

**iwata**

by ANEST IWATA

**Eclipse**

AIRBRUSH SERIES

**Operating Instruction Manual**

ECL101-IM-NHT

# ALL-STAR VERSATILITY™

## 便利で多才



HP-CS



HP-BS



匠 TAKUMI



HP-BCS

*The unique multi-purpose, high flow Iwata Eclipse Series airbrushes are designed to easily atomize heavier sprayable mediums from a controlled fine line to controlled wide spray. These capabilities combine to make Eclipse Series airbrushes well-suited to almost every airbrush application imaginable. Hugely popular, they are the ultimate in all-star versatility.*

# NEED ASSISTANCE

**If you have any issues or warranty service questions, contact your local ANEST IWATA affiliate before returning to your place of purchase.**

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## IWATA ECLIPSE AIRBRUSH SERIES

This multi-purpose, high-paint-flow, high-detail Eclipse Airbrush Series covers a wide range of uses. Commonly used to spray premixed or heavier paints, it is well suited for uses demanding precise control of spray when applying moderate-to-large amounts of paint to a variety of surfaces and to various-sized areas. This Eclipse Airbrush Series has established a benchmark for excellence in an all-purpose airbrush.



### ***Iwata Eclipse HP-BCS***

- *Siphon feed airbrush features an E5 head system*
- *Sets the industry standard for high-performing, general-purpose, high-paint-flow airbrushes*
- *Versatile, reliable performance – this airbrush does it all*



### ***Iwata Eclipse Takumi***

- *Side feed airbrush features E3 head system and comes standard with a 0.24 oz gravity assisted cup and adaptor - 0.10 oz cup available separately*
- *Ideal for users who; need a direct line of sight, need multiple cup and bottle options, who need to spray at odd angles, even upside down*



### ***Iwata Eclipse HP-CS***

- *Gravity feed airbrush features E3 head system*
- *Generous 1/3 oz sized cup is designed with a new funnel shape, which makes for easy clean up and more efficient paint flow*
- *Sprays heavier mediums, while maintaining high-detail spray characteristics*



### ***Iwata Eclipse HP-BS***

- *Gravity feed airbrush features E3 head system with a convenient 1/16 oz cup*
- *The improved funnel design of the cup makes for easy clean up and more efficient paint flow*

## GETTING STARTED

### Compressor

Choose an appropriate compressor for your Eclipse airbrush. The Iwata Smart Jet Compressor is a good beginner choice and will provide approximately 20-25 psi of air pressure to the Eclipse. The low - high pressure output category of compressors can provide up to 50 psi to the Eclipse. At 35 psi, the ideal air pressure to utilize all of the airbrush's unique potential, the Eclipse's versatility provides high-paint flow for background spray as well as for controllable fine line detail performance. This unmatched versatility is a unique feature of the Iwata Eclipse airbrush series.

### ASSEMBLY (BCS)

1. Screw the air hose onto the compressor.
2. Screw the air hose onto the airbrush.
3. Adjust the air pressure to between 35 and 55 psi.
4. Check for any air leaks in the compressor and air hoses.
5. Fill the bottle with Medea Airbrush Cleaner, or the appropriate solvent for your paint.
6. Attach the bottle to the airbrush by pushing the bottle stem into the bottle joint of the airbrush body.
7. Point the airbrush away from you.
8. Press down on the main lever (#12) to start the flow of air through the airbrush.
9. Pull back on the main lever to open the nozzle of the airbrush.
10. Spray cleaning solution through the airbrush to rinse out any residual pre-testing pigment.

### ASSEMBLY (BS, CS, Takumi)

1. Screw the air hose onto the compressor.
2. Screw the air hose onto the airbrush.
3. Adjust the air pressure to between 25 and 35 psi.
4. Check for any air leaks in the compressor or air hoses.
5. Place a few drops of cleaner into the bowl.
6. Point the airbrush away from you.
7. Press down on the main lever (#12) to start the flow of air through the airbrush.
8. Pull back on the main lever to open the nozzle of the airbrush.
9. Spray cleaning solution through the airbrush to rinse out any residual pre-testing pigment.

## GENERAL OPERATION

### Fine-Line Spray

1. Depress the main lever (#12) to start airflow.
2. Position the airbrush close to the surface, between 1/16 and 1/2 inch is common.
3. Pull the main lever back slightly to start the flow of paint.

### Stippling

Iwata airbrushes are designed to produce a wide range of stippling textures. Remove the needle cap and nozzle cap (being very careful not to bump the needle) and depress the main lever. Experiment with various air pressure to achieve the right texture for your project. Higher pressures will produce larger dot patterns.

### CAUTION

**The needle and nozzle are very delicate. Even a slight bend on the tip of the needle can adversely affect the spray pattern. Replacing the needle cap on the Eclipse with an optional crown cap will protect the needle, yet enable an extremely narrow line to be sprayed.**

### Wide-Line and Background Spraying

1. Depress the main lever (#12).
2. Position the airbrush further away from the surface, from 1/2 to 6 inches is common.
3. Pull the main lever back much further, releasing more paint to cover the bigger area.

Line thickness can be controlled by adjusting the distance between the airbrush and the surface, by manipulating the main lever and by raising or lowering the air pressure. An extremely narrow line can be obtained by carefully removing the needle cap (#1), positioning the airbrush closer to the surface and working at a lower air pressure.

Increase the distance between the airbrush and painted surface to control the line's width. Increasing the air pressure will also affect the spray width. The Eclipse's maximum useable line width is approximately 2½ inches.

### Cutaway Handle

The cutaway handle (#19) is a special feature on the Eclipse. Its purpose is to free up paint clogs that may have formed at the tip of the airbrush without removing the handle and the needle.

1. Unscrew the needle cap (#1).
2. Unscrew the nozzle cap (#2).
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 Eclipse, working pressures generally vary between 25 and 55 psi, depending on what type of work is being done and what textures are desired. In general 35 psi or above is preferred to take full advantage of the unique, versatile spray characteristics of the Eclipse. The viscosity of the paint and your desired spray characteristics will also affect your ideal pressure. As a general rule, larger amounts of paint, or thicker paints, will be sprayed with higher pressures.

### PAINT PREPARATION

For non-specific airbrush paints, proper preparation, including filtering the paint through a nylon mesh, is critical for best performance. Thin paint with its proper solvent, and make repeated passes across the work to build up the color. This improves your work's quality and decreases your airbrush's cleaning time.

### CAUTION

- **Always spray in well ventilated areas.**
- **Do not spray solvent based (flammable) paints around open flames.**
- **Use the appropriate respirator to safely filter out paint vapors particular to your specific paint type.**
- **Wear eye protection to prevent paint contact with eyes.**
- **Never exceed the airbrush's pressure limit (98 psi).**

## MAINTENANCE

### Cleaning the Airbrush between Colors (BCS)

1. Remove the paint bottle.
2. Attach a bottle containing the appropriate cleaning solution.
3. Spray until the solution sprays clear.
4. Remove the bottle of cleaning solution.
5. Spray air until the airbrush sprays dry.
6. Attach a bottle containing the next color.
7. Repeat cleaning procedure when finished.

### Cleaning the Airbrush between Colors (BS, CS, TAKUMI)

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 leftover paint.
4. Fill the bottom of the cup with cleaner.
5. Spray cleaner until the spray is clear.
6. (TAKUMI ONLY) Separate cup from adaptor and wipe adaptor and cup threads clean using a paper towel.
7. Add the next color to the color cup.
8. Repeat cleaning procedure when finished.

### 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.



**NEVER soak your entire airbrush in any liquid. NEVER store your airbrush with spray medium or cleaning agents in the fluid cup.**

### **Cleaning the Needle**

1. Unscrew the handle (#19) from the airbrush body.
2. Loosen the needle chucking nut (#18).
3. Gently pull the needle (#17) straight out.
4. Fold a soft cloth damp with cleaner over the needle.
5. Rotate the needle to gently wipe the residual paint off.
6. Carefully insert the needle into the airbrush until it seats fully against the nozzle (#4).

### **⚠ CAUTION**

**The most probable time to damage the needle is when the needle passes through the main lever (#12) and through the needle packing screw (#14b).**

**If the needle stops abruptly, retract and examine the trigger mechanism for proper assembly and re-insert the needle.**

7. Tighten the needle chucking nut finger tight. Pull the main lever back and forth to visually confirm the needle's ability to move.
8. Screw the handle back onto the airbrush body.

### **Periodically**

To ensure smooth main lever action, lubricate the needle (#17) and the main lever mechanism (#12) regularly.

1. Unscrew the handle (#19).
2. Loosen the needle chucking nut (#18).
3. Remove the needle.
4. Coat the needle lightly with a high-quality lubricant, like Iwata Lube.
5. Wipe the needle with a soft, clean cloth, leaving a light coat of lube behind.
6. Re-insert the needle gently into the airbrush.
7. Tighten the needle chucking nut.
8. Screw the handle onto the airbrush body.

Drip one drop of lube into the slot directly behind the main lever and as close to the main lever as possible.

### **⚠ CAUTION**

**DO NOT over-lube the needle; transferring excess lube into the nozzle may cause severe paint flow problems.**

**DO NOT use light machine oil or WD-40 for lubrication. These lubes cause the needle to stick when it moves through the needle packing and can also get into the air system.**

**If it becomes absolutely necessary to dismantle the airbrush remember that most situations, unless otherwise directed, do not require tools.**

## TROUBLESHOOTING PROCEDURES

| Symptom                         | Problem                              | Solution   |
|---------------------------------|--------------------------------------|--|
| •Bubbles in color cup or bottle | •Loose head cap                      | •Tighten (#3) with provided wrench                                       |
|                                 | •Loose nozzle cap                    | •Tighten (#2) finger tight   |
|                                 | •Improper nozzle to body connection  | •See nozzle (#4) to reseal the nozzle                                    |
| •Double Line                    | •Cracked or damaged nozzle           | •See nozzle (#4) to replace the nozzle                                   |
|                                 | •Dried paint on needle tip (Tip-Dry) | •See cleaning the needle   |
|                                 | •Dirty airbrush                      | •See cleaning the airbrush between colors                                |
| •Not Spraying                   | •Debris on nozzle tip                | •See cleaning the needle   |
|                                 | •Bent needle                         | •See nozzle (#4) and clean nozzle with toothpick                         |
|                                 | •Cracked or damaged nozzle           | •See needle (#17) to replace needle                                      |
|                                 | •Loose needle chucking nut           | •See nozzle (#4) to replace the nozzle                                   |
| •Not Spraying                   | •Loose head cap                      | •Finger tighten (#18)  |
|                                 |                                      | •Tighten (#3) with provided wrench                                       |
|                                 |                                      | •See specific compressor instructions to raise or lower the air pressure |
|                                 | •Improper air pressure               | •See paint preparation   |
|                                 | •Paint too thick                     | •Use pushpin to unclog vent hole   |
|                                 | •Bottle vent hole is plugged         | •See nozzle (#4) and clean nozzle with toothpick                         |
|                                 | •Clogged nozzle                      | •See nozzle (#4) to replace the nozzle                                   |
| •Cracked or damaged nozzle      |                                      |  |

 **Nozzle contains Nickel.**

## TROUBLESHOOTING PROCEDURES

| Symptom     | Problem   | Solution  |
|-------------|---|---|
| •Skipping   | <ul style="list-style-type: none"> <li>•Dried paint on needle tip (Tip-Dry)</li> <li>•Pigment too thick</li> <li>•Air pressure too high</li> <br/> <li>•Improper nozzle to body connection</li> <li>•Dirty airbrush</li> <br/> <li>•Cracked or damaged nozzle</li> </ul>                                    | <ul style="list-style-type: none"> <li>•Clean with cotton swab dipped in cleaner</li> <li>•See paint preparation</li> <li>•See specific compressor instructions to lower the air pressure</li> <li>•See nozzle (#4) to reseal the nozzle</li> <li>•See cleaning the airbrush between colors</li> <li>•See cleaning the needle</li> <li>•See nozzle (#4) to replace the nozzle</li> </ul>  |
| •Spattering | <ul style="list-style-type: none"> <li>•Dried paint on needle tip (Tip-Dry)</li> <li>•Pigment build-up in needle cap</li> <li>•Air pressure too low</li> <br/> <li>•Pigment too thick</li> <li>•Dirty airbrush</li> <br/> <li>•Dirty airbrush</li> <br/> <li>•Dried out air valve packing o-ring</li> </ul> | <ul style="list-style-type: none"> <li>•Clean with cotton swab dipped in cleaner</li> <li>•Unscrew #1 and clean with cotton swab</li> <li>•See specific compressor instructions to raise the air pressure</li> <li>•See paint preparation</li> <li>•See cleaning the airbrush between colors</li> <li>•See cleaning the needle</li> <li>•See cleaning the airbrush between colors</li> <li>•See cleaning the needle</li> <li>•Lube trigger housing</li> </ul> |

 **Nozzle contains Nickel.**

## REPLACEMENT PARTS AND ACCESSORIES

### Nozzle (#4)

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

1. Unscrew the handle (#19).
  2. Loosen the needle chucking nut (#18).
  3. Gently pull the needle (#17) part way back. It doesn't need to be fully pulled out.
  4. Unscrew the head cap (#3).
  5. The nozzle should fall out. If it doesn't, push it gently to the side with your thumb.
  6. Fit the new nozzle onto the airbrush body.
  7. Screw the head cap onto the airbrush body.
    - Hand tighten cap or "lightly" tighten it with the provided wrench.
    - **DO NOT OVERTIGHTEN!**
  8. Push the needle all the way forward until it seats with the new nozzle.
  9. Tighten the needle chucking nut.
  10. Screw the handle onto the airbrush body.
- TIP: Keep a spare nozzle on hand for unforeseen accidents.



**Nozzle contains Nickel.**

### Crown Cap (Optional Accessory, Standard on Takumi)

A crown cap replaces the needle cap (#1). It physically protects the needle while spraying very fine lines. It also prevents pigment build-up and spattering when spraying large backgrounds.

### Preset Handle (Optional Accessory, Standard on Takumi)

The preset handle replaces the handle (#19). A threaded adjusting screw mounted behind the handle limits the distance the main lever can be pulled back. This provides accurate control of paint volume and is especially useful when doing repetitive, precision work.

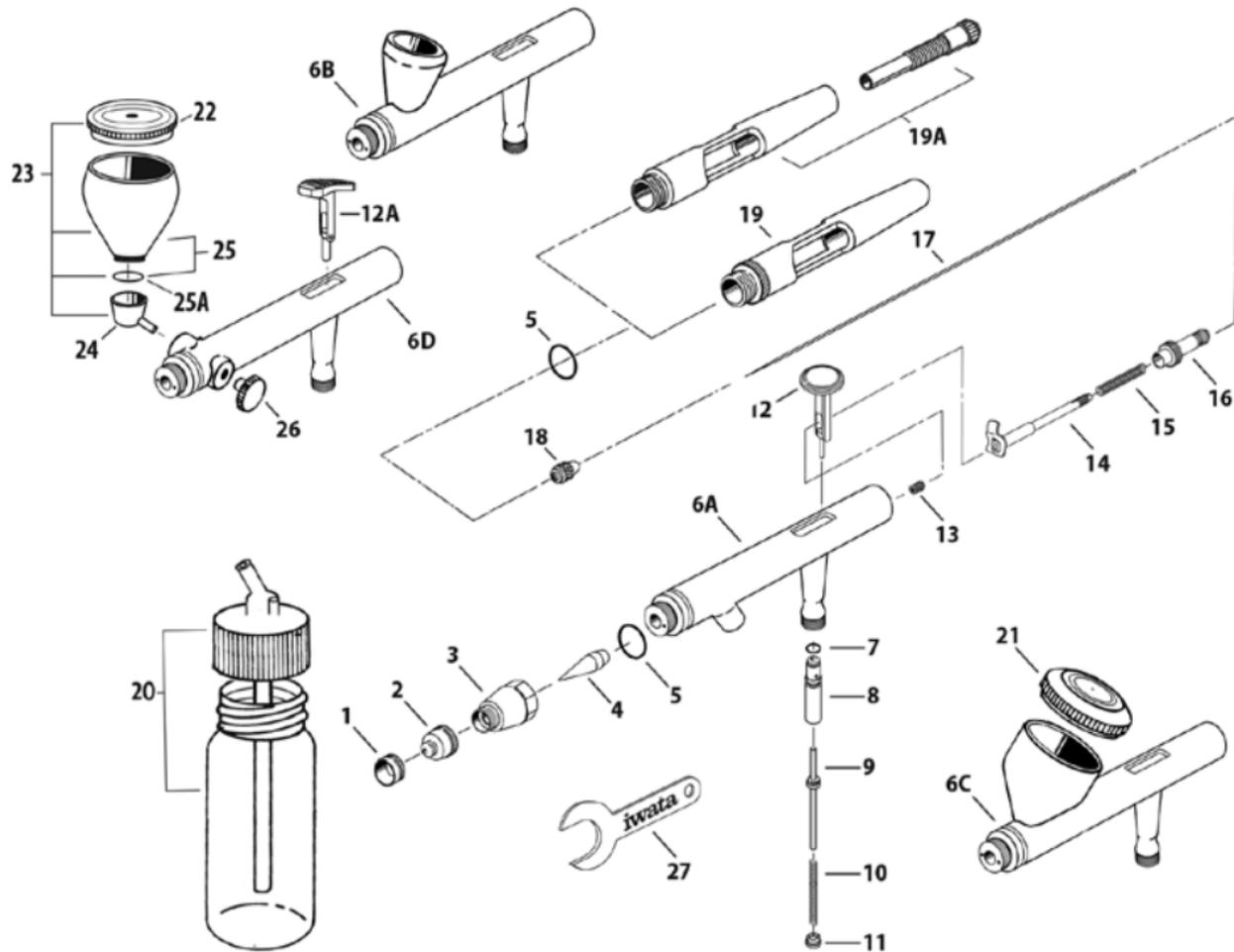
### Needle (#17)

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 air hose and a quick disconnect adapter is screwed onto each airbrush. When using multiple airbrushes, the quick disconnect joint facilitates changing airbrushes on the same air hose quickly.



— IWATA ECLIPSE SERIES AIRBRUSHES • MASTER PARTS LIST —

| #   | ITEM DESCRIPTION                | PRICE CODE | ITEM #  | HP-BCS | HP-BS | HP-CS | TAKUMI |
|-----|---------------------------------|------------|---------|--------|-------|-------|--------|
| 1   | Needle Cap                      | A          | I6011   | ■      | ■     | ■     | OPT    |
| 1A  | Needle Cap (Crown)              | D          | I1050   | OPT    | OPT   | OPT   | ■      |
| 2   | Nozzle Cap                      | E5         | B I6021 | ■      | x     | x     | x      |
|     |                                 | E3         | C I6022 | x      | ■     | ■     | ■      |
| 3   | Cap                             | C          | I6031   | ■      | ■     | ■     | ■      |
| 4   | Nozzle                          | E5         | C I6041 | ■      | x     | x     | x      |
|     |                                 | E3         | E I6042 | x      | ■     | ■     | ■      |
| 5   | O-ring                          | A          | I6051   | ■      | ■     | ■     | ■      |
| 6A  | HP-BSC Body *                   | -          | -       | ■      | x     | x     | x      |
| 6B  | HP-BS Body *                    | -          | -       | x      | ■     | x     | x      |
| 6C  | HP-CS Body *                    | -          | -       | x      | x     | ■     | x      |
| 6D  | Takumi Body *                   | -          | -       | x      | x     | x     | ■      |
| 7   | Valve Piston Packing            | B          | I5801   | ■      | ■     | ■     | ■      |
| 8   | Air Valve Guide Body            | B          | I6081   | ■      | ■     | ■     | ■      |
| 9   | Air Valve                       | A          | I6091   | ■      | ■     | ■     | ■      |
| 10  | Air Valve Spring                | A          | I5104   | ■      | ■     | ■     | ■      |
| 11  | Air Valve Guide Screw           | A          | I6111   | ■      | ■     | ■     | ■      |
| 12  | Main Lever                      | C          | I6121   | ■      | ■     | ■     | ■      |
| 12A | Main Lever (Control)            | D          | I6124   | OPT    | OPT   | OPT   | ■      |
| 13  | Needle Packing Screw Set (PTFE) | A          | I7251   | ■      | ■     | ■     | ■      |
| 14  | Needle Chucking Guide           | C          | I7151   | ■      | ■     | ■     | ■      |
| 15  | Needle Spring                   | A          | I1352   | ■      | x     | x     | x      |
|     |                                 | A          | I1351   | x      | ■     | ■     | ■      |

| #   | ITEM DESCRIPTION                           | PRICE CODE     | ITEM #  | HP-BCS | HP-BS | HP-CS | TAKUMI |
|-----|--|----------------|---------|--------|-------|-------|--------|
| 16  | Spring Guide                               | C              | I1702   | ■      | ■     | ■     | ■      |
| 17  | Needle                                     | E5             | B I6171 | ■      | x     | x     | x      |
|     |  | E3             | B I6172 | x      | ■     | ■     | ■      |
|     |  | E3             | B I6176 | x      | x     | x     | ■      |
| 18  | Needle Chucking Nut                        | A              | I1202   | ■      | ■     | ■     | ■      |
| 19  | Single Cut Handle                          | D              | I6191   | ■      | ■     | ■     | ■      |
|     | Preset Handle                              | G              | I1552   | OPT    | OPT   | OPT   | OPT    |
| 19A | Handle (Preset/Single Cut)                 | G              | I1556   | OPT    | OPT   | OPT   | ■      |
| 20  | Bottle                                     | 2 oz / 60 ml   | - A4702 | ■      | x     | x     | x      |
| 21  | Lid  | C              | I6181   | x      | x     | ■     | x      |
| 22  | Cup Lid (Siphon Cut)                       | 0.24 oz / 7 ml | C I6187 | x      | x     | x     | ■      |
| 23  | Cup Assembly                               | 0.24 oz / 7 ml | H I0710 | x      | x     | x     | ■      |
| 24  | Cup Adapter (Side-Gravity)                 | D              | I0700   | x      | x     | x     | ■      |
| 25  | Cup (Gravity)                              | 0.24 oz / 7 ml | D N0702 | x      | x     | x     | ■      |
| 25A | Cup (Gravity) O-ring                       | 0.24 oz / 7 ml | A N0713 | x      | x     | x     | ■      |
| 26  | Blanking Cover                             | A              | I0452   | x      | x     | x     | ■      |
|     | QuickFit Quick Disconnect Set              | H              | I1603   | OPT    | OPT   | OPT   | OPT    |
|     | QuickFit Quick Disconnect Airbrush Adaptor | C              | I1604   | OPT    | OPT   | OPT   | OPT    |
|     | Airbrush Adapter for Paasche Air Hose      | -              | J001    | OPT    | OPT   | OPT   | OPT    |
|     | Airbrush Adapter for T&C/Badger Air Hoses  | -              | J002    | OPT    | OPT   | OPT   | OPT    |
| 27  | Spanner Head Cap Wrench                    | A              | I6301   | ■      | ■     | ■     | ■      |

■ = yes    x = no    OPT = optional  
 \*Replacement parts not available.



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.

# iwata

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[www.iwata-airbrush.com](http://www.iwata-airbrush.com)