THE HISTORY OF

BASCO

BRIGGS & STRATTON
Briggs & Stratton Corporation with its headquarters in Milwaukee, Wisconsin is the world’s largest manufacturer of air cooled gasoline engines. The company, which has a rich and diverse history, did not reach this pinnacle easily nor directly. Over the past 95 years Briggs & Stratton has pursued products as diverse as electric refrigerators, battery eliminators and coin operated paper towel dispensing machines. Surprisingly, it is a variation of the first product that currently accounts for more than 90 percent of sales.
IN THE BEGINNING (1908-1920)

In 1908 an informal partnership between Stephen F. Briggs and Harold M. Stratton began. This informal partnership which has become Briggs & Stratton Corporation is now over 95 years old and has prospered into a company that produces 4-cycle gasoline engines for a worldwide audience.

Briggs was the inventor and Stratton was the investor. The Briggs & Stratton partnership first ventured into the automobile manufacturing business. From there, Briggs & Stratton progressed to manufacturing automobile parts. Some of the parts that Briggs & Stratton produced for the automobile industry included locks, switches and igniters. In 1910 Briggs & Stratton became incorporated. Because of the growing demand for automobiles, starter switches became the early mainstay of Briggs & Stratton business.

In 1919 Briggs & Stratton acquired the A.O. Smith Motor Wheel. The Motor Wheel (which was an early predecessor to the “P” engine) was used as a power source for bicycles and the Briggs & Stratton Flyer. This Motor Wheel led to the development of the stationary Type “P” engine. This development revolutionized the 4-cycle gasoline engine industry and set the course for Briggs & Stratton to become the world’s largest manufacturer of air cooled gasoline engines. The development of the “P” engine and subsequent models provided a portable, reliable and convenient means to power many applications of machinery. These applications included: washing machines, garden tractors, cultivators and generators.

From top: Briggs & Stratton produced locks; Gas igniter produced by Briggs & Stratton; “Superior” car (only three were made); 1920 “Type P” engine introduced; Washing machine powered by a Briggs & Stratton engine
PROVIDING POWER AND SERVICE (1920-1960)

Briggs & Stratton was now able to provide power for people in every aspect of life. To accommodate the varied demand for small engines during the 1930s, Briggs & Stratton developed several new models. These portable engines were first used extensively in agriculture and military use, but soon found use in other applications.

In 1930 Briggs & Stratton established a nationwide service organization using independent authorized central service distributors. These distribution centers were operated by factory trained personnel and provided replacement parts, special tools and engine repair service.

Design, manufacturing and service are the components needed to obtain world-class manufacturing status. All were brought to bear under the leadership of Charles Coughlin. He was president of the company from 1935-1972. He successfully navigated the company through World War II, labor difficulties and the incredible growth of the postwar boom years. His brilliance as an industrialist was subsequently recognized by the Harvard Business School.

Later designs of the “P” type engine were used extensively during WWII. Briggs & Stratton also produced generators, magnetos, ignition switches and ordnance fuse caps for the war effort. The development of the portable 4-cycle gasoline engine and the nationwide service system positioned Briggs & Stratton to take advantage of the postwar economic boom.

In 1953 Briggs & Stratton revolutionized the Lawn and Garden Industry by developing the first lightweight aluminum engine. Lightweight and inexpensive, these new engines made lawn and garden equipment accessible to the masses of Americans moving to the nation’s new suburbs. By 1957 the aluminum engine accounted for 80% of engines shipped. The development of the aluminum engine lead to the introduction of the Kool Bore™ engine which is the mainstay of engines today. Throughout the 1950s Briggs & Stratton produced an average of over 2,000,000 engines per year.

From Top: Charles Coughlin, President of Briggs & Stratton 1935-1972; Briggs & Stratton Model U engine; Rotary engine assembly line; Briggs & Stratton service center; FG engine introduced in 1929; Briggs & Stratton creates lightweight engines for Navy; Model P used on 1924 garden tractor; 1955 riding mower powered by Model 14 engine; Early reel-type mower with P series engine
POWERING THE WORLD (1960-1980)

With the market for lawn and garden equipment growing tremendously because of the growth of suburbia, Briggs & Stratton engines were perfectly suited for the lawn mowers that would become an integral part of suburban life.

During the 1960s Briggs & Stratton expanded production in its Milwaukee Plants due to the exploding demands for its product. Briggs & Stratton focused on two goals: improving the small engine and finding ways to produce as many engines as possible.

Leading the expansion and continuous product improvement effort during this period was Chairman Fred Stratton and CEO Vince Shiely. Some of these improvements included Easy-Spin® starting, lo-tone mufflers and an automatic choke and starter. Briggs & Stratton also introduced many new product lines to meet the needs of the growing marketplace. These lines included the Quiet Power® engine, the opposed twin engine and the I/C® family of engines. The fuel shortage of the 1970s combined with increasing environmental concerns prompted Briggs & Stratton to look into the development of electric motors for use on lawn and garden equipment.

With the onset of the mid-seventies, Briggs & Stratton faced its first serious challenge to its leadership position in the air cooled engine market when Japanese engine manufacturers, encouraged by the weak yen, began competing in the small engine industry.

In 1980 Briggs & Stratton developed an unusual prototype vehicle, the Gasoline/Electric Hybrid automobile. This electric car was equipped with a small, twin-cylinder, 4-cycle engine. The two power sources could be used independently or in tandem according to the needs of the user.
REPOWERING BRIGGS & STRATTON (1980-1995)

The infusion of moderately priced premium Japanese engines and successful cost reduction efforts of its domestic competitors represented a critical challenge to the company's leadership position.

At the same time, the retail market for outdoor power equipment began to concentrate in the hands of a few powerful mass retailers who began to demand lower prices and greater product diversity. In the late 1980s Fred Stratton Jr. and John Shiey led an effort to meet this challenge by reorganizing the company into product focused divisions. It also adopted the “economic value added” discipline in order to better manage operating and capital costs.

Briggs & Stratton expanded its product line and built new plants in order to better deal with the “mass marketization” of outdoor power equipment. New efficient product focused facilities were built in Statesboro, Georgia; Murray, Kentucky; Auburn, Alabama; Rolla, Missouri and Poplar Bluff, Missouri.

The largest principle market for a Briggs & Stratton engine has traditionally been the lawn and garden equipment market. However, with the emerging threat to engine sales came competitive intrusions into the industrial and commercial application markets. To counter this threat, Briggs & Stratton introduced several new lines of engines including the Industrial/Commercial line and the Vanguard™ line. These engine lines which were launched in the 1980s, represented improvements in design and overall performance that helped strengthen Briggs & Stratton’s hold of its share in this market segment.

Briggs & Stratton also resolved to expand its presence in lucrative foreign markets through products geared toward foreign applications. In an effort to meet international competition, Briggs & Stratton entered into a joint venture with the Daihatsu Motor Company. This highly automated facility would produce the Vanguard™ V-Twin overhead valve engines. This joint venture, along with a strategic alliance with Mitsubishi Heavy Industries helped re-establish Briggs & Stratton’s presence in the premium engine business.

During this time period, Briggs & Stratton continued to explore and introduce alternative products such as the environmentally friendly Smart-Fill® Fuel Can, battery powered lawn mower and the electric power head.

BRIGGS & STRATTON MOTORSPORTS

In 1993 Briggs & Stratton embarked on another new venture and entered the field of Kart Racing with the formation of the Briggs & Stratton Motorsports Division. The division provides engines, parts, racing gear and information through a network of about

From top: Quantum® engine developed in the 1980s; Vanguard™ V-Twin engine, introduced in 1984; Briggs & Stratton Daihatsu 3-cylinder diesel engine; World Formula International Motorsports engine
100 Briggs & Stratton Motorsports Centers in the United States and Canada.

Most people think of lawn mower engines when they think of Briggs & Stratton, but Briggs makes more racing engines than any other company in the world. From racing karts to dragsters, from asphalt speedways to off road, Briggs & Stratton makes the engines that have been the choice of competition racers for years and years.

2000 AND BEYOND

Chairman Emeritus Fred Stratton Jr. and Chairman, President and Chief Executive Officer John Shiely’s vision for the future contemplates maintaining its traditional leadership position in outdoor power equipment, but extends the company’s “Providing Power For All People” mission to servicing new markets, including transportation, electrical products and emerging markets for powered products.

Today Briggs & Stratton offers its customers over 100 different models of engines ranging from 3.5 to 25 horsepower which can be serviced at more than 32,000 authorized service facilities in 102 countries. Briggs & Stratton has become a highly regarded brand name by producing high-quality, durable, reasonably priced products. The company continues to grow in stature by focusing on technological improvements, changing market needs and a commitment to creating value for its employees, customers, suppliers, shareholders and the communities in which it does business.
THE POWER OF INNOVATION

Briggs & Stratton continues to press forward in providing innovative product and comprehensive service to its customers worldwide.

While Briggs & Stratton continues to offer the latest in technologically advanced outdoor power equipment it is not at the expense of our fragile environment.

Aggressive research and innovative technology has enabled Briggs & Stratton to reduce engine emissions by 70% since 1990. As the world’s largest producer of small four-cycle engines, the company has undertaken a comprehensive initiative during the last decade to voluntarily reduce air emissions attributed to small air cooled engines. We are committed to further reductions by dedicating a substantial part of its engineering and research and development staff to emission testing, research and new product development.

NEW PRODUCTS

By introducing new products and innovations we have given the customer the cutting edge technology needed to compete in today’s competitive environment. To remain number one, the quest for new products must be relentless. Our customers expect and deserve the very best we have to offer.

Touch-N-Mow® is a push button starter on lawn mowers that uses no batteries or electric cords. This innovative system makes starting the mower as easy as 1-2-3; prime the engine and unlock the key, push and hold the starter button, and pull the bail control handle.

The patented design stops the engine when you release the lever and energizes it for the next start. Touch-N-Mow® has an advanced spring-powered mechanical design that not only starts the engine but quickly stops it when you release the safety lever. This unique system utilizes inertia from the engine to energize the starter for next use. It’s effortless, easy and convenient to use.

Etek™ Brushless Motor System, which offers increased performance and durability, along with reduced maintenance, when compared to the brush-type motors traditionally used in commercial floor care equipment, golf cars, and other electric motor-driven equipment. By utilizing an industry-first brushless, axial-gap motor design, combined with an integrated, programmable electronic motor controller, Briggs & Stratton has created a motor ‘system’ that offers increased power, reduced noise and maintenance, and longer run times between charges.
Why 4-cycle technology for a trimmer? Over the years emissions regulations from government agencies have become increasingly more stringent. Old fashioned 2-cycle gas and oil engines have been a massive target of these regulations. In comparison the Fource™ 4-cycle engine offers many more advantages including: reduced emissions, easier starting, no mixing gas and oil, a broader power range and a patented lubrication system that allows the engine to be operated at a full 360°.

The Fource™ 4-cycle engine is the first from Briggs & Stratton that is specifically designed for handheld trimmers. Over 60 million American homes rely on Briggs & Stratton’s world leading 4-cycle technology for dependable power. Now the same dependability is available in a small high performance engine designed specifically for trimmers or other micro-engine applications.

POWERLINK™ – Imagine being able to power your hedge trimmer from the convenience of your riding mower. Briggs & Stratton makes it happen with its new POWERLINK™ System, an innovative engine design that provides a riding mower with up to 1,500 watts of electrical power.

POWERLINK™ converts electricity generated by the engine into usable AC power. It features advanced power inverter technology capable of producing 1,000 watts of continuous power, with up to 1,500 watts of surge capacity. With the POWERLINK™ System, you can run a variety of electric tools and appliances off your riding mower, providing power where outlets are not available. One Engine, One Mower, Multiple Tasks.

Snow blower engines. Briggs & Stratton re-entered the snow engine market with the new Intek™ OHV Series (overhead valve engines) in 1999. OHV engines are more fuel efficient, cleaner burning, more compact and more powerful than the engines of the early 1980s.

Our engines are noted for the power, fuel efficiency, low vibrations and the quietest engines in the industry, setting a new standard for the competition.
From top: Fresh Start® cap and replacement cartridges; 5 HP 4-cycle Briggs & Stratton Power Products gasoline Outboard; 3 HP/150 lb. thrust Briggs & Stratton Power Products electric Outboard; Briggs & Stratton Power Products Elite Series™ pressure washer; Briggs & Stratton Power Products emergency power generator
COMMERCIAL POWER

The days are long and the work is relentless for people who rely on commercial equipment to earn a living. These hard working people need commercial equipment powered by robust, high-performance engines that never back down. Briggs & Stratton Commercial Power designs and manufactures robust, premium-grade Vanguard™ engines that are application-engineered to power equipment that works for a living.

Whatever the commercial application requires—single-cylinder, V-Twin, even a 3-cylinder that runs on diesel, propane or natural gas, horizontal or vertical shaft, air cooled, liquid cooled, even electric—we have powerful, reliable engines that are application-engineered to start fast, work long and finish strong. Briggs & Stratton Commercial Power is all about the design and manufacturing of hard working engines for people that work hard.

INTERNATIONAL

In 2002, as it was looking to grow its general purpose engine business, Briggs & Stratton identified the Asian markets as having the greatest long-term potential. Agricultural mechanization in Asia has created (or will create) the largest untapped small engine market in the world. These engines are traditionally more costly than their vertical shaft counterparts and therefore at a disadvantage when competing in the worldwide market. The competitive disadvantage was especially noticeable when compared to the low cost Chinese manufacturers.

Briggs & Stratton decided that building a facility in China to manufacture horizontal shaft engines for sale in China, and the rest of Asia, was the best strategy to reach its goal of tapping the larger Asian market potential. Additionally, after a careful analysis it was decided that this facility should be situated in Chongqing, China and that the facility should be run by a reformulated Joint Venture with our existing partners in the PUYI-B&S JV. The re-organized Joint Venture company (Bai Li Tong Engines Chongqing) is 90% owned by Briggs & Stratton with each partner having a 5% stake in the business.

SIMPlicity MANUFACTURING

On July 4, 2004 Briggs & Stratton acquired Simplicity Manufacturing, Inc. of Port Washington, Wisconsin. Simplicity Manufacturing is a leading designer, manufacturer, and marketer of a broad range of premium outdoor power equipment used in both consumer and commercial lawn and garden applications. Simplicity’s products are widely distributed through independent dealers under the brand name Simplicity®, Snapper™, Ferris®, and Giant Vac®.

This acquisition represents the company’s first attempt in its history to serve the lawn and garden industry directly. This purchase is expected to build closer relationships with its OEM and retail customers from an operational, sales, and marketing standpoint.

Simplicity is the second acquisition that has focused on engine powered products with the first being Briggs & Stratton Power Products. “We believe we have proven with our acquisition and subsequent performance in the generator/pressure washer segment that we can deliver on our value and commitment to customers and shareholders. Simplicity is a solid company with several compelling brands, a strong position in the retail dealer channel for outdoor power products, and superior product development capabilities. We will utilize these assets to further our high value integration efforts with our traditional OEM customer base for mutual benefit,” said John S. Shiely, Briggs & Stratton’s Chairman, CEO and President.

From top: Briggs & Stratton Commercial Power logo; Chongqing Plant; Simplicity Manufacturing brand logos