



## DYNO SESSION CHECKLIST & WAIVER

**Please Note:**

This checklist is provided as a tool to help you in assessing the preparation of your vehicle for a dyno session. This is not an exhaustive list, and it does not lay out a foolproof plan to avoid any and all malfunctions during the dyno session. Experience has shown, however, that doing thorough checks on engine-critical systems prior to strenuous activity is a smart strategy that pays bigtime in safety, reliability, and cost.

*If you have any questions about the suitability/condition of your vehicle for the dyno session, please don't hesitate to ask!*

### GENERAL FUEL SYSTEM INSPECTION

- Engine fires are scary. Gasoline, Alcohol, and other Racing Fuels are highly volatile and fuel lines operating at high pressure pose a serious fire risk if they leak onto hot engine parts.
- It's also important for the longevity of your engine to ensure a steady supply of fuel to your engine's Fuel Injectors.
- Your Fuel System should absolutely be free of leaks, with Fuel-Rated hose and adequate clamping or coupling at each joint.
- Your Fuel Lines must be mounted to prevent excessive movement and abrading on other components over time.
- Old (soft, cracked, disintegrating) Fuel Hose should absolutely be replaced prior to a dyno session.
- Lines or Hose routed near sources of high heat such as exhausts should be properly heat shielded and in good condition.

My Fuel System is ready for the Dyno Session. I have taken proper care to ensure my hoses are in good condition, that the whole system will remain free of leaks, and is not at risk of cracking or abrading.

I'm unsure if my Fuel System is will be adequate or leak-free, it will need to be inspected prior to the dyno session.

### ENGINE OILING SYSTEM INSPECTION

- It's imperative that your internal engine components are fed an adequate supply of oil. Your engine will see heavy loads and high temperatures during the dyno session and your Engine Oiling System needs to be up to the challenge.
- It should be free of leaks and care should be taken to ensure any external hoses and coolers are correctly plumbed.
- **Please Note:** You may be charged an additional cleanup fee if your engine leaks oil onto the dyno room floor. If you aren't sure if your Oiling System is adequate for a Dyno Session, just ask us!

I confirm that my Oiling System is up to the job, I won't require an Inspection.

I'm unsure if my Oiling System is ready for the dyno, it will need to be inspected prior to the dyno session.

### ENGINE COOLING SYSTEM INSPECTION

- Your Engine Cooling System is what keeps your engine from overheating and all the problems that come along with that.
- When fully warm your Cooling System should hold pressure up to the rated pressure of the Radiator Cap, and should do so without leaks.
- Your radiator should be sized adequately for the intended use of the engine and free of obstruction.
- Your radiator fan should be securely mounted, ducted, and working properly.
- **Please Note:** You may be charged an additional cleanup fee if your engine leaks coolant onto the shop floor. If you aren't sure if your Cooling System is adequate for a Dyno Session or would like to make some improvements, we can offer suggestions!

My Engine Cooling System is properly filled and free of leaks, and will adequately cool my engine during the Dyno Session.

I'm unsure if my Engine Cooling System is up to the job, it will need to be inspected prior to the dyno session.

### ELECTRICAL SYSTEM INSPECTION

- Your Electrical System must be free of exposed wires. Any joints, terminals and splices must be secure and properly insulated.
- Wires should be of sufficient gauge to carry the required current and all circuits should be adequately protected by fuses or other means.
- Ground points and battery terminals should be clean and free of corrosion.
- Your battery should be strong and healthy as frequent engine restarts may be required.

- My Electrical system is in good shape, all circuits are adequately protected, operate correctly, and do not pose a safety or fire risk.
- I'm unsure about some of my car's electrical or, I may have a few issues that will need to be inspected prior to the dyno session.

### DRIVETRAIN INSPECTION

- What good is a really powerful engine if your driveline components can't reliably get the power to the drive wheels? Avoid expensive failures and wasteful downtime by ensuring your equipment is up to the job prior to a dyno session.
- If you're unsure if your drivetrain is up to the task, please ask!

- My transmission, clutch, driveshaft, differential, axles and other important driveline components are sufficient for my power goals, are in good shape, and do not require inspection.
- I'm unsure if my drivetrain is adequate for my intended use, it will have to be inspected prior the the dyno session.

### FUEL SYSTEM COMPONENT INSPECTION

- Inadequately sized Injectors, Fuel Pumps, and FPR's often bring dyno sessions to a premature end. It's always a letdown when the engine falls short of its potential because you can't keep it supplied with fuel.
- Your Base Fuel Pressure must also be properly calibrated.
- **If you're unsure your Fuel System components will support your power goals it is always worth it to ask ahead of time.**

- My Injectors, Fuel Pump, and Fuel Pressure Regulator are adequate for my power goals and my Base Fuel Pressure is properly set.
- I'm unsure if my Injectors, Fuel Pump, and Fuel Pressure Regulator are up to the job, they will need to be inspected prior to the dyno session.

### INTAKE SYSTEM INSPECTION

- Your intake system needs to stay sealed and leak-free under all operating conditons (vac/boost) for a reliable tune and best power. The intake filter should be clean and the whole intake pipe assembly should be free of obstruction.
- For a boosted application a Boost Leak Test is strongly recommended. The intake system must be tested up to the expected operating boost pressure.
- Don't know how a boost leak test works? Just ask and we'll make you an expert!

- I confirm that my Intake System is properly sealed up and will not leak at the expected operating boost pressure.
- I'm unsure about my Intake System. It will need to be inspected prior to the Dyno Session.

### EXHAUST SYSTEM INSPECTION

- A leak-free Exhaust System, from the head all the way to the tail pipe, is another critical factor in producing a reliable tune.
- Pre-turbo exhaust leaks will slow turbo response, cause misfires, and only grow worse with time.
- Exhaust leaks anywhere in the system will "contaminate" the exhaust gas mixture with fresh air and skew the AFR (Air-Fuel Ratio) reading from the dyno's Wideband O2 Sensor.

- I confirm that my Exhaust System is properly gasketed and is free of leaks.
- I'm unsure about my exhaust system. It will need to be inspected prior to the Dyno Session.

I the undersigned hereby accept all responsibility for the condition and preparation of the vehicle and warrant that it is in suitable condition for dyno testing and tuning. I have read and understood this document in full and I hereby acknowledge that I am aware of the potential risks involved with Dyno testing / tuning and that I waive any and all claims against Mikitune, its employees, directors and officers for ANY damage to my vehicle as a result thereof.

Signed: \_\_\_\_\_

Print: \_\_\_\_\_

Date: \_\_\_\_\_