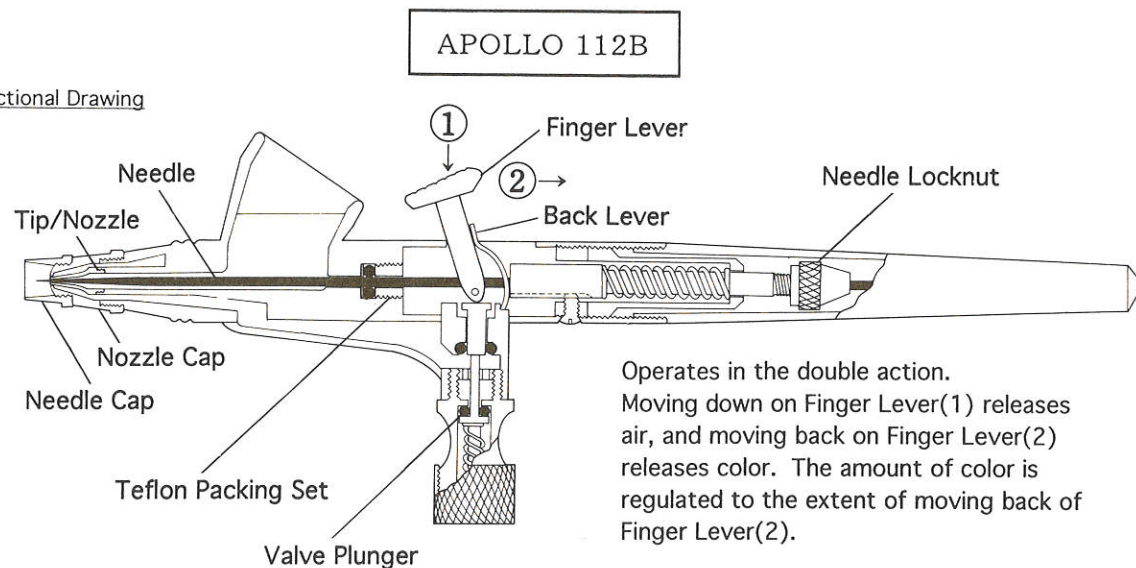
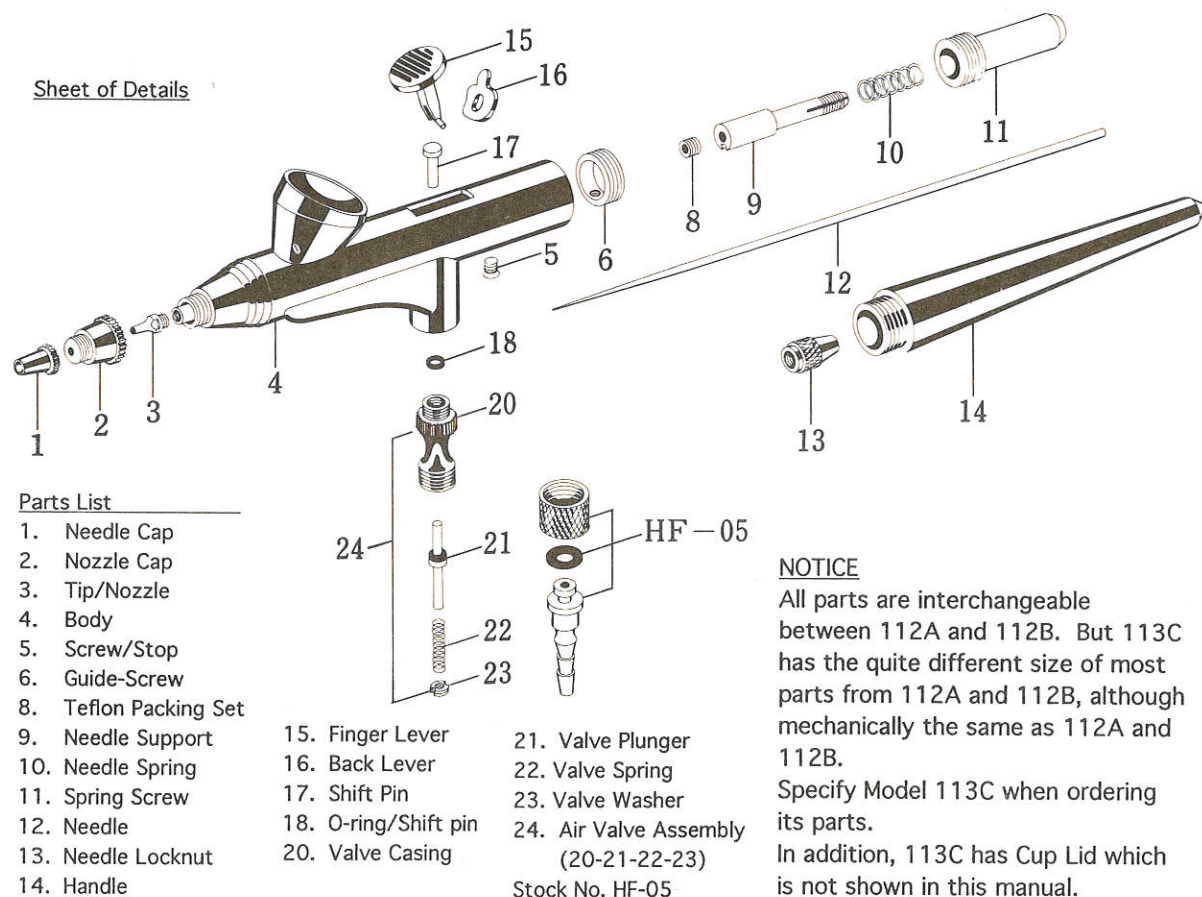


Sectional Drawing



Sheet of Details



For any repair service requirements or questions, please contact your authorized dealer, or if necessary, directly at:



12-17, Honkomagome 6-chome, Bunkyo-ku, TOKYO, 113-0021 JAPAN
Tel: +81-3-3947-1334 Fax: +81-3-3947-1319
Home page: <http://www.richpen.com> E-mail: info@richpen.com

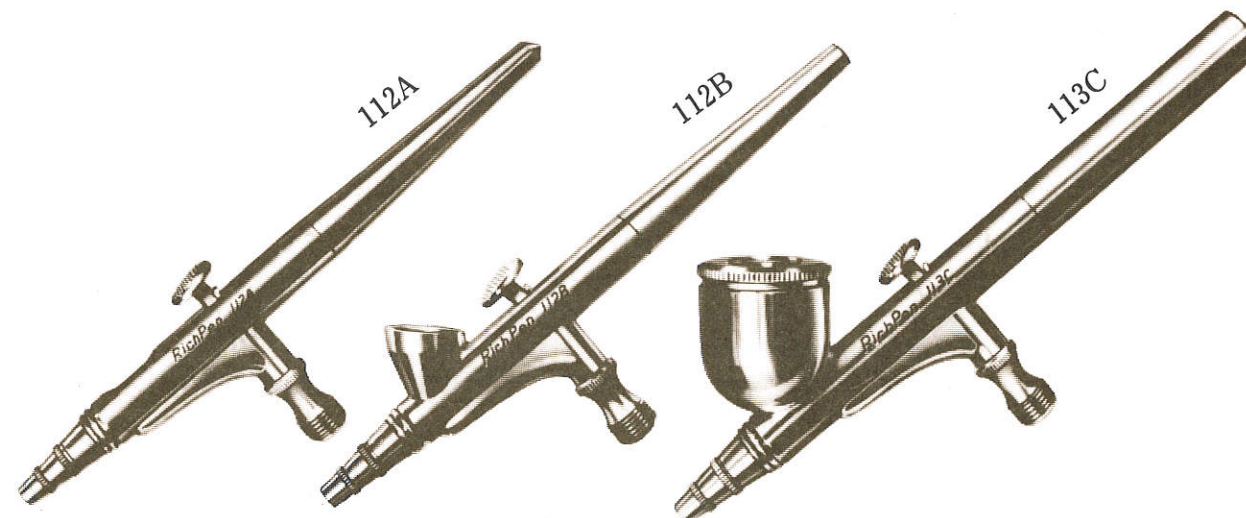
RichPen Airbrush Apollo Series Instruction Manual

Standard
The Most Popular & Versatile

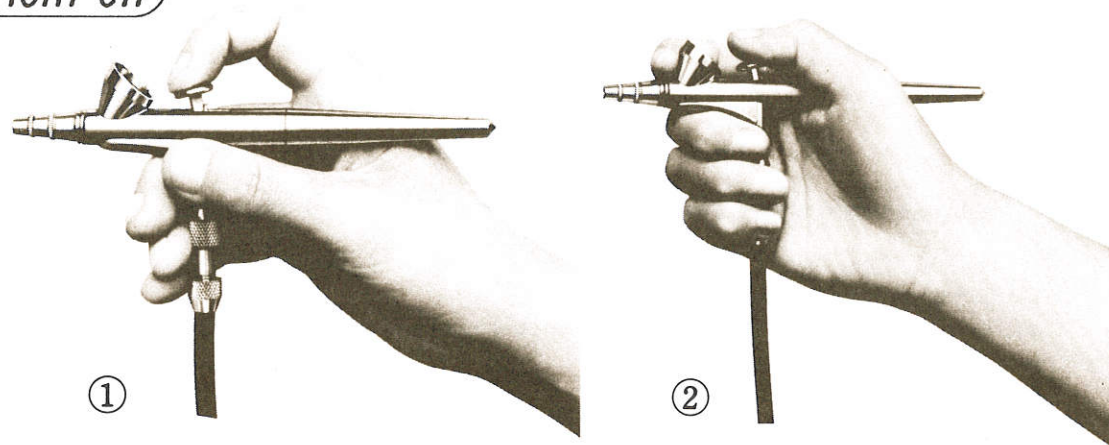


Double-action finger lever control lets you vary spray pattern width without stopping. Pattern adjusts from hair line to broad shading. Used for applications such as photo-retouching, technical and medical illustration, precision model making, etc.

- Sprays sandy pattern with Needle/Nozzle caps removed.
- Features the most simple cleaning and maintenance.
- Operates on 0.1 - 0.7 MPa (1.0 - 7.1 kgf/cm², 14 to 101 PSI), especially featuring consistent operation on low pressure even around 0.1 MPa (1 kgf/cm², 14 PSI).
- Accepts thinly reduced acrylics, inks, watercolors, gouaches, oil colors, hobby lacquers, enamels and so on.



	APOLLO-112A	APOLLO -112B	APOLLO-113C
Tip Size	0.2 mm	0.2 mm	0.3 mm
Cup Capacity	0.5 cc	1.5 cc	7 cc
Applications	Designed primarily for fine detail work	Excellent for fine-to-medium detail work	Ideal for general purpose with wide spray range of fine lines to broad area
Color Materials Used	Dyes, inks, etc.	Watercolors, dyes, inks, thinly reduced acrylics, gouaches, etc.	Wide range of pigment materials from dyes and inks to acrylics and gouaches.



HOW TO USE AIRBRUSH

1. Ordinary Holding Way

Put the index finger on Finger Lever and lay the thumb on Body while holding Air Hose connected part with the other three fingers.

2. When airbrushing for long period, put the thumb on Finger Lever and lay the index finger on Body while holding Air Hose connected part with the other three fingers.

3. Recommended air pressure approx. 0.3 MPa (3.1 kgf/cm², 43 PSI).

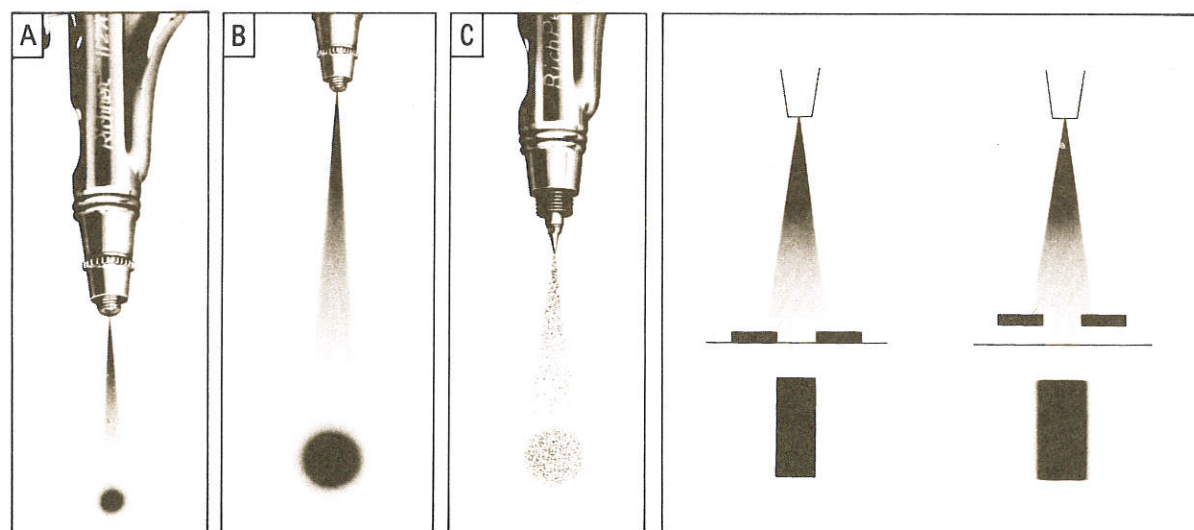
When the finest line or sandy pattern is demanded, operate on 0.1 - 0.2 MPa (1.0 - 2.0 kgf/cm², 14-29 PSI).

4. The color materials being sprayed are important in determining the correct airbrush. In actual use, make the color thinning down to the proper density.

5. Finger Lever Operation

Moving down on Finger Lever softly, moving back on it gradually allows for spraying the mixture of color and air. When a small dot or fine line is demanded, work closer to the surface and move down/back on Finger Lever softly, as illustrated below:

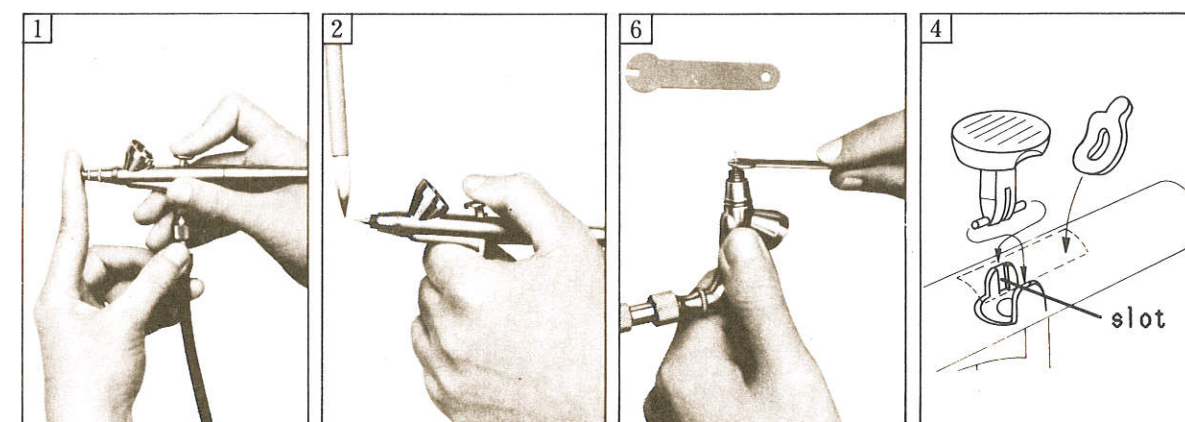
6. Sandy pattern is sprayed with the Caps of Needle and Nozzle removed on the air pressure 0.1 - 0.2 MPa (1.0 - 2.0 kgf/cm², 14-29 PSI). See illust. (C).



CLEANING & MAINTENANCE

Most of the problem can be traced back to an airbrush that has not been cleaned properly. Clean and purge any leftover paint from the chamber and cup before getting hardened. Keep your airbrush and color cup clean at all time and do not leave the airbrush standing with materials for long period. Since this tends to gum up the internal feed channels.

1. Use a bristle brush to remove the residual paint from the color chamber and cup to clean them. Back flush by filling the cup with clear water or proper solvent and then pulling back on Finger Lever while pushing down for full passage with your finger covering the tip. Repeat until all paint is cleaned up.



TROUBLE SHOOTING

1. Bubbles in Color Cup

Nozzle Tip is cracked or transformed. Check Nozzle Tip with a magnifier and replace it if it is not normal condition. If bubbles are caused by loosed Nozzle Tip, tighten it fully.

Needle is not snug against the Caps of Needle. Replace the Caps of Nozzle and Needle.

2. Fine Line not sprayed

Solid pigment particle sticks to Needle Tip or Needle Tip is bent. Replace Needle when it is bent, and also required to replace Nozzle Tip which may be damaged by bent Needle.

3. Centipedes

Too much color is sprayed when Finger Lever is pulled from the close position. Slightly pull back Finger Lever.

