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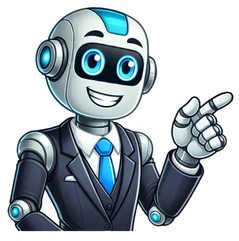

Guys - I have a 2015 John Deere 318D 1600hrs. After about 5 minutes of use I get an "Engine Derate 99%" error on my screen it quickly falls another 20-30% before I get it back to the shop. The Error codes it troughs "Fuel Pressure Sensor" and ECU 94.18 and ECU 94.18. So far I have: 1.) Replaced both fuel filters (And changed the oil / new air filters (unrelated I think) ) 2.) Replaced the fuel pressure sensor 3.) Replaced the fuel pump still getting the error. I'm thinking of dropping the fuel tank and checking for garbage in the tank. I don't think its Fuel quality issue as I have used BIO-Cide and this problem existed before it got cold enough to gel. Does anyone have any experience with this sort of problem, helpful hints or alternatives to try ? Thanks for any help and Merry Christmas ! - Stucake 2015 John Deere 318D Hi - I moved your post to the Deere section. Hopefully it will get the attention that it needs here. Cheers - SR I have a 319D with about the same amount of hours. Change the fuel filters and it should fix the problem. But don't be surprised if you have to do it again in about 100 hours. I have a 319D with about the same amount of hours. Change the fuel filters and it should fix the problem. But don't be surprised if you have to do it again in about 100 hours. This sometimes happens when you are running low on fuel. Just add more fuel and the error message will go away if this was the problem. Guys - I have a 2015 John Deere 318D 1600hrs. After about 5 minutes of use I get an "Engine Derate 99%" error on my screen it quickly falls another 20-30% before I get it back to the shop. The Error codes it troughs "Fuel Pressure Sensor" and ECU 94.18 and ECU 94.18. So far I have: 1.) Replaced both fuel filters (And changed the oil / new air filters (unrelated I think) ) 2.) Replaced the fuel pressure sensor 3.) Replaced the fuel pump still getting the error. I'm thinking of dropping the fuel tank and checking for garbage in the tank. 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Thanks for any help and Merry Christmas ! - Stucake 2015 John Deere 318D Hello my name is mark rood I have a John deer 319 d and I'm having the same problem John deer replaced the motor about 250 hours ago unfortunately the warranty expires at 200 hrs everything was fine up to about 225 hours I've changed the oil and filter both fuel filters ,both of the air filters and it keeps on happening I contacted John deer shop that put on the new motor and they have no clue if you have any information could you please contact me (so frustrated ) my e mail is [email protected] I would really appreciate any help if you have any information thank you mark Explore John Deere like never before at NEWS-JD.COM, your hub for the latest news, product reviews, and detailed insights into agricultural and construction equipment. Our comprehensive parts catalog and troubleshooting guides ensure your machinery operates smoothly. Plus, our John Deere Kids section offers educational activities to inspire the next generation. Join our community committed to celebrating and sustaining John Deere’s legacy. Visit us today.You can contact us via email at info@news-jd.com. We are happy to answer all your inquiries. I can start the engine and operates normal for a few minutes then it gradually decreases in power, from 100% to 90% to 80% and so on. Have changed fuel and air filters a couple fuel lines. Cleaned and flushed fuel tank and changed pickups. Any suggestions or recommendations I would really appreciate it. Thanks in advance. sounds to me issue withg fuel compression? how many hours on motor? Machine is John Deere 323D 2012. Has 2116 hours on engine Machine is John Deere 323D 2012. Has 2116 hours on engine its eother fuel or low compression By decrease in power do you mean you lose RPM ? More info needed on the circumstances around power, rpm, response loss. What is the machine actually doing?? Losing power? Rpm? Rough temps and situation would help a lot. Could be almost anything without proper diagnostic description of events. Does it have a ecm? Any codes? Run it till it looses power re prime the fuel system and see if there is any air in the system After the bell rings a message appears (Eng Dehydrant) but no codes. The engine don't sound like the RPM is going down. Has no DEF. Warning bell dings then message on screen "Engine Derate 99%" then will continue to go decrease. Gets to around 65% and machine will move very slowly. No loss of RPM engine stays at RPM level. Have changed filters fuel and hydraulic, some lines, cleaned and flushed fuel tank, changed alternator, and changed battery. I don't get another code other Engine Derate. 2012, John Deere 323D approx. 2120 hours om machine. Any assistance is much appreciated. Thank you I would be checking compression do you notice any certain TEMP that things starts to go downhill at? as is, when it reached "X" temp, it starts to loose power As a diesel technician with over 15 years of experience, I have extensive knowledge about engine derate issues. When engines go into derate mode, it can be incredibly disruptive for truck drivers and fleet owners. However, understanding what causes derate and how to properly clear it can get engines back to full power operation. Engine derate refers to an intentional limitation of engine power output. Modern diesel engines have electronic control modules (ECMs) that constantly monitor various engine sensors and operating conditions. The sensors provide data inputs to the ECM related to temperatures, pressures, fluid levels, engine speeds, and more. When the ECM detects a problem or condition that could potentially cause engine damage if continued running at full power, it will initiate an immediate derate. The ECM does this by electronically limiting power and performance to protect the engine from failure. Think of derate as the engine’s version of a “limp mode”. By restricting engine RPMs, throttle response, fuel delivery, and overall power output, the engine can continue operating safely until the underlying issue is properly diagnosed and repaired. The ECM only derates engine power output as much as necessary to avoid immediate failure risk. The ECM is essentially the brains of the engine management system. It utilizes software logic programming to act in the best interest of the engine’s longevity and performance. The ECM sets predefined acceptable limits and thresholds for variables like temperature, pressure, contamination, speeds, and voltage. When sensors identify measurements exceeding those set limits, the ECM takes action to mitigate risks. Initiating a derate is one of the main actions an ECM takes to prevent catastrophic engine failures when risks are detected. By intelligently limiting power output, it reduces stress on components and allows extended operation until repairs can be made. While disruptive, derates are actually beneficial engine protection mechanisms against the alternative – no derate and eventual total engine failure if problems persist. Main Causes of Engine Derates The most common issues that trigger ECM-initiated power derates include: Excessive coolant temperature is one of the most frequent reasons an ECM will enforce a derate. The coolant temperature sensor provides constant real-time readings to the ECM. If the coolant exceeds the maximum predefined limit, usually around 230°F, the ECM will immediately derate engine power. This protects the engine from overheating damage which can lead to cracked heads, blown head gaskets, and piston seizure. Typical causes of excessive coolant temperatures leading to derate include: Low coolant level – Insufficient coolant volume allows overheating. Faulty thermostat – Stuck closed thermostat prevents proper coolant flow and heat transfer. Cooling system leaks – External leaks reduce coolant volume and system integrity. Cooling fan issues – Failed fan clutch or fan motor disrupts air flow for radiator cooling. EGR problems – Stuck open EGR valve allows too much hot exhaust into the intake. An ECM will derate an engine any time the coolant level drops critically low. Even if not yet overheating, the lack of sufficient coolant volume means the engine is at high risk of overheat damage. The coolant level sensor alerts the ECM whenever coolant drops below acceptable limits. Whether from external leaks or failure to maintain level, low coolant triggers derate. Restricted exhaust flow prevents proper evacuation of hot gases from the combustion chambers. Excessive exhaust backpressure causes higher exhaust temperatures which can damage turbochargers, cylinder heads, and catalytic converters. When the ECM detects excessive backpressure through its sensor, it will derate engine power to minimize risks and high temps. Typical causes of excessive exhaust restrictions include: Plugged catalytic converter – Carbon buildup creates blockage. Collapsed/crimped pipes – Crushed or rusted through pipes prevent flow. Carbon packed turbo – Buildup impedes turbine side air flow. Maintaining proper oil pressure is critical to ensure adequate lubrication of internal components and prevent catastrophic engine damage. The oil pressure sensor provides constant feedback to the ECM. If oil pressure drops below 5-7 PSI, the ECM will immediately reduce RPMs and power output to maintain minimal safe pressure levels. This protects from complete oil flow loss and subsequent failure. Common causes of critically low oil pressure include: Low oil level – Lack of sufficient oil volume reduces pressure. Failing oil pump – Damaged gears or relief valve failure prevents pressure buildup. Worn main/rod bearings – Excess bearing clearance bleeds off pressure. Both the engine’s fuel and lube oil systems are sensitive to contamination from particulates or dilution. The ECM monitors the buildup of solids and dilution in each system via specialized sensors. Excessive contamination can disrupt combustion, reduce oil viscosity, and accelerate wear. If contamination exceeds allowable thresholds, the ECM will derate power to avoid damage. Typical contamination issues stem from: Injector faults causing unburned fuel dilution of lube oil. Coolant mixing with oil from head gasket or other leaks. Insufficient fuel filtration allowing dirty fuel delivery. Incorrect oil type or viscosity grade reducing protection. Diagnosing and fully repairing the root cause of the issue is the only way to truly clear an engine derate condition. Band-aid fixes will only temporarily alleviate it. Here are the general steps to clearing derates: The ECM logs diagnostic trouble codes (DTCs) whenever it initiates a derate. Scanning the ECM for codes is the first step in diagnosing the derate. Key DTCs pointing to the derate stimulus include: Engine over temp warnings Low coolant alerts Low oil pressure codes High contamination indicator Assessing the DTCs provides critical clues into where to start troubleshooting. Inspect Maintenance Records Review maintenance logs and records to identify any oversights. For example, if coolant dilution DTCs are present but no coolant filter backflushes were performed, that’s a red flag. Maintenance gaps often contribute to derate causes. Closely inspect the engine bay and components for identifiable issues before digging deeper. Look for obvious problems like: Low fluid levels – Coolant, oil may need topping off. Leaks – Signs of coolant, oil or exhaust leaks. Exhaust – Carbon packing, crushed pipes. Belt wear – Look for signs of worn/cracked belts. Move on to verifying and testing systems related to the derate codes: Confirm thermostat opening temperature Check fan clutch operation Measure exhaust backpressure with a gauge Perform an oil pressure test Check fuel for contamination Testing helps isolate the root failure. Once the root cause is found through testing, make the required repairs: Replace the failed part causing the issue Top off low fluid levels Seal up any identified leaks Flush contaminated systems Address any overdue maintenance concerns Do not take shortcuts – completely fix underlying problems. With repairs made, use a diagnostic scanner to clear all DTCs related to the derate. This “resets” the ECM’s memory. Also perform an ECM reset procedure to clear any remaining derate power limits. This will allow the engine to operate at full power again. The last step is confirming repairs were successful by: Carefully test driving under varying loads. Monitoring engine temperature, pressure, and power output. Rescanning for any remaining derate related DTCs. The derate condition should now be eliminated if repairs were properly completed. While engine derates cannot always be avoided, focusing on preventive maintenance can reduce their frequency. Recommended practices include: Many derate causes tie back to overlooked maintenance. Sticking to the OEM’s recommended service intervals goes a long way, including: Oil and filter changes Fuel filter replacements Coolant flushes Belt and hose changes Periodically check engine oil, coolant, transmission fluid, and other levels. Top up as needed to maintain proper levels. Catching low fluid early reduces derate chances. Inspect around gaskets, seals, hoses, housings, and connections for any evidence of leaks. Address all leaks immediately before bigger issues arise. Perform periodic cleaning of the EGR valve to prevent sticking. Inspect exhaust components for carbon build up or restrictions. Replace per OEM spec’s. Follow OEM fuel type and oil viscosity recommendations. High tier diesel fuels and heavy duty oils help minimize deposit formation. Never ignore even minor issues like leaks or unusual noises when spotted early. Small problems turn into major faults if left unchecked. Making preventive maintenance a priority provides the best safeguard against derate conditions. But when issues do occur, have them properly diagnosed and repaired by a professional diesel technician. Taking shortcuts virtually guarantees repeated derate problems. Correctly fixing the root cause is key to keeping engines at peak performance. Does a derate hurt the engine? No, derate is actually protective and allows safe operation temporarily until repairs can be made. Without it, major failures could occur. Should I try to fix a derate myself? No, have an experienced diesel technician properly diagnose, repair, and clear derates. Incorrect DIY fixes often make things worse. How do I know if my engine is in derate mode? Signs include reduced power, lack of throttle response, low boost pressure, and the check engine light coming on. Scanning for diagnostic trouble codes can confirm. Can a derated engine still drive? Yes, a derated engine can still safely operate and move the vehicle, but at reduced power. It’s limp mode to enable driving for repairs. Does derate damage affect resale value? Yes, severe or repeated derate events can indicate underlying problems. Repair records showing proper fixes can help offset value impacts. Do diesel additives help fix derates? No, additives don’t fix mechanical or sensor issues causing derates. Diagnosing and repairing root causes is the only solution. How long can an engine safely run in derate? It varies by root cause, but aiming for repair in under 500 miles is recommended. Longer operation increases failure risks. Will a DPF reset clear a derate? No, a DPF reset tool only clears soot-related warning lights. It does not address other derate causes or reset the ECM. Can bad fuel cause engine derate? Yes, contaminated or improper fuel can trigger derates from issues like fuel dilution, loss of viscosity, and reduced lubricity. Is it OK to disable a derated engine’s EGR? No, disabling emissions equipment will worsen problems long-term. Proper diagnosis and repair is the correct resolution. Every since I was a little boy, I can remember spending the afternoons in my dad’s repair shop. I got my first car at 16 and it was the best feeling ever! I have contributed to various automotive publications but decided it’s finally time to settle for something constant. Explore John Deere like never before at NEWS-JD.COM, your hub for the latest news, product reviews, and detailed insights into agricultural and construction equipment. Our comprehensive parts catalog and troubleshooting guides ensure your machinery operates smoothly. Plus, our John Deere Kids section offers educational activities to inspire the next generation. Join our community committed to celebrating and sustaining John Deere’s legacy. Visit us today.You can contact us via email at info@news-jd.com. We are happy to answer all your inquiries. Jan 12, 2013 / John deere 333d skid loader derating #1 I have a John deere 333d skid loader and ill turn in on and after acouple minutes it pops up a message about derating 100% and before I know it it's at 50%. Idk what to do. My dealer never heard about it and the John deere head courters customer support have no Ida either. All they have told me is its the engines way of preventing damage and it could be caused by low fuel pressure so I should change the fuel filter but that didn't work. I'm out of ideas. Please help if anyone has any clues Thanks -Hunter McVey Jan 12, 2013 / John deere 333d skid loader derating #2 There are many reasons possible for engine derating. Did the dealer connect a computer and check codes? A code should be stored that will point you in the right direction. There were some issues with ecu software on early serial numbers. If your serial number is lower than 195481, have your dealer reprogram it with newest software. Did you replace both fuel filters? The small in-line filter is more likely to be clogged than the main filter. Dirty air filter could also cause this as well as a clogged fuel line, low transmsission pressure, clogged hydraulic filter, engine overheating, or a failed sensor. If you can get the code and post it here, we can help further. Jan 13, 2013 / John deere 333d skid loader derating #3 I have replaced all the possible filters and all the oils in the machine. I get asked for the codes but the only ones I have are the stored ones. No other codes pop up. Jan 17, 2013 / John deere 333d skid loader derating #4 This happened to my 328D and it was caused by foreign debris in my fuel tank. Had to dump and clean the entire tank out. It fixed the issue though. And we havent had any others come in the shop for that. Jan 17, 2013 / John deere 333d skid loader derating #5 any chance the cold weather has caused some gel or ice in your fuel?