

**1999 Chrysler Truck Town & Country LWB FWD V6-3.8L VIN L**

Vehicle Level → Heating and Air Conditioning → Air Door → Air Door Actuator / Motor → Testing and Inspection → **Actuator Calibration/Diagnostics and Cool Down Test** ←

**Actuator Calibration/Diagnostics and Cool Down Test**

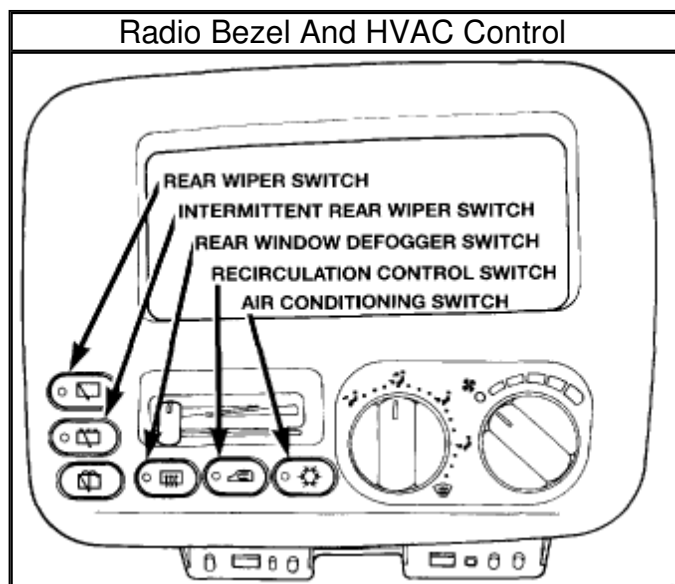
[Notes](#)

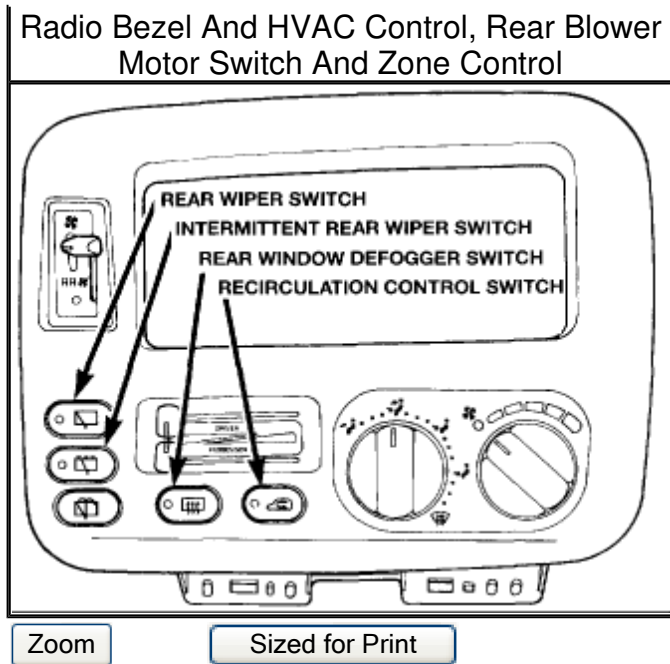
**GENERAL INFORMATION**

If the HVAC control module is replaced, the Calibration Diagnostic and Cooldown tests will need to be performed. Once this group of tests have successfully passed, they can be performed individually. The engine must be running during the test to provide hot coolant for the heater, A/C compressor operation and to assure that the actuators are calibrated correctly. The HVAC control module is capable of troubleshooting the system in approximately **120 seconds** . If a condition is detected, an error code is displayed. The error code cannot be erased until the condition is repaired and the diagnostic test is performed.

**CAUTION :** Do not remove the actuators from the Heater-A/C unit assembly with power applied. Removal should only be done with the Ignition OFF. The actuators have no mechanical stops to limit the travel. If the actuator rotates and is not connected to the unit assembly, it will become out of calibration.

**Actuator Calibration**





Mode, Blend and Zone (if equipped) door calibration compensates for mechanical variations in the actuators, HVAC control module and its linkages. In vehicle calibration can be entered from the control's front panel. If the REAR WIPE and INTERMITTENT LED's flash simultaneously when Ignition is cycled ON, the actuators have not been calibrated or during the previous calibration a failure occurred. Diagnostics will always occur during Calibration Diagnostic and Cooldown test.

### Diagnostics

During the Actuator calibration, diagnostics are performed on the actuators and evaporator temperature Fin Sensor. Once diagnostics are completed the REAR WIPER and INTERMITTENT LED's will flash to indicate either a successful calibration or the appropriate fail code(s). At this time manual testing of the Blend, Mode and Driver (if equipped) potentiometers can be performed. If a failure is detected during Diagnostics a fault will be set in the control. When Ignition is cycled OFF and then ON or Diagnostics is aborted, the REAR WIPER and INTERMITTENT LED's will flash simultaneously showing that a failure has occurred. The control will not indicate the fail code, but only that a failure had occurred during the last diagnostics test. The only way to clear the failure codes is repeat the Calibration Diagnostic and Cooldown test, after all repairs are completed.

### Cooldown Test

This test has been designed for performance testing of the A/C system at the manufacturing facility. If the HVAC control module is replaced, the Cooldown test will occur during Calibration test. Cooldown will not occur on Heater Only units. During the Cooldown test the control will monitor the temperature of the Fin Sensor. The A/C system must be able to bring the evaporator temperature down a predetermined minimum amount in less than **2 minutes** .

## Calibration/Cooldown LED Display Codes

Calibration/Cooldown LED Display Codes		
The content of this image reflects the changes called out by TSB 26-04-00.		
LED'S	PASS/FAIL	CORRECTIVE ACTION
NO LED'S FLASHING-NORMAL OPERATION	NONE	NONE
REAR WIPER AND INTERMITTENT LED'S FLASH SIMULTANEOUSLY	FAILED CALIBRATION DIAGNOSTICS	RUN CALIBRATION TEST
A/C AND RECIRC LED'S FLASH SIMULTANEOUSLY	FAILED COOLDOWN	RUN COOLDOWN TEST
REAR WIPER AND INTERMITTENT LED'S ARE FLASHING SIMULTANEOUSLY A/C AND RECIRC LED'S ARE FLASHING SIMULTANEOUSLY	FAILED CALIBRATION, DIAGNOSTICS AND FAILED COOLDOWN TEST	RUN BOTH TESTS

Zoom

Sized for Print

See chart for definition of flashing LED's. If no problems are found, the control functions normally.

### Calibration/Diagnostics Test Entry To Initiate Tests:

- Set [Blower motor](#) ON HIGH
- Set Mode position to Panel
- Open all A/C outlets
- Set Temperature to Cold (Both slide pots if equipped)
- Depress WASH and REAR WIPER button simultaneously for 5 Seconds (Until all LED's light)

Results:

- All LED's will turn on for 5 Seconds
- Calibration Test is running when REAR WIPER and INTERMITTENT are

alternately flashing. Cooldown test is running if A/C and RECIRC are alternately flashing.

- Acceptable results is REAR WIPER LED is the only LED flashing. Push Rear Wiper to exit.
- After all tests have passed, Calibration Diagnostics and Cool down can be run separately.

### Cooldown Test Entry

#### To Initiate Tests:

- Set [Blower motor](#) ON HIGH
- Set Mode position to Panel
- Open all A/C outlets
- Set Temperature to Cold (Both slide pots if equipped)
- Depress WASH and A/C simultaneously for **5 Seconds**

**NOTE** : Prior to start of test, If the evaporator is already cold, the system will fail test. To correct, operate system with A/C OFF and the [blower motor](#) ON high for three minutes prior to starting test.

#### Results:

- All LED's will turn on for **5 Seconds**
- Cooldown Test is running when A/C and RECIRC. are alternately flashing. If A/C and RECIRC. are flashing simultaneously, Cooldown has failed.

### Calibration Diagnostics And Cooldown Abort

Test can be aborted by doing one of the following:

- Depressing Rear Window Defogger, RECIRC and Rear Wiper buttons.
- Cycling Ignition OFF and then ON.
- Control will automatically abort after **15 minutes** from the time Calibration Diagnostics and Cooldown was entered.

The HVAC control module will return to normal operation or may indicate unsuccessful Calibration.

Diagnostics or Cooldown test by LED's flashing simultaneously.