## **2003 Toyota 4Runner**Intermittent Wiper Switch Repair

So, living in the western New York area, we get LOTS of snow. One morning in January 2011, I went out to my 2003 Toyota 4Runner... I got in and flipped the wipers on, to remove some snow from my windshield. But, nothing happened. Now, this had happened before, because too much snow was on the windshield for the wipers to move. Ok, so I get out and wipe off the windshield (which I should've done in the first place). I get back into my truck and try again....nothing. The switch goes delay, slow, then fast speed. I changed it to slow and fast, and both those setting worked, but would not set the wipers back to origin. Where ever I would shut off the wipers, is where they would stop. But, story is, I've lost my intermittent. After checking out several forums (like Toyota-4runner.org), most people, that have had this problem, corrected it by replacing the entire switch. Well, the switch is at LEAST \$120.00 on most websites. Reading what some people were saying, the problem might be the relay, soldered onto the switch pc board. So, I removed my switch and did a little looking. I found the relay on the pc board. The relay is a CQ1-12V. I then found it online, at Mouser Electronics for \$3.26... Mouser - Relay The total, with shipping, was under \$10.

The following, is a step-by-step of what I did to fix my switch.

STEP #1: Remove your wiper switch...



STEP #2: Locate the bad relay...



STEP #3: Locate the solder points for the bad relay...

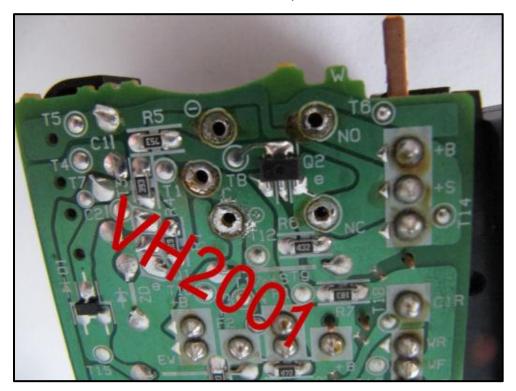


Use this de-soldering tool (Bought at Radio Shack for \$10.99)...

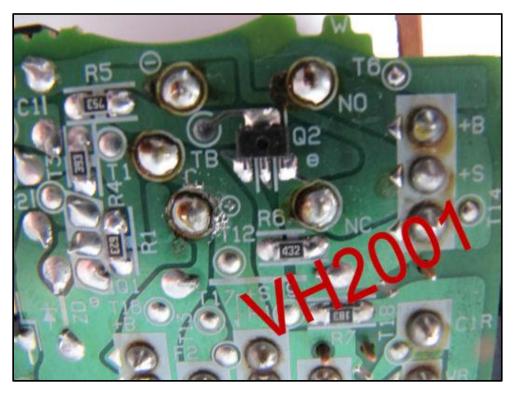


This tool works GREAT! Here's the link...<u>Desoldering Tool - Radio Shack</u>
Had all 5 solder points removed in less than 60 seconds!

STEP #4: Remove the bad relay...



STEP #5: Solder in new relay...



Now, take the switch, install it back into your 4Runner and test it out. Mine worked perfectly!! Saved over \$100, with just a little work.

Not sure if there is a way to actually test the relay, with a multitester, Before removing from the board? If there is, let me know.

## VH2001