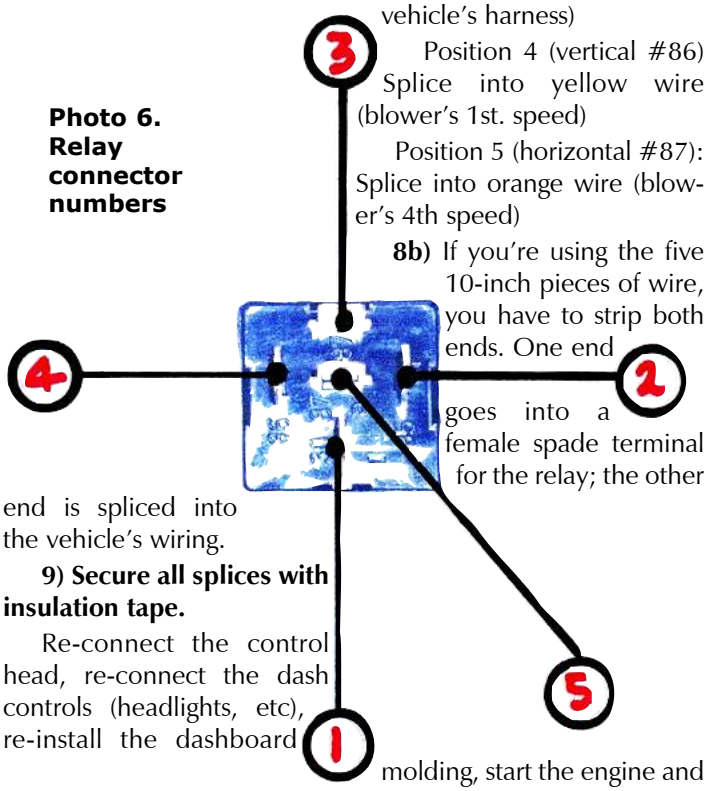

Photo 6. Relay connector numbers

8b) If you're using the five 10-inch pieces of wire, you have to strip both ends. One end goes into a female spade terminal for the relay; the other end is spliced into the vehicle's wiring.

9) Secure all splices with insulation tape.

Re-connect the control head, re-connect the dash controls (headlights, etc), re-install the dashboard molding, start the engine and test your repair.

The control head will regain all its functions if the repair is done correctly. So far, in all of my experiences, this is a permanent fix; a new control head was not needed.

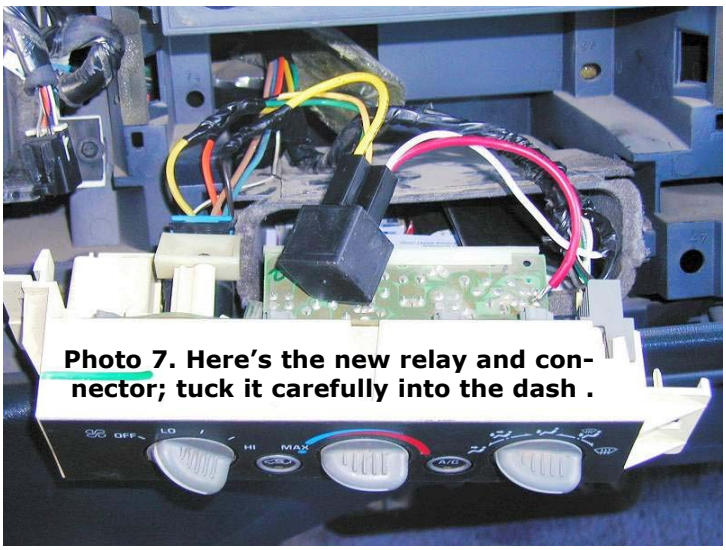

Photo 7. Here's the new relay and connector; tuck it carefully into the dash .

Important: This repair does not apply to 1995 model years! Although identical in the front, 1995 C/K control heads are unique to that year!

Problem #2: Compressor is always on

Symptom: the compressor is always engaged, even if the blower is off. The A/C button's light bar will be on and the compressor will be on. Unless you depress the A/C button, the compressor will keep running and the evaporator and suction lines are likely to freeze.

In its early stages, this failure will make both A/C and RECIRC buttons flicker when turning the A/C off. Out of the blue, the lights will come on if the buttons, like most people do, are left depressed.

Check out the blower switch before replacing the Control Head

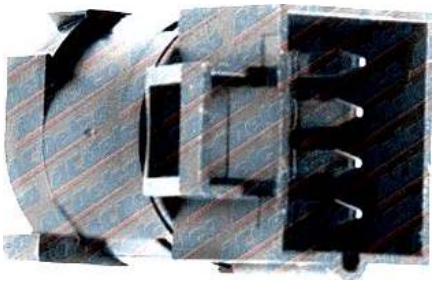

Photo 8. Delco Blower Control Switch #15-72275

So you know, in case you're ever told you need to cough up an extra $150 - $200 for a new control head, the problem is due to a faulty blower control switch, not the whole head. This blower control switch is sold as a separate service item and is fairly easy to replace. The control knob, a retainer with a screw, and two plastic hooks keep it in place. Unlike the erratice airflow problem, #1, this condition also affects the 1995 model year.

1995 - 1999 C/K trucks use the same switch. Delco part is #15-72275. See Photo 8 and keep this article handy; you never know when you'll need it.

The control head must be removed from the dashboard in order to replace this part, so the same removal instructions apply as above. Have fun and make some money on a righteous repair. **$$$**

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