

**Subject:**

Transmission malfunction caused by defective tow-package wiring

**Vehicle Applications:**

2000 Toyota Tacoma

**Essential Reading:**

- Rebuilder
- Shop Owner
- Center Manager
- ✓ Diagnostician
- R & R

**Author:**

Jesse Zacarias and Roy Delfran



# What's the Connection?

We have all seen the television commercial in which the do-it-yourselfer is proudly turning on the light switch he has just installed and the garage door goes up and down; time to go see a professional.

We had a similar problem come to the shop in a 2000 Toyota Tacoma. The customer's complaint went like this: "When I have the cruise control on and I turn on my left turn signal the cruise control turns off, but not when I turn on my right turn signal. I also notice that the transmission drops out of overdrive when I turn on my left turn signal but not when I turn on my right turn signal."

After road-testing the vehicle, we noticed that the customer was half right. The left turn signal kicked off the cruise control, but it was not the overdrive that came off; rather, it was the torque-converter clutch that was disengaged.

We checked for codes and noticed a P0755, shift solenoid B malfunction. On observation we noticed that when the left turn signal was turned on the brake lights came on (see Figure 1)

*continues page 12*



but not when the right turn signal was turned on.

We studied the factory wiring diagram and noticed that other than the ground, the only connector that both the turn signal and stop light had in common was the BN1 connector under the driver's

seat. So we removed the seat to inspect the connector but found no sign of corrosion or anything else wrong, for that matter (see Figure 2).

Next we inspected the left-rear light assembly and removed it from the system (see Figure 3), but

the problem was still there.

We started to inspect the bottom of the bumper for any sign of wire damage to the harness when we noticed what appeared to be an aftermarket tow package (see Figure 4). When we disconnected the box the problem went away.

When we informed the customer what we found, he went to his glove box and pulled out a recall notice that he had received from Toyota for its factory-installed tow package. He did not follow up on the recall because, according to him, he "doesn't tow anything." We checked the factory wiring diagrams for a tow-package diagram but none was available.

The notice, "SSC-10H Trailer Towing wire harness converter safety recall," covers 2000 Toyota Tundra and 1999-2000 Toyota Tacoma. According to the recall the "harness converter" (see Figure 4) can short out or cause an open circuit.

With all the electrical test equipment we have, sometimes nothing replaces a good visual inspection.

**TD**

*Jesse Zacarias is the owner of Elec-Tran Diagnostics in Gilroy, Calif. Roy Delfran is with Snap-on Diagnostics' Ask A Tech Community Web Forums (<http://askatech.snapon.com>).*

### The Bottom Line:

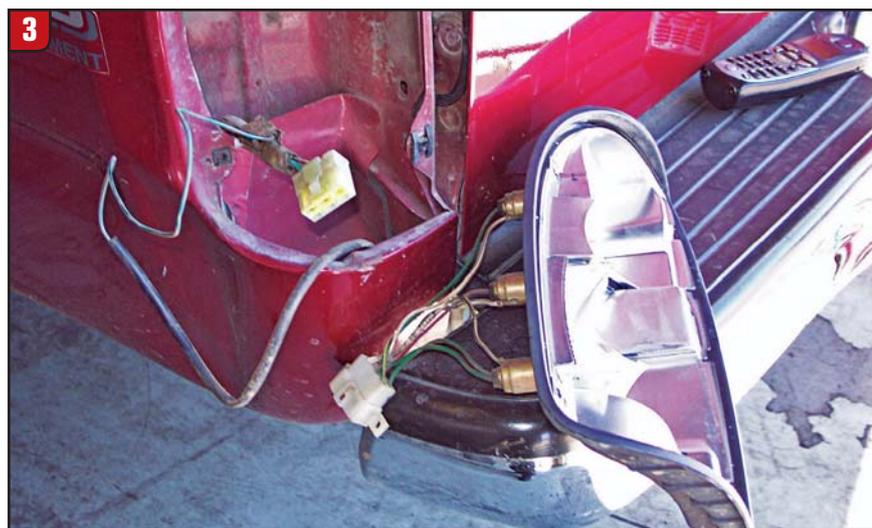
**Tell us your opinion of this article:**

Circle the corresponding number on the free information card.

96 Useful information.

97 Not useful information.

98 We need more information.



**"After road-testing the vehicle, we noticed that the customer was half right. The left turn signal kicked off the cruise control, but it was not the overdrive that came off; rather, it was the torque-converter clutch that was disengaged."**

