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(Disclaimer : As an Amazon Associate, we earn commissions from qualifying purchases at NO additional cost to the customer) Due to the nature of the job, many people may be compelled to stay away from home and on the other side, work from home culture has also been given preference now a days in corporates.And there may be several other reasons that necessitate people not to use their cars. This would mean your vehicle sits in the backyard for several months.Keeping the vehicle untouched for a longer period would affect the performance of many parts of a car.Why my car is not getting started? Why my car is not responding properly? Anybody would come across this question at some point in time when they resume using their car after a prolonged time.Various reasons could cause this irritating experience since the car has several auto components which would lead to this kind of problems.Diagnosing the root cause of the problem becomes difficult since most of the time the function of the vehicle parts is interdependent on many other parts downstream.Identifying the root cause involves a trial and error method of analyzing the parts concerned and using the technique of elimination to pinpoint the problem area.A Fuel pump is one such important part whose malfunction or deterioration would lead to severe vehicle performance issues and in the worst case, the engine doesn't get cranked at all.Can a fuel pump go bad from sitting? The short answer is yes, it may happen due to fuel oxidation, ethanol percentage and water content in fuel, fuel contamination, environmental corrosion and temperture conditions, clogging of fuel strainer, bad O-ring and seals used in fuel pump.If your car is not starting after sitting for a while and thinking of whether the fuel pump has gone bad, then you are at the right place.Here in this article, we will discuss in detail why do fuel pumps go bad and how to prevent the failure of the fuel pump, if you are not going to use the vehicle for a while.What Does A Fuel Pump Do?Before we proceed to know that can a fuel pump go bad from sitting it is essential to understand what is the function of a fuel pump and the parts of a fuel pump to easily correlate with what we are going to discuss.The fuel pump is considered the heart of a car. The main function of the fuel pump is to deliver the required flow rate of fuel from the fuel storage tank to the engine intake manifold at a certain pressure.There are two types of the fuel pump which are used in vehicles. One is mechanically operated and the other is electrically operated.The mechanical fuel pump is operated by the engine itself. The fuel tank is connected to a mechanical fuel pump by a fuel hose which draws fuel from the fuel tank by vacuum generated by a mechanical pump.The electric fuel pump is operated by a power supply from the battery. Electric fuel pumps are further divided into two types; one is an inline fuel pump and another one is an in-tank fuel pump.An Inline fuel pump is mounted external to the fuel tank on the chassis of the vehicle and is usually a positive displacement type pump.Intank fuel pump is usually mounted on top of the fuel tank and the pump is submerged in the fuel inside the tank. It is usually a centrifugal type pump having either impellers or roller cells to pressurize the fuel.What Are The Parts Of Electric Fuel Pump?Most modern vehicles that use an engine to propel the vehicle use an electric in-tank fuel pump.The in-tank electric fuel pump module typically consists of an electric motor, impeller, strainer or filter, pressure regulator, and a check valve.Electric motorAn electric motor is driven by a power supply from the vehicle's battery and is usually connected to the ECU (Electronic Control Unit) of the vehicle.It is typically a DC motor with brushes and commutators. In modern fuel pumps brushless or contactless motors are being used to prevent the formation of debris by the pump itself.ImpellerThe impeller is mounted on the shaft of the motor and it rotates along with the motor.The Impeller usually got specially designed cup-shaped portions on the periphery. When the impeller rotates, it creates suction pressure to draw fuel from the fuel tank and pushes it upstream towards the engine by the centrifugal force created on the discharge side of the fuel pump.Fuel strainer or filterThe fuel strainer or filter is the part through which the impeller sucks the fuel.During this process, the fuel is drawn through the fine fabric/mesh layers of the fuel strainer to filter out the contaminants, if any from the fuel.If these foreign matters are allowed without filtering, then they would end up clogging the fuel injectors on the engine.So filtration efficiency and dust carrying capacity of filters are what decides the performance of any fuel filter.This results in no or inconsistent fuel supply condition and the engine would not get cranked and it will become as good as a dead engine.Pressure regulatorThe main function of the pressure regulator is to maintain the pressure of fuel getting delivered to the engine.It opens at a certain predefined pressure and leaks the excess fuel flow or pressure back to the fuel tank.This pressure (usually 2.5 to 3.5 bar for gasoline fuel) is what ensures the atomization of fuel in the engine combustion chamber.Check valveThe check valve is there to prevent the reverse flow of fuel from the engine to the fuel pump or fuel tank when the vehicle is switched off. It allows fuel to flow only in the forward direction and not in reverse.Otherwise, the fuel hose which traverses from the fuel tank to the engine would become empty. So next time when you start the vehicle, fuel will not be readily available in the fuel hose for injection into the engine.It will take some time for the fuel to fill the entire fuel hose before it is available for consumption in the engine. This would lead to extended cranking time for the vehicle to start.To avoid this delay in fuel injection, a check valve is incorporated at the fuel pump outlet portion.Can A Fuel Pump Go Bad From Sitting?If you were not using your car for a long time due to various reasons and on one fine day you wanted to go for an outing and you notice that your vehicle is not getting started, then you have reason to worry since the car parts are known to malfunction if kept unused for a while.Since the fuel pump is what keeps the engine alive, it is natural to question, can a fuel pump go bad from sitting? The short answer is yes.When the fuel pump sits idle inside the fuel tank of a car for a prolonged period, various external sources will act upon the parts of the fuel pump and fuel tank and can make the fuel pump go dead.What causes a fuel pump to go bad? What can mess up the fuel pump? If these queries are wandering in your mind then, you will get your doubts cleared after going through the below reasons.Fuel oxidationOxidized FuelThis is the single largest contributor to make your fuel pump go bad. Do you know that the gasoline which is inside the fuel tank gets oxidized when left unused for a longer time?Yes. The oxygen which is inside the fuel tank above the fuel level surface reacts with the hydrocarbon compounds of the fuel and gets oxidized and creates acidic byproducts and leaves unstable and gummy precipitates.The acidic byproduct causes premature rusting of the parts which comes in contact with it, making it lose its primary functions.The resulting gummy and unstable precipitates sticks, attacks, and jams the parts of the fuel pump and thereby makes the fuel pump go bad and dead.The state of gasoline can also be determined by its look and smell. The pungent smell of the oxidized fuel is extremely unpleasant. You will not be able to tolerate its odor. The color of the fuel turns darker and muddier than fresh gas.The period the fuel can remain useable in your gas tank depends on the fuel type.Based on research and experiments, it is evident that the gasoline can withstand three to six months before it goes unstable, while diesel fuel will have a shelf life of a year before it becomes unusable.On the other hand, Ethanol based gasoline like E10 & E20, etc., which has a higher Reid Vapor Pressure (RVP) can lose their properties and get degraded in just one to three months. This is due to rapid evaporation and oxidation of oxygenated fuel like ethanol.Water contamination in fuelWater is used in the manufacturing of fuel from petrochemicals by the distillation process. At the end of the process, some water may remain in the fuel.Besides, moisture in the air which is present in the headspace of the fuel tank may get condensed in the fuel.Also, if the vehicle is kept open to the atmosphere and the fuel cap lid is not present and the fuel cap seals are not tightly sealed, then the water may enter the fuel tank through the fuel cap sealing path.This water often finds its way to the fuel tank and corrodes the parts of the fuel pump and the fuel tank, making it difficult to perform its intended function of pumping the fuel.This corrosion depends on the length of time the fuel pump is exposed to this water-contaminated fuel.Ethanol percentage in fuelFuel Tank CorrosionThe ethanol fuel is known for its hygroscopic properties. This means it has more affinity to absorb water or its vapor from the atmosphere.Apart from the general condensation of moisture from the atmosphere, this hygroscopic property of ethanol makes the situation tough for the fuel pump and fuel system parts.This water content in fuel causes corrosion of fuel pump parts and makes it unusable. Ethanol is a good conductor of electricity; hence it acts as a good electrolytic medium for corrosion.Moreover, ethanol is naturally corrosive in its chemical property and is ready to attack any coated metal parts.More the ethanol percentage in fuel, the higher is the amplification of the problem associated with it.Environmental corrosionThe headspace atmosphere of the fuel tank above the fuel level and the ambient outside environmental conditions aggravate the corrosion of fuel pump and fuel tank parts.Every component of a vehicle has some surface treatment done to protect it from the external environment.But these protective coating gives limited hours of protection which is generally measured in neutral salt spray hours.After that specific period, the base metal gets exposed to direct environmental attack and causes the formation of white rust first and when the situation goes out of control it becomes red rust which means the part nears the end of life.Once the internal parts are corroded then there will not be smooth movement of internal parts and the parts get stuck against each other and get jammed.This affects the fuel pumping action and the pump gives inconsistent and unreliable delivery and fuel pressure and goes bad subsequently.Many times, the fuel pump electrical terminals also get corroded & electrical conductivity gets breaks down.This means the fuel pump would be electrically dead and there will be no more rotation of the motor and the pump and hence the pumping action.Environmental temperature and conditionsWhere you have parked your vehicle for a long time plays an important role in determining the health of your fuel pump.If the vehicle is parked directly under the sunlight, then the above-mentioned fuel oxidation, corrosion due to water contamination, environment, and ethanol attack would get aggravated due to higher ambient temperatures.Also, if the place at which you reside is close to sea level, then the environmental conditions would be more corrosive. The salt spray life offered by the surface treatment on the parts would reach its life limit early.This leads to premature degradation of fuel pump parts and failure of the fuel pump.Clogged fuel strainerThe corrosion particles which are formed due to the effect of fuel oxidation, water contamination, and environmental corrosion attack gets entangled in the fabric mesh of the fuel strainer and thereby clogs it.Once the fuel strainer is clogged, the pump can no more suck the fuel across the fuel strainer mesh. The clogged strainer acts as a solid wall and creates a pressure drop in the outlet delivery of the fuel pump.Typically, in a fuel pump module, there use to be one vapor jet hole on the pressurized side of the pump to ensure priming of the fuel pump to push out the air inside the fuel pump to the fuel tank to prevent air lock inside the fuel pump.But in the event of fuel strainer clogged condition, suction pressure increases to such an extent that this negative pressure builds up at the vapor jet hole and starts sucking the unfiltered fuel directly from the fuel tank.If the fuel is contaminated with the above highly corrosive particles then it makes irreversible damages to the internal parts like the impeller, pressure regulator and affects the performance of the fuel pump extensively to such an extent that the fuel pump can go bad later if not looked into and fixed.The placement of fuel filter or strainer is of prime importance. People often get confused whether the fuel filter to be placed before or after pump for best pump performance, but this depends on type of fuel filter, mesh size and type of fuel pump.Fuel contaminantsThe contaminants which are present in the fuel stimulates the corrosion of the fuel pump parts to some extent. Unless the fuel cap is tightly sealed, the contaminants mostly enter the fuel through the fuel filling stations.The debris which is present in the underground fuel storage tanks at fuel pumping stations gets mixed up with the fuel and finds its way into the fuel tank.A certain amount of foreign matters can be managed by the fuel strainer but once it reaches the certain threshold limit, it gets clogged as mentioned earlier and the amount of contaminants will go on increasing and will affect the fuel pump performance.The contaminants also wear the brushes of the fuel pump which makes it draw more current to maintain the fuel pressure. More current drawn will burn out the connectors and harnesses of the fuel pump and cause the fuel pump to go bad.O-ring and Seal damageIf you don't use the vehicle for a long time, the important O-rings and other such seals which serve the purpose of leak-proof interface get dried, cracked, and damaged.This leads to internal leakage joints and will prevent the generation of required pressure in the fuel pump and the fuel flow rate also gets affected resulting in inconsistent fuel pump performance.How To Bench Test A Fuel Pump?Before you go for bench testing the fuel pump, it is necessary to confirm whether the fuel pump is pumping the fuel or not. For this, you can loosen the screws or bolts of the fuel filter or loosen the hose connection joint at the fuel filter nozzle.When you crank the engine, if you find that there is no fuel leaking through the above joints and interface then probably the fuel pump is not pumping at all. Electrical connections need to be checked to confirm the same.On the other hand, if you find fuel leaking through the loose joints, that means the fuel pump is developing some flow and pressure, but whether it is sufficient or not is the problem in question. Then you need to check the flow characteristics of the fuel pump.In modern vehicles, the fuel pump is usually located on the top of the fuel tank. You may easily access the same through the access window beneath the rear passenger seat.In some cases, people cut hole in truck bed for accessing the fuel pump without dropping the fuel tank or removeing the truck bed for troubleshooting the fuel pump.Check circuit continuityClean the positive and negative terminals of the fuel, if there are any deposits on it.Connect a multimeter to the terminals and set it to check continuity. Connect multimeter probes to the terminals of the purge valve. The multimeter shall produce a continuous sound which confirms that the wiring circuit is continuous.Check voltage across fuel pump terminalsConnect the multimeter's one lead to the ground terminal and another one to the positive terminal.If the multimeter reads 12 V then the battery power supply is ok. If not check the wiring and the fuel pump relays for any problem.Next, connect one lead to the ground and another one to the negative terminal. The multimeter shall read less than 0.5 V. If it measures more than 0.5 V, then there are bad earthing connections.Check fuel pressureConnect a rubber hose to the outlet nozzle of the fuel pump. Provide a mechanical lever or a control valve kind of arrangement to adjust the opening or flow or pressure in the outlet hose.Connect a pressure gauge in series with the valve. Provide battery power supply to the fuel pump.Completely block the outlet hose and check the blocked condition pressure that the pump develops and confirm whether it is within the specification mentioned in the owner's manual.If not, the pump has deteriorated and it is going to affect the performance of the pump and vehicle.Check fuel flow rateIn the above setup, instead of complete blocking of the outlet hose, adjust the opening of the control valve such that it develops the required operating pressure in the outlet hose.The pressure values usually vary from 40 to 60 psi and it varies between manufacturers. You need to look into the owner's manual to find out what is the specifications for the pump.Measure the flow rate of the fuel and confirm whether it is as per specifications. If not, the pump has gone bad.How To Keep Fuel Pump From Going Bad?If we face some problems with the fuel pump in past, it is natural to think and strive to make arrangements so that it will not happen in the future. If you are looking for ways to keep the fuel pump from going bad then below are some tips to ensure the trouble-free performance of the fuel pump.Drive your vehicle a few times a weekThe fuel starts its journey from petroleum refineries where it is stored for some time before it gets transported to pumping stations.Depending upon how much rush is there in filling stations and how much is the storage capacity of underground tanks, the fuel may sit there before you refill your vehicle's fuel tank.So as explained earlier even though the fuel lasts for some months before it goes unstable since it is difficult to estimate the life of the fuel.So, it is recommended to drive your vehicle a few times a week to consume the fuel available inside the fuel tank and keep your fuel system and vehicle parts lubricated.Add additives/fuel stabilizers to fuelIf driving your vehicle once a week is not possible, then you may add additives or fuel stabilizers to your fuel. The stabilizers slow down the process of fuel oxidation and would keep the fuel fresh for 12 to 15 months.Fuel stabilizers prevent the formation of acids and gummy particles due to oxidation which otherwise would causes rusting and jamming of parts which comes in contact with oxidized fuel.The fuel stabilizers shall be added to the fuel just before you go to hibernation mode, but do remember that the fuel stabilizers added to already oxidized fuel are not going to reinstate the fuel to its original fresh condition, as it will not serve any purpose.Once the fuel stabilizer is added, ensure you drive the vehicle for few minutes so that the stabilizer mixed fuel reaches all the parts of the fuel system and engine parts not just the fuel tank.This is necessary since the fuel sitting in other parts also shall not get oxidized, otherwise, the problem area will shift from the fuel pump to other parts of the fuel system.Drain out the fuel from the tankIf you are not going to use the vehicle for more than 6 months, then it is advisable (if possible) to completely drain out the fuel from the tank and run the vehicle till it shuts down automatically until it consumes the last drop of fuel in the system.By doing so, you can keep your fuel pump protected for years. If the fuel tank is emptied, then there will not be any question of fuel getting oxidized. Isn't it?Top up the fuel tankIn case of the addition of fuel stabilizers to the fuel, it is sensible to top up the fuel tank to the brim of the fuel filler neck to ensure no headspace empty volume inside the fuel tank.This ensures that there is no oxygen and moisture left inside the fuel tank for the oxidation of fuel.Replace the fuel pump strainer with a new oneIf the fuel pump strainer alone is clogged with corrosive particles, then you may try replacing the fuel strainer with new one to see whether the fuel pump works fine.Usually, the fuel strainer is to be replaced with a new one as recommended by the vehicle manufacturer to avoid overloading the fuel pump, since the clogged strainer would mean that the pump shall work more to maintain the discharge pressure and flow.Park your vehicle inside the garageAs discussed earlier, the lower the ambient temperature lesser will be the reaction of fuel with the oxygen in the atmosphere.So it is logical to keep your vehicle parked inside the garage to maintain a relatively low temperature around your vehicle.Fill good quality fuelEnsure good quality gets filled in the fuel tank. Avoid the fuel filling when the tanker truck is refilling the ground storage tank of the fuel pumping stations.During this time the debris which gets settled at the bottom of the station storage tank gets agitated making it move up in the fuel level.Eventually, this debris may get sucked up and delivered to the fuel tank.How To Know If Fuel Pump Is Bad?The following are the symptoms that you may experience in your car if the fuel pump is going out. Engine sputtering at high speeds, losing Power when the Vehicle is under Stress, less response to acceleration, low fuel economy, engine starting problem, engine misfire, engine rough idling, engine overheating, car dies on heavy load, and so on.Since the symptoms which would occur in the case of a faulty fuel pump coincides with the problems which could happen in case of failure of other engine parts, it becomes difficult to differentiate the root cause of the problem.ConclusionEven though the fuel pump is a small part of the vehicle, it plays an extremely role in the vehicle system to keep the wheels moving.Fuel oxidation is a major phenomenon that affects the entire fuel system especially the fuel pump. So If you're going to leave the vehicle parked for more than a couple of months, you would like to drain the tank and refill it with fresh fuel before you start the vehicle ride.This is not only because the vehicle will behave erratically and not operate as expected, but also because bad gasoline can cause damage to the internal parts of your engine components and also produce a sticky residue that could line all the parts and create havoc in your vehicles fuel system.The stabilizer and additives help to slow down the oxidation process, otherwise, these gummy precipitates of oxidation would turn gas into the garbage that can gunk up your vehicle system, and if left unnoticed the damage becomes costly to repair.Hope with the above information you would able to pinpoint whether the problem is in the fuel pump or it is somewhere else!References //www.chevytalk.org/fusionbb/showtopic.php?tid/292273/ ArticlesFuel Pump Primes But No Pressure? Everything you Need To Know!Car Won't Start After Fuel Pump Replacement? All You Need To Know!Fuel Pump Not Priming? Reasons And Solutions To Fix It!Fuel Pump Runs Continuously With Key On? (9 Causes And Solutions To Fix It!)

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The clogged strainer acts as a solid wall and creates a pressure drop in the outlet delivery of the fuel pump.Typically, in a fuel pump module, there use to be one vapor jet hole on the pressurized side of the pump to ensure priming of the fuel pump to push out the air inside the fuel pump to the fuel tank to prevent air lock inside the fuel pump.But in the event of fuel strainer clogged condition, suction pressure increases to such an extent that this negative pressure builds up at the vapor jet hole and starts sucking the unfiltered fuel directly from the fuel tank.If the fuel is contaminated with the above highly corrosive particles then it makes irreversible damages to the internal parts like the impeller, pressure regulator and affects the performance of the fuel pump extensively to such an extent that the fuel pump can go bad later if not looked into and fixed.The placement of fuel filter or strainer is of prime importance. People often get confused whether the fuel filter to be placed before or after pump for best pump performance, but this depends on type of fuel filter, mesh size and type of fuel pump.Fuel contaminantsThe contaminants which are present in the fuel stimulates the corrosion of the fuel pump parts to some extent. Unless the fuel cap is tightly sealed, the contaminants mostly enter the fuel through the fuel filling stations.The debris which is present in the underground fuel storage tanks at fuel pumping stations gets mixed up with the fuel and finds its way into the fuel tank.A certain amount of foreign matters can be managed by the fuel strainer but once it reaches the certain threshold limit, it gets clogged as mentioned earlier and the amount of contaminants will go on increasing and will affect the fuel pump performance.The contaminants also wear the brushes of the fuel pump which makes it draw more current to maintain the fuel pressure. More current drawn will burn out the connectors and harnesses of the fuel pump and cause the fuel pump to go bad.O-ring and Seal damageIf you don't use the vehicle for a long time, the important O-rings and other such seals which serve the purpose of leak-proof interface get dried, cracked, and damaged.This leads to internal leakage joints and will prevent the generation of required pressure in the fuel pump and the fuel flow rate also gets affected resulting in inconsistent fuel pump performance.How To Bench Test A Fuel Pump?Before you go for bench testing the fuel pump, it is necessary to confirm whether the fuel pump is pumping the fuel or not. For this, you can loosen the screws or bolts of the fuel filter or loosen the hose connection joint at the fuel filter nozzle.When you crank the engine, if you find that there is no fuel leaking through the above joints and interface then probably the fuel pump is not pumping at all. Electrical connections need to be checked to confirm the same.On the other hand, if you find fuel leaking through the loose joints, that means the fuel pump is developing some flow and pressure, but whether it is sufficient or not is the problem in question. Then you need to check the flow characteristics of the fuel pump.In modern vehicles, the fuel pump is usually located on the top of the fuel tank. You may easily access the same through the access window beneath the rear passenger seat.In some cases, people cut hole in truck bed for accessing the fuel pump without dropping the fuel tank or removeing the truck bed for troubleshooting the fuel pump.Check circuit continuityClean the positive and negative terminals of the fuel, if there are any deposits on it.Connect a multimeter to the terminals and set it to check continuity. Connect multimeter probes to the terminals of the purge valve. The multimeter shall produce a continuous sound which confirms that the wiring circuit is continuous.Check voltage across fuel pump terminalsConnect the multimeter's one lead to the ground terminal and another one to the positive terminal.If the multimeter reads 12 V then the battery power supply is ok. If not check the wiring and the fuel pump relays for any problem.Next, connect one lead to the ground and another one to the negative terminal. The multimeter shall read less than 0.5 V. If it measures more than 0.5 V, then there are bad earthing connections.Check fuel pressureConnect a rubber hose to the outlet nozzle of the fuel pump. Provide a mechanical lever or a control valve kind of arrangement to adjust the opening or flow or pressure in the outlet hose.Connect a pressure gauge in series with the valve. Provide battery power supply to the fuel pump.Completely block the outlet hose and check the blocked condition pressure that the pump develops and confirm whether it is within the specification mentioned in the owner's manual.If not, the pump has deteriorated and it is going to affect the performance of the pump and vehicle.Check fuel flow rateIn the above setup, instead of complete blocking of the outlet hose, adjust the opening of the control valve such that it develops the required operating pressure in the outlet hose.The pressure values usually vary from 40 to 60 psi and it varies between manufacturers. You need to look into the owner's manual to find out what is the specifications for the pump.Measure the flow rate of the fuel and confirm whether it is as per specifications. If not, the pump has gone bad.How To Keep Fuel Pump From Going Bad?If we face some problems with the fuel pump in past, it is natural to think and strive to make arrangements so that it will not happen in the future. If you are looking for ways to keep the fuel pump from going bad then below are some tips to ensure the trouble-free performance of the fuel pump.Drive your vehicle a few times a weekThe fuel starts its journey from petroleum refineries where it is stored for some time before it gets transported to pumping stations.Depending upon how much rush is there in filling stations and how much is the storage capacity of underground tanks, the fuel may sit there before you refill your vehicle's fuel tank.So as explained earlier even though the fuel lasts for some months before it goes unstable since it is difficult to estimate the life of the fuel.So, it is recommended to drive your vehicle a few times a week to consume the fuel available inside the fuel tank and keep your fuel system and vehicle parts lubricated.Add additives/fuel stabilizers to fuelIf driving your vehicle once a week is not possible, then you may add additives or fuel stabilizers to your fuel. The stabilizers slow down the process of fuel oxidation and would keep the fuel fresh for 12 to 15 months.Fuel stabilizers prevent the formation of acids and gummy particles due to oxidation which otherwise would causes rusting and jamming of parts which comes in contact with oxidized fuel.The fuel stabilizers shall be added to the fuel just before you go to hibernation mode, but do remember that the fuel stabilizers added to already oxidized fuel are not going to reinstate the fuel to its original fresh condition, as it will not serve any purpose.Once the fuel stabilizer is added, ensure you drive the vehicle for few minutes so that the stabilizer mixed fuel reaches all the parts of the fuel system and engine parts not just the fuel tank.This is necessary since the fuel sitting in other parts also shall not get oxidized, otherwise, the problem area will shift from the fuel pump to other parts of the fuel system.Drain out the fuel from the tankIf you are not going to use the vehicle for more than 6 months, then it is advisable (if possible) to completely drain out the fuel from the tank and run the vehicle till it shuts down automatically until it consumes the last drop of fuel in the system.By doing so, you can keep your fuel pump protected for years. If the fuel tank is emptied, then there will not be any question of fuel getting oxidized. Isn't it?Top up the fuel tankIn case of the addition of fuel stabilizers to the fuel, it is sensible to top up the fuel tank to the brim of the fuel filler neck to ensure no headspace empty volume inside the fuel tank.This ensures that there is no oxygen and moisture left inside the fuel tank for the oxidation of fuel.Replace the fuel pump strainer with a new oneIf the fuel pump strainer alone is clogged with corrosive particles, then you may try replacing the fuel strainer with new one to see whether the fuel pump works fine.Usually, the fuel strainer is to be replaced with a new one as recommended by the vehicle manufacturer to avoid overloading the fuel pump, since the clogged strainer would mean that the pump shall work more to maintain the discharge pressure and flow.Park your vehicle inside the garageAs discussed earlier, the lower the ambient temperature lesser will be the reaction of fuel with the oxygen in the atmosphere.So it is logical to keep your vehicle parked inside the garage to maintain a relatively low temperature around your vehicle.Fill good quality fuelEnsure good quality gets filled in the fuel tank. Avoid the fuel filling when the tanker truck is refilling the ground storage tank of the fuel pumping stations.During this time the debris which gets settled at the bottom of the station storage tank gets agitated making it move up in the fuel level.Eventually, this debris may get sucked up and delivered to the fuel tank.How To Know If Fuel Pump Is Bad?The following are the symptoms that you may experience in your car if the fuel pump is going out. Engine sputtering at high speeds, losing Power when the Vehicle is under Stress, less response to acceleration, low fuel economy, engine starting problem, engine misfire, engine rough idling, engine overheating, car dies on heavy load, and so on.Since the symptoms which would occur in the case of a faulty fuel pump coincides with the problems which could happen in case of failure of other engine parts, it becomes difficult to differentiate the root cause of the problem.ConclusionEven though the fuel pump is a small part of the vehicle, it plays an extremely role in the vehicle system to keep the wheels moving.Fuel oxidation is a major phenomenon that affects the entire fuel system especially the fuel pump. So If you're going to leave the vehicle parked for more than a couple of months, you would like to drain the tank and refill it with fresh fuel before you start the vehicle ride.This is not only because the vehicle will behave erratically and not operate as expected, but also because bad gasoline can cause damage to the internal parts of your engine components and also produce a sticky residue that could line all the parts and create havoc in your vehicles fuel system.The stabilizer and additives help to slow down the oxidation process, otherwise, these gummy precipitates of oxidation would turn gas into the garbage that can gunk up your vehicle system, and if left unnoticed the damage becomes costly to repair.Hope with the above information you would able to pinpoint whether the problem is in the fuel pump or it is somewhere else!References //www.chevytalk.org/fusionbb/showtopic.php?tid/292273/ ArticlesFuel Pump Primes But No Pressure? Everything you Need To Know!Car Won't Start After Fuel Pump Replacement? All You Need To Know!Fuel Pump Not Priming? Reasons And Solutions To Fix It!Fuel Pump Runs Continuously With Key On? (9 Causes And Solutions To Fix It!) Ever felt like your car's acting up, but it keeps rolling? Fuel pumps can be sneaky that way. They might seem fine at first, but under the hood, they could be plotting a mischief.A fuel pump's job is to shuttle fuel from the tank to the engine. Simple as it sounds, this task is crucial. But what happens when it starts malfunctioning yet still works? You've got performance issues that crop up when you least expect them.Dimming lights, stuttering acceleration, and weird noises might have you scratching your head. Are these signs of a bad fuel pump that's still chugging along? Sure, it's possible. Many drivers face this puzzling scenario and wonder what their car's trying to tell them.Before you panic or shell out the cash for repairs, there are some telltale signs and simple checks you can do yourself. Knowing what these are can save you time, money, and a stranded car. Understanding Fuel Pump FunctionalityAlright, let's get into the nitty-gritty of how fuel pumps work. Your car's engine relies on a steady flow of fuel, and the fuel pump makes that happen. It's like a reliable friend making sure your engine's never running on empty.Here's the deal: the fuel pump is usually located inside the tank. It's designed to push fuel from the tank, along the fuel line, and up to the engine. It's not just about moving fuel; it's about delivering it at the right pressure, ensuring your engine gets the power it needs when you hit the gas.Types of

happen before. The engine turned over probably 5 or 6 times and by that time it had jumped up to over 300 psi. So I took the compression tester out and then re installed it just to verify the results and the same thing happened. What would cause this? So what long blocks will fit in an 01 expedition? Will any of the E150 van engines work, or the F150s? I know I need a Romeo engine, but I am having trouble finding out if any other long blocks will work. Thanks for any help. I think the only long blocks that will fit are going to be the F150, Expedition, and maybe the 02-03 Explorer/Mountaineer. My firs t thought is did you buy it from a dealer or individual? If a dealer I'd look to them for help. If an individual, was it sold as is or did they represent it as being in excellent condition. If none of those apply then I'd replace plug on 3 then run another test. I've messed with cars for 30 years and never seen 300psi on a cylinder. Maybe someone else will chime in here. I bought it from a private seller knowing that it had engine problems. I don't think I got screwed, I am just trying to figure out the best route to go when fixing it. Other than the engine it is in very good shape. It's an 01 No Boundries XLT. The cylinder pressure on #4 just kept going up....It went well over 300. I have never seen that either. Do you guys know of a good place other than ebay or car-part to source a used engine in good condition? I bought it from a private seller knowing that it had engine problems. I don't think I got screwed, I am just trying to figure out the best route to go when fixing it. Other than the engine it is in very good shape. It's an 01 No Boundries XLT. The cylinder pressure on #4 just kept going up....It went well over 300. I have never seen that either. Do you guys know of a good place other than ebay or car-part to source a used engine in good condition? High compression in one cylinder can be excessive carbon build up on the piston. Car-Part/eBay are your 2 best options to source new engines.