# HISTORY OF INNOVATION FUTURE OF EXCELLENCE.

Subaru 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 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.





#### Industrial Power Products

Robin America, Inc.
FUJI HEAVY INDUSTRIES, LTD.

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Industrial Power Products

# PUMPS full line



Centrifugal Pumps
Diaphragm Pumps

High-Pressure Pumps

Semi-Trash Pumps

Trash Pumpa

PUB-PMPFL rev. 12/2009

# When it comes to quality and a reputation you can rely on for exceptional support and service, one name comes to mind: SUBARU.

Whether you're a contractor or homeowner/do-it-yourselfer, we offer a product built with quality and features to meet your demanding applications. With 13 models of pumps to choose from, including centrifugal, semi-trash, high-pressure, diaphragm and trash, we offer a product to meet any application need. But more than that, we ensure service and support that lasts long after the sale. Better yet, our reputation supports that claim! And with the engine and pump designed as a complete integral unit, you receive exceptional performance with synergy for a superior product covered by a single warranty.



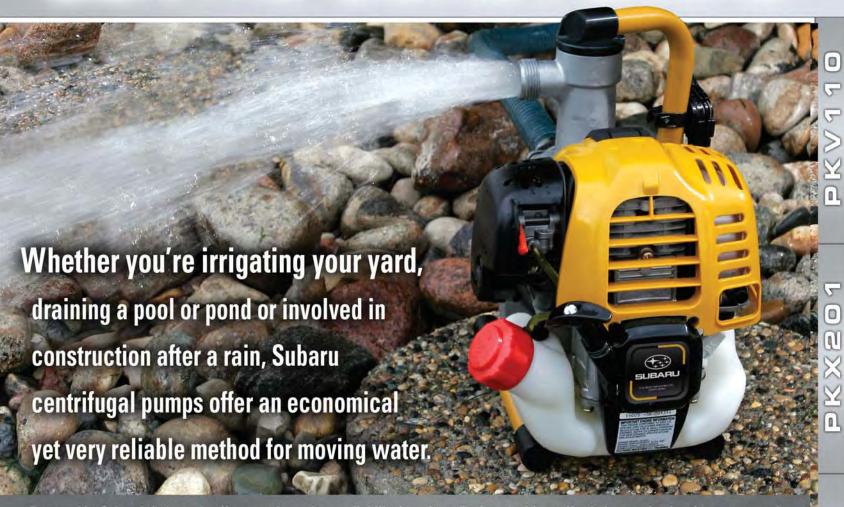
### Subaru Engines

With more than 40 years of performance
and quality second to none, Subaru
engines have earned a worldwide
reputation for high quality performance
and reliability. Here's what the Subaru name
means to the market:

- With less recoil pulling force, an electronic ignition system and automatic decompression, our engines offer 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, high carbon steel crankshaft supported by steel ball bearings and an electronic low oil shut-off, Subaru engines are built to last.
- With a network of more than 4,500 Subaru dealers in North America and the support of a 3-Year Limited Warranty, the strength of the Subaru network remains long after the sale.

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

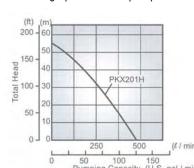
# **CENTRIFUGAL PUMPS**



Powered by Subaru's industry leading 4-cycle engines, reliability is a given. Equipped with a self-priming mechanism for easy operation as well as a steel roll cage for protection, our pumps will withstand the rigors of any application. And with four models with varying volumes to choose from, we're confident homeowners and professionals alike will find a unit to match their needs.

#### **Subaru High-Pressure Pump**

For those applications requiring the movement of water over extended distances or heights, Subaru offers the PKX201H high-pressure pump. This high-performance design enables the transfer of lower volumes of water over a greater distance for applications such as sprinklers and firefighting support. The self-priming design ensures easy operation while the steel roll cage protects the pump from damage.



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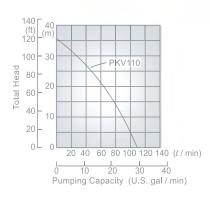
- 2-inch suction and discharge ports
- 127 gallons per minute maximum discharge capacity
- 81 psi maximum performance
- 6.0 hp overhead cam Subaru engine with low oil shut-off system
- Cast iron impeller and volute
- Ceramic carbon mechanical seal for high durability

The lightest and most compact pump



#### PKV110 Centrifugal Pump

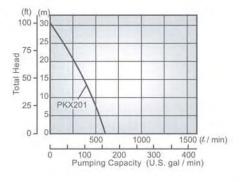
- 1-inch suction and discharge ports
- 28 gallons per minute maximum discharge capacity
- Heavy-duty design features aluminum housing and impeller with a ceramic carbon mechanical seal; 11.7 pounds
- 1.1 hp Subaru 4-cycle engine for low noise and easy starting





#### **PKX201 Centrifugal Pump**

- 2-inch suction and discharge ports
- 158 gallons per minute maximum discharge capacity
- 4.5 hp overhead cam Subaru engine with low oil shut-off system
- Cast iron impeller and volute
- Ceramic carbon mechanical seal for high durability





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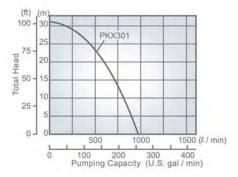
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#### **PKX301 Centrifugal Pump**

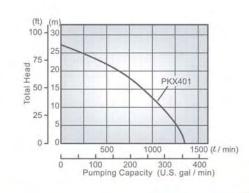
- 3-inch suction and discharge ports
- 256 gallons per minute maximum discharge capacity
- 6.0 hp overhead cam Subaru engine with low oil shut-off system
- Cast iron impeller and volute
- Ceramic carbon mechanical seal for high durability





#### PKX401 Centrifugal Pump

- 4-inch suction and discharge ports
- 356 gallons per minute maximum discharge capacity
- 9.0 hp overhead cam Subaru engine with low oil shut-off system
- Cast iron impeller and volute
- Ceramic carbon mechanical seal for high durability



# SEMI-TRASH PUMPS

## For demanding water removal applications

where the potential exists for small abrasive material to get into centrifugal pumps and cause premature wear, we offer a line of semi-trash pumps.

Made from the same durable material as our trash pumps, these pumps are ideally suited for applications where something more rugged than a centrifugal pump is required. Our semi-trash pumps allow use with light debris. They are constructed with a high-quality silicon-carbide mechanical seal for exceptional durability with a heavy-duty cast iron impeller. Aluminum die cast pump casing and steel roll cage protect the pump from damage.



#### PKX201ST Semi-Trash Pump

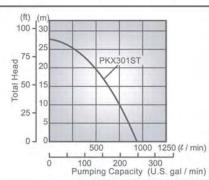
- 2-inch suction and discharge ports
- 153 gallons per minute maximum discharge capacity
- 4.5 hp overhead cam Subaru engine with low oil shut-off system
- · Spherodial graphite cast iron impeller and volute for long life
- Silicon carbide mechanical seal for high durability

#### (ft) (m) 100 - 30 25 - 20 H 50 - 15 0 - 0 - 15 0 - 0 - 100 200 300 Pumping Capacity (U.S. gal / min)



#### PKX301ST Semi-Trash Pump

- 3-inch suction and discharge ports
- 246 gallons per minute maximum discharge capacity
- 6.0 hp overhead cam Subaru engine with low oil shut-off system
- Spherodial graphite cast iron impeller and volute for long life
- Silicon carbide mechanical seal for high durability

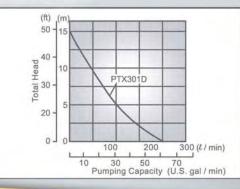


# DIAPHRAGM PUMP



#### PTX301D Diaphragm Pump

- 3-inch suction and discharge ports
- 66 gallons per minute maximum discharge capacity
- 6.0 hp overhead cam Subaru engine with low oil shut-off system



# TRASH PUMPS

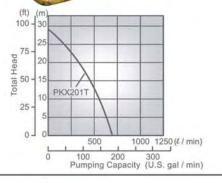
# A staple on any construction site, Subaru trash pumps offer the durability and performance

to move high volumes of trash water, with a heavy-duty, user-friendly model available for any application. Featuring five models with pump capacities to 428 gallons per minute, two diesel trash pumps are available as well as three options with our world-class Subaru Robin overhead cam and overhead valve engines. With a high quality silicon-carbide mechanical seal and a steel roll cage to protect the unit, these pumps will withstand the most rigorous demands.



#### **PKX201T Trash Pump**

- 2-inch suction and discharge ports
- 185 gallons per minute maximum discharge capacity
- 6.0 hp overhead cam Subaru engine with low oil shut-off system
- Quick clean out, easy-open cover





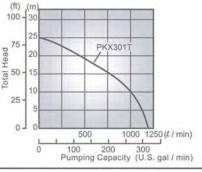
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#### PKX301T Trash Pump

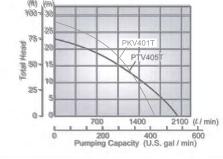
- 3-inch suction and discharge ports
- 314 gallons per minute maximum discharge capacity
- 9.0 hp overhead cam Subaru engine with low oil shut-off system
- Quick clean out, easy-open cover





#### **PKV401T Trash Pump**

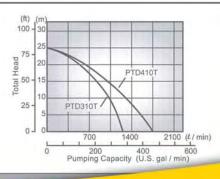
- 4-inch suction and discharge ports
- 428 gallons per minute maximum discharge capacity
- 13.5 hp overhead valve Subaru engine with low oil shut-off system
- · Quick clean out, easy-open cover



#### PTD310T, PTD410T Diesel Trash Pumps

- 3-inch and 4-inch suction and discharge ports
- 317 and 449 gallons per minute maximum discharge capacity
- · Hatz 1B30 and Hatz 1B40 engines with low oil system
- Quick clean out, easy-open cover

\*Model shown PTD410T



## SUPERIOR DESIGN

## MAXIMUM PERFORMANCE

#### CENTRIFUGAL PUMPS

#### TRASH PUMPS

#### **OUTER PUMP HOUSING:**

Lightweight die-cast aluminum pump housing provides strong durability against damaging debris.

**ENGINE & FRAME:** Steel tubular wraparound frame protects the pump, engine and all components from handling damage while offering easy storage.



**VOLUTE:** Hardened cast iron volute for long life and outstanding performance



#### **MECHANICAL SEAL:**

Self-lubricating carbon ceramic mechanical seal provides durable and rugged construction for long unit life. Shim system on impeller allows for longer pump life.



WEAR PLATE: Easily replaceable wear plate extends pump life and reduces maintenance costs.



IMPELLER: Abrasion-resistant, high-chrome cast iron impeller ensures a long service life.

**VOLUTE:** Hardened spherodial and graphite cast iron volute withstands solid and abrasive debris for maximum service life.



#### SHIMS & MECHANICAL SEAL:

**ENGINE & FRAME:** Steel tubular wraparound

frame protects the pump, engine and all

offering easy storage.

components from handling damage while

Durable, self-lubricating silicon carbide mechanical seal provides stamina for tough applications. Easily replaceable shims offer maximum performance over the life of the pump.

#### Semi-Trash pumps feature enhanced volute and impeller to handle larger solids as well as the silicon carbide seal system to ensure durability in challenging applications.



#### **MECHANICAL SEAL:**

Heavy-duty, self-lubricating silicon carbide mechanical seal resists wear from abrasive debris while easily replaceable shims maximize performance over the life of the pump.



**OUTER PUMP HOUSING:** 

Heavy-duty die-cast

easy open cover for quick clean out.

aluminum housing with

#### IMPELLER:

Abrasion-resistant hardened spherodial and graphite cast iron impeller extends service life.



Hardened spherodial and graphite cast iron volute provides extra durability even in abrasive applications.

# SPECIFICATIONS

PUMP TYPE	CENTRIFUGAL					DIAPHRAGM	SEMI-TRASH			TRASH		DIESEL TRASH	
PUMP MODEL	PKV110	PKX201	PKX301	PKX401	PKX201H	PTX301D	PKX201ST	PKX301ST	PKX201T	PKX301T	PKV401T	PTD310T	PTD410T
Туре	Self-priming centrifugal pump Self-priming centrifugal high-pressure pump				Self-priming diaphragm pump	· · · · · · · · · · · · · · · · · · ·		Self-priming trash pump			Self-priming trash pump		
Suction/Discharge Size	1 inch	2 inch	3 inch	4 inch	2 inch	3 inch	2 inch	3 inch	2 inch	3 inch	4 inch	3 inch	4 inch
Maximum Capacity	28 gallons per minute	158 gallons per minute	256 gallons per minute	356 gallons per minute	127 gallons per minute	66 gallons per minute	153 gallons per minute	246 gallons per minute	185 gallons per minute	314 gallons per minute	428 gallons per minute	317 gallons per minute	449 gallons per minute
Maximum Lift Head	115 feet	98 feet	102 feet	89 feet	187 feet	49 feet	98 feet	92 feet	95 feet	82 feet	89 feet	78.8 feet	78.8 feet
Maximum Suction Lift	26 feet	26 feet	26 feet	26 feet	26 feet	25 feet	26 feet	26 feet	26 feet	26 feet	26 feet	26 feet	26 feet
Maximum PSI(Max. head/2.31)	50 psi	43 psi	44 psi	44 psi	81 psi	21 psi	43 psi	40 psi	41 psi	36 psi	33 psi	34.1 psi	34.1 psi
Mechanical Seal Material	<b></b>	Ceramic Carbon ————————————————————————————————————				N/A	N/A Silicon Carbide —			Silicon Carbide			
Engine Model	EH025	EX13	EX17	EX27	EX17	EX17	EX13	EX17	EX17	EX27	EH41	Hatz 1B30	Hatz 1B40
Туре	Subaru air-cooled 4-cycle, OHV, gasoline	ooled 4-cycle, Subaru air-cooled 4-cycle, OHC, gasoline				Subaru air-cooled 4-cycle, OHC, gasoline air-cooled 4-cycle, OHV, gasoline					Hatz air-cooled, 4-cycle single cylinder diesel engine		
Horsepower	1.1 hp	4.5 hp	6.0 hp	9.0 hp	6.0 hp	6.0 hp	4.5 hp	6.0 hp	6.0 hp	9.0 hp	13.5 hp	6.8 hp	9.9 hp
Low oil system		Low Oil Shutdown				Low Oil Shutdown					N/A		
Spark Arrestor		•	•	•	•	•	•	•	•	•	•	•	•
Run Time (per tank, full load)	1.5 hours	2.7 hours	2.5 hours	2.2 hours	2.5 hours	2.0 hours	2.7 hours	2.5 hours	2.5 hours	2.2 hours	2.4 hours	3.2 hours	2.1 hours
Fuel Tank Capacity	.13 gallons	.71 gallons	.95 gallons	1.61 gallons	.95 gallons	.95 gallons	.71 gallons	.95 gallons	.95 gallons	1.61 gallons	1.85 gallons	1.32 gallons	1.32 gallons
Starting System	-	Recoil Starter				Recoil Starter					Recoil Starter		
Dimensions (L x W x H)	13.1" x 8.4" x 12.6"	18.4" x 14.1" x 15.7"	19.9" x 15.2" x 18.4"	25.6" x 18" x 25.4"	20.5" x 15.4" x 17.1"	26" x 17" x 20"	18.4" x 14.1" x 15.7"	19.9" x 15.2" x 18.4"	24.1" x 18.2" x 18.9"	27.2" x 19.1" x 21.1"	29.3" x 21.1" x 24.6"	27" x 19" x 24"	27" x 19" x 26"
Net Weight	12 lbs.	53 lbs.	66 lbs.	112 lbs.	71 lbs.	100 lbs.	55 lbs.	68 lbs.	106 lbs.	128 lbs.	175 lbs.	150 lbs.	193 lbs.
Standard Accessories	Tool Kit, Strainer, Vib. Isolators, Hose Coupling and Band, Garden Hose Adapt.  Tool Kit, Strainer, Vibration Isolators and Hose Band				Tool Kit, Strainer, Hose Coupling and Hose Band	Hose Coupling Tool Kit, Strainer and Hose Band Hose Coupling			Tool Kit, Strainer, Hose Coupling and Hose Band				
Solid Handling	0.2"	0.25"	0.3"	0.35"	0.2"	1.3"	0.3"	0.35"	0.8"	1.1"	1.2"	1.3"	1.3"

TYPICAL PUMP APPLICATIONS									
Pump:	Clear water	Muddy water	Sandy water	High solid content	Clear water - High lift				
Centrifugal	Best								
Diaphragm	Good	Best	Best	Best					
High-Pressure	Good				Best				
Semi-Trash	Good	Good	Good	Good					
Trash	Good	Best	Best	Best					

#### STRAINERS

All pumps come standard with a strainer to prevent damage to the pump from oversize debris entering the intake hose.



• NOTE: Self-priming pumps require initial priming to operate.

