



Transmission: 41TE (A604), 42LE

Subject: Limp mode (fail-safe) with no trouble codes stored

Application: Chrysler

Issue Date: April, 1997

41TE (A604), 42LE

Limp Mode (Fail-safe) with No Trouble Codes Stored

When a 1995 or earlier 41TE or 42LE goes into limp mode, but there are no transmission trouble codes in the controller's memory, it is usually due to either:

1. Low battery voltage.
2. A faulty EATX relay.

Step 1: Check battery voltage. For proper computer operations, the voltage across the battery posts must be at least 12.5 volts with the key on, but the engine not running. Starter and headlight operation are not good indicators of battery charge state, because they work pretty good even when battery voltage drops below 12 volts a bit.

If the battery voltage checks out okay, change the EATX relay. One of the undocumented facts regarding the relay is that its status is only monitored by the TCM for the first few milli-seconds after starting the engine. After this point, the relay status is not checked by the controller. If the relay subsequently fails, the solenoid body power shuts off, putting the transmission into fail-safe mode with no codes stored.

To verify, switch the EATX relay with the back-up light relay after making sure that the back-up lights work, or replace it with a new one. The relays will usually be found in one of the views below or in the under-hood relay or power distribution center. It's a good idea to keep a couple of these relays in your toolbox. They are very inexpensive, and replacing the relay rather than trying to diagnose a relay problem is far easier and quicker, therefore less expensive.

