



SUBARU

Robin Industrial Engines

ENGINES

full line



Overhead Cam **Engines**

OHV Slant **Engines**

OHV V-Twin **Engines**

Rammer **Engines**

Micro **Engines**

A Solid Investment. Lasting Value.

One of the largest engine manufacturers in the world, Subaru Robin produces more than 1.2 million engines annually for every type of market. With industry-leading technology and top-quality components, our engines power everything from rammers, welders and trowels to generators, pressure washers and fun karts – and everything in between. With a two-year warranty and an expansive parts and service network, our support after the sale is second to none. In fact, it's the most comprehensive, powerful engine package on the market.

Excellent Engines

With more than 40 years of superior operation and quality that's second to none, Subaru engines have earned a worldwide reputation for top-notch performance and unbeatable reliability. When you buy Subaru engines, you can count on excellent value every time.

- *With less recoil pulling force, an electronic ignition system and automatic decompression, you can rely on easy starting every time.*
- *High power and torque, extended running time and high compression ratios ensure premium performance in a broad range of applications.*
- *Designed with cast-iron cylinder liners, a high-carbon steel crankshaft supported by steel ball bearings and an electronic low-oil shut-off, Subaru engines are built to last.*
- *The strength of the Subaru network remains long after the sale with more than 4,500 Subaru dealers in North America and the support of a two-year limited warranty.*
- *Subaru engines meet or exceed all current EPA and California emission standards.*



**Subaru is
backed by
a network of
4,500 service
dealers in
North America.**

**2-YEAR
WARRANTY**
Limited Manufacturer's Warranty

OVERHEAD CAM

Combining advanced technology with experienced craftsmanship, Subaru Robin's EX Series engines are leading the industry.

With four models ranging from 4.5- to 9-horsepower, these engines are superior to competitors in the same class. After all, it's the first air-cooled engine line to use advanced chain-driven overhead cam (OHC) technology to ensure more power, less noise and easy, one-pull starting every time.

ADVANCED TECHNOLOGY

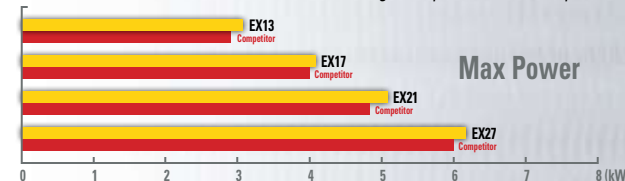
Subaru Robin's EX Series engines take technology to the extreme. Using chain-driven overhead cam (OHC) technology, these workhorses provide maximum efficiency, performance and power, along with minimal noise and emissions.

Extremely easy starting with no kick-back:

- An automatic decompression system offers easier starting, reducing the required pulling force by 30 to 40 percent.
- EX engines start instantly even at temperatures as cold as -10 C without any perceptible kick-back.

More power means superior performance:

- Pent roof combustion chamber allows for a high compression ratio of up to 9:1.



Less noise:

- 33 percent fewer moving valve train parts than OHV designs and reduced mechanical noise ensures noise levels a full 2 dbA below competitive models.

LONG LIFE AND EASY MAINTENANCE

These engines take a lot of abuse, which is why they were built with longevity in mind. A cooler running design and heavy-duty interior parts ensure maximum uptime. When maintenance is performed, EX Series engines require no special tools and have high parts commonality between models.

- The patent-pending cooling design features a slanted cylinder and 360-degree airflow around both the exhaust and intake valve stem areas.
- Heavy-duty piston rings and a cast-iron cylinder liner resist wear and ensure a long engine life.
- A case-hardened steel timing chain allows for precision timing and maximum durability.

FACTORY OPTIONS

- Charging System up to 200 watts*
- Electronic Low Oil Shut-Off System
- Key, Tapered or Threaded Shafts
- Manual or Cable Remote Throttle Control

- Solenoid-Actuated Idle Control
- Manual or Remote Control Choke
- Multiple Air Cleaner Options

Extra-large, Extremely Quiet Muffler



Offers exceptional noise reduction.

Electric Start*



For quick, convenient and easy starting.

Low-profile Air Cleaner



Accommodates a compact design for generator applications.

Cyclone Pre-cleaner



Ensures engine protection even in high dust environments.

*for 6 hp and above

EX SERIES

EX13



4.5 HP

EX17



6.0 HP

EX21



7.0 HP

EX27

9.0 HP



BENEFITS

#1 - Industry leading chain-driven overhead cam offers superior power and performance.



#2 - Optimized-capacity rigid muffler for noise reduction 2 decibels below competitor models.



#3 - Dual ball bearing crankshaft support offers maximum stability under demanding loads.



#4 - Pent roof combustion chamber enables optimum intake and exhaust valve placement for maximum engine performance and efficiency.



KEY FEATURES

1 Chain-driven overhead cam

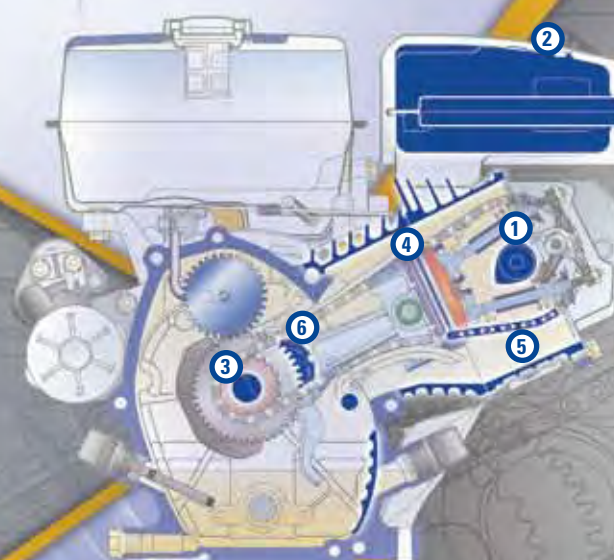
2 Optimized-capacity rigid muffler

3 Dual ball bearing crankshaft support

4 Pent roof combustion chamber

5 Case-hardened steel timing chain

6 Lubrication holes for the critical rod journal



CUTAWAY

OVERHEAD VALVE

SLANT CYLINDER SERIES

When searching for a powerful engine for a wide variety of uses, look no further than the EH36 and EH41 four-cycle engines.

Featuring overhead valve (OHV) slant cylinder technology, the EH36 and EH41 offer high performance, easy starts and maximum durability. With maximum power outputs of 11.5 and 13.5 horsepower, these engines work in a wide range of applications.

DURABILITY AND RELIABILITY

The EH36 and EH41 pack quite a punch. Designed for professional and medium to heavy use, the engines are built to last. A dual-ball-bearing-supported crankshaft ensures maximum reliability.

- Cast-iron cylinder liner provides extended engine life.
- Dual ball-bearing-supported crankshaft for maximum reliability.
- Splash-type lubrication system and large-capacity air cleaner with dual elements enhance reliability.

EASIER STARTING

One easy pull is all it takes and the EH36 and EH41 are off and running. Teaming a QuickStart® starting system and a HotSpark® electronic ignition system with an automatic decompression system ensures easy starts to make sure the job gets done when you want.

- Features automatic decompression for quick starting.
- HotSpark® electronic ignition features automatic timing adjustment to allow easier starting.

FACTORY OPTIONS

- Charging System up to 200 watts
- Electronic Low Oil Shut-Off System
- Key, Tapered or Threaded Shafts
- Manual or Cable Remote Throttle Control
- Solenoid-Actuated Idle Control
- Manual or Remote Control Choke
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Low-profile Air Cleaner



Accommodates a compact design for generator applications.

Cyclone Pre-cleaner



Ensures engine protection even in high dust environments.

EH41 EH SERIES

13.5 HP



11.5 HP

BENEFITS

#1 & 2 - Aluminum alloy block with cast-iron cylinder liner for long engine life.



#3 - Low-noise, rust-resistant muffler.



#4 - Forged steel crankshaft with dual ball bearing support for optimum reliability.



#5 - Unique balancer system rotates at the same speed as the crankshaft to offset unbalanced forces and ensure smooth performance.



KEY FEATURES

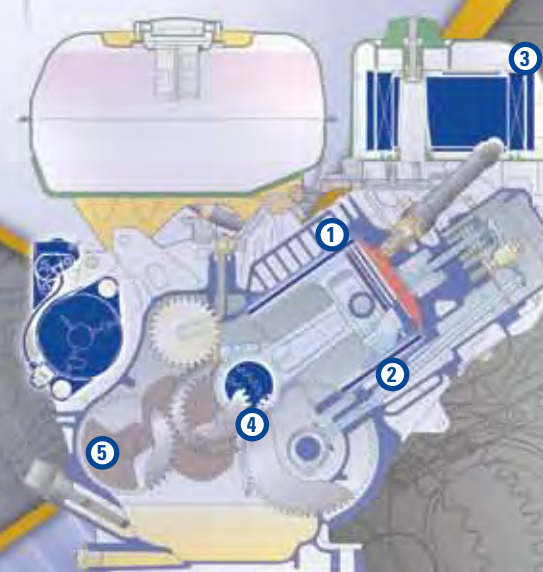
① Cast-iron cylinder liner

② Aluminum alloy block

③ Quiet low-tone muffler

④ Forged steel crankshaft with dual ball bearing support

⑤ Unique balancer system



OVERHEAD VALVE

V-TWIN CYLINDER SERIES

Featuring six models ranging from 18 to 25 horsepower, the V-Twin cylinder series engines are the workhorses of the Subaru Robin engine line.

Delivering high power and performance in a small package, these four-cycle gasoline engines are ideal for a variety of industrial and construction equipment. Despite their high power, like all Subaru engines, they boast maximum durability, easy starts and low exhaust emissions. Indeed there is performance magic in the V-Twin engine.

MAXIMUM VERSATILITY

The V-Twin Series offers models with horizontal or vertical PTO shafts, allowing the engines to be used for an even greater variety of equipment.

- Smooth torque is provided throughout the rpm range.
- Improved breathing at high rpm increases power.
- Unique design provides smooth torque and power.
- A full-pressure lubrication system featuring a trochoid-type oil pump enhances reliability and longevity.

EXTREME DURABILITY

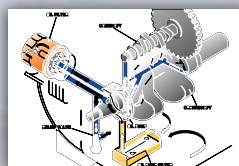
Heavy-duty engine components ensure optimum durability and long engine life. The V-Twin Series is built to withstand the most punishing working conditions. A forged-steel crankshaft with high-load-capacity ball bearings ensure maximum reliability.

- The large-capacity air cleaner with dual elements enhances reliability.
- Heavy-duty ball bearing support on output shaft for high load capacity.
- Cast-iron cylinder liners promote long engine life.

FACTORY OPTIONS

- Multiple Muffler Kits
- Key Switch with Electronic Tachometer/Hour Meter
- 15- or 30-amp Charging Systems
- LP/NG Fuel System
- Manual & Remote Cable Throttle & Choke Controls
- Oil Drain Extensions
- Rotating Flywheel Screen
- Oil Cooler
- Flywheel Stub Shaft
- Electronic Governor

Full-Pressure Lubrication System



With spin on oil filter, provides superior lubrication and long engine life.

Hydraulic Pump Mount



Allows close coupling of hydraulic pumps.

Control Box with Electronic Tachometer



Offers a quick and accurate read of power, speed and service intervals.

Canister Air Cleaner



Ensures engine protection even in high dust environments.

EH SERIES



18.0 HP



20.5 HP



22.0 HP



18.0 HP



22.0 HP



25.0 HP

BENEFITS

#1 - Cast-iron cylinder liners enhance reliability and extend engine life.



#2 - Forged high-carbon steel crankshaft provides maximum reliability under demanding loads.



#3 - Large main bearing support on PTO side of crankshaft minimizes shock under heavy loads.



#5 - Optional low oil pressure system protects the engine if oil levels drop too low.



KEY FEATURES

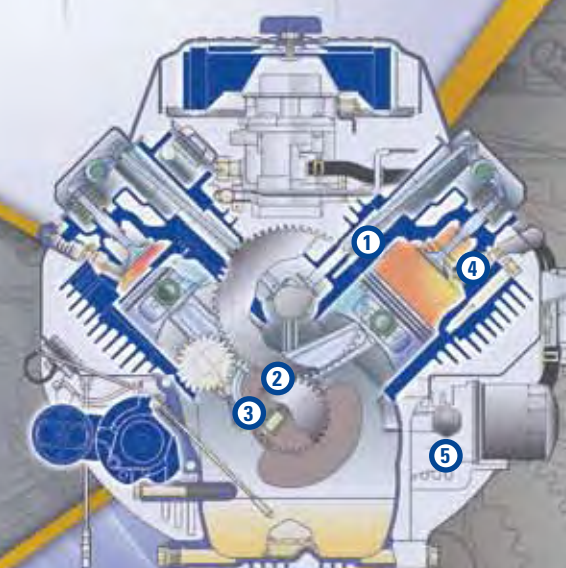
① Cast-iron cylinder liners

② Forged high-carbon steel crankshaft

③ Oversized ball bearing support

④ HotSpark® electronic ignition system

⑤ Electronic low-oil pressure system



CUTAWAY

RAMMER

EH SERIES

Light weight, yet durable
and packed with power.

Designed specifically for rammer applications, these engines feature overhead valve (OHV) upright cylinder technology to provide continuous rated power for demanding rammer applications. Rammer engines are easy starting and lightweight, yet built for high power, high stress and high performance.

DESIGNED SPECIFICALLY FOR RAMMERS

Ideally balanced, the engine's upright cylinder reduces swinging movement and vibration, resulting in less operator fatigue. The cylinder's vibratory force moves in the same direction as the rammer itself increasing momentum.

- *Electronic ignition with automatic timing adjustment for easier starting.*
- *Lightweight design increases mobility.*
- *Vibration-proof breather mechanism maintains separation between oil and breather air enabling any position operation and transportation without concern for contamination.*

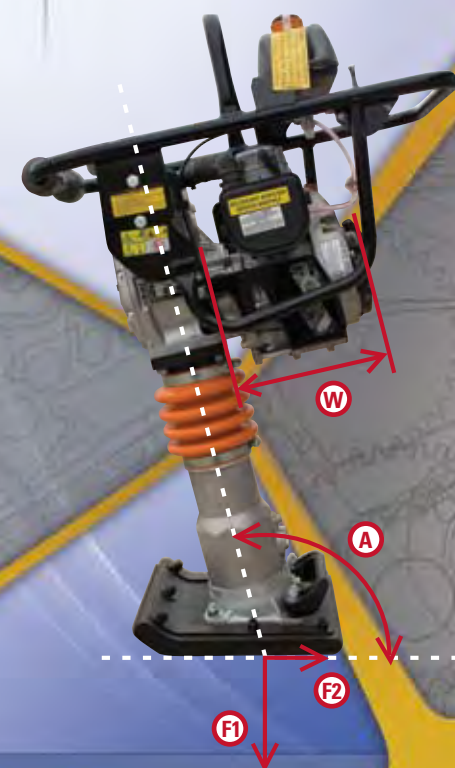
REINFORCED POWER

Built with a vibration-proof breather mechanism, thick sheet metal, and reinforced casting parts with thick walls and ribs, rammer engines are durable to withstand demanding environments.

- *Reinforced casting parts are strong enough to endure the toughest conditions.*
- *Heavy-duty casing with cross bracing ensures durability in demanding rammer applications.*

RAMMER ENGINE

Rammers present a special engineering challenge. The engine must withstand both the vibration of the compactive force and the high dirt and dust environment. Additionally, rammer engines require a high degree of specialized design to integrate with the rest of the machine for maximum performance. The rammer designs require that the entire machine be balanced on the center of the foot in both the front to back axis and side to side axis. Since the engine is mounted to the side of the leg of the rammer, the lesser the width (W) of the engine the less the rammer needs to be angled (A) forward to balance the machine over the foot. As the rammer angle (A) is increased, the compaction force (F1) that impacts the ground is reduced and the backward force (F2) increases – propelling the rammer forward and reducing compactive force. To maximize the compaction force, Subaru rammer engines are designed specifically for rammer applications. All Subaru rammer engines are balanced close to the mounting face and also are balanced on the side to side axis for best compaction performance and easy operation.



KEY FEATURES

- 1 Cast-iron cylinder liners
- 2 Dual ball bearing crankshaft support
- 3 Vertical cylinder design
- 4 Specific rammer design

BENEFITS

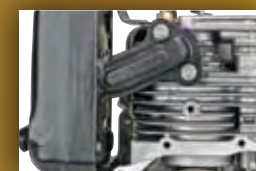
#1 - Aluminum alloy block with cast-iron cylinder liners for durability.



#2 - Dual ball bearing crankshaft support provides reliable performance even in demanding rammer applications.



#3 - Vertical cylinder design maintains an excellent center of gravity to efficiently transmit power to the ground, ensuring performance second to none.



#4 - Specific rammer design ensures exceptional and reliable performance in a durable, sustaining package.



MICRO 4-CYCLE

Try not to let the name mislead you.

For as small as the Micro engines are in size, they're more than huge in power and performance. The lightest and most compact engine series in its class, Subaru Robin's Micro engines showcase advanced technology and engine design all in one compact, efficient unit.

ULTRA LIGHT AND WELL BALANCED

Easy-to-carry Micros are ideal for handheld equipment, such as backpack blowers, mini-tillers, water pumps and cement screeds, among many other applications. At just 8 pounds, these quiet, compact engines are easy to maneuver and maintain. The result is less operator effort and fatigue, which ultimately means higher productivity.

- Introduced as the lightest and most compact 4-cycle engine in its class.
- The unique lubrication system, with a separate oil chamber, guarantees a smooth, stable-running engine throughout a wide range of operating positions.
- The Micro 4-cycle OHV design combined with an automatic decompression system provides an easy pull and reliable starting.

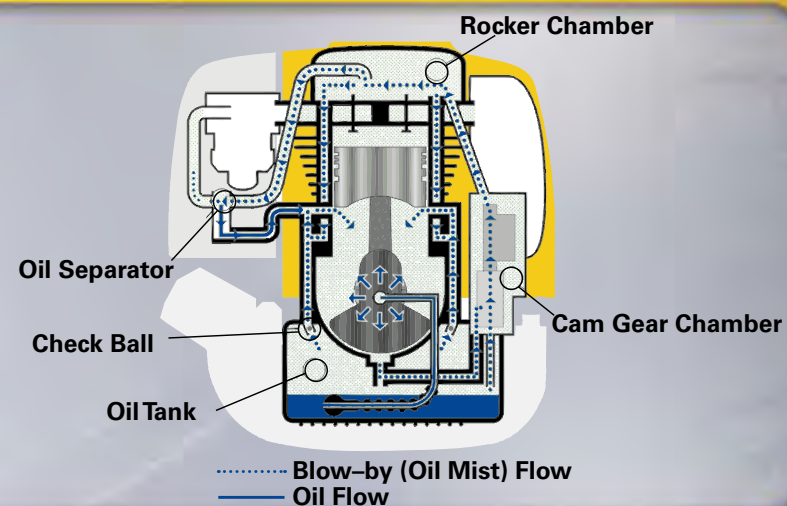
POWERFUL AND RESPONSIVE

With high torque and horsepower output, these state-of-the-art compact engines provide a lot of bang for the buck. The Micros feature quick throttle response and a wide rpm range with low vibration. The unique lubrication system with a separate oil chamber ensures smooth and stable running throughout a full range of operating positions.

- Quick throttle response and wide rpm range meet the requirements of demanding applications.
- Compared to a 2-cycle engine, the Micro 4-cycle OHV design emits one-tenth the emissions and uses half as much fuel.
- Heavy-duty crankcase design with hard chromium plate cylinder and forged steel rocker arm ensures maximum reliability.

LUBRICATION SYSTEM

The Subaru Micro engines are designed to run in a wide range of positions. The patented oil lubrication system is elegant in its engineering simplicity. The natural pressure changes in the crankcase caused by the piston movement in the cylinder are harnessed to pump the oil throughout the engine. Oil is pumped from a reservoir in the base of the engine through a network of one-way valves for reliable lubrication and long engine life without the need to keep the engine level.



EH035 EH SERIES

1.6 HP

EH025

1.1 HP

EH035V

1.6 HP

KEY FEATURES

- 1 Powder metal inserted cam gear
- 2 High-carbon steel crankshaft with ball bearings on both ends
- 3 Connecting rod with needle bearing inserts
- 4 Hi-temp fluoride oil seal
- 5 Automatic decompression system

BENEFITS

#1 - Powder metal inserted cam gear ensures extra protection for added durability and extended performance life.



#2 - High-carbon steel crankshaft with ball bearings on both ends ensures ultimate reliability in heavy load applications.



#3 - Connecting rod with needle bearing inserts offers true bearing support to provide dependable performance in the toughest applications.



#4 - Hi-temp fluoride oil seal ensures maximum protection.



SPECIFICATIONS



EX17



EH36



EH65



EH09



EH025



		Model	Type		Piston Displacement (cc)	Maximum output (HP/rpm)	Maximum torque (ft•lb/rpm)	Dry weight (lb)
OVERHEAD CAM	EX13	Air-cooled, 4-cycle, slant single cylinder, OHC, horizontal PTO shaft			126 cc	4.3/4000	6.01/2500	31
	EX17	Air-cooled, 4-cycle, slant single cylinder, OHC, horizontal PTO shaft			169 cc	5.7/4000	8.34/2500	33
	EX21	Air-cooled, 4-cycle, slant single cylinder, OHC, horizontal PTO shaft			211 cc	7.0/4000	10.26/2500	35
	EX27	Air-cooled, 4-cycle, slant single cylinder, OHC, horizontal PTO shaft			265 cc	9.0/4000	13.74/2500	46
OHV SLANT	EH36	Air-cooled, 4-cycle, slant cylinder, horizontal shaft, overhead valve, gasoline engine			404 cc	11.5/3600	20.3/2500	68
	EH41	Air-cooled, 4-cycle, slant cylinder, horizontal shaft, overhead valve, gasoline engine			404 cc	13.5/3600	21.0/2500	68
OHV V-TWIN	EH63	Air-cooled, 4-cycle, V-twin cylinder, horizontal shaft, overhead valve, gasoline engine			653 cc	18.0/3600	31.9/2000	97
	EH64	Air-cooled, 4-cycle, V-twin cylinder, horizontal shaft, overhead valve, gasoline engine			653 cc	20.5/3600	32.7/2200	97
	EH65	Air-cooled, 4-cycle, V-twin cylinder, horizontal shaft, overhead valve, gasoline engine			653 cc	22.0/3600	33.6/2500	97
	EH72	Air-cooled, 4-cycle, V-twin cylinder, horizontal shaft, overhead valve, gasoline engine			720 cc	25.0/3600	39.6/2500	101
	EH63V	Air-cooled, 4-cycle, V-twin cylinder, vertical shaft, overhead valve, gasoline engine			653 cc	18.0/3600	31.9/2000	93
	EH65V	Air-cooled, 4-cycle, V-twin cylinder, vertical shaft, overhead valve, gasoline engine			653 cc	22.0/3600	33.6/2500	93
	EH09	Air-cooled, 4-cycle, single cylinder, horizontal shaft, overhead valve, gasoline engine			86 cc	2.4/3600	3.5/3200	21
	EH12	Air-cooled, 4-cycle, single cylinder, horizontal shaft, overhead valve, gasoline engine			121 cc	4.0/4000	5.5/2600	34
MICRO	EH025	Air-cooled, 4-cycle, OHV engine			24.5 cc	1.1/7000	0.87/5000	6
	EH035	Air-cooled, 4-cycle, OHV engine			33.5 cc	1.60/7000	1.30/5000	8
	EH035V	Air-cooled, 4-cycle, OHV engine			33.5 cc	1.60/7000	1.30/5000	8

Specifications subject to change without notice.

HISTORY OF INNOVATION. FUTURE OF EXCELLENCE.

Subaru Robin is a division of Fuji Heavy Industries Ltd., headquartered in Tokyo, Japan. Fuji is a global manufacturing company of diversified premium brand products. Total annual sales exceed \$13 billion.

There are four main divisions: Subaru Automotive, Aerospace, Eco Technologies and the Industrial Products Division. All divisions share a common history of innovation of unique technologies and products that bring added value to premium products.

Subaru Robin industrial engines and equipment have earned a reputation throughout the world for high performance and durability in the most demanding applications. Subaru Robin is the fourth largest engine manufacturer in the world, with annual production exceeding 1 million engines.

Advanced engineering, high technical expertise, and state-of-the-art robotic manufacturing are hallmarks of Fuji, which proactively shares technology between divisions in order to stay on the cutting edge, lead competition and provide customers with outstanding products.

In recent years, Fuji has earned a worldwide recognition for technical advances in its Subaru automobiles, such as Subaru's All Wheel Drive (AWD) system, horizontally opposed engines and the turbo-charged 300-horsepower WRX STI performance car. Fuji has built its solid reputation on 60 years of success. Each division of Fuji Heavy Industries produces technically advanced products.



SUBARU

Robin Industrial Engines

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