

# Stevenson Type 59 Cyclekart

Stevenson Cyclekarts, Ltd. Torrid Pines Circuit, Over Hill and Dale, Monterey, California

## At a Glance

0-25 mph **4.3 sec**

0-1/4 mile **yes**

Top speed **36 mph**

Skidpad **0.90g**

Slalom **9.8 mph**

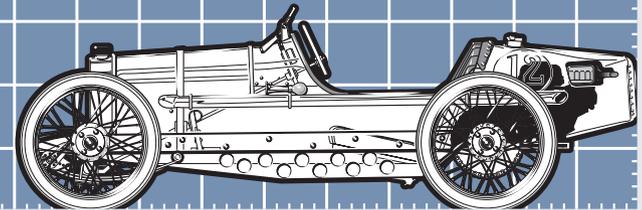
Brake rating **slim to none**

List Price, materials: **est \$1500**

Price as Tested: **just how much is your labor worth?**

Price as tested incl std equip. (bulb horn, pivoting "Brooklands" windscreen, faux friction shocks, lightening holes beneath frame rails, dash-mounted Monte Carlo stopwatch, leather hood strap, convex rearview mirror, horseshoe-shaped grille, actual horseshoe on grille screen, French markings for kill switch hand-lettered with a black Sharpie, Ettore Blue pearlescent paint (\$50), floormats (\$10), Plywood Association rebate (-\$10).

SCALE: 10 IN.(254mm) DIVISIONS  
DRAWING BY TIM BARKER



## SPECIFICATIONS

### Engine

Type.....aluminum head, crankcase and steel-lined cylinder, 4-stroke inline-1  
Valvetrain.....ohv 2-valve/cyl  
Displacement.....11.9 cu in./196 cc  
Bore x stroke.....2.68 x 2.13 in./68.0 x 54.0 mm  
Compression ratio.....8.5:1  
Horsepower (SAE).....6.4 bhp @ 3600 rpm  
Bhp/liter.....32.6  
Torque.....9.8 lb-ft @ 2500 rpm  
Redline.....higher than typical riding mower  
Red mist.....descends whenever driver enters car  
Fuel delivery.....in 5-gal. cans  
Rec. fuel.....premium unleaded, 91 pump octane with a dash of castor oil for regularity

### Warranty

Basic warranty.....pH 11  
Acidic warranty.....pH 4

### Chassis & Body

Layout.....rear engine/right-rear-wheel drive  
Body/frame.....monocoque 1/4-in. plywood with rectangular-section steel beams and "exhaust pipe" longitudinals  
Brake.....8.0-in. solid disc, single fixed cable-actuated caliper  
Assist type.....quadriceps, ABS (Any Brakes? S%\$#!!!)  
Total swept area.....entire workshop after project completion  
Wheels.....Honda moped wire spoke w/cast hubs, 17 x 2  
Tires.....Chen Shin, 2.50 x 17 4-ply  
Steering.....go kart industry standard  
Turns, lock to lock.....0.37  
Turning circle.....19.5 ft

### Suspension

Front: tubular beam drop-center axle, buggy-seat leaf springs, fancy fake friction shocks  
Rear: hardtail live axle with glutteal & seat foam damping

### General Data

Curb weight.....225 lb  
Test weight.....405 lb  
Weight dist (with driver), f/r, %.....depends a lot on the driver  
Wheelbase.....64.0 in.  
Track, f/r.....34.0 in./35.4 in.  
Length.....99.0 in.  
Width.....39.5 in.  
Height.....32.0 in.  
Ground clearance.....4.5 in.

### Accommodations

Seating capacity.....1  
Head room.....infinite  
Seat width.....16.5 in.  
Leg room.....44.0 in.

Seatback adjustment.....small changes can be made by wetting plywood and exposing to direct sunlight  
Seat travel.....shouldn't move if screwed together right

### Drivetrain

Transmission:.....Comet Industries TAV 30, continuously variable belt drive  
Range of ratios:.....2.7-0.9:1  
Final drive ratio.....7.2:1 via roller chain and sprockets  
Engine rpm @ 30 mph.....sounds fast

### Instrumentation

vintage Monte Carlo stopwatch, finely tuned bum

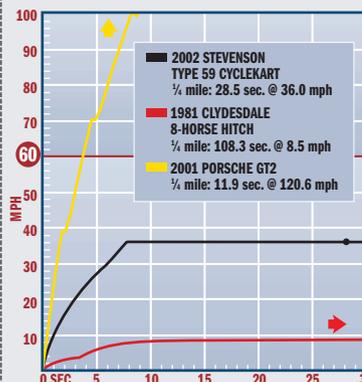
### Safety

I laugh at danger...ha!

## PERFORMANCE

### Acceleration

Time to speed Seconds  
0-5 mph.....0.3  
0-10 mph.....1.1  
0-15 mph.....1.9  
0-20 mph.....3.0  
0-25 mph.....4.3  
0-30 mph.....6.5  
0-35 mph.....8.0  
0-40 mph.....clock still ticking  
Time to distance  
0-100 ft.....1.1  
0-500 ft.....2.9  
0-900 ft.....4.4  
0-1320 ft (1/4 mile).....28.5 sec @ 36.0 mph



### Braking

Minimum stopping distance  
From 10 mph.....12 ft  
From 25 mph.....67 ft  
Brake feel.....stiff  
Overall brake rating.....slim to none  
Subjective ratings consist of excellent, very good, good, average, poor; no means information is not available.

### Fuel Economy

Our driving.....18 laps of Torrid Pines  
Cruise range.....full race length, one hopes  
Fuel capacity.....1.0 gal.

### Handling

Lateral acceleration (10-pace skidpad).....0.90g  
Balance.....bumpy  
Speed through  
60-pace slalom.....9.8 mph  
Balance.....mild oversteer  
Lateral seat support.....where are those pillows?

### Interior Noise

Idle in neutral.....85 dBA  
Maximum in 1st gear.....101 dBA  
Constant 50 mph.....still trying to get there  
70 mph.....you're kidding

### Test Notes:

Launching the Cyclekart is as easy as just stepping on the throttle, especially when it's going downhill. Braking, however, requires lots of planning and faith that the car will actually slow down somewhat before going off-road into the Torrid

Pines. • Slalom exercise calls for mastery of hula techniques to help steer (I mean slide) the Cyclekart in the direction you suggest, sort of. • Better lateral acceleration would be possible without the speed bump around the skidpad.

### Test Conditions:

Temperature **48° F** Humidity **54%** Elevation **hilly** Wind **calm**