Fuel it n54

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Looking for an inexpensive option to supply more fuel? Then this option is for you! For those of you that are looking for a budget conscious kit but don't want to sacrifice performance or reliability we have developed a DIY port injection option for your N In addition our DIY kit offers a multitude of options that lets you configure a kit to meet your power goals and still stay within budget! Simply follow our easy step by step selections to complete your custom kit. All prices are in USD. Please wait Sign in or Create an account. Home Contact Us. See 13 more pictures. Please choose an option to add this product to your cart. I will be running upgraded fuel lines. No Thank You! Choose your Fuel-It! Sticker Color:. No cylinder 1 offset spraying the intake runner wall In addition our DIY kit offers a multitude of options that lets you configure a kit to meet your power goals and still stay within budget! Other than the additional expense there aren't any drawbacks to running the larger injectors. Low Pressure Fuel Line Select this option if you will be tapping in to the stock low pressure fuel system and we will include our exclusive Cam-Lock! If you already have our ethanol sensor, let us know when you order and we will cut your line to the correct length and install the correct connector for you. Generally this is not needed for those customers targeting less than whp on E85 and can not be run with methanol. As such, the kit will need to be assembled and we will provide technical support for hardware assembly and installation. However we do not provide port injection tuning support for DIY purchases. If you would like your kit to be assembled and you need assistance with fueling related tuning, you'll need to purchase this option. Included with your purchase is: Fuel rail assembly 90 days of port injection email tuning support to include: Log reviews and input Port injection controller map adjustments BMS MHD Backend flash fueling adjustments JB4 tuning assistance Not included with this purchase is: Remote tuning Custom flash tuning We can not adjust fueling on locked custom flash maps Once you purchase this option, please email us at tuning fuel-it. Product Videos. Demonstration with option explanations for ordering our DIY port injection kits For questions or to inquire about any of our fueling products, please visit us at Demonstration with option explanations for ordering our DIY port injection kits A video to describe the different options and features and how DIY Port Injection kit assembly and overview. A video to describe the different options and features and how Product Videos Demonstration with option explanations for ordering our DIY port injection kits Choose Options. Port Injection Controllers. This post will serve as a complete guide to N54 stock fueling limitations and upgrades available. What are the limits of the stock N54 fueling system? How does E85 factor into all of this? We plan to answer all of these questions and then some. Additionally, we will discuss a few of the best options on the market for all N54 fueling mods. A quick note before:. Data-logging is an important and valuable method to keep an eye on fuel flow. This will be the first fueling mod most N54 owners will want to knock out. We always like to throw in these reminders. Not only for our readers, but also for ourselves. A lot of the numbers we mention in this post are nearly maxing out the fueling system. This applies to everything from fueling, to turbos, to engine limits. You likely build it to handle whp. The same should apply to fueling. E85 mixes are a great way to improve peak boost, timing, and overall engine safety. However, it puts a lot of stress on any fuel system. The chances of a blown motor if you lean out become very real at that power. Ultimately, accept the risk or play it safe up-front and build in some headroom. First off, this is the most common N54 fueling mod and there are a lot of options out there. Therefore, a modest upgraded turbo setup can likely get by with an upgraded LPFP alone. Additionally, bucketless fuel pumps are available. There are a ton of different options out there so this is by no means an exhaustive list. This kit is available from Fuel-It as are most of the upgrades we will recommend in this post. They have a ton of fueling solutions for the N Therefore, it may not be the best or cheapest solution for those wanting to replace their factory LPFP. This is a well priced solution for those with a healthy stock LPFP simply looking for a bit more flow. This stage 1 LPFP kit is not recommend for those running upgraded turbos or who plan to do so in the future. Of course, while this pump will support upwards of whp on full E85 the HPFP will be capped well before then. Stage 3 LPFP kits are venturing into the territory of extreme fueling demands. The kit is a complete plug and play offering, however the secondary pump will require a second wiring harness. The wiring harness is included but installation is an additional factor to consider. Stage 4 LPFP kits are similar to stage 3, however it requires the use of port injection. The dual pump set up is the same as with the stage 3 kit. This includes the stage 4 LPFP kit, port injection kit with injectors, and a port injection controller. LPFP upgrades are typically the first fueling mod for N54 owners. Those planning to run lower or no E85 mixtures on stock turbos may find the stage 1 upgrade the most cost effective option. However, since inline pumps still rely on the stock LPFP it may not be a good option for those with weakening or faulty stock pumps. However, it does not need to be upgraded. There are ways around that such as port injection or charge pipe injection. Both of those options will essentially bypass the HPFP limit. It actually relocates the HPFP to be driven

by the serpentine belt. The kit includes the HPFP drive housing, a new belt, and all other hardware required for installation. In essence, the belt is able to help overdrive the HPFP. That basically means the pump is being driven faster than it was designed to do. However, most HPFP failures are caused by modes unrelated to over-spinning the pump. Upwards of or beyond whp may be possible on lower E50 or E60 mixes. More power may be had with lower mixtures, such as E It rivals the price of a full port injection system. Unlike the VTT options above this does not add a second pump or relocate the stock pump. Rather, it uses a gearbox that allows for an increase in HPFP shaft speed. Standard Helix overdrive units can support whp of fueling on full E Expect closer to whp with E50 or E60 mixtures. A Helix Xtreme unit is also in longevity testing but is expected to support whp on full E This is truly incredible for a slightly modded HPFP and stock injectors to make this kind of power. However, there might be a catch. The N54 and N20 use a very similar timing chain design. Part of that likely has to do with the nature of inline 6 engines being harmonically balanced. There are concerns that over-driving the pump could cause additional vibrations and lead to an increased chance of timing chain failure. The VTT and Helix options certainly have potential. Additionally, the VTT double barrel option supports excellent flow but rivals or exceeds the price of port injection. Alright, we went a bit deeper on HPFP upgrades than initially planned. Charge pipe injection CPI is another exciting development in the recent years. CPI is a similar concept to methanol injection. If you can run meth through the CP, why not offer an additional fuel injector and fuel lines, too? However, we would recommend only running injectors after the FMIC. There could be concerns of detonation if sprayed before the FMIC where air temps can be extremely hot. Moving onto the highly tested, proven fueling method to make big power on the N Port injection adds a new fuel rail along with 6 injectors. The stock direct injection system still remains carries quite a bit of the weight. However, port injection kicks in at a certain point to handle the rest of the fuel flow demands. Port injection with the proper LPFP setup and high flowing injections can support in excess of whp. There are a lot of different options out there dependent upon your personal preferences and goals. Anyways, hopefully this was a helpful outline of the different N54 fueling possibilities out there. There are several options at this point. Charge pipe injection can add a 7th N54 injector to support additional power and E What fueling mods do you have on your N54? What kind of power are you running? Leave a comment and let us know! Looking to make big power? The older Walbro never did this. M3 suspension and KW coilovers. 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. Our site is dedicated to all things BMW Tuning related. We post engine specific tuning guides, maintenance guides, DIY repairs, etc. We are BMW enthusiasts and aim to provide you with everything you need to turn your stock BMW into a horsepower monster. Our garage currently includes a i, i, and i. You can say we are somewhat N54 fanatics. Leaving Some Headroom We always like to throw in these reminders. Best Regards, Zach. Side note: in terms of fuel octane the max we run is Leave a Reply Cancel reply Your email address will not be published. Search the site Privacy Policy. Menu Menu. Log in. Install the app. New posts Trending. New media New comments. Latest reviews. New Fuel-It! Stage 4 LPFP now available. Start date Dec 13, JavaScript is disabled. For a better experience, please enable JavaScript in your browser before proceeding. You are using an out of date browser. It may not display this or other websites correctly. You should upgrade or use an alternative browser. Nov 3, 0 IL. Hi Everyone, The N54 has been reaching new levels regularly and we've noticed that there were quite a few people pushing the limit of their Stage 3 fuel pumps. When these were first introduced breaking whp was a big deal but now we're encroaching on whp so an update was needed. Consequently we revisited the Stage 3 setup to see how we could make improvements and maintain the flows and pressures we needed for these new boost and power levels. Ultimately the biggest restriction in the fuel system once the pump and fuel lines have been upgraded is the fuel filter assembly on the drivers side. We've all known that for some time but wanted to keep that fully functional so that all the return systems worked as designed and the system remained robust and reliable. Keeping all that in mind we set out to design our Stage 4 fuel pump and had a few mandatory criteria: -Keep all the in tank fuel transfer systems functional and as stock as possible -Maintain the DME's and Jb4's ability to monitor and regulate the low pressure fuel system -Achieve higher flows -Maintain greater pressures To do this we ended up creating a new design for our dual pump assembly that I'll outline below. Primary fuel pump: With the new design the primary pump is isolated and runs just like a Stage 2 pump. In addition it utilizes the stock tank's internal plumbing so that all the venturis and fuel transfer systems remain functional, this will support approximately whp on E Secondary fuel pump: The big changes for Stage 4 is the secondary pump configuration. The secondary pump is now isolated so that none of it's capacity is used to feed venturi's nor is restricted by the stock fuel fuel filter assembly. Instead

as you'll see in the pictures, the secondary pump is plumbed directly out the tophat where it is then routed toward the engine compartment via a -6an E85 compatible fuel line. External fuel filter assembly: The most obvious change you'll notice is the addition of our new dual input 6 micron E85 compatible fuel filter. This new GPH fuel filter accomplishes a couple purposes. The secondary pump is no longer running through the stock filter so it must be filtered. In addition to maintain the DME's and JB4's ability to regulate and monitor fuel pressures for everyday use and port injection we needed to combine the inputs. This new filter assembly does that and then supplies the fuel to the HPFP and port injection kit. This new filter is mounted under the chassis by the driver's footwell where there are two existing 8mm female bolt holes. Many are familiar with this location for mounting an ethanol sensor. If you wish to run an ethanol sensor as well, the alternate filter mounting location is in the metal "tunnel" area as the fuel lines enter the engine bay. As this thread progresses we'll update it with additional pictures of those mounting locations. Upgraded fuel lines: Another obvious addition to this fuel kit are the additional fuel lines that are included with the Stage 4 kits. These are required due to the addition of the secondary feed line and the filter assembly. Consequently if you have an existing fuel line upgrade or port injection kit that you will be upgrading from, those lines will have to be changed out. Fuel Pressure Regulator: To run this system, it is mandatory that you have an external fuel pressure regulator. Frankly by the time you get to the power levels that require this magnitude of a setup, you should be running one that is boost referenced anyway. We have not added it to the standard Stage 4 package because some of you already have them. If you don't have one, you can simply select that additional option when ordering your Stage 4 fuel pump. Answers to a few questions we anticipate we'll get What's included with Stage 4? However, to utilize the secondary, an additional wiring harness must be installed. Yes , just let us know when you place your order and we will cap the secondary feed line and return fitting for you. Once you complete your upgrades, you can remove the caps, install your secondary wiring harness, and upgrade the fuel lines. Can I trade-in my Stage 3? Unfortunately no, we can't re-use your Stage 3. Your Stage 4 will come with a new wiring harness and we would recommend removing your Stage 3 and selling it with the new wiring harness. Those are unchanged and this will supply your buyer with a new wiring harness to complete their installation. If you will be utilizing our trade-in option and need additional time for your buyer to return their stock core to you, let us know and we're happy to work with you on that. Can I trade-in my Stage 2? Yes , our normal upgrade policy rules apply to this as well. Can I trade-in my Stage 1? No , but you can use your core for the trade-in option as long as it is otherwise stock and undamaged. Can the parts for the upgrade be purchased separately? No , we get asked this quite a bit and here is why we don't do that. First off who better to build your pump assembly than the company that builds them every day? Second, there are specialty tools and procedures used to build these. Most don't have those tools in their possession. Third, after it's built, don't you want to know that it has been bench tested for flows, pressures, current draw, and functionality before putting it in your car? Otherwise if you have issues dialing everything in, how are you going to know where to start? Do you have an option to add a 3rd pump? No, there is no need at this time. One pump will max out the HPFP at approximately whp on E85 but is capable of flowing enough fuel for approximately whp. With our design we utilize that additional capacity and add an additional pump that is also capable of supporting over whp as it's not feeding the venturi's. Consequently adding a 3rd pump at this time would create additional expense and complication that is not needed. This setup runs dual -6an lines from pumps that are capable of supporting over whp each. We have simplified this design with our Y adapter to feed the HPFP and the port injection and it's currently a -6an line. Should the need arise as we approach whp, we'll also make a dual output filter available so the HPFP and port injection rail can be supplied by individual -6an lines as well. Overall power potential is going to also be subject to the AFR targets, fuel type, and requested pressures. As more questions arise we'll add them to this post and continue to update this thread with install pictures, videos, and additional information. Below we have included a brief video description of the pump assembly, a few logs, and some pictures of the products. You'll also notice in these logs that as our boost levels rise, so do our fuel pressures to compensate for the increased manifold pressures. Generally with these pumps the LPFP pressures will max out between 85 and 90psi and our base pressures are set at approximately 58psi. Last edited: Dec 15, Reactions: zero2sixtyZ , Twisted Tuning and doublespaces. Dave, Great you guys have a revised option, thanks for continuing development for the platform! Quick question, since both pumps are located inside the bucket, would there be a risk of the pumps flowing out more then the venturi could replace? So the bucket has an added secondary venturi or am I missing something with the OEM design having a second venturi? I think. Last edited: Dec 13, Nov 18, 87 0 Las Vegas. Twisted Tuning Lieutenant Platinum Vendor. Oct 25, 0 New York Great work guys. Dec 14, 22 18 0. Reactions: R. SingleTurboE92 Corporal. Nov 2, 0 36

Aubrey, Texas. What is this policy? I can not find it on your website. SingleTurboE92 said:. View attachment Thank you! Here's a copy that has been updated to reflect the Stage 4 option as well. It doesn't look like you can read it very well if uploaded to the site, so here's a link to download it. Erichale77 Lieutenant. Sucks for us stage 3 guys. Our recommendation would be to upgrade to a Stage 4, take the new wiring harness that comes with the Stage 4 and sell it as a complete Stage 3 with a new wiring harness. Your Stage 3 harness will be re-used for the Stage 4, so no need to swap any of that out. Show hidden low quality content. You must log in or register to reply here. Similar threads. Stage 2 Pump.. Need help Low Voltage. Replies 6 Views N54 Aug 13, e92wolf. Fuel line quick connect to fuel filter broken.. Mvaccarelli01 Jun 21, N Replies 5 Views N54 Jun 23, MoistNapkin. Another engine build. Jern54 Nov 16, N54 2. Replies 25 Views N54 Yesterday at PM Jern Losing fuel pressure and my sanity :. Replies 26 Views 1K. N54 Dec 16, NoQuarter. Fuel system rework changed rail pressure. Replies 7 Views N54 Dec 16, JuniorB. Top Bottom. You may encounter some visual styling issues as we resolve some upgrades to the forum. This site uses cookies to help personalise content, tailor your experience and to keep you logged in if you register. By continuing to use this site, you are consenting to our use of cookies. Accept Learn moreâ€¦ Enter your email address below to be notified when this product is no longer on back order. Your email address will only be used for the notification of this product and deleted afterward. Recover Lost Password. Password must be at least 8 characters. Password must contain a lowercase letter, an uppercase letter, a digit and a special character! Sorry, I don't understand this YouTube link. Video successfully uploaded. Your video will appear once it is approved. Add Another Video. Does NOT Fit. Does Fit. Are you running meth or planning to run meth but want better control, distribution, and additional capacity? If so, this kit is for you. Direct port meth injection is a kit that is installed between your intake manifold and the cylinder head to provide you with better control and more flow potential to each individual cylinder. If you are currently running meth this provides more accurate distribution and control than standard charge pipe injection. What additional components will I need? No, not for a standard installation. If you wish to run a small meth nozzle in the charge pipe for IAT suppression, you can do so with the addition of a solenoid, meth line, adapter at the meth rail, and nozzle in the charge pipe. If you choose to do this, we'd recommend a very small nozzle such as a CM5 or CM7. ECS Tuning is not affiliated with any automobile manufacturers. At least one option needs to be selected. There was an error submitting your request, please try again. On Sale. Offered with free shipping. Cancel Submit. Cancel Add. Create Account. Enter your email address below and instructions to reset your password will be emailed to you. Please try again, or Reset Your Password. Email Password Password must be at least 8 characters. Passphrase Zip Code. Home Page Fuel-It! ES Add File. YouTube Link Add Video. Add Document. Qty Add To Cart. Add to Wish List. Does this fit my vehicle? What is direct port meth injection? What does the kit include? Will this fit my car? If you are driving an E-Series N54 or N55, yes. All warranties, product application, fitment, and performance are the responsibility of ECS Tuning. For additional information see the terms of use. Enter your email address below to be notified when this product is no longer on back order. Your email address will only be used for the notification of this product and deleted afterward. Recover Lost Password. Password must be at least 8 characters. Password must contain a lowercase letter, an uppercase letter, a digit and a special character! Sorry, I don't understand this YouTube link. Video successfully uploaded. Your video will appear once it is approved. Add Another Video. Does NOT Fit. Does Fit. If you still need more flow, the Stage 3 upgrade is also available and can be added to your Stage 2 bucketless pump. ECS Tuning is not affiliated with any automobile manufacturers. At least one option needs to be selected. There was an error submitting your request, please try again. On Sale. Offered with free shipping. Cancel Submit. Cancel Add. Create Account. Enter your email address below and instructions to reset your password will be emailed to you. Please try again, or Reset Your Password. Email Password Password must be at least 8 characters. Passphrase Zip Code. Home Page Fuel-It! ES Add File. YouTube Link Add Video. Add Document. The above image is for illustrative purposes only. Select options below. ES : Availability: In Stock. Add To Cart. Add to Wish List. Select Options. In Stock. Don't damage your lock ring, do it correctly with this tool. The Stage 2 bucketless kit includes the following: A custom anodized billet fitting for the pump output and stock fuel line connection. Our custom billet aluminum anodized bracket for the pump and float assembly Two cotter pins to secure your float assembly A new E85 compatible Walbro pump Spare vent tube clip A new Walbro filter If you still need more flow, the Stage 3 upgrade is also available and can be added to your Stage 2 bucketless pump. When using this filter, running the vehicle under low fuel conditions can cause fuel starvation issues. In addition, if you intend to use this for road course applications, you may see starvation issues when running less than a half tank and doing long high G right turns. Again for those applications we'd recommend one

of our standard pump applications. All warranties, product application, fitment, and performance are the responsibility of ECS Tuning. For additional information see the terms of use. Our throttlebody injection kits are installed between your throttlebody and your intake manifold to provide you with more fueling capability while under boost. It's a relatively easy system to install that supplements up to a 1 liter of fuel per minute at 20psi of boost and will support an additional whp on ethanol mixes. For more information and installation guides, visit us on N54tech. Throttlebody spacer Fuel solenoid Adapter and fuel line to connect to the factory fuel line Hobb's switch to activate system under boost Wiring harness New bolts for the throttle body to install the spacer Plug and play integration. Throttlebody spacer Fuel solenoid New upgraded fuel line to replace the factory fuel lines to the tank Hobb's switch to activate system under boost Wiring harness New bolts for the throttle body to install the spacer Plug and play integration. Throttlebody spacer Fuel solenoid New upgraded fuel lines to replace the factory fuel lines and add the ethanol sensor New Continental ethanol sensor requires analyzer to read ethanol content Hobb's switch

pioneer deh 2100 wiring diagram
toyota camry 96
gmc truck parts diagram

to activate system under boost Wiring harness New bolts for the throttle body to install the spacer Plug and play integration. These kits are for track use only! Be sure to purchase the kit for your engine type, N54 or N55 as the throttlebody bolts are different! An upgraded low pressure fuel pump is required. We recommend running our Stage 2 upgrade when running ethanol. We recommend running an aftermarket intake from Burger Motorsports. To run the stock airbox, it will need to be modified. Hobb's switch Please contact us at info Fuel-It. Fuel that has been contaminated can generate a false ethanol reading. Your basket is empty. Added to Basket. Please enter a search keyword. Shop About N54Tuning. Add to Basket. Customer Reviews This product hasn't been reviewed yet. Write a review. Write Review Name. Review Title. Verify you are a human. Shop by Category Christmas Sale!!! N55 3. British Pounds. Canadian Dollars. Australian Dollars. Enter your e-mail address to receive our newsletter.