



Technical Information..

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Ford AW-21 Control Module Relearn Procedure

There are two relearning procedures that must be followed:
Neutral Position Learning - and - TCM Initial Learning

NEUTRAL POSITION LEARNING PROCEDURE

- 1.) Apply parking brake and place transmission in neutral.
- 2.) Install a scanner and turn the ignition switch on.
- 3.) Scanner should read neutral. If scanner does not indicate neutral, adjust the TCM.
- 4.) If neutral is indicated on scan tool, move shifter to park and turn ignition off.
- 5.) Turn ignition back on & move shifter from park to drive. Scan tool should match each shifter position as shifter is moved to drive.
- 6.) If scan tool indicates each P-R-N-D-L position, check for trouble codes. If there are no codes, Neutral Position Learning is complete.
- 7.) If scan tool does not indicate each P-R-N-D-L position, recheck TCM adjustment & check shifter to trans cable for damage or proper adjustment, then retest starting at Step 3.

Neutral Position Learning MUST be performed when a new TCM has been installed!

TCM INITIAL LEARNING PROCEDURE

**** CAUTION ** DO NOT raise transmission fluid temperature by stalling torque converter as internal transmission damage may occur!**

- 1.) Install a scan tool. Clear all trouble codes & set parking brake.
- 2.) Run the engine to get transmission temperature to between 151 & 230 F.
- 3.) With engine idling & trans at operating temperature, apply foot brake & place trans in neutral. Wait 3 seconds & move shifter to D & wait 3 seconds. Repeat 5 times & move shifter to park.
- 4.) Apply foot brake, move shifter to neutral and wait 3 seconds. Move shifter to reverse & wait 3 seconds. Repeat 5 times & move shifter to park.
- 5.) Place shifter in drive & release parking brake. Drive vehicle at 25-30% throttle angle until trans shifts to 6th gear but do not exceed 50 MPH. Release throttle & coast to stop within 60 seconds. Repeat 10 times.
- 6.) Initial engagements & shift harshness should have decreased. Vehicle may need to be driven more to completely relearn the shift feel that your customer is accustomed to.

TCM Initial Learning Procedure MUST be performed when a new/rebuilt transmission, new/rebuilt valve body or new TCM has been installed or when TCM has been reflashed! In addition, whenever trans is rebuilt or valve body is replaced, PCM & TCM should be checked for the latest calibration!

Technical Service Bulletins for the AW-21 are as follows:

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| TSB # 05-24-4, dated 12/12/05: | harsh/erratic forced downshifts, reprogram PCM & TCM. |
| TSB # 06-24-5, dated 11-15-06: | harsh shifting and/or perceived slip engine flair, no trouble codes, reprogram PCM & TCM and/or replace valve body. |
| TSB # 08-24-1, dated 12/08/08: | Same as TSB # 06-24-5 |

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