KOSHIN

For Kerosene and Diesel application only

ELECTRIC DRUM PUMP

FP-2512 OPERATION MANUAL

- Please read carefully before use and understand how to operate. Wrong usage may cause accident or injury.
- Please keep this manual for future reference.

SAFETY CAUTION

Read this "SAFETY CAUTION" carefully before use. These following cautions are for correct usage of product and prevent you or others from injury or harm.

Each article contains important contents. Following are the articles:

DANGER : may cause death or serious injury on high level. MARNING : may cause death or serious injury.

▲ CAUTION : may cause serious injury or major damage.

It is necessary to follow the article.

\Lambda DANGER

| | This product is for kerosene or diesel application only. |
|-----------------------|--|
| | This product cannot be used for petroleum grade liquid, such as gasoline, A-crude, solvents, Chemicals, water. (Danger - may cause explosion, fire, or damage) |
| | This product does not use flame-proof motor. |
| Inflammable | Do not use this product near inflammable objects such as petrol. |
| Inflammable | Do not use fire when you operate this product. It may cause fire. |
| Recent of Deser | This product is exclusively designed for transfer of kerosene or diesel only. Do not use for other applications. |

| | Do not leave the pump unattended during operation. | |
|-----------|--|--|
| Operation | Do not operate this product without understanding the operation manual. | |
| | Operate this product in a safe place away from children. | |
| | Besides trained technician of repair, do not dismantle, repair, rebuild. It may cause damage. | |
| | Do not wet the product with water or oil. It may cause serious accident, injury, or damage to the product due to electric shock, short-circuit, or electric leakage. | |
| | Please do not use outdoor. This product may be damaged if wet by rain or water. | |
| | When you put the clip with power source (battery) avoid short-circuit, by touching ⊕and⊝. It may cause fire or accident. | |

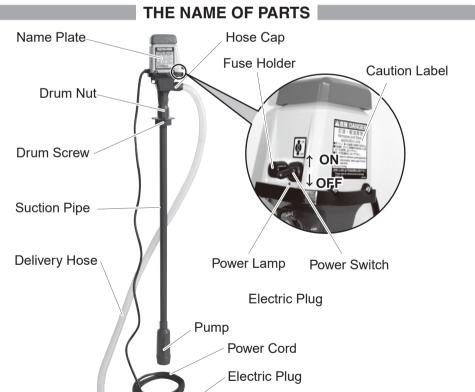
KOSHIN LTD.

www.koshinpump.com

TEL.: +81-75-953-2499 FAX.: +81-75-954-6119 E-mail: info@koshin-ltd.co.jp 12 Kami-Hachinotsubo Kotari, Nagaokakyo City, Kyoto 617-8511 JAPAN

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| 2mm | Do not harm, damage, twist or break electric cable. Do not put heavy objects on the cable. This may cause damage to the cable and may cause fire, electric shock. |
|----------|---|
| AL | Do not use this product if electric cable or clip is damaged or inadequate connection with power supply. It may cause electric shock, short-circuit or fire. |
| DC-12V | Besides rated voltage, do not use this product. It may cause fire, electric-shock. |
| | Do not dismantle the product. It may cause electric-shock or injury. |
| -747 | Do not give any shock to the product during operation. It might cause fire by electric-shock, short-circuit or electric leakage. |
| B | If the product does not operate or looks like an abnormal run, take of the clip power source immediately, and ask for checking or repair with your local distributor/dealers. |





Please do not run dry. (Operation without liquid in drum) It may cause damage to the product.



Use this product with liquid temperature between 0-40 degrees centigrade.



If you use extension cable, please use the length as minimum. Use cable with isolation treated to avoid short-circuit. Thin or long cable may lead to inferior performance or even damage of the product.



When lifting the product, please do not pull power cord or hose. It may damage the power cord or hose.

* All these important safety instructions described by this operation manual may not cover all the conditions and cases of usage. We pay careful attention about safety of the product. Please pay careful attention by user, operator, technician for maintenance as well.



SPECIFICATIONS

| Model | FP-2512 |
|---------------------------|------------|
| Connection dia | 25 mm (1") |
| Total head | 2.8 m |
| Discharge volume | 18 L/min |
| Voltage | DC 12 V |
| Continuous operating time | 30 min |
| Power cord | 4 m |
| Fuse | 4 A |
| Discharge hose | 1.5 m |
| Nozze | Gun type |
| Net weight | 2.0 kg |

% We offer 1.5 m delivery hose as option item. 1.5 m delivery hose is replacement type.



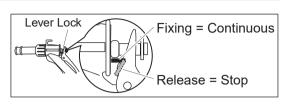
Insert suction pipe into Drum. Fix Drum screw onto the collar. Turn Drum Nut to fix.



After fixing the pump to the drum, please do not operate pump or drum at oblique condition.

When you loosen "Drum Nut", hold the pump body by another hand. A CAUTION Otherwise, pump body may drop suddenly and cause injury or damage.

Make sure Power Switch is 2 "OFF" and Lever Lock of Nozzle is released, then, connect power plug.



Put Power Switch "ON" and grip the Lever of Nozzle. 3

4 If you use Lever Lock, pump will transfer oil continuously. Release lever lock when stop continuous operation.

| Do not be near fire during operation |
|--|
| If do not release the lever lock, the outflow of oil does not stop. To avoid a oil overflow, please operate carefully |
| When Power Switch is "ON" and motor is running, please do not leave pump with Lever Lock for more than 3 minutes. (It might cause damage or accident.) |

CAUTION AFTER USE

- 1. After using pump, switch power to "OFF". Release Lever Lock of Nozzle, then, remove electric plug from socket.
- 2. Remove pump from the drum. Remove oil in the suction pipe, hose, and nozzle. Wipe off excess oil on the surface of the pump with a duster.

After use, do not put pump on the ground directly. If dust gather at the strainer, it may cause future inferior suction or damage.

TROUBLE SHOOTING AND MAINTENANCE

Please do not dismantle or repair the pump by yourself. Please ask for repair work from your local distributor /dealers.

| Condition | Possible Cause | Measure |
|---|--|---|
| No discharge (No suction) Pump does not work | Dirt & dust inside pump | Open pump and clean |
| | Burn out Fuse *In such case, power lamp is light "ON" | Take corrective action for the cause of the blown fuse and replace the fuse. (Refer to MAINTENANCE · CHECK) |
| | Voltage drop when using extension cord | Reduce extension cord length |
| | Motor does not work | |
| | Disconnection of power cord (Check power lamp is light "ON" or not.) | Ask repair by local distributor / dealer |
| | Electric plug does not sit well Into the socket (Check power lamp is light "ON" or not.) | Check electric plug and socket. |
| No discharge | Air-Lock inside pump | Turn power switch to "Off" and re-start |
| (No suction) or, small | Hose is too long (in case of extension) | Shorten the hose. |
| or, small discharge volume - pump is working. | No liquid, not enough flow In the drum | Fill liquid into the drum |
| | Strainer is clogged with dust | Cleaning |
| | Bending hose | Straighten hose |
| Oil leakage | Sealing failure of packing caused by screw loosening. | Tighten screw |
| Oil leakage from connection part of hose | Hose cap is not tightened enough | Tighten hose cap firmly |
| Oil leakage from nozzle | Leakage due to Siphon phenomenon | Remove liquid inside hose and keep position of hose higher than the pump before storage |

3. Storage

Please keep pump clean, in low humidity, well-ventilated, indoor, away from sunlight.

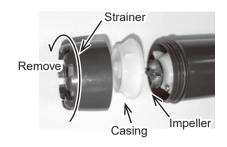
| | Please lay down the pump during storage to avoid inversion. | |
|-------------------------------------|---|--|
| 4. Clean Strainer (Refer Mainten | if you do not use this pump for long time. ance, Check) | |
| | If position of nozzle is lower than liquid level in the drum, liquid may leak from nozzle due to Siphon phenomenon. Put out this pump from drum before storage. | |
| | | |

| CAUTION During maintenance and check, always turn switch to "OFF" and re electric plug from socket. Otherwise may cause accident or injury. | ove |
|--|-----|
|--|-----|

[Cleaning of Strainer · Impeller]

If dust obstruct Strainer or Impeller, it may cause inferior suction, inferior flow, shorten pump's life and damage of motor. Make sure electric plug is removed from socket and check following points regularly.

- ① Remove Strainer by turning towards indicated direction, remove all dirt and dust.
- ② Remove Casing and clean up dust inside the Impeller.
- ③ After cleaning, re-assemble by reverse course.



[Replacement of Fuse]

A fuse may burn out to protect motor damage if surplus current enters the motor. It is necessary to replace a fuse in this case.

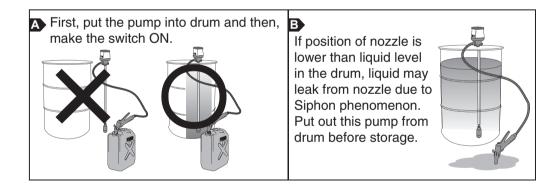
- \bigcirc Remove fuse cover by + screw driver, turn counterclockwise.
- 2 Remove fuse, check if it is "burn out" then, replace with new 4 A fuse. Do not use fuse other than 4A.



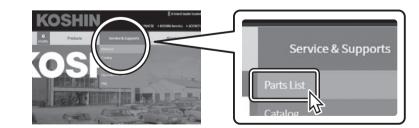
③ Please re-assemble by reverse course.

If the fuse blows frequently, the oil seal of the motor may be worn out, and kerosene or light oil may have entered the motor and the fuse may blow due to overload.

Please ask for repair work from your local distributor /dealers.



SPARE PARTS



For spare parts information, visit

http://www.koshinpump.com