

PILOT
POWER



**PILOT POWER
SPRAY GUN**

Service Sheet &
List of Spare Parts

AB-16 Pro
AIR BRUSH

Dear Customer,

Thank you for purchasing PILOT Power AIRBRUSH. Every PILOT product guarantees years of customer satisfaction. PILOT Power equipments are unique and are designed for easy use with simple mechanism.

PILOT Power AIRBRUSHES are manufactured using components, which have a very good ratio of weight and strength. Its critically engineered air cap, nozzle and needle achieve a fine uniform spray.

It is widely used by artists for fine art work, photo retouching etc. It is also used for eliminating unwanted details, decorating tags, painting paper cards etc. Its simplistic operation (by pressing the push button) makes it user-friendly for professionals as well as amateurs.

How to use

It is important to eliminate dust accumulated in the hose. You can easily do it by connecting the hose to the air receiver at a working pressure of (1.5 to 4 kgs/cm²).

Pour the required quantity of prepared fluid into the cup and slightly push back the trigger, which will activate the air flow. Retraction of the trigger will start the flow of the fluid. The movement of the trigger should be continuous till the flow of fluid spreads in order to avoid surplus fluid deposition at the end of each stroke.

For best results

We recommend the use of liquids of appropriate viscosity that's finely ground resulting in a free flow. Liquids containing loose particles should be used only after straining the mixture through a fine filter. This will avoid clogging of the nozzle.

Do not allow any liquid build-up on the air cap. Also take care of the needle point and prevent it from bending or damage. It is important that liquids are mixed in correct ratio of water or mixing medium to achieve proper viscosity.

Technical Specifications

Code no.	AB-16 Pro
Cup capacity approx (ml)	30/60
Max. Pattern width (mm)/ Gun distance from work piece mm (inch)	20/50(2)
Fluid nozzle orifice dia(mm)	0.5 mm
Min required pressure (Kg/sq.cm)	1.5
Air consumption of rated pressure lit/min (c.f.m)	5(0.17)
Material output (cc/min)	12
Min. Air - compressor (HP)	1/8*
Weight of gun (gms)	208

List of Spare Parts

Sr. no	Description	Part No.	Qty. Per Gun
	Air Brush AB-16 Pro with 30 MI Cup.	AB 16000P30	1
	Air Brush AB-16 Pro with 60 MI Cup.	AB 16000P60	1
1	Needle Valve Cover	AB 16001	1
2	Air Cap	AB 16002	1
3	"O" Ring For Air Cap	AB 16003	1
4	Fluid Nozzle	AB 16004	1
5	"O" Ring For Fluid Nozzle	AB 16005	1
6	"O" Ring For Needle	AB 16007	1
7	Needle Packing Screw	AB 10008	1
8	Needle Nut	AB 16009	1
9	Spring For Needle Nut	AB 16010	1
10	Stopper	AB 16011	1
11	Plunger	AB 16012	1
12	Needle Spring	AB 16013	1
13	Needle Valve	AB 16014	1
14	Connector	AB 16015	1
15	Needle Socket	AB 16016	1
16	Back Cover Complete	AB 16017	1
17	Back Cover	AB 16017A	1
18	Needle Adjusting Screw	AB 16017B	1
19	Guide Screw	AB 16018	
20	Trigger	AB 16019	
21	Trigger Screw	AB 16020	
22	"O" Ring For Housing	AB 16021	
23	Housing	AB 16022	

Sr. no	Description	Part No.	Qty. Per Gun
24	"O" Ring For Air Control Knob	AB 16023	1
25	Air Control Knob	AB 16024	1
26	"O" Ring For Seal	AB 16025	1
27	Seal Screw	AB 16026	1
28	Air Valve Pin	AB 16027	1
29	Air Valve Body Nut	AB 16028	1
30	"O" Ring For Air Valve Nut	AB 16029	1
31	Air Valve Body	AB 16030	1
32	Air Valve Spring	AB 16031	1
33	"O" Ring For Air Valve Button	AB 16032	1
34	Air Valve Button	AB 16033	1
35	Body Connector	AB 16035	1
36	Body Connector Nut	AB 16036	1
37	Hose Joint Complete	AB 16037	1
38	"O" Ring For Hose Joint	AB 16037A	1
39	Hose Joint	AB 16037B	1
40	Hose Nut	AB 16037C	1
41	"o" Ring For Bottom Part	AB 16038A	1
42	Plastic Top Feed Cup 30 MI Capacity	AB 16038	1
43	Plastic Top Feed Cup 60 MI Capacity	AB 16039	1
44	Spanner	AB 16040	1
45	Repair Kit #*	AB 16080	1

Accessories

* This Set Contains A Fluid Nozzle And Needle Valve.

Disassembly of the airbrush

In each of these steps please refer to the diagram. Remove each part by turning or pulling in the direction indicated by the arrows.

Step 1. Pull air hose off the hose connector.

Step 2 Remove back cover complete (17)

Step 3 Loosen needle socket (16)

Step 4 Pull needle valve (14) out. Be careful not to damage the tip.

Step 5 Unscrew connector (15) and remove needle spring (13) and plunger (12).

Step 6 Unscrew stopper (10) remove spring for needle nut (9) and needle nut (8) respectively.

Step 7 Remove needle valve cover(1) & using small spanner remove air cap (2) Note that fluid nozzle (4) is tapered at both the ends, hence air cap and nozzle are released simultaneously.

For dual action (where air flow starts before fluid flow): open back cover complete (17) & loosen needle socket (16), then pull the trigger (19) back from idle condition by 1-2 mm, ensure needle (14) is pushed in completely & again tighten the needle socket (16), mount back cover (17).

For single action (where air flow starts with fluid flow): open back cover complete (17) & loosen needle socket (16) ensure trigger (20) is in idle condition then push needle (14) in completely & the again tighten the needle socket (16), mount back cover (17).

Cleaning & Lubrication

Submerge all parts of the airbrush except the needle in a solvent in a glass or metal pan for a few minutes. Then scrub the parts with a small soft paint brush until all liquid has been removed. Clean the cup thoroughly. Make sure there is a good liquid flow from where the nozzle connects. Use a q-tip to scrub the walls and to reach into the cup. Rinse the parts with hot water and dry thoroughly with a lint-free cloth. Clean the needle and check the point to make sure there is no damage. Look at the tip of the needle for a bend or hook. Using a white piece of paper and placing the needle on it and rolling it will make it easier to see if there is damage and needs to be replaced.

Assembly

1. Note the taper ends on the both side of the fluid Nozzle (4), insert wider end of the nozzle into taper portion of the front body & place air cap (2) on the nozzle and

- tighten with spanner (41). Please note that, nozzle's outside taper portion (narrower taper) should match with internal taper portion of the air cap (2).
2. Screw needle valve cover (1) on the air cap (2) and hand tighten.
 3. Fit trigger (20) with trigger screw (21) on body.
 4. Insert needle nut (8), spring for needle (9), and screw the stopper (10) as shown in the fig and tighten it.
 5. Insert plunger (12), and slide the needle spring (13) on it, tighten connector (15) as shown in the fig. Spring mechanism will push main lever and auxiliary lever forward.
 6. Insert needle valve (14) through plunger (12) and slowly push all the way forward, screw on the needle socket (16) and tighten securely.
 7. Tighten back cover complete (17)

Periodic Airbrush Maintenance

On the back page you will find the diagrammatic representation of the airbrush with instructions for airbrush maintenance. Please study the diagram for parts recognition and to understand how to disassemble and assemble the airbrush.

For long lasting use

- o Do not allow remaining liquid to dry up in the cup.
- o Wash the cup & the nozzle immediately with cleaning solvent after use by spraying.
- o Never use a sharp object for cleaning, instead use a soft brush.
- o Always handle the nozzle and the needle with utmost care, for if tampered with or damaged will not produce the desired results.

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Company reserves the right to change the design & specifications of the guns featured herein without prior notice.