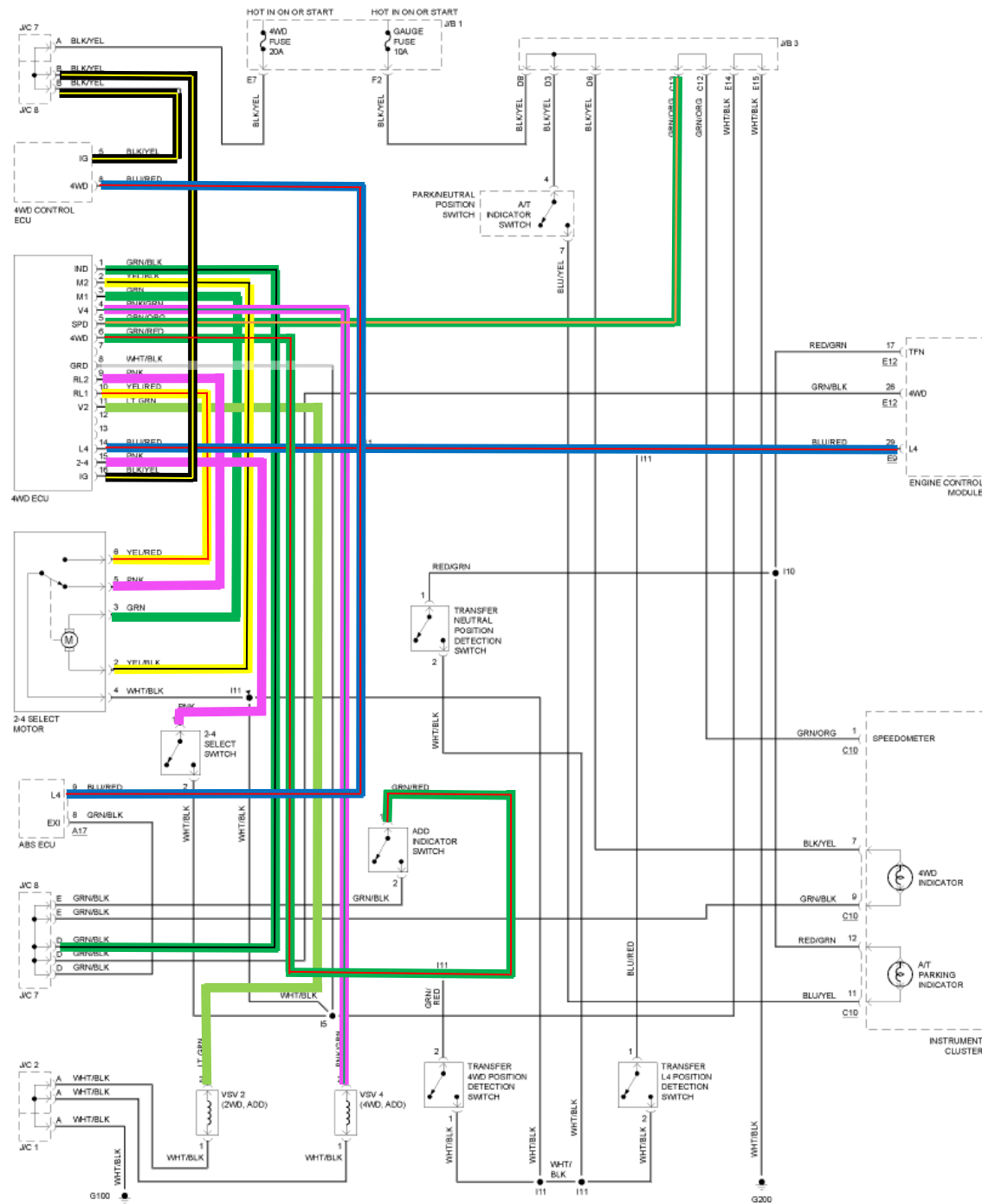
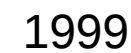
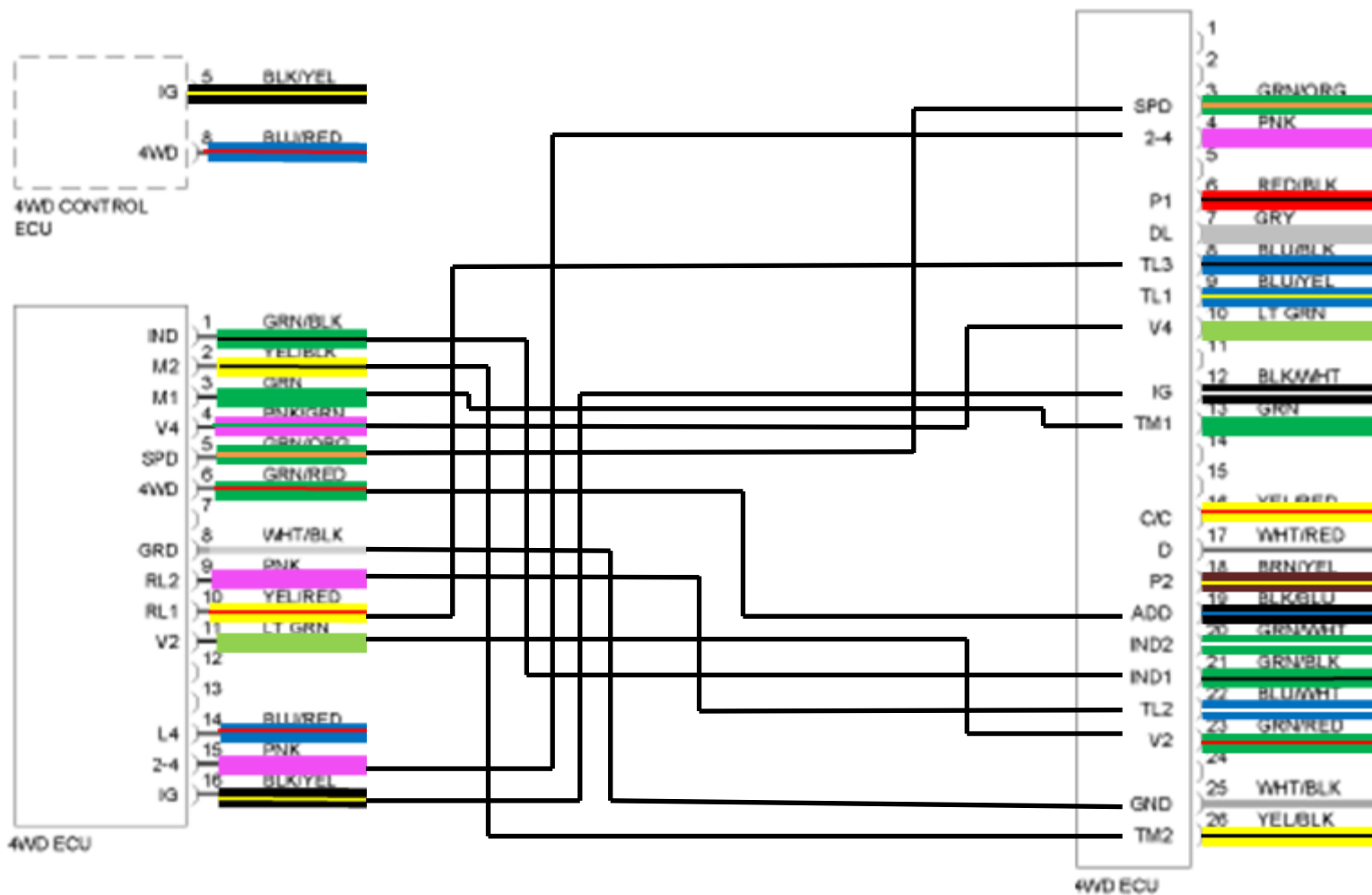




1996





Transfer Case Swap 1996-1999

- The Transfer case ecu has 26 pins (9 of them not used , 2 of them used for dash indicator)

Pin 1 - Not used

pin 2 - Not used

Pin 3 - Speed sensor - Not need if you engage on the fly.

Pin 4 - Switch on transfer case knob - to engage AWD

Pin 5 - Not Used

Pin 6 - Detection switch on transfer case (center diff lock engaged)

Pin 7 - Detection switch on Transfer case (Switch that is when shift lever is pulled back to lock Center diff)

Pin 8 - Goes to pin 6 on the actuator motor on the transfer case.

Pin 9 - Goes to pin 4 on the actuator motor on the transfer case.

Pin 10 - Goes to 4wd VSV switch on drivers inner fender.

Pin 11 - Not used

Pin 12 - +12 volts

Pin 13 - Goes to pin 3 on the actuator motor on the transfer case.

Pin 14 - Not Used

Pin 15 - Not used

Pin 16 - Goes to Cruise control ecu - Not needed

Pin 17 - +12 volts from the neutral park safety switch (wire it with pin 12 to save a step)

Pin 18 - Detection switch on transfer case. (from H2 to H4F)

Pin 19 - goes to front axle ADD indicator switch.

Pin 20 - Goes to center diff lock light in instrument cluster. (tells driver the center diff is locked)

Pin 21 - Goes to the 4 wheels pictograph in the instrument cluster. (Tells the driver that the 4 wheels are engaged.

Pin 22 - Goes to pin 5 on the actuator motor on the transfer case.

Pin 23 - Goes to 2wd VSV switch on drivers inner fender.

Pin 24 - Not used

Pin 25 - Ground

Pin 26 - Goes to pin 2 on the actuator motor on the transfer case.

Transfer Case Swap 1996-1999

- Although many questions have been asked about the possibility of a multi-mode transfer case swap into non-multi-mode 4runners, nobody has actually confirmed a fully working completed swap that I have found on the internet. Many have asked about them on 5spd transmissions, and I'm sure it's been done but nothing verified I have found either. I researched as much information prior to swap and found the posts written by Singtoe to be the most informative. His information given was about 99% correct.

As he has stated here are all the parts required:

- multi-mode transfer case
- front and rear drive shafts
- 4WD ECU
- transfer case shifter & knob

- I had actually bought the transfer case from a member here, I do not know his username but he mentioned researching this site as he was going to tackle this swap in his own T4R. Luckily he included the ECU and a FULL (but cut up) body harness from a 99 (which I used for the swap). I paid \$200CDN which I thought was fair. Drive shafts were at purchased at the wreckers for \$50/piece. So my total cost was \$300CDN and 2 days of labor. This guy also included a 99 instrument cluster as well which I wired in to replace the 97 cluster I had ... BUT the fuel gauge does not work since I need the fuel sending unit of the 99. Maybe I'll attempt that again when I need to replace the fuel pump.

This swap is possible with all 96-02 4Runners regardless of what transfer case it has originally. This is possible because the 4WD ECU is independent. There ARE however signals from ECU, ABS, Cruise etc. but it's up to you if you want to tie them in. I can only give my input from what I have done which is with 2-4 Selectable 4WD that come on the Limited. I have never done a write-up and don't intend to either but I will give insight on what is involved. Here is the link to Singtoe's post where he goes through the pin-out. [Feasibility of a "J"-Shift to Multi-Mode Transfer Case Swap](#) I myself used a wiring diagram for both vehicles as it made more sense to me. Now for the wiring I used most of the existing wiring (with the Limited 2-4 Select Switch I already had the switch wired). Although the wire was there they were all in different pin locations, and the connector is different so all 17 wires you have to cut. I would have liked an identical connector to re-pin but hey, soldering 17 small wires is fun! I solder, heat shrink, and wire loom ALL my wiring and I suggest people do as well. I had to run a total of 4 wires from the 4WD ECU to the transfer case. And one wire to the ADD switch on the front differential.

Now the most confusing in the electrical wiring was the ADD switch. With the way it was wired in my 97, there was no way I could tie into the existing wiring. It had to be independently wired with it's own ground from pin #2. Pin #1 comes from the 4WD ECU which I tied in with the PCM signal as well. Not sure what it does but it's black & white in the 99 wiring diagram. Without proper hookup of this ADD wire, nothing will work. That was the only obstacle I encountered.

I know this is no writeup but I'm willing to answer questions and give information to those who are willing to tackle this swap. I may decide one day to do a proper writeup with the information that Singtoe has provided combined with all the small information I have learned through this process.

Good luck to those who will now attempt this swap!