

# On the Move!

## The Automobile Industry's History and Future

These days, we take for granted our ability to drive from here to there. But it has been a long and evolutionary journey for us to arrive here! Many technological advances have paved the way—and more are shaping the future.

There's much to celebrate from years gone by and much to look forward to in the years ahead. So, we thought it would be fun to reflect on some significant milestones and visit some predictions of what's in store.

### A Look Back

#### 1886 – Happy Birthday to the Automobile

On January 29, Carl Benz applied to patent his gas-powered vehicle. Despite the “Velocipede” being a three-wheeled creation that bears no resemblance to our cars today, it is regarded as the world’s first automobile.

#### 1900 – “Motor City” Is Set in Motion

Oldsmobile founder Ransom Olds brought the first automobile manufacturing factory to Detroit, Michigan. More manufacturers eventually followed his lead, thus earning Detroit the nickname “Motor City.”

#### 1908 – The Model T Makes Auto Ownership Affordable

Henry Ford’s debut of the Model T introduced a good quality, user-friendly, and affordable automobile that appealed to a broad range of American customers (and their bank accounts!).

#### 1911 – The Electric Starter Makes Starting a Breeze

Charles Kettering refined the concept of the electric starter, developing and patenting his version on June 15. This invention (small enough to fit under the car’s hood) eliminated the cumbersome (and dangerous) hand-crank process of starting a vehicle.

#### 1913 – Assembly Lines Revolutionize Production Efficiency

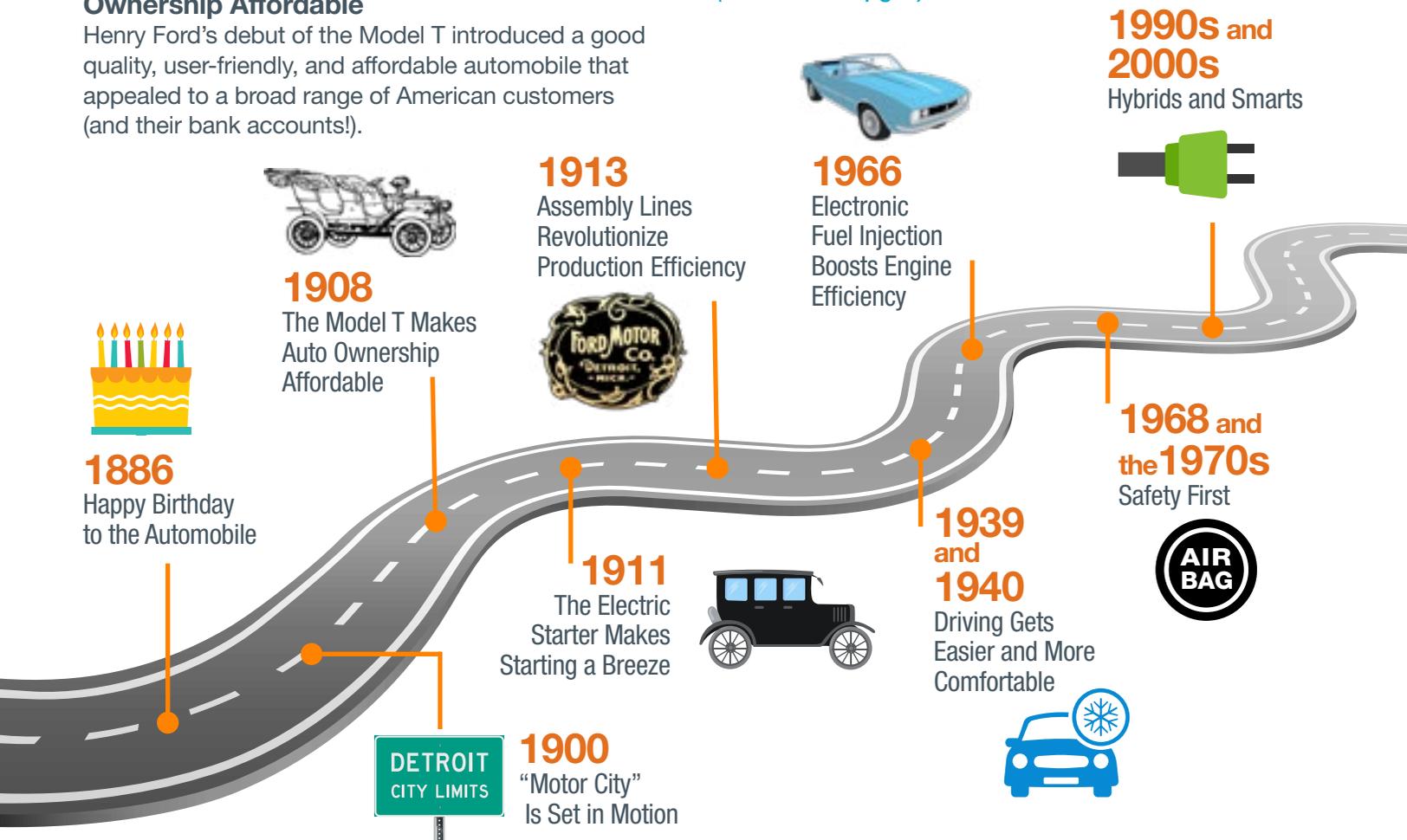
With more consumer demand for cars, manufacturers had to find a way to step up production. Ford Motor Company implemented the first moving assembly line on December 1, 1913. By reducing a vehicle’s production time from more than 12 hours to just one hour and 33 minutes, the innovative process enabled the company to make thousands of cars per year. Mass production also lowered the cost per vehicle, making car ownership affordable for more people.

#### 1939 and 1940 – Driving Gets Easier and More Comfortable

The advent of an automatic transmission using hydraulic fluid in 1939 meant drivers no longer had to manually shift their cars into gear. In 1940, the Packard was the first car to offer factory-installed air-conditioning. *(continued on pg. 3)*

#### 1990s and 2000s

Hybrids and Smarts



6 Months Interest-Free Financing. Go to [roberts-automotive.com](http://roberts-automotive.com) for details.



- The **new car smell** is produced by over 50 volatile organic compounds.
- The **first car accident** occurred in 1891, in Ohio.
- The average car has **30,000 parts**.
- The **inventor of cruise control** was blind.
- In 1941, Henry Ford made a car out of **soy beans**.
- The average American spends about **38 hours a year** stuck in traffic.
- **Most car horns** beep in the key of “F”.
- The automobile is the **most recycled consumer product** in the world.
- The **first windshield wipers** were hand-operated.
- It would take less than **6 months to get to the moon** by car at 60 mph.
- The average American will spend two weeks of his or her life **stopped at red lights**.
- **An airbag** inflates within 40 milliseconds of a crash.
- **White is the most popular** car color.
- There are **over 1 billion cars** currently in use on the planet.

From <https://affordableautohopkins.com/20-surprising-interesting-car-facts/>, <https://www.fredbeans.com/fun-car-facts.htm>

## Want Top Performance from Your Car?

### Consider Top Tier™ Fuel.



#### What Is “Top Tier” Gasoline?

Engines have become increasingly complex and expensive, so it’s wise to take measures to help ensure they operate optimally and last a long time. One way to do that is to choose Top Tier fuel for your vehicle.

Top Tier gasoline’s existence (since its introduction in 2004) has been “driven” by automakers’ desire to keep their engines cleaner and protect them from carbon buildup and harmful deposits. With its higher concentration of detergents, Top Tier gasoline helps reduce problems such as rough idling, hesitation when acceleration, knocking, pinging, and diminished fuel economy.

#### With its higher concentration of detergents, Top Tier gasoline helps reduce problems . . .

Understand that octane level has nothing to do with whether a fuel earns the designation of “Top Tier.” Top Tier gasoline is available in regular, midgrade, and premium octane grades. To earn the Top Tier distinction, retail locations must exceed EPA detergency standards and meet the requirements of the Top Tier program. All gasoline grades must be treated with an approved Top Tier detergent additive at the correct concentration.

#### Where Can You Find It?

You can find licensed retail brands that sell Top Tier gasoline and diesel fuel at the website [toptiergas.com](http://toptiergas.com). And if you’re looking for brands locally that qualify as Top Tier retailers, we’ll be happy to point you in the right direction.

SOURCES:  
<https://www.pca.org/news/which-fuel-should-my-porsche-drink-pca-tech-tips>  
<https://www.consumerreports.org/car-maintenance/study-shows-top-tier-gasoline-worth-extra-price/>  
<https://www.toptiergas.com/licensed-brands/>

#### On the Move! (continued from pg. 1)

##### 1966 – Electronic Fuel Injection Boosts Engine Efficiency

The invention of an electronic fuel injection system enabled more precise, efficient fuel and air delivery to the engine’s cylinders (where fuel is combusted and power generated). The result: more efficient and powerful engine operation.

##### 1968 and the 1970s – Safety First

In 1968, the U.S. Government required manufacturers to install front seats with shoulder and lap belts and back seats with lap belts.

In the 70s, major automotive makers began adding airbags to vehicles, making them standard in many models. However, the law requiring airbags didn’t become a reality until the Surface Transportation Efficiency Act of 1991. That law set a deadline of September 1, 1998 for all cars and trucks made and sold in the U.S. to have airbags on both sides of the front seat.

##### 1990s and 2000s – Hybrids and Smarts

Hybrid automobiles, powered by both an internal combustion engine and electric motor, entered the automotive scene. These vehicles have since help reduce emissions and owners’ fuel costs.

Cars also began to become more intelligent and intuitive with smart technology. Examples include automatic braking systems, collision sensors, and backup cameras to improve safety. Also, tech companies and auto manufacturers began focusing on the potential of self-driving capabilities to offer increased convenience and less “pilot error” on the road.

#### A Look Forward

What’s next for us and our cars? Although we have no crystal ball to predict the future, it seems logical that manufacturers will continue to improve upon what’s already in place. And of course, we expect they will seek new ways to enhance their products.

#### Advances in Autonomous Vehicle Capabilities

As companies like Uber and Lyft drive interest in the potential cost efficiencies of driverless vehicles, we anticipate continued research and technological advancement in automated cars. Of course, consumer demand for increased convenience will also push forward initiatives to expand capabilities and improve the quality and safety of partially and fully automated vehicles.

#### Electrified vehicles (EVs) will become much more mainstream as their battery technology improves

**Electrification Expansion**  
Electrified vehicles (EVs) will become much more mainstream as their battery technology improves and the push to lower vehicle emissions intensifies.

Many manufacturers have made public promises to launch significantly more hybrid or fully electric vehicles within the next five years.

#### Automotive Repair Evolution

As automobiles continue to change, vehicle owners will need repair shops that have kept pace with the evolving industry. It’s critical to put advanced vehicles in the hands of capable, knowledgeable technicians who have the latest diagnostic and repair tools at their fingertips. At Roberts Automotive, we have always stayed at the forefront of automotive repair technology. From performing basic maintenance to assessing and resolving complex computerized issues, we have the industry expertise, skilled team, and latest tech to handle your car’s needs now and in the future.

SOURCES:  
<https://www.daimler.com/company/tradition/company-history/1885-1886.html>  
<https://www.daimler.com/company/tradition/company-history/1886-1920.html>  
<https://www.qad.com/blog/2019/12/the-biggest-milestones-in-the-history-of-automotive-manufacturing>  
<https://corporate.ford.com/articles/history/the-model-t.html>  
<https://automotivehistory.org/june-15-1911-the-electric-starter-is-patented/>  
<https://www.history.com/this-day-in-history/fords-assembly-line-starts-rolling>  
<https://knightlawgroup.com/when-airbags-became-mandatory-in-cars/>  
<https://www.ge.com/digital/blog/future-automotive-industry>





- 1 - 9 in. Graham Cracker Crust
- 1 Box (small) instant chocolate pudding
- 1 1/2 cup of milk
- 4 oz. Cream Cheese
- 8 oz. Cool Whip
- 1 cup Powdered Sugar
- 1/2 Cup Creamy Peanut Butter

**Directions**

Mix instant pudding & milk—beat, set aside. Soften cream cheese, add 1/2 cool whip, powdered sugar, peanut butter—beat well. Spread cream cheese mixture in bottom of crust. Spread chocolate pudding on top of cream cheese mixture. Spread remaining cool whip on top.

**TIP:** Jackie always makes 2 and freezes one for later use.

## Fall Special \$20.00 OFF\*

### Be Aware and Be Prepared

Special \$49.95  
Value \$69.95

**Special Includes:**

- Change oil and filter using filter and oil that match your personal driving situation\*\*
- FREE 52-Point End-to-End Check Including:
  - Rotate, inspect & adjust tire pressures
  - Inspect all lights
  - Inspect wiper blades
  - Inspect brakes
  - Check fluids and top off as needed
  - Inspect steering and suspension components
  - Road test

\*\*up to 5 quarts of regular motor oil. Synthetic extra.

\* Offer not valid with any other offer, excludes tires & batteries. Please present coupon at the time of drop-off.

Expires 11/30/2021



3846 Columbia Ave., Mountville, PA  
717-285-3738

Specializing in VW/Audi, BMW, Mercedes, Porsche

[roberts-automotive.com](http://roberts-automotive.com)

## \$20.00 OFF\*

### Service or Repair over \$100

Roberts Automotive is a full-service auto repair shop, capable of handling all of your auto repair needs. We specialize in Volkswagen, Audi and Mercedes repairs, as well as BMW repair and Porsche repair services. Our expert mechanics are qualified to repair and service any of your other cars as well.



3846 Columbia Ave., Mountville, PA  
717-285-3738  
Specializing in VW/Audi, BMW, Mercedes, Porsche

\* Service or Repair must be \$100 or more. Coupon not valid with any other offers. One coupon per customer, per household. Expires 11/30/21 | [CODE SERV20](#)



**ROBERTS**  
AUTOMOTIVE

3846 Columbia Ave., Mountville, PA 17554

717-285-3738 |

[www.roberts-automotive.com](http://www.roberts-automotive.com)

Import Service & Repair - Specializing in VW/Audi, BMW, Mercedes, Porsche