

MATCH THE ACTUAL CONTROLLER / OS BEFORE A TRIAL

GM Gen V Truck: Starting and Idle Adjustments

Self-service starting point for a confirmed E92-family LV3/L83/L86 truck file. The directly observed worked example is a 2015 Silverado 5.3 L83, not every Gen V OS. Match your file's definitions before following a table-specific step.

1. Make a reversible trial

Keep your untouched original and save a separate trial. Record current cells and neighbors before changing one area. Start scanning before cranking; compare actual/desired RPM, coolant temperature and elapsed run time. Keep cold start, hot restart, steady idle and throttle-release stalls separate.

2. Runs, but the idle target is too low

Open Engine > Idle > RPM > Base Setpoint > Base. Confirm RPM output, coolant-temperature columns and the actual gear/operating rows. HP Tuners uses +50 RPM as a common small adjustment example; it is not a required target for every cam. Trial only the affected temperature/operating region, blend into neighboring cells, and check relevant rolling/in-gear targets for consistency. Retest actual versus commanded RPM. Revert if creep, flare or hanging worsens; a higher request cannot fix an engine that never fires.

3. Needs pedal help to catch, or catches then dies

In the observed L83 example, Airflow > General > Cranking Airflow and Torque exposes Base Airflow indexed by coolant temperature and Engine Run Time (s). Check Use Crank Airflow and read this file's Base Airflow description and output units first. If it confirms a commanded airflow contribution active during your failing event, a small increase confined to that temperature/time region is a candidate trial; preserve the transition into normal running. Do not apply the same percentage to Min Crank Torque or unrelated modifiers. Zero multiplied by a percentage remains zero; verify a zero cell's purpose before adding a value. No numerical airflow increment is established here.

4. Warm-airflow reference for a Truck Norris combination

Gulf Coast's published Gen V Truck Norris benchmark is 750 RPM in P/N and Drive, with 6.5-7.5 g/s warm running airflow. It does not identify an exact displacement/OS or establish a crank-table preset. Use this as a running-airflow reference only when the control quantity and combination match; do not paste it into a torque field or the startup table. The engine's observed need decides the result.

5. Test the catch and the handoff

Repeat the same temperature/state after a successful, vehicle-appropriate write. Compare time to catch, minimum RPM, flare and settling. If it catches better but hangs longer, the trial has not passed. Restore the recorded cells before testing another control.

6. Steady or return-to-idle problem

Do not keep increasing startup air after the startup event has ended. Check the active throttle/torque control source and actual versus desired idle. A torque-model number is not a direct airflow command; do not scale Virtual Torque, driver demand or limits together as an idle shortcut.

7. Later controllers and paid help

E90/E93 and Global B require their own definitions; do not transfer this E92 example. Downloads are self-service. Personalized JRJ file/log review or calibration changes require an eligible paid upgrade under that package.

Want us to handle the tune?

A download includes self-service written guidance only. Personal troubleshooting, individual file/log review and tune changes require a paid upgrade within the chosen package. We deduct the verified amount actually paid for your eligible file; you pay the remaining balance.

[See your paid upgrade options](#)

Sources and example scope

[HP Tuners: idle-speed adjustment and +50-RPM example](#)

[HP Tuners walkthrough: Base Setpoint table at 0:54](#)

[Matt Sanford: original 2015 L83 worked example; RPM 4:44, crank airflow 7:07](#)

[HP Tuners: Virtual Torque model boundaries](#)

[Gulf Coast / Michael Gilmore: Gen V Truck Norris workshop benchmark](#)

Apply only to the identified controller/OS and matching control definition. Examples are starting trials, not a finished tune, compatibility approval or guaranteed repair. Personal JRJ troubleshooting, file/log review and changes require a paid upgrade.