

top dog dragster



J & J SLOT RACING

1.05 SEC.

GENE HUSTING

UNLIMITED CLASS

What does it take to do the 1/24 scale quarter-mile in 1.05 seconds?

Here's an inside look



at Gene Husting's ultra light chassis with modified Lindsay power, along with his formula for tuning

WHAT TYPE OF car does it take to turn the 1/24 scale quarter-mile in 1.05 seconds? To find the answer to this question, we contacted Gene Husting who holds the track record at 1.05 seconds at the J & J track in Long Beach, California. Under Rod & Custom Model National Electric Drag Rules, the unlimited class allows you the widest choice of chassis and body combinations. It also places no restrictions on the type or cost of motors. Gene decided that this would be an interesting class in which to run. Interesting it turned out to be, as he established track records at the three hottest strips in the L.A. area — J & J, Western Model Raceways in Gardena, and Modelrama in Compton.

Since he had raced in the dragster class with a Lindsay L1010 motor, way back when they were legal, Gene decided this type of motor might be the one to use. His dragster was the first one in the area to turn in the 1.20 bracket, with a final low E.T. of 1.08 seconds. But he felt he needed more power, so he contacted Bob Lindsay about the problem and Bob took great pains to make him a 14-bar commutator, seven-pole armature with a 3/8-inch diameter. A fellow drag racer, Jim Rhoden, ground a hole in a horseshoe-type magnet and Gene contoured the outside to conform to a Lindsay L1010 magnet configuration. When this arrangement was tried in a car, there was not enough field strength in the magnet. Next, he tried the Pittman 85A magnet with modified field laminations and this worked out quite well.

The frame is .10-inch thick magnesium cut to the 10-inch maximum allowable length for unlimited class. Lightening holes

are cut into the frame to keep weight to a minimum. The car weighs more than eight ounces, which is quite heavy for a car in this class, but includes approximately two ounces of lead weight in the nose of the car to keep the front end down on the track. Those giant wheelstands look good, but they slow the car down. There is a 3/16-inch brass tube ahead of the front Speedway wheels, to which additional weight can easily be added. Different strips have varying amounts of power and traction, so when you're trying to tune up six cars for a meet, it helps to be able to add or subtract weight quickly from the front of the cars. The weight added should be kept to a minimum, but must be enough to prevent wheelstands. A swinging pickup is used to help assure positive electrical contact with the strip tapes.

The field laminations are held together with 2-56 threaded rod which attaches to the frame rails. Brushes and brush holders are from the Pittman 85A motor. The brush spring is considerably stiffer than the stock 85A spring. The armature and rear axle bearings are flanged 3/16 OD x 1/8 ID ball bearings. The right hand armature bearing is mounted in a removable bearing mount. This enables the armature to be removed and replaced easily, through a 3/8-inch hole in the frame. The rear axle is hardened 1/8-inch drill rod. Flat spots are ground in the rod for the set screws in the wheels and gears to keep them from turning on the axle. The gears are 64-pitch Weldon gears. The small gear is stainless steel and the large one is aluminum. The gear ratio is varied from 2.5:1 to 3:1 depending on strip power and traction.

The rear tires are German record elastic

model airplane tires cut down to size after being epoxied to the wheel. The tires have been the biggest problem to date. These German tires have the best traction of any tires tried so far, but the car has so much power, it spins the tires from the starting line to the finish line. The tremendous centrifugal force on the tires near the finish line has caused two tires to be thrown off their wheels. Another tire had a chunk approximately one-quarter of its diameter torn out, and numerous other tires have pulled loose from the epoxy on the wheels. This problem was finally solved by Charles Hamill of Raceway Products, who made an experimental set of magnesium wheels with deeper side flanges to give the tires more bonding area. Before each run, the tires are cleaned with Energine Spot Remover and are allowed to dry thoroughly before running. The Formica surfaced track is also cleaned before each run with Windex glass cleaner.

The body is cut from .009-inch thick sheet aluminum, hand formed to fit the chassis. It is painted candy apple red with a fadeaway to a gold front end. The car is also equipped with a driver with helmet, roll bar, and steering wheel, as required by the rules. The cockpit is covered with an aircraft type canopy for protection from the abrupt stop in the parachute at the finish line. Many an unprotected driver has lost an arm or head in the parachute! Either a parachute or large piece of nylon is generally used to stop the cars. It doesn't seem to damage the cars in any way, and nylon does not get any lint in the ball bearings. The car is also equipped with a gear guard which keeps the parachute out of the finely meshed gears. ◀