



HIDELS PUMP

High Performance Self-Priming Engine Pump

OPERATION MANUAL

《 SER 》

- Thank you for purchasing KOSHIN HIDELS PUMP.
- This manual is prepared for your safety when operating pump. Please read carefully and comprehend fully before use. (Wrong usage could cause injury or death.)
- Please keep this manual handy for future reference.

**Please read this manual and engine manual
before operation.**

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. No-discharge operation is hazardous.

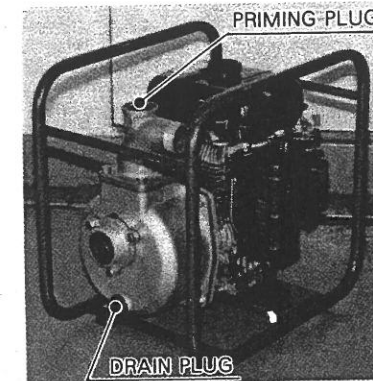
Refrain from no-discharge operation at discharge side or suction side . over 5 minutes. It is extremely dangerous as the water temperature in the pump is raised. The following troubles will result if the above instruction observed;

- * Damage to the mechanical seal
Water leakage
Breakage of the pump casing

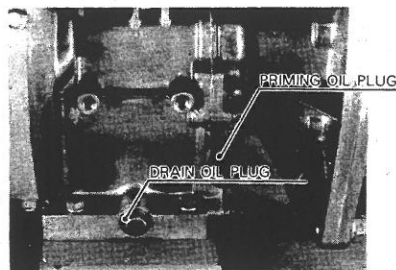
5. Drain of water after use

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



6. 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),
SAE 10w-30 (cold district, below -10°C)
Apply oil having a quality better than Grade SC (old Grade MS).
* Trouble if you don't observe.
Burning of engine



7. Long storage
Discharge fuel in fuel tank and carburettor entirely.
* Trouble if you don't observe.
Impossible to start engine (With regard to engine, refer to instruction manual of engine.)

TROUBLE & REMEDY

- | | |
|---------------------------|---|
| Pump does not revolve. | <ul style="list-style-type: none"> 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. | <ul style="list-style-type: none"> 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) Wear of impeller
(Replace impeller) |
| Pump does not self-prime. | <ul style="list-style-type: none"> 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) |

※When the hose is bent, self-suction may sometimes fail as the air is not drawn out completely.
In such a case, loosen the priming cock and keep discharging the air to the end of self-suction.

SPECIFICATION

		SER-40	SERH-50B	SER-50	SERH-50
P U M P	Connection Dia	IN 50%(2") OUT 40%(1½")	50%(2")	IN 65%(2½") · OUT 50%(2")	
	Connection Thread	Outer Pipe Thread			
	Total Head	60m 197Ft	57m 187Ft	65m 213Ft	62m 203Ft
	Delivery Volume	400 ℓ /min 106U.S.G/min	440 ℓ /min 114U.S.G/min	570 ℓ /min 148U.S.G/min	560 ℓ /min 148U.S.G/min
E N G I N E	Model	Forced Air Cooling 4 Cycle Gasoline Engine			
		Robin EY20D	HONDA GX160	Robin EY28D	HONDA GX240
	Exhaust Volume	183cc	163cc	273cc	242cc
	Power output	2.6kW(3.5ps)/3600rpm 3.7kW(5.0ps)/4000rpm	2.8kW(3.8ps)/3600rpm 4.1kW(5.5ps)/4000rpm	4.0kW(5.5ps)/3600rpm 5.5kW(7.5ps)/4000rpm	4.5kW(6ps)/3600rpm 5.9kW(8ps)/3600rpm
	Fuel	Automobile Non-lead Gasoline			
	Fuel Tand Capacity	3.8 ℓ	3.6 ℓ	5.5 ℓ	6.0 ℓ
	Fuel Consumption Hour (full tank)	a.b.t 2hr		a.b.t 2.5hr	a.b.t 3.0hr
	Staring Method	Recoil Starter			
Net Weight		36kg	32kg	52kg	44kg
Standard Accessories		1 Strainer 2 Couplings 3 Hose Bands 4 Engine Tool set	1 Engine tool set	1 Strainer 2 Couplings 3 Hose Bands 4 Engine Tool set	

The specification is subject to change without notice for improvement.

PERFORMANCE CURVE

