

Airbrush Demo

- I. Single Action vs. Double Action Airbrush
 - a. Single – operates like a can of spray paint. Just press the button and air and paint flow.
 - b. Double – must push the button down for air and pull back to release paint
 - c. Double – most controllable and able to give different effects. Most versatile.
- II. Types of Airbrushes
 - a. Top feed – low pressure operation (10-40 psi). Thinner paints must be used. Very versatile. (gravity feed)
 - b. Side feed – similar to top feed. Line of sight good because cup is out of the way. You can paint from any position. Used a lot in illustrator's work.
 - c. Bottom feed – high pressure needed (30-70 psi). Thicker paints used. Suction pulls paint from jar on bottom. Used by T-shirt and sign artist. (siphon feed)
 - d. A & B can be compared to sport cars while C is the workhorse or truck of airbrushes.
- III. Paint Thickness vs. Air Pressure
 1. Air pressure is the horsepower or muscle used to carry the paint
 - a. Low pressure – must use thinner paints to get the correct flow; can move your hands slower resulting in better control.
 - b. High pressure – thicker paints can be used
- IV. Paint Thickness vs. Nozzle Size
 1. Nozzle & Needle Sizes
 - a. .15-.20 nozzle – must use thin paint (water like consistency) at low pressure.
 - b. .30-.35 nozzle – can use "airbrush ready" paint – medium paints (milk like consistency).
 - c. .50 + nozzle – use thick paints (heavy cream like consistency).
 2. RULE OF THUMB - Don't think if you want a thin line that you must get a small nozzle & needle size. You must match your paint, air pressure and nozzle/needle size to do the correct job. Use the smallest nozzle/needle combination that corresponds to the paint you are using.
- V. Disassembly and Function of Double Action Airbrush
 1. Push down for air and then start to slowly pull back to start paint flowing; forward to stop paint.
 - a. Don't pull back to fast or you will get a blob of paint or runny splattered paint
 - b. The closer you hold the airbrush to the work the finer the paint line will be.
 - c. The farther away you hold the airbrush the wider the paint line will be.
 2. Before Using Paint
 - a. Use water and spray a continual mist into the air.
 - b. Observe the spray pattern.
 - c. It should be a full-pattern and atomized nicely.
 - d. You should have no sputtering, skipping or bubbling anywhere.

- e. If you do have any of these, you need to correct the issue before adding paint.
- f. If you have any of these problems –
 - a. Check to be sure all screw-on parts are tight but not over tightened. Use Teflon Tape on threads if necessary to stop leaks.
 - b. If you have bubbling, you have a clogged orifice somewhere. You may need to disassemble the airbrush and clean thoroughly.
- 3. Practice First
 - a. Start with water and food coloring in the airbrush cup. Mix well.
 - b. Practice spraying on paper varying the size of the lines.
 - c. Make straight consistent size lines.
 - d. Make dots in varying sizes (tiny to large).
- 4. Using Paint
 - a. Know your nozzle/needle size and mix paint accordingly.
 - b. Use proper pressure to match nozzle/needle and paint consistency.
 - c. Practice as in #3 above.
 - d. Work slowly; don't blast paint out – this defeats the airbrush purpose to give a graduated soft effect.
 - e. You can always add more paint to project but hard to remove.
- 5. Masking
 - 1. Types of Masking
 - a. Frisket
 - b. Liquid (spray-on)
 - c. Post It notes
 - d. Stencils

VI. Exercises

- 1. Types of Exercises
 - a. Dots
 - b. Lines
 - c. Circles
 - d. Cubes
 - e. Stencils

VII. Maintenance

- 1. Choose appropriate cleaning agent for paint used.
 - a. Water
 - b. Solvents
- 2. If there is paint in the cup, pour it back into container or spray out excess.
 - a. Wipe paint out of cup with paper towel.
- 3. Fill the cup with appropriate cleaning agent.
 - a. Slosh around in cup to break down paint residue.
 - b. Spray into a container
- 4. Repeat the process until spray is clear/clean.
- 5. Carefully remove the needle.

- a. Be aware of the needle tip and do NOT damage.
- 6. Gently wipe the needle with paper towel and cleaning agent to remove paint residue.
 - a. Carefully re-install the needle into the airbrush.
- 7. Do not use Q-Tips to clean with – the fibers will clog airbrush and make a mess.

VIII. Troubleshooting

- 1. Tip Dry
 - a. Caused by a build-up of paint on the needle tip. This causes turbulence over the tip.
 - 1a. Opaque or heavily pigmented paint dries on tip and build up quickly.
 - 2a. Paint could be over-reduced causing a quick build up on tip.
- 2. Cure
 - a. Clean the needle and watch for paint on tip.
 - b. Keep a wet clean paper towel to regularly, carefully wipe tip.
 - c. Check the paint for proper mixture.
- 3. Clogged air-hole in cup cap or bottle top
 - a. Vacuum can for and paint will stop flowing.
 - b. Paint can be back flushed into cup or bottle (notice bubbles).
 - c. When you remove the cup cap or bottle top pressurized paint is released (mess).
- 4. Cure
 - a. Keep the air-hole open (cleared).
- 5. Bubbles in cup or bottle
 - a. Clogged air-hole in cup cap or bottle.
 - b. Loose air cap and/or nozzle cap.
 - c. Tip dry.
- 6. Cure
 - a. Keep air-holes cleared.
 - b. Tighten air cap and/or nozzle cap (do not over tighten).
 - c. Keep the needle tip clean regularly wiping with a wet paper towel gently.
- 7. Nozzle wear
 - a. Old worn-out.
 - b. Damaged from pushing needle to hard (cracking).
 - c. Dropping/bending.
- 8. Cure
 - a. Replace nozzle if worn, bent or cracked (use magnifiers to determine).
 - b. Regularly clean any paint build-up.
- 9. Needle wear
 - a. Worn out tip from long-term use. (most common- caused by paint flowing over tip).
 - b. Bent or damage tip.
- 10. Cure
 - a. Use magnifiers and replace needle if damaged or worn in any way.

- b. Keep a new spare on-hand
- 11. Leaks in airbrush
 - a. Loss of suction.
 - b. Reduced efficiency.
 - c. Does not spray correctly.
- 12. Cure
 - a. Spray area suspected of leaking with water/soap mixture and look for bubbles.
 - b. Tighten or use Teflon tape (only 3 wraps maximum) and do not over tighten.
- 13. Clogged air passages in body or head assembly
 - a. Airbrush not spraying properly or at all.
- 14. Cure
 - a. Carefully use small piece of wire to clean out passage.
 - b. Do NOT scratch the airbrush in any way in or around the passages.
- 15. Air Cap bent or damaged from dropping
 - a. Will not spray properly.
- 16. Cure
 - a. Use magnifiers to closely inspect air cap (hole should be perfectly round).
 - b. Air cap should be perfectly concentric and not out of round in any way.
 - c. Replace the air cap
 - d. If the air cap was damaged and replaced, replace nozzle too!!

IX. Check List

- 1. Airbrush passes the water/solvent spray test
- 2. Check paint consistency is proper for nozzle/needle size
- 3. Be sure the air-hole on cup cap and/or bottle or not clogged
- 4. Reduce paint to the necessary consistency usually about 5% but no more than 25%
- 5. Check to be sure paint is fresh. Do not use old paint
- 6. Check to be sure airbrush is clean and in good working order

X. Exercises

- 1. Refer to section VI. And practice, practice, practice

XI. Supplies/Suppliers

- 1. Airbrushes, compressors and accessories
 - a. Chicago Airbrush Supply (Iwata Eclipse series) or (Iwata High Performance Plus).
 - b. Paasche VL airbrush is also a less expensive choice.
- 2. Paint
 - a. Dick Blick
 - b. Golden High Flow Acrylic Paint
 - c. Iwata Medea Com-Art Acrylic Paint
 - d. Createx Acrylic Paint for airbrushes

