SPRAY EQUIPMENT

INSTRUCTIONS AND PARTS LIST

This instruction manual contains IMPORTANT,
WARNINGS AND INSTRUCTION THAT MUST BE READ
BEFORE OPERATING THE PUMP

HYDRAULIC RATIO 50:1

MODELS BUD G50/200

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OPERATING INSTRUCTIONS LEAFLET

Air-operated Grease Pump

(1) Instructions

(a) The pump is a reciprocating pump with double action desing allows for dispensing product on both the up stroke and down stroke to provide steady and continuous delivery.

(b) Two strokes only one exhasust at down stroke dead point.

(c) With 50 to 1 pressure ratio, i.e. use 5 kg/sq.cm (70 psi) air input pressure then can get 250 kg/sq.cm (3500 psi) fluid output pressure.

CAUTION

Always keep lubricants clean and covered to prevent dirt damaging bearing of equipment or clog the pump.

WARNING

Never run pump with air motor plate removed.

(2) Specifications

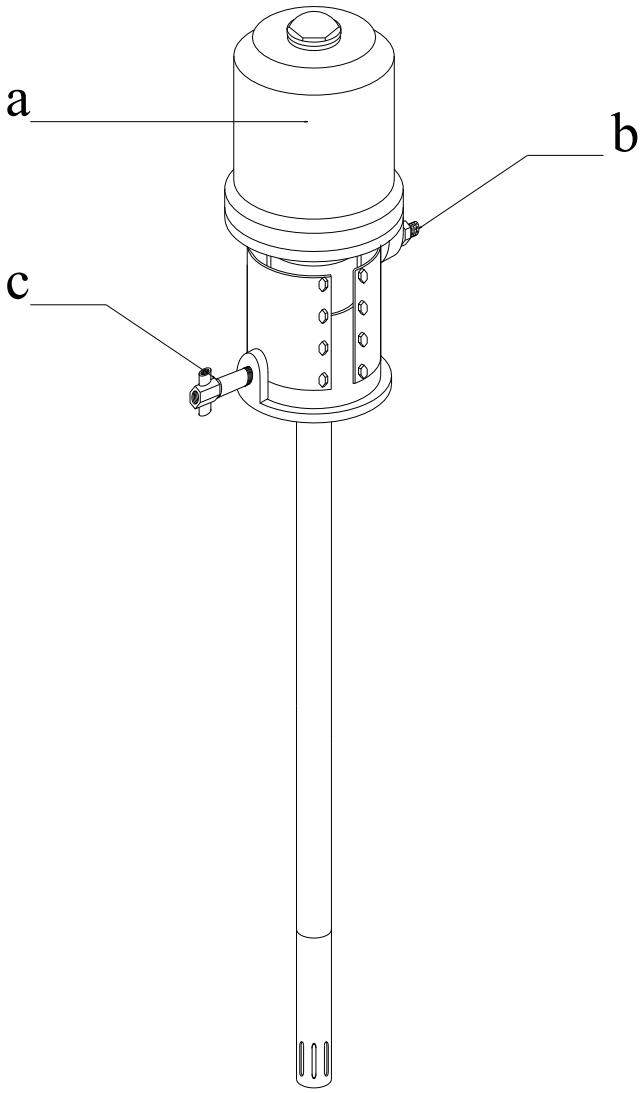
(a) 4-1/4'' I.D., 2-3/4'' stroke air motor.

(b) Pressure ratio: 50:1

(c) Recommended operating pressure: 5-8 kg/sq.cm (70-115 psi)

(d) Delivery rate: 2.24 kgs per minute at 6 kg/sq.cm

(e) Capacity: suitable for 180 kgs original drum.



a. 4-1/4''I.D. Air Motor
b. Quick Detach Air Coupler
c. Fluid Outlet Connector

(3) Operation

(a) Joint the air line into Air Coupler

(b) If use Air Pressure Regulator, set the pressure within 5-8 kg/sq.cm (70-115 psi) and will get 250-400 kg/sq.cm (3500-5750 psi) fluid output pressure.

(c) The Pump will stop automatically when the resultant force at two terminals of Pump are in equilibrium.

(d) If your air line system doesn't set oiler for lubricating air. For daily, manual lubrication, disconnect the Quick Detach Air Coupler, place about 15 drops of light machine oil in the air inlet, reconnect the hose and turn on the air supply to blow oil into the Motor.

(e) Always turn off power to Pump and release all pressure in system before disconnecting or servicing any parts of system. At reassembly, be sure to tighten all threaded connections securely.

(f) Never allow the Pump to run dry of material. A dry Pump will quickly accelerate to a high speed, possibly damaging itself. If your Pump accelerate quickly or is running to fast, stop it immediately and check the material supply. If the supply container is empty and air has been pumped into line, prime Pump and line with material.

(4) TROUBLE DIAGNOSIS

(I) When Pump runs.

(A) Low output pressure or delivery.

(a) On up stroke - 1.Check 19 (fig.3) Valve seat within 6 (fig.3) Coupling.
2.Check 10 (fig.3) Packing.

(b) On down stroke - 1.Check 19 (fig.3) Valve Seat within 13 (fig.3) Check Valve Packing Retainer.
2.Check 12 (fig.3) Packing & 11,12 (fig.3) Guide.

(c) On both strokes - 1.Insufficient air pressure - Increase air pressure.
2.Refer to (I) (B).
3.Refer to (I) (A) (a) & (I) (A) (b).
4.Replace 8 (fig.3) Guide, 9 (fig.3) Washer, 10 (fig.3) Packing, 11 (fig.3) Guide, 12 (fig.3) Packing & 14 (fig.3)Guide. If 34 (fig.2) Packing or 33 (fig.2) Bearing worn-out, replace it.

(B) No lubricant delivery

(a) Lubricant drum may be empty - Replenish lubricant or replace with new lubricant drum.

(b) Lubricant is too heavy to absorb - Use 81921 or 81922 Follower Plate (to be ordered separately) or thin it with clean machine oil.

*(c) The Fluid line within Pump is being clogged by foreing matter.
- Clean the fluid line of 6 (fig.3) Coupling, 13 (fig.3) Check Valve Packing Retainer, 15 (fig.3) displacement Tube.

(II) When Pump fails to run

(A) Continuous air leakage from exhaust.
Check Air Motor - Check 24 (fig.2) Lockwire, 11 (fig.2) Stem Valve, 25 (fig.2) Adjusting Nut, 28 (fig.2) Puppet Rubber Valve, 12 (fig.2) O-ring & 16 (fig.2) O-ring.

(B) No air leakage.

(a) Check air supply line - 1. Air line is being clogged.
2. Insufficient air pressure - Increase air pressure.

*(b) Pump is stopped by foreing matter between 18 (fig.3) Priming Tube & 17 (fig.3) Priming Plunger.
- Loosen 18 (fig.3) Priming Tube and clean 15 (fig.3) Displacement Tube, 18 (fig.3) Priming Tube, 17 (fig.3) Priming Plunger.

* A 40651 Strainer is recommended to prevent foreing matter clog Pump.

(5) MAINTENANCE

The pump will be reparaid by replacement or adjustment for only the necessary parts in judgement from out-looking troubles on the pump and unnecessary disassembly should be avoided. In some long time use, it may be required to overhaul the pump so as to remedy decreasing efficiency caused by worn packing and others. If you are using a repair kit to service the pump, use new parts, even if the old one look good. The old parts will wear faster making pump service needed again sooner. Use 40650 Repair Pack for Air Motor, 8040660 Repair Pack for Displacement Tube.

(6) DISASEMBLY AND REASSEMBLY

(a) For Displacement Pump (fig.3).

Clamp 18 (fig.2) Air Motor Base in a vise and screw 18 Priming Tube off 16 Packing Retainer. Put a rod through the hole of 15 Displacement Tube and screw 17 Priming Plunger off 15 Displacement Tube. Loosen 16 Packing Retainer then use a pipe wrench at the knurl part of 4 Displacement Cylinder to screw it out of 18 (fig.2) Air Motor Base and remove it. Screw 16 Packing Retainer out of 4 Displacement Cylinder and remove 11&14 Guild and 12 Packing. Use a hammer and punch to remove 2 Roll Pin from 13(fig.2) Air Piston Tube then screw 1 Connecting Rod out of 13 (fig.2) Air Piston Tube. Use a rod to screw 15 Displacement Tube out of 13 Check Valve Packing Retainer. Remove 7 Gasket, 19 Valve Seat and 5 Steel Ball, then screw 13 Check Valve Packing Retainer out of 6 Coupling and remove upper 7 Gasket, 19 Valve Seat and 5 Steel Ball. Remove 8 Guide, 9 Washer, 10 Packing. Clean all parts and inspect them for wear or damage. Replace parts as necessary. Lubricate all parts with light waterproof grease and reassembly the Pump. To reassembly, make sure of assembling in reverse order of disassembling method. Be sure to tighten securely.

(b) For Air Motor (fig.2).

Clamp 18 Air Motor Base in a vice. Unscrew 1 Cylinder Cap Nut. Pull Nut up, grip 7 Trip Rod with padded pliers and screw 1 Cylinder Cap Nut off rod. Use a nut (5/16''-18 UNC). Screw in 7 Trip Rod. Remove 19 Bolt holding 3 Cylinder to the base and carefully pull 3 Cylinder Straight up off 10 Piston. Unscrew nut (5/16''-18 UNC) off 7 Trip Rod then screw 1 Cylinder Cap Nut in 7 Trip Rod. Press 1 Cylinder Cap Nut push down on 6 Shuttle to snap the 23 Toggle Arm down. Remove 24 Lockwire from 25 Adjusting Nut, screw the top nuts of 25 Adjusting Nut off and screw 11 Stem Valve off 27 Grommets and bottom nuts of 25 Adjusting Nut. Press 1 Cylinder Cap Nut and put a screw driver under the 23 Toggle Arm, lever it up slowly and carefully. Pull 10 Piston up out of 18 Air Motor Base, remove 32 Throat Packing Nut and take out the 33 Bearing, 34 Packing and 35 Gland. Clean all the parts carefully and inspect for wear or damage. Replace parts as necessary. Check the polished surface of 10 Piston, 13 Air Piston Tube and 3 Cylinder wall for wicks, mars or scratches. Lubricate all parts with a light, waterproof grease and reassembly the Air Motor. To reassembly, make sure of assembling in reverse order of disassembling method.

(7) Contents of Repair Pack

40650 Repair Pack for Air Motor

Nº	Ref.	Description	Q
2	40007	O-Ring	1
9	40023	Spring Clip	2
11	40003	Stem Valve	2
12	40016	O-Ring	1
14	40017	O-Ring	1
16	40018	O-Ring	1
24	40002	Lockwire	2
25	40004	Adjusting Nut	4
27	40098	Grommet	2
28	40001	Puppet RubbeR Valve	2
29	40228	Spring Washer	2

5040660 Repair Pack for Displacement Tube

Nº	Ref.	Description	Q
5	40033	Steel Ball	2
7	40035	Gasket	4
8	40036	Guide, Brass	2
9	40039	Washer	2
10	40038	Packing, Polyurethane	1
11	5040046	Guide, Brass	1
12	5040047	Packing, Rubber	1
14	5040048	Guide	1
19	40034	Valve Seat	2
26	40029	Roll Pin	4
33	5040025	Bearing	1
34	40026	Packing	5

AIR MOTOR

Nº	REF.	DESCRIPTION	Q
1	40006	CYLINDER CAP NUT	1
2	40007	O-RING	1
3	40008	CYLINDER	1
4	40011	TOGGLE PIN	2
5	40005	AIR VALVE BAR	1
6	40010	SHUTTLE	1
7	40009	TRIP ROD	1
8	40032	BOLT	2
9	40023	SPRING CLIP	2
10	40015	PISTON	1
11	40003	STEM VALVES	2
12	40016	O-RING	1
13	5040020	AIR PISTON TUBE	1
14	40017	O-RING	1
15	40019	GASKET	1
16	40018	O-RING	1
17	40218	PLATE	1
18	40022	AIR MOTOR BASE	1
19	40055	BOLT	6
20	40132	BOLT	12
21	40014	ROCKER ARM	2
22	40013	SPRING	2
23	40012	TOGGLE ARM	2
24	40002	LOCKWIRE	2
25	40004	ADJUSTING NUT	4
26	40029	ROLLPIN	1
27	40098	GROMMET	2
28	40001	PUPPET RUBBER VALVE	2
29	40228	SPRING WASHER	2
30	40053	COUPLER	1
31	40054	QUICK DETACH COUPLER	1
32	40021	TTHROAT PACKING NUT	1
33	5040025	BEARING	1
34	40026	PACKING	5
35	5040056	GLAND	1
36	40217	PLATE	1

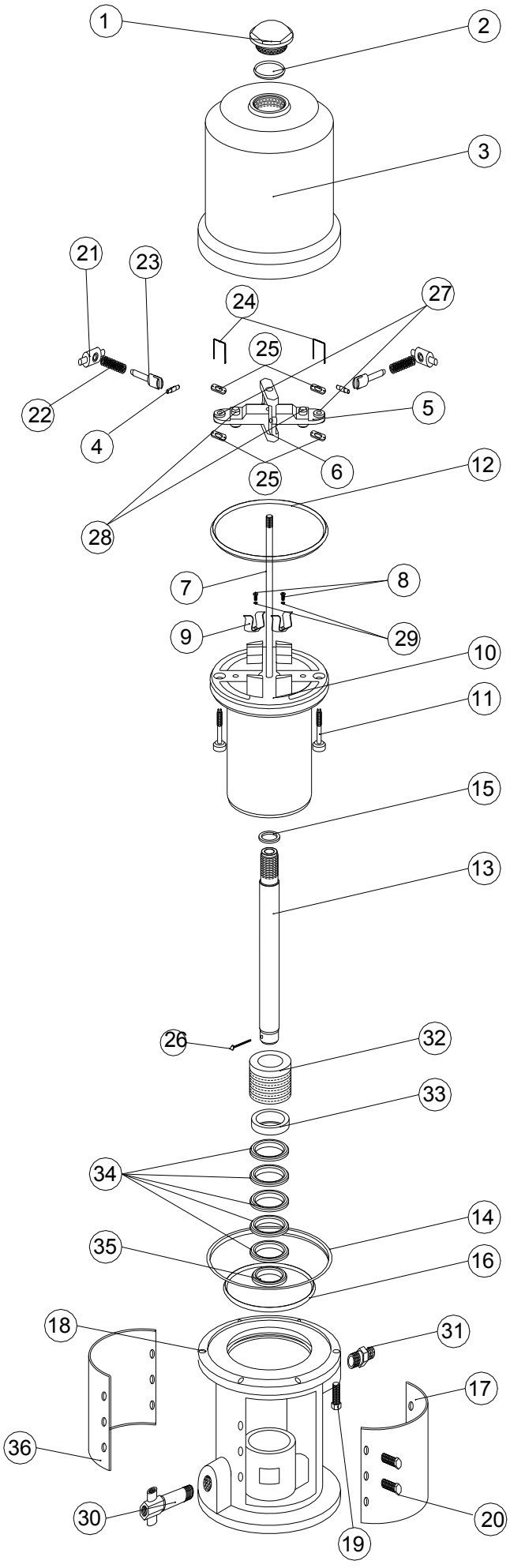
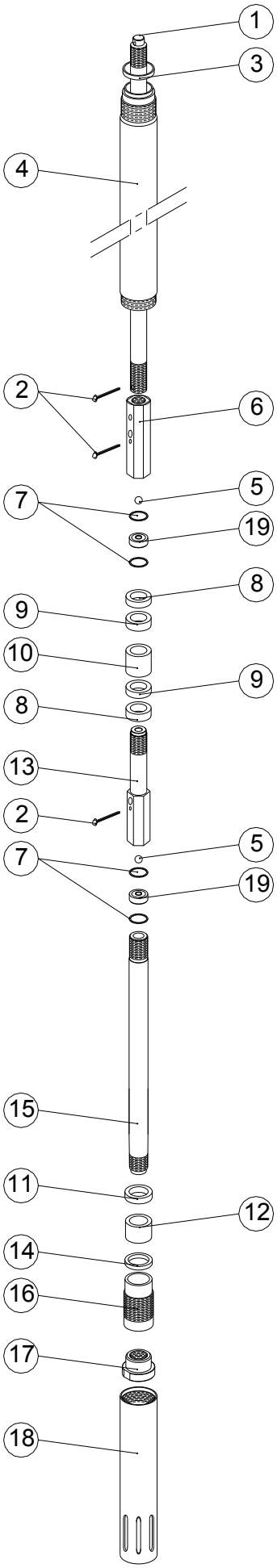


fig. 2

DISPLACEMENT PUMP



(fig.3)

Nº	REF.	DESCRIPTION	Q
1	80030	CONNECTING ROD	1
2	40029	ROLL PIN	3
3	40027	GASKET	1
4	80028	DISPLACEMENT CYLINDER	1
5	40033	STEEL BALL	2
6	40031	COUPLING	1
7	40035	GASKET	4
8	40036	GUIDE	2
9	40039	WASHER	2
10	40038	PACKING	1
11	5040046	GUIDE	1
12	5040047	PAKING	1
13	40041	CHECK VALVE PACKING RETAINER	1
14	5040048	PACKING	1
15	5040050	DISPLACEMENT TUBE	1
16	40049	PACKING RETAINER	1
17	40052	PRIMING PLUNGER	1
18	40051	PRIMING TUBE	1
19	40034	VALVE SEAT	2

WARRANTY

M.B.P., will any repairs necessary during the first 12 months after purchase of a new unit, with the exceptions shown under 1 and 2 below, and under the conditions shown in item 3.

1.- Damage caused by external abuse, customer negligence, or failure to operate the unit in accordance with the instructions supplied with the unit.

2.- Normal maintenance items.

3.- Within the first 12 months after purchase, M.B.P. will pay 100% of the cost of covered repairs.

In no case will M.B.P.liability extend beyond repair or repalacement of the equipment. Such liability is limited to the amount of the original purchase price paid for the unit, minus a reasonable deduction for the time the unit has been in service. It is the responsibility of the purchaser under this warranty to ship or deliver the failed paint sprayer to the authorized service center at the purchaser's expence. Parts or components covered under this warranty may either be repaired or replaced at M.B.P. option.

Equipent not covered by M.B.P. warranty. Accessories or components of equipment sold by M.B.P. that are nort manufactured by M.B.P. are subject to the warranty, if any, of their manufacturer. M.B.P. will provide purchaser with reasonable assistance in making such claims.

The Industry Department of The Basque Goverment, states that all electric and pneumatic airless equipment manufacture by M.B.P. S.L., follows the ''CE'' standards under the number 83/392/CEE.

DECLARACION DE CONFORMIDAD ''CE"
''EC" DECLARATION OF CONFORMITY

MODELO / MODEL BUD G-50/200

Este producto cumple con la siguiente directiva de la Comunidad Europea.

This Product complies with the following European Comunity Directive.

Directiva 2014/34/EU Atex sobre máquinas. (Ex II 2G c T6 X)
Machinery Directive 2014/34/EU Atex Directive. (Ex II 2G c T6 X)

APROBADO POR /
APPROVED BY AITOR ORTIZ

FECHA / DATE

MBP, S.L. figura inscrita en el Registro Industrial del País Vasco con el Nº 01/8030 y cumple los requisitos para el desarrollo de su actividad comercial.
MBP, S.L. is registered in the Industrial Register of the Basque Country with the Nº 01/8030.

CE

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