



## Stage 3 BASE Tuning Dyno Test and Data Recoding

Data Logging is necessary to make the correct technical modifications to the tune file for improved performance and engine reliability.

Submit data in graph format and CSV or TXT file if available. Title all files clearly with run number and tune file name.

### Data recording channels required

- Horsepower
- Torque
- Engine RPM
- Throttle pedal position
- Boost PSI (or bar)
  - Requested and actual if possible
- Lamda (or A/F ratio)
- Water temperature

### **Optional data recording channels if available**

- Knock sensor
- Ignition timing
- Ignition timing
- Ignition adaptation

### Dyno Test Plan

Dyno and data log must be performed in 4th gear at WOT and needs to be performed consistently in the exact same way on the original file and all tuned files.

1. Stock OE file in ECU
  - a. 3 power pulls with data recording (stabilize water, oil and driveline temperatures)
2. Upload Stage 3 tune file into ECU
  - a. 2 power pulls with data recording
3. Stock OE file in ECU (optional-to check consistency of dyno)
  - a. 1 power pull with data recording