Wagonmeister

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Thank you for purchasing a Wagonmeister replacement heater control valve for your Volvo 240. Please note: This valve is designed for 240s from 1975 to 1991 with the capillary tube style heater valve. The “old” style valve. 92 and 93 vehicles came from the factory with what a newer style valve that is now sold as the Volvo replacement valve for earlier cars. The Wagonmeister valve will not fit 92-93 cars with OEM style valves without a change. Nor will it fit earlier cars that have been fitted with the later style replacement valve. If your car has a valve that looks like this:

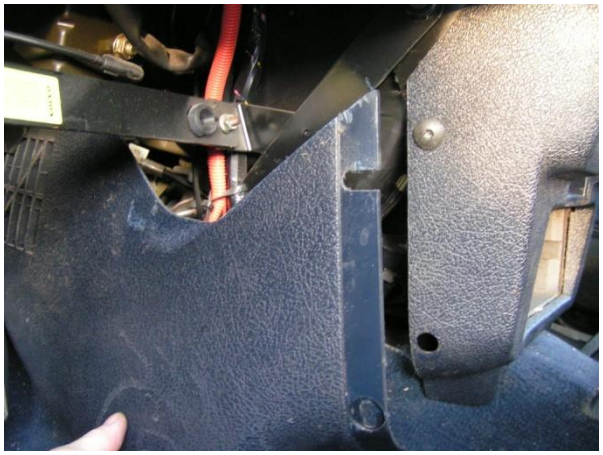
You will need to replace the inside firewall hose with the earlier style hose. (In stock)

These photographs show an installation in a 1990 vehicle which is fitted with the SRS (Supplemental Restraint System) that includes a knee bolster. Cars prior to 1990 are non-SRS and changes will be noted.

Start by removing the trim plugs and screws that hold the knee bolster to the frame under the driver's side dash. Pre-90 cars will not require this.

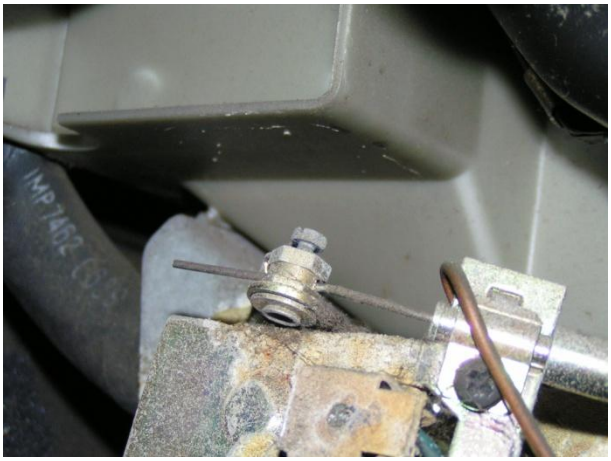
The two screws are Torx fasteners and may be very tight. Once removed you can lower and remove the bolster.

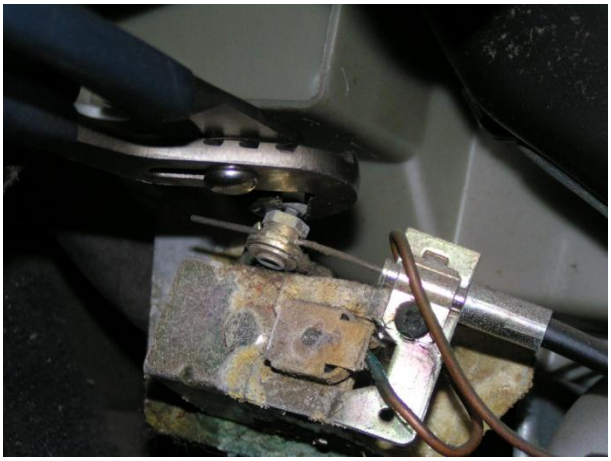
Next, remove the felt trim pad under the dash. This will require removing the support o-ring and edge trim on the AC duct if fitted. The felt pad is secured at the firewall by two twist buttons. Turn them 90 degrees to remove them. Next, remove the side cover for the center console. One screw at the top, one twist fastener at the bottom.



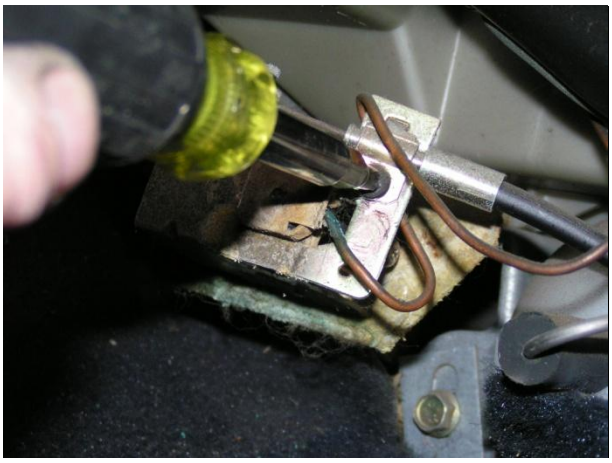
This exposes the old heater valve. It is recommended that the cooling system be drained before the old valve is removed. Otherwise the floor will be flooded with coolant! Drain the block via the drain plug under the #4 exhaust port. Next, disconnect the heater hoses on the outside of the firewall. Use a piece of hose that fits one of the two firewall fittings to direct compressed air into the heater core with the old heater valve fully open. This will expel all coolant. Use a suitable container to catch the coolant via a second hose on the second firewall fitting. If you are not re-using the coolant, dispose of it in a safe manner. Don't discharge anti-freeze or other coolants into streets or storm drains!

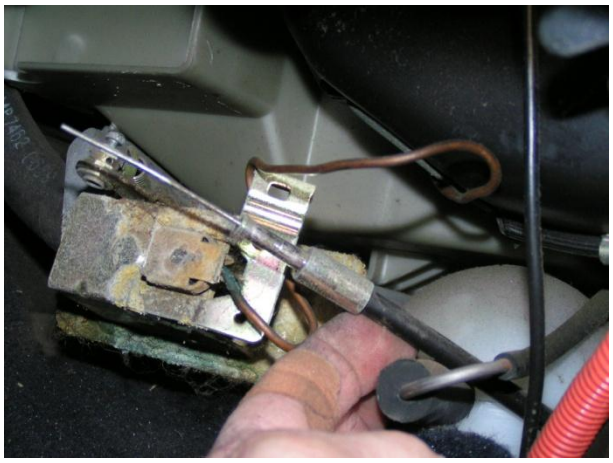
Use a pliers or wrench to loosen the fixing bolt atop the cable swivel.





Use a screwdriver to loosen the cable clamp. Remove the clamp completely.





Reposition the cable below any vacuum plumbing for the HVAC vacuum canister.

Grasp the old valve firmly and pull the top bracket out of the back of the heater box.

Now is the time to put down some rags, just in case any coolant remains in the hoses.

A ¼” ratchet and 9/32” socket will make removal of the old hose clamps easier if they are original Volvo clamps. Loosen both hose clamps.

The hoses will be stuck tightly to the valve! Be careful. If you tear them, they will have to be replaced. Work a small screwdriver under the edges of the hoses to help loosen them. The old valve will likely be somewhat corroded, depending on how much humidity has been present. This one was not too bad—a desert car.

With the heater valve pulled down, remove the capillary tube assembly from the heater box. You will need to pull out the oval rubber grommet too. Here you can see the capillary tube assembly exiting the bottom of the blower motor scroll housing.

Now it's time to install the new valve. Note that on the support bracket there are two 6mm bolts (10mm hex head). The bottom one secures the bracket to the floor. The top one attaches to the bracket that supports the vacuum reservoir and the heater box. The ground wire for the blower motor may be attached to either of these. OEM location is the lower bolt. If your blower motor ground is on the top bolt, you can leave it there or relocate it to the bottom bolt. Clean the attachment point to assure a good ground either way.

Remove the top bolt.

Trim about one inch off the hose that goes to the passenger side.

Insert one of the hose splices and secure with a hose clamp.

Attach the small elbow hose. The long end goes on the splice.

Attach the right angle hose to the arrowed side of the valve (outlet). Note that the hose is pointing slightly upward. That's so it will clear the next hose which you see here already attached to the valve (inlet). Note the orientation.

Rotate the valve around and install the second hose splice for the inlet hose. Pay attention to orientation of hose clamps or something will rub or hit another hose—or the valve's actuator arm.

Completed inlet splice.

Push the valve back into place against the heater box support where you removed the bolt earlier. Note position of the inlet hose under the outlet hose. Note how the outlet hose's clamp is positioned to clear the actuator arm.

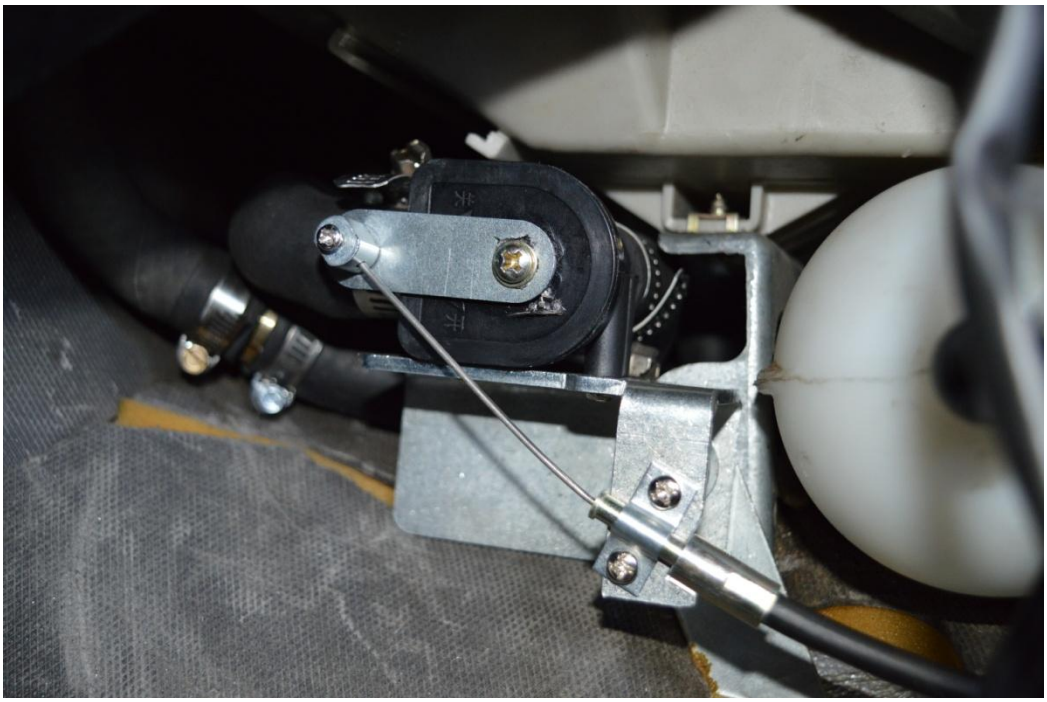
The valve is supplied with a high strength 6mm bolt and nut, two plain washers and one lock washer. Occasionally the captive nut on the vertical brace will be missing. The nut supplied can be used to replace it. If the captive nut is in place, the longer bolt, one plain and one lock washer are all that is needed to attach the valve bracket to the brace. A ratcheting box wrench is a great help here. Start the bolt by hand.

Tighten the bolt to fix the bracket/valve in place. This photo is at an angle, but the valve should be almost perfectly level with the floor. Otherwise the cable will not reach the swivel properly. Once the valve is positioned, tighten the bolt firmly.

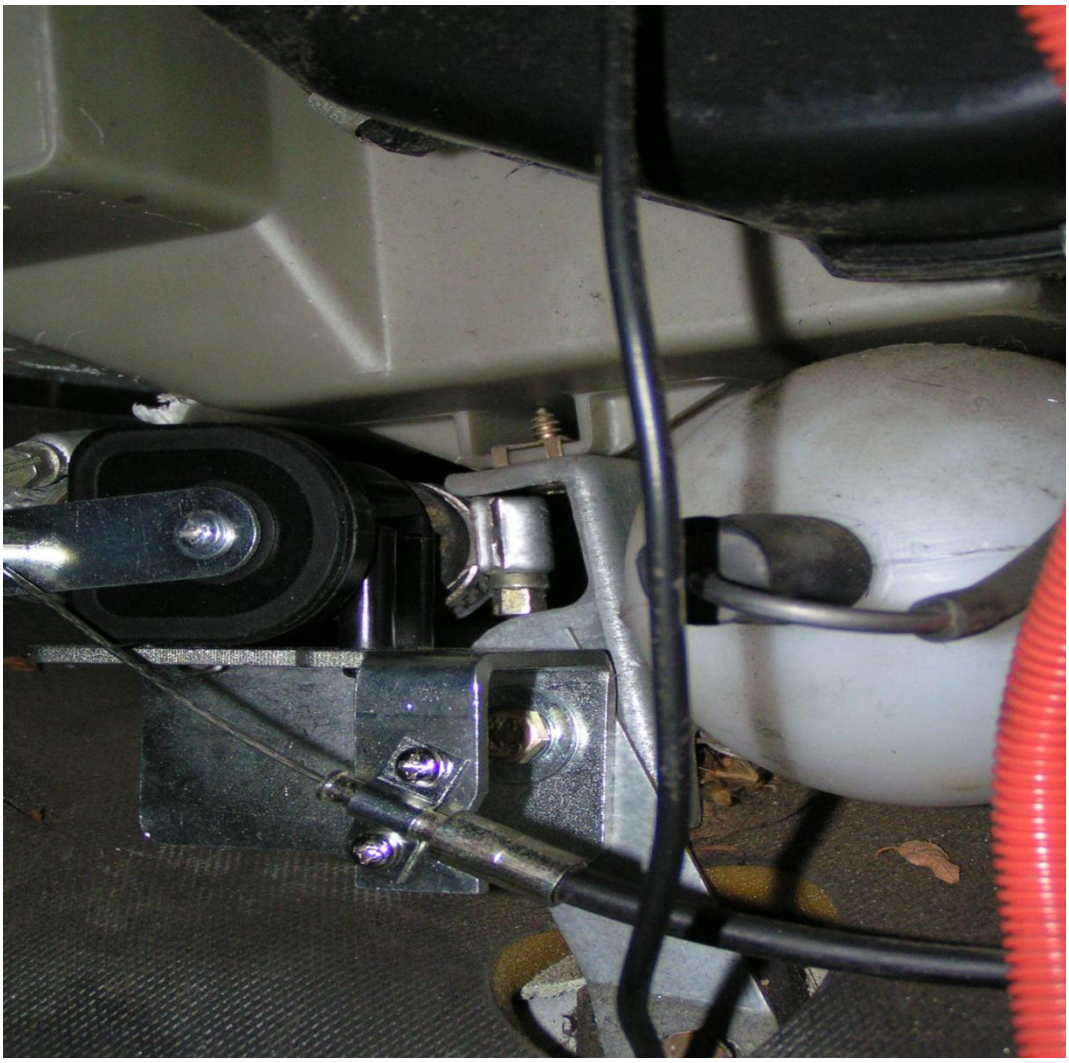
Loosen the two screws on the cable clamp of the valve's bracket and slide the heater control cable into the clamp. The housing of the cable will butt up against the notch in the bracket. Tighten the clamp.

Rotate the valves arm fully upward. Move the dash control for the heater to the right. This will retract the cable's wire. With the fixing screw on the swivel loosened, guide the wire into the hole on the swivel as you move the heater control lever on the dash to off. You can also move the valve's arm to insert the wire.

Adjust the wire in the swivel and also the cable in the attachment clamp so that when the heater control lever is off, the valve is fully closed—arm in the up position. You must use almost all the length of the cable to assure the heater control lever on the dashboard moves the valve's arm all the way to "closed". If the valve stays open, your air conditioning will not function correctly.



Tighten the swivel lock screw and also the cable clamp screws once the valve is adjusted. When the heater control lever on the dash is fully “on”, the arm will not move a full 90 degrees to the vertical position. Regardless, the valve is at near full flow and will provide more than enough volume for the well known and relentless Volvo 240 heat.



If you feel you pushed a lot of the passenger side (outlet) hose back in behind the heater box, it is wise to check under the right side of the dash and make sure the hose is not rubbing against the windshield wiper linkage. The hose may have worked its way upward when you pushed it back in place. If so, arrange the hose to clear the linkage and consider fixing it in place to the AC plumbing if it will not stay put.