

iwata
Revolution



HP-M1



HP-M2

Gravity-Feed Single-Action Airbrush

REVOLUTION M SERIES MANUAL & PARTS GUIDE

NEED ASSISTANCE ?

**If you have any issues with this product,
call ANEST IWATA-MEDEA (U.S.A.) 503-253-7308 (M-F 8AM - 4:30PM Pacific Time)
or your local ANEST IWATA affiliate before returning to your place of purchase.**

ANEST IWATA-MEDEA, INC.

Portland, Oregon U.S.A.
+1-503-253-7308
www.lwata-medea.com

ANEST IWATA CORPORATION

Yokohama, Japan
+81-(0)45-591-1111
www.anest-iwata.co.jp

ANEST IWATA AUSTRALIA PTY LTD.

Mt. Druitt, NSW
+61-(02)-9853-2000
www.anest-iwata.com.au

ANEST IWATA SOUTH-EAST ASIA CO., LTD.

Bangkok, Thailand
+66-(0)-2643-2870
www.anest-iwatasoutheastasia.com

ANEST IWATA EUROPE S.R.L.

Torino, Italy
+39-01-1248-0868
www.anest-iwataeu.com

ANEST IWATA (U.K.) LTD.

Neots Cambs, England
+44-(0)1480-474742
www.anest-iwata.co.jp

ANEST IWATA DO BRASIL COMERCIAL LTDA.

Bairro do Paraíso, Sao Paulo
+55-11-3171-0072
www.anest-iwata.net.br

ANEST IWATA SHANGHAI

Shanghai, China
+86-(0)21-6407-9713 / 15 / 16
www.anest-iwata-sh.com/ja

ANEST IWATA MOTHERSON LTD.

Uttar Pradesh, India
+91-(0)120-4600500 / 14 / 17
www.motherson.com

ANEST IWATA SOUTH AFRICA (PTY) LTD.

Johannesburg, Republic of South Africa
+27-11-463-2169/2265/2223

ANEST IWATA RUS LLC

Moscow, Russia
+7-495-938-77-28
www.anestiwata.ru

CENTURY TRADING CO., LTD.

Seoul, Korea
82-2-2163-0300
www.centradng.co.kr

Congratulations on your purchase of an Iwata *Revolution*[™] **M SERIES** airbrush, a versatile, reliable and dependable airbrush. The Revolution was designed for the new airbrush user or hobbyist seeking Iwata's famous superior spray quality combined with multi-purpose versatility.

**VALUE,
QUALITY & PERFORMANCE**

distinguish these airbrushes as Revolution!

iwata
Revolution



ONLY FROM IWATA-MEDEA

Iwata airbrushes are designed for demanding professionals. Modern precision machining and carefully selected materials used in the manufacturing process ensure consistent high performance and long life. Each Iwata airbrush is spray-tested before shipment to assure maximum performance and adherence to Iwata's strict quality standards. To maintain your Revolution at its peak performance, proper care and attention must be observed.

IWATA REVOLUTION M SERIES M1 AND M2

The Iwata Revolution M Series features a single-action style trigger for simple operation. It's gravity-fed with internal-mix for superior spray results. The M Series airbrushes are perfect for airbrush cosmetics, body art, hobbies, models and other general applications.



Iwata Revolution HP-M1

- *Single-action*
- *.3 mm needle/nozzle*
- *1.5 ml cup*
- *Designed for low pressure applications*

Iwata Revolution HP-M2

- *Single-action*
- *.4 mm needle/nozzle*
- *7 ml cup*
- *Designed for low pressure applications*

GETTING STARTED

Compressor

Choose an appropriate compressor for your Revolution M Series airbrush. The Iwata Sprint Jet and Smart Jet compressors are good beginner's choices and will provide approximately 20-30 psi of air pressure to the M Series.

Assembly

1. Screw the airhose onto the compressor.
2. Screw the airhose onto the airbrush.
3. If using a Power Jet, Power Jet Lite or Power Jet Pro compressor, adjust the pressure to between 30 and 45 psi.
4. Check for any air leaks in the compressor or air hoses.
5. Place a few drops of cleaner into the gravity cup.
6. Point the airbrush away from you.
7. Turn the fluid adjustment knob counterclockwise for more paint and clockwise for less and press down on trigger.
8. Spray cleaning solution through the airbrush to rinse out any residual pre-testing pigment.

NOTE: When done spraying, close the fluid adjustment knob or paint may leak.

GENERAL OPERATION

Fine-Line Spray

1. Depress the main lever to start air flow.
2. Position the airbrush close to the surface, between 1/16 and 1/2 inch is common.
3. Twist the fluid adjustment valve slightly to start the flow of paint.

Line thickness can be controlled by adjusting the distance between the airbrush and the surface and also by varying the paint flow by manipulating the adjustment valve position.

An extremely narrow line can be obtained by carefully removing the needle cap (#1) and positioning the airbrush closer to the surface.

CAUTION:The needle and nozzle are very delicate. Even a slight bend on the tip of the needle can adversely effect the spray pattern.

Wide-Line and Background Spraying

1. Depress the main lever.
2. Position the airbrush further away from the surface, from 1/2 to 6 inches is common.
3. Twist the fluid adjustment valve back farther releasing more paint to cover the bigger area.

Increase the distance between the airbrush and painted surface to control the line's width. Increasing the air pressure will also effect the spray width. The Revolution's maximum usable line width is approximately 2-1/2 inches.

GENERAL OPERATION

Stippling

Iwata airbrushes are designed to produce a wide range of stippling textures.

1. Unscrew the needle cap.
2. Unscrew the nozzle cap.
3. Adjust the air pressure between 5 and 50 psi.

Lower air pressure will give you coarse stipple whereas higher pressure will provide a fine stipple effect. Paint viscosity will also effect the stippling texture.

Air Pressure

For the Revolution, working pressures generally vary between 20 and 60 psi, depending on what type of work is being done and what textures are desired. A good working pressure may average around 25 psi. The viscosity of the paint and your desired spray characteristics will also effect your ideal pressure. As a general rule, larger amounts of paint or thicker paints, will be sprayed with higher pressures.

WARNING: Do not exceed 100psi.

Paint Preparation

For non-specific airbrush paints proper preparation, including filtering the paint through a nylon mesh, is recommended for best performance. Paint should be thinned with its proper solvent. It is best to prepare paint relatively thin and make repeated passes across the work to achieve the desired shade. This will also improve the quality of your work and decrease the cleaning time of your airbrush.

Safety Tips

- Always spray in a well-ventilated area.
- Do not spray solvent-based (flammable) paints around open flames.
- Use the appropriate respirator to safely filter out the paint vapors particular to the kind of paint you are using.
- Wear eye protection to prevent paint contact with eyes.
- Never use air pressure that exceeds the airbrush's limit. (98 psi)

MAINTENANCE

1. Dump out the color cup's excess paint.
 2. Rinse the cup with the appropriate cleaning solution.
 3. Use a paper towel to wipe out any left-over paint.
 4. Fill the bottom of the cup with cleaner.
 5. Spray cleaner until the spray is clear.
 6. Add the next color to the color cup.
 7. Repeat cleaning procedure when finished.
1. Unscrew the adjuster valve from the airbrush body.
 2. Gently pull the needle straight out by twisting the needle counter-clockwise.
 3. Fold a soft cloth damp with cleaner over the needle.
 4. Rotate the needle to gently wipe the residual paint off.
 5. Screw the fluid adjustment knob fully into the airbrush body.
 6. Carefully insert the needle into the airbrush until it seats fully against the nozzle.
 - If the needle stops abruptly, retract and examine the trigger mechanism for proper assembly and re-insert the needle.
 7. Screw the adjuster valve back onto the airbrush body.

MAINTENANCE

Before Each Session

Spray water or the appropriate paint solvent through the airbrush to make sure the airbrush is working properly.

After Each Session

Or any time the airbrush becomes clogged:

1. Increase the air pressure.
2. Spray cleaning solution for a short time.
3. Clean the needle if necessary

Cleaning the airbrush this way helps clean the paint passage, the nozzle and the needle thoroughly.

Periodically

To ensure smooth main lever action lubricate the needle and the main lever mechanism when necessary.

1. Unscrew the adjuster valve.
2. Remove the needle and adjuster valve.
4. Coat the needle lightly with a high-quality lubricant, like Medea SuperLube by putting a small dab of SuperLube on the needle where the taper starts.
5. Re-insert the needle gently into the airbrush.
6. Screw the needle and adjuster until it stops.

Drip one drop of lube into the slot directly behind the main lever and as close to the main lever as possible. If trigger feels sticky going down, put a small amount of SuperLube on the shaft of the trigger.

DO NOT over-lube the needle or the main lever mechanism, since it is possible to transfer excess lube into the nozzle causing severe paint flow problems.

DO NOT use light machine oil or WD-40 for lubrication. These will cause the needle to stick as it moves through the needle packing o-ring.

CAUTION: If it becomes absolutely necessary to dismantle the airbrush remember that in most situations tools are not needed.

TROUBLESHOOTING PROCEDURES

Symptom	Problem	Solution
•Bubbles in color cup or bottle	•Loose nozzle cap •Improper nozzle to body connection •Cracked or damaged nozzle	•Tighten finger tight •See nozzle to reseal the nozzle •See nozzle to replace the nozzle
•Double Line	•Dried paint on needle tip (Tip-Dry) •Dirty airbrush •Debris on nozzle tip •Bent needle •Cracked or damaged nozzle	•See cleaning the needle •See cleaning the airbrush between colors •See cleaning the needle •See nozzle and clean nozzle with toothpick •See needle to replace needle •See nozzle to replace the nozzle
•Not Spraying	•Reset needle •Improper air pressure •Paint too thick •Clogged nozzle •Cracked or damaged nozzle	•See cleaning the needle •See specific compressor instructions to raise or lower the air pressure •See paint preparation •See nozzle and clean nozzle with toothpick •See nozzle to replace the nozzle

TROUBLESHOOTING PROCEDURES

Symptom	Problem	Solution
•Skipping	<ul style="list-style-type: none">•Dried paint on needle tip (Tip-Dry)•Pigment too thick•Air pressure too high •Improper nozzle to body connection•Dirty airbrush •Cracked or damaged nozzle	<ul style="list-style-type: none">•Clean with cotton swab dipped in cleaner•See paint preparation•See specific compressor instructions to lower the air pressure•See nozzle to reseal the nozzle•See cleaning the airbrush between colors•See cleaning the needle•See nozzle to replace the nozzle
•Spattering	<ul style="list-style-type: none">•Dried paint on needle tip (Tip-Dry)•Pigment build-up in needle cap•Air pressure too low •Pigment too thick•Dirty airbrush	<ul style="list-style-type: none">•Clean with cotton swab dipped in cleaner•Unscrew and clean with cotton swab•See specific compressor instructions to raise the air pressure•See paint preparation•See cleaning the airbrush between colors•See cleaning the needle
•Trigger sticks (up and down)	<ul style="list-style-type: none">•Dried out air valve packing o-ring	<ul style="list-style-type: none">•Lube trigger shaft

REPLACEMENT PARTS AND ACCESSORIES

Nozzle

In time, the nozzle may wear or be damaged and may need to be replaced.

1. Unscrew the adjuster and needle.
2. Screw the fluid adjustment knob fully out of the airbrush body.
3. Unscrew the nozzle cap.
4. Unscrew the nozzle counter-clockwise with the provided wrench.
5. Screw the new nozzle into the airbrush body with your fingers. Put soft wax on threads of nozzle.
6. Slightly tighten the nozzle with the provided wrench.
 - DO NOT OVER TIGHTEN!
7. Screw the nozzle cap onto the airbrush body.
8. Screw in the needle and adjuster all the way forward until it seats with the new nozzle.

TIP: Keep a spare nozzle on hand for unforeseen accidents.

Needle

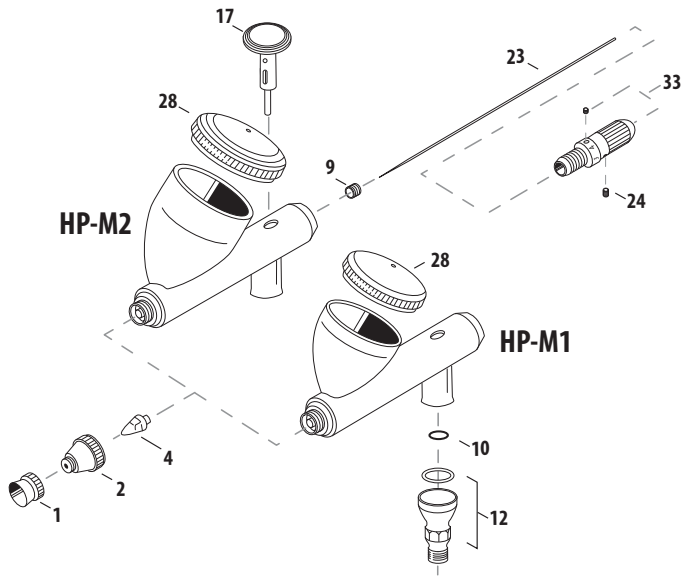
Iwata needles are made of precision ground and hardened stainless steel that will withstand prolonged usage. They are, however, subject to easy physical damage because of the long tapered, extremely fine tip. If the needle point becomes severely bent, it must be straightened before pulling it back through the nozzle. If not, the bent needle might damage the nozzle as it's pulled through.

TIP: Keep a spare needle on hand for unforeseen accidents.



Quick Disconnect (Optional Accessory)

A quick disconnect joint is screwed onto the airhose and a quick connect adapter is screwed onto each airbrush. When using multiple airbrushes the quick disconnect joint facilitates changing airbrushes on the same airhose quickly.


NOTE: Use jeweler's screwdriver to take apart.



— IWATA REVOLUTION M SERIES AIRBRUSHES — MASTER PARTS LIST

#	ITEM DESCRIPTION	PRICE CODE	ITEM #	HP-M1	HP-M2	ALSO FITS
1	Needle Cap	0.3 mm	A 1701 4	■	x	
		0.4 mm	A 1701 5	x	■	
2	Nozzle Cap	0.3 mm	C 1702 4	■	x	
		0.4 mm	C 1702 5	x	■	
4	Nozzle	0.3 mm	E 1704 4	■	x	
		0.4 mm	E 1704 5	■	x	
9	Needle Packing Screw	 B	1725 4	■	■	
10	Piston O-Ring	A	1145 1	■	■	
12	Air Valve Set	 F	1712 2	■	■	

#	ITEM DESCRIPTION	PRICE CODE	ITEM #	HP-M1	HP-M2	ALSO FITS
17	Main Lever	C	1714 3	■	■	
23	Needle	0.3 mm	E 1717 6	■	x	
		0.4 mm	E 1717 7	x	■	
24	Needle Chucking Nut	A	1715 3	■	■	
28	Lid	C	1718 3	■	x	
		C	1718 4	■	x	
33	Fluid Adjustment Valve	F	1722 2	■	■	
32	Spanner	A	1765 1	■	■	

 **CALIFORNIA PROP 65 WARNING:** Certain products identified with this symbol and offered for sale in this catalog contain lead, a chemical known to the State of California to cause cancer, birth defects and other reproductive harm.

■ = yes x = no opt = optional

All Iwata airbrushes are *Warranted* against all manufacturing defects of material and manufacture or workmanship for a period of FIVE years from date of purchase. This warranty does not cover needles, nozzles, o-rings and internal packings since these parts need to be replaced occasionally due to normal wear. Any other parts or materials that are or become defective so as not to be usable within this period will be repaired or replaced. This warranty does not cover damage caused by negligence or airbrushes which have been altered or abused in any way. Call or e-mail Iwata-Medea before returning an airbrush for the appropriate procedure for warranty repairs.



Genuine Iwata

iwata

by **ANEST IWATA**

WWW.IWATA-AIRBRUSH.COM