



**ATD-6849**  
**Air Brush Kit**  
**Owners Manual**



- Dual-Action Trigger Air/ Fluid Control
- Precision machined nozzle
- Ideal for automotive & motorcycle graphics, etc.

Made in Taiwan to ATD Tools Inc. Specifications.  
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# REASONS & MEASURES FOR INCOMPLETE PAINTING

## PAINTING CONDITIONS UNEASY PAINTING

### REASONS

The end of the spray nozzle, paint is damaged or cracked

The erection screw between the spray nozzle and the main unit touches the air

### MEASURES

Replace with a new spray nozzle, paint. Turn the nozzle tightly or take off the nozzle and clear the threading part and dabber pad. Re-assemble it.

The spray nozzle doesn't adjust it to the proper jut through the cover, air position. pressure (ES-6.8) (GU-6.8)

## COARSE GRAINS ARE SPRAYED OUT & FLY ABOUT

### REASONS

The paint is attached on the end of the nozzle.

The needle starts in advance of the valve, air pressure.

The needle performs mal-functionally

### MEASURES

Clean it properly.

In case of no air-spray, after the needle is pulled, the coarse grain will spray out.

It is because that the fixing screw of the teflon O ring is too tight. Adjust it to the proper tension. Lubricate the parts.

## THE PAINTING SURFACE IS UNEVEN; THE SPRAYING CON- DITION IS BAD.

### SEASONS

The paint is attached on the end of the nozzle

The viscosity of the paint is too high. The spraying pressure is too low.

### MEASURES

Clean it properly.

Adjust its viscosity

Adjust the pressure

## THE PAINTING SURFACE IS TEARFUL.

### SEASONS

The viscosity of the paint is too low.

### MEASURES

Adjust its viscosity.

## THE FOLLOWING PROBLEMS WILL AID IN TROUBLESHOOTING YOUR AIR BRUSH.

1. Grainy Spray: Caused by paint being too thick. Add water sparingly to the mixture. check the needle and regulator tip for dried paint, and check the air supply.
2. Bucking Paper. Paint may be too thin; Add pigment to thicken the mixture. Do not air brush as heavily in one area. Move more rapidly or lessen your spray.
3. Paint blobs at ends of stroke. You are spraying paint before moving your hand and stopping the movement before shutting off the paint flow
4. Flared Ends. Caused by turning the wrist while air-brushing. The whole forearm should move horizontally across the paper.
5. Centipedes. Caused by spraying too much paint too close to paper. If a fine line is desired. Lightly pull back on the front lever.
6. Splattering. Caused by permitting the needle to snap back into tip. Always release the lever gently. Check for dried paint on needle or tip.
7. Curved Stroke. Caused by arcing arm too close to the paper. Arm should always be parallel to work. Unless this effect is desired.
8. Restricted Spray. Can be caused by spraying regulator being screwed too tightly into head. Open up a turn or two
9. Bubbles through color cup. The spray regulator might be turned out too far. Turn it back in a few turns. Color cup stem may be clogged.
10. Color spray cannot be shut off. Tip may be clogged. This is recognized by a "SPONGY" feel when needle is set into tip. A reamer can be used to clean out dry, gummy color in tip by pushing it gently into the tip. slowly remove and rotate at same time, removing the reamer gently, turning the reamer, and pushing it gently back into the tip. Repeat until residue is out of the tip. Run clear water through the air-brush. Take extreme care throughout this operation.
11. Spitting. Caused by residue on the needle or in the color cup. Paint may be too thick to operate properly.

## PAINTING PROCEDURE:

Prepare object to be painted, masking off any area that should not be painted. (Be sure object is clean and free of dust, grease, etc.) Small object such as models, etc. Should be hung or placed on a pedestal so all areas to be sprayed can be easily reached. (A stand may be fashioned from an ordinary wire coat hanger, or bottle, etc.)

Hold nozzle of air brush about 6 inches from surface. Use short strokes, moving air brush constantly at a steady rate, parallel to the surface.

Don't spray too heavy; Rather, apply a light coat, let dry then another coat, let dry, etc., until desired coverage is achieved.

## TO OPERATE:

After mixing and thinning paint, fill paint jar about 2/3 full (or less). Attach jar of paint to air brush, turn air on and press trigger. Test your spray on old newspaper or other material make any necessary spray adjustments, and get the "FEEL" of your air brush. (Be sure that paint or fumes cannot reach any flame. Also make sure that there is adequate ventilation.

## ADJUSTING PAINT FLOW:

Paint flow and spray pattern are adjusted by turning the fluid cap (See illustration) at front of air-brush.

Fluid cap is completely closed when it has been turned clockwise to stop point. Using thumb and index finger turn fluid cap counter clockwise to obtain various degrees of paint flow. Maximum flow will be attained by turning fluid cap approximately 4 half turns counter clockwise.

## MASKING OFF:

In the next several exercises you will need to mask off a square area from the drawing (Fig. 8) using four pieces of scrap paper tape down edge around area to be sprayed these masks are held in place by scotch or masking tape. Thus keeping the atomized material from creeping into the margins around the area when using masks do not spray under the edge. Spray over the edge.

## MAINTENANCE AND CLEANING OF YOUR AIR-BRUSH

The air-brush is a precision engineered tool for professionals and hobbyists. Like a good watch it requires proper handling. Proper care and common sense will produce a long service life. Keep your air-brush and color cup and/or jar clean at all times and do not leave the air-brush standing with material in the color cup for long periods, since this tends to gum the cup and internal feed channels. Keeping your air-brush clean cannot be stressed too strongly: most of the problems encountered can be traced back to an air-brush that has not been cleaned properly. If the needle is removed from your air-brush for cleaning purposes, which should be done after using, (use proper solvent) make sure it is replaced properly and is snug against the tip. Do not jam it into the tip.

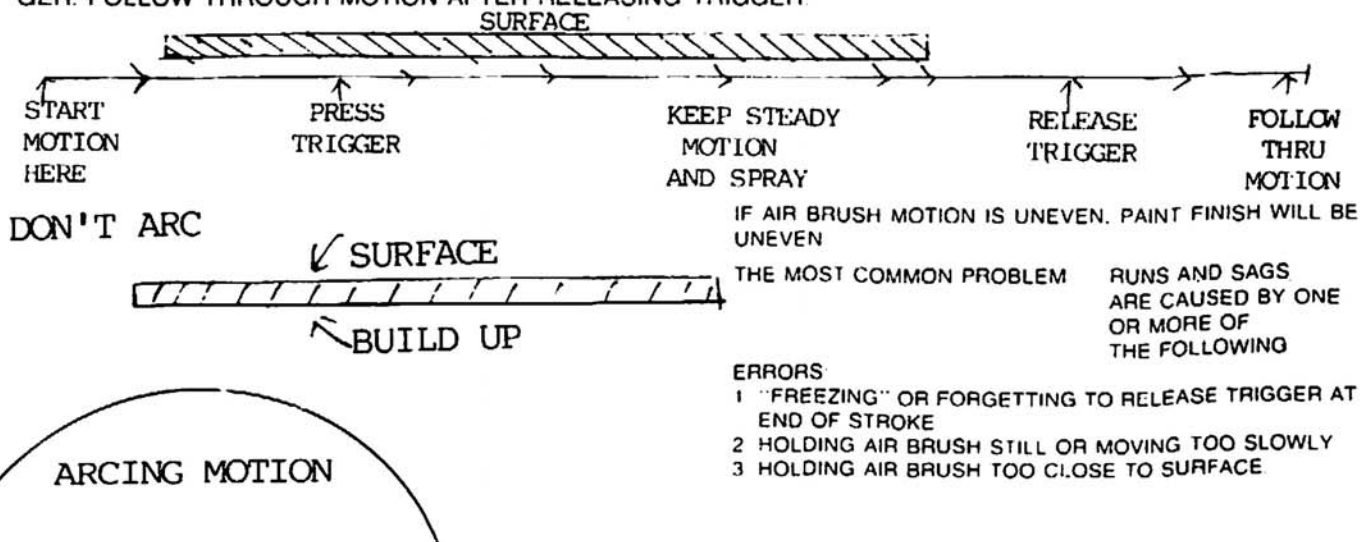
You will find that a residual stain will remain on the needle. One method of polishing it is to hold the needle flat on a worktable; then run a pink eraser the length of the needle (being extremely careful not to bend the tip) turn the needle slowly by rolling it toward yourself. This will remove all stains and paint particles from the needle body. Be sure to remove all eraser particles by running the needle between your thumb and forefinger. When replacing needle in air-brush be sure to tighten needle chuck firmly; needle will not move and you will be unable to shut off color flow. Always protect the tip of the needle, it may protect beyond the spray regulator and be susceptible to bending.

**Fig. 1.** To clean the color chamber remove the color cup and insert a bristol brush into the hole that the cup fits into turning the brush to clear the chamber of the paint. Also the chamber can be cleaned by placing cotton on the end of a reamer inserting it into the hole and removing the residual paint from the chamber. The latter operation is performed within the needle removed from the air-brush.

**Fig. 2.** Another method of cleaning the air-brush is to back flush by filling the color cup with clear water or thinner placing the air-brush underneath the tabletop to prevent color splattering your work and pulling back on the lever while pushing down for full air passage with your finger or soft cloth covering the tip. This will flush the color backward through the air-brush clearing and purging any leftover paint from the chamber and cup.

## KEEP AIR BRUSH PARALLEL TO SURFACE:

BEST RESULTS ARE ACHIEVED BY A GOOD CONSTANT MOTION. START MOTION BEFORE PRESSING TRIGGER. FOLLOW THROUGH MOTION AFTER RELEASING TRIGGER.



**FIG. 3.** To clean the color cup screw off bottom of cup use a bristol brush to swirl clean water inside surfaces, repeat until all paint is clear from cup and bottom.

**FIG. 4.** After removing the needle from the air-brush which is accomplished by loosening the needle chuck and withdrawing the needle straight outward from the back of the air-brush proceed to turn the tube shank assembly out of the air-brush body by turning in a counterclockwise direction. The trigger can then be lifted out of the body.

**FIG. 5.** If the needle is stuck in the air-brush carefully loosen the needle chuck then grasp the end of the needle with the pliers and twist in a counterclockwise direction to release the needle. Inspect for hardened paint which causes the needle to bind.

**FIG. 6.** A bent needle will prevent you from air-brushing a line and will cause an erratic direction of spray. A bent tip on a needle does not mean that it is to be discarded by placing the needle on a firm surface at the angle of the tip you can easily straighten the bent tip by running your fingernail across it on the tabletop, while you turn the needle slowly. Run your fingernail from the body of the needle outward toward the tip.

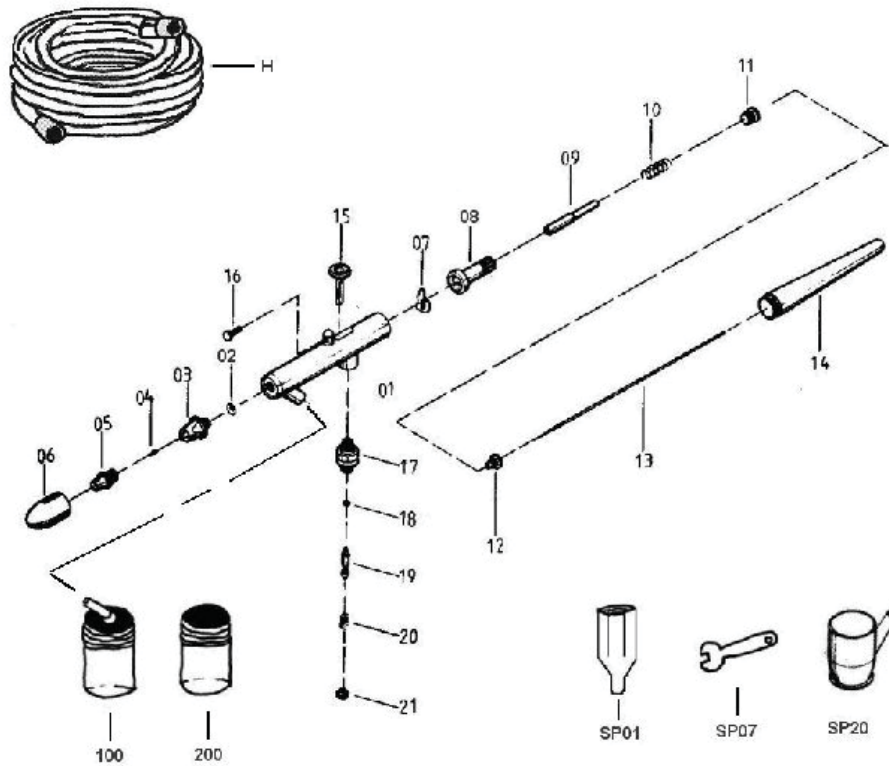
**FIG. 7.** The back lever can be removed from the air-brush body by means of a tweezer or by gently shaking the air-brush in an upside-down position. To replace back lever insert small screw driver in slot and slide into air-brush body. Holding it in place with the trigger then screw in tube shank assembly.

**FIG. 8.** The spray regulator can be removed from the front of the air-brush by unscrewing it in a counterclockwise direction.

**FIG. 9.** Remove the head by using an adjustable wrench on flat sides of head. Exercise great care and use a counterclockwise motion.

**FIG. 10.** If it is necessary to replace a damaged tip, insert a 3 cornered reamer in back of head and turn counterclockwise. When inserting new tip, seal with a small quantity of beeswax. This is done by lightly coating the threads with beeswax before engaging them (heat over an open flame for 1 or 2 seconds); then tighten firmly. Failure to do this will cause an intermittent spray.

**FIG. 11** When you want to soak your air-brush in solvent for cleaning valve assembly must be removed to prevent damage to "O" ring. Remove valve assembly with pliers (in a counterclockwise direction) to protect brush and knurl on valve put tape or aluminum foil on pliers



ITEM#	ORDERING PART#	PART DESCRIPTION
1	PRT6849-01	AIR BRUSH FRAME
2	PRT6849-02	O-RING
3	PRT6849-03	SPRAY NOZZLE ASSEMBLY
4	PRT6849-04	FLUID TIP - FINE
5	PRT6849-05	SECURE NUT
6	PRT6849-06	SECURE CAP
7	PRT6849-07	SPACER
8	PRT6849-08	NEEDLE SECURE NUT
9	PRT6849-09	NEEDLE SECURE SCREW
10	PRT6849-10	SPRING
11	PRT6849-11	PACKING SCREW
12	PRT6849-12	NEEDLE SECURE SCREW
13	PRT6849-13	FLUID NEEDLE ASSEMBLY
14	PRT6849-14	TAIL COVER
15	PRT6849-15	TRIGGER
16	PRT6849-16	MICRO ADJUST SCREW
17-21	PRT6849-17-21	VALVE ASSEMBLY 17-21
18	PRT6849-18	O-RING
SP01	PRT6849-SP01	AIR HOSE ADAPTER
SP07	PRT6849-SP07	WRENCH
SP20	PRT6849-SP20	5cc CUP
100	PRT6849-100	GLASS JAR W/TAPPING ADAPTER
200	PRT6849-200	GLASS JAR W/O TAPPING ADAPTER
H	PRT6849-H	HOSE