Etcs fuse

Advice to reset the reading of higher octane fuel for the ECU to read and record under driving characteristics, and aid throttle response etc I had been noticing that my "ECT PWR" button when presed and displayed on the dashboard, there was no noticable acceleration difference from standard. I put this fact that there was not ETCS electronic Throttle control in operation due to the lack of fuse not plugged in When using ECT PWR button now, I have a bigger kick on acceleration Ithink-it's marginal Prob due to the electronic throttle now being controoled by the fuse now plugged in Is this how it works, I dont know. BUTWhen driving, I can smell a slight whiff of burnt exhaust gases through my air intake in the cabin after plugging in the fuse Can any one eplain how ETCS works, and what the fuse regualtes, and what I was missing out on with the fuse not plugged in. Why did the burnt exhaust smell appear im my opinion when the ETCS fuse was plugged in, with the fuse in also, I noted a slightly wobblier acceleration Do i have a fault with the ETCS fuse plugged in, ands is that why someone had removed it prior to me buying the car? The pwr button should make the gearbox hold gears for longer under normal driving. The ETCS is not for the pwr button it is the electonic throttle control. Does your engine warning light not come on with this fuse removed? If not then does your engine warning light come on at all? You can post now and register later. If you have an account, sign in now to post with your account. Paste as plain text instead. Only 75 emoji are allowed. Display as a link instead. Clear editor. Upload or insert images from URL. Reply to this topic Start new topic. Recommended Posts. Posted July 3, So, I filled my car up with Optimax, and as per in the knowledge page Is this how it works, I dont know BUTWhen driving, I can smell a slight whiff of burnt exhaust gases through my air intake in the cabin after plugging in the fuse I have auto transmission and a six cyl engine. Question 3. Link to post Share on other sites. ColinBarber 2, Posted July 3, Full throttle acceleration doesn't make any difference as both modes that the engine to redline. Yes, engine light does come on with fuse out when key turned in "ignition mode" before starting car. Then does go out when engine is started. But this fuse replaced, coupled with exhaust smells concerned me. Join the conversation You can post now and register later. Reply to this topic Insert image from URL. Followers 0. Go to topic listing. Sign In Sign Up. Insurance Sell your Lexus Support. Search for the part s number you wish to receive samples. Or, visit the sample center page. Automotive Fuse Link Definition and Specifications Automotive use links are self-acting break appliances for the protection of electrical devices against unsuitable current loads. The current flow is interrupted by the melting of the fuse wire in which the current flows. The following international regulations and recommendations in their currently valid version are valid for fuse links:. Further the level of technology, the details of the actually valid implementation provisions, the safety-principle "human beings, animals and material assets must be protected against danger," as well as the qualification of the installed components should be taken into account - self-responsibility of the manufacturer of electrical devices. The rated voltage U N of a fuse link has to be at least equal or higher than the operating voltage of the device or assembly unit which is to be protected with the fuse link. If the operating voltage is very low, the fuse link's natural resistance voltage drop must possibly be taken into consideration. The voltage drop U N is measured according to standards e. The rated current I rat of a fuse link should approximately correspond to the operating current of the device or assembly unit which is to be protected in accordance with the ambient temperature and rated current-definition, which means the permitted continuous currents. Higher ambient temperatures T umg mean additional load for the fuse links. The heating conditions of the maximum occurring ambient temperature have to be checked, in particular with high rated currents of the fuses, and a strong thermal radiation of components nearby. For such applications, the fuse should be derated in accordance with the following diagram, resp. Due to different specifications of rated current the recommended continuous current of the fuse links is max. The pre-arcing time limits indicate the relation of fusing time to current. They are presented as an envelope curve for all mentioned rated currents. The melting integral I 2 t results from the squared melting current and the corresponding melting time. The data in this catalog are based on 6 or 10 x Irat. The melting integral is an index for the time-current characteristic and informs about the pulse consistency of a fuse link. The mentioned melting integrals are typical values. The breaking capacity I B should be sufficient for any operating and error conditions. The short-circuit current maximum fault current to be interrupted by the fuse links at the rated voltage under default conditions must not be higher than the current corresponding to the breaking capacity of the fuse link. The maximum power dissipation P V is determined at a load with rated current, after having obtained temperature equilibrium. In operation, these values can occur for some time. Typical values are indicated and in addition the standard values for fuses that comply with standards. Only when choosing correctly and when using as agreed that means corresponding to the level of technology and the valid recommendations, as well as the specified characteristics shown in the data sheets under

consideration of the safety-principle that is to say "human beings, animals and intrinsic values must be protected against danger" can a definite function of the fuse links as a protection component rated breakpoint be possible. The personal responsibility of manufacturers of electrical devices is applicable here:. Fuse Selection for Electronics Applications Many of the factors to consider in fuse selection for electronic applications are listed below. For additional guidance please view our Fuse Technology Reference Guide or contact the Littelfuse products representative in your area:. Also known as interrupting rating or short circuit rating, this is the maximum approved current which the fuse can safely break at rated voltage. Please refer to the interrupting rating definition of this section for additional information. The nominal amperage value of the fuse. Catalog Fuse part numbers include series identification and amperage ratings. Some common variations of these standards include: fully enclosed fuseholders, high contact resistances, air movement, transient spikes, and changes in connecting cablesize diameter and length. Fuses are essentially temperature-sensitive devices. The circuit design engineer should clearly understand that the purpose of these controlled test conditions is to enable fuse manufacturers to maintain unified performance standards for their products, and he must account for the variable conditions of his application. The fuse temperature generated by the current passing through the fuse increases or decreases with ambient temperature change. The fuses in this catalog range in size from the approx. As new products were developed throughout the years, fuse sizes evolved to fill the various electrical circuit protection needs. By , Underwriters Laboratories had established size and rating specifications to meet safety standards. The renewable type fuses and automotive fuses appeared in , and in Littelfuse started making very low amperage fuses for the budding electronics industry. Other non-glass fuse sizes and constructions were determined by functional requirements, but they still retained the length or diameter dimensions of the glass fuses. Their designation was modified to AB in place of AG, indicating that the outer tube was constructed from Bakelite, fibre, ceramic, or a similar material other than glass. An important part of developing quality overcurrent protection is an understanding of system needs and overcurrent protective device fundamentals. This section discusses these topics with special attention to the application of fuses. All electrical systems eventually experience overcurrents. Unless removed in time, even moderate overcurrents quickly overheat system components, damaging insulation, conductors, and equipment. Large overcurrents may melt conductors and vaporize insulation. Very high currents produce magnetic forces that bend and twist bus bars. These high currents can pull cables from their terminals and crack insulators and spacers. Too frequently, fires, explosions, poisonous fumes and panic accompany uncontrolled overcurrents. This not only damages electrical systems and equipment, but may cause injury or death to personnel nearby. Industry and governmental organizations have developed performance standards for overcurrent devices and testing procedures that show compliance with the standards and with the NEC. Electrical systems must meet applicable code requirements including those for overcurrent protection before electric utilities are allowed to provide electric power to a facility. An overcurrent is any current that exceeds the ampere rating of conductors, equipment, or devices under conditions of use. The term "overcurrent" includes both overloads and short-circuits. An overload is an overcurrent confined to normal current paths in which there is no insulation breakdown. Sustained overloads are commonly caused by installing excessive equipment such as additional lighting fixtures or too many motors. Sustained overloads are also caused by overloading mechanical equipment and by equipment breakdown such as failed bearings. If not disconnected within established time limits, sustained overloads eventually overheat circuit components causing thermal damage to insulation and other system components. Overcurrent protective devices must disconnect circuits and equipment experiencing continuous or sustained overloads before overheating occurs. Temporary overloads occur frequently. Common causes include temporary equipment overloads such as a machine tool taking too deep of a cut, or simply the starting of an inductive load such as a motor. Since temporary overloads are by definition harmless, overcurrent protective devices should not open or clear the circuit. It is important to realize that fuses selected must have sufficient time-delay to allow motors to start and temporary overloads to subside. However, should the overcurrent continue, fuses must then open before system components are damaged. A short-circuit is an overcurrent flowing outside of its normal path. Types of short-circuits are generally divided into three categories: bolted faults, arcing faults, and ground faults. Each type of short-circuit is defined in the Terms and Definitions section. A short-circuit is caused by an insulation breakdown or faulty connection. During a circuit's normal operation, the connected load determines current. Since there is no load impedance, the only factor limiting current flow is the total distribution system's impedance from the utility's generators to the point of fault. A typical electrical system might have a normal load impedance of 10 ohms, But in a single-phase

situation, the same system might have a load impedance of 0. If the same circuit has a 0. As stated, short-circuits are currents that flow outside of their normal path. Regardless of the magnitude of overcurrent, the excessive current must be removed quickly. If not removed promptly, the large currents associated with short-circuits may have three profound effects on an electrical system: heating, magnetic stress, and arcing. Heating occurs in every part of an electrical system when current passes through the system. When overcurrents are large enough, heating is practically instantaneous. The energy in such overcurrents is measured in ampere-squared seconds I2t. An overcurrent of 10, amperes that lasts for 0. If the current could be reduced from 10, amperes to 1, amperes for the same period of time, the corresponding I2t would be reduced to 10, A2s, or just one percent of the original value. If the current in a conductor increases 10 times, the I2t increases times. A current of only 7, amperes can melt a 8 AWG copper wire in 0. Within eight milliseconds 0. Any currents larger than this may immediately vaporize organic insulations. Arcs at the point of fault or from mechanical switching such as automatic transfer switches or circuit breakers may ignite the vapors causing violent explosions and electrical flash. Magnetic stress or force is a function of the peak current squared. Fault currents of , amperes can exert forces of more than 7, lb. Stresses of this magnitude may damage insulation, pull conductors from terminals, and stress equipment terminals sufficiently such that significant damage occurs. Arcing at the point of fault melts and vaporizes all of the conductors and components involved in the fault. Additional short-circuits are often created when vaporized material is deposited on insulators and other surfaces. Sustained arcing-faults vaporize organic insulation, and the vapors may explode or burn. Since overcurrent protection is crucial to reliable electrical system operation and safety, overcurrent device selection and application should be carefully considered. When selecting fuses, the following parameters or considerations need to be evaluated:. The Class L fuses are the only time-delay fuse series available in these higher ampere ratings. To select the proper overcurrent protective device for an electrical system, circuit and system designers should ask themselves the following questions before a system is designed:. Answers to these questions and other criteria will help to determine the type overcurrent protection device to use for optimum safety, reliability and performance. Littelfuse, Inc. We use cookies to collect information about how you interact with our website and to remember you. We use this information to improve and customize your browsing experience and for analytics about our visitors on this website and other media. To find out more about the cookies we use, see our Privacy Policy. By continuing, you agree to the use of our cookies. By selecting among and accepting to our use of the cookie categories below, you direct Littelfuse to store cookies on your device and disclose information as described in our Privacy Policy. If you do not direct us to collect any categories of cookies, a single essential cookie will be used in your browser to remember your preference not to be tracked. When you use our website, we collect personal data about you and your use of the Website, through cookies and analytics tools. We may also collect personal data such as your name, job title, company name, address, email address and telephone number either directly from you or by combining information we collect through other sources. Because Littelfuse respects your right to privacy, you can choose to modify the cookies option and disallow some of them. Click on the different category headings to learn more and change default settings. However, blocking some types of cookies may impact your experience of the site and the services we are able to offer. There are cookies which are needed for our website, applications or services to function properly. For example, these cookies remember your preference not to be tracked and identify trusted web traffic. These cookies collect information about how visitors and users use our website, applications, and services. These cookies enable us to improve our website, for instance, by ensuring that users are finding the required information. These cookies don't collect information that identifies a visitor or user. All information collected by these cookies is aggregated and anonymous. These cookies allow our website, applications and services to remember choices you make such as your preferred language and provide enhanced, more personal features. They may also be used to provide services you have asked for. The information these cookies collect may be anonymized and they cannot track your browsing activity on other websites. These cookies are used to deliver advertising that may be relevant to you and your interests. They are also used to limit the number of times you see an advertisement as well as help measure the effectiveness of an advertising campaign. They remember that you have visited a website and this information is shared with other organizations such as advertisers. Products Automotive Sensors Automotive Sensors Littelfuse Automotive Sensor Products offer a wide range of sensors for use in monitoring various vehicular functions in the areas of passenger safety, comfort and convenience plus vehicle powertrain, chassis and emission applications. Chassis Comfort and Convenience. Emissions Passenger Safety. Powertrain xEV Sensors. Littelfuse battery management devices provide

methods of conserving battery power, protecting against over-discharge, combining and protecting auxiliary equipment such as liftgate motors. Littelfuse battery mini-Breakers provide battery cell protection for high-capacity Lithium Polymer and prismatic cells. Metal Hybrid Protection. Electrical sockets, plugs and coils used for connection of a truck and trailer on commercial vehicles or caravans for 12 and 24V systems. Connector Accessories Greycon Connectors. Common Mode Noise Filters CMF attenuate common mode noise in differential and balanced transmission, and power supply and audio lines. Littelfuse offers a comprehensive line of fuse blocks, fuse holders, and fuse accessories for automotive, electronic, and electrical markets. Fusible Switches and Panels Fusible Switches and Panels Provide a complete, one-piece solution for easy procurement and code compliance. Dissipate high voltage transients through a contained plasma gas with high surge capability, low capacitance and small size. Magnetic sensing products utilizing Reed and Hall Effect technologies, with custom solutions available. Low capacitance polymer base product for protecting high speed data circuit from ESD damage and maintaining data integrity. Polymer-enhanced, precision Zener diodes that offer resettable protection against multi-Watt fault events without the need for multi-Watt heat sinks. Power Semiconductors Power Semiconductors High reliability power semiconductors utilize the latest technology. Stacks, Subsystems, and Assemblies Bare Die. TD and Chip Telecom. Our surge protection devices SPDs and modules are designed to provide protection from transient overvoltage. They are thermally-protected and built with high-quality, dependable materials. Features manually-operated, foot-operated, and mechanically-operated switches; and switches operated by temperature or pressure. Reliable standard and thermal protected varistor, available in a variety of forms, surge current capability up to 70, Amp. Radial Leaded Specialty Surface Mount. Thermally Protected. Custom Circuit Protection Solutions, Electronic Testing Services. Need the Littelfuse equivalent to a competitor part? Enter the competitor part number here. Check distributor stock levels by entering in full or partial part numbers Cancel. Industrial Power and UL Fuses. Automotive Passenger Car. Automotive Aftermarket Products. Axial Radial Thru Hole Fuses. Cartridge Fuses. Surface Mount Fuses. Specialty Power Fuses. Medium Voltage Fuses. Military High Reliability Fuses. Hazardous Area Type Fuses. Information Center Technical Resources. Automotive Fuse Selection and Definitions Electronic Fuse Selection and Definitions Industrial Fuse Selection and Definitions Automotive Fuse Link Definition and Specifications Automotive use links are self-acting break appliances for the protection of electrical devices against unsuitable current loads. The following international regulations and recommendations in their currently valid version are valid for fuse links: DIN DIN ISO UL SAE Further the level of technology, the details of the actually valid implementation provisions, the safety-principle "human beings, animals and material assets must be protected against danger," as well as the qualification of the installed components should be taken into account - self-responsibility of the manufacturer of electrical devices. Selection Explanations and Recommendations The rated voltage U N of a fuse link has to be at least equal or higher than the operating voltage of the device or assembly unit which is to be protected with the fuse link. The personal responsibility of manufacturers of electrical devices is applicable here: "Any person involved in the production of electrical systems or the manufacturing of electrical equipment, included those dealing with the operation of such systems or equipment is, according to the present interpretation of the law individually responsible for every aspect of compliance to the recognized rules and procedures of electrical engineering. The current rating of a fuse link I N Fuse is established by the max. The following applies: I N Fuse 3 Ioperating max. The necessary breaking capacity of the fuse link is determined by the max. In addition to the above-mentioned points, the method of installation is also important for correct fuse link selection taking into consideration possible approvals. Fuseholder features, if applicable and associated rerating clips, mounting block, panel mount, PC board mount, R. Breaking Capacity: Also known as interrupting rating or short circuit rating, this is the maximum approved current which the fuse can safely break at rated voltage. Current Rating: The nominal amperage value of the fuse. Dimensions: Unless otherwise specified, dimensions are in inches. Why Overcurrent Protection? What is Quality Overcurrent Protection? Provides maximum safety for personnel, exceeding minimum code requirements as necessary. Minimizes overcurrent damage to property, equipment, and electrical systems. Provides coordinated protection. Only the protective device immediately on the line side of an overcurrent opens to protect the system and minimize unnecessary downtime. Is cost effective while providing reserve interrupting capacity for future growth. Consists of equipment and components not subject to obsolescence and requiring only minimum maintenance that can be performed by regular maintenance personnel using readily available tools and equipment. Overcurrent Types and Effects An overcurrent is any current that exceeds the ampere rating of conductors, equipment, or devices under conditions of use. Overloads An overload is an

overcurrent confined to normal current paths in which there is no insulation breakdown. Short-Circuits A short-circuit is an overcurrent flowing outside of its normal path. Selection Considerations Selection Considerations for Fuses volts and below Since overcurrent protection is crucial to reliable electrical system operation and safety, overcurrent device selection and application should be carefully considered. Fast-acting JLLN and JLLS series Class T fuses possess space-saving features that make them especially suitable for protection of molded case circuit breakers, meter banks, and similar limited-space applications. Class CC and Class CD series fuses are used in control circuits and control panels where space is at a premium. Industrial Circuit Protection Checklist To select the proper overcurrent protective device for an electrical system, circuit and system designers should ask themselves the following questions before a system is designed: What is the normal or average current expected? What is the maximum continuous three hours or more current expected? What inrush or temporary surge currents can be expected? Are the overcurrent protective devices able to distinguish between expected inrush and surge currents, and open under sustained overloads and fault conditions? What kind of environmental extremes are possible? Dust, humidity, temperature extremes and other factors need to be considered. What is the maximum available fault current the protective device may have to interrupt? Is the overcurrent protective device rated for the system voltage? Will the overcurrent protective device provide the safest and most reliable protection for the specific equipment? Under short-circuit conditions, will the overcurrent protective device minimize the possibility of a fire or explosion? Does the overcurrent protective device meet all the applicable safety standards and installation requirements? Search By Parameter. UR Ord Loc. Connect with Littelfuse. This website stores cookies on your device. Essential Performance and analytical technologies Functionality Targeting or advertising. Always Active. Performance and analytical technologies. Targeting or Advertising. By clicking Allow All or Save Settings you agree and accept our terms and conditions. The electronic control module ECM – also called the powertrain control module PCM or electronic control unit ECU – is a computer which controls the electronics in an automobile. The ECM 1 is one such computer; it has a fuse is installed to protect the computer from sudden power surges or other component damage – the fuse will blow before any damage can reach the ECM. Many component defects can cause your ECM 1 fuse to blow. Although complaints have been reported about the O2 sensor causing the ECM 1 fuse to blow, in reality it is not the O2 sensor causing the problem – it is the placement of the O2 sensor. If the wires leading to the O2 sensor rub against the exhaust, it creates a ground; once the O2 sensor is grounded, the fuse to the ECM 1 blows. The O2 sensor must be installed in a different place to ensure the wires do not short-circuit. Another cause of an ECM 1 fuse consistently blowing is a fuel pump problem. When the fuel pump begins to fail it overheats, causing it to drain more amperage amp ; if the amps exceed the amount of amps the ECM 1 fuse allows, the fuse will blow. Replacing the fuel pump should correct this problem. The ECM 1 operates via voltage sent from the battery. Anytime an electrical wire becomes frayed, burnt or damaged, the wiring leading to the ECM 1 will short-circuit; once a wire short-circuits, a power surge can occur; if the power surge exceeds the ECM 1 fuse's limitations it will blow the fuse. It is hard to track down a short circuit, but you will have to look at every wire leading to the ECM. It is best to have a qualified technician – with the tools and devices to narrow down the specific wire causing the short – work on such fuse problems. The starter is the component that engages the engine when the ignition system is turned on. Voltage from the battery is sent to the starter, which then engages and starts the engine. If the starter is failing or has failed, voltage can get redirected to the ECM. The voltage or amps surge, causing the ECM 1's fuse to blow. When the starter fails you will hear a clicking noise or the engine will be hard to start. Gerald Elliott published his first article in in the "Stanford Daily" newspaper. Elliott received his Bachelor of Arts with a major in literature in from Stanford University. Wiring The ECM 1 operates via voltage sent from the battery. Starter The starter is the component that engages the engine when the ignition system is turned on. Does Toyota Sienna minivan have a limp mode when there is something wrong with this car? A friend asked me to help charge their car battery. When I got to the car, it had a voltage of 10V. I then hooked up my running car, and started the Toyota Sienna. When the car started driving it was in a limp mode. Did we damage a computer somewhere? It may may not make a difference whether the ignition key were turned to ON, or not, while the jumper cables were reversed. Hopefully, someone who knows the internals of the engine computer will show some light on this question of reversed polarity effects. Good news! It turns out that hacks like me benefit from one of the most important electrical part in the car†… the fuse. Thank god, the cheapest part in the car protected me from destroying the most expensive part in the car. Moral of the story†… Electrical problems should always start with Step 1: Check your fusebox. Good to know; happy ending. Lesson number one though should be, check the leads like ten times

before jumping a car! Hey Carhack, Thanks so much for posting your resolution here, I did the exact same thing on my Sienna, same symptoms loss of power, VSC light, check engine light on,. Had completely zoned out when attaching the cables but who puts a black cover on a positive terminal?? Anyway i still chalk it up to my stupidity, no way around that. But yes, that ETCS fuse was blown I would not have thought to check that specific one, the VSC fuses were all good, the ECS fuses were good, the a fuse was good, I was about to give up but saw your post, checked it and all good!!! There was even a spare fuse in the box thanks Toyota. Yes it was, but does that make the post any less relevant or make me appreciate it any less? Not in my opinion. Toyota "Limp" mode? Just about all vehicles have this programmed in. It effectively prevents the tranny from shifting past 2nd gear. Get the van to a tranny shop and have a scanner hooked up to find the problem. There was even a spare fuse in the box thanks Toyota Much appreciated!!! The last response to this thread was 11 years agoâ€¦ Just letting you knowâ€¦ lots of people do it. If any of the electrical components do not operate, a fuse may have blown. If this happens, check and replace the fuses as necessary. Vehicles with a smart key system: turn the engine switch off. Open the fuse box cover or instrument panel. Engine compartment Push the tabs in and lift the cover off. Never replace a fuse with a wire, even as a temporary fix. Do not modify the fuses or fuse boxes. Have the cause of electrical overload determined and repaired by your toyota dealer as soon as possible. Claw engagement type: Using needle-nose pliers, remove the inboard joint boot clamp, as shown in the illustra Initialization Zero point calibration Notice: Make sure that the front passenger seat is not occupied before performing the operation. Hint: Perform the zero point calibration and sensitivity check if any of the following conditions apply. The occupant classification ecu is replaced. Terminals of ecm Check ecm Disconnect the a9 and b30 connectors. Measure the voltage and resistance of the wire harness side connectors. If the result is not as specified, there may be a malfunction on the wire harness side. You will need the following items: Flathead screwdriver Small flathead screwdriver Lithium battery cr vehicles without a smart key s Light bulbs You may replace the following bulbs by yourself. The difficulty level of replacement varies depending on the bulb. If necessary bulb replacement seems difficult to perform, contact your toyota deal Failing to do so may cause damage, and possibly a fire or injury. Never replace a fuse with a wire, even as a temporary fix. This can cause extensive damage or even fire. Rds-tmc display When a TMC signal is received the icon in the top left of the screen will appear green. If a TMC signal is not being received, the icon will be shown with a bar through it. The system will inform Air vents in the door pillars a Closed b Open c Horizontal airflow d Vertical airflow Direct the outer air vents toward the side windows to defrost. Direct the vents into the passenger compartment to help maintain the d Sport mode The transmission will stay in the lower gears for longer, improving mid-range performance. To deselect Sport mode, move the selector back to D. Checking and replacing fuses If any of the electrical components do not operate, a fuse may have blown. If this happens, check and replace the fuses as necessary. Light bulbs You may replace the following bulbs yourself. The difficulty level of replacement varies depending on the bulb. If necessary bulb replacement seems difficult to perform, contact your Toyota dealer. See also: Rds-tmc display When a TMC signal is received the icon in the top left of the screen will appear green. Ad vertisements. Here you will find fuse box diagrams of Lexus RX , , , , and , get information about the location of the fuse panels inside the car, and learn about the assignment of each fuse fuse layout. It is located in the engine compartment on the left-side , under the covers. How to check the fuses? How to replace a blown fuse? Why do car fuses blow? Types of automotive fuses. Table of Contents. Passenger Compartment Fuse Box. Engine Compartment Fuse Box. Learn more: How to check the fuses? We use cookies to ensure that we give you the best experience on our website. If you continue to use this site we will assume that you are happy with it. Ok Privacy policy. Navigation system, outside rear view mirror , multiplex communication system, multi-information display, head-up display, air conditioning system , audio system, Emergency flashers, navigation system, head-up display, air conditioning system , charging system Outside rear view mirror, windshield wipers and washer, seat heaters, starter system, power outlet, moon roof, Automatic High Beam , air conditioning system Multiplex communication system, electric power steering system, shift lock control system, tilt and telescopic steering, starter system, automatic transmission system, power back door, tire pressure warning system, vehicle stability control system , pre-collision system Multiplex communication system, power door lock system , power back door Parking lights, side marker lights, tail lights, license plate lights, front fog lights, towing converter Vanity mirror lights, luggage compartment lights, interior lights, personal lights, door courtesy lights , footwell lights , scuff lights Over the years I have had numerous emails, messages and help requested on forums on this subject, so I thought it was time for a troubleshooting article to assist others in resolving the issues that can potentially occur with the system. Hopefully this

article helps you for any ETCS-i issues, if you have any further troubleshooting information to add then please let me know by commenting below. I have a 1jz vvti with etcs-i, are there ant throttle conversion kits out there which could help me get rid of poor response of the throttle. I hearedof the one of premium japan any other out there. When you turn the key it turns over and sometimes acts as if it is going to start but never does. Before when the key was on the throttle motor would buzz constant now it has stop when the key is first turned on it gets power for just a second and then it stops. If you operate the throttle the motor makes no noise at all. Is someone know how to adjust this two bolts? Thanks and scuze me for my englishâ€¦. The throttle adjustment screws can easily throw the CEL light. Here are some voltages I have found from the IS forums ;. Between VTA and E2 ground 0. So Pin 1 is the direct feed into 12v with the 15amp fuse which is shared power to the fuse box. I do not know that a manual trans with a auto ECU would even work, but I could be wrong. Yes you would have the full throttle control as the electronics would be eliminated and it would be all mechanical. I could be wrong in this train of thinking, but something tells me doing something like that will just lead to headaches and frustration. Yes, swapping to manual you can still run the auto ECU. Only thing is the ECT light and check engine light will come on. Only way I know how to fix that is run a piggyback or full aftermarket ECU. Then you could override it. For now the check engine light and ect light doesnt bother me. Drives better than stock and more fun, other than that. Would you know if you can convert to mechanical throttle control, and still use the factory ecu? Gears removed. Once boost kicks in, feels as is the ecu powers down and then engine has to be restarted. With the kit you should be able to keep all the other stock components without hitting limp mode or having power issues. Hi i have an TT Supra vvti that keeps going into limp mode giving you only half throttle,now eml light comes and i can not get any communication at the 16 pin obd plug as there is no power,i have checked the etcs and values as per spec and thats all good. Did you end up sorting this out? Seems like a sensor issue from somewhere else that is putting it into limp mode. Are you getting 12v to the throttle motor from the pin? What scanning tool are you using? I got my Aristo swap done a few months ago. Everything was good with the throttle idle, revs etc. This was the first time the ECU has been reset since the swap. This morning on my way to get tuned, I started the car and the idle immediately jumps to RPM then slowly settles to about rpm. My tuner only adjusted TPS since that was off and now it idles and acts like it should, except the throttle sticks at RPM or so and bounces about rpm while driving. It happens randomly. I noticed that the little idler adjuster screw was adjusted I know this is a no no. Could this be causing my issues? This did not happen until the ECU was reset. Is there a way to go about fixing this? Have you tried resetting ECU again? Oh also one last thing â€" make sure all of your vacuum lines are in-tact and have no leaks, you can pinch a vacuum line to see if the idle adjusts when the car is idling. Just today I was driving my 97 Aristo v 2izgte stock and decided to give it WOT on the highway when suddenly the car would cut out all power and then would proceed into limp mode with vsc light,cel,abs lights going off. When I came to a complete stop the car was idling around rpms. Not really sure on what to check at this point. Any advice would be greatly appreciated! Have you followed all of the troubleshooting steps listed? Were there any abnormal results in the voltage and resistance values? Hope you can shed some light on this issue. I have a JzS Aristo. Anytime I drive my car under WOT it cuts out and hesitates really bad. Almost like a boost leak would cause. There are however no boost leaks. Just seems to get no real power. I know the turbos are fine As well. If possible have the codes read by a Lexus dealer or alternatively check them yourself. Also there is a chance that this is related to the ETCS-i system and the troubleshooting steps in this post should be followed to see if any help resolve the issue. Hello sir, I have a Toyota aristo 2jz gte vvti I have a problem with my throttle. Please I need some help because it stressed me alottt. Does the issue occur with the afc neo removed? Is the MAP sensor setting applied in the neo? If it was working fine before and no other neo settings or modifications have occurred then it could be the TPS sensor. Hello, and thank you for this amazing writeup. I do have a question however as the picture for the wiring job you did is a bit hard to understand. I agree, that is alot of effort just for that. I just want to make sure my ETCS-i is functioning correctly as I have been operating in limp mode since I completed the swap. You can check the ETCSi Pin 1 for 12v when ignition is on â€" this 12v is shared with the other fuse box 12v circuit. I just did a NA to TT swap with the vvti 2jz-gte engine. The engine will start with no hesitation or issue. Idle perfectly for seconds, start to act like it is being fuel starved then die. I have temporarily hard wired the stock pump to bypass any fuel computer for testing and still the same issue, and I changed the map sensor. I should note that we do not have a drive by wire throttle pedal installed in the car. I want to delete the drive by wire. The car should still idle without this, correct? Thanks for the help. I posted my question on here before but it must have gotten deleted. Anyways my 99 Aristo has been acting up. The car starts up fine and idles fine when in P. But once I shift into D or R it would idle rough,

sputter, and the rpm would fluctuate. Sometimes when going uphill and I floor it, I would here like pops and it would feel like the engine runs better. My filter is about 1 month old and I have cleaned the MAF sensor with sensor cleaner. Can anybody give me an idea of what could be causing this? I would check your fuel system, starting with fuel filter, then check fuel pumps and injectors. Also check the fault codes if possible. There is a potential for the ETCSi system to be causing problems too, you can check the reset procedure outlined here also the voltages and resistances. It was scary driving it in the English countryside roads since it went into limp mode around corners, sometimes with no area to pull over with the narrow roads. If I slowed down it would go into a fit of delayed pedal response to sporadic small burst of power to no power at all. The strange pedal feel is noticeable or if I went into the tiptronic 3rd gear mode that reved higher or booted it in drive trying to top mph it would cop out. I checked the pedals, notice some slack in the analogue throttle cable and tried disconnecting the battery and unplugging the wires to the APPS to get the code again. Thanks for the tips and printed pages of notes off to have on hand and hope to get the car running to catch my vessel in time. It was totally the Accelerator Pedal Position Sensor, once fitted by some technicians and a bit of tweaking to reduce the extra slack in the throttle cable she began to run fine with now MIL light appearing. The part number is , which was fairly dear since I ordered direct through Toyota to obtain a brand new OEM grade part with rush delivery, but its worth it in some cases. In all honesty, I may have not needed to replace the Throttle Position Sensor, but the fact that they can crap themselves after a given point in time I guess it was also worth replacing to error on caution. The Supra RZ is all good to go to Canada. I could imagine how sketchy driving around tight English roads would be with limp mode! I would first try resetting the ETCSi as outlined in the article, to see if there is any issues. At idle the APPS voltage should be between 0. Also ensure the resistance between terminals VC and E2 â€" 1. Great write up! The problem is I cant find the sensor new in the US. I am however getting the APP for the 2jzge vvti but I dont know if it is the same electrically and can be interchanged. Can you advise? They are fairly expensive also to replace. It might be easier to track down a 2nd hand throttle with the sensor, or see if someone is willing to let you test. The other option is to order via Toyota Australia potentially? All I did was remove, clean and resecure the positive cable between the alt and fuse block. All the resistance tests check good. It runs perfect for about 4 mins and then right back to limp mode. Seems very strange! Usually problems like this are electronic components that have failed or wiring issues. Not sure if you can borrow or find another throttle to try, or maybe try swapping the sensors out to narrow down the issue. However now my air fuel mixture is way rich. Thanks for the help though. In need of help I have a successfully swapped 1jzvvti etcs-i into my is for about 4 months now. This past week I had a charging issue which I resolved. I shit it down. And start it back up after a couple seconds and it drives fine for about a minute and happens again. Any ideas? I think since i upgraded the exhaust it might be boost creaping so at WOT its holding back the second throttle or maybe the second turbo I havent done the turbo parallel mod. Yes with a larger exhaust and increased boost pressure you will be hitting fuel cut, disconnecting the MAP can get around the issue but I would not recommend it. Thanks a lot for this information. Quick one. However recently when I start the engine, it throws a CEL and revs high, about rpm. Sometimes it starts and revs normal however after idling for say 2 mins it jumps to rpm and the CEL shows which from your description is the fail safe mode. This happened after attempting to clean the TB. It happened for two days and it went away. Additionally I adjusted the TPS but wondering how to get it back to stock position. Happened again when i disconnected the battery for an extended period, perhaps the ECM was reset. What could be wrong. Is it possible the TB is dying or dead? Where should I check? Looks like it was a Accelerator Pedal Position Sensor. Popped on a new one and problem hasnt returned. Glad you got it sorted, you had troubleshooted most of the issues from looking at your last post, I would have recommended the APPS or TPS as the culprit! That seems strange, are you sure that the MAF is not damaged or not working correctly? It could also be the wiring loom for the MAF. Otherwise if you can try another MAF if possible. Yea its wierd i berly bought my maf about 2 months ago NEW so i wouldnt understand why it could be bad. I can turn the car with maf disconnected and sounds fine, but as soon as i connect maf it turns offâ€ًâ€ if so how do i test if my maf sensor is working? Is the car boosting correctly without the MAF? Do you have a boost gauge? Is there a vacuum reading at idle, if so what is it? It would seem strange for a new MAF to go. Did you try the old MAF to see if you have the same issue? It would be nice if you could get your hands on a known good one to rule it out, if it is a bad MAF then maybe the new one will be covered by warranty also. I still think your issue is FMIC pipe leak or similar. Hard to tell from your scan tool diagnostics if that is a genuine TPS issue or not, but good place to start. Also it could be related to your VVTi solenoid. Try unplugging the solenoid plug on the intake side of the head and see if you experience the same issues. I actually had a success in fixing

the cold start. Dirty throttle body. However my fuel economy has not improved. I think it is probably unrelated boost leak or the like. Thanks very much! Glad you got it sorted mate. Also a boost leak or similar could have similar issues. Great write up, thanks. I doubt that removing the DBW would change the fuel mixture much but rather the other sensors such as traction control, idle and cruise control. Thanks for the reply and link, that looks quite interesting! I will have to study it later on and see. The rpm would just go straight high. However, if i start up in once, the engine will just start and idle normally at rpm. I am a beginner to this 2jz-gte. Please kindly instruct me ways to solve these problems. That very much sounds like an ECTS-i issue, rather an idle control problem. Its def. Quick ques. Completed all of the wiring, plumbing and so-forth , the engine started right up and idled nicely but i am not getting any throttle response whatsoever from the etcs-i system. I have checked resistance on all the sensors on the tb and they all checked out ok. The swap is out of an auto Aristo and still running the auto ecu if that makes a difference. Any feedback would be greatly appreciated! Check that the return spring closes the throttle correctly to idle position. Also ensure you have sufficient EFI connectivity and fuel pressure, seems fuel related to me. I just have one question that im hoping you can answer. I had to replace the tps as this was faulty. Your email address will not be published. Save my name, email, and website in this browser for the next time I comment. Notify me of follow-up comments by email. Notify me of new posts by email. Notice: It seems you have Javascript disabled in your Browser. In order to submit a comment to this post, please write this code along with your comment: aaccee02a58ee7db Skip to content. Operation: The throttle motor operates the throttle valve. An electromagnetic clutch connects the throttle motor to the throttle valve. The throttle position sensor detects throttle valve angle. The throttle lever is connected by cable to the accelerator pedal. As the driver moves the accelerator pedal, the APPS signal voltage changes indicating a new pedal position. At the same time, current to the throttle control motor and magnetic clutch are cut off. With no power to the motor or magnetic clutch, the return spring closes the throttle valve to the default position. In this situation, called limp mode, the accelerator pedal operates the limp mode lever. When in limp mode, the throttle can only be partially opened reducing engine power. The driver will notice the pedal travel is longer in relation to engine response and that the MIL is on. Now turn the car back over and re-test to see if you have any symptoms. Hi Remi, Not a problem, I hope this helps! Is there any ideas why i have no power at ob

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d plug and is there any other way of code reading. Hi, Did you end up sorting this out? Hi, Have you tried resetting ECU again? Hi, Does the issue occur with the afc neo removed? Hey Guys, It was totally the Accelerator Pedal Position Sensor, once fitted by some technicians and a bit of tweaking to reduce the extra slack in the throttle cable she began to run fine with now MIL light appearing. Cheers to the great Australian s for creating this website. Sometimes it starts and revs normal however after idling for say 2 mins it jumps to rpm and the CEL shows which from your description is the fail safe mode This happened after attempting to clean the TB. Thanks Mustafa. Hey Michael, Very sorry for the late reply, did you have any luck sorting it out? Hi Matt, Sorry for the late reply. Its hard to start up the engine if i dont step on the Accelerator Pedal a bit. Thanks, Ted. Leave a Reply Cancel reply Your email address will not be published. Sorry, your blog cannot share posts by email.