

Audi UrS HVAC Blower Removal & Replacement

Say, Bucky, is your squeaking heater blower driving you MAD? Is it? Don't despair; it can be replaced without the agony of removing the heater box!

The heater blowers on the old Type 44 used to run until their brushes wore out. The upgraded blowers on the Type C4 don't get to that point; the bearings start squeaking long before the brushes are worn. They seem particularly affected by cold (winter service or AC on). My '94 S4 is now on it's third blower; they only seem to last about 6 years or so. Can't really complain, I suppose; most people don't even keep their cars that long.

I used the following procedure to change the blower without removing the heater box.

1. Remove the plenum cover by releasing the four spring clips at the front, lifting the front of the cover clear, and pulling it forward (see Photo 1).



Photo 1 Release clips to remove plenum cover

2. Remove the windshield wiper arms (13 mm nut). Remove the metal trim plate at the bottom of the windshield by removing the four 5 mm Allen bolts (see Photo 2).



Photo 2 Remove Allen bolts to release trim plate

3. Remove the plastic tray under the trim plate by removing the spring clips securing it. Remove the tray support attached to the wiper drive mechanism (see Photo 3).



Photo 3 Remove spring clips to release plastic drip tray. Remove tray support.

4. Remove the four 10 mm bolts securing the wiper drive assembly to the body. Remove the wiper drive assembly (see Photo 4).



5. Remove the bolt (8 mm) securing the front passenger foot well heat duct to the heater box (see Photo 5).



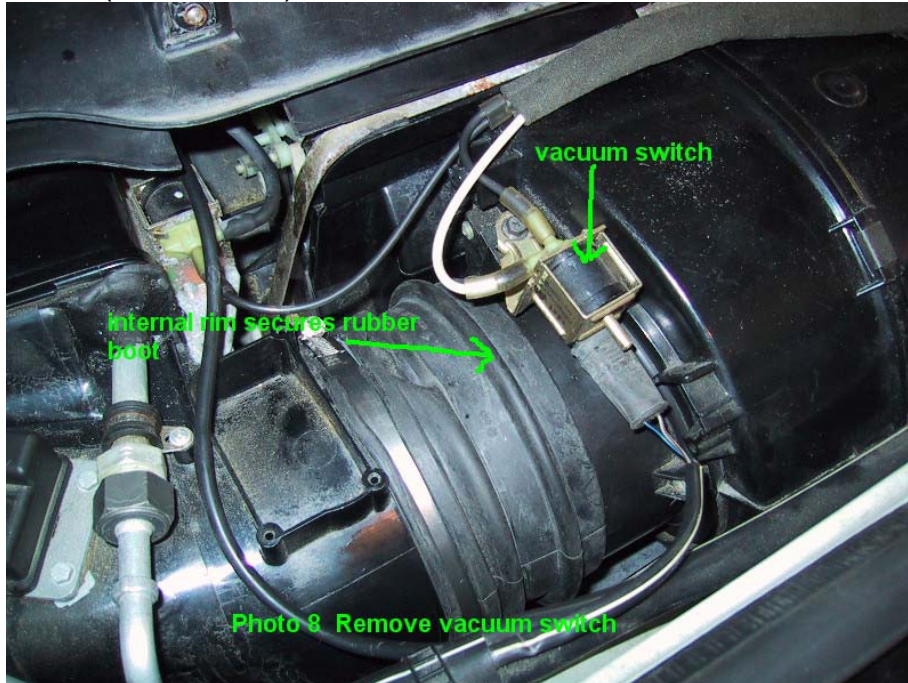
6. Remove the 2 screws (Phillips) securing the trim plate that holds up the front drivers foot well heat duct (see Photo 6).



7. Remove the bolt (8 mm) securing the drivers foot well heat duct to the heater box (see Photo 7).



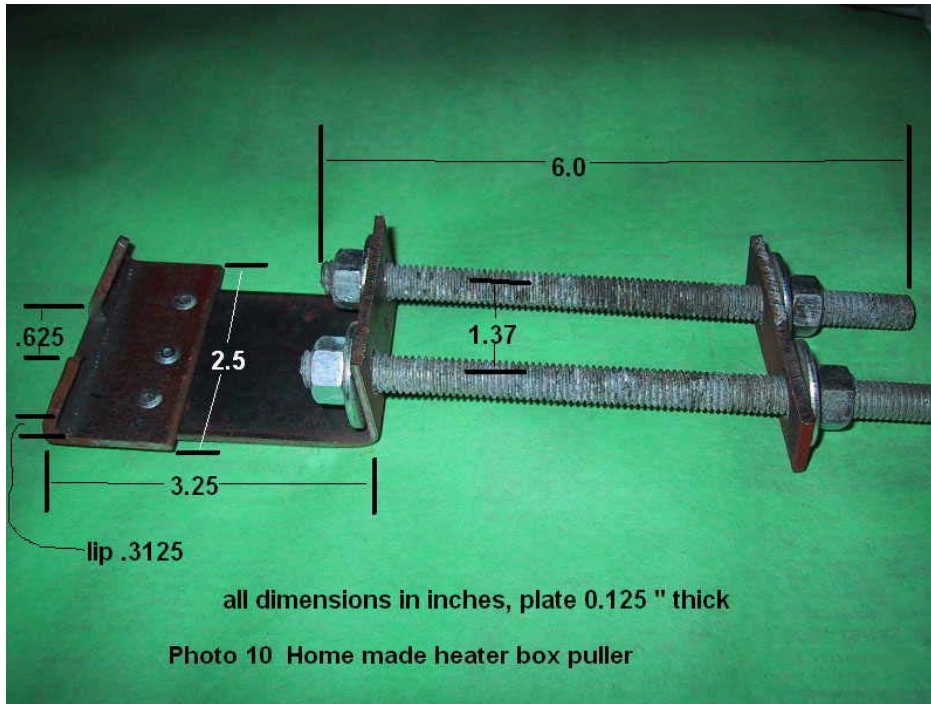
8. Remove the vacuum switch attached to the right side of the heater box (see Photo 8).



9. Remove the rubber boot connecting the heater box to the AC evaporator box. Remove the large hose clamp to release the evaporator side of the boot. A rim cast into end of the plastic box extension holds the heater box side of the boot. You can't slide the boot off; you have to lift it up to clear the rim before it slides off (see Photo 8).
10. Remove the clamp strap securing the heater box (see Photo 9).



11. Now comes the tricky part; the front of the heater box has to be lifted about 3-4 inches for the rest of the procedure. The box is glued to the firewall with an adhesive foam gasket. I made a heater box puller that makes this job a snap. The puller is shown in Photo 10. Photo 11 shows the puller attached to the box and the box lifted. The gasket should reseal when you clamp the box down again.



12. Remove the heater box inlet that the rubber sleeve was attached to. It is secured with 3 Phillips screws. Two are accessible from the top. The third is hidden under the box. It can be removed by lifting the box a couple inches, sliding a Phillips screwdriver into the AC evaporator outlet, and then sliding the screwdriver forward to engage the bottom screw. Use a mirror to see what you are doing (see Photo 12). I tried a lot of other approaches before I figured this one out!

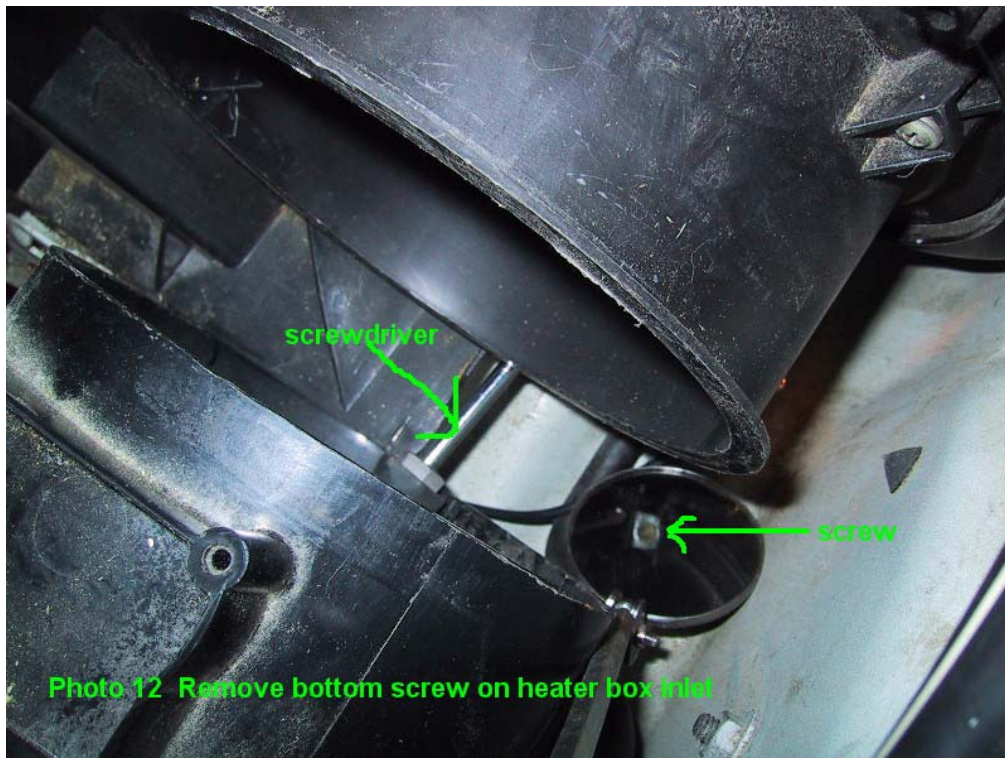


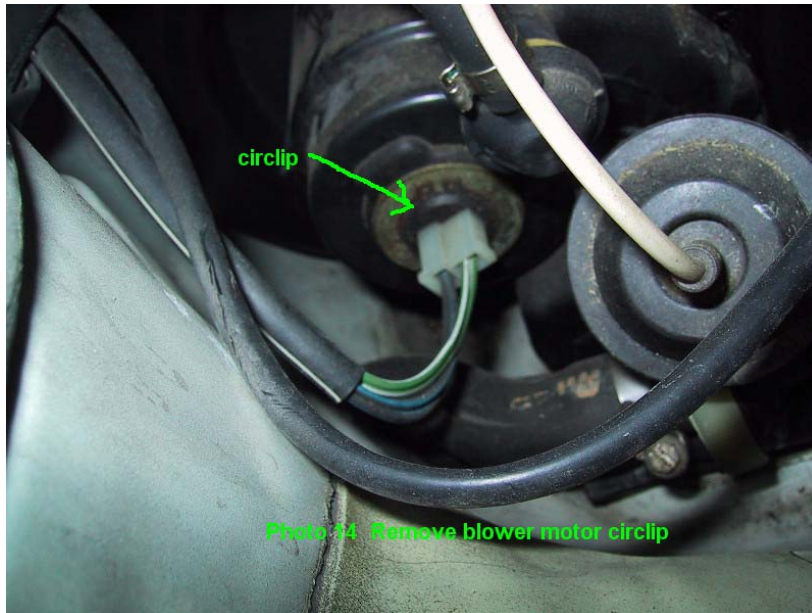
Photo 12 Remove bottom screw on heater box inlet

13. With the inlet removed, the blower is easily visible (see Photo 13).



Photo 13 Heater box inlet removed. Note screw positions

14. Disconnect the electrical connector from the blower motor and remove the circlip securing the blower motor to the heater box (see Photo 14). It is easier to get at the circlip if the temperature sensor wire is moved and the vacuum lines are moved out of the way.



15. Pull the blower motor forward. It is located inside the heater box by 3 rubber strips (see Photo 15); once the circlip is removed it slides out of these strips. It may be stuck to the rubber – work it side to side a bit.



16. Lift the front of the heater box until there is enough clearance for the fan to fit between the top of the heater box opening and the top of the AC evaporator box opening (see Photo 16). I've never gotten it quite high enough, but the fan can be squeezed a bit to give the clearance required to get it out.



17. Clean the debris and dust from the motor brushes out of the housing. Lubricate the 3 rubber strips with silicone grease or equivalent to make installing the new blower easier (see Photo 15).

18. Compare the old and new blowers to make sure the genius at the parts counter has actually given you the right part (see Photo 17). The blower part number is 4A0 959 101 A



Photo 17 The old & the new - they match!!!

19. Slide the new blower through the gap into the heater box. Make sure you don't scrape the balancing clips off the fan blades. Note from Photo 15 that there is a slot cut into the mount that takes the connector end of the motor. A spade on the motor end fits into this slot. Orient the motor to engage the slot and slide it into place.
20. Install the circlip that secures the motor in the heater box. Spin the fan by hand to make sure it isn't rubbing.
21. Install the plastic extension on the heater box. I used a piece of handyman's secret helper (duct tape) to hold the bottom screw in place (see Photo 18). The procedure outlined in (12) is used to install the screw.

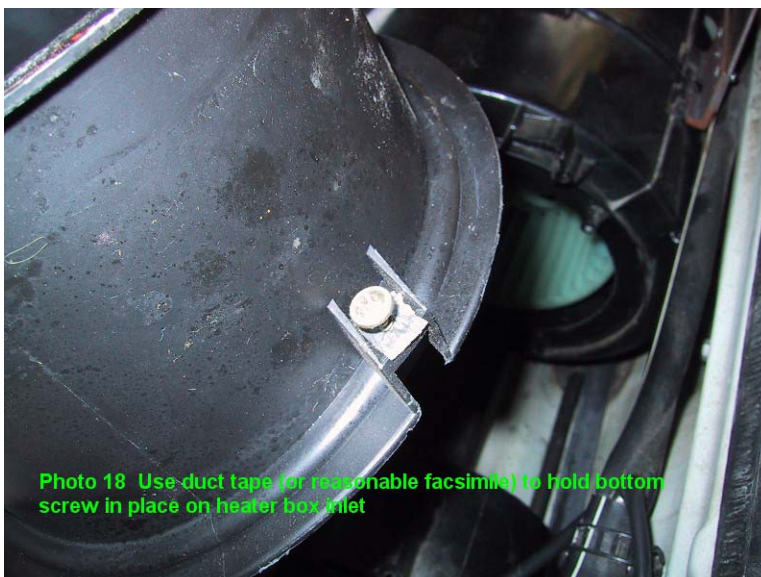


Photo 18 Use duct tape (or reasonable facsimile) to hold bottom screw in place on heater box inlet

22. It is easier to install the rubber boot on the heater box inlet while the box is lifted (see Photo 19).



Photo 19 Install boot on heater box intake while box is lifted

23. Lower the box back into position and install the clamp strap. At this point it is a good idea to test the new blower – apparently some of them are noisy right out of the box.

24. The rubber boot can be installed on the bottom of the evaporator box outlet by opening up the top of the boot and using a screwdriver to fit the boot on at the bottom (see Photo 20).



Photo 20 Install boot on AC evaporator box outlet

25. The rest, in the immortal words of the Bentley, is the reverse of removal.
26. Enjoy the quiet new blower!

Fred Munro
October 16, 2005