

# INSTRUCTION

## **OIL BUCKET PUMP**

STB-50 MODEL No.880134 STB-60 MODEL No.880135 STB-70 MODEL No.880136



## **M** WARNING

Prior to operating this pump, be sure to read this operation manual for safety. After reading the manual, please keep it at hand any time for your quick reference.

## YAMADA CORPORATION

#### - Preface

Thank you for purchasing a Yamada Pump. This is a portable hand-operated lever oil bucket pump delivering oils such as gear oil, motor oil, and machine oil.

This pump is ideal for use especially in remote locations where power is not available with a large capacity container. Please do not use with greases.

## - For Safe Operation

This manual describes the items that are important for the user to operate this product safely, correctly, and efficiently. Before operating this product, read this manual thoroughly, in particular, "Warnings and Cautions" at the beginning of this manual.

## Warnings and Cautions

For safe use of this product, be sure to note the following: In this document, warnings and cautions are indicated by symbols. These symbols are for those who will operate this product and for those who will be nearby, for safe operation and for prevention of personal injury and property damage. The following warning and caution symbols have the meanings described below. Be sure to remember their meanings.



**WARNING**:

This indicates the existence of potential hazard which, if not avoided, will

result in death or serious injury.



**CAUTION:** 

This indicates the existence of potential hazard which, if not avoided, may

result in bodily injury or in physical damage.

Furthermore, to indicate the type of danger and damage, the following symbols are also used along with those mentioned above:



This symbol indicates a DON'T, and will be accompanied by an explanation on something you must not do.



This symbol indicates a DO, and will be accompanied by instructions on something you must do in a certain situation.

### Precautions on Use

The following warnings and cautions are very important. Be sure to observe them.



## **WARNING**



- Gasoline is a high-volatility fuel. Do not use it to clean the pump in any case. Otherwise, ignition or explosion may be caused.



Some types of oil to be used may contain carcinogens. Read the precautions provided by oil
manufacturer thoroughly and handle the oil with care.



## **CAUTION**



- This is a lubricant oil pump suitable for lubricant oil such as gear oil, motor oil, and machine oil. DO NOT use with gasoline, light oil, heating oil, or any other solvents.



- Be sure to establish a grounding connection to prevent shock caused by static electric spark.

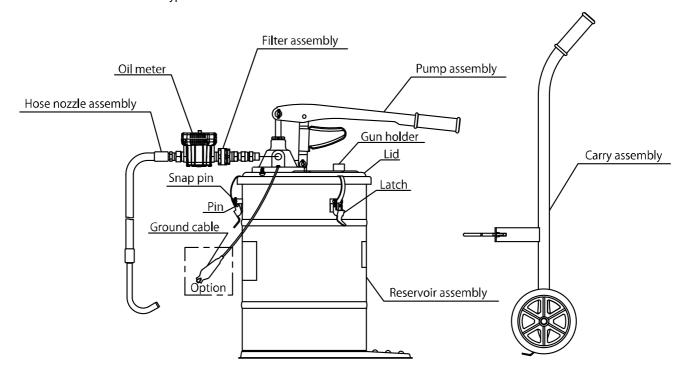
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## 1. Names and Materials of Parts

### 1.1 Names and Materials of Parts

■880135 STB-60 Type



- X STB-50 (880134) does not include carry assembly (851003) and oil meter (805184).
- X STB-70 (880136) does not include oil meter (805184).

## 1.2 Contents of Package

The main unit and accessories are packed separately in the box.

Open the top cover of the box and check the package contents to make sure there are no damaged or missing items.

## 2. Preparations before Operation

<Assembly>

1) Attach hose nozzle assembly to the oil discharge port and tighten with a wrench. (Fig. 1)

<To Fill Reservoir>

- 2) Release three latches on the top of reservoir. (Fig. 2)
- 3) Remove lid together with pump assembly.

#### <NOTE>

- Prevent dirt particles from being sucked into the suction port.
- 4) Wipe off reservoir with a clean cloth before filling it with lubricant. Then, pour lubricant into reservoir. (Fig. 3) Make sure to fill about two thirds of container. Lubricant, if reservoir is full, may spill when pump is in motion.
- 5) Wipe the suction port of pump assembly. Mount lid and secure three latches. In this time, set lever at appropriate position.



- 1) Wipe tip of nozzle and a filler port of equipment you are going to lubricate.
- 2) Place nozzle tip on a filler port. Step on the footboard to keep container from moving. Slowly push lever up and down several times so that oil will come out of nozzle. If you have an oil meter, be sure to press the reset button of the oil meter and set "0" before lubricating. (Fig. 4)
- 3) After lubrication, push lever down and put nozzle back in the slot on lid.

#### <NOTE>

- Oil tends to adhere to surfaces. Always keep your equipment clean.



Fig.1



Fig.2



Fig.3



Fig.4

### 4. Maintenance and Inspection

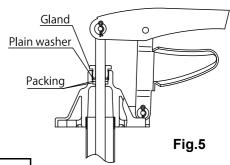
## 4.1 Troubleshooting and Corrective Measures

SYMPTOM	POSSIBLE CAUSE	CORRECTIVE MEASURE	
Pump delivers no oil	Reservoir is empty.	Fill reservoir.	
Fullip delivers no on	The foot valve is clogged with dust.	Check and clean the foot valve.	
	The foot valve is clogged with dust.	Check and clean the foot valve.	
Insufficient flow	Wear-out of plunger packing.	Replace packing.	
	The filter of the oil meter is clogged with dust.	Clean the filter.	
Oil leaks from gland	Wear-out of gland packing.	Tighten gland or replace packing.	

## 4.2 Maintenance and Inspection

If the lever becomes stiff, loosen gland a little and place a few drops of oil on it. (Fig.5)

Check hose periodically and replace it if it is aged or leaking.



## 5. Disassembly and Assembly

## **A** CAUTION



- Gasoline is a high-volatility fuel. Do not use it to clean the pump in any case. Otherwise, ignition or explosion may be caused.

#### [Foot Valve]

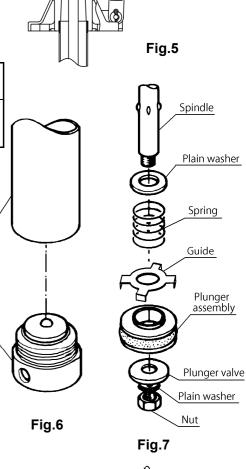
- 1) Unscrew hose nozzle assembly.
- 2) Release three latches on the top of reservoir and remove lid together with pump assembly.
- 3) Unscrew four bolts on the back of lid to separate pump assembly from lid.
- 4) Clamp knurled section of suction tube in a vise.
- 5) Turn foot valve with a wrench and check it. Wash foot valve if it is clogged with dirt. (Fig.6)

### [Plunger Packing]

- 6) Clamp pump body in a vise and turn suction tube with a wrench to separate from pump body.
- Unscrew nut on the end of spindle; then spring washer, plunger valve, plunger assembly, guide, spring, and washer will be separated from spindle. (Fig.7)
- 8) Clean and check each part of plunger assembly and replace damaged or worn parts. Be sure to replace spindle and guide at the same time.
- 9) Reverse the disassemble procedure to reassemble while being certain that each part is attached in the correct direction.

## [Filter]

- 10) Unscrew union nut to separate packing and filters from filter assembly. (Fig.8)
- 11) Check filters and clean them if they are clogged with dirt.
- 12) Reassemble filter assembly while being careful to attach filters in the correct order.



Suction tube

Foot valve

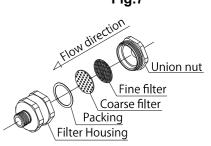
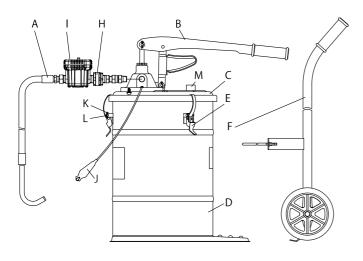


Fig.8

## 6. Parts Disassembly Drawing and Parts List

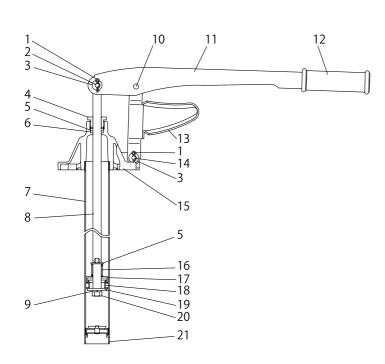
## 6.1 880134(STB-50)、880135(STB-60)、880136(STB-70) Oil Bucket Pump



No.	Description	Q'ty	Part No.		
NO.			STB-50	STB-60	STB-70
Α	HOSE NOZZLE ASSEBMLY	1	695453	<b>+</b>	<b>←</b>
В	PUMP ASSEMBLY	1	851110	<b>+</b>	+
С	LID	1	703181	<b>+</b>	<b>←</b>
D	RESERVOIR ASSEMBLY	1	830270	+	<b>+</b>
Е	LATCH	3	830112	+	<b>+</b>
F	CARRY ASSEMBLY	1	-	851003	<b>+</b>
Н	FILTER ASSEMBLY	1	-	805191	ı
Ι	OIL METER	1	-	686859	-
J	GROUND CABLE	1	681769	<b>←</b>	<b>←</b>
K	SNAP PIN	3	680710	<b>+</b>	<b>←</b>
L	PIN	3	701747	<b>+</b>	<b>←</b>
М	GUN HOLDER	1	770331	<b>+</b>	<b>+</b>
L	PIN	3	701747	<b>←</b>	<b>←</b>

<sup>※</sup> Ground cable is option.

## 6.2 851110 Hand Pump Assembly



No.	Part No.	Description	Q'ty
1	680608	SNAP PIN	2
2	703578	PIN	1
3	631012	PLAIN WASHER	2
4	580994	GLAND	1
5	701755	PLAIN WASHER	2
6	770333	PACKING	2
7	708312	SUCTION TUBE	1
8	715316	SPINDLE	1
9	631420	SPRING LOCK WASHER	1
10	702559	PIN	1
11	703177	HANDLE	1
12	770494	HANDLE GRIP	1
13	830268	TOGGLE ASSEMBLY	1
14	703579	PIN	1
15	708314	BODY	1
16	702020	SPRING	1
17	715315	PISTON GUIDE	1
18	830483	PLUNGER ASSEMBLY	1
19	703180	PLUNGER VALVE	1
20	627012	NUT	1
21	830269	FOOT VALVE ASSEMBLY	1

## 7. Specification

## **■**Engineering Data

Туре	STB-50	STB-60	STB-70
Model No.	880134	880135	880136
Height	leight 586mm 795mm		795mm
Mass(kg)	7.4kg	11.3kg	9.9kg
Reservoir capacity	20L	20L	20L
Accessories	695453 Oil hose (Black 2.0M) with Nozzle · · · · · · 1	with Nozzle · · · · · · 1	695453 Oil hose (Black 2.0M) with Nozzle · · · · · · 1 851003 Carry assembly · · · · · · 1
Option	851003 Carry assembly 805184 Oil meter with Filter		805184 Oil meter with Filter

## **Above conditions**

Delivery	Stroke	Material	Oil Temperature
40mL / stroke	50 mm	Machine oil #160	20°C

### 8. Limited Warranty

If an abnormality occurs during normal operation in accordance with the operating instructions and other operating cautions within the warranty period (12 months after date of purchase) that can be attributed to a manufacturing defect, the defective parts of this product will be serviced or the product will be replaced free of charge. However, this warranty will not cover compensation for incidental damage or any malfunction listed below.

### 1. Warranty period

This warranty will be valid for a period of 12 months after the date of purchase.

#### 2. Warranty

If, during the warranty period, any of the material of the genuine parts of this product or the workmanship of this product is found defective, and is so verified by our company, the servicing cost will be fully born by our company.

#### 3. Exclusion

Even during the warranty period, this warranty does not cover the following.

- 1) Malfunction arising from use of parts other than manufacturer-specified genuine parts
- 2) Malfunction arising from misuse or operating errors, or lack of storage or maintenance care
- 3) Malfunction arising from use with a fluid that may cause corrosion, inflation or dissolution of the component parts of the product
- 4) Irregularity arising from repair made by other than by our firm, our regional office, dealer or authorized service personnel
- 5) Malfunction arising from modification of the product by other than authorized service personnel
- 6) Wear and tear of parts that must be regularly replaced in the course of normal operation, such as packings, O-rings and hose.
- 7) Malfunction and/or damage due to use with incorrect voltage.
- 8) Malfunction and/or damage due to transportation, moving or drop page of the product after purchase
- 9) Malfunction and/or damage due to fire, earthquake, flood or other force majeure
- 10) Malfunction arising from use of compressed air that contains impurities or excessive moisture, or use of gases or fluids other than the specified compressed air
- 11) Malfunction arising from use of excessively abrasive material or of inadequate grease.

Furthermore, this warranty does not cover the rubber parts, or other parts used in this product and its accessories, which are subject to wear in normal operation.

hosespackingscords

#### 4. Parts

Parts for this product will be kept available for 5 years after discontinuation of production. Once 5 years have elapsed after close of production, availability of parts for this product cannot be guaranteed.

Manufactured by

## YAMADA CORPORATION

INTERNATIONAL DEPARTMENT

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