

# SCHRADER®

## PAST TO PRESENT ... AND BEYOND

**“While many companies talk about their ability to innovate, Schrader actually does it. Schrader has a long-standing and proven track record of innovation, backed by patent protection. Even today, Schrader’s diverse valve and sensing technologies can be found across a broad range of sectors – from automotive, to aerospace and agriculture, to heavy equipment and oil and gas.”**

—HUGH CHARVAT, PRESIDENT, SCHRADER

Innovation, vision and performance are the building blocks of great companies. For more than 165 years, Schrader, the global leader in the design and manufacture of valve, mechanical and electronic system components and sensing technologies, has delivered innovative solutions that customers trust.

Founded in 1844 by German immigrant August Schrader, the company’s humble roots began in a small machine shop in Manhattan. A mechanic by trade and an innovator by nature, Schrader saved enough money to purchase needed machinery and open his own shop in the spring of 1844. Initially, Schrader developed supply fittings and valves for rubber products like air pillows and life preservers. But his inventive nature and strong interest in diving eventually led him to design and manufacture improved diving helmets and air pumps, catapulting the young company into more than 50 years of successes in the dive equipment business.

By 1890, having brought his son, George Schrader, into the business, the senior Schrader’s attention turned to bicycles – specifically the newly popular pneumatic tires. During this time, Schrader and his son developed what would become the company’s most popular and famous invention – the Schrader® pneumatic tire valve – the very same patented valve that is used on every motor vehicle in the world today. This pioneering work led to the patent of the tire valve cap and, soon after, tire valves for automobiles were introduced.

Since the breakthrough inventions of the 1800s, Schrader has continued a proven culture of innovation. More recently, Schrader pioneered tire pressure monitoring systems (TPMS), a safety feature now standard on all passenger vehicles in the U.S. that is being adopted globally via mandatory legislation. As the number-one supplier of TPMS sensors and valves worldwide, Schrader’s TPMS systems, components and tools are used by many of the world’s leading automobile manufacturers, and throughout the Aftermarket service and repair communities. In fact, over 54 percent of all global OEM vehicle platforms utilize Schrader direct TPMS technology, with over 158 million TPMS sensors in operation worldwide. By accurately monitoring tire pressure, TPMS helps drivers avoid serious accidents due to low tire pressure, reduce their environmental impact, and save money at the pump. Another strong example of Schrader innovation is the EZ-sensor™ patented programmable tire pressure monitoring sensor—a first-of-its-kind sensor for Aftermarket retailers that dramatically speeds-up the TPMS-repair process and reduces inventory requirements from 150+ SKUs to a single programmable sensor.

In addition to a legacy of performance with leading Original Equipment Manufacturers (OEMs) in the automotive sector, today Schrader delivers customer-driven innovation to a diverse range of industries and applications—from industrial production, to off-road/heavy-duty equipment, marine to agriculture, aerospace and oil and gas—delivering valve and sensing solutions that protect and perform.

THE SATURDAY EVENING POST 63

### Correct inflation means using a Schrader Gauge—regularly

THIS is the best way to assure yourself of the utmost comfort and service from balloon tires. Check your inflation with the Schrader Balloon Tire Gauge—compact, durable, always dependable, easy to use with any type of wheel construction.

Dealers everywhere sell these balloon tire gauges. Keep yours handy in your car.

A. SCHRADER'S SON, Inc.  
Chicago Brooklyn London  
Toronto

*This shows how easy it is to apply the ball joint on the Schrader Tire Gauge to the mouth of the tire valve.*

BE SURE IT'S A Schrader - LOOK FOR THE NAME



Schrader's diverse valve and sensing technologies are present in an extensive array of adjacent market applications. For example, Schrader sensing technologies can now be found relaying critical performance and failure mode data within power transmission belts and hydraulic hoses, as well as fuel-level and flex-fuel sensors and oxygen monitors. Similarly, tire pressure monitoring is used in the large heavy-duty earth-moving sector for mining operations where tires are a premium item and operational downtime is avoided at all costs.

August Schrader's pioneering spirit and appetite for invention has remained at the heart of Schrader's business for over 165 years. While the company's focus has expanded over the years, August Schrader's zeal for innovation and the production of high quality products continues to drive the company forward.

YEAR	SCHRADER INNOVATION MILESTONE
1844	<ul style="list-style-type: none"> <li>August Schrader enters business in lower Manhattan as a turner of brass parts.</li> </ul>
1845	<ul style="list-style-type: none"> <li>Schrader supplies fittings and valves for rubber products made by Goodyear Brothers. These include air pillows and life preservers.</li> </ul>
1849	<ul style="list-style-type: none"> <li>Schrader produces copper diving helmets for underwater salvage operations.</li> </ul>
1950	<ul style="list-style-type: none"> <li>Schrader devises an air pump for diving suits.</li> </ul>
1891	<ul style="list-style-type: none"> <li>Schrader produces the first tire valve for bicycles. Schrader invented the world-renowned Schrader pneumatic tire valve – the same patented valve that is used today on every motor vehicle in the world.</li> </ul>
1896	<ul style="list-style-type: none"> <li>Schrader patents the tire valve cap. Tire valves for automobiles are introduced.</li> </ul>
1905	<ul style="list-style-type: none"> <li>Schrader introduces gauges to measure tire pressure with accuracy.</li> </ul>
1951	<ul style="list-style-type: none"> <li>Schrader presses development of tubeless tire valves to meet needs of automotive industry.</li> </ul>
1956	<ul style="list-style-type: none"> <li>Schrader develops the tubeless tire valve, which eliminates the need for the inner tube on automobile tires.</li> </ul>
1998	<ul style="list-style-type: none"> <li>Schrader introduces a variety of valve assemblies in other automotive systems. These include bleeder valves, idle speed control valves, inertial damping shock absorber valves, and compressor control valves.</li> </ul>
1999	<ul style="list-style-type: none"> <li>Schrader equips the Renault Laguna with a Tire Pressure Monitoring System, the first high-volume production car in the world to be launched with 100 percent TPMS.</li> </ul>
2001	<ul style="list-style-type: none"> <li>Schrader is producing a high volume of tire pressure monitoring systems with fully automated production lines.</li> </ul>
2002	<ul style="list-style-type: none"> <li>Schrader Bridgeport helps develop SAE standards for new CO2 automotive Air Conditioning systems, and develops new innovations for valve designs.</li> </ul>
2009	<ul style="list-style-type: none"> <li>Schrader receives the Frost &amp; Sullivan Award for Innovation for its Snap-In TPMS sensor. There are now more than 15 million Snap-In sensors in service.</li> </ul>
2010	<ul style="list-style-type: none"> <li>Schrader spearheads and sponsors a public and industry TPMS communications effort to raise awareness about tire pressure monitoring systems and to stress the importance of proper tire pressure. Launches a comprehensive TPMS Web site with three distinct sections: TPMSMadeSimple.com for drivers; TPMSMadeEasy.com to address specific training and service needs of the aftermarket, and TPMSMadeRight.com to assist original equipment manufacturers with quality questions and technology-based decisions.</li> </ul>
2010	<ul style="list-style-type: none"> <li>Schrader and Bartec, two of the industry's most respected names in TPMS technology, launch EZ-Sensor, the auto industry's first patented &amp; programmable OE-replacement TPMS sensor. EZ-Sensor can be programmed to function across car makes and models and is designed to replace 90 percent of TPMS sensors currently stocked by dealers.</li> </ul>

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