

# Iwata Eclipse Manual Copy

Contributed by Hyjeauq  
 Tuesday, 23 October 2007  
 Last Updated Thursday, 25 October 2007

All the words and none of the pictures. This set of copy doesn't have any links to other portions of the site as of yet. Think of it as my initial foray into making my airbrush and compressor knowledge more accessible.

Enjoy while I tinker with my website.  
 ECLIPSE SERIES

Congratulations on the purchase of your Iwata Eclipse airbrush, a versatile, reliable, high-performance airbrush. We designed this Eclipse for the exacting needs of the artist who requires a multi-purpose, high paint flow airbrush for spraying fine details and wide backgrounds all with one airbrush, one nozzle, and one needle size. This technology defines the Iwata Eclipse.

Iwata airbrushes are designed for the demanding professional. Modern precision machining and carefully selected materials are used in the manufacturing process to 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 Eclipse at its peak performance, proper care and attention must be observed.

## IWATA ECLIPSE HP-BCS, SBS, CS, BS

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

### Iwata Eclipse HP-BCS

- Bottom-feed airbrush features a 0.5mm needle, nozzle, and nozzle cap combination
- Sets the industry standard for high performing, general purpose, high paint flow airbrushes
- Versatile, reliable performance -- this airbrush does it all

### Iwata Eclipse HP-SBS

- Side-feed airbrush features a 0.35mm needle, nozzle, and nozzle cap combination with the option of four cups sizes -- the standard 1/8oz. side cup, a 1/4oz. side cup, a 1/2oz. gravity-feed side cup or a 1oz. siphon-feed bottle
- Ideal for custom automotive graphics and murals, as well as for fine-arts work that requires custom color mixing and thicker paints
- The Auto Graphics version of the HP-SBS is similar to the standard HP-SBS, except that it comes with a large 1/2oz. gravity-feed cup and a 1oz. siphon-feed bottle

### Iwata Eclipse HP-CS

- Gravity-feed airbrush features a unique 0.35mm needle, nozzle, and nozzle cap combination for fine-detail spraying, but with high paint flow capacity.
- Generous 1/3oz. sized cup is designed with a new funnel shape, which makes for easy clean up and more efficient paint flow.
- Automotive artists, fine artists, and students will appreciate how well the Eclipse CS sprays heavier acrylics and Medea Textile Colors, while maintaining high detail spray characteristics.

### Iwata Eclipse HP-BS

- Gravity-feed airbrush features a 0.35mm needle, nozzle, and nozzle cap combination with a convenient 1/16oz. sized cup.
- The funnel design of the cup makes for easy clean up and more efficient paint flow
- Ideal for nail and beauty applications

## 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 high powered Iwata Power Jet, Power Jet Lite, and Power Jet Pro 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)

- Screw the airhose onto the compressor.
- Screw the airhose onto the airbrush.
- If using a Power Jet, Power Jet Lite, or Power Jet Pro compressor, adjust the pressure to between 30 and 45 psi.
- Check for any air leaks in the compressor or airhoses
- Fill the bottle with Medea Airbrush Cleaner, or the appropriate solvent for your paint.
- Attach the bottle to the airbrush by pushing the bottle stem into the bottle joint of the airbrush body
- Point the airbrush away from you.
- Press down on the main lever (#12) to start the flow of air through the airbrush.
- Pull back on the main lever to open the nozzle of the airbrush.
- Spray cleaning solution through the airbrush to rinse out any residual pre-testing pigment.

#### (BS, CS, SBS)

- Screw the airhose onto the compressor.
- Screw the airhose onto the airbrush.
- If using a Power Jet, Power Jet Lite, or Power Jet Pro compressor, adjust the pressure to between 30 and 45 psi.
- Check for any air leaks in the compressor or airhoses
- Place a few drops of cleaner into the bowl.
- Point the airbrush away from you.
- Press down on the main lever (#12) to start the flow of air through the airbrush.
- Pull back on the main lever to open the nozzle of the airbrush.
- Spray cleaning solution through the airbrush to rinse out any residual pre-testing pigment.

### GENERAL OPERATION

#### Fine-Line Spray

- Depress the main lever (#12) to start airflow.
- Position the airbrush close to the surface, between 1/16 and 1/2 inch is common.
- Pull the main lever back 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 main lever's 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. 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

- Depress the main lever (#12)
- Position the airbrush further away from the surface, from 1/2 to 6 inches is common.
- Pull the main lever back much further 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 Eclipse's maximum usable line width is approximately 2 1/2 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.

- Grip the exposed needle chuckling nut (#18) with your fingers.

- Pull back on it while simultaneously depressing the main lever (#12)

The increased paint flow allows more paint to flow past the needle and tip, freeing up any clogs. Repeat this process several times until the airbrush is free of clogs and spraying normally.

## Stippling

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

- Unscrew the needle cap (#1)
- Unscrew the nozzle cap (#2)
- 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 20 and 60 psi, depending on what type of work is being done and what textures are desired. In general 35 psi or above is desired 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 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

Cleaning the Airbrush between Colors(BCS)

- Remove the paint bottle.
- Attach a bottle containing the appropriate cleaning solution.
- Spray until the solution sprays clear.
- Remove the bottle of cleaning solution.
- Spray air until the airbrush sprays dry.
- Attach a bottle containing the next color.
- Repeat cleaning procedure when finished.

(BS, CS, SBS)

- Dump out the color cup's excess paint.
- Rinse the cup with the appropriate cleaning solution.
- Use a paper towel to wipe out any left over paint.
- Fill the bottom of the cup with cleaner.
- Spray cleaner until the spray is clear.
- Add the next color to the color cup.

- Repeat cleaning procedure when finished.

#### Cleaning the Needle

- Unscrew the handle (#19) from the airbrush body.
- Loosen the needle chucking nut (#18).
- Gently pull the needle (#17) straight out.
- Fold a soft cloth damp with cleaner over the needle.
- Rotate the needle to gently wipe the residual paint off.
- 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.
- Tighten the needle chucking nut finger tight.
- Pull the main lever back and forth to visually confirm the needle's ability to move.
- Screw the handle back onto the airbrush body.

#### 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.

- Increase the air pressure.
- Spray cleaning solution for a short time.
- 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 (#17) and the main lever mechanism (#12) regularly.

- Unscrew the handle (#19).
- Loosen the needle chucking nut (#18).
- Remove the needle.
- Coat the needle lightly with a high-quality lubricant, like Medea Super Lube.
- Wipe the needle with a soft, clean cloth, leaving a light coat of lube behind.
- Re-insert the needle gently into the airbrush.
- Tighten the needle chucking nut.
- Screw the handle onto the airbrush body.
- Drip 1 drop of lube into the slot directly behind the main lever and as close to the main lever as possible.

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. DO NOT use pliers. If needed use the provided wrench to unscrew the head cap (#3).

## REPLACEMENT PARTS AND ACCESSORIES

### Nozzle (#4)

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

- Unscrew the handle (#19).
- Loosen the needle chucking nut (#18).
- Gently pull the needle (#17) part way back. It doesn't need to be fully pulled out.
- Unscrew the head cap (#3).
- The nozzle should fall out. If it doesn't push it gently to the side with your thumb.
- Fit the new nozzle onto the airbrush body.
- Screw the head cap onto the airbrush body.

- Hand tighten cap or &ldquo;lightly&rdquo; tighten it with the provided wrench.DD NOT OVERTIGHTEN!
- Push the needle all the way forward until it seats with the new nozzle.
- Tighten the needle chucking nut.
- Screw the handle onto the airbrush body.

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

#### 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&rsquo;s pulled through.

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

#### Crown Cap (Optional Accessory)

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.

#### Pre-Set Handle (Optional Accessory)

The pre-set 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.

#### Quick Disconnect (Optional Accessory)

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

#### WARRANTY

All Iwata airbrushes are warranted against all manufacturing defects of material and manufacture or workmanship for a period of FIVE years from the date of purchase. This warranty does not cover fluid needle or fluid nozzles since these parts need to be replaced occasionally due to normal wear. Any other part or material that is or becomes 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 that have been altered or abused in any way. Call or email Iwata-Medea before returning an airbrush for the appropriate procedure for warranty repairs.