



## HIGH PERFORMANCE SELF-PRIMING PUMP OPERATION MANUAL

LARGE DELIVERY VOLUME HIGH DELIVERY HEAD

# **HIDELS PUMP**



## **KOSHIN LTD.**

12, Kami-Hachinotsubo, Kotari Nagaokakyo City, Kyoto, Japan  
TEL +81-75-953-2499 FAX +81-75-954-6119  
<http://www.koshin-ltd.co.jp>

《SE · SEH · SEM-100X》

Thank you for purchasing KOSHIN  
HIDELS PUMP

Upon receipt, please check the following.

- Model is exactly what you ordered.
- There is no damage in transit.
- Accessories are all supplied.

In case of trouble, please contact dealer.

**KOSHIN LTD.**

## CAUTION

### 1. Application

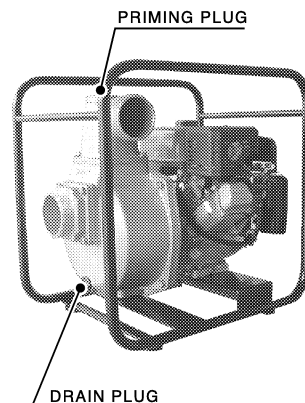
As this pump is exclusively used for agriculture, do not apply muddy water.

- \* Trouble if you don't observe.  
Damage of mechanical seal

### 2. Priming

As this pump is of self-priming type, pour water fully from priming port before running.

- \* Trouble if you don't observe.  
Impossible pumping  
Damage of mechanical seal



### 3. Connection of suction hose

If priming is not made by running after pouring water from priming port, it is almost because of imperfect connection of suction hose.

In such a case, run after checking again connection of hose

- \* Trouble if you don't observe.  
Impossible pumping

### 4. Supply & Change of engine oil

Supply oil before running from oiling port, shown in photo, at bottom of engine.

Change oil every 8 hours for the first 20 hours and every 50 hours thereafter.

Applied oil : SAE#30(spring-summer, SAE#20(autumn-winter)

SAE10w-30(cold district, below -10°C)

Apply oil having a quality better than Grade SC(oil Grade Ms).

- \* Trouble if you don't observe.  
Burning of engine

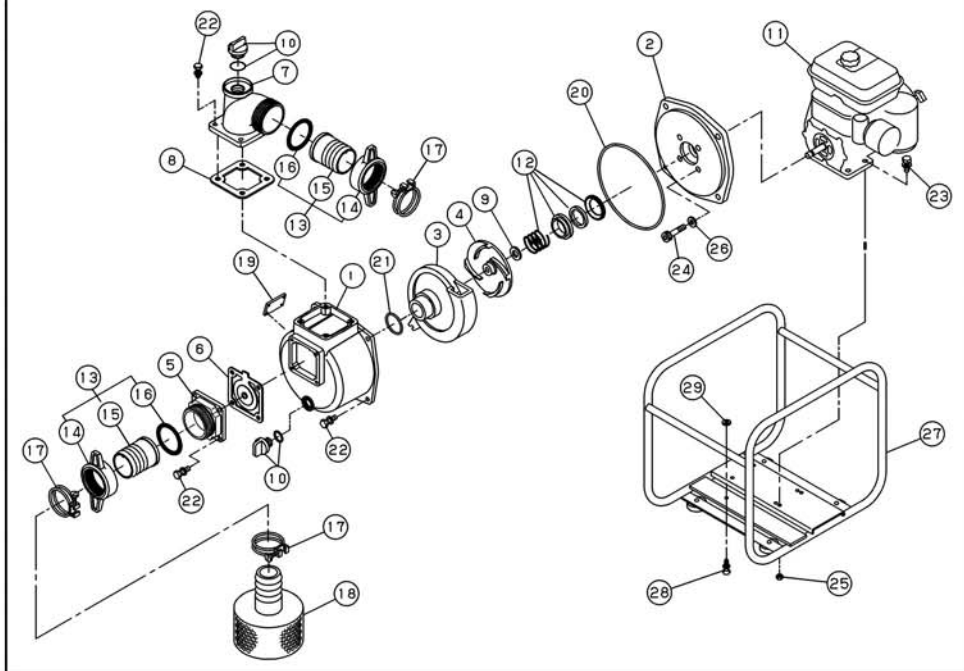
### 5. Drain of water after use

Water inside casing freezes at below 0°C in winter and thereby pump may possibly be broken. After use, drain water from drain port at bottom to store.

- \* Trouble if you don't observe.  
Breakage of pump casing

## PARTS LIST

SE□-100X



No.	PARTS CODE	PARTS NAME	QTY	MATERIAL	SIZE	REMARKS
1	0115691	PUMP CASING	1	ADC		
2	0115763	FLANGE BRACKET	1	ADC		
3	0110717	VOLUTE CASING	1	FC		
4	0115664	IMPELLER	1	FC		
5	0110963	SUCTION FLANGE	1	ADC	FFT	SE-SEH-100X
	0116188			ADC	BSP	SEM-100X
6	0117363	CHECK VALVE SET	1			
7	0115674	DELIVERY FLANGE	1	ADC	FFT	SE-SEH-100X
	0116187			ADC	BSP	SEM-100X
8	0110750	DELIVERY FLANGE PACKING	1	CR		
9	0110081	IMPELLER ADJUSTING WASHER	3			
10	0118079	25A PLUG SET	2			
	0113278	ENGINE	1	ROBIN EY280		SE-100X
11	0114434		1	HONDA GX240		SEH-100X
	0116647		1	MITSUBISHI GM231		SEM-100X
12	0115764	MECHANICAL SEAL	1		EH791-025	
	0118050	COUPLING SET	2	ADC	FFT	SE-SEH-100X
13	0117639			ADC	BSP	SEM-100X
	0110852	COUPLING	2	ABS		SE-SEH-100X
	0116189			ADC		SEM-100X
15	0110471	HOSE NIPPLE	2	ADC		

※FFT(FIRE FIGHTING THREAD)

No.	PARTS CODE	PARTS NAME	QTY	MATERIAL	SIZE	REMARKS
16	0110853	COUPLING PACKING	2	NBR		SE-SEH-100X
	0111478					SEM-100X
17	940019120	HOSE BAND	3		φ 120	
18	0111217	STRAINER SET	1	SPC		
	0115765	NAME PLATE	1			SE-100X
19	0115770					SEH-100X
	0116649					SEM-100X
20	890455080	O-RING	1	NBR	1516-80	
21	889855090	O-RING	1	NBR	P90	
22	743119080	HEXAGON BOLT	12	SWRM	M12X35	
23	743119067	HEXAGON BOLT	4	SWRM	M10X40	
24	734532078	HEXAGON SOCKET BOLT	4	SCM	M8X70	
25	827419010	HEXAGON NUT	4	SWRM	M10	
26	854255008	SEAL WASHER	4		φ 8	
	0117514	BASE SET	1	ORANGE		SE-100X
27	0117519			BLACK		SEH/SEM-100X
28	743119043	HEXAGON BOLT	1		M8X16	
29	0115923	RUBBER SHEET	1		26X12X5	

### 6. Long storage

Discharge fuel in fuel tank and carburetter entirely.

\* Trouble if you don't observe.

Impossible to start engine (With regard to engine, refer to instruction manual of engine.)

### 7. Avoid water hammer

Don't step on the discharge hose of abrupt valve operation.

\* Trouble if you don't observe.

Breakage of pump casing

## TROUBLE & REMEDY

Pump does not revolve.

**Rusting inside engine**

(Refer to instruction manual of engine)

**Burning of engine**

(Refer to instruction manual of engine)

**Sticking of impeller**

(Disassemble & clean)

Pumping volume is small.

**Entrance of air at suction side**

(Check piping at suction side)

**Drop of engine output**

(Repair)

**Breakage of mechanical seal**

(Replace mechanical seal)

**High suction lift**

(Lower)

**Thin or long or kink of hose**

(Thicken or shorten or straighten)

**Leak of water from water passage**

(Stop leak)

**Clogging of foreign substance in impeller**

(Disassemble & clean)

Pump does not self-prime.

**Suction of air at suction side**

(Check piping at suction side)

**Insufficient priming water inside pump casing**

(Prime fully)

**Imperfect tightening of drain cock**

(Tighten)

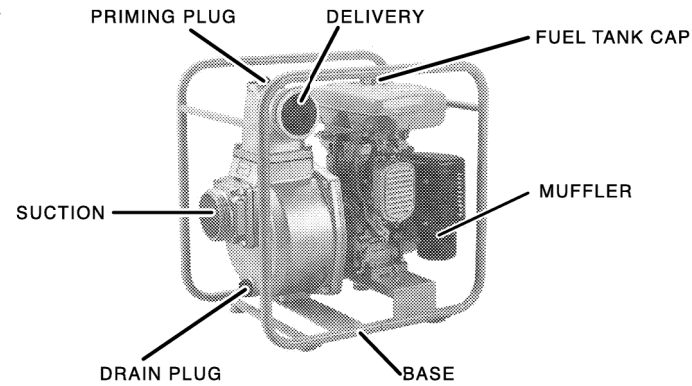
**Imperfect revolution of engine**

(Repair engine)

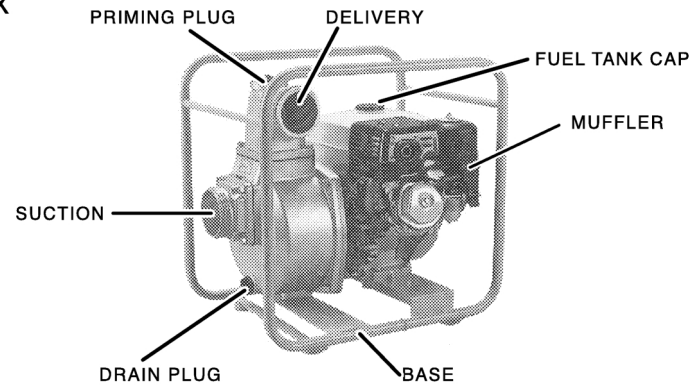
**Entrance of air from mechanical seal**

(Replace mechanical seal)

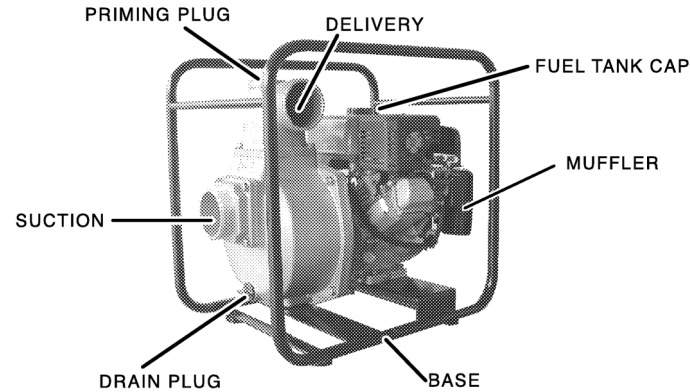
SE-100X



SEH-100X



SEM-100X



**SPECIFICATIONS**

		SE-100X	SEH-100X	SEM-100X
P U M P	Connection Dia	100 m/m(4")		
	Connection Thread	Fire Fighting Hose Coupling Thread		
	Total Head	28 m    92Ft		
	Delivery Volume	600 ℓ /min 158 U.S.G/min	1450 ℓ /min 383 U.S.G/min	1380 ℓ /min 365 U.S.G/min
E N G I N E	Model	Forced Air cooling 4cycle gassolin		
		ROBIN EY280D	HONDA GX240	MITUBISHI GM 231PN
	Exhaust Volume	273 cc	270 cc	215 cc
	Out Put	4.0kW/3600rpm	4.6kW/3600rpm	3.7kW/3600rpm
		5.5kW/4000rpm	5.9kW/3600rpm	
	Fuel	Automobile Non-lead Gasoline		
	Fuel Tank Capacity	5.5 ℓ	5.3 ℓ	4.5 ℓ
	Fuel Consumption Hour full tank	Abt.3.0 h	Abt.3.0 h	Abt.2.0 h
Net Weight		50kg	54kg	48kg
Standard Accessories		1Strainer, 2Hose Couplings, 3Hose Bands, 1Engine Tool set		

**PERFORMANCE CURVE**

