



# Operator-Friendly General-Purpose Engines Developed by Responding to Professional Opinions



A general-purpose engine is the primary component of agricultural equipment. Kawasaki launched its first general-purpose engine 60 years ago, in 1957. Kawasaki initially founded its business in the field of farming machinery. Today it enjoys absolute trust among professional users of lawn mowers in

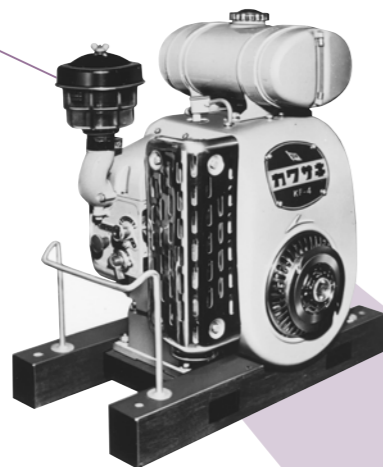
equipment, lawn mowers, and industrial equipment. Capitalizing on the mechanization of agriculture in Japan, and later expanded into other areas. the global market. Developing new products



## 1957

### KF4 (250 cm<sup>3</sup>)

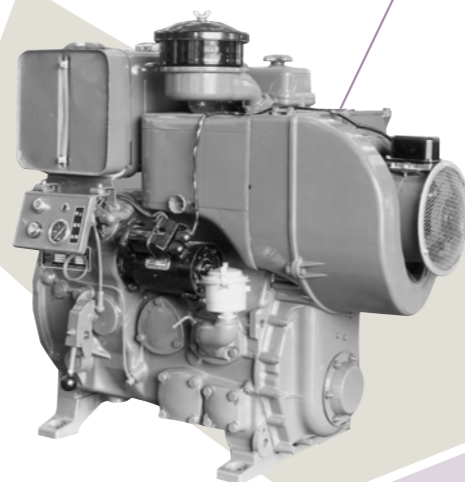
The first general-purpose engine manufactured by the former Kawasaki Aircraft went on sale in February of 1957. It was an air-cooled 4-stroke gasoline engine based on an air-cooled engine for aircraft, and became hugely popular as a highly-durable engine featuring cutting-edge technology, including cast iron cylinders and a tunnel-type crankcase.



## 1962

### KP209 (1,750 cm<sup>3</sup>)

The agricultural equipment market in Japan at the time was dominated by gasoline engines and liquid-cooled diesel engines, but in Europe, air-cooled diesel engines were mainstream. With an eye to future overseas sales, Kawasaki signed a technical assistance agreement with a firm in West Germany, and the KP Series—including the KP209—came out of this joint development effort. The partnership continued until 1986, and paved the way for Kawasaki's diesel engine business.



## 1984

### FB460V (460 cm<sup>3</sup>)

The FB engine was developed for riding lawn mowers in response to a request by U.S. agricultural products manufacturer Deere & Company. This model marked Kawasaki's expansion into the North American lawn mower market and still makes up a significant portion of general-purpose engine sales today. Subsequent model changes were highly reputed as well. This model was a precursor to the Kawasaki V-Twin engine.



## 2016

### FX850V-EFI (852 cm<sup>3</sup>)

This is one of the latest models of the air-cooled vertical-shaft Kawasaki V-Twin engines, which took the U.S. lawn mower market by storm with its compact frame, as well as low vibration and low noise performance. Featuring a new fuel injection system, this engine automatically adjusts travel speed and load on the lawn mower even on slopes, not just on level ground, which results in increased productivity.



It was 60 years ago, in 1957, that the former Kawasaki Aircraft Co., Ltd. started manufacturing and selling small engines for agricultural equipment in response to a request for collaboration from a leading agricultural equipment manufacturer. Back then, agriculture in Japan was starting to shift toward mechanization, and general-purpose engines that powered tillers and other equipment became sought-after products as improvements were made. Cumulative production reached 1 million units in 1968, just 11 years after the debut of the first engine, subsequently topping 5 million in 1976, and 10 million in 1983.

In the 1980s, demand for lawn mower engines grew rapidly in the United States. Kawasaki built a branch factory

for Kawasaki Motors Manufacturing Corp. (KMM) in Maryville, Missouri, in 1989, establishing a production base for general-purpose engines. Kawasaki secured its position in the market by releasing a succession of hit products, including an overhead valve engine for walk-behind lawn mowers (the first ever in the U.S. general-purpose engine industry), and the air-cooled vertical-shaft Kawasaki V-Twin engine, which catered to a demand for high-end products. In addition to the success in the U.S., Kawasaki 2-stroke engines have earned an outstanding reputation from professional end-users in Europe. This achievement has resulted in Kawasaki being recognized as one of the most reliable engine brands in Europe.

Kawasaki has been able to create numerous successful products, both in Japan and overseas, by adhering to a user-first development approach, listening carefully to the opinions of

the operators who use Kawasaki's general-purpose engines, and continually observing how they are used. For example, Kawasaki was the first in the industry to adopt a diaphragm carburetor in 2-stroke engines for lawn mowers, which eliminated constraints related to working postures. In this manner, Kawasaki's general-purpose engines have continually evolved into operator-friendly products that offer high output, low fuel consumption, low noise, and low vibration.