

**American Iron & Camaro Mustang Challenge**  
**2010 Dyno Test Data and Vehicle Specification Sheet**

Owner: \_\_\_\_\_ Car#: \_\_\_\_\_ Class: \_\_\_\_\_ Engine CID: \_\_\_\_\_

NASA Log Book # \_\_\_\_\_ Veh Year: \_\_\_\_\_ Make and Model: \_\_\_\_\_

Items to be certified (if applicable):

1. Ignition Timing: \_\_\_\_\_ deg. adv. @ idle. Idle RPM: \_\_\_\_\_
2. Fuel Pressure: \_\_\_\_\_ psi.
3. Carb Jet or Rod sizes if applicable: \_\_\_\_\_ Primary \_\_\_\_\_ Secondary
4. Restrictor # of orifices, diameters, thickness if applicable: \_\_\_\_\_
5. Exhaust Configuration:
  - a. Head pipe size: \_\_\_\_\_ inches
  - (Check all that apply)
  - b. \_\_\_ Single \_\_\_ Dual      c. \_\_\_ X-pipe      \_\_\_ H-pipe      \_\_\_ Y-pipe
  - d. Muffler Type: \_\_\_\_\_ Inlet size: \_\_\_\_\_ inches
  - e. Tail Pipe location: \_\_\_\_\_ Outlet size: \_\_\_\_\_ inches
6. List any additional modifications and or parts to bring vehicle to recorded power listed in section 10. (Use reverse side if needed):  
 \_\_\_\_\_  
 \_\_\_\_\_

7. Altitude of dyno shop: \_\_\_\_\_ ft
8. Rear tire pressure set at 30lbs before run \_\_\_\_\_ Yes
9. Dynojet set to correct to SAE J1349, smoothing 5 \_\_\_\_\_ Yes
10. Readings at 185 degree water temp: \_\_\_\_\_ HP \_\_\_\_\_ Torque  
 Readings at 195 degree water temp: \_\_\_\_\_ HP \_\_\_\_\_ Torque  
 Readings at 205 degree water temp: \_\_\_\_\_ HP \_\_\_\_\_ Torque

<b>Average of three runs above:</b> _____ <b>HP</b> _____ <b>Torque</b>
<b>Minimum Weight as per class rules:</b> _____ <b>Pounds</b>

\_\_\_\_\_  
Owner's Signature                      Date

\_\_\_\_\_  
Dyno Operator's signature                      Date

\_\_\_\_\_  
Name

## AI/CMC Dynamometer Inspection Procedures

1. Only dyno runs on DynoJet brand dynamometers are acceptable.
2. One dyno report may be performed and used for the entire season provided that:
  - a. It is performed after the last event of the prior season and before the first race entered for the season.
  - b. No performance modifications are made to the car.
3. All dyno readings must be corrected to SAE J1349 Rev JUN90 (29.23 in/hg, 77F, zero humidity) and the dyno's smoothing function must be set to 5
4. Car must be in "ready to race" configuration with regards to engine and drivetrain.
  - a. American Iron Classes: All engine or drivetrain components that are *adjustable and affect power* (carb jets, timing, etc.) must be explicitly allowed by the vehicle's class rules, must be written down in section 1 - 6 of the inspection sheet, and must match at all times.
  - b. Camaro Mustang Challenge Classes: All engine or drivetrain components that *are not stock or are adjustable, and affect power* (restrictors, air intakes, timing, etc.) must be explicitly allowed by the vehicle's class rules, must be written down in section 1 - 6 of the inspection sheet, and must match at all times.
5. Rear tires must be set to 30psi.
6. Hood shall be open during dyno test runs.
7. Electric engine fans and or external cooling fans may be used.
8. Dyno pulls will be made in 4<sup>th</sup> gear or at a 1:1 ratio.
9. Altitude of the dyno shop must be recorded. Dyno runs made at locations with elevation greater than 1,500 feet higher than the track will not count as being valid at that track. Class Officials may decide to waive this requirement for certain circumstances. **CHECK WITH YOUR LOCAL CLASS DIRECTOR ahead of time.**
10. Three consecutive runs shall be made under full power. The RPM range shall be consistent for all three runs. Starting RPM shall be no higher than 2000. Ending RPM shall be clearly beyond max horsepower.
11. The first run shall be made with water temperature at 185F. The next run shall be with water temperature at 195F, and the last run shall be made with temperature at 205F.
12. The peak horsepower and torque of each run will be noted on the inspection sheet.
13. The average of the three consecutive runs will be calculated and noted on the inspection sheet. This average horsepower and torque number is what must be used to determine the vehicle's required minimum weight, using the car's specific class weight rules.
14. One dyno certification may be valid for an entire race season as long as no performance modifications are made to the car.