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- **1.0.**

If you already spent all that time getting it out the car its not a bad idea to replace the expansion valve and do the best you can to wrap it in some thermo insulation material. I used some packaging material and tape to hold it in place. Now that I think about it maybe glue would have been a better idea. Then wait 20 min and flush it out with shop air. I was fortunate enough to be able to use the shop compressor at my school. If you use a portable one it most likely will not be able to keep up with demand and you will have to wait for the tank to refill. Add Tip Ask Question Comment Download Step 3 Compressor If your compressor is leaking freon from the central oring seal or making clicking noises then its probably time to replace it. The replacement is straight forward, I didnt find any surprises when I replaced mine. One thing to keep in mind is to add oil to the suction side and rotate the clutch 15 to 20 times to make sure the oil clears. Also when installing the compressor be sure to tighten the four bolts evenly in a circular pattern to prevent the compressor case from being deformed. And when installing new seals for the freon pipe be sure to rub a little bit of oil on them. Below are pictures of an my oil compressor.This not only keeps the price down, but also creates less paper wastes. Since the drier absorbs moisture that may have entered the system. When you installing a new drier make sure to drain the oil from the old one and place the same amount of new oil in the new drier. This should be done right before vacuuming, since the drier will become useless after two hours or so of being in the open.Electric pumps sell for a couple of hundred dollars, so if you already own an air compressor you might want to look into an air powered vacuum pump for under fifty dollars.It is recommended that this be done when the temperature is above 80 degrees. So try not to be like me and do it in the middle of winter, if possible.<http://gorod-r.com/userfiles/3g3hv-manual.xml>

If the vacuum drops a little bit that means that some water has evaporated so just turn the pump on to pull it out. Then let the vacuum sit for a minimum of 45min. If the pressure can not kept then that means that there is a leak some where in the system. Be sure to repair it before filling up the system. Add Tip Ask Question Comment Download Step 5 Filling the System Once you are sure that the system can hold a vacuum for an hour you may proceed to filling the system with Freon. If your car ran on Freon R12 from the factory and you have the means to purchases it you can use R12 or Freeze 12 to get maximum performance. If you are not certified then you have the choose Enviro Safe, R134a and I have heard that propane can also be used. I chose to use R134a for my retrofit. You probably will not notice difference between using R134a instead of R12 if you do not live in Death Valley California. Once you have the can of Freon hooked up to the service line of the manifold gauge middle or yellow, you should purge the air from the hose. If you do not have a purge valve then turn the can upside down and unscrew the hose a little bit until air starts to come out and as soon as liquid starts to come out tight it. When refilling the system, I would recommend that you wear goggles. Once the air is removed you can open the low side and start filling. NEVER fill through the high pressure side as tough this may cause the can to explode. If you are adding a can of Freon with UV dye or oil you need to have the can upside down. This will cause liquid instead of gas to come out; you should open the low side valve just a little bit in order to have a little bit flowing. Be careful not to get liquid inside the compressor; as liquid is not compressible and can cause damage to the compressor. If you are just adding a can of Freon and nothing else than keep the can right side up and the valve fully open.

If you want to speed up the refill process then dump the can in some warm water or heat it with a hair drier. Do not use heat guns, gas burners or boiling hot water. Now it is time to determine when to stop filling the system. I find that the best way is to fill the system until it comes close to the chart above chart. Because every car is a little bit different you will need to find the best pressure for your vehicle and to do that you will need helper and digital cooking thermometer. What did was I had my brother in the car looking at the thermometer which is in the center vent. When the pressure in the manifold gauges is around 30 psi away from the chart value, I start to let in less Freon and I wait until my brother says to stop. What my bother is doing is watching until the temperature stops dropping or starts to rise and says stop. System top off If you are just adding a little bit of freon to the system and you dont want to purchase an expensive manifold gauge, then you can use the simple hose that comes with no gauge. The way to determine when the system is full is to look at the sight glass until you see liquid with no bubbles or no foam appears. Another way is to add freon until the low side line under the hood starts to have water condensation. The last way is to use the center vent temperature method mentioned above. Add Tip Ask Question Comment Download Step 6 Leak Checking Leak checking can be done with a leak checking device. You will need to hold the device up to any connection, compressor, condenser and the drier. When checking the condenser, take your time and check all the rock chips. When checking the service valves do not push the sniffer directly down wards because it can push the valve down and give you a false reading. If you cannot find a leak you can always turn up the sensitivity on the leak detector. Unfortunately there is no way to check the evaporator for leaks.

Add Tip Ask Question Comment Download Step 7 Useful Tools Here are two tools that can be useful when servicing air conditioners. The firsts one is a valve removal and installation tool. The second on is used to straighten heat exchangers fins. Add Tip Ask Question Comment Download Step 8 Here are some links with extra explanation Add Tip Ask Question Comment Download Share it with us! I Made It! Recommendations Top 10 Ways to Cut Metal Without an Angle Grinder! How do I fix this I will try to explain this as simply as possible. If it has moisture it was introduced in one of two ways. Either all the Freon leaked out and someone just added Freon or someone added Freon and did not purge the air out of the hoses. 1 If it loss all the Freon it has a leak and you CAN NOT just vacuum the system and recharge. The reason is when you try to vacuum it will be constantly pulling in air as

you are vacuuming. The air contains moisture. Solution Repair the leak, Evacuate, and recharge the system. 2 If someone added freon and did not properly purge air from the hoses that would introduce moisture. But here is the problem Why would someone add Freon if there wasnt a leak. Answer they wouldnt unless they didnt know what they were doing. Let be sum up something that driveway mechanics dont know and you tube videos dont tell you. FREON Refrigerant never wears out or loses its chemical compound. If some trys to tell you they are going to put new Freon in your car because the refrigerant is old you should run as fast as you can. Freon, because it is sealed in the system will last forever.it NEVER goes bad and will last thousands of years which is why they banned certain refrigerants because they will get released into the atmosphere and stay there and supposedly ruin the ozone!!! 0 JohnA500 The motor compressor in a auto does not have a capacitor. Most times when auto AC fails it is because it has a leak. The leak must be repaired. Everyone thinks they can JUST ADD FREON!!!

Thats where the problem begins. 0 JohnJ399 Question I want instructions on how to change them correctly. My car is a 2006 Chrysler 300 touring awd with the 3.5 L engine. It's showing pressure loss from the machine the mechanic used. I've tried to refill it with Freon, it blows cold air for 10 minutes then hot air again. It goes empty with Freon within 10 minutes. It's not the compressor. I had a new compressor installed last year. My uncle who is an auto mechanic said it could be the compressor relief valve being stuck open. I got a set of orings and gaskets. That was a small price, I'll try that first. My uncle said it would be rare for the orings or gaskets to go bad for no reason at all. 0 OpticHash A vacuum should be pulled to under 500 microns measured with a micron gauge. Without it your not sure if there is still moisture present in the system or the pump is capable of going that low to get all your noncondensables out. Leak testing with a vacuum doesnt mean there is not leak. At most a deep vacuum is only putting 30psi pressure on the outside of the pipe pushing in, and dirt can get sucked into a crevice temporarily stopping any noticeable leaks. R134a can achieve what like a little under 200 psi. If possible use dry nitrogen and fill to 150 psi then wait to see if it leaks. Dont use air and definitely dont use oxygen unless you like explosions. Checking with a vacuum is even less effective than you state; at sea level the most pressure you will get pushing in from outside is atmospheric pressure, about 14.7psi 0 YanchunL That was probably hard work. Your detail is much appreciated. 0 mthomp525 It isnt freezing up. Cheers, Nello 0 mthomp525 The smell is a problem on older cars, that is why newer vehicles come with a cabin air filter to prevent dust and other things from getting into the evaporator and decomposing. They do make products to try and clean it without disassembling the dash. Sometimes they work and most of the time they dont.

The bast way to cure the smell is to take dash apart and clean the evaporator with bleach or some type of recommended coil cleaner. 0 bchenry Also evaporator leaks can be found with an electronic leak detector at the evaporator drain or by taking out the blower motor resistor and checking through there dye often will show up there as well. Recovering hoses is also required by law if the hose is longer than 1foot. Also the EPA license to buy R12 is really easy, its an open book test and can be taken through ASE. 0 ahooper. Test conditions 1 Ignition switch ON 2 Temperature control lever MAX COOL 3 Blower switch HI If circuit is as specified, replace the amplifier. MAGNET CLUTCH DISASSEMBLY AIR CONDITIONING SYSTEM AIR CONDITIONER AMPLIFIER AC25 AIR CONDITIONER AMPLIFIER INSPECT AMPLIFIER CIRCUIT Disconnect the amplifier and inspect the connector on the wire harness side as shown in the chart below. Test conditions 1 Ignition ON 2 Temperature control lever MAX. COOL 3 Blower switch HI FZ Series Engine If circuit is as specified, replace the amplifier. We are a nonprofit group that run this service to share documents. We need your help to maintenance and improve this website. August 10, 2020 What If I Replace Just One Tire. August 3, 2020 Can I Replace Run Flat Tires with Regular Tires. June 15, 2020 What Causes Flat Spots on Tires. May 18, 2020 What Does Brake Fluid Do. April 21, 2020 Batteries 7 Things That Can Drain Your Car Battery February 17, 2020 Interstate Battery August 6, 2019 How to Charge a Car Battery July 1, 2019 How to Know When to Replace Your Car Battery February 20, 2019 Alignment

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Refer to your Owner's Manual for more information. Bring your ride to us as soon as you start noticing this symptom, it could mean the difference between needing a small repair, or worse, a large one. Here's what can cause your cold air to lose its cool. The lack of precious cold air could be caused by A Freon leak caused by a failed oring, seal, hose or component A clogged expansion tube or refrigerant charging hose Failed compressor or compressor clutch Failed blower motor or blower motor resistor Damaged or failed condenser or evaporator Vacuum leaks Failed switch, fuse, relay, control module, blend door or solenoid Leaks can be devastating. Well, like many complicated stories, there's never one simple answer. Your best bet is to have us inspect your system for any of the following listed symptoms. From cold to hot and all the symptoms in between The clogged expansion valve The expansion valve distributes the proper amount of refrigerant to your evaporator. If the valve is blocked, the refrigerant can't flow into the evaporator. With the valve clogged, the refrigerant will start to freeze the valve altogether if moisture is present. Faulty compressor clutch If the clutch is not engaging with your compressor, than your compressor can't maintain the correct pressure. Hot air will result. The blown fuse scenario Fuses sometimes short out. When moisture and refrigerant mix, nasty corrosive acids will eat away at seals and components, causing a leak. Sounds like you have an odorific problem on your hands. There are a few issues that may be causing this smell. Potential causes of nasty "gym locker" odors Dirty and old air cabin filter. Moldy evaporator case. A problem for many vehicles when water sits in the evaporator case because the case's drain is blocked. Mold will accumulate. Detecting leaks Black light enabled dyes. You read that right. A lot of refrigerants are premixed with a special U.V. dye that shows up under black light. Bring in the "sniffer.

" A sniffer is a special device that hones in on the refrigerant's chemical components. If there's a leak, our sniffer will sniff it out. Quick fact If moisture is present, it could damage your accumulator,

receiver or drier. Post tagged How Tos Summer Car Problems Related Posts What Does an Alternator Do. What Happens If You Drive With Low Coolant. What to Consider When Storing Your Car for Weeks, Months, or More Schedule an appointment Save time in the store by booking your appointment online. Schedule Now Top posts 1. Should I Inflate My Tires in Cold Weather. October 30, 2018 2. Help! My Parking Brake's Stuck October 23, 2017 3. Car Battery Problems When is it Time for a New Battery. August 22, 2016 Get Offers and Coupons Save on tires, brakes, batteries, oil changes and more. See Coupons Get a free tire quote Find the best tires that match your needs. Get A Quote Find A Store Find your nearest location. Many stores are open late and on weekends. All Rights Reserved. The times of the Renaissance reformer finished. Rather, most current mechanics practice. Today, we have motor developers, front end pros, tuning authorities, transportation masters, and so on. For the correct conditions refer to repair procedures. If contaminated by foreign oil or additives, such as the wrong or too much UV dye, the refrigerant cycle must be flushed before new parts are installed. In case Leak Stop, imitation refrigerants or severe contamination are present, flushing is no longer sufficient and the complete system must be replaced. When flushing the refrigerant cycle we recommend the use of dedicated flushing equipment. Conditions for flushing are All parts need to be replaced! When applicable always add the oil in the condenser, receiver dryer or second evaporator cycle. To recognise which type of oil to use check the compressor identification label, either attached to the rear or side of the compressor.

Mixing with other oils or using universal oil will reduce the lifetime of a compressor and can cause severe damage. When using other type of oils than specified, warranty is void. The purpose is to distribute compressor oil and start up lubrication in order to prevent damage directly after new installation. After removal of the old compressor check the suction port, discharge port and discharge hose. Depending on the situation found, refer to procedure 1, 2, 3 or 4. Condition a The system is clean. Use the following calculation to confirm the correct amount of oil to remove from the compressor. Condition a Incorrect oil or additives are found. Do not remove oil from the new compressor. Review car manufacturer data to check if it is necessary to adjust the oil quantity. Condition a Black particles are found in the refrigerant cycle. Clean the remaining parts of the refrigerant cycle by flushing. Do not remove oil from the new compressor. Review car manufacturer data to check if it is necessary to adjust the oil quantity. Condition a Black sludge and metal particles are found in the refrigerant cycle. Cleaning of the refrigerant cycle is not possible. Review car manufacturer data to check if it is necessary to adjust the oil quantity. For more information about cookies, privacy and copyright, please refer to our full privacy policy, visible here. Its possible that your entry will only be visible in the guestbook after we reviewed it. We reserve the right to edit, delete, or not publish entries. Its possible that your entry will only be visible in the guestbook after we reviewed it. We reserve the right to edit, delete, or not publish entries. Sutinku Privatumo politika. Our range of diagnostics and service units offers you the entire spectrum of professional equipment. It is also crucial to ensure the correct filling quantities. Scroll through this page and find out about the different variants of refrigerant and compressor oils.

You can also find important information on refilling refrigerant and a link to the refrigerant and oil filling quantity manual. The information provided on this website is intended for use by suitably qualified personnel only. Even today, the conversion from R12 to R134a is still an ongoing topic in the area of classic and modern classic cars as well as in several nonEU countries. In the course of conversion, the system must be checked for leak tightness. Leaks must be corrected beforehand. All components should be checked for function and damage. The filter dryer is to be replaced. Sealing rings should be replaced. In addition, the mineral oil of the R12 system is to be replaced with PAG or PAO oil. In the course of this replacement it is also recommended to flush the airconditioning system. R134a has a high GWP global warming potential of 1430. Airconditioning systems in vehicles of class M1 passenger cars, vehicles with up to 8 passenger seats and class N1 commercial vehicles with a permissible total weight of up to 3.5 metric tons for which a type approval was issued

within the EU as of January 1, 2011, can therefore no longer be filled with R134a. As of January 1, 2017, vehicles filled with R134a are no longer entitled to receive initial registration approval. R134a can, however, continue to be used to carry out service and maintenance work on existing R134a systems. R1234yf with a GWP of 4 shall be used as new refrigerant. Other refrigerants can also be used, however, provided their GWP value is below 150. Only in time will it become apparent if all vehicle manufacturers agree on a single refrigerant, or whether different refrigerants will be used. This, of course, also impacts workshops and their service personnel. As such, it appears that purchasing new service units is something that cannot be avoided. Separate measures with respect to storing and handling the new refrigerants must certainly also be observed.

Under normal atmospheric pressure and ambient temperatures, liquid refrigerant evaporates so quickly that any physical contact with the skin or eyes can cause the tissue to freeze risk of blindness. If direct physical contact has been made, thoroughly rinse the affected areas with a generous supply of cold water. Do not rub. Seek the medical attention of a doctor immediately. The workplace must be well ventilated for working on refrigerant circuits. Breathing in high concentrations of gaseous refrigerant can cause dizziness and even suffocation. Do not work on the refrigerant circuit from an inspection pit. As gaseous refrigerant is heavier than air, it can collect in high concentrations there. Do not smoke! Refrigerant can be broken down into poisonous substances if it contacts cigarette ash. Do not introduce an open flame or hot metal in the immediate vicinity of refrigerant. Doing so can cause lethal gases to form. Never allow refrigerant to leak out into the atmosphere. If the refrigerant reservoir or airconditioning system is opened, its contents will escape under high pressure. The extent of the pressure depends on the temperature. The higher the temperature, the higher the pressure. Do not expose any components of the airconditioning system to heat. If this cannot be avoided, drain the airconditioning system beforehand. When removing the service tubes from the vehicle, do not point the connections toward your body. Refrigerant residues may leak. When cleaning the vehicle, do not point the steamjet cleaner directly onto parts of the airconditioning system. Never change the factory setting of the adjusting screw on the expansion valve. Our latest manual for refrigerant and oil filling quantities provides the answer for the most common vehicle types. If you would like to unsubscribe from the newsletter, please [click here](#). Under no circumstance will your data be given to a third party. Please try again later.

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