Toad wiring diagram

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Discussion in ' Security ' started by Admin , Aug 8, Log in or Sign up. Club GTI. What is a Toad AI and why would I want one? The AI or Toad is cheap to buy inc delivery and simple to fit. It is a very good Alarm and Immobiliser which has a remote key fob to switch on and off. You can link the Toad up to your central locking system so that when you arm it the vehicle locks, you can also link it up to you electric windows for a full closure system. There are many other useful things the Toad can do. I ordered the alarm and it arrived within a couple of days, in the pack you get the Toad AI control unit plus the wiring loom, the siren, 2 x key fobs, 2 x Ultrasonic sensors, full instructions, a plunger for the bonnet, brackets, cable ties and lots of screws to secure everything in place. Soldering Iron and Solder. A crimping tool. X amount of wire in some cases. Before you start ripping into the car, you need to prep the Toad and identify which wires you will be using and which wires you can neatly fold away in case you will use them at a later date or cut off to save on bulk. The wiring diagram is quite good, the wires are easy to identify either by colour, or a coloured band of heat shrink. Once you have identified which wires you are using mark the wire at the end with a piece of masking tape and write on it what it does. After I identified each wire I would mark the diagram with a tick if I was using it or a cross if not. Once you have done this lay the wires out on a flat surface and stretch them out, now tape them together at varying spaces so that the loom is easier to move around and thread through the car. Disconnect the battery terminals before go any further. Once you have done this, take the Toad out to the car and remove the complete lower dash and centre console. Decide where you are going to mount the control unit Out of sight and in a hard place to find. Preferably somewhere where you would have to remove the lower dash to get to it and then route the wiring around to the various positions. For the indicators to flash you need splice in to the loom at the back of the hazard switch. Measure the Toads loom up and cut it down to size if you cut the masking tape off then re apply so you know what is what! For the Toad to gain power it will need permanent live feed, I used Section P on the back of the fuse box all of these are live feeds directly from the battery. See here for a wiring diagram. The Toad requires a switch ignition live. Join this wire to the switch ignition wire in the car BLACK Position A Pin 8 I spliced this wire to the larger of the two black wires coming out of the back of the ignition barrel. The Toad has a warning LED that needs to be mounted so that it can be seen from the drivers seat, also mount it so that it can be seen from all angles outside of the vehicle as a deterrent. The LED flash red when armed, it will flash green when unarmed but before a doors is opened, and will stay green when unarmed and ready to start. The LED is also used to set up the Toad, certain flashes will indicate various things. There LED is very simple mount, drill an 8mm hole, push through and then pope the cap on. I mount the LEDs in a blank switch on the dash. There are two earth wires that run out of the Toad. Run these wires to a point on the metal body of the car and attach with the self tapping screw supplied. Do not fit these to an earthing point that other components are attached! Make sure that you sand of the paint on the surrounding area to make a good contact. For the Toad to recognise a door has been opened you need to connect the Toad up to the door opening pins. These are already in place and require a Diode to be spliced in due the circuit in the car This way you will keep the convenient light system. If you do not have a diode you will need to unplug the convenient light system on the door push buttons the brown wire otherwise you will get false alarms. To fit with the diode, remove the door switch, and cut the brown wire. Solder the diode between the cut brown wire. Now solder the Toad wire to the very end of the brown wire past the diode i. Repeat for all doors, splicing extra wire as needed into the Toads green wire. Make sure that your diode is facing the correct way!!! The boot switch is wired in the same way as the door switches, if you do not have a boot plunger nip down to Halfords and buy one. To mount the sensors select a sensible place, they need to be able to cover the doors and the windows. Some people mount them high looking down, using the clip supplied to attach to some trim. I think this looks messy so I mount mine into the dash Simply drill a hole into your dash. If you have extra wire wrap it up, tie away securely using a cable tie. To fit the bonnet plunger is very important, as this trigger is there to stop a thief getting under the bonnet and ripping the siren out of the car making it easy for than to then override and steel. Find a suitable place on the slam panel to mount the plunger. Drill a 10mm hole and fix the trigger in place with the supplied security screw. Check that the bonnet pushes the plunger down when closed. If not then add a block of material the correct thickness to the bonnet. I used the block of plastic from a MK2 Golf GTi locked on the inside of the boot it does the same job and would have plunged the boot trigger. Fitting the siren unit is very simple, it needs to fitted into the engine bay somewhere, so that it can project its warning nice a loudly. Plus it is out the way so the thief will struggle to rip it out. A lot of alarm fitters mount the siren to the rear firewall in the engine bay to me this is not hidden enough an looks unsightly too. So use you imagination and mount it somewhere out of sight, ie the scuttle tray, in the chassis leg, behind the battery, under the slam panel etc. I

mounted mine under the scuttle tray using the bolts for the coil. I fed the wring through original grommets through the firewall and into the car. The wiring loom here is self explanatory with a 4 point multi plug that connects to the Toads wiring loom. Right then, All of the wiring above is what is needed for the alarm to work as intended, what is left is just connecting up the immobiliser. This is simple, you have four wires that make up two circuits. For the immobiliser to work you need to cut out a wire that is curial for the vehicle to run and join it into one of these circuits. You have two circuits so you could immobilise two different critical wires on the car it is up to you to choose which wires to immobilise. EDIT This is an example of how to immobilise a circuit, it is not recommended to immobolise just the starter motor but another circuit as well. See above for example circuits. To immobilise my vehicle I chose the starter wire to cut. This is the thick red and black wire coming from the back of the barrel. I like to use the starter wire as if someone does get in and try to steel it, it will not even turn over so hopefully they will get bored quickly and leave it alone. If the fuel pump was only immobilised then they could be there for ages turning the engine over be they realise it is immobilised. In this picture you will see the two wires connected to the one red and black starter wire. When I splice any of my wires I always solder do not use those crappy Halfords plastic three way splitters and to make the alarm the most secure splice all the wires as close to the fuse box as possible. Not up by the barrel This requires you to trace the wire and takes more time BUT it makes it a million times harder for a thief to work out what has been spiced and what would need to be bridge, plus down behind the fuse box is a very hard place to see and work on even in the best of conditions. Ok so you have now cut all the wires to length and mounted all the parts that need to be mount, at this stage I took the Toad from the car and soldered all the joins I could. Then I wrapped the loom to conceal the wires. Take the Toad back to the car fit and solder the remaining joins. Reconnect the battery and test all the triggers on the Toad. If the entire vehicle is closed correctly and your wiring is good the Toad will chirp once to arm and chirp twice to disarm. If the Toad chips 4 Times you have a problem with the boot or bonnet switch. If the Toad chips 5 Times you have a problem with the door switches. If the Toad chips 6 Times you have a problem with the Ultrasonic sensors. If the Toad chips 7 Times you have a problem with the ignition. All being well the Toad will be working correctly, next you can go about setting up the functions. Eg, Chirp when armed, lock doors when engine is started, auto arm after a set time etc etc the list is long. Follow the guide bellow in pics on how to do this. Last edited by a moderator: Mar 13, Admin , Aug 8, Excellent guide and good write-up. Made sticky as requested. This, along with the other washer bottle thread, could be made FAQs later. I installed an AI myself and I found that the software switch programming instructions were a bit ambiguous in one aspect. You know when you go to select the second software switch number by pressing the button X number of times, and then it chirps the number back to you? I seem to recall that the number of chirps it returns is actually the switch number minus one. So you hit the button five times for instance to select switch , but it'll chirp four times back at you. Something like that anyway. Another thing with the AI is that it should have been able to drive the standard MK2 central locking pump directly. The four-second setting is sufficiently long enough to drive the pump to the point where its internal switch clicks so that the doors are fully locked or unlocked, and the pump is then ready to work in the opposite direction. And it did, until I tried to unlock the car after a long period of being set. Therefore, a five-wire solenoid really is the only way. Cheers Trev. Trev16v , Aug 8, Thanks Trev, interesting about the Toad having a possible firmware glitch, in the future i plan on installing central locking to the MK1, glad you have highlighted the problem, ill now forget about using the VAG pump system and look to use an after market system. Admin , Aug 9, Ah, you can still use the VAG pump without any problems, but you have to use a five-wire solenoid in the driver door. The AI drives the solenoid two wires , and then the solenoid's internal switch remaining three wires replace the existing VAG switch in the door that drives the pump. Trev16v , Aug 9, With CE2 equiped cars there is no need to splice wires really I have crimped mine directly ino the VW loom using the proper terminals from VW and a propper ratchet crimp tool. Using a indicator stalk loom from a MK3 gives you a two pin connector to wire the indicator outputs to this is used for the indicator warining lights for the clocks on a MK3 just cut the plug from the clocks loom pop out the termanals and crimp to the toad loom using the proper crimps and tool. Jetta , Nov 2, Trev16v , Nov 2, Joined: Jun 11, Likes Received: 0 Location: on the edge Last edited: Dec 24, Joined: Dec 9, Likes Received: 0. This post puts all VW Golfs at risk you show the alarm the possible cuts that a thief would love to see its all in the post for him these are to keep your car safe please pm them not broadcast them i fit alarms and its like showing how to do the magic trick to people that thought it was magic now your next door neighbour can disable your immobilisors easy Be carefull guys its your property lan. Admin , Jan 8, Has anyone tried a time delay relay with this alarm to combat the centeral locking problem?? I believe that Martin is referring to the issue I was discussing

further above, where the AI cannot be used to drive the MK2 central locking pump directly , as opposed to the usual method of having the AI driving a five-wire solenoid. Martin, there's no issue really. You can drive the central locking using a 5-wire solenoid. The actual problem is that the AI appears to have a firmware problem. This means the pump is quite often not operated properly. And you're totally correct, a timed relay would indeed solve that problem. I know that one can just install a five-wire solenoid, but it would be so much less farting about to just connect the AI directly to the pump and then put a slave vacuum plunger into the driver door. Last edited: Jun 5, Trev16v , Jun 5, Joined: Feb 20, Likes Received: 0. A top tip is to obviously when adding such security stuff always tape up alarm wiring black and cable tie into place together with the vehicles wiring, this makes bypassing very difficult. With regards to the siren the back up battery is useless if the siren is on show under the bonnet and is easily ripped out. Always mount the siren in a hidden location in the engine bay, under the scuttle tray is a good location and is very hard to access, so the siren will be safe from tampering. Desite the jazzy look of the toad's siren, it's always best for sirens to be black and be hidden! Can anyone say what rating I need for the rectifying diodes for the doors? You must log in or sign up to reply here. Show Ignored Content. Share This Page Tweet. Your name or email address: Do you already have an account? No, create an account now. Yes, my password is: Forgot your password? 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 More States can have additional requirements flares in RVs are an example , and they can also prohibit certain equipment that federal law permits. Why that happens, and the rammifications, will be saved for another document. Everything starts with the wiring diagrams. The ease of use depends on the vehicle manufacturerâ€"American makes are generally the easiest to follow, and Smart has to be one of the most difficult more on that later. These diagrams are among the easier to followâ€"power at the top of the page, ground at the bottom. This style makes it easy to follow how the circuits work, but sometimes a little more difficult to identify the point where all the wires we need come together in one spot. This is a good thing and very common for marker lights , as it means we can make one connection and light up 10 bulbs! Where do we connect? Instead, we can make the connection on the length of wire that heads down toward the front side marker lightâ€"that way we have about a foot of exposed wire to work with, and make the connection without worrying about messing something else up. Connect to this wire with brown wire coming from the 7-pin plug. How do you know what you have? Back to the wiring diagrams for just a bitâ€"locate the turn signal wiring diagram:. Here it becomes obvious that the front and rear signals share an output from the flasher control module. So far so good? The green right turn input to the converter should go to the right turn connector on the 7-pin harness also green , and the yellow left turn input should go to the yellow left turn wire on the harness. At this point, the converter has two wires not connectedâ€"stop and ground. Maybe I should have started with the brake lights. This is even simpler than the other functions to read. Take the white wire from the 7-pin harness and the white wire from the light converter and connect both to a good chassis ground. I recommend against just finding a body screw and instead looking for a factory grounding point. The green and yellow wires from the 7-pin plug will connect directly to the circuits on your vehicle. Required Equipment Reflex reflectors , on the sides front and rear, and on the rear facing rearward. These are the amber front and red rear reflectors with a small triangular pattern that reflect light back in the direction it came from. If the vehicle was legal on its own, it already has reflectors meeting these requirements. Stop, tail, and turn signal lamps. License plate lamp. Not so much for avoiding an accident, but it does help in identifying your vehicle. Yes, this is required. Side marker lights. On the sides of the vehicle, at front amber and rear red. What do I need to get started? Wiring diagrams. There are a number of places to find these for free, from online forums to the repair guides from AutoZone. That will get you access to all of the factory repair information the same stuff the dealer will have for your year, make, and model of vehicle. A few minutes with the wiring diagrams can save you hours of probing around, running wires, etc. I prefer using the combination of this plug and harness. The connection at the back of the plug is a MetriPack connection, with weather seal. Instead of screw terminals in a rough environment, the harness length lets you get into the engine bay to make your field connections. Not to mention, pretty inexpensive. Depending on where and how, and what you prefer, anything from OE-style connectors where you make a plug-in adapter, solder and heat shrink, butt splices or quick splices. Hook-up Wire. White, brown, yellow, and green for the lights. Voltmeter, wire cutters and strippers, crimpers, and possibly screwdrivers or other tools for gaining access to wiring. How do I get started? Main Vehicle Menu. Click Diagrams shortcut on bar at right. Select Electrical Diagrams. Back to the wiring diagrams for just a bitâ€"locate the turn signal wiring diagram: Here it becomes obvious that the front and rear signals share an

output from the flasher control module. Brake Lights At this point, the converter has two wires not connectedâ€"stop and ground. Back to the wiring diagrams for just a minute: Maybe I should have started with the brake lights. See better, and make your RV look new again! The toad lights that need control are the tail lights, the brake lights, and the turn signals. Usually a four-wire cable is sufficient for this task, because a ground wire is also needed. But, before you buy a cable or make one up, check and see what type of connector is already on your motorhome. Some older motorhomes have only a four-wire connector, many newer motorhomes have a six-wire connector, and, now, most motorhomes come with seven-wire connectors. It is easiest if you have your car wired up with the same type of connector. Most newer cars today that have built-in computers for controlling all sorts of functions will require that you not wire the motorhome directly to the lights in your toad. Instead, you will need diodes that keep the motorhome signals from interferring with some of the other non-lighting toad internals. A diode is sort of like a switchâ€"allowing either a signal from the motorhome or a signal from the toad to activate, for example, the brake lights; and the diodes keep the two signals from ever getting together. Unless you are savy with automotive electrical skills, it is best to pay someone knowledgeable to wire your toad lights. If you select an auxiliary toad brake that requires 12 volts from the motorhome, then you will definitely need to install either a six-wire connector or a seven-wire connector, since you will using the fifth wire for the 12 volts needed by the auxiliary brake system. Oh yes, one more little detail. Usually, both of these adapters are readily available at your favorite RV supply store or your local auto parts store. Back to Main Page. Continue to Next. With the many methods of towing in the RV world, you must have an electrical connection between the RV and the towed vehicle for lights, turn signals, brakes, etc.. Pre-made cables are available at most Camper part stores, as well as kits for wiring into the wiring harness of vehicles. And every smart RV owner learns what those wires do, and what the symptoms are when there is a bad connection. RV Motorhomes will have either a 6-pin or 7-pin connector mounted somewhere near the Hitch for connecting to the towed vehicle.. Some of the wiring systems used for connecting a tow vehicle with a TOAD or towed vehicle are simpler than others, but there are standards for all of the connectors and how they are wired. The standard 4-pin connector is a flat plastic connector, with 3 pins either male or female, and the 4th pin t he op posite sex. The connector shown is for the wiring of the towing vehicle. The pins and their usage are;. Those show n are from the wiring side of the towing vehicles connector. The Pins and their usage, are;. This pin is used to provide a variable voltage to the electrical brakes of larger tow trailers and campers to assist in stopping them. Those shown are from the wiring side of the towing vehicles connector. The pins and their usage, are;. You can read and enjoy this article and share it with your friends, but if you want to use it commercially then you must have the authors permission, in writing. You are commenting using your WordPress. You are commenting using your Google account. You are commenting using your Twitter account. You are commenting using your Facebook account. Notify me of new comments via email. Notify me of new posts via email. This site uses Akismet to reduce spam. Learn how your comment data is processed. January 27, March 7, ramblingdon. Like this: Like Loading Leave a Reply Cancel reply Enter your comment here Fill in your details below or click an icon to log in:. Email required Address never made public. Name required. Post was not sent - check your email addresses! Sorry, your blog cannot share posts by email. By continuing to use this website, you agree to their use. To find out more, including how to control cookies, see here: Cookie Policy. From years of experience wiring up towing and braking systems, I can say that brightness of toad bulbs, whether added or existing, is more related to the wiring and its ability to feed power to the bulb, than it is about exact bulb placement in the taillight housing. Before most coach manufacturers switched over to relays and heavy 12 gauge wiring to the 7 pin blade connectors, it was not abnormal to find Combine a weak ground, with light gauge wiring or poor diode quality and often the voltage at the toad tail light bulb was Volts. Wiring Adapters are fine as long as the proper pins are feeding power to the appropriate connection. Thus there is a significant loss of power going through them. Using a quality 6 pin connector and 16 gauge wiring from front to back in the toad combined with good wiring practices will result in ample power to the Toad taillight, brake and signal bulbs. Grounding the ground wiring at the front and back of the toad to a clean chassis spot is a good practice and shortens the current path providing less loss. When you look at the original wiring use on coaches prior to the widespread use of relays, the circuits were over feet front of coach to back of toad and return. Combine small gauge wiring with a little corrosion and poor quality connectors and no wonder lights were dim. Some brake systems depend upon the brake signal from the coach to activate and with poor wiring towing safety is compromised. Coach wiring and extension cables between toad and coach have improved, quality diode packs do exist and quality connectors are available. So where do most problems start? Dealing with a reputable

shop is important; if they cheapen up on the components the day you drive off the lot everything will likely work, however the question is for how long? The days of wiring a toad like we did a small boat trailer or cargo trailer are gone. Even quality cargo trailers are using the seven pin connectors. You can buy cheap diode packs, or expensive high quality ones. The cheap ones not only perform poorly, they degrade rapidly and require replacement frequently. RVers need to be proactive in maintaining the lighting system by properly preventing corrosion on the connectors. So what do we recommend? First of all use a six pin round connector on the towed vehicle and a six or seven pin connector on the Coach. This provides a better quality connector and allows for the additional wiring required f

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or braking system purposes. This applies to the Towed vehicle connector as well. Cover the wiring in split loom for protection and secure it safely up out of the way. Follow the wiring code embossed on the plastic connector housing. This combiner would have its output the two wires connected to the LT and RT connections on the coach connector. Therefore it is installed before the connector. Use quality components and a minimum of 16 gauge wiring in the Towed vehicle and the system will perform as expected. Check the cable connections daily and always check all lighting functions each day prior to towing the Towed Vehicle. Menu Click on the white bars to open. Properly Wiring a Towed Vehicle. Properly Wiring a Towed Vehicle From years of experience wiring up towing and braking systems, I can say that brightness of toad bulbs, whether added or existing, is more related to the wiring and its ability to feed power to the bulb, than it is about exact bulb placement in the taillight housing.