



TOE SIMPLIFIED

Toe is the pointing in or pointing out of the front wheels as viewed from the top of the car. If the front wheels point in, toward the engine, at the front edge of the wheels then you have toe in. If the front wheels point out at the front edge then you have toe out.

In general, racecars are set with a small amount of toe out. The toe out provides directional stability. Toe out pulls on the tie rods taking out the tiny clearances that are built into the tie rod ends. Depending on the type of car typical toe readings are 1/16" to 1/4" out for tracks under 1/2 mile in length.

Toe should be checked often as any contact with other cars or retaining walls is likely to change your toe setting. Changes in ride height can have an effect on toe as well.

Toe can be set with a pair of toe plates that are rested on the sidewalls of the tires. A tape is placed on the toe plates in front of the tire and an additional tape behind the tire. When using toe plates a smaller tape reading on the back tape indicates toe out.

For a very precise reading you can scribe a line in each front tire. Use a tire scribe and spin each of the front tires to get your straight line. You can then measure between the two scribed lines with a tape measure or with a toe bar. As with toe plates, a smaller measurement at the backside of the tire indicates toe out.

Some racers use a toe bar to measure the toe that lies against the sidewall on one side of the racecar. On the other side, this toe bar extends past the sidewall by a few inches. A tape is used to measure from the toe bar back to the sidewall. When this system is used a smaller tape reading at the front of the tire indicates toe out. You will notice that this is opposite the two other methods described above.
