



Idle Air Volume Learn Procedure

COMPLAINT: Engine idle isn't within specs, and basic idle relearn procedures haven't been successful in bringing the idle speed back to normal.

CAUSE: Computer idle air volume learn is out of specs; this can occur after cleaning the throttle body.

CORRECTION: Perform an Idle Air Volume Learn (IAVL) relearn procedure.

IMPORTANT Before performing this procedure, always attempt to reset the idle relearn and accelerator pedal released position relearn procedures. See CPTB0030 for details.

For this procedure, you'll need a bidirectional scan tool specifically coded to Nissan vehicles.

Connect your scan tool and verify this data before continuing:

Data Monitor Signals (Engine)	System Conditions
Battery Volt (V)	More than 12.9V at idle
Coolant Temp (C) or (F)	Between 158–210°F (70–99°C)
P/N POSI SW (ON/OFF)	ON (Transmission in either Neutral or Park)
A/C Signal (ON/OFF)	OFF (A/C or HVAC switch off)
Load Signal (ON/OFF)	OFF (Lighting switch and rear defogger off)
Cooling Fan (ON/OFF)	OFF (Engine cooling fan motor not running)
PW/ST Signal (ON/OFF)	OFF (Steering wheel is straight ahead)
VHCL Speed SE (km/h) or (MPH)	0 (Vehicle speed is 0 MPH)
Work Support Setting (Engine) Consult Target Idle RPM ADJ	0 (Zero)
Fluid Temp SE (Vehicles with CVT only)	Less than 0.9V

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Technical Service Bulletin (continued)

Once you've verified these conditions, you can begin the IAVL procedure:

- Key off; wait at least 10 seconds.
- Start engine and let it idle for at least 30 seconds.
- Select Idle Air Vol Learn from your scan tool menu, and choose Start.

The IAVL should take between 30 seconds and two minutes.

If the IAVL completes successfully, your scan tool should read CMPLT. From there, rev the engine a couple times and make sure the idle returns to the correct levels. If so, the procedure's complete; remove your scan tool and prepare to deliver the vehicle.

Make sure the customer knows the vehicle will continue to adjust to operating conditions over the next few weeks of normal driving.

If the IAVL doesn't complete within two minutes, or the scan tool displays INCMP, you'll need to start over. Verify the conditions necessary on your scan tool and perform the IAVL procedure again.