

Required Logging PID List

LT1Tuner.com - Custom Tuning for Most GM Cars & Trucks

- Engine RPM
- Vehicle Speed
- Engine Coolant Temperature (ECT)
- Intake Air Temperature (IAT)
- Barometric Pressure
- Manifold Absolute Pressure (MAP) – Load only the applicable 2■bar or 3■bar sensor
- Spark Timing Advance
- Knock Retard
- Throttle Position (%)
- Mass Airflow (g/sec)
- Mass Airflow Frequency (Hz)
- Cylinder Airmass
- Commanded AFR
- Commanded EQ Ratio (Flex Fuel)
- Alcohol Content (E85)
- Delivered Engine Torque
- Idle Desired RPM
- Control Module Voltage
- Injector Pulse Width – Bank 1
- Injector Pulse Width – Bank 2
- O■ Voltage Bank 1 Sensor 1
- O■ Voltage Bank 2 Sensor 1
- Fuel System Status
- Short■Term Fuel Trim Bank 1
- Long■Term Fuel Trim Bank 1
- Short■Term Fuel Trim Bank 2
- Long■Term Fuel Trim Bank 2
- Wideband Input – EGR or A/C Pressure (Voltage)
- Idle Air Control Position
- Dynamic Airflow
- Idle Air Control Desired Position
- Idle Desired Airflow
- Idle Base Airflow (Sum / Base)
- Idle Adaptive Trim (STIT)
- Idle Cracker Airflow
- Idle Follower Airflow
- LTIT – Gear / A/C Off
- LTIT – Park/Neutral / A/C Off
- Throttle Position (Voltage)
- Misfire Current Cylinder 1–8

Important Notes
- These PIDs are intended to be **added to your existing or base layout** — do not replace your current layout.
- Wideband inputs using **EGR** or **A/C Pressure** must be logged as **Voltage**, not converted AFR.
- Additional PIDs may be required for special combinations or diagnostics.
- For Flex Fuel setups, set wideband display units to **Lambda (EQ)**.



HP Tuners VCM Scanner

How to ADD LT1 Tuner PIDs to Your Existing Layout

Follow these steps to add the LT1 Tuner required PIDs to your **existing or base Scanner layout** without overwriting your current dashboard.

Step■by■Step Instructions

1. **1) Open VCM Scanner.** Launch HP Tuners VCM Scanner.
2. **2) Load your normal layout.** Use the layout you already log with (stock or custom).
3. **3) Open Channels list.** Go to **Channels** → **Edit Channels**.
4. **4) Add required LT1 Tuner PIDs.** Manually select the PIDs listed on Page 1. Do **not** use Replace/Load Channel Config if it overwrites your existing channels.
5. **5) MAP sensor selection.** If using a 2■bar or 3■bar MAP, select **only** that sensor PID. Do not log multiple MAP sensors at the same time.
6. **6) Wideband input setup.** If your wideband is wired to EGR or A/C Pressure:
   - Select the **EGR Position Voltage** or **A/C Pressure Sensor Voltage** PID
   - Ensure the channel is logged strictly as **Voltage (0–5V)**
   - Do **not** apply AFR math inside Scanner
7. **7) Verify key channels.** Confirm MAF (Hz & g/sec), Commanded AFR/EQ, KR, MAP, Fuel Trims, and Wideband Voltage are active.
8. **8) Save your updated setup.** Use **Save Layout As** to preserve your dashboard and **Save Channel Config As** to preserve your channel list.
9. **9) Important reminder.** Any time you add or remove a PID, you must save again or the change will be lost.

Wideband Wiring Notes

- EGR and A/C Pressure inputs are used only as a **voltage input** for wideband data.
- Actual AFR or Lambda conversion is handled by LT1 Tuner tools or external analysis software — not by HP Tuners Scanner math.
- Logging converted AFR in Scanner will result in incorrect data for tuning.