

Mercury Barometer



I could write a book on this, but suffice it to say ... If you have a Dyno and don't have one of these hanging on the wall, you are "pushing a chain", my friend. Let me try to explain.

Aneroid barometers are nice and we sell a very good one in our weather station, but they are a compromise at best. Let's face it – it is just not practical to carry a three foot long glass tube full of mercury around the race track to monitor the barometric pressure, so everyone uses a diaphragm "aneroid" type barometer. Nor is it practical for Super-Flo to install a mercury barometer on the Dyno. But, they DO realize that an aneroid is not ideal for accuracy and repeatability, and that is the reason they provide a means for calibrating the barometer on the system. Believe me, you better calibrate the system often if you want repeatability on your horse power and torque readings. You hear people every day saying somebody has a dyno that gives high or low numbers. I promise you that Super-Flo, Stuska, Go Power and the rest, spend a ton of money developing a load cell and software that repeats. And I realize some problems occur, but most of the time this is caused by incorrect barometric pressure input data. You can go on and on, but the bottom line is: If you have a dyno, you better have a mercury barometer and use it often to calibrate the machine.

NOTE: You don't care anything about the corrected barometric pressure – only absolute. Also, unless you are right next to the airport (same altitude), their numbers mean nothing to you either. The reason you can bet away with an aneroid barometer for predicting ET and MPH change in a race car is because you aren't concerned with actual barometric pressure, but with the amount of CHANGE in pressure between runs.



PMS

Weather Station

This kit provides the racer with close observation of the following:

- * Air Temperature
- * Humidity
- * Barometric Pressure
- * Air Density
- * Direct relation of all of the above to your MPH & ET

It is a well known fact that atmospheric conditions have a definite influence on your engine's performance and consistency. Until now, the problem has been that only a select few racers have been able to understand and interpret these changes in terms of MPH & ET. The PMS Weather Station provides the racer with the proper instrumentation and instructions to do this. We cannot over-stress the importance and value of this kit to the racer making "at the track" changes or tests – regardless whether it be tire, transmission, induction, ignition or valve train. If you expect the get accurate feedback, it is absolutely essential that the atmospheric influence be separated from your testing. Air density alone tells the racer very little--get the whole picture with this station.

Kit includes: Weather bureau-type sling psychrometer with thermometer. Brass-cased aneroid barometer graduated in in/HG. and 10-page instruction book. NOTE: Does not include a commercial air density gauge. Using the PMS weather station, the racer computes air density from barometer reading, temperature and humidity. This method takes a little longer, but you have the assurance of correct results (unlike many of your commercial gauges).