

BS-Series

Battery Sprayer Pump

Mod.

MASPRA BS-17-BP



WARNING!!! Read all instructions carefully before assembling components and operating sprayer. Incorrect procedure could result in damage to the unit, severe personal injury and/or property damage. When spraying flammable materials, sprayer must be placed at least 20 feet from target in a well-ventilated area. Vapours can be ignited by static discharge or electrical sparks and result in severe personal injury. Airless sprayers generate high fluid pressure. Improper use could result in an injection injury.

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1. General Information

The following use and maintenance manual is an integral part of the machine and must always be available to the personnel responsible for its use and maintenance. The operator and the personnel responsible for handling the machine must know the contents of the manual. The descriptions and illustrations contained in the manual are not to be considered binding. Although the main characteristics of the machine described in this manual are not subject to modifications, Gemini GmbH reserves the right to modify at any time those components, details and accessories that it deems necessary to improve the machine or to satisfy construction or commercial needs without update this manual immediately.

**WARNING**

ALL RIGHTS RESERVED. The reproduction of any part of this manual, in any form, without the prior written authorization of Gemini GmbH is strictly prohibited. The contents of this manual may be modified without notice. Great care has been taken in collecting and checking the documentation contained in this manual in order to make it as complete and understandable as possible. Gemini GmbH equipment is not designed to operate in areas at risk of fire and/or explosion. For problems or information call the Gemini GmbH technical service or your local retailer.

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**WARNING:**

The original configuration of the machine must not be modified in any way. Upon receiving the machine, make sure that:

- The packaging is intact and undamaged.
- The supply corresponds to what was ordered.
- In case of damage, contact Gemini GmbH

2. Reminder

Read the information on the paint container label to determine if the paint is a flammable oil-based paint. Please ask the supplier for the safety data sheet (SDS). The container label and SDS will describe the composition of the paint and the specific precautions associated with it. Paint, coating and cleaning materials can generally be divided into 3 basic types:

Types of flushing and cleaning materials



Water-Based: The container label should state that the material can be cleaned with soap and water. This sprayer is NOT compatible with harsh cleaners such as chlorine bleach.



Oil-Based: The container label should indicate that the material is flammable and can be cleaned up with mineral spirits or paint thinner. The SDS must indicate that the material has a flash point above 100° F. This sprayer is compatible with this material.

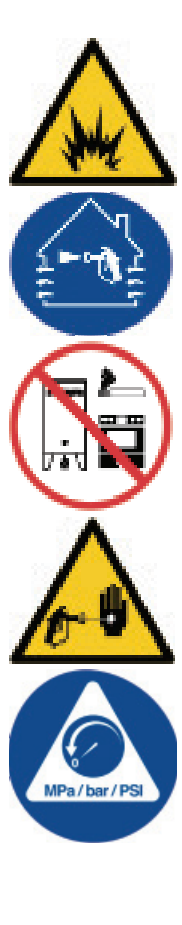



Use oil-based materials outdoors or in a well-ventilated (fresh air circulation) indoor area. See Safety Warnings in this manual.



Flammable: These materials contain flammable solvents such as xylene, toluene, naphtha, methyl ethyl ketone, paint thinner, acetone, denatured alcohol, and turpentine. The container label should state that this material is flammable. Flammable paints should be used outdoors or in well-ventilated indoor areas with fresh air circulation.

Such materials are NOT compatible with this sprayer and should not be used.

3. Warning

	<p>FIRE AND EXPLOSION HAZARD</p> <p>Flammable fumes, such as solvent and paint fumes, in work area can ignite or cause an explosion. To avoid fire and explosion:</p> <ul style="list-style-type: none"> • Do not spray flammable materials near open flames or ignition sources such as cigarette butts, motors, and electrical equipment. • Do not use paints or solvents containing halogenated hydrocarbons. • Keep the spray area well ventilated. Make sure there is plenty of fresh air throughout the area. • Sprayer creates sparks. Keep spray pump assembly in a well-ventilated area when spraying, flushing, cleaning, or servicing. Do not spray the pump assembly. • Do not smoke in the spray area or spray when sparks or flames are present. • Do not operate light switches, engines, or other products that create sparks in the spray area. • Keep the area clean and free of paint or solvent containers, debris, and other flammable materials. • Know the ingredients of the paints and solvents you spray. Read all Safety Data Sheets (SDS) and container labels provided with the paints and solvents. Follow the paint and solvent manufacturers' safety specifications. • Always have an effective fire extinguisher available in the work area. <p>Oil-based and flammable materials</p> <p>Static electricity can be generated by paint or solvent flowing over the surface of the equipment. Static electricity can cause a fire or explosion hazard in the presence of solvent or paint fumes. To prevent fire and explosion when spraying flammable or oil-based paints, do the following:</p> <ul style="list-style-type: none"> • If static sparking occurs or static charge is felt, stop operation immediately. Do not use sprayer until the problem has been found and corrected. • All spray system parts, including pumps, hose assemblies, spray guns, and objects in and around the spray area should be properly grounded to prevent static discharge and sparks.
	<p>High-Pressure Aluminum Parts Danger</p> <p>Use of fluids incompatible with aluminum in pressurized equipment can cause severe chemical reaction and equipment rupture. Failure to follow this warning can result in death, serious injury, or property damage.</p> <ul style="list-style-type: none"> • Do not use 1,1,1-ethyl chloride, methylene chloride, other halogenated hydrocarbon solvents or liquids containing these solvents. • Do not use chlorine bleach. • Many other fluids may contain chemicals that react with aluminum. Contact your material supplier for chemical compatibility information.
	<p>Toxic liquid or fume hazards</p> <p>Toxic fumes can cause serious injury or death if inhaled, ingested, or splashed in eyes or on skin.</p> <ul style="list-style-type: none"> • Read the Safety Data Sheet (SDS) and familiarize yourself with the specific hazards of the fluid you are using. • Hazardous fluids must be stored in specified containers and disposed of in accordance with relevant regulations.
	<p>Personal protective equipment</p> <p>Wear appropriate protective equipment when in the work area to prevent serious injury, including eye damage, hearing loss, inhalation of toxic fumes, and burns. This protective equipment includes but is not limited to:</p> <ul style="list-style-type: none"> • Protective glasses and hearing protection. • Use respirators, protective clothing, and gloves as recommended by the fluid and solvent manufacturers.

4. Spraying




Take a few minutes before you spray to review these simple tips to ensure your spray project goes smoothly.
NOTE: For proper spraying, select a low pressure, high efficiency nozzle.

Flow control:

The flow control allows precise pressure regulation. To reduce overspray, start spraying at the lowest speed and then increase speed to the minimum setting required to produce the desired spray pattern.

Nozzle and pressure selection

See table below for recommended spray pressures for materials. Refer to paint (material) instructions for manufacturer recommendations.

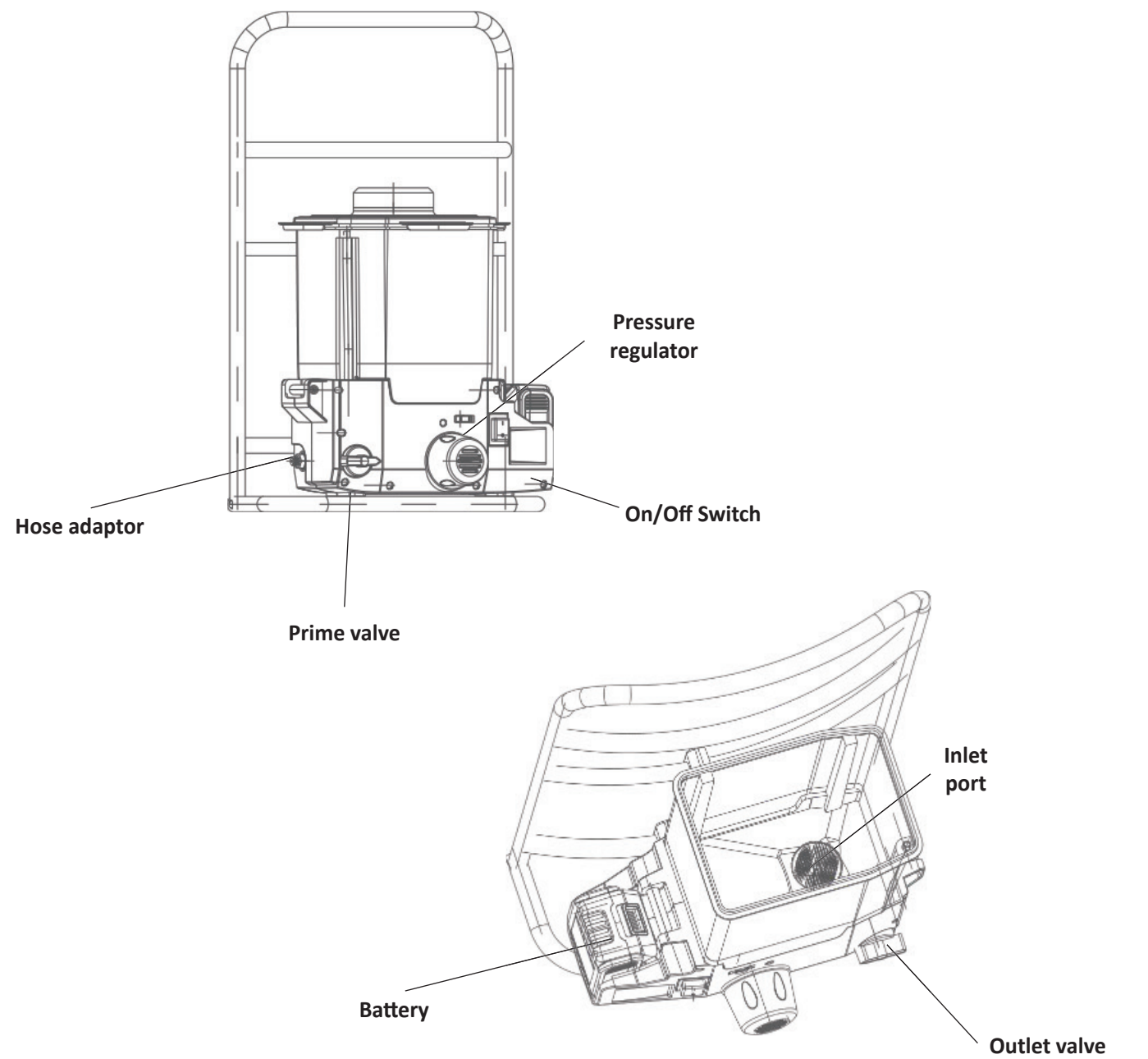
	Material type					
	Indoor Stains / Indoor & Exterior Clearance	Outdoor stain paint	Enamel paint	Primer	Interior latex paint	Exterior latex paint
Flow control	1-3	2-5	3-6	5-6	5-6	5-6
Nozzle size						
0.008 in (0.20 mm)	•					
0.010 in (0.25 mm)	•	•				
0.012 in (0.30 mm)		•	•			
0.014 in (0.36 mm)		•	•	•	•	
0.016 in (0.41 mm)			•	•	•	•

Nozzle direction

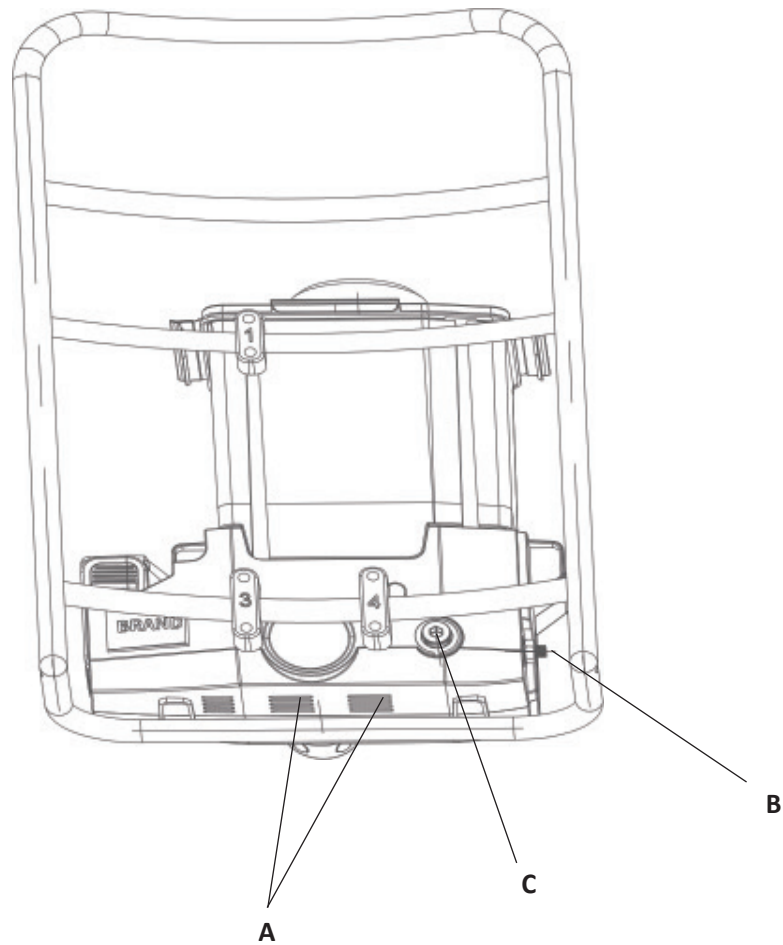
To avoid serious injury from skin injection, do not put your hands in front of the nozzle or nozzle guard.



5. Main parts



Technical Data			
Brushless Motor	500 W	Max.Nozzle Size	0.017"
Battery	4.0Ah	Hopper	6L
Battery nominal voltage	18V	Battery max. charge voltage	21V
Max.Flow	1.2L/min	Max.WP	150 Bar



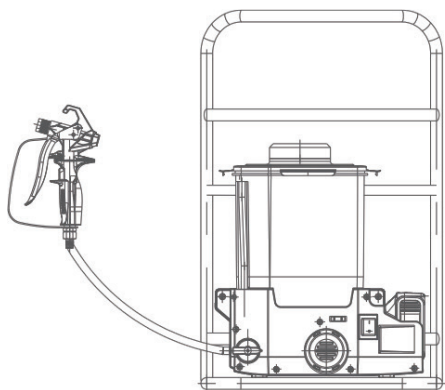
Leakage at point	Reason	Solution
A	The seal is worn; The return pipe is loose.	Replace the seal assembly; Open the casing and check the return pipe. If it is damaged, replace the return pipe.
B	The hose adaptor is loose; The high-pressure pipe is improperly connected.	Reinstall the hose adaptor with nut glue; Tighten the high-pressure pipe with wrenches.
C	The seal of outlet valve is worn;	Replace the seal.

6. Preparation

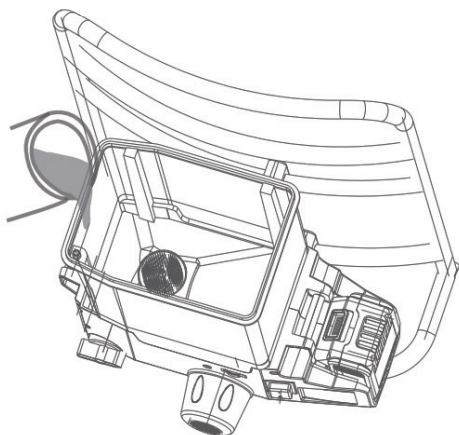
Set-up the sprayer

This machine has an electronic pressure protection switch, which can be adjusted by a pressure regulator switch if the pressure fluctuates during use.

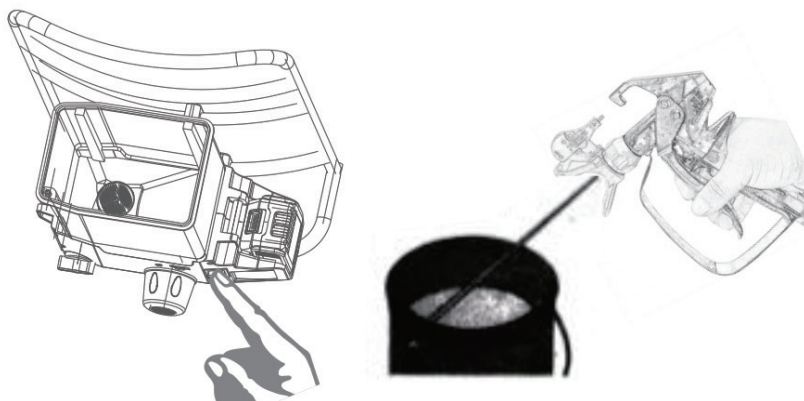
1. Connect the high-pressure tube and the spray gun, and plug in the lithium battery.



2. Fill the hopper with water and close the lid.

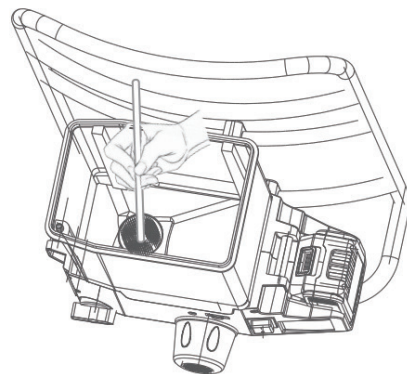
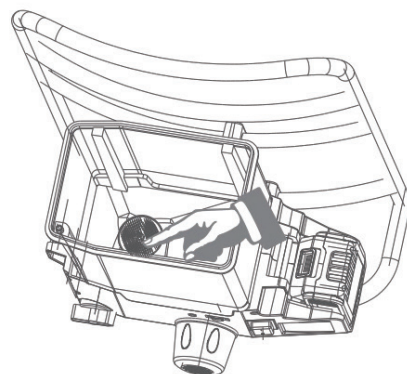


3. The return valve of this machine is an auxiliary component, to return and exhaust air, just turn on the power switch, hold the trigger of the spray gun, reverse the nozzle to the dredging position, and then face the waste area.



4. After the machine is pressed up, the operation can be repeated for each feeding.

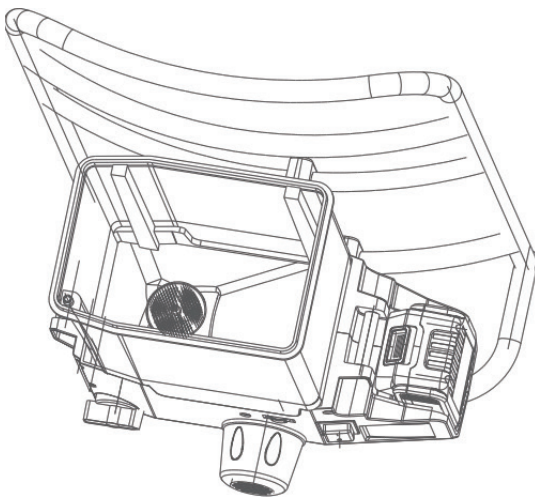
5. If the spray gun cannot spray after the above operation, you can press the center of the filter to push down the ball valve, or remove the filter and use a 6mm fine wire to check whether the ball valve rotates freely. If the ball valve cannot rotate freely, repair the feed valve.



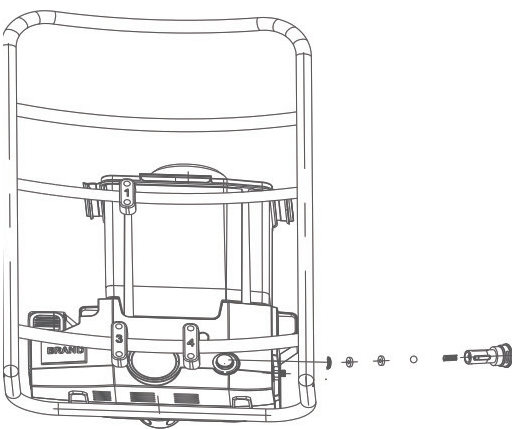
7. Maintenance

This machine has an electronic pressure protection switch, which can be adjusted by a pressure regulator switch if the pressure fluctuates during use.

1. Turn off the power switch, unplug the battery, and trigger the gun to release the pressure.
2. Open the hopper lid and remove the feed inlet screw. Clean or replace the feed valve assembly.

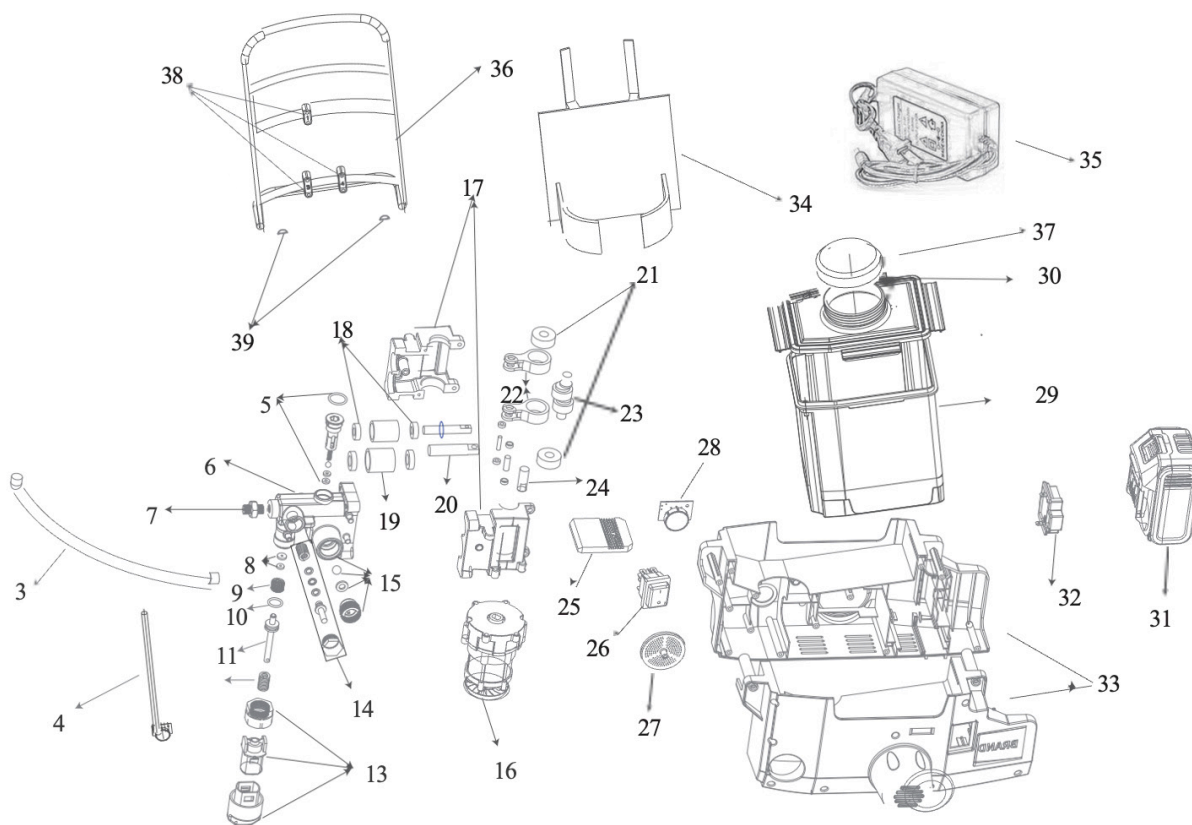


3. Remove the outlet valve, clean it and check if there is any damage, or replace the outlet valve.



4. If the pressure is too low after replacement for the above problems, please contact the seller.

8. Parts list



Pos.	Description	Part. No.	Pos.	Description	Part. No.
3	Hose	MA-BS17#3	22	Connecting rod	MA-BS17#22
4	Return pipe	MA-BS17#4	23	Connecting rod assy	MA-BS17#23
5	Outlet valve assy	MA-BS17#5	24	Pin	MA-BS17#24
6	Pump body	MA-BS17#6	25	Circuit board	MA-BS17#25
7	1/4"adapter	MA-BS17#7	26	ON/OFF switch	MA-BS17#26
8	Valve seat, prime	MA-BS17#8	27	Filter	MA-BS17#27
9	Nut, prime	MA-BS17#9	28	Pressure knob	MA-BS17#28
10	O-ring	MA-BS17#10	29	Hopper	MA-BS17#29
11	Rod,prime	MA-BS17#11	30	Hopper cover	MA-BS17#30
12	Spring	MA-BS17#12	31	Battery	MA-BS17#31
13	Prime valve handle shell	MA-BS17#13	32	Buckle for battery cover	MA-BS17#32
14	Pressure switch	MA-BS17#14	33	Frame	MA-BS17#33
15	Inlet valve assy	MA-BS17#15	34	Strap	MA-BS17#34
16	Brushless motor	MA-BS17#16	35	Charger	MA-BS17#35
17	Crankshaft bracket	MA-BS17#17	36	Bracket	MA-BS17#36
18	Seal	MA-BS17#18	37	Lid for hopper cover	MA-BS17#37
19	Sealing sleeve	MA-BS17#19	38	Connecting buckle,bracket	MA-BS17#38
20	Plunger, set	MA-BS17#20	39	Connecting buckle,strap	MA-BS17#39
21	Bearings	MA-BS17#21			

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