



A shock dyno graph is your "Assurance of Quality", showing you exactly how your shock or strut performs.

A dyno graph is important because:

- It provides you with a baseline for comparison to see changes in the damper's performance, whether those changes are from age, wear and tear, damage, or other variables.
- It is essential to see that all dampers are well matched to each other or a given baseline curve.

Penske Racing Shocks and Custom Axis Racing Shocks provide our customers with a dyno graph for every new shock, strut, service, or rebuild they receive. Professional race teams always validate their suspension's performance with a dyno graph, and so do we. We follow that policy for every shock, for every strut, for every customer.

Other shock suppliers or service shops may be reluctant to document their work with a dyno graph, but with Penske Racing Shocks and Custom Axis Racing Shocks, rest assured we will always provide you with an "<u>Assurance of Quality</u>" for your shocks.



HOW TO READ A DYNO GRAPH

BLUE – This is the compression open quarter or "accelerating". The crank moves from BDC to 90 degrees "counter clockwise". The shock shaft is accelerated from zero velocity to the peak speed at 90 degrees. We can see the blue line on the graph extending from 0 velocities (this is BDC on the crank) to 10ips velocity. Also note the force increases as the velocity increases.

ORANGE/Red – This is compression close or "deceleration". The shaft must slow down to return to zero velocity at TDC. Note the orange line on the graph that starts at 10ips and returns to zero velocity (TDC on the crank)

GREEN – We now have changed direction and started into rebound. This quarter is rebound open and we are accelerating to the peak velocity in the rebound direction.

BLACK – rebound close is the quarter we slow in the rebound direction returning to BDC and completing one cycle.