Dyno At The Show Addendum "A"

How many cars can we do in one seven hour period? It can take anywhere from 15 minutes to ½ hour for the typical street vehicle to complete a dyno test. We have ranged from 15-30 vehicles in one day, and is dependent on a few factors.

1. **Preregistration**. Having everyone ready in a time slot keeps everything on pace. For a busy show, We recommend having a volunteer for the show coordinate the line-up for the dyno. Keeping the next vehicle on deck saves a lot of time.

2. **Front and rear wheel drive cars.** We are capable of doing both, however some equipment must be moved around between the 2 drive types. We recommend grouping them. You could do 2 fwd, then 3 rwd, then 3 fwd as an example. The same goes for diesel trucks. Different equipment is involved so grouping them together is a plus. <u>Remember, We can't do All wheel Drive vehicles.</u>

3. **Race cars, Exotics, and Lowered vehicles with Body kits.** These are all vehicles that take extra time and care to load properly on the dyno.

4. **Dyno Location.** Have the dyno in a spot where vehicles can be staged and loaded without a large amount of foot traffic. You want completed vehicles to be able to get back to their spot easily. I would suggest a corner of the show, opposite of the DJ and in the direction that is least likely to cause a noise concern, but also visible to incoming show spectators and participants.

5. **Space.** More Space is always better. The minimum needed is 40 X 60 feet for loading the vehicle and space around the dyno. Additional space for staging vehicles is recommended if a large volume of vehicles is expected to dyno.

6. **Vehicle Configurations.** Some vehicles take extra time to find a steady RPM signal from the ignition system. Getting this signal is crucial to have an accurate torque reading and to plot RPM on the graphs. Finding this signal also becomes a challenge as new models with coil packs buried deep within the engine bay show up on the dyno. Sometimes it is as easy as removing a plastic cover, and other times it requires removing with tools and testing different wires until a signal is found. The common procedure for this is to do a visual inspection on the vehicle to make sure we can get a signal before loading it on the dyno.

7. **Similar Vehicles.** Anytime the same models can be lined up back-to-back is a real time saver. It's also nice for comparison purposes.

Other Considerations

1.Electrical power. The Dyno is equipped with a generator, however the preferred method is to use an outlet power source. This makes for a much quieter dyno day as the generator is very loud. A 110 volt, 20 amp circuit is perfect. We are equipped to run 125 feet of cable to a power source.

2. Tire width. Max tire width to fit on the drum rollers is 83" This width sometimes becomes an issue with trucks that have non stock tires or dual rear wheels. Duallies will have to remove outside wheels. Fully tubbed race cars minimum inside tire width can be no LESS than 37". The measurements should be taken at the foot print of the tire and does not include the sidewall.

4. Loading vehicles on the dyno. Rear wheel drive cars get backed onto the dyno. Front wheel drive cars get pulled on the dyno. The deck of the dyno raises and lowers to load the car. During the dyno test the deck is in the “up” position. Once the test is complete and the vehicle is unstrapped and moved off the rollers, the deck comes down to unload the vehicle.

Figure 1 Dyno in "up" Position