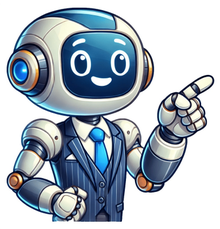
I'm human



I've got a '00 Ranger Super Cab with a door adjar light problem where it's not the switch inside the door. I started by identifying which door was causing the issue and found it was the passenger side. Initially, I tried the WD40 trick but didn't get any results, so I disassembled the door and checked the switch. It turned out to be working fine when tested with a test light. However, even after jumping the contacts together, the dash light remained on. This led me to suspect that both contacts were grounded to ground, which explained the problem since only one should be. I drew up a simple circuit diagram to try and figure it out and came up with the theory that there must be a short to ground somewhere between the dome light and the door switch. Another possibility is that a GEM (Generic Electronic Modules) relay or two is stuck or shorted, which could also cause the issue. If anyone has a wiring schematic for a '00 Ranger's dome light/door switch/dash adjar light circuit, I'd love to see it and can figure out the problem from there. There's been an issue with the dome light staying on constantly; it seems like a short circuit somewhere in the system. The owner thinks there might be a problem with the dome light switch, causing it to malfunction when the bulb is moved or bumped. They've noticed that the dashboard light also comes on when the door switch is closed, which suggests that the circuit is not as simple as they initially thought. The driver's side and passenger side door switches are grounded separately, but both have black ground wires connected to them. The other wire from each switch goes directly to the GEM module (pins 7 and 8). When a door is open, the corresponding switch sends a ground signal to the GEM, which then illuminates the "door ajar" lamp on the dashboard. The main headlamp switch controls the "door ajar" functions via the GEM. Some owners have suggested that the dashboard thumb wheel switch might be stuck in an incorrect position, but this doesn't explain the issue with the door and dash lights. One owner has experienced a similar problem with their 2000 SuperCab 4-door, where only the rear passenger door's interior light stays on when opened. They've tried pulling out the bulb and resetting the switch, which seems to resolve the issue temporarily. The complexity of the circuit, including the GEM module's involvement in sensing door openings, suggests that there might be more to this problem than initially thought. Checking the positive wire between the door switches could provide further clues to resolving the issue. I've got a problem with the dome light in my truck, and I'm trying to figure out if it's due to a short circuit. The issue is that both wires from the door switch are showing as shorted to ground, but only the black wire should be grounded. I've already checked the dash dimmer switch and the interior lamp power relay, and everything seems fine there. Next, I'm going to unplug the other wire from the door switch and check if it's shorted to the frame. The problem is that both doors have their own separate circuits, so I think they should be working independently of each other. I've also noticed that the power saver circuit shouldn't be turning off the dome light after a certain amount of time, but I'm not sure how to check if it's malfunctioning. I've got some experience with electronics and troubleshooting from my HVAC background, so I'm hoping to use that knowledge to help me track down the problem. The main issue is that without a schematic, I'd have to take everything apart to see if there are any hidden components and to track down the routing of the wires. I've also been told to check the GEM module, but I don't know where it's located or how to access it. I'm going to start by unpluging the door switch wire at the GEM module and checking if it's still shorted somewhere between the door switch and the GEM. If it's not then more than likely the GEM is bad and is grounding that wire for some reason. I'll update you guys later today when I look at things and break out my multimeter. Which method was easiest for you to use that way. The black box on the left side does not look the same as yours in the picture. Also, I found no wire connected to it that matched the color of the one coming from the passenger door, which is probably grey with a purple or red stripe, or light green or tan with a red or purple stripe. It might be grey/red (or purple) though. Anyway, none of the wires going to that box matched its color. I saw a grey wire with a yellow stripe and a few other grey wires with black stripes or no stripes at all. Nothing matched. My box has a grey connector in the same spot but it does not have a black one to the left. Either way, I know it doesn't match your picture. So, I figured I'd track that wire where it came from the door by removing the plastic cover on the right side of the floor. It looks like the wire comes in, plugs into a big harness, and then routes up and over the glove box on the right side. I removed the glove door to see where it went and it looks like it goes high into the dash and then over to the driver's side. Either it changes color before it gets to that black box or it might plug in at the top and back side of the box, but I don't think so. It looks like all those wires go somewhere behind the dash's display and I'm not even sure if this wire is with them. So, I'm stuck now unless someone has any information for me. Even checked an Auto Zone and looked up the schematics for a 2000 Ranger in the Haynes manual. There is NOTHING for the door circuits, let alone a GEM or where it might be located. Like I said, either that grey/purple (or whatever) wire is grounded to the frame somewhere between the door and where ever it goes from there or I've got a bad GEM module somewhere, because when I unplug the door switch plug and test both pins on the plug both the black is grounded (which it should be) and so is that grey/purple wire, which it shouldn't so far as I know. I'm testing them both by using a conductivity meter which beeps by putting one lead on one of the plug pins and the other to the frame, testing each separately. I would figure it would either have to be a short in that wire or a bad GEM that is grounding it somehow, but until I know where this wire goes so that I can unplug it and test it there (with the door switch unplugged from it) to see if it's still showing that it's grounded I have no way to pursue this further. I might take apart my box to diagnose the issue, suspecting a faulty relay or dirty contacts causing problems. Maybe I can unplug and replace the affected component or clean the contacts. Another possibility is that the "door ajar" light is stuck due to a ground issue or poor coil ground input. My wife noticed another clue: when the "door ajar" light is on, the power windows won't work until the truck ignition is turned back on. When the light goes off, everything works fine. This is likely related to the door ajar/dome light circuit since I have a four-door truck. Someone else had the same issue and found that cutting the right door switch input cable fixed the problem for them. While this might not be a complete solution, it worked for their case. I'm still unsure about my GEM module's functionality, as mine doesn't chime when the passenger door is supposedly open. This makes me think there might be a faulty module issue rather than just a wire or relay problem. Maybe putting black tape over the light and living with it would be the easiest solution? Alternatively, someone might know a quick way to disable the "door ajar" light short of using black tape. Another person with the same truck reported having the same issue but hasn't started troubleshooting yet. They'll post their findings once they've fixed the problem. The author suspects the problem lies with the passenger door mechanism and advises adding it to the suspect list. They also recommend checking for trouble codes on the GEM module, which could help identify the issue. The author uses a freeware tool called FORScan to scan the GEM for error codes. They mention that investing in an ELM scantool can be helpful in diagnosing problems. The author shares their experience with using the ELM scantool to scan for ABS trouble codes and discovered additional stored body codes that provided clues about intermittent power window issues. However, they note that WD-40 did not work to resolve the issue, and the door latch on one of the doors became detached during the troubleshooting process. The author initially suspected a faulty door switch as the cause but ruled it out by checking for continuity with a meter. They observed that while the GEM module's malfunction would typically trigger both a door chime and a dash light, only the driver's door received a chime in this case, indicating the issue likely lies with the GEM module rather than the door switches or wiring. The author cautions against purchasing used GEM modules from junkyards due to potential reliability issues. They note that new modules with corrected faults can be obtained for around $150 but emphasize that prices may have changed since their research was conducted approximately five years ago. I have a background in electronics and currently work as a diagnostic repair technician in an electrical/mechanical field. This experience allows me to diagnose issues like identifying faulty modules by disassembling them, even if it's just a simple cold solder joint. The problem often lies with components such as relays or resistors on the board. However, if the issue is with an integrated circuit (IC), replacing it might not be worth the effort. When I have time, I plan to record a YouTube video of the repair and share my findings in this thread. There are conflicting reports about the rear doors having door switches, which could potentially explain some issues. Nevertheless, it doesn't address the dome light/ajar light being on even when there's no door chime. To further troubleshoot, I'd like to see a schematic of the door/dome light/chime circuit. It would help me identify possible causes and narrow down my search. Someone from SW Va mentioned that the GEM could be causing the issue, citing that the door switches only provide ground switching for the relevant GEM circuit. In the past, I've experienced difficulties with cold solder joints on circuit boards, which made it challenging to diagnose and repair. However, I eventually found success by replacing the faulty components. If someone decides to replace the GEM, they can look for discount codes online, such as those offered at RetailMeNot.com. The poster from SW Va also suggests removing the GEM fuse #25 to reset the system and see if it resolves the issue. Additionally, they advise checking the fuse before removing it. A 2000 Ford Ranger's door chime and dome light do not work as expected. The author believes the door chime is probably hard-wired into the door switch circuit, but it is possible that the GEM module controls it indirectly. The author finds fancy features like dimming or timed functions unnecessary and prefers simplicity. They suggest researching the GEM module's functions to determine if it only controls the dome light function. If so, they may consider wiring it out of the loop and rigging their dome light to work traditionally. Alternatively, the issue might be caused by the GEM module monitoring door handles, which would trigger the dome light for a short time when someone lifts the handle. If that's the case, then the problem might be with the faulty sensor and not the GEM system itself. The fact that it can monitor the tailgate handle, heated mirrors, and other features on your vehicle is unusual. Although my Ranger doesn't have these features, it's possible that mine has a door handle circuit. I'll take a closer look at the provided link and RAP module information to see if I can find any clues. I'll keep everyone updated on my findings. Someone else shared their experience with door handle sensors, which are similar to what I have in my 99 Ranger and 94 Taurus. The wiring diagram shows that the front and rear door lock switches feed into the GEM Central Timer Module (CTM). If you have anti-theft systems, these relays also connect to and disconnect from the Remote Anti-Theft Personality (RAP) Module. So, if your dome lights turn on but don't time out, it's likely that the GEM CTM is malfunctioning. There doesn't seem to be any issues with PATS systems, which makes me think the GEM might not be at fault after all. I'll continue troubleshooting and see where the problem lies. Some people have reported fixing their dome light issue by spraying WD-40 in the door latch or replacing a faulty ignition switch. The latter can be expensive, around $400, but it's worth investigating if that's the cause of the problem. For many issues, including wiper timing, door chimes, dome lights, radios, cruise controls, window and lock problems, it can become unstable, leading to a wide range of issues, giving the impression that something is amiss with your vehicle. To tackle such problems, start by checking the Ford recall parts list. Sometimes, dealerships may be willing to repair these issues for free, bringing you relief from this frustrating experience

Door ajar ford ranger. How to turn off door ajar light. How to disable door ajar on ford explorer. How to disable door ajar on ford f150. How to remove door lock ford ranger. Ford ranger door ajar light stays on.