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Get your heat back on so that you can stay warm Driving in the winter without working heat is beyond unpleasant. Luckily, there are only a handful of reasons why your heat wouldnt be working, and narrowing the problem down isnt particularly complicated. In this article, well break down how your cars heating system works, what could be causing your issue, and what the necessary fixes are. Most often, the heater isnt working because you need a new thermostat, which controls the valve in your engines coolant system.Low coolant or antifreeze can also cause your heater to shoot out unheated hair, so check your coolant tank to see if its low.Wiring issues, damaged circuits, and blown fuses can all keep a heater from operating properly.1Faulty thermostat There is a thermostat inside of your vehicles coolant system that monitors the temperature of the coolant or antifreeze. When you turn the thermostat on, it checks to see if the fluid is hot enough to heat your car. If it isnt, the system stays closed and the fluid is sent back into the engine to reheat. If it is hot enough, the thermostat opens a valve that feeds the air into your car. If the thermostat is busted, that valve will never open, though.[1]Other symptoms: Your temperature gauge rises slowly and your engine overheats. You may also notice poor mileage or engine performance if the issue continues to be ignored.What will happen when you turn the heat on? Air will come out, but it will be cold or room temperature.The fix: The thermostat needs to be replaced. This is a very common repair, so see a mechanic to have it swapped out quickly. 2Low antifreeze/coolant Its possible that the fluid running through your coolant system is too low to absorb all of the heat your engine is generating. This usually happens when theres a leak somewhere in your coolant lines, but it could also be a sign the coolant has gone bad and its time for a coolant flush.[2]In general, you need a coolant flush roughly every 30,000 miles (48,000km) or every 3 yearswhichever comes first.[3]Other symptoms: Uneven temperature readings on your gauge, poor engine performance, and gurgling noises in your engine bay.What will happen when you turn the heat on? You may get bursts of heat from the vents, but it will likely be mostly room-temperature air. You may notice the air smells sweet, too.The fix: See a mechanic and ask them to inspect your coolant lines and reservoir for tears. If there are any, fixing them and refilling your coolant should solve the problem.3Damaged wiring The thermostat, coolant pump, and heating system are all connected to the vehicles main battery via a complex series of wires. If one of those wires has become short-circuited or a wayward squirrel chewed on one of your wires, it can interfere with your vehicles heating system.[4] You could also have a blown fuse.[5]Other symptoms: You might smell something burning when you drive.What will happen when you turn the heat on? It depends on which wires are or are not damaged. Nothing may happen, or you may get bursts of hot air.The fix: See a mechanic and ask them to inspect your wiring. Theyll be able to locate any electrical issues and fix them for you.4Gauge error Its possible that the problem isnt the thermostat controlling the coolant temperature, but the gauges interpreting the thermostat. If the gauge isnt communicating with the thermostat, your cars heating system may not work correctly.[6]Other symptoms: The check gauges light may come on and the readings on your engine temperature gauge wont move.What will happen when you turn the heat on? Its likely that one of two things happens. Either the heat comes on but its not particularly hot, or the vents just blow cold air out.The fix: The gauges need to be tested and replaced, so see a mechanic to have them repair the gauges for you.5Air lock An air lock refers to a bubble or pocket of air thats trapped in the coolant system. This is a problem because air in the coolant system blocks the open flow of coolant through the engine, which can cause overheating, leaks, blown gaskets, and all kinds of problems. How the air got there in the first place is also a potential issue, since it signals there may be a leak somewhere letting the air in.[7]Other symptoms: Weird noises coming from your dashboard, engine overheating, and irregular engine performance.What will happen when you turn the heat on? It depends on where the bubble is and how big it is, but its very likely youll either get random bursts of hot air, or nothing but room-temperature air.The fix: See a mechanic to have your coolant system bled and cycled. Then, the mechanic will need to diagnose and fix the underlying issue, which is often a leaky radiator gasket or a tear in a coolant line.6Blockage A blockage in your coolant system is almost always a really big air lock that gets stuck because the pressure in the system gets too high and/or the air pocket gets lodged in a spot where it cant continue to circulate through the system. This will cause all kinds of serious problems if it isnt addressed soon.[8]Other symptoms: The coolant in the reservoir bubbles when your car is running, the coolant color changes, the engine runs hot, and eventually, your system develops coolant leaks.What will happen when you turn the heat on? The air may start out hot when you turn the heat on, but it will quickly peter out and turn into room-temperature air.The fix: Do not continue to drive! Get the vehicle to a mechanic and have them bleed and flush your system to locate the problem.7Bad blower motor If nothing happens when you turn the heat on, youve almost positively got a blown blower motor. The blower motor is the component that actually forces air into your cars cabin. If the motor fails, nothing will push the air out when you turn the air or AC on.Other symptoms: No air comes out at all when you turn the heat on, or the air comes out hot but its much weaker than it should be.What will happen when you turn the heat on? Nothing at all.The fix: The blower motor needs to be replaced. This is luckily a very cheap and quick repair job for a mechanic.8Bad heater core The heater core is the compartment that the thermostat is in control of opening once the heat is turned on and the coolant is hot. If the heater core is blocked or theres an air lock, it can crack and let the coolant outresulting in poor airflow. This is a rare problem, but it can happenusually when you dont perform maintenance or get an air conditioning problem repaired.[9]Other symptoms: Coolant leaks into your cabin. This is the only heater problem where something will leak into the cabin. You may also notice your windows fogging up, or notice a sweet odor.What will happen when you turn the heat on? You wont get any heat. If air keeps blowing out, your dashboard will eventually start to leak coolant.The fix: See a mechanic to have the dashboard disassembled and the heater core replaced. Youll likely need a coolant flush, as well. Coolant/antifreeze circulates through the engine to redirect heat. Your engine generates a lot of heat. To keep it from overheating, coolant or antifreeze is pumped through channels in the engine (called water jackets), where the liquid absorbs heat. If you dont turn the heater on, that heat gets sent to the radiator where the liquid cools back off and the loop repeats itself. If you do turn the heat on, the hot coolant/antifreeze is directed through a railing where that hot air gets blown into the car.[10]Just FYI, theres no real difference between antifreeze and coolantthey perform the same function. The difference is how much water there is in the mixture.This is why you should turn your heat on and lower the windows if your engine ever starts overheating and you cant pull over immediatelythe heat will have an easier time dissipating with your vents open.The heating system in electric cars is a little different. The main difference is that air is compressed to heat it instead of relying on coolant. The rest of the system is basically the same.[11] Most of the heating system repairs are relatively inexpensive. Every shop has their minimums, and you have to pay the hourly rate for labor, but the heating system repairs tend to be on the lower side of things when it comes to automotive issues. Its never fun to pay for vehicle repairs, but so far as problems go, these are usually on the lower end.[12]The cheapest repair will be a coolant flush or top-off, which shouldnt cost more than $100 or so.Hose repairs, cracks in coolant lines, and damaged wiring will usually run $200-400.The most expensive repairs are a blower motor or blower core replacement. These can run anywhere from $550 to $2,000 depending on your make and model. Ask a Question This article was reviewed by Jason Shackelford and by wikiHow staff writer, Eric McClure. Jason Shackelford is the Owner of Stingray Auto Repair, a family owned and operated auto repair shop with locations in Seattle and Redmond, Washington. He has over 24 years of experience in auto repair and services, and every single technician on Jasons team has more than 10 years of experience. This article has been viewed 3,868 times. Co-authors: 4 Updated: January 11, 2024 Views:3,868 Thanks to all authors for creating a page that has been read 3,868 times. Theres nothing worse than getting into your car on a freezing morning, turning on the heater, and feeling nothing but cold air. Its frustrating, especially when youre already shivering and just want a warm, comfortable drive. But dont panic, this issue is more common than you might think, and in many cases, its easy to fix.This post will help you understand the possible causes and walk you through simple troubleshooting steps to get your heater working again quickly.How Your Car Heater Works?Before diving into the causes and fixes, its important to understand how your cars heating system works. Unlike a home heater that uses electricity, your cars heater relies on engine heat. Heres how it functions:The engine produces heat as it runs.Coolant absorbs the engines heat and circulates through the heater core.The heater core acts like a small radiator, transferring heat to the air.A blower motor pushes the warm air into your cabin through vents.Temperature settings are controlled by blend doors and other HVAC components.If any part of this system fails, your car heater wont work properly.Common Reasons Your Car Heater Is Not Working (With Fixes)Here are all the reasons why your car heater is not working and their solutions in detail, which are as follows:#1. Low Coolant LevelWhenever the coolant level in your car is low, your car heater will not work and vice versa, the engine will overheat.The heater blows cold air instead of warm airThe engine temperature is rising or overheatingThe low coolant warning light is flashing on the dashboardYour cars heater relies on the warm coolant from the engine to warm the air before it enters the cabin. When the coolant level gets too low, there isnt enough fluid to reach the heater core, leaving you with nothing but cold air. This problem is often caused by leaks in the cooling system, a faulty radiator cap, or air pockets preventing proper coolant flow.How to Fix it?Check the Coolant Level: Open the hood and inspect the coolant reservoir and radiator (only when the engine is cold). If the level is low, this could be the reason your heater isnt working.Top Off The Coolant: Add the correct type of coolant as directed in your vehicle manual. Mixing different types of coolant can cause problems.Check For Leaks: Check for puddles of coolant underneath the car. If you see green, orange or pink fluid, you probably have a leak.Inspect Components: Check the radiator, hoses and water pump for visible signs of damage or leaks. If leaks are found, repair or replacement may be necessary.Bleed the System: If air pockets are trapped in the cooling system, they can block the flow of coolant. Some vehicles require a bleeding procedure to remove air after adding coolant.Keeping your coolant at the proper level not only ensures the heater works, but also prevents the engine from overheating, which can require costly repairs if ignored.#2. Faulty ThermostatA faulty thermostat is one of the most common culprits behind a car heater blowing cold air. The thermostat controls the flow of coolant through the engine, ensuring it reaches the proper operating temperature.Engine takes longer than usual to warm upTemperature gauge remains low or doesnt reach the optimal rangeHeater blows cold or lukewarm airWhen the thermostat is stuck open, coolant flows continuously through the engine, preventing it from heating up properly. As a result, the heater core, which relies on hot coolant, cant produce warm air for the cabin.How to Fix It?To check if the thermostat is the issue, monitor the temperature gauge while driving. If it stays low or doesnt reach the normal range, its likely time to replace the thermostat. Replacing it will restore the correct coolant flow and get your heater working again.#3. Clogged or Leaking Heater CoreA clogged or leaking heater core can cause weak or no heat from the vents, foggy windows, and a sweet smell in the cabin. These issues are a sign that your heater core is either blocked or leaking coolant, affecting the heating system.Weak or no heat from the ventsFoggy windows (coolant leaking inside the cabin)Sweet smell inside the car (coolant odor)The heater core works by using hot coolant from the engine to heat the air inside the cabin. When the heater core becomes clogged, it restricts the flow of coolant, preventing the air from warming up properly.A leak in the heater core can cause coolant to escape, lowering the coolant level and leading to reduced heating efficiency. If coolant leaks inside the cabin, it can cause a sweet smell and foggy windows due to condensation on the glass.How To Fix It?To clear a clogged heater core, flush it with a garden hose to remove blockages.If the heater core is leaking, it may need to be replaced. This is usually a more involved repair that may require professional help, as the heater core is often difficult to access and replace on your own.#4. Blower Motor or Resistor FailureA malfunctioning blower motor or resistor can prevent air from flowing into your cars cabin, leaving you without heat when you need it most.No air blowing from ventsFan works only on certain speedsLoud noises coming from the blower motorThe blower motor is responsible for pushing air into your cars cabin, including the heated air from the heater core. If the blower motor or the resistor that controls its speeds fails, the airflow can stop altogether, or it may only work at certain speeds. In some cases, a loud noise could indicate a failing motor or debris inside.How To Fix It?Check the blower motor fuse and replace it if blown.Test the blower motor by changing the fan speeds to see if it responds properly.If the motor only works on certain speeds, the resistor may need replacing.Inspect the blower motor for any visible signs of damage or wear and replace it if necessary.#5. Blend Door or Actuator ProblemsIf your cars heater isnt working properly, the blend door or actuator could be the culprit. This part is responsible for controlling the temperature of the air flowing through the cabin, and if its malfunctioning, you might find yourself stuck with either hot or cold air.SymptomsStuck on hot or cold airClicking noise coming from behind the dashboardHeater works intermittently, sometimes blowing hot air, other times coldThe blend door is a crucial component of your cars climate control system. It controls the flow of air between the hot and cold settings, allowing you to adjust the temperature to your preference. If the blend door becomes stuck or the actuator fails, it can prevent the air from being directed properly.This can result in only hot air or only cold air blowing from the vents. In some cases, you may hear a clicking sound coming from behind the dashboard, indicating that the actuator is malfunctioning.How to Fix It?Listen for clicking noises behind the dashboard, which may indicate a faulty actuator.Try adjusting the temperature settings to see if the air temperature changes at all.If the air doesnt change, the blend door or actuator may need to be inspected and replaced.In some cases, the dashboard may need to be removed to access the blend door, so this repair can be more complex. If youre not comfortable doing this yourself, consider taking the car to a professional mechanic.#6. Broken Control Panel or ButtonsIf your car heater isnt working properly, the issue might be with the control panel or buttons. A malfunction in these components can prevent you from adjusting the temperature or settings correctly.Heater doesnt respond to temperature adjustmentsButtons or dials feel loose or unresponsiveDisplay or controls are flickering or not lighting upOver time, the control panel and buttons in your car can wear out or become damaged, especially if they are frequently used. Electrical connections or internal components may become faulty, preventing the system from receiving your input to adjust the temperature or airflow.This can lead to your heater blowing cold air or not functioning at all. If the control panel is damaged or buttons are stuck, the heater may not be able to adjust as needed.How To Fix It?Inspect the control panel and buttons for visible damage, such as cracks or wear.Check if any buttons are sticking or not responding when pressed.If the issue is electrical, check the fuses or wiring connected to the control panel.Reset the system by disconnecting the car battery for a few minutes and reconnecting it.If the problem persists, you may need to replace the control panel or have the buttons repaired by a professional.#7. Radiator IssuesA faulty radiator can cause your heater to blow cold air and can even lead to engine overheating. Understanding how to spot radiator issues can save you from costly repairs and uncomfortable drives.Heater blows cold airEngine temperature rises higher than normalVisible coolant leaks under the carSteam or unusual odors coming from the engineThe radiator plays a critical role in maintaining the engines temperature by dissipating heat from the coolant. Over time, the radiator can become clogged, damaged, or develop leaks.If the radiator is not functioning properly, the coolant wont circulate effectively, causing the heater to blow cold air and the engine to overheat. This can be caused by debris buildup, corrosion, or physical damage to the radiator.How To Fix It?Inspect the radiator for visible signs of leaks or damage.Check the radiator fins for blockages caused by dirt, leaves, or debris.Flush the radiator if there is buildup or corrosion inside.Ensure the radiator cap is securely tightened to maintain proper pressure.If the radiator is severely damaged or leaking, consider replacing it.Consult a professional mechanic if youre unsure about the condition of your radiator or if further repairs are needed.By addressing radiator issues early, you can ensure that your cars cooling system works efficiently and your heater blows warm air as it should.8. Air in Cooling SystemAir trapped in the cooling system can prevent your cars heater from working properly. It can cause fluctuating temperatures and reduce the efficiency of the heater.Heater blows cold air intermittentlyFluctuating or inconsistent cabin temperatureBubbling or gurgling noises from the dashboard or engine bayAir can get trapped in the cooling system when theres a leak, after coolant is drained and replaced, or if the system is not properly bled after maintenance.This trapped air creates pockets that prevent the coolant from flowing smoothly through the heater core, resulting in cold air blowing from the vents.The air pockets can also cause the engine to overheat or the heater to fail to maintain a consistent temperature.Check the coolant level and top it off if necessary.Bleed the cooling system to remove trapped air. This can often be done by loosening the radiator cap while the engine is cool or using a specific bleeder valve (refer to your manual for instructions).Inspect for any leaks in the radiator, hoses, or water pump.Run the engine with the heater on full to allow air to escape from the system, checking for any improvement in temperature.Check Coolant Level: Low coolant can prevent heat; top it up if needed.Inspect Thermostat: A stuck-open thermostat wont allow proper heating.Clear Heater Core: Flush the heater core if clogged.Check Blend Door Actuator: Ensure its functioning and directing warm air.Verify Heater Control Valve: Replace if stuck closed.Bleed Air from Cooling System: Air pockets can block heat flow.Inspect Blower Motor & Fuse: Replace if not working.Check Radiator & Hoses: Look for leaks or blockages.Ignoring Coolant Level & Air Pockets Not checking or bleeding air from the cooling system properly.Misdiagnosing the Thermostat Assuming its fine without testing or replacing it unnecessarily.Overlooking Heater Core Issues Not checking for clogs or leaks in the heater core.Skipping Blend Door Inspection Failing to check if the actuator is stuck or malfunctioning.Replacing Parts Without Testing Changing heater control valves or blower motors without verifying the real issue.Neglecting Radiator & Hoses Not checking for blockages or collapsed hoses affecting coolant flow.Ignoring Electrical Issues Not testing fuses, relays, or wiring for blower motor operation.Using Wrong Coolant Mix Incorrect coolant ratio can affect heat transfer.If your cars heater is blowing warm air instead of hot, it could be due to a low coolant level, a partially clogged heater core, a malfunctioning thermostat, or an issue with the blend door actuator.Car has no heat but isnt overheatingIf your car has no heat but isnt overheating, the problem may be related to the heating system rather than the engine cooling system. Common causes include low coolant levels, a clogged heater core, a bad thermostat or air trapped in the cooling system.Why is my car heater blowing cold air?A car heater blowing cold air may be due to low coolant, a faulty thermostat, a clogged heater core, or a broken blend door actuator. Check coolant levels and inspect these parts for issues.If your cars heater is not working, causes could include low coolant levels, a bad thermostat, a clogged heater core, or a bad blower motor.why is the heat not working in car but ac works?If your cars heat is not working but the AC does, check the coolant level, thermostat, heater core, and blend door actuator. Low coolant or a stuck thermostat can prevent heat, while a clogged heater core or faulty actuator can block warm air. The heating system in the car is an important element of comfort, especially in the cold season. After all, it not only warms up the cabin to the desired temperature, but also protects against freezing and fogging of windows, as well as removes some heat from the engine. Therefore, when the cabin heater does not work it is at least uncomfortable. We analyze why the heater in the car does not warm, what are the causes of possible malfunctions, and we will briefly tell you how to eliminate them.The arrangement of the heating systemTo understand why the heater does not warm the heater, first it is worthwhile to understand how the interior heater in the car is arranged in general.In addition to the main radiator that cools the engine, in a modern passenger car there is another one the heater radiator. It is smaller in size and is located behind the dashboard. Two pipes are connected to it inlet and outlet, through which the coolant flows. It circulates through the cooling and heating system of the car with the help of a special pump (pump).In the process of engine operation, heat exchange takes place. Antifreeze heats up, taking some of the heat from the engine, and flows into the radiators (main and heater). The heater fan blows cold air through the radiator honeycomb, and reverse heat exchange occurs the radiator transfers heat to the air, and the air cools the heater.Warm air blows into the passenger compartment, and cooled antifreeze returns to the engine to pick up excess heat again. This heating system is the most popular and efficient, although in some internal combustion engine cars (not to mention electric cars) it is supplemented by an electric air heater (tan).The simplest configuration of the cooling system. On the right is the heater radiator with cabin fanLow efficiency of the heater can be caused by many reasons. Lets look at the most common ones.Insufficient amount of coolant in the systemA banal lack of coolant (coolant) can cause the heater to blow warm, not hot air. Low antifreeze level leads to the formation of air plugs in the system, and the efficiency of the heater drops sharply.Reasons why the coolant can leave the system:non-tightness of branch pipes;vaporization due to overheating;cylinder head gasket or heat exchanger malfunction.How to fix the problemTo begin with, you need to find the expansion tank a plastic reservoir in which coolant is poured. Unscrew the plug and top up the liquid above the MIN mark on the tank body. This should restore the performance of the heating system, at least for a while. It is also important to eliminate the heater air lock.Important! Do not mix antifreeze of different brands or use tosol for refilling. Because of the different chemical composition can form a sediment that will remain on the engine parts and over time will reduce the performance of the motor.To understand the cause of the lack of liquid, you need to find the place of leakage, carefully inspecting all parts of the cooling system. To do this is not very difficult usually antifreeze leaves colored streaks on the parts. In case of leakage of any of the pipes, you need to tighten its clamps, and if this does not help put a new pipe.Antifreeze can get inside the cylinders, if the head gasket is damaged. In this case, the exhaust gases acquire a whitish color. In addition, because of such a malfunction, the engine can boil in harmless situations.There is only one way out to replace the gasket. The amount of work is large, it is quite complex, and the level of responsibility of the repairer is high. Therefore, if you have not had to disassemble the motor yourself before, it is better to contact the service.Thermostat malfunctionAnother reason why the heater in the car does not work is the failure of the thermostat. This is a device that performs the functions of a thermostat and is responsible for maintaining the temperature in the cooling system.It has two circuits: small (bypassing the main radiator) and large. A classic thermostat consists of a brass cylinder filled with wax, a rod and two valves with a spring. When the cylinder heats up, the wax mixture expands and pushes the rod out, thereby opening a valve that allows fluid to flow through the large circle of the cooling system. The approximate temperature at which the valve begins to open is 82C.In modern cars, more and more often installed thermostats with electronic control, where the main sensor is a thermistor. With such a thermostat, the engine ECU can control the temperature more flexibly, but the dual circuit configuration is retained.If the thermostat valve is jammed so that it always lets the fluid circulate in a large circle, the engine will warm up slowly. And with it the radiator of the heater, so it may seem that the heater in the car does not work.How to fix the problemTo remove the thermostat, the first thing you need to do is to drain all the coolant. You can do this by removing the hose at the bottom of the radiator, and also by unscrewing the special plug on the cylinder block, if there is one. Next, we find the thermostat and remove it. Most often it is located on the upper branch of the main radiator, which goes to the engine. This unit is not repairable you will need to put a new one, at the same time replacing all the seals.Important! The work of the mechanical thermostat can be checked: it should be removed and lowered into boiling water. If the valve in it when heating opens, and after cooling is closed the thermostat can not be changed and look for other reasons.Pump FailurePump another name for the pump, which provides circulation of antifreeze through the cooling system, whether it is a small or large circuit. A standard pump consists of an aluminum housing, pump shaft with impeller, bearings, gaskets and oil seals. There are also pumps with plastic housing or impeller. It is with the wear of the impeller can be associated with poor operation of the heater.In simple words, the impeller is a disk connected to the blades, due to the movement of which the liquid is pumped through the cooling system. Due to prolonged interaction with antifreeze or other coolants, the impeller wears out and slows down the movement of liquid inside the system. Especially spoil it low-quality antifreeze, which because of its chemical composition literally corrode the impeller. In addition, it can turn on the shaft and stop rotating properly.How to fix the problemReplacing one impeller is not the best idea. And it is practically unrealizable in modern pumps, the design of which does not involve disassembly. The coolant passes through the entire pump and interacts with each of its elements. Therefore, it is worth replacing the old pump completely with a new one.Each car has a different design, but the pump is usually located outside the engine and is driven from the crankshaft either by a timing belt (or even a chain) of the timing belt, or by a single belt with the generator. In any case, replacing the pump is not the easiest operation, requiring draining all the antifreeze and then filling the system again. Therefore, if you lack auto repair skills, it is better to contact a car service. And when replacing independently, do not forget to thoroughly clean and degrease all mating surfaces, as well as replace the gaskets with new ones.The clogging of the radiator heaterWhy does the heater warms badly, if everything is in order with the pump? The matter may be in the clog inside the heater itself. Heater radiator a rectangular-shaped part consisting of a pair of tanks (more often plastic), connecting them thin metal tubes through which the heated coolant flows, and plates between them (the so-called honeycomb).If several tubes are clogged (for example, by scale when using low-quality antifreeze or ordinary water), part of the radiator remains without heating liquid. Therefore, the air from the heater is not hot enough.By the way, the space in the honeycomb can also be clogged. Some drivers do not see the point in the cabin filter and save on it. As a result, the heater radiator quickly clogs from the outside. Air passes through it with great difficulty.How to fix the problemTo begin with, you need to check the pipes of the heating system, leading from the motor to the cabin. And if one is barely warm, and the other is hot, then the matter is in the clogging of the radiator. Read more about how to wash the radiator of the heater with your own hands here.What to do if the honeycomb is clogged? Here without removing the heater and mechanical cleaning can not do without it.Clogged cabin filterAnother reason why the heater blows badly in the car is a dirty filter of the climate system. It is a consumable element made of paper or synthetic fibers. The main task of the filter is to protect the cabin from dust, insects or leaves.If the cabin filter is heavily clogged, it provides additional resistance to the air flow. And the less it passes through the heater radiator, the colder it is in the cabin.How to fix the problemDepending on the design of the car, the filter can be installed both inside the body (under the dashboard or behind the glove compartment) and under the hood. If you have noticed a weak air flow from the heater, you can try to change the filter yourself usually it is not difficult. As a rule, replacement is recommended once in 10000-15000 km (or more often, if you drive a lot on dusty roads).Heater fan malfunctionIf the heater in the car does not warm up, the reasons for this can also be associated with the cabin fan. It is he who runs the air through the radiator of the heater.The main faults are as follows:breakdown of the electric motor of the fan;clogging or damage to the fan blades;failure of the electrical control system of the fan.How to fix the problemIf the heater blows weakly, then, perhaps, blowing and cleaning the fan impeller blades will help. When when the heater is working, the cabin is filled not so much with heat as with noise, it is necessary to replace the brushes and/or bearings in the fan. If the heater stopped blowing hot air at all, then the heater motor must be replaced in its entirety. In both cases, you will need the help of an experienced auto electrician.TotalsTo understand why the heater does not work, you need to conduct the simplest diagnostics and determine to which item from our list refers to your case.Some problems can be solved by yourself: for example, replace the cabin filter or top up the antifreeze in the system.There are complex malfunctions: a punctured cylinder-head gasket, a broken pump or thermostat. With such a thing it is better to address in service. Yes, and operate the car with them, most likely, will not work even in the warm season.It is not worth ignoring the symptoms of problems with the heating system: after all, it is part of the cooling system, which means that difficulties may arise with the heat removal from the engine. In the colder months, our car heaters are a godsend. The last thing you'd want on a frosty winter morning is to find that your car heater is having issues, or not working at all.Below, we explain how a car heater works, why it may not be working and what you can do about it.Read more useful advice on driving during winter. How does a conventional car heater work?Most car heaters use coolant to warm up the interior of the vehicle. Heres how it works: The vehicle engine heats the coolant to a very high temperature. The coolant is pushed through the heater core (which acts like a mini-radiator). Air is pushed through the heater core, resulting in hot air blowing into the car.Often when you first turn the heating on, youll notice the air feels cold for a few minutes this is because the engine needs a little time to warm up and heat the coolant.How does an electric car heater work? Most electric car heaters work by sending the electricity through a conductor, which in turn is blown through a heating element and into the seating area.An EVs heating system does rely on power from the traction battery, which used to result in the range of electric cars being much shorter during winter. But with modern EVs, the heat pumps are very efficient so this is no longer an issue.Plus, one of the benefits of driving an EV during winter is preconditioning this means you can pre-heat or pre-cool your car before you start your journey.This handy feature means you can warm up and defrost your car in the morning while its still charging, so its ready for you when you want to drive it and theres no impact on the battery charge.Read our guide tomaintenance and repair for electric cars.We provide 24/7 roadside assistance. Does the heater in my car have a fuse?It depends on the design of your specific car, but it's possible that your blower motor has a fuse. The blower motor is what powers the fan on your car heater.How often should I flush my coolant?If it's not specified in your car manual, it's widely recommended that you flush your coolant every 5 years or 100,000 miles whichever one comes first.Why is my car heater not working?If the heating system isnt working at all (no hot air is being blown into the car), this is likely due to a faulty or broken thermostat as they can end up stuck open or stuck closed, which can also create problems with the cooling system in your engine, but that's not the only possible reason.In general, car heater issues can be caused by the following: If your coolant level has gotten too low, it means there wont be enough hot liquid in the heater core, resulting in cold air. You should top up the coolant to the appropriate level and then check to see if the heating is working again. (Only do this when the engine is cool) All in all a damaged wire wouldnt be the worst outcome as it can be a fairly simple fix, but if your car heater is unresponsive then its possible that a short-circuited wire or blown fuse is the culprit. Its possible that your car heater is working, but only until the hot liquid reaches the heater core. If the heater fan itself is broken, then it wont be able to blow heat into the interior of the car. This could be down to a mechanical failure or electrical problem. Find out whats causing your cars heating problems with Smart Care. Book an expert vehicle check Why does my car heater only work on high?If your car heater only seems to work by blowing air while on the highest setting, then it's likely that you have a problem with the heater rheostat which will likely need replacing.Why is my car heater blowing cold air?If youre still getting cool air from your heater when the engine is on, there are a few possible causes. The most common reasons are typically that your engine coolant is low or theres a fault with the thermostat.First things first, make sure youve set the system to hot. And let the engine run for a few minutes to give it time to heat up the coolant.How to repair a car heaterThe first thing to do if youre having issues with your car heater is tocheck your engine coolant. Make sure to do this when your engine has cooled down to avoid being burned.Low engine coolant can be a sign of a leak or other issue in the system so you should also get your vehicle checked by a professional to make sure there are no further problems.If there is enough engine coolant but the heating still isnt working, youll need totake your car to a garageso an experienced mechanic can diagnose and fix the issue.How much does it cost to repair a car heater?The costs involved in fixing a car heater can depend on the problem and what needs replaced or mended.A full replacement of your heater core can be expensive due to the labour involved, costing upwards of 1,000 for parts and labour.Will I fail my MOT if the car heater is not working?A broken car heater won't cause you to fail your MOT. This is because it's not one of the main checks done as part of the test.However, this doesnt mean you should ignore any problems with your heater. Down the line, it can cause problems with the cooling system in your engine, which could lead to costly damage and MOT failures.Why choose us? UK drivers have consistently rated us as the best breakdown service against all other major breakdown providers Our patrols will usually get to you in less than an hour and get you back on the road in around 30 minutes of arrivalGet a quote for our breakdown cover.Verify the information above attheAA.com/best. Last updated:26 November 2024 | Author: The AA Even in warm climates, a working car heater is much appreciated on chilly mornings. In cold climates, a properly functioning car heating system is essential, not only for creature comfort, but for safety. A malfunctioning heater blowing cold air prevents the defroster from removing ice and fog from the windshield.Sleet, snow and even rain already make it difficult to see everything that crosses your path, even if you have a clear windshield. When your malfunctioning heater allows fog and frost to collect on your windshield, things can get downright dangerous. You might lose track of the dividing lines on the roadway or fail to spot a pedestrian in front of you. Sure, you may not have enough time to handle everything on your to-do list, but a car heating system is something you need to prioritize. Dont ignore it. Why Isnt the Car Heater Blowing Hot Air?Here are the most common reasons why your car heating system isnt blowing hot air.Low coolant: Whether caused by a leak or water evaporation, low coolant is the most common source of poor heater output.Thermostat: A stuck-open thermostat prevents the engine (and coolant) from heating up.Heater core: A clogged heater core restricts coolant flow, giving up little or no heat.Electric cooling fans: Due to a bad sensor, switch or controller, electric cooling fans running constantly prevent coolant (and the engine) from reaching operating temperature.Heater (hot water) control valve: Some vehicles have a heater control valve that only opens when the temperature control is set to hot. A stuck-closed valve prevents hot coolant from flowing through the heater core.Blend doors: An inoperative temperature control, blend door or a failed (or out of calibration) blend door actuator stuck in the cold position prevents heated air from entering the passenger compartment.If your vehicle was serviced recently, there could be another reason. If you had the fluids topped off or the radiator flushed with new coolant, or if you have a defective radiator cap, air bubbles could have made their way into your cooling system. Air bubbles keep coolant from circulating through the cooling system, including the heater core.Heres how to solve the air bubble problem yourself and get your heater working again. Dont laugh: Like a baby, your cooling system needs to be burped.How to Burp a Vehicles Cooling SystemBurping the cooling system removes trapped air. Specifics depend on your vehicles make, model and year, and whether it has a coolant reservoir or surge tank, but burping air from your coolant system is usually an easy fix. Be patient, though. The process takes some time to complete.A coolant reservoir and surge tank do the same thing. As hot coolant expands, excess coolant flows into the reservoir or surge tank. As the engine cools, a vacuum draws the coolant back into the radiator. Surge tanks are placed at the highest point in the cooling system. Coolant is added here rather than the radiator and sealed with the pressure cap.Safety firstBefore removing the radiator cap, let the engine completely cool. Coolant reaches 220 F, even hotter under pressure. When working on the cooling system, always keep fingers, tools and clothing away from the cooling fan (which can run with the engine off) and drive belts.Tools and materialsOne gallon or more of coolant (a 50/50 mix of water and anti-freeze).Spill-proof funnel. This keeps coolant from bubbling out of the radiator when air begins to burp.Drain pan, placed under your car to keep coolant from spilling.A new radiator cap if the existing cap shows signs of wear or rust, or is more than three years old.Step 1: Add CoolantWith coolant system bleeder valves:Check if there are bleeder valves (AKA screws), similar to a brake caliper bleeder valve, on the radiator, thermostat housing or intake manifold.If there are valves, with the engine off and cool, remove the radiator cap and open the valves. Insert the spill-proof funnel in the radiator and add the pre-mixed coolant until escaping air stops hissing and bubbling and a steady stream of coolant flows from the valve. Then go to Step 2.Without bleeder valvesWith the engine off and cool, remove the radiator cap and insert the spill-proof funnel in the radiator. Fill the radiator with pre-mixed coolant until theres about two inches of coolant in the funnel. Fill the reservoir to the Full Cold mark.Step 2: Start the EngineStart the engine and set the heater temperature control inside the car to high and the blower motor fan on low. This allows the coolant to reach operating temperature faster by not removing heat from coolant through the heater core.Let the engine run. Be patient; it can take 15 to 20 minutes for coolant to reach operating temperature. Air bubbling in the funnel means trapped air is being purged.Step 3: Check the temperature gaugeWith the radiator cap off and engine running, keep the funnel filled with coolant and check the instrument panel temperature gauge. Temperature readings should be normal once air has been fully purged from the coolant.Step 4: Finish UpKeeping the coolant level full, let the engine run for another 10 to 15 minutes, or until youre satisfied all the air has been removed. Carefully remove the funnel. The coolant will be really hot. Spill-proof funnels have a plunger that prevents any coolant still in the funnel from spilling when removed from the radiator.Fill the radiator to the top and reservoir/surge tank up to the Hot Full mark. Replace the radiator cap, turn off the engine and let it cool. After the engine completely cools, check the reservoir/surge tank level. It should be at the Full Cold mark. Add coolant, if needed.Alternate step: Jacking up the front endIt may be necessary to raise the front of your vehicle to force air pockets out of the cooling system.Using a jack and jack stands, safely lift the front of your car until the radiator fill neck is higher than the engine. Secure the jack stands. Once raised and firmly sitting on the jack stands, follow the steps above to thoroughly burp air out of the cooling system.The Final WordAddress car heater problems right away. If coolant levels keep dropping or air bubbles come back, its time to see your mechanic.No heat on frigid days places you and passengers at risk if the windshield fogs up or ices over. Air trapped in a cooling system can also cause engine overheating, resulting in premature engine failure.Flushing fluids at the manufacturers suggested service intervals is the easiest and least expensive way to extend the life of your vehicle.Stay Warm While Driving This WinterIf your car heating system is acting up this winter, youre not aloneheres how to troubleshoot common problems and stay warm on chilly drives. FAQCan a DIYer burp a car coolant system?Yes, anyone who read and follow the instructions presented here can burp their cooling system. If you have to jack up your vehicle, be sure to secure the rear wheels with blocks and to follow the safety guidelines for using a jack. And dont forget: Engine coolant gets hot, so gloves and goggles are advised.What should I do if burping the coolant system doesnt work?Air in the cooling system isnt the only reason a car heating system wont work. If you burp the coolant and dont see an improvement, check the other possible causes of heating system malfunction presented above. Ever found yourself stuck in a cold car during winter? Its not just uncomfortable; it can be downright dangerous. You might be wondering if a space heater could provide some warmth while you wait for your engine to heat up.Using a space heater in your car sounds like a cozy solution, but there are important safety concerns to consider. This article will help you understand the risks and benefits of using a space heater in your vehicle. By the end, youll know whether its a smart choice or a risky move.Safety First: Always prioritize safety when considering a space heater in your car; ensure it has safety features like automatic shut-off and monitor it closely to prevent fires.Carbon Monoxide Awareness: Be cautious with fuel-burning heaters, as they can produce harmful carbon monoxide. Ensure proper ventilation and install a carbon monoxide detector in your vehicle.Legal Regulations: Check local and state regulations regarding the use of space heaters in vehicles, as some areas may have restrictions that affect safe usage.Battery-Powered Options: For emergencies or extended waits in cold weather, consider portable, battery-operated space heaters that reduce fire risk and provide warmth.Alternatives to Space Heaters: Use automotive-specific heaters or insulation techniques, such as window covers and electric blankets, to maintain warmth without the risks associated with traditional space heaters.Insurance Implications: Be aware that using a space heater may impact your car insurance policy. Review coverage details and inform your insurer to ensure youre protected against potential damages.Space heaters offer targeted heating solutions, but using them in a car presents unique challenges. Its crucial to understand their types and functioning before considering them for your vehicle.Ceramic Heaters: Ceramic heaters provide rapid heat using ceramic plates. Theyre efficient and tend to run silently, making them popular for personal spaces.Infrared Heaters: Infrared heaters emit heat directly to objects, warming them quickly. Theyre effective in small areas, but poor ventilation can lead to uneven heating.Oil-filled Radiators: Oil-filled heaters use heated oil to radiate warmth. They take longer to heat up but maintain warmth for extended periods, which could be useful in a knock-off scenario.Micathermic Heaters: These heaters combine convection and radiant heat. They tend to be lightweight and portable, making them a versatile option, but they can be less powerful.Propane Heaters: Portable propane heaters offer significant heat but require special handling. They need outdoor ventilation to prevent carbon monoxide build-up, posing safety risks inside a car.Space heaters operate by converting electrical energy into heat. Each type uses different mechanisms:Ceramic heaters heat air as it passes over ceramic plates.Infrared heaters raise objects temperatures via infrared radiation.Oil-filled models utilize electrically heated oil that warms the surrounding air.Safety mechanisms play a critical role in preventing hazards. Most modern heaters include automatic shut-off features to prevent overheating. Proper placement is vital, as placing a heater too close to flammable materials creates significant risks.Understanding these factors helps you gauge whether using a space heater in your car is prudent. Keep the specifics of each type in mind, as they significantly influence heating efficiency and safety.Using a space heater in your car carries significant safety risks. Understanding these risks helps ensure your safety and the safety of others.Space heaters can ignite nearby flammable materials. Keep all items like blankets, clothing, and paper away from the heater. If you use a space heater, ensure it has safety features, such as an automatic shut-off in case of tipping. Monitor the heater closely and never leave it unattended while in use. Choose a location where the heater stands securely and isnt prone to being bumped or knocked over.Using fuel-burning heaters, like propane models, poses a carbon monoxide risk. Carbon monoxide is odorless and can accumulate quickly in enclosed spaces. Always ensure your vehicles windows are slightly open when operating these heaters. Install a carbon monoxide detector in your car for added safety, especially during extended usage. If you feel dizzy, headache, or nauseous, turn off the heater immediately and ventilate the area.Using a space heater in your car involves several legal aspects that vary by location and usage. Understanding these considerations ensures you remain compliant with laws and regulations.Many states impose restrictions on the use of portable heating devices in vehicles. Some regulations focus on fire safety, requiring that you use approved heating methods. Check with your local government or fire department to find specific laws in your area. For example, in California, using propane heaters inside a vehicle isnt allowed unless designed specifically for automotive use. Always verify the rules before using any heater, as violations can lead to fines or penalties.Using a space heater in your car can affect your insurance coverage. Some policies may not cover damages related to fire caused by improper heater use. Review your policy details and discuss with your insurance agent. If you choose to use a space heater, consider informing your insurer to ensure youre protected. Documentation of safety measures taken can also help in the event of a claim. Always prioritize safety and adherence to regulations to safeguard both your vehicle and your financial interests.Using a space heater in your car can be practical in certain situations, but knowing when and how to use it safely is crucial.Your car may break down in cold weather, leaving you stranded and vulnerable. A space heater can provide essential warmth during these emergencies. Opt for portable, battery-operated models for safety, considering how long they can run on battery power. Position the heater in a secure spot, away from flammable materials, and always monitor it closely. In case of a malfunction, being vigilant can prevent accidents.A space heater can enhance comfort during long waits in your car, especially when temperatures drop. For instance, when waiting for kids after school or during travel breaks, using a small heater can create a cozy environment. Choose a model with safety features like automatic shut-offs and overheat protection. Set it on a stable surface, and keep it clear of any items that could catch fire, including clothing or blankets. This ensures you enjoy warmth without compromising safety.You can stay warm in your car without using a space heater. Several alternatives prove effective and safe for adding heat when needed. Here are two practical options:Portable heaters designed for vehicles offer a viable alternative to traditional space heaters. These heaters connect to your cars power outlet. They often include safety features, such as automatic shut-off systems and overheat protection.When selecting a portable heater, consider models specifically made for automotive use to minimize risks. Look for options that operate quietly and efficiently. A few popular models include:12V Ceramic Heaters: Easy to plug into the cars power source. They warm a small area quickly and are lightweight.Electric Blankets: These blankets plug into your vehicles power outlet, providing direct warmth. Theyre ideal for use during long waits or when you prefer a snug feel.Insulation helps maintain heat inside your car, making it feel warmer without additional heating devices. Simple techniques can significantly improve heat retention:Window Covers: Use reflective window covers or insulated shades to block the cold from seeping through glass windows. These covers help retain body heat inside the vehicle.Seal Gaps: Check door seals and windows for leaks. Replacing worn weather stripping keeps cold air out and warmth in.Blankets and Sleeping Bags: Keep extra blankets in your car. Layering them or using them for insulation helps trap body heat effectively.These methods provide warmth and comfort without the risks associated with space heaters. Always prioritize safety and consider utilizing some combination of these alternatives when dealing with cold conditions in your car.Staying warm in your car during those chilly winter months doesnt have to be a daunting task. While space heaters can provide comfort, its crucial to weigh the safety risks and legal considerations before using one.Remember to prioritize safety by choosing heaters with automatic shut-off features and keeping flammable materials away. If you decide to use a space heater, keep a close eye on it and ensure proper ventilation, especially with fuel-burning models.Dont forget there are safer alternatives like 12V heaters and electric blankets that can keep you cozy without the risks. Whatever method you choose, staying warm should always be a safe experience.Using a space heater in a car can pose several safety risks, including fire hazards and carbon monoxide exposure. If you choose to use one, ensure it has safety features like automatic shut-off and keep flammable materials away from the heater. Its also crucial to monitor it closely for safety.The ideal types of space heaters for cars include ceramic heaters, infrared heaters, oil-filled radiators, and propane heaters. Each has its mechanism and efficiency, but look for models with safety features, such as automatic shut-off, to minimize risks.When placing a space heater in your car, ensure it is on a stable surface away from flammable materials. Avoid placing it near upholstery or blankets. Regularly monitor its position to prevent accidents and potential fire hazards.Yes, many states have regulations regarding the use of portable heating devices in vehicles due to safety concerns. Its essential to check local laws to avoid any legal issues or fines associated with using space heaters in your car.Insurance coverage for damages from using a space heater in your car can vary by policy. Its advisable to review your insurance terms and disclose any safety measures you implement to ensure youre covered in case of an incident.Safe alternatives to space heaters include 12V ceramic heaters designed for vehicles and electric blankets. Additionally, using insulation techniques, such as reflective window covers and extra blankets, can help maintain warmth without added risks.In an emergency, opt for portable, battery-operated space heaters, ensuring they have safety features. Constantly monitor the heater while its in use, and ensure proper ventilation to mitigate risks associated with fuel-burning models.

Space heater shuts off after a few minutes. Space heater won't turn on. Space heater noise. Space heater fix. Space heater suddenly stopped working.