

What's My Rollout?

by Al Smyth, Portatree Timing Systems, Inc.

Probably the most unknown drag racing value is rollout. Some think it is the amount of inches that their car rolls out of the stage beam (they are partially correct).

When racers inquire about their rollout, we can't provide one simple answer. Rollout is the time from when the driver initiates the leave until the car physically leaves the starting line that starts the Elapsed Time (ET) clock. The start of the race can be initiated by rolling out of the stage beam (stage beam makes - light on tree goes out), guard beam breaking (some tracks don't have a guard beam, but its purpose is to limit rollout length), or either one happening first. It is important to know this because if your track is using a different method than another track, your Reaction Time (RT) will change!

Rollout consists of 7 variables of which the driver has control of 5 and track personnel control the other 2. The Track sets up the height of the beams on the race track and if they are set too high, the rollout is increased (harder to red light). If they are set low, the rollout is decreased (easier to red light). The track also has control of traction. If the track is slippery (tires spin) then you will have a longer rollout.

The 5 variables that you can control are:

- Weight of Vehicle
- How you stage the car -- shallow or deep
- Clutch / Converter Slippage
- RPM of the leave
- Front Tire Diameter / Air Pressure in the front tire

When you are practicing with a practice tree whether it is a table top or the full sized tree, it is important to use a rollout number that your vehicle can attain. After you practice and get consistent at that rollout number, you should make the vehicle work with you - don't try and compensate to work with the vehicle.

If you have a delay box then you use the delay box to vary the rollout number so working with the vehicle just got a whole lot easier, but remember, the rollout is still a variable. Even with a delay box, you can still red light if you stage too deep or get too much traction.

Good luck racing and practice daily !!!

Note: LED Bulbs effect rollout .03 to .04 secs - deduct from your Rollout Time when practicing. .32 on incandescent is .28-.29 on LEDs!

Typical Rollouts:

Jr. Dragster - Gas Motor	.40 - .44 Seconds
Jr. Dragster - Alcohol Motor (sm. front tires)	.36 - .38 seconds
Jr. Dragster - Alcohol Motor (lge front tires)	.31 - .34 seconds
Motorcycle	.18 - .22 Seconds
Pro Stock Bike	.24 - .28 Seconds
Pro Stock Car	.24 - .28 Seconds
Super Comp Dragster	.18 - .22 Seconds
Super Stocker (3200 lbs)	.30 - .34 Seconds

Calculation (Estimate Only):

Weight of Vehicle / 10,000
3200 lbs / 10,000 = .32 Seconds

This estimate does not work for vehicles that slip clutches excessively.