

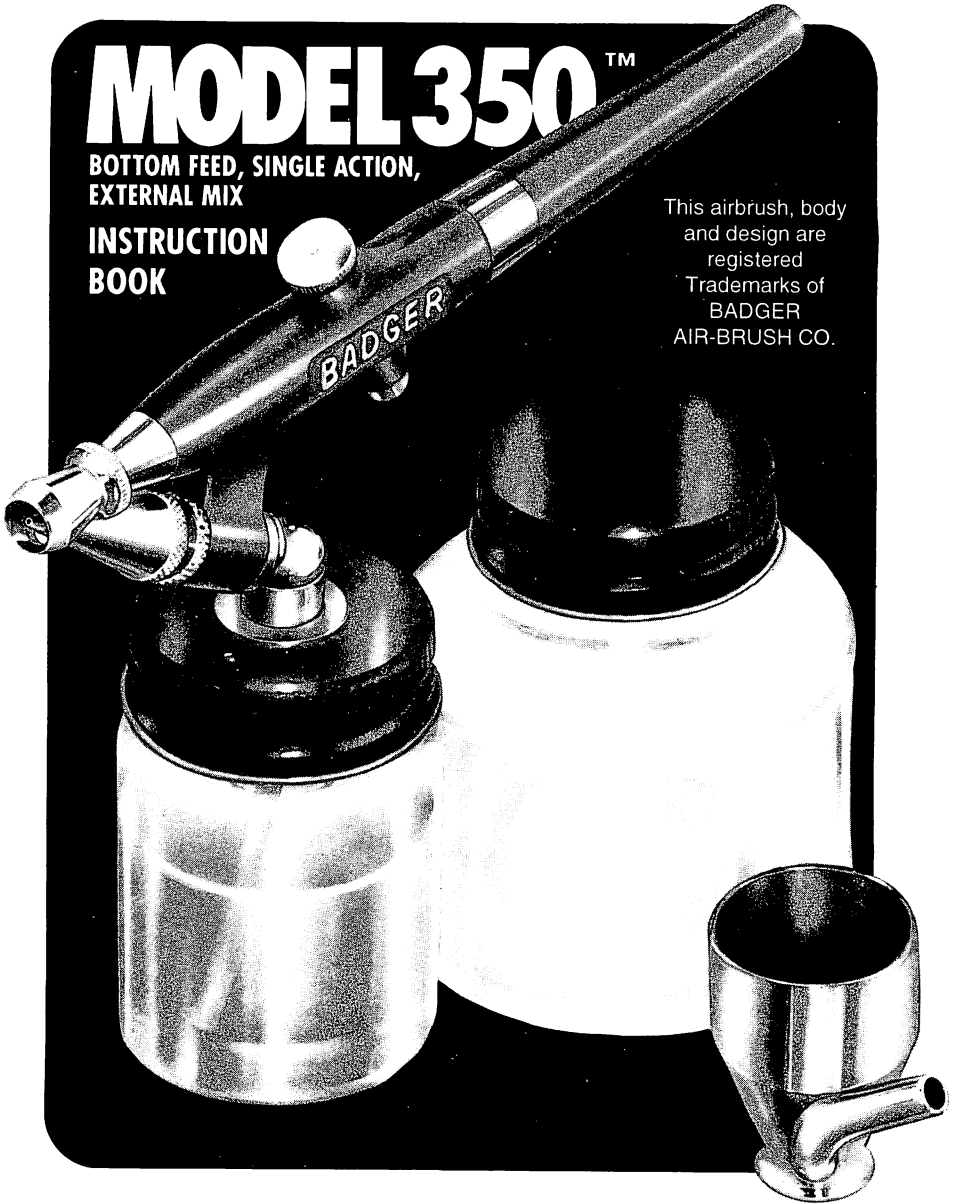
# BADGER

## MODEL 350™

BOTTOM FEED, SINGLE ACTION,  
EXTERNAL MIX

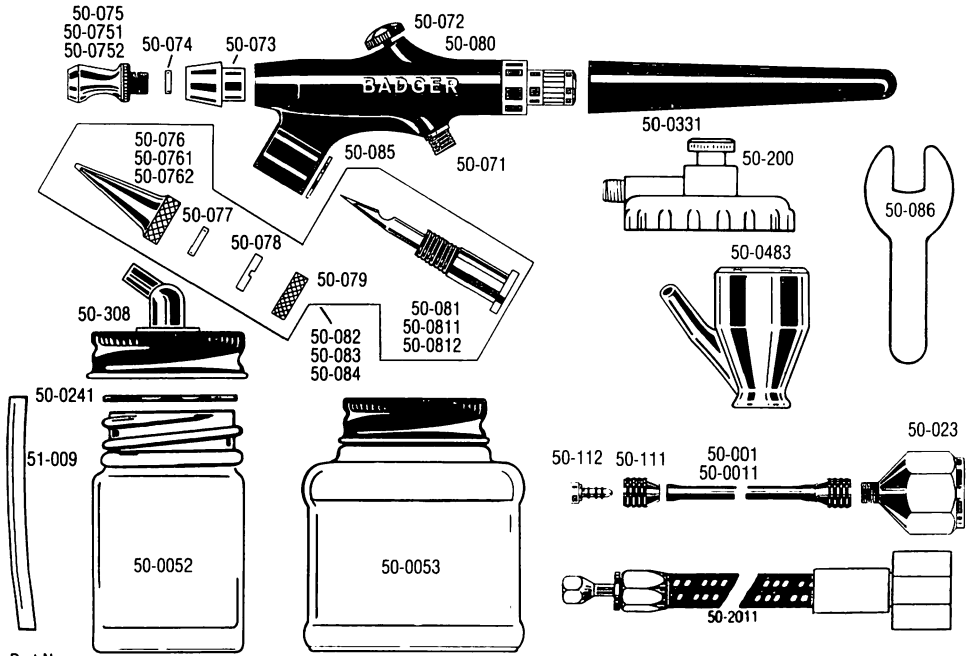
INSTRUCTION  
BOOK

This airbrush, body  
and design are  
registered  
Trademarks of  
BADGER  
AIR-BRUSH CO.



# AIR-BRUSH

# REPLACEMENT PARTS / MODEL 350™



**Part No.**

- \* 50-001 Five Foot Air Hose
- \* 50-011 Eight Foot Air Hose (Includes 50-023)
- 50-023 1/4" Pipe Thread Fitting
- 50-0241 Jar Cover Gasket
- 51-009 Siphon Tube
- 50-0331 Handle
- 50-071 Air Hose Fitting
- 50-072 Plunger Head
- 50-073 Air Tip Bushing
- 50-074 Air Tip Seal

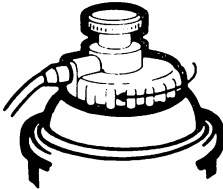
- 50-075 Air Tip Fine
- 50-0751 Air Tip Medium
- 50-0752 Air Tip Heavy
- 50-076 Fluid Cap Fine
- 50-0761 Fluid Cap Medium
- 50-0762 Fluid Cap Heavy
- 50-077 Paint Seal
- 50-078 Paint Seal Nut
- 50-079 Lock Nut
- 50-080 Body

- 50-081 Fluid Needle Fine
- 50-0811 Fluid Needle Medium
- 50-0812 Fluid Needle Heavy
- 50-082 Fluid Needle Assembly Fine
- 50-083 Fluid Needle Assembly Medium
- 50-084 Fluid Needle Assembly Heavy
- 50-085 Spacer
- 50-086 Wrench
- 50-0483 1/4 oz. Color Cup (350)
- 50-308 350 Jar Adaptor
- 50-0052 3/4 oz. Paint Jar w/Cover
- 50-0053 2 oz. Paint Jar w/Cover
- 50-111 Coupling Nut
- 50-112 Coupling Nipple
- 50-200 Propel Regulator Valve
- \* 50-201 Braided Air Hose swivel connection both ends

\*Only included in certain kits

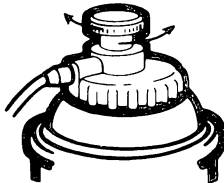
## TO ATTACH

1. Attach air-regulator to air-hose.
2. Attach air-regulator to propel can.
3. Attach other end of air-hose to air-brush by turning in a clockwise motion on to fitting.



## TO TURN ON AIR

1. Turn knob clockwise to desired pressure.
2. For less pressure or to turn off, turn knob in counterclockwise direction.



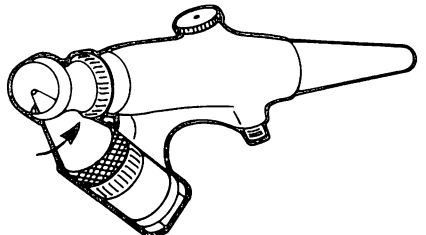
The air-regulator valve is designed for propellant cans. It will adjust pressure from 15 to 50 PSI. For larger jobs and prolonged spraying a compressor or CO<sub>2</sub> tank is recommended.

When air is regulated, pressure should be between 15 to 50 PSI. Normal operating pressure is 30 PSI.

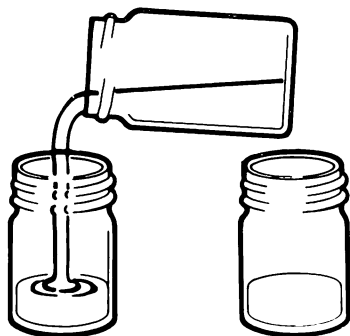
## ADJUSTING PAINT FLOW

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

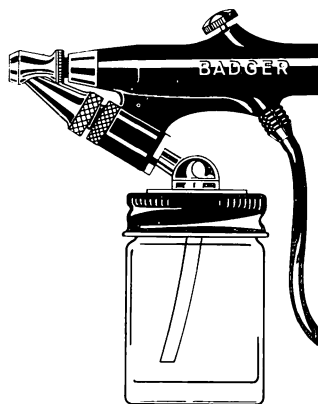
Fluid cap is completely closed when it has been turned clockwise to stop point. Using thumb and index finger turn fluid cap counter clockwise to obtain various degrees of paint flow. Maximum flow will be attained by turning fluid cap approximately 4 half turns counter clockwise.



## MIXING PAINT

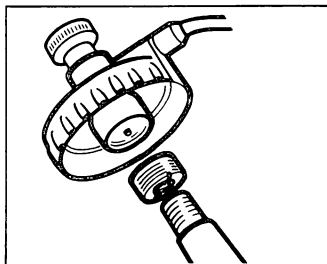


You can custom mix any color combination you wish. **REMEMBER:** Paints must be compatible . . . that is, mix enamels with enamels, lacquers, etc. Mix thoroughly. Make sure paint is free of lumps . . . strain if necessary.



## SPARE TIRE VALVE ADAPTER

A spare tire from the family car can be used as a power source in place of a can of propellant. Simply inflate the tire (must be on a rim) to 40 lbs. of air. Adapter screws are sold through dealers.



## THINNING

Most jar paints are too heavy to spray. Enamels should be thinned approximately 1 part paint to 1 part thinner, and lacquers approximately 1 part paint to 1 part thinner. To thin automotive lacquers, consult the spraying directions on the side of the paint container.

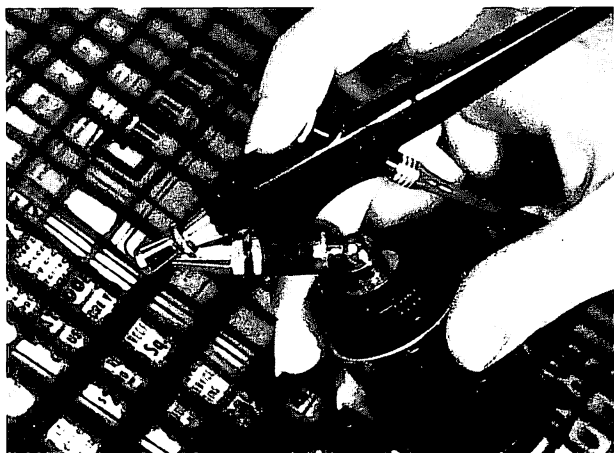
## WHEN USING LACQUER

Lacquer dries very quickly. For best results the operation should be continuous, that is, the air brush should not be set down for more than a few moments before resuming spray.

Keep an extra paint jar of thinner handy . . . remove lacquer jar, attach jar of thinner and spray to clean out any lacquer that may dry in air brush. Also refer to cleaning instructions for additional information.

## TO OPERATE

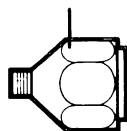
After mixing and thinning paint, fill paint jar about  $\frac{3}{4}$  full (or less). Attach jar of paint to air brush, turn air on and press trigger. Test your spray on old newspaper or other material, make any necessary spray adjustments, and get the "feel" of your air brush. (Be sure that paint or fumes cannot reach any flame. Also make sure that there is adequate ventilation.



## MANUFACTURERS NOTES

For larger jobs and prolonged spraying, a compressor or CO<sub>2</sub> tank is recommended. A 1/4" pipe thread fitting is needed (sold separately) to adapt air-hose to air-supply. When using a non tank mounted diaphragm compressor, a small bleeder hole must be drilled in adaptor to prevent back pressure. Drill hole on flat surface just behind the taper, using a number 72 or 1/32" drill. If you should change to a tank mounted compressor, the hole on the adaptor must be sealed, masking or duct tape (not included) may be used or a small drop of solder.

NO. 72 OR  
1/32" DRILL



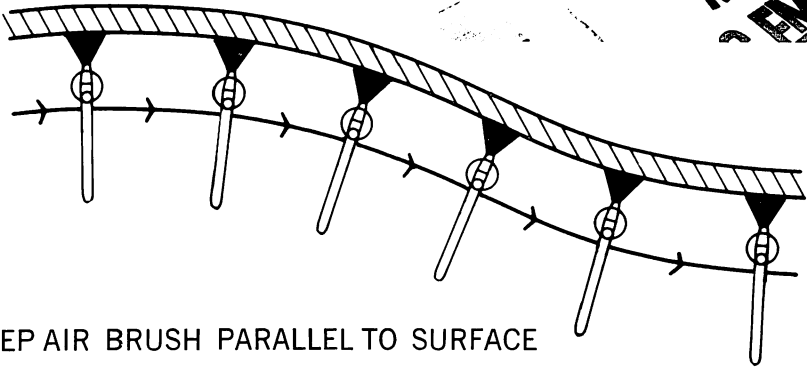
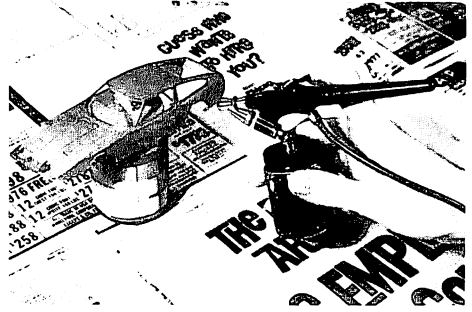
1/4" PIPE  
ADAPTOR

## 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 objects 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.

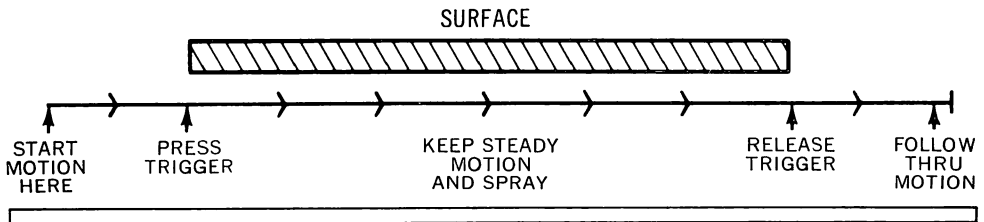
Don't spray too heavy; rather, apply a light coat, let dry then another coat, let dry, etc., until desired coverage is achieved.



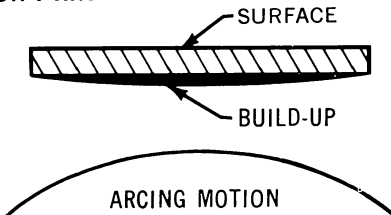
KEEP AIR BRUSH PARALLEL TO SURFACE

## LEARN TO TRIGGER

Best results are achieved by a good constant motion. Start motion before pressing trigger, follow through motion after releasing trigger.



## DON'T ARC

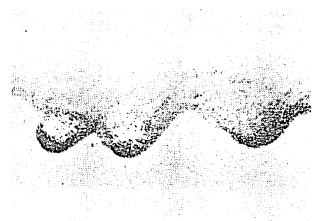


If air brush motion is uneven, paint finish will be uneven.

## THE MOST COMMON PROBLEM

Runs and sags are caused by one or more of the following errors:

1. "Freezing" or forgetting to release trigger at end of stroke.
2. Holding air brush still or moving too slowly.
3. Holding air brush too close to surface.



## EASY CLEANING AND DISASSEMBLING INSTRUCTIONS

For best result always clean immediately after using. Remove and empty paint jar. Wipe thoroughly including inside of cover. Fill jar  $\frac{1}{2}$  full of thinner and reattach to air-brush. Spray to clean fluid needle, fluid cap and air tip. Stop up fluid cap with soft cloth and force air and thinner back and forth thru needle, cap and tip.



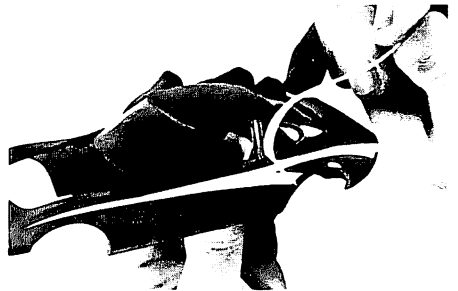
Clean needle, fluid cap and air tip with a small piece of cotton dipped in thinner or a fine bristle brush. To reassemble reverse above procedure.

When using quick drying paints, it is advisable to clean or immerse fluid end of brush in a compatible solvent between sprays.

Should airbrush become clogged, remove needle, cap and tip using the following procedure: hold fluid cap and locknut using thumb and index finger. Place wrench (provided in kit) on a flat surface of fluid needle and turn counter clockwise. Fluid needle can then be easily taken out.

## TECHNIQUES TO USE

Masking or frisket is used mostly when more than one color is applied. A new frisket is cut for each color and covering any area that should not be sprayed. Frisket paper is available at art supply stores.



A flat surface mask can be cut from acetate or stiff paper. For a sharp edge, hold mask flat in position. For a softer edge, elevate the mask slightly by resting on ruler or other flat object.

For contour masking (models, ceramics, etc.) use masking tape, scotch tape, or frisket and cut to desired shape, make sure edges are pressed firmly against surface. In addition, office supply stores carry Avery pressure sensitive labels. These labels make excellent masks.

## STENCILS



POSITIVE

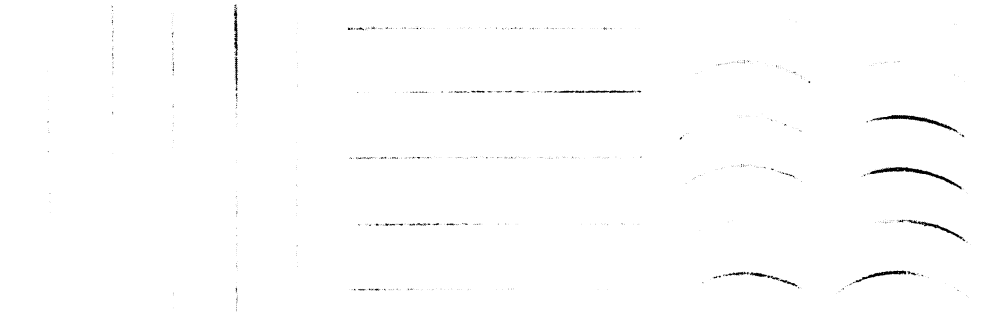


REVERSE

Stencils are used when a design needs to be duplicated. Ideal for posters and decorating. Cut from stiff paper, hold firmly in position and spray starting with edges and work inward. A reverse stencil can also be used, spray along stencil edge.

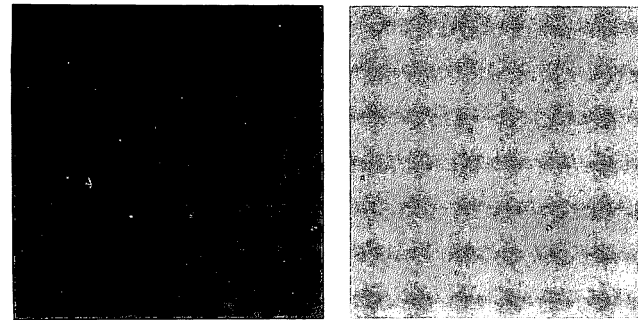
## AIR BRUSH EXERCISES

Practice develops skill. Air brush painting is the most versatile painting medium, easily mastered and gives the finest finishes and most satisfactory results.



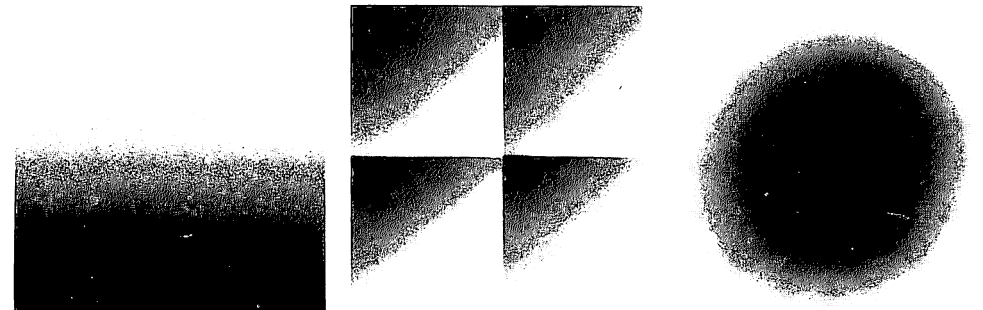
## FREE HAND CONTROLLED EFFECT

Turn needle adjusting screw forward for fine spray. Care should be taken to eliminate the small splashes of color that mark the beginning and end of the lines. To eliminate these, see LEARN TO TRIGGER on pg. 3.



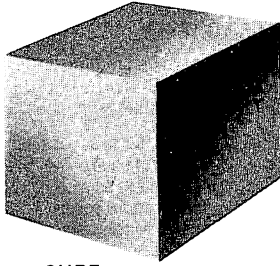
## EVEN TONE

When you have attained a certain amount of control with the air brush on lines (and not until then), you should practice the casting of various even tones. In these practices, the needle adjusting screw should be moved backward to give a wider spray. Use the air brush in almost the same way as in doing the fine line work, except that you hold your air brush farther from the paper, thus producing a broader blend of color rather than a fine line. Build tone by spraying one light overall tint, and repeating the process until desired tint is attained.

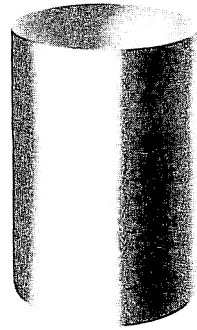


## VARYING SHADE

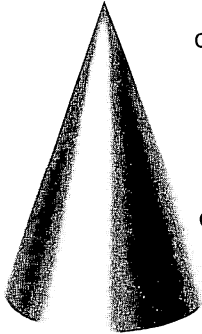
### 3 DIMENSIONAL EFFECT USING MASKS OR FRISKET



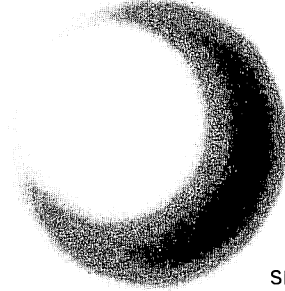
CUBE



CYLINDER



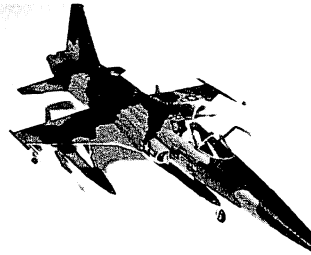
CONE



SPHERE

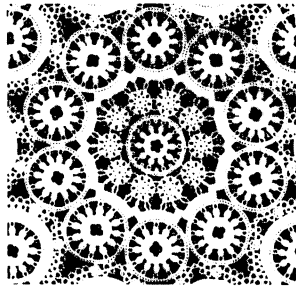
Having developed your skill, practice blending smoothly from one tint to another using the skill you attained in the other exercises.

### TRY THESE SPECIAL EFFECTS



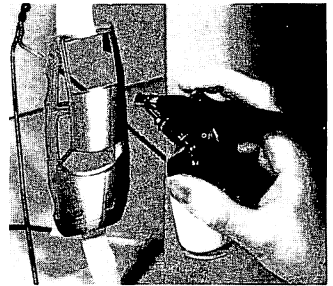
#### CAMOUFLAGE

Hard edge by masking, Soft edge freehand.



#### PATTERN

Spray thru lace, Cheese cloth, etc.



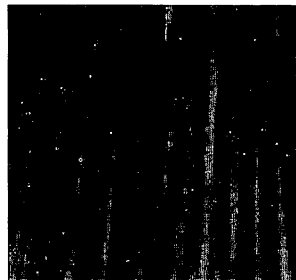
#### FOGGING

Unlimited effects can be done this way.



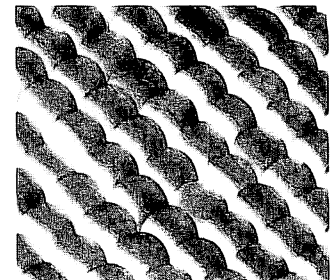
#### FLAME

Mask to shape, Grade tone working away from edge.



#### WOOD TONE

Work free hand, using actual wood for reference.



#### SCALES—OR OTHER MULTIPLE EFFECTS

Done with a mask, each scale made separately.

## PLEASE READ CAREFULLY BEFORE USING YOUR BADGER AIR-BRUSH

Your new BADGER air-brush should provide you with many hours of enjoyment. However, because of the nature of air-brushing and of the composition of materials which you may use in your air-brush, we are providing you with information about potential hazards.

Many materials commonly used in arts and crafts projects (such as lacquers, varnishes, adhesives, fixatives, powders, acrylics and solvents) can be extremely hazardous. Not all of these materials will be used in your air-brush, but may be used in some other phase of your project. We recommend that you always find out what is in the material you use. We suggest that when using **any** chemical substance that you request a copy of the manufacturer's **Material Safety Data Sheet** from your art supply dealer. This will give you some indication of the dangers posed and some of the precautions you need to take.

### ALWAYS READ AND FOLLOW LABEL DIRECTIONS CAREFULLY.

**CHILDREN** Hazardous materials pose an even greater risk to children due to their lesser body weight and frequent lack of care in following directions. **CHILDREN SHOULD ALWAYS BE SUPERVISED WHEN USING AN AIR-BRUSH OR ART MATERIALS** (unless the materials have been certified by the Crayon, Watercolor and Craft Institute). An air-brush is not a toy. It should not be pointed at anyone or at oneself.

### GOOD HYGIENE IS IMPORTANT ANYTIME YOU ARE WORKING WITH ART MATERIALS.

- Do not smoke, eat or drink while air-brushing.
- Avoid putting your fingers in your mouth while working on art projects.
- Be sure to clean your fingernails and wash your hands when you are finished.
- Be especially careful of the materials you use if you have cuts or open sores.
- **STOP WORK AT THE FIRST SIGN OF DIZZINESS, NAUSEA, HEADACHE, BLURRED VISION, OR SKIN IRRITATION.** Seek fresh air immediately, and call a doctor if the symptoms persist or are severe.

**VENTILATION** An open window does **not** provide adequate ventilation when working with hazardous art materials. When working with these materials, you should have an exhaust ventilation system (one which removes vapors, dusts, etc., from the area in which you are working and vents to the outside). A general ventilating system dilutes toxic vapors with fresh air to lower their concentration to a safer level.

Many factors have to be considered to determine the kind of ventilating system you should have. We suggest that you contact the National Institute for Occupational Safety & Health, (NIOSH), Robert A. Taft Laboratories, 4676 Columbia Parkway, Cincinnati, Ohio 45226 for publications which they have dealing with ventilating systems.

**RESPIRATORS** A respirator may pose more of a hazard than a help unless:

- you get one designed to filter out the specific hazardous substance you are working with
- one that fits properly
- you keep it properly cleaned and maintained.

We suggest you buy only a NIOSH\* approved respirator and read and follow carefully the instructions which come with it.

A respirator may not be suitable for some people with heart or breathing problems. Information on respirators is also available from NIOSH at the address above.

**RESOURCES** In addition to NIOSH, you might want to read **Health Hazards Manual for Artists** by Michael McCann, PhD (published by the Foundation for the Community of Artists, 280 Broadway, Suite 412, New York, New York 10007) or contact the Consumer Products Safety Commission, Washington, D.C. 20207.

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