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### Starting Up

Is the Tesla Model S the *best car ever*? If you're already an owner, then you know it's true. For the curious and the skeptics, I'm going to introduce you to the Model S and show you why it is the best car ever. And for you Model S owners, you'll learn even more about your fantastic car.

'Best car ever' is quite a boast. You'll find the Model S a revolutionary vehicle unlike anything before. It has it all – sex appeal, comfort, sports car handling, safety, style, powerful acceleration, extra passenger and cargo space, and much more. It even costs far less to run than the latest high-mileage hybrids and diesels. You'll never have to visit a gas station again.

Today, there are hundreds of cars to choose from. We'll explore why the Model S should be at the top of your list when considering any new car purchase.

#### 2 Introduction

# "Oh you're gonna drive an electric car, you just don't know it yet." - The Lefsetz Letter

Now, be prepared to be surprised and delighted, as the Model S breaks so many illusions about what a car and a car company should be. It delivers what other car makers only dream about – an economical to run, environmentally friendly, stunningly fun-to-drive car that looks and performs great both inside and out!

#### **Common Terms**

- EV Electric Vehicle
- ICE Internal Combustion Engine
- kWh 1,000 Watts per hour of electricity
- MPG Miles Per Gallon



### Steer Me Right

Part of what makes a great car is the quality of the steering and road feedback. Often the desired "feel" varies wildly by owner, and can change based on road conditions. Some owners prefer an easy light touch for touring, while others want tight sports car handling with good road feedback.

Tesla managed to address a wide range of customer desires with multiple steering options. The Models S uses a variable ratio, speed sensitive, rack and pinion electronic power steering system. A driver can select the steering

feel they want at any time – satisfying a wide range of users without compromise.



An electronic power steering system has a number of additional advantages over old hydraulic power steering

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systems. It uses about a tenth of the power, saves weight, and eliminates the need for a steering pump, high-pressure hoses and oil reservoir.

The steering wheel fully adjusts with power tilt and telescopic adjustments. With the Tech Package option, these settings are saved and restored for each user profile.

#### **Cool Fact**

Electronic steering systems are quiet and maintenance free.



## Tips and Tricks

If you have time-of-day electric rates where you charge, set the charge timer to start charging at the lowest cost of the day, typically starting at midnight.





Some functions are GPS location aware. For example, if you manually reduce the default charging current, it remembers the value for that location. The time-of-day charge setting and Homelink functions are also location aware.

While in the car, to extend the door handles to let a passenger in, press park.



After adjusting the driver's seat, steering wheel driving position and side mirrors, tap the person icon at the top of the display to save these memory positions in your driver profile. Up to ten personal profiles are stored here (requires Tech Package).





A light press up or down on the turn-signal stalk activates the turn-signal for three flashes.

In Controls (lower-left Touchscreen button) spend a few minutes going through every setting for each Tab to select the operations you prefer.



## The Tesla Story

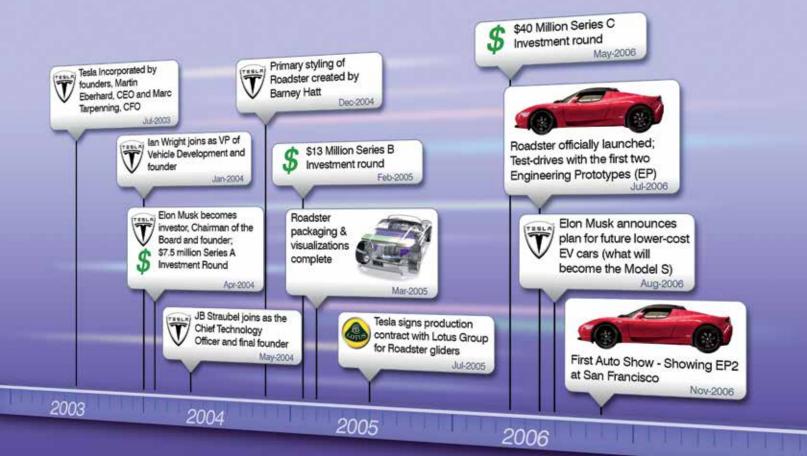
Tesla Motors, named after the AC induction motor inventor Nikola Tesla, is one of those rare companies that comes along and disrupts an established industry. Founded in 2003, Tesla has focused on three goals:

- Produce a range of car models, each one being the absolute best in its class proving that all-electric vehicles are more desirable than comparable ICE cars
- Make each generation of EVs more affordable than the last, bringing clean energy transport to the masses to accelerate the move from a petroleumbased economy to a sustainable energy economy
- Develop and sell electric powertrain technology to other companies to speed release of their own EVs

Tesla's first car was the Roadster, a two-seater sports car. It blew away all previous complaints about electric cars being slow, ugly and range limited. Instead, it delivers an incredible EPA range of 244 miles per charge, zips along easily at 130 mph, and accelerates from 0-60 mph in 3.9 seconds. It stunned the market by being so much better than its ICE rivals. The Roadster even looked great, something unexpected from a new company, let alone an electric car!

To bring the Roadster to market faster, Tesla worked with Group Lotus, experts in low volume vehicle production. While Tesla planned to use the Lotus Elise as the base platform to reduce the design work, Tesla heavily modified the frame, created all new carbon fiber body panels, and created the entire drivetrain. In the end, less than 7% of the Elise parts were retained in the Roadster. With the design complete, Group Lotus was contracted to assemble "gliders," the Roadster shell without the electric powertrain.

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