

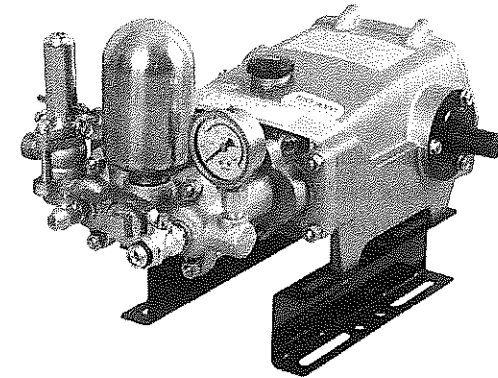
Memo :

Power Sprayer

03/2010-A1



Manual Instruction



For Models : SB-428/428A/528/528A/458/468



Caution : Please read this manual instruction carefully before operating.

LU SHYONG MACHINERY INDUSTRY CO., LTD.

P/N06005

LU SHYONG MACHINERY INDUSTRY CO., LTD.

MADE IN TAIWAN

Prelude

- ** Thank you very much for you chose high quality LU SHYONG product we hope which will provide your job more efficient and satisfied
- ** The Power of this Sprayer may you with Gasoline Engine, Diesel Engine, Electric Motor, please refering to the specification from this instruction.
- ** To maintain satisfactory operation and high performance of this product over a long period, all operating instructions and maintenance guide lines should be strictly adhered to.
- ** LU SHYONG reserve the right for any revision of the product's function, specification, shape, colour without further notice.
- ** No claims can be derived from any of the illustrations or from information contained in these operating instructions.
- ** For any further questions or further information required regarding this product, please contact your specialist dealer who will be pleased to assist.

Declaration of Conformity

According to the EN 45014 process and with other relevant Directives. These references must be those of the texts published in the Official Journal of the European Union EU Directives as following:
 Machinery Directive: 98/37EC and amend 2006/42/EC
 Electromagnetic Compatibility Directive: 2004/108/EC
 Noise emission in the environment by equipment for use outdoors Directive: 2000/14/EC
 Company Name: LU SHYONG MACHINERY INDUSTRY CO., LTD.
 Manufacture's Address: No. 116-8, Ding-San-Zhuang Rd., Hai-Fong Village, Ching-Hsui Town, Taichung Hsien, Taiwan, R.O.C.

Model Name: Power Sprayer

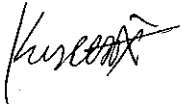
Model Number: SB-428/428A/528/528A/458/468

Serial Number : 2010/00001E ~UP

This Declaration of conformity is based upon compliance of the essential healthy and safety requirements in annex I of this Directive are applied and fulfilled and that the relevant technical documentation is compiled in accordance with part B of Annex VII.

This partly completed machinery must not be put into service until the final machinery into which it is to be incorporated has been declared in conformity with the provisions of Machinery Directive, where appropriate;

Title: Manager

Signature: 

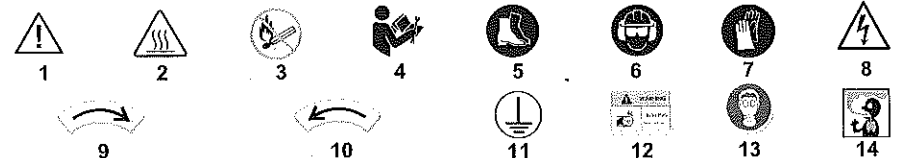
Date: 1st January 2010

Place: Taichung, Taiwan, R.O.C.

Index

1. Symbols in the manual	1
2. Safety caution	2
2.1 General safety hints	2~3
2.2 Working with chemicals safely	3~4
2.3 Work clothing	4
2.4 Transporting the sprayer	5
2.5 Electric or Fuelling	5
3. Specification	6
4. Description of the Sprayer	6
4.1 Sprayer and accessories	6
4.2 Standard Accessories	7
4.3 Optional Accessories	7
4.4 Scope of Application	8
5. Operating instruction	8
5.1 Fix Power and Sprayer with Frame	8
5.2 Fix accessories of Sprayer	9
5.3 Preparing for Spraying	9~11
5.4 Instruction for Irrigation	11
6. Generally repair	12
6.1 Cleaning or replacement for Valve Ass'y	12
6.2 Replace Cylinder, V-Packing	12
6.3 Replace Crank Case, Crank Shaft, Connecting Rod	13
6.4 Safety Valve replacement	14~15
7. Generally Maintenance	16
8. Trouble shooting	17~18
9. Storage	19
10. Disposal	19
11. Limited guarantee	19

1. Symbols in the manual



1	Caution / Warning/ Attention	8	Warning for Electric Shock
2	Hot	9	Turning life for Lower
3	Keep away from open fire	10	Turning right for Higher
4	Read owner's manual before operating this machine	11	Grounding Earth
5	Wear foot protection	12	Caution for Rolling risk
6	Wear head · eye and ear protection	13	Mask
7	Wear gloves	14	Warning for poor ventilation

2. Safety caution

2.1 General safety hints



Read the manual thoroughly before using the machine for the first time.

Keep the manual in a safe place.



Use this machine carefully and with caution.

- ** Ignoring these safety hints may endanger your life. Also observe all rules and regulations for the prevention of accidents as issued by the respective trade associations.
- ** This manual must be available for reference at the place of use of the product.
- ** The manual has to be read by every person who is requested to use, maintain, service or repair the machine.
- ** You should request and receive instructions from the vendor on the safe operation if you are using this type of product for the first time.
- ** Children and persons under the age of 18 are not allowed to use this machine.
- ** No other persons or animals should be within the work area. Never spray towards other persons, animals or objects which would suffer damage. The sprayer generates high pressure at the nozzle which may be dangerous.
- ** The operator is responsible for any accidents or damage caused towards other persons or property.
- ** This High Pressure Sprayer may only be passed on or lent to other persons if that person is familiar with the safe use of this product and is familiar with the instruction manual.
- ** Ensure you are rested and in good health when using this product.
- ** Persons under the influence of alcohol or drugs, including prescription drugs, are not allowed to use the machine as their ability to quickly react to potential danger may be impaired.
- ** Never alter, change or modify any safety equipment or functional assemblies on this machine.
- ** The engine driven sprayer should only be used when the unit is in good, safe condition.
Always check the machine prior to use.
- ** Only use parts and accessories which were approved and supplied by the manufacturer.
- ** Always store the machine in a safe place and in such a way that it will not pose any danger.
Stop the engine or power off the electric motor when the machine is not used.
- ** Drain and clean the liquid tank, in side of Sprayer, Spray Hose, Spray Gun after used for each time, please follow the regulation of local government for dispose the chemical liquid, please note that unauthorized persons should have no access to the machine.

Exercise extreme caution while spraying

- ** Generally there is less wind and air movement during early morning and early evening hours. It is recommended to spray during that time. Only wet those plants and objects which are targeted. In any case we recommend caution during the spray operation.

Danger of Accident!

- ** Only use parts and accessories which were approved and supplied by the manufacturer. The reliability and safe operation of your machine depend on the quality of parts used with the machine. Only use original spare parts. Original spare parts are identical with genuine production parts and guarantee best quality in material, measurements, function and safety. Original parts and accessories are available from your specialist dealer. Your specialist dealer has been supplied with correct documentation to determine the correct parts. The specialist dealer is frequently supplied with updates about improvements to the equipment. Please note that the use of non-original parts will void your warranty.
- ** Always store the machine in a safe place and in such a way that it will not pose any danger. Stop the engine when the machine is not used.
- ** Drain and clean the liquid Tank drain all residual Chemicals in a suitable container which collect the residual Chemicals solution to avoid spill to Soil, Fields, River ect.. and if required, tilt the Tank slightly to the side to ensure complete drainage of any remaining Chemical solution into the suitable container. Drain and thoroughly rinse the liquid Tank daily after used with fresh Water. Observe any cleaning hints provided in the instructions supplied with the Chemical, after cleaning, leave the Tank to dry.
- ** Persons who disregard safety instructions, operating instructions or maintenance instructions may be liable for any damage or consequential damage.

2.2 Working with chemicals safely

- ** This high pressure sprayer is suitable for the application of approved plant protection chemicals, fungicides, pesticides and herbicides as well as liquid fertilizers which are available from authorized specialized shops. Only use plant protection chemicals which have been approved by the respective authorities in your country or state.
- ** Do not use liquids with a temperature above 50°C.
- ** To avoid personal injury and for the protection of the environment only use approved chemicals. Always read and follow all recommendations of the chemical manufacturer.
- ** Never drain excess chemicals into the public water drainage system and never pour excess chemicals on unused land or in ponds and lakes. Avoid return suction of chemicals into the hose while filling the mixing container with tap water. Never add plant protection chemicals to goods for domestic garbage and refuse collection.
- ** Collect plant protection chemicals in a suitable container and deliver the container to a designated collection point for chemicals. Check with your local authorities regarding the availability and address of such a collection point.
- ** Avoid direct contact with chemicals.
- ** If you feel drowsy and unwell while using the sprayer, stop work immediately. If drowsiness persists, see a medical practitioner.
- ** Children or persons unfamiliar with the handling and application of chemicals are not allowed to use the sprayer.

2.2 Working with chemicals safely

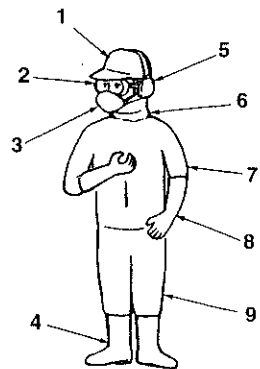
- ** Thoroughly clean the tank before using different spray chemicals. After cleaning the tank, use fresh water to operate the sprayer for a short time. This will remove residual chemicals from the pump and the hose system. This will avoid possible chemical reactions.





- Do not spray in small or closed rooms - there is a danger of poisoning from chemicals and from exhaust fumes. Use motorized equipment in glass houses only if there is sufficient ventilation. Recently treated glass houses should be marked to prevent access before the spray has settled and full ventilation is completed.
- ** Drain and clean the chemical tank on the sprayer after the spraying job has been completed. Wash hands and face with fresh water and soap. Change work clothing and have it cleaned.

2.3 Work clothing

- ** Always wear appropriate clothing and protective equipment whenever this sprayer is used.
 - ** Wear appropriate protective clothing which covers all body parts. This includes gloves, head protection, foot protection, body protection and possibly an apron or breathing mask.
- The working clothing as :



- 1 Head protector
- 2 Eyes protector
- 3 Mask
- 4 Rubber boots
- 5 Ear protector
- 6 Neck Cover
- 7 Protective clothing
- 8 Rubber gloves
- 9 Protective clothing

- ** Clothing should be suitable, i.e. tight without being obstructive.
- ** Do not wear a scarf, necktie, jewellery or any clothing which can get caught on shrubs or branches.
- ** Wear firm shoes with good traction, preferably safety shoes.
-  Wear protective gloves with non-slip grip.
-  Use personal ear protection and a face mask or safety goggles to protect against spray drift or airborne debris.
- ** When working between close and tall plants, in badly ventilated glass houses or when using highly toxic chemicals, always wear a suitable, approved breathing mask.
- ** Any clothing soaked with chemical or petrol should be changed immediately.

2.4 Transporting the sprayer

- ** Always stop the engine to transport the sprayer.
- ** Considering road traffic hazards it is advisable to secure the sprayer firmly and safely before transporting the unit.
- ** Ensure there are no chemical or petrol leaks. Always check the chemical tank, pump, fuel tank and all hoses and pipes for the chemical solution and fuel supply for leakage.
- ** Prior to transporting the sprayer, drain and clean the liquid Tank drain all residual Chemicals in a suitable container which collect the residual Chemicals solution to avoid spill to Soil, Fields, River ect.. and if required, tilt the Tank slightly to the side to ensure complete drainage of any remaining Chemical solution into the suitable container. Observe any cleaning hints provided in the instructions supplied with the Chemical, after cleaning, leave the Tank to dry.

2.5 Electric or Fuelling




- Petrol is very light and highly flammable. Do not get close to an open flame and do not spill any fuel.

Do not smoke at the operating site or at and near the refuelling site!

- ** Stop the engine prior to refuelling.
- ** The engine should be allowed to cool down before refuelling - fire danger!
- ** Open the tank lid slowly to allow the safe escape of any excess pressure in the tank without the danger of petrol spray.



- Avoid breathing in fuel vapour.

- ** The refuelling site should be well ventilated.
- ** Avoid any soil spillage of fuel or oil. (Protection of the environment). Use a suitable mat. Immediately clean any spilled fuel on the machine. Contaminated clothing should be changed without delay.
- ** Firmly tighten all tank lids. This will reduce the risk of spillage from lids which have become loose from engine vibrations.
- ** Check for petrol leaks. Do not start the machine or work with the machine if there is a petrol leak. Life threatening danger from burns!
- ** Store fuel and oil in approved and correctly labelled containers.
-  ** Use suitable Electric Leakage Breaker according to Horse Power of Electric Motor used and ground Earth is required always, which to avoid any risk of electric shock.
- ** Use suitable Breaker according to Horse Power of Electric Motor used and one machine used one Breaker to avoid any over load of risk, in case the Power used Electric Motor.
- ** Don't point to the Sprayer by Spray Gun which may have electric shock risk.
- ** To avoid any risk of Electric shock always keep Power Sprayer in dry place.
- ** Use suitable wire according to Horse Power of Electric Motor used wrong wire used may cause fire.

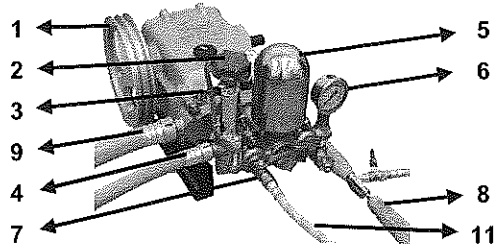
3. Specification

Model	SB-428 SB-428A	SB-528 SB-A528A	SB-458 SB-468
Dry Weight (KGS)	SB-428x12 SB-428Ax13	SB-528x12 SB-528Ax13	SB-458x38 SB468x39.5
Plunger Dia. (mm)	30	30	38
Suction Capacity L/min	16~34	21~42	39~70
R.P.M	500~1000	500~1000	500~900
Plunger NO.	3	3	3
Max. Pressure kgf/cm ²	50kgf/cm ²	50kgf/cm ²	40kgf/cm ²
Working pressure kgf/cm ²	20~50kgf/cm ²	20~50kgf/cm ²	20~40kgf/cm ²
Power Required E/M HP	2~4	3~6	5~9
Power Required Engine PS	4~6	5.5~7.5	8~13

4. Description of the Sprayer

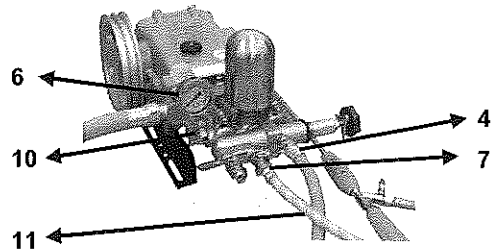
4.1 Sprayer and accessories

Normal safety Valve



1	V-Pulley
2	Pressure Regulator
3	Overflow Lever
4	Overflow Port (with Hose)
5	Air chamber
6	Pressure Gauge
7	Discharge Port (With Hose)
8	Spray Gun
9	Suction Port (With Hose)
10	Stirrer Port
11	High pressure Hose

Auto Safety Valve Type



4.2 Standard Accessories

Item No.	Description
1	Suction Strainer
2	Suction Hose
3	Overflow Hose
4	Fly Nut & Regulating Screw
5	Screw Kits
6	Pulley
7	Manual Instruction

4.3 Optional Accessories

Item No.	Mark	Description
1		Spray Gun (Nozzle Plate OD1.6mm) 3ft · 4ft · 5ft
2		Base frame 3/4" · 1" · 1-1/4" · 1-1/2"
3		Hose Reel 50M · 100M · 150M · 200M
4		High Pressure Hose (7.5mm, 8.5mm, 10mm, 13mm) 50M · 100M · 150M · 200M
5		Free joint (8.5mm · 10mm · 13mm)
6		Ball Cock (8.5mm · 10mm · 13mm)
7		V-Belt (A31"~A52") · (B52"~B67")
8		Engine Pulley (2-1/4", 2-1/2", 3", 3-1/2", 4")
9		Rotation Stirrer
10		Stirrer Spraying
11		1.2M High pressure Hose

4.4 Scope of Application

- ** This Power Sprayer is suitable for the application of approved liquid plant protection material, pesticides, herbicides, and liquid fertilizers available from authorized trade outlets and which Plant Protection Chemical have to be approved by local government.
- ** The areas of application for this Power Sprayer are Agriculture, such as: Paddy field Garden plant, Vegetable plant, Horticulture, Fruit farm ect..
- ** The machine is not to be used in windy and rainy conditions to prevent the spread of the spray material over a large areas.
- ** Check the wind direction prior to commencing work.
- ** Never, spray towards open doors, windows, cars, animals, children, or anything that may be damaged by chemicals.
- ** Generally there is less wind and air movement during early morning and early evening hours. It is recommended to spray during that time. Only wet those plants and objects which are targeted. In any case we recommend caution during the spray operation.

Caution : For safety reason and make perfect performance Please read and follow the instruction as:

5. Operating instruction

(a). Assembly with Power of Engine or Electric Motor

This Sprayer's power is available with Diesel Engine, Petrol Engine, Electric Motor that depend on the situation, please follow the details of specification from the Label that stuck along with the conspicuous of the machine to choosing the suitable Horse Power of Diesel Engine, Petrol Engine and Electric Motor.

5.1 Fix Power and Sprayer with Frame

1. Put Engine or Electric Motor on the Frame and open Screw Kits then fixing the Power with Frame (figure 1,2) then put Sprayer on the other side of Frame and fixing it as well. Fixing Engine Pulley, Sprayer Pulley and keep the V-groove of both Pulley in same straight line.
2. The V-Belt have to keep in straight line like (figure 3).

figure 1

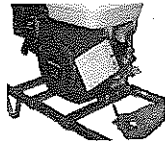


figure 2

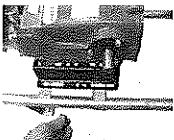
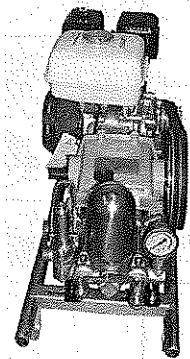


figure 3



3. Adjust the tension of V-Belt like (figure 4) test the tension of the V-Belt like (figure 5).

figure 4

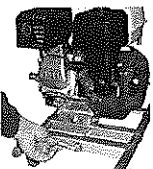
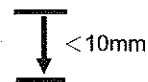
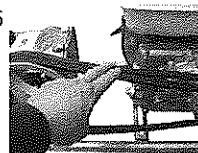


figure 5



5.2 Fix accessories of Sprayer

1. Connecting the Suction Hose (figure 6) and Strainer from the other side of Suction Hose as (figure 7) then fix Overflow Hose (figure 8).

figure 6

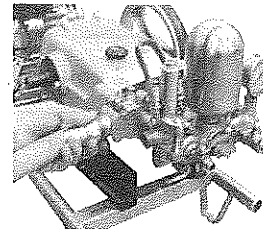


figure 7

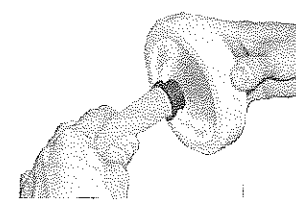
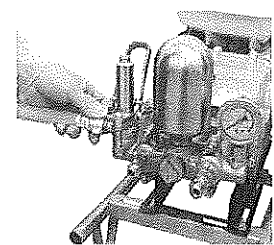


figure 8



2. Connecting High pressure delivery Hose with Ball Cock (figure 9) then connecting Spray Gun at the side of High pressure Hose (figure 10) please add a ball cock between the High pressure Hose and Spray Gun .

figure 9

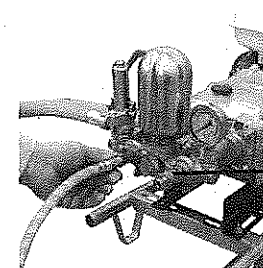
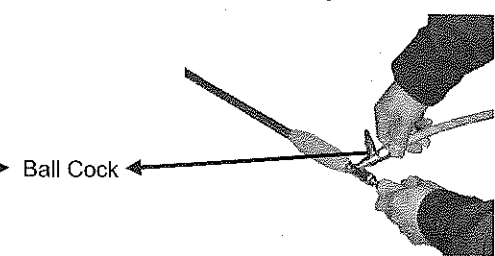


figure 10



3. Fixing regulating screw like (figure 11), all prepared as figure 12).

figure 11

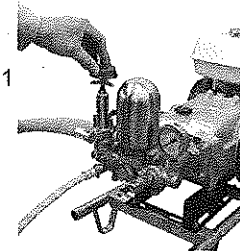
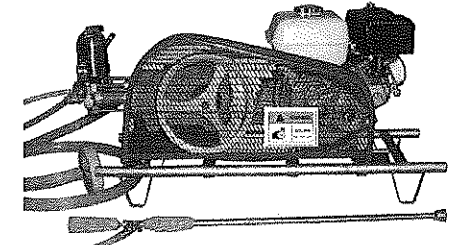


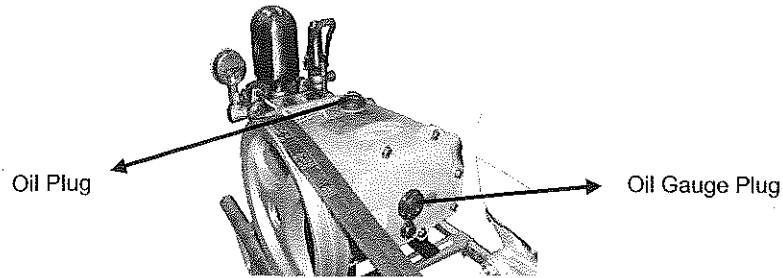
figure 12



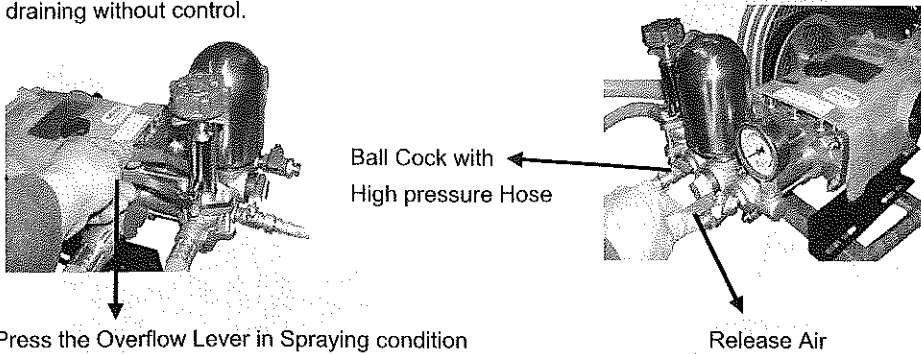
5.3 Preparing for Spraying

1. Please check the Voltage that follow the specification of Electric Motor used, and make sure all safety caution when the Power used Electric Motor.
2. Please check the engine Oil and use right of fuel that follow the manual instruction of maker of Engine, always keep away fire source that for safety reason.
3. Wrong Engine Oil used is dangerous which might cause the Engine damaged.
4. Keep away from around of Muffler which will heating while the Engine is run.

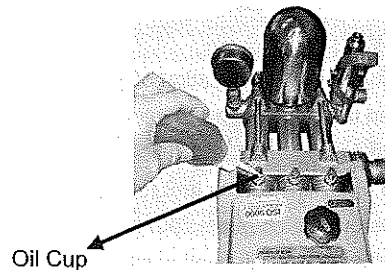
5. Check the Oil of Sprayer from the Oil gauge, that level of Oil have to be in half co if less please fill Oil to suitable level or draining Oil contrary, please use SAE#40 of Oil.
6. Please keep suitable Oil level which for consider the life of Sprayers.



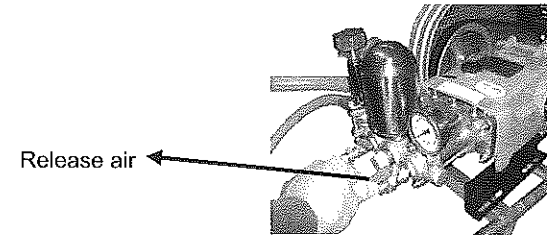
7. Start the Electric Motor or Engine then move the Overflow Lever in Spraying condition then adjust pressure from regulating screw and check the pressure from pressure gauge please follow the specification of each models for the rages of pressure, don't over use the pressure than Max. pressure, then open the Ball Cock to release the air that inside of Chamber of Sprayer and waiting about 5 sec. then close immediately, then open the Ball Cock of contacting High pressure Hose, please make sure the other side of High pressure Hose of Ball Cock is in close condition that for avoid any accident of Chemical liquid draining without control.



8. Add some Oil (SAE#30) into the Oil Cup for every time of use which for lubricate to Oil Seal.



9. Please open the Ball Cock again for release air while you found the Suction are unsteady.

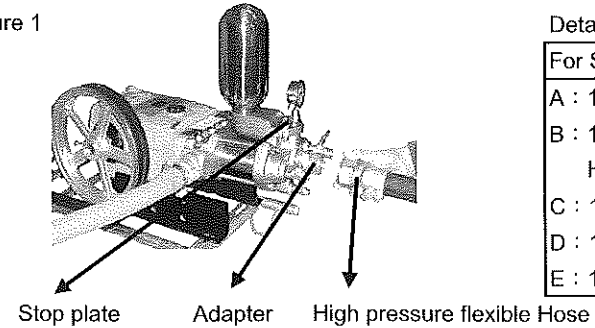


10. Please use fresh water to clean Chemical Tank, Sprayer, High pressure Hose, Sprayer Gun Please dispose the procedure in particular place that should be isolated and can't impact the environment , please follow the regulation of local government regarding the dispose of waste Chemical Liquid.

5.4 Instruction for Irrigation

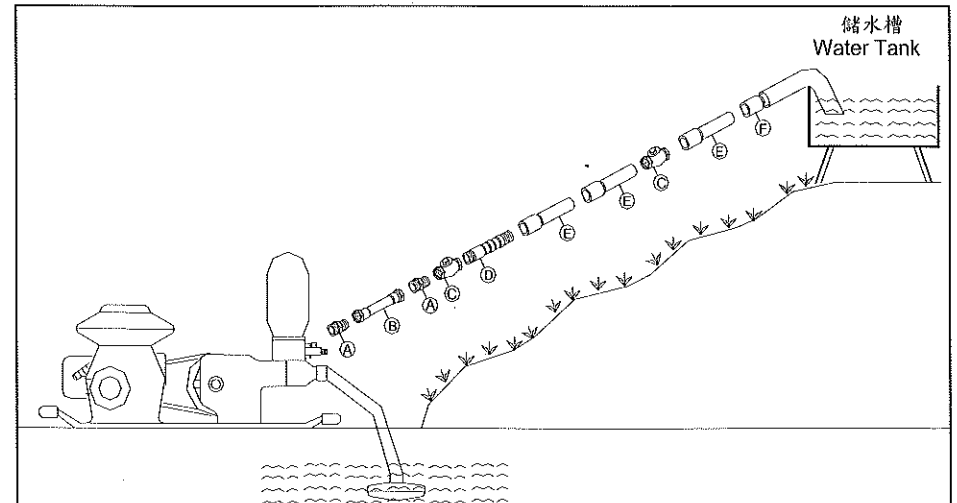
1. For irrigation that please fit the Stop plate from the Overflow port. (figure 1) °
2. Fixing Adpater then connecting High pressure flexible Hose (figure 1) °

figure 1



Details

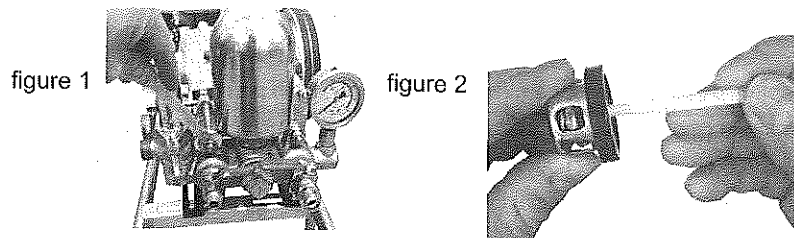
For SB-458 of Pump
A : 1-1/4"Adapter
B : 1-1/4"High pressure flexible Hose
C : 1-1/4"Check Valve
D : 1-1/4"PVC Pipe(thread)
E : 1-1/4"PVC Pipe



6. Generally repair

6.1 Cleaning or replacement for Valve Ass'y

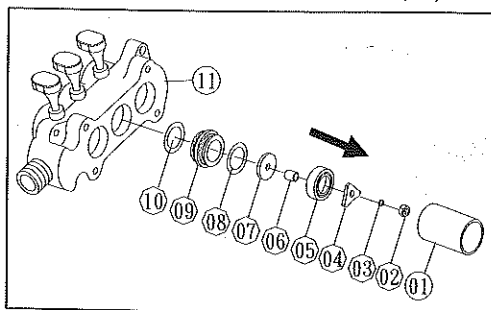
1. Use Tool to loose the Screw of Discharge chamber (figure 1), then take off Valve Ass'y and checking (figure 2), if damaged replace new one.



6.2 Replace Piston

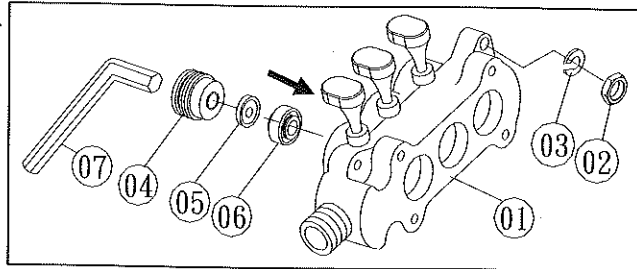
1. Disassemble Piston Bush (01), loose the Nut (02) then can replace part of Piston (05), Tringle washer (04) and Washer (07), Plunger Bush (06), Cylinder Bush Jointer (09).

Caution: The V-Groove of Piston (05) have point to the direct of Arrow when replace it there are no suction function when the direction of Piston (05) is wrong.



2. Loose the nut (02) then disassemble the Suction metal (01) use Wrench of hexagonal head (07) and loose the Water Ring Box (04) could be replace Washer Felt (05) and Water Seal (06) -

Caution: The side of Water Seal (06) where with a Spring should be point to the direct of Arrow.



6.3 Replace Crank Case, Crank Shaft, Connecting Rod

1. Use Tool loose the screw of Oil Seal Cover (figure 1) loose the screw of Crank Case Cover (figure 2).

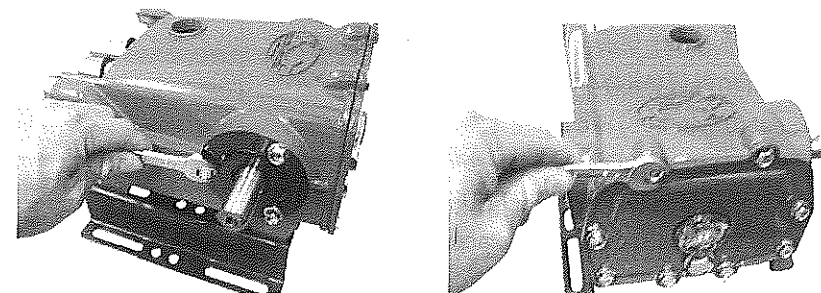


figure1

figure2

2. Use T tool to loose the screw of Connecting rod (figure 3), the Connecting Rod should be one by one can't mixed to each other (figure 4, 5) which to avoid block, then replace Plungers Connecting Rod, Pin, Bearing, Oil Seal if required. (figure 5).

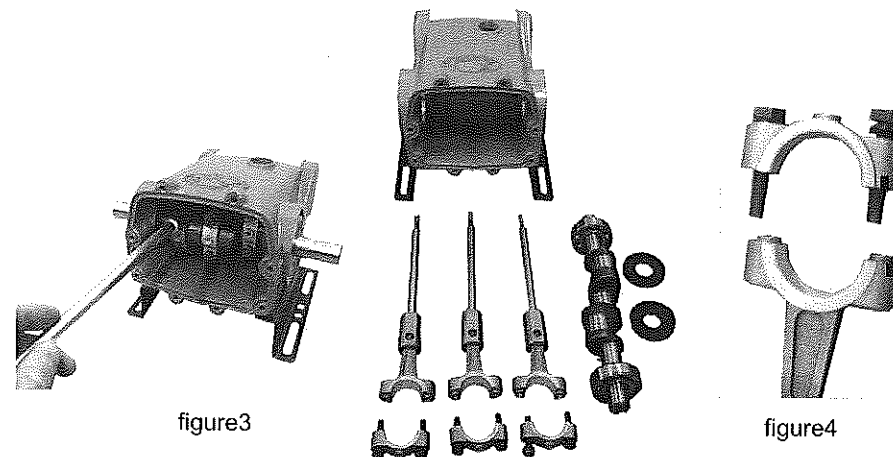


figure3

figure5

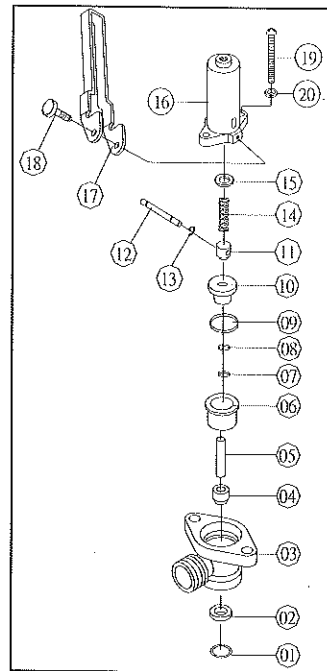
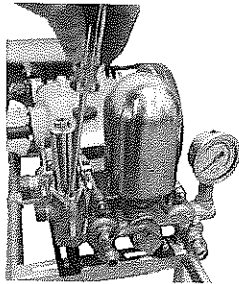
figure4

6.4 Safety Valve replacement

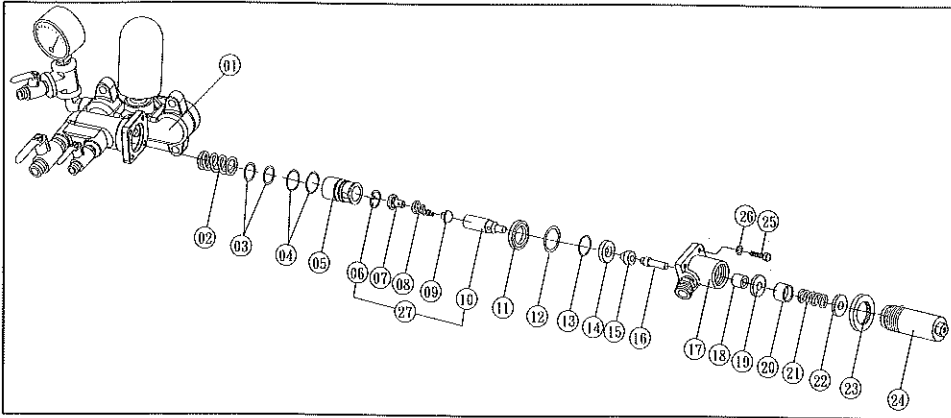
Generally Safety Valve

1. Use Tool to loose screw of Spring Box (16), then replace the parts of Safety Valve that Valve Seat(02), Valve Seat Ring(01), Valve(04), Valve Bar(05), Water Seal Cup(06) Seal Seat(10) and the O-Ring of in side Seal Seat (07) and (08) like figure 1.
2. Disassemble the Clip(13) and take off Pin(12) could be replace Under Metal(11) Spring(14) Upper Metal(15) ect. Loose the Screw(18) could be replace Lever (17) or Spring Box (16)

figure 1



Auto safety Valve SB-528A

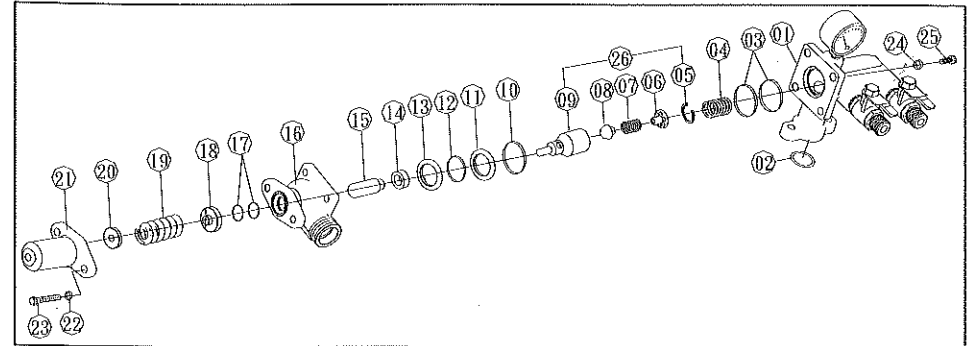


1. When the Sprayer can't release pressure automatically, check high pressure Hose's fitting whether have leakage first, if no leakage please loose screw (25) of Overflow Body (17) then use Pincers take out Push Bar(27) and take off inside of parts that (06,07,08,09) check it whether some things blocked, if yes please cleaning it and re-assemble it. If the parts of (06,07,08,09,10) are damaged please replace new one and re-assemble again.

ENGLISH-14

2. Please check the Spring(02) when the Push Bar's function all are well without damaging because no Auto release pressure function that some time caused by the Spring(02) broken if broken please replace new one.
3. If the pressure can't adjusting easily or no pressure, please follow the procedure as:
 - 3.1) Dis-assemble the Overflow Body (17) and check the Valve seat (14) and Valve (15) whether have some things blocked there, if yes please cleaning it and re-assemble, if there are parts damaged please replace a new one.
 - 3.2) Check the Pressure Spring (21) if broken please replace new one.

Auto safety Valve SB-468

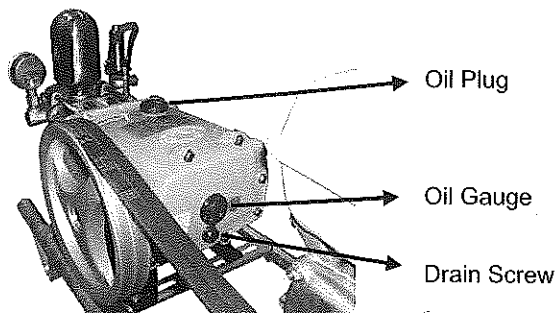


1. When the Sprayer can't release pressure automatically, check high pressure Hose's fitting whether have leakage first, if no leakage please loose screw (25) of Discharge Metal (01) then use Pincers take out Push Bar(26) and take off inside of parts that (05,06,07,08) check it whether some things blocked, if yes please cleaning it and re-assemble it. If the parts of (05,06,07,08,09) are damaged please replace new one and re-assemble again.
2. Please check the Spring(04) when the Push Bar's function all are well without damaging because no Auto release pressure function that some time caused by the Spring(04) broken if broken please replace new one.
3. If the pressure can't adjusting easily or no pressure, please follow the procedure as:
 - 3.1) Dis-assemble the Discharge Metal (01) and check the Valve seat (13) and Valve (14) whether have some things blocked there, if yes please cleaning it and re-assemble, if there are parts damaged please replace a new one.
 - 3.2) Loose the Screw (23) then check inside of Spring(19) if damaged replace new one.

ENGLISH-15

7. Generally Maintenance

1. Please replace Oil when first use of 10~50Hours then each 70 hours of operation repalce Oil again. Please use SAE#40 of Oil.
2. Loose the Drain Screw for draining the Oil used,(Please don't make Oil spill out side which might impacting the environment) after dirty Oil drained out please lock the Drain Screw then fill Oil intothe Crank Case and check the level of Oil from Oil Gauge in half condition.
3. Please follow the regulation of local government for disposing dirty Oil.

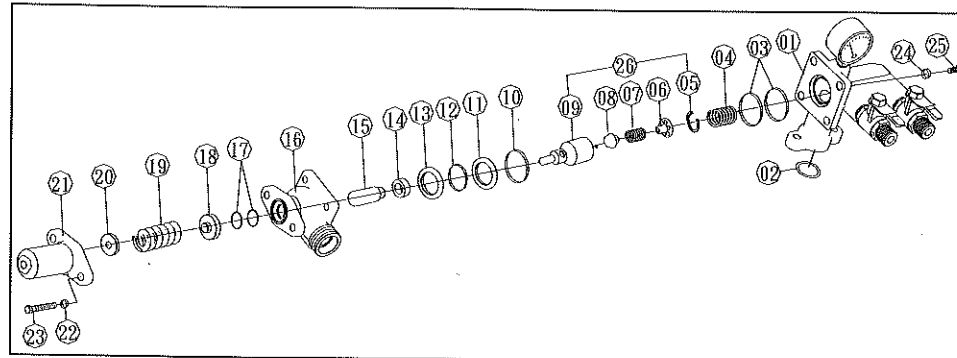


4. Please use fresh water to clean the Chemical liquid in side of Sprayer of accessories like Hose, Spray Gun for every time of use, the place where cleaning Chemical liquid have to make sure and isolated that disposed liquid will not impacting to Soil, Fields, River,Water source or any possible to impacting the environment, please follow the regulation of local government regarding dispose the Chemical liquid.
5. Please check the Dia. of Nozzle plate for each 100 hours of used, replace new one while the orifice of Nozzle plate coming bigger, which will cause over spraying and effecting the environment.

8.Trouble shooting

Trouble	Countermeasure
Poor discharge Unsteyadable Pressure	<ol style="list-style-type: none"> 1.Check the Hose Fitting whether loose, then tight it as well. 2.Check the Strainer whether blocked and clean it. 3.Open the Ball Cock to draining the Air in side of Sprayer 4.Dis-assemble the Suction and Discharge Chamber for check the Valve assemble , cleaning it or replace them.
Poor pressure or no pressure	<ol style="list-style-type: none"> 1.Check the pressure from Pressure Gauge, and make suitable pressure, from pressure regulator. 2.Check V-Belt and make suitable tension. 3.Check the discharge Hose whether damaged then replace new one.
Water leaking	<ol style="list-style-type: none"> 1.Disassemble the Piston Bush then check the Water Seal, and the Bush, if damaged please replace new one. 2.Please check the Ring of Seat of Piston Bush if damaged replace new onw please.
For models with Auto Safety Valve No pressure auto release function	<ol style="list-style-type: none"> 1.Check the Push Bar(26) in side of Parts(05,06,07,08), cleaning them or replace. 2.The parts (08) or (09) damaged then replace it. 3.Check the Spring(07) if broken replace it. 4.Open the Overflow Body (16) and push the Push Bar(26) by hand if can't move easily then take off the Push Bar from the metal (01) and check the Push Bar as NO.1 shown, then check the O-Ring(03) if damaged replace it, for re-assemble that add some Grease into the inside of Bush of Push Bar for lubrication purpose and re-assemble them again.

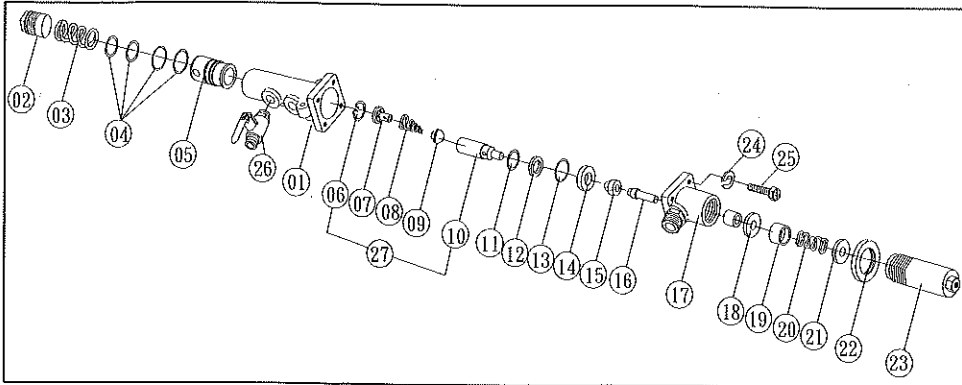
SB-468



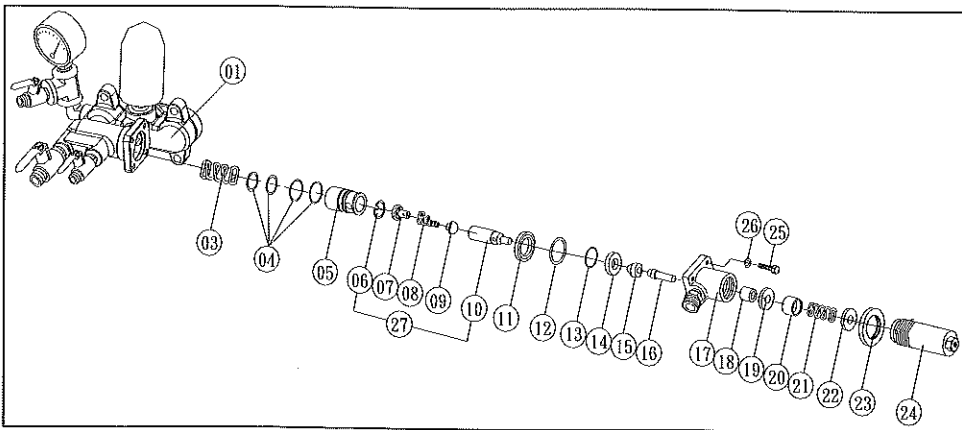
8 Trouble shooting

For models with Auto Safety Valve	1. Check the Push Bar(27) in side of Parts(06,07,08,09), cleaning them or replace.
No pressure auto release function	2. The parts (09) or (10) damaged then replace it. 3. Check the Spring(08) if broken replace it. 4. Open the Overflow Body (17) and push the Push Bar(27) by hand if can't move easily then take off the Push Bar from the metal (01) and check the Push Bar as NO.1 shown, then check the O-Ring(04) if damaged replace it, for re-assemble that add some Grease into the inside of Bush of Push Bar for lubrication purpose and re-assemble them again.

SB-428A



SB-528A



9. Storage

- ** For lone time of storage please keep in dry and well ventilation place which kid or any animal can't touch the machine also be considered.
- ** Please use fresh water to cleaning inside of Chemical solution that Sprayer, Hose, Spray Gun.
- ** Power with Engine that please follow the instruction provided by Engine maker for long time of storage.

10. Disposal

When disposing your machine, please follow the regulation of local government.

11. Limited guarantee

- ** The manufacturer should any failure occur on the product under normal operating conditions within the applicable guarantees period, the failed part will be replaced or repaired free of charge by a LU SHYONG authorized dealer, when in doubt, please ask the vendor of the machine.
- ** You will understand that we can't be liable for damage resulting from these causes as:
 - 1) Non-compliance with operating instructions.
 - 2) Neglecting required maintenance and repair job.
 - 3) Wear from normal use.
 - 4) Obvious overload by continuously exceeding the upper performance limit of the machine.
 - 5) Using non-approved Power or Tools.
 - 6) Improper treatment, use of force misuse and accidents.
 - 7) Attempted adjustments and repairs by non-qualified persons.
 - 8) Use of unsuitable spare parts or non-original parts if such parts are the cause of the damage.
 - 9) Damage caused by using the machine in the hire or rental industry.

In the best interest of continued technological progress we reserve the right to change the design and configuration of any product without prior notice. For that reason, no claims can be accepted with reference to text and illustrations in this manual.

Memo

Memo