

# Models PWP2HX, PWP3HX, PWP4HX, PWP2SST, PWP3SST, PWP2SCH5050

# Gasoline Powered Pump Owner's Manual

Customer Service Hotline: 1-866-939-66666 visit our website: www.kodiakpower.ca

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PWP2HX model shown. May not be exactly as shown.

**IMPORTANT:** Do not operate this equipment until you have read and understand all of the enclosed Owner's Manuals. Carefully **read all Warnings, Safety Precautions, Assembly and Operating Instructions, Maintenance and Storage information.** 

#### Introduction

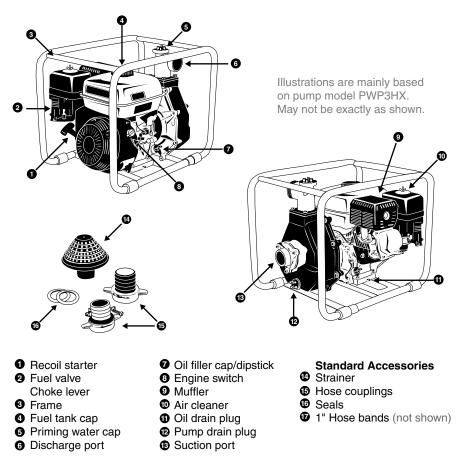
We would like to take this opportunity to thank you for choosing Kodiak Power Equipment. This general-purpose water pump has been designed to provide years of safe and dependable operation. To obtain the best performance from your unit please read the "Operating Manual" carefully before using this product.

This manual contains important **Safety Precautions**, **Operating Instructions** and **Maintenance Instructions** essential to the safe operation of your Kodiak water pump. Failure abide by these instructions could result in personal injury or equipment damage.

This manual should be considered a permanent part of the pump and should remain with the pump if it is resold.

#### Overview

**Note:** Check for visible shipping damage. Shipping damage will cause problems in the operation of this unit. Contact the Customer Service Hotline immediately at **1-866-939-6666** if there are missing or damaged parts. **DO NOT return this product to the store.** 



### **Important Safety Precautions**

#### Safety Overview

This unit was designed for specific applications. It should not be modified or used for any application other than that for which it was designed.

The Owner's Manual constitutes an essential part of the water pump and should be kept in a safe place for future reference. If you sell the water pump, all manuals should be provided to the new owner. Read this manual carefully before using the product – know your equipment.

Save these instructions. The Owner's Manual should remain with unit at all times.

IMPORTANT: The muffler becomes very hot during operation and remains hot for a while after stopping the engine. Be careful not to touch the muffler while it is hot. Allow the engine to cool before storing the pump indoors.

#### Safety Precautions

The following safety precautions are essential for the safe operation of your pump. Make sure anyone who may be using this gas-powered pump is familiar with these important safety safety and equipment precautions.

If safety precautions are overlooked or ignored, personal injury or property damage may occur. Always heed these precautions, as they are essential when using any mechanical equipment.

- 1. Always make a pre-operation inspection before you start the engine. You may prevent a serious accident or equipment damage.
- 2. Regularly check engine oil and fuel levels before start-up. (Please refer to the Honda Engine Owner's Manual for details.)
- Secure and inspect all hoses before start-up, making certain that all connections are secure. Be sure to provide a means of pressure relief for the pump if the discharge line could be shut off or obstructed.
- If the pump is located in an area subject to freezing temperatures the pump should be drained when not in operation.
- Place the pump on a firm, level surface. If the pump is tilted or overturned fuel spillage may result.

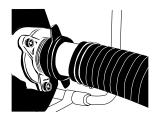
- Do not run the engine in an enclosed area. Exhaust fumes contain carbon monoxide which is an odourless, poisonous gas; exposure can cause loss of consciousness and may lead to death.
- If the pump is located in an enclosed area, use an exhaust line to the outside and regularly check for exhaust leaks. Be sure the area is well ventilated.
- To prevent fire hazards and to provide adequate ventilation, keep the pump at least 1 metre (3 feet) away from building walls and other flammable substances as well as other equipment during operation.
- 9. Do not place flammable objects close to the pump.
- 10. For safety, never pump flammable or corrosive liquids such as gasoline or acid.
- 11. Wear safety glasses at all times when working with hazardous chemicals.
- Check the wind direction before pumping hazardous chemicals to ensure that spray or mist does not come into contact with people or animals.
- To avoid pump corrosion, never pump sea water, chemical solutions, or caustic liquids such as used oil, wine, or milk.
- Know how to stop the pump quickly, and understand the operation of all controls. Never permit anyone to operate the pump without proper instruction.
- 15. Keep the work area clean, uncluttered and properly lighted. Keep visitors at a safe distance from the work area. Children and pets must be kept away from the area of operation due to a possibility of burns from the hot engine components.
- Periodically inspect pump and system components. Perform routine maintenance as required. (Refer to the Honda Engine Owner's Manual.)
- Carefully read the Operating Manual supplied by the engine manufacturer before attempting to assemble, operate or service the engine.
- Release all pressure and drain all fluids from the pump before attempting to service any component.

#### Preparing the pump

#### 1. Connect the suction hose.

The strainer that is provided with the pump should be firmly attached to the end of the suction hose with a hose band.

Use commercially available hose, connectors and hose bands. The suction hose must be of a reinforced, non-collapsible construction.



The suction hose should not be longer than necessary, as pump performance is best when the pump is not far above the water level. Self-priming time is also proportional to hose length.

**CAUTION:** If connecting aluminum fittings to the pump apply at least 8 wraps of Teflon tape to the threads of both inlet & discharge ports before attaching the fitting. Failure to do so will cause gauling of the thread and void warranty.

**CAUTION:** Always install the strainer on the end of the suction hose before pumping. The strainer will filter debris that can cause clogging or impeller damage.

**NOTE:** Tighten the hose connector and bands to prevent air leakage and loss of suction. A loosely connected suction hose will reduce pump performance and self-priming ability.

#### 2. Connect the discharge hose.

Use a commercially available hose, connectors and hose bands. A short, large diameter hose is most efficient. Longer hoses or small diameter increases fluid friction and reduces pump output.

**NOTE:** Tighten the hose band securely to prevent the hose from disconnecting under high pressure.



#### 3. Add fuel as required.

Refer to the Honda engine Owner's Manual for proper fueling instructions.

Refuel in a well-ventilated area with the engine stopped. Do not smoke or allow flames or sparks in the area where the engine is refueled or where gasoline is stored.

NOTE: Do not add fuel while the engine is running or hot.

#### **Operating Instructions**

Always make a pre-operation inspection before you start the engine. You may prevent an accident or equipment damage.

#### 1. Priming the pump.

The pump chamber must be primed full with water before operating.

> Remove priming plug. Fill with water to prime pump. Replace priming plug.

**CAUTION:** Never attempt to operate the pump without priming water or the pump will overheat. Extended dry operation will destroy the pump seal. If the unit has been operated dry, stop the engine immediately and allow the pump to cool before adding priming water.

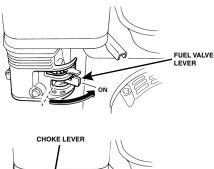
#### 2. Starting the engine.

Please refer to the Honda Engine Owner's Manual for any safety precautions that should be observed in conjunction with engine start-up, shutdown or operation.

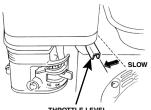
- 2.1 Turn the fuel valve lever to the ON position
- 2.2 To start a cold engine, move the choke lever to the CLOSED position.

To start a warm engine, leave the choke lever in the OPEN position.

2.3 Move the throttle lever away from the SLOW position, about 1/3 of the way toward the FAST position.







THROTTLE LEVER

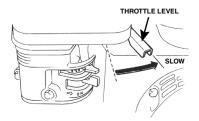
### **Operating Instructions -** *continued*

2.4 Turn the engine switch to the ON position.

- 2.5 Pull the starter grip lightly until resistance is felt, and then pull it briskly. Return it gently to prevent damage to the starter.
- 2.6 As the engine warms up, gradually open the choke.
- 2.7 Set the throttle at the desired speed.

#### 3. Stopping the engine

3.1 Move the throttle lever all the way to the right (SLOW position)



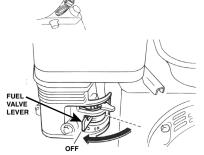
ENGINE SWITCH

non

STARTER GRIP

ENGINE SWITCH

3.2 Turn the engine switch to the OFF position.



3.3 Turn the fuel valve to the OFF position.

To stop the engine in an emergency, turn the engine switch to the OFF position.

### Maintenance

Periodic inspection and adjustment of the pump are essential if high level performance is to be maintained. Regular maintenance will also help to extend service life.

The required maintenance intervals and the kind of maintenance to be performed are described in the chart below.

Perform each item at every indicated month or operating hour, whichever comes first.		Daily	First Month or 20 hrs	Every 3 Months or 50 hrs	Every 6 Months or 100 hrs	Every Year or 300 hrs
Engine Oil	Check level	О				
	Change		О		О	
Air/Fuel Filter*	Check	О				
All/Fuel Filler	Clean	O <b>*</b>		O¹		
Spark Plug	Check/Clean			О		
Valve Clearance	Check/Adjust					O <sup>2</sup>
Fuel Tank and Strainer	Clean					O²
Fuel Line Replac	Check e if necessary	Every 2 years				
Impeller	Check					O <sup>2</sup>
Impeller Clearance	Check					O <sup>2</sup>
Pump Inlet Check Valve	e Check					O <sup>2</sup>

<sup>1</sup> Service more frequently when used in dusty areas

<sup>2</sup> These items should be serviced by an Authorized Service Centre.

\* Fuel filter is best kept clean when washed with white kerosene.

On a daily basis be sure to check for any loose nuts, bolts or screws as well as any leaks in fuel or oil.

**IMPORTANT:** The engine becomes very hot during operation and remains hot for a while after it has been turned off. Be careful not to touch the engine while it is hot. Allow the engine to cool before storing the pump indoors.

**WARNING:** Shut off the engine before performing any maintenance. If the engine is to be left running make sure the area is well ventilated. The exhaust contains poisonous carbon monoxide gas; exposure can cause loss of consciousness and may lead to death.

### Storage, Winterizing & Transport

#### Storage & Winterizing

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Always store pump in a location where the temperature will NOT fall below 0° C. Store the pump and accessories in a dry place, protected from freezing. The pump should NOT be placed near an open flame i.e. furnace, hot water heater, etc.

**WARNING:** The pump is susceptible to permanent damage if frozen. Damage as a result of unit freezing is NOT covered by the warranty.

- 1. Be sure the storage area is free of excessive humidity and dust.
- Clean the pump interior. Sediment will settle in the pump if it has been used in muddy or sandy water, water containing heavy debris.
- Pump clean water through the pump before shutting down or the impeller may be damaged when restarting. After flushing remove the pump drain plug. Drain as much water as possible from the pump housing and reinstall the plug.
- If storing the pump for a long period of time pump clean water through the pump and allow the engine to run dry of gas/oil mixture.

**CAUTION:** Always remove gasoline from the engine if storing the pump indoors.

#### Transport

- 1. Avoid severe burns or fire hazards; let the engine cool before transporting the pump.
- When transporting the pump, turn the fuel valve to the OFF position, and keep the pump level to prevent fuel spillage. Spilled fuel or fuel vapours may ignite.

### Troubleshooting

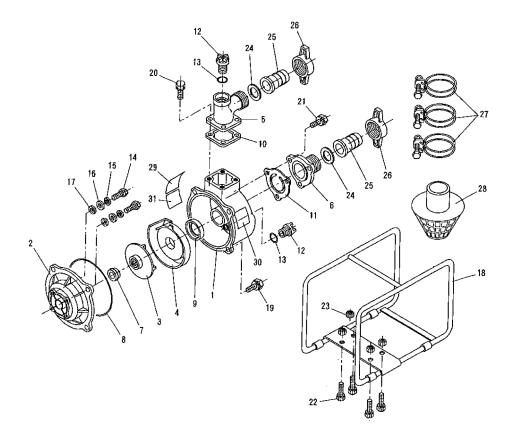
Symptom	Possible Cause	Corrective Action
Pump will not prime, or retain prime after operating	Air leak in suction hose	Repair or replace
	Flapper valve fouled or defective	Clean or replace
Flow rate is low	Incorrect engine speed	Adjust to 3600 rpm
	Hoses are fouled or damaged	Clean or replace
	Clogged or worn impeller	Clean or replace
	Discharge hose restricted or undersized	Flush out hose or replace
Pump runs but no fluid	Faulty suction hose	Replace
	Pump located too far from fluid source	Relocate
	Gate valve closed	Open
	Clogged strainer	Clean or replace
	Fouled foot valve	Clean or replace
	Discharge height too great	Lower the height
Liquid drips from point where shaft enters the pump casing when pump is full of liquid	Damaged mechanical seal	Replace
Pump starts and then	Fouled impeller	Clean
stops pumping	Faulty mechanical seal	Replace
	Leak in suction hose	Repair
	Leak in foot valve	Repair or replace
	Engine seizure	Repair
Excessive noise while pump is in operation	Pump is not secured to a firm foundation	Secure properly
	Hoses not supported to relieve any strain on pump assembly	Make necessary adjustments
	Restricted suction hose	Clean or correct

If you encounter any difficulties not listed above, please contact the Customer Service hotline.

# Customer Service Hotline: 1-866-939-6666

visit our website: www.kodiakpower.ca

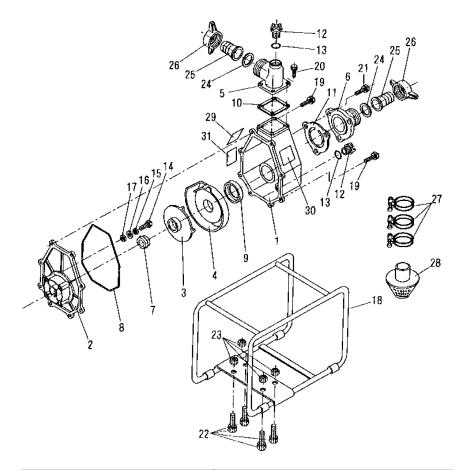
## Parts Breakdown - PWP2HX



	Part Number	Description	Qty		Part Number	Description	Qty
1	PWP503001	Casing	1	15	PWP501007	Washer Spring (M8)	4
2	PWP501004	Casing Cover	1	16	PWP501008	Plain Washer (8)	4
3	PWP501009	Impeller	1	17	PWP501006	Seal Packing	4
4	PWP501011	Inner Casing	1	18	PWP501030	Frame	1
5	PWP501019A	Bend (NPT)	1	19	PWP501003	Bolt (M10x30) w/Spring Washer	4
6	PWP501013	Valve Case (AI-NPT)	1	20	PWP501014	Bolt (M8x25) w/Spring Washer	4
7	PWP501010	Mechanical Seal	1	21	PWP501014	Bolt (M8x25) w/Spring Washer	3
8	PWP501002	Packing (Casing)	1	22	PWP501023	Bolt (M8x40) w/Spring Washer	4
9	PWP501012	Packing (Inner Casing)	1	23	PWP501024	Flange Nut (M8)	4
10	PWP501020	Packing (Bend)	1	24	PWP501017	Packing (Coupling)	2
11	PWP501015	Check Valve	1	25	PWP501018	Hose Coupling (ABS)	2
12	PWP501021	Plug	2	26	PWP501016ALUM	Hose Coupling (AL-NPT)	2
13	PWP501022	Packing (Plug)	2	27	PWP501028	Hose Band	3
14	PWP501005	Bolt (M8x48)	4	28	PWP505029	Strainer	1

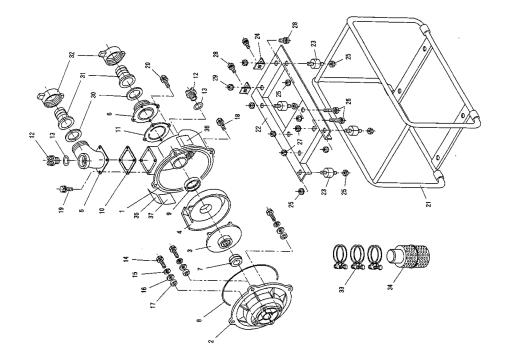
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# Parts Breakdown - PWP3HX



	Part Number	Description	Qty		Part Number	Description	Qty
1	PWP802001	Casing	1	15	PWP501007	Washer Spring (M8)	4
2	PWP502004	Casing Cover	1	16	PWP501008	Plain Washer (8)	4
3	PWP801009	Impeller	1	17	PWP501006	Seal Packing 4	
4	PWP801011	Inner Casing	1	18	PWP801030	Frame	1
5	PWP801019A	Bend (NPT)	1	19	PWP501014	Bolt (M8x25) w/Spring Washer	8
6	PWP801013	Valve Case (AI-NPT)	1	20	PWP801031	Bolt (M8x25) w/Spring Washer	4
7	PWP501010	Mechanical Seal	1	21	PWP801014	Bolt (M8x30) w/Spring Washer	3
8	PWP502002	Packing (Casing)	1	22	PWP501023	Bolt (M8x40) w/Spring Washer	4
9	PWP801012	Packing (Inner Casing)	1	23	PWP501024	Flange Nut (M8)	4
10	PWP801020	Packing (Bend)	1	24	PWP801017	Packing (Coupling)	2
11	PWP801015	Check Valve	1	25	PWP801018	Hose Coupling (ABS)	2
12	PWP501021	Plug	2	26	PWP801016ALUM	Hose Coupling (AL-NPT)	2
13	PWP501022	Packing (Plug)	2	27	PWP801028	Hose Band	3
14	PWP501005	Bolt (M8x48)	4	28	PWP805029	Strainer	1
7 8 9 10 11 12 13	PWP501010 PWP502002 PWP801012 PWP801020 PWP801015 PWP501021 PWP501022	Mechanical Seal Packing (Casing) Packing (Inner Casing) Packing (Bend) Check Valve Plug Packing (Plug)	1 1 1 2 2	21 22 23 24 25 26 27	PWP801014 PWP501023 PWP501024 PWP801017 PWP801018 PWP801016ALUM PWP801028	Bolt (M8x30) w/Spring Washer Bolt (M8x40) w/Spring Washer Flange Nut (M8) Packing (Coupling) Hose Coupling (ABS) Hose Coupling (AL-NPT) Hose Band	

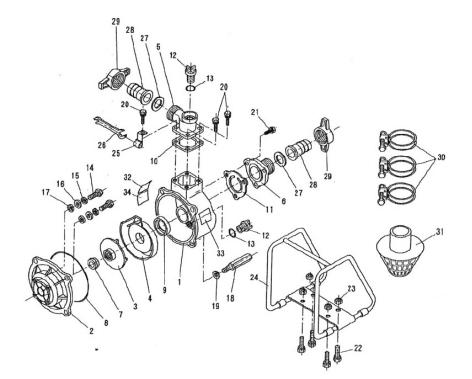
# Parts Breakdown - PWP4HX



	Part Number	Description	Qty		Part Number	Description	Qty
1	PWP1001001	Casing	1	18	PWP501003	Bolt (M10x30) w/Spring Washer	4
2	PWP1001004	Casing Cover	1	19	PWP501003	Bolt (M10x30) w/Spring Washer	4
3	PWP1001009	Impeller	1	20	PWP501003	Bolt (M10x30) w/Spring Washer	4
4	PWP1001011	Inner Casing	1	21	PWP1001030	Frame	1
5	PWP1001019	Bend (AL-NPT)	1	22	PWP1001031	Base	1
6	PWP1001013	Valve Case (AI-NPT)	1	23	PWP1001032	Anti Vibration Rubber	4
7	PWP1001010	Mechanical Seal	1	24	PWP1001034	Metal	2
8	PWP1001002	Packing (Casing)	1	25	PWP1001024	Nut (M8) w/Spring Washer	8
9	PWP1001012	Packing (Inner Casing)	1	26	PWP1001023	Bolt (M10x45) w/Spring Washer	4
10	PWP1001020	Packing (Bend)	1	27	PWP1001033	Flange Nut (M10)	4
11	PWP1001015	Check Valve	1	28	PWP1001014	Bolt (M10x20)	4
12	PWP501021	Plug	2	29	PWP1001033	Flange Nut (M10)	2
13	PWP501022	Packing (Plug)	2	30	PWP1001017	Packing (Coupling)	2
14	PWP501005	Bolt (M8x48)	4	31	PWP1001018	Hose Coupling (AL)	2
15	PWP501007	Washer Spring (M8)	4	32	PWP1001016ALUM	Hose Coupling (AL-NPT)	2
16	PWP501008	Plain Washer (8)	4	33	PWP1001028	Hose Band	3
17	PWP501006	Seal Packing	4	34	PWP1001029	Strainer	1

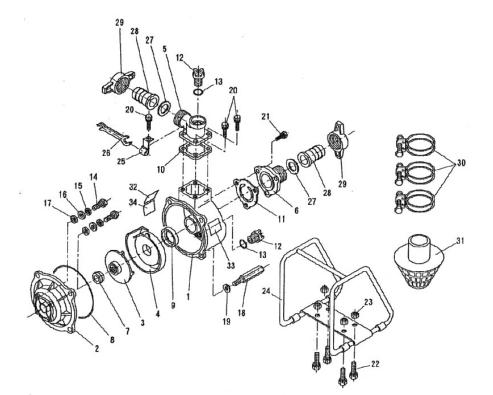
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# Parts Breakdown - PWP2SST



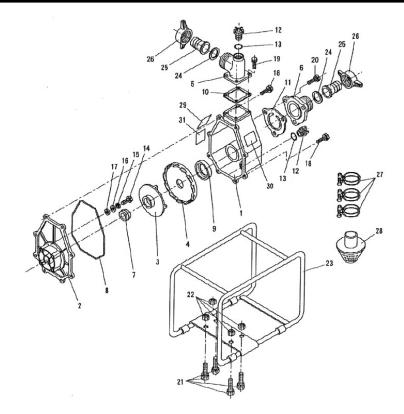
	Part Number	Description	Qty		Part Number	Description	Qty
1	PWP503001	Casing	1	18	PWP571003	Spacial Bolt W/S.W.	4
2	PWP501004	Casing Cover	1	19	PWP571003	Spacial Bolt W/S.W.	4
3	PWP571009	Impeller	1	20	PWP501014	Bolt (M8x25) W/S.W	4
4	PWP571011	Inner Casing	1	21	PWP501014	Bolt (M8x25) W/S.W	3
5	PWP501019A	Bend (NPT)	1	22	PWP501023	Bolt (M8x40) W/S.W.	4
6	PWP501013A	Valve Case (AI-NPT)	1	23	PWP501024	Flange Nut (M8)	4
7	PWP521008	Mechanical Seal (SIC)	1	24	PWP571030	Frame	1
8	PWP501002	Packing (Casing)	1	25	PWP571021	Hook	1
9	PWP501012	Packing (Inner Casing)	1	26	PWP571022	Spanner	1
10	PWP501020	Packing (Bend)	1	27	PWP501017	Packing (Coupling)	2
11	PWP501015	Check Valve	1	28	PWP501018P	Hose Coupling (ABS)	2
12	PWP501021	Plug (Priming)	2	29	PWP501016A	Hose Coupling Handle (AL-NPT)	2
13	PWP501022	Packing (Plug)	2	30	PWP501028	Hose Band	3
14	PWP501005	Bolt (M8x48)W/S.W.	4	31	PWP575029	Strainer	1
15	PWP501005	Bolt (M8x48)W/S.W.	4	32	PWP571027	Capacity Plate	1
16	PWP501005	Bolt (M8x48)W/S.W.	4	33	PWP501026	Caution Plate	1
17	PWP501006	Seal Packing	4	34	PWP501025	Name Plate	1

# Parts Breakdown - PWP3SST



	Part Number	Description	Qty		Part Number	Description	Qty
1	PWP803001	Casing	1	18	PWP571003	Spacial Bolt W/S.W.	4
2	PWP501004	Casing Cover	1	19	PWP571003	Spacial Bolt W/S.W.	4
3	PWP871009	Impeller	1	20	PWP501014	Bolt (M8x25) W/S.W	4
4	PWP871011	Inner Casing	1	21	PWP801014	Bolt (M8x30) W/S.W	3
5	PWP801019A	Bend (NPT)	1	22	PWP501023	Bolt (M8x40) W/S.W.	4
6	PWP801013A	Valve Case (AL-NPT)	1	23	PWP501024	Flange Nut (M8)	4
7	PWP521008	Mechanical Seal (SIC)	1	24	PWP871030	Frame	1
8	PWP501002	Packing (Casing)	1	25	PWP571021	Hook	1
9	PWP801012	Packing (Inner Casing)	1	26	PWP571022	Spanner	1
10	PWP801020	Packing (Bend)	1	27	PWP801017	Packing (Coupling)	2
11	PWP801015	Check Valve	1	28	PWP801018P	Hose Coupling (ABS)	2
12	PWP501021	Priming Plug	2	29	PWP801-016A	Hose Coupling Handle (AL-NPT)	2
13	PWP501022	Packing (Plug)	2	30	PWP801028	Hose Band	3
14	PWP501055	Bolt (M8x48)W/S.W.	4	31	PWP875029	Strainer	1
15	PWP501005	Bolt (M8x48)W/S.W.	4	32	PWP871027	Capacity Plate	1
16	PWP501005	Bolt (M8x48)W/S.W.	4	33	PWP501020	Caution Plate	1
17	PWP501006	Seal Packing	4	34	PWP501025	Name Plate	1

# Parts Breakdown - PWP2SCH5050



	Part Number	Description	Qty		Part Number	Description	Qty
1	PWP502001	Casing	1	17	PWP501006	Seal Packing	4
2	PWP511004	Casing Cover	1	18	PWP501014	Bolt (M8x25) W/S.W.	8
3	PWP511009	Impeller	1	19	PWP501014	Bolt (M8x25) W/S.W.	4
4	PWP511011	Inner Casing	1	20	PWP501014	Bolt (M8x25) W/S.W	3
5	PWP501019A	Bend (AL-NPT)	1	21	PWP501023	Bolt (M8x40) W/S.W	4
6	PWP501013A	Valve Case (AL-NPT)	1	22	PWP501024	Flange Nut (M8)	4
7	PWP501010	Mechanical Seal	1	23	PWP511030	Frame	1
8	PWP502002	Packing (Casing)	1	24	PWP501017	Packing (Coupling)	2
9	PWP501012	Packing (Inner Casing)	1	25	PWP501018P	Hose Coupling (ABS)	2
10	PWP501020	Packing (Bend)	1	26	PWP501016A	Hose Coupling Handle (AL-NPT)	2
11	PWP501015	Check Valve	1	27	PWP501028	Hose Band	3
12	PWP501021	Plug	2	28	PWP505029	Strainer	1
13	PWP501022	Packing (Plug)	2	29	PWP511027	Capacity Plate	1
14	PWP501005	Bolt (M8x48)	4	30	PWP501026	Caution Plate	1
15	PWP501007	Washer Spring (M8)	4	31	PWP501025	Name Plate	1
16	PWP501008	Washer (8)	4				

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### Warranty

#### **Engine Warranty**

The engine is warranted for a period of two years by the Honda Motor Company Limited.

In the unlikely event that you have a problem with the engine you must contact an authorized Honda Service Centre. Please call the Honda toll-free hotline at **1-888-946-6329** to locate the Service Centre nearest you.

#### **Pump Warranty**

This product is warranted to be free from defects in materials and workmanship under normal use and service, for a period of one year from the date of purchase, when operated and maintained in accordance with the Maintenance and Operating Instructions supplied with the unit. Warranty period commences on date of purchase. This warranty is extended only to the original purchaser.

The warranty herein is expressly conditioned upon the customer's compliance with all precautions and instructions contained in the Owner's Manual.

If the machine is still under warranty, the customer has a valid receipt, and the machine meets the warranty criteria, then the repair will be made at no charge to the customer. Units and parts should be returned at the customer's expense to the nearest Authorized Service Centre. Include original purchase receipt with any claim, making sure to keep a copy for your files. Be sure to pack the unit in a strong carton and pad tightly to avoid damage. **Damage in transit is NOT covered by warranty**.

Warranty is void if any devices or accessories other than those distributed or recommended by Kodiak are attached to or connected with the equipment in such a manner that the original factory construction is altered.

Warranty is void if repairs are attempted by anyone other than an Authorized Service Centre. In the event that a difficulty develops with the product, you should contact the nearest Authorized Service Centre. Only these locations are authorized to make repairs to the product or affect replacement of defective parts, which will be done at no charge within a reasonable time after receipt of the product.

This warranty shall not apply to any problem which is due to misuse, neglect, accident, abuse, improper handling, freezing, normal wear and tear, use of improper detergents/chemicals, or non-compliance with precautions and instructions contained in the Owner's Manual. This warranty is non-transferable.

The liability of John Brooks Company Limited is limited to repair of the product and/or replacement of parts, and is given to the purchaser in lieu of all other remedies including incidental and consequential charges. There are no expressed warranties other than those specified herein.

Customer Service Hotline: 1-866-939-6666 visit our website:

www.kodiakpower.ca