

Drive Tesla Roadster; Forget What You Knew About Acceleration

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MENLO PARK, CA – Twenty-four hours after piloting the '10 Tesla Roadster Sport along undulating ribbons of blacktop that wind through Bay-area forests of aromatic California Laurel, the disappointment lingers.

Not because the electric vehicle's interior, despite an inspired upgrade, smacks of an aftermarket refit. Or that its \$128,000-plus price tag is an affront to the segment.

Disillusionment festers because every other vehicle now on the market, and most of those to come, will be shackled by the vagaries of internal combustion.

Harnessing electron flow affords pull so intense, it seems unnatural. So to those auto makers that would still claim prodigious pickup from a gas pedal: You need to shut up.

Acceleration no longer is measured in degrees of delay. And the benchmark is the Roadster Sport.

With a 0-60 mph (97 km/h) rating of 3.7 seconds, the car's 288-hp electric motor delivers maximum torque on demand. All 280 lb.-ft. (380 Nm). No waiting.

Cruising around an on-ramp at 60 mph, we spy an orange Carrera. We catch up and show the Tesla's LED taillights to the Porsche, almost instantly upping the ante to 80-plus mph (128 km/h) with the flick of a foot.

Now we know how Han Solo felt when the Millennium Falcon kicked in to hyper-drive, minus Chewbacca's histrionics.

Because there is no growl. No roar. No exhaust system, period. Tesla's top-line 2-seater surges with a whirr. Like a carnival bumper car, only more refined.

The dearth of rich, visceral sound from such an athletic ride is, at first, disconcerting. But the performance benefit of electric drive makes this sacrifice worthwhile.

The tranquility also accommodates comfortable cabin conversation, which comes easily anyway, even with the top



Tesla EV Roadster Sport has carbon-fiber exterior.

down.

Equally remarkable is the car's deceleration. Releasing the accelerator triggers the motor's dynamo function, which not only generates energy but actively slows the vehicle as if you were gearing down.

Of course, with the car's single-speed gearbox, there is no shifting of any description.

The Roadster Sport adds new dimensions to input modulation. Control is enhanced and brake-wear is an afterthought.

'09'10 Tesla Roadster Sport

Vehicle type	RWD electric-powered roadster
Motor	375-volt AC induction air-cooled electric
Power (SAE net)	288 hp
Torque	280 lb.-ft. (380 Nm)
Transmission	single-speed gearbox
Wheelbase	92.6 ins. (235 cm)
Overall length	155 ins. (395 cm)
Overall width (including mirrors)	73.7 ins. (187 cm)
Overall height	44 ins. (113 cm)
Curb weight	2,690 lbs. (1,120 kg)
Base price	\$128,500
Fuel economy	244 miles (393 km) at maximum battery charge
Competition	None
Pros	Cons
Acceleration	Fit and finish
Deceleration	Pricey
Acceleration	No 'W' button

Other maintenance bonuses: Oil changes are moot, along with emissions checks. The only red flag in the owner's manual is a recommendation to change, at five to seven years, the antifreeze serving the battery pack's cooling system.

On a twisting hill descent down a narrow back road, we tap the 4-wheel discs twice, relying almost solely on the motor's extraordinary push-pull to negotiate curves. And when we reach bottom, we've actually added 2 miles (3.2 km) of range.

The 6,831 lithium-ion cells in the Roadster Sport's battery pack promise 244 miles (393 km) of driving on a single charge.

Expect a drained battery to recharge in about 10 hours on the 240-volt, 30-amp circuits found in most homes. So range anxiety becomes a non-factor for the average commuter who tops up at the end of every work day.

But because a nationwide infrastructure of high-powered public charge outlets appears years away, and one hour of charging on a standard 120-volt, 12-amp circuit equates to just four miles (6.4 km) of travel, road trips in a Tesla portend some genuine adventure.

Note: Mobile connectors are optional equipment – \$1,500 for 240-volt; \$600 for 120-volt. But the light show that accompanies the charging process provides some amusement. Pulsating LEDs in the charge port glow blue, yellow and green to indicate progress.

Absent any range concerns, the Roadster Sport assures memorable driving experiences. While the Mini Cooper long has evoked go-kart comparisons, the Roadster Sport comes much closer – if only because of its manual steering.

The Tesla's steering setup offers a light workout in city driving. But at highway speeds, particularly with the exceptional level of available boost, a tight tiller is welcome.

Tesla also offers a custom-tuned suspension to Roadster Sport buyers. This is an appealing feature given the car's stiffness, an attribute engineered by Britain-based Lotus Cars, whose Elise 2-seater inspires Tesla's Roadster line.

A Tesla executive bristles at the prevailing notion that its cars are modified versions of the Elise. Though they share just 6% parts commonality, the family resemblance remains strong.

To accommodate its battery pack and power electronics module, the Roadster Sport has a longer wheelbase and wider track than the Elise. However, while its profile evokes the Fiat X1/9, the Roadster Sport's shape is all Elise – a letdown, considering the Tesla is twice the price.

The carbon-fiber Roadster Sport comes with a fabric top. It rolls up to fit easily in the trunk, which conveniently is about the same size as a golf bag. But be wary of the optional removable hardtop. The trim, sculpted Tesla wears this lid like a bad toupee.

Inside, carbon fiber accents are constant reminders that the Roadster Sport is high-tech. So why does this 6-figure car's interior look like it was done by a backyard customizer?

The Roadster Sport inherits from Lotus a cramped foot well and glaring deficiencies in fit and finish.

Tesla imports from U.K.-based Lotus a built-up “glider,” which comprises the car’s interior and key chassis components, then completes the Roadster Sport’s assembly here by installing its patented electric-drive system.

The leather upholstery on our tester’s door is puckered and wrinkled, while instrument-panel control knobs (one of which falls off) retain a disconcerting industrial-grade feel.

More pleasing are the haptics emanating from the driver-information screen, which delivers data ranging from tire pressure to the number of barrels of oil saved while driving the Tesla.

The modestly proportioned display responds to every touch with a decisive pat, but the accompanying beeps are loud and annoyingly sharp.

This interface also is used to calibrate the car’s energy use. Four modes – storage, standard, range and performance – juggle charge conservation accordingly.

The latter setting enables snappier response by warming the battery. However, it also compromises battery life if used excessively.

The new-for-’10 glove box is appropriately named, because that’s about all it will hold.

Gone from the outgoing model is the fake tachometer, which simply mimicked the speedometer needle’s movement. In its place is a useful gauge that tracks kilowatts-per-hour generated and expended.

Similarly, the previous model’s faux shifter, which afforded all the charm of a kit-car interior, has been replaced by a tastefully trimmed console adorned with buttons: ‘P’ for park, ‘N’ for neutral, ‘R’ for reverse and ‘D’ for drive.

Arguably, there also should be a button marked ‘W’ – for wow.