

## Lamp FAQs

### What information do I need to order replacement lamps?

- Provide make, model, and year of the unit(s).
- Have the information (numbers, letters, name, etc.) from the lamp currently used.

Most lamps have numbers and letters etched on one end. These numbers will help identify the brand, the length, the end type, wattage, the presence of reflective phosphor, color, etc.

### F71-T12-100W/BL/BP

- The series of letters and numbers is an example lamp etch. **F71** represents the length of the lamp in inches. However, if you measure the lamp, it will not measure exactly 71 inches. The figure used is an industry standard. The common lengths used in the tanning industry are **F59, F60, F71, F72, F73, F74, and F79**.

- **T12** represents the diameter of the lamp. T12 is the most common in low-pressure fluorescent lamps used in the tanning industry, although diameters of **T5, T8**, and others are found in the shorter, “spaghetti”-type lamps used for facial and shoulder tanning.

- **100W** stands for the wattage of the lamp. The most common wattages used in the tanning industry are **25W, 80W, 100W, 105W, 120W, 140W, 160W, 170W, 180W, and 200W**. If you cannot find a number followed by the letter W on your lamp, do not worry. Many lamp manufacturers use letters or words to represent the wattage of their lamps.

- **BL** refers to the color. In this case, “black light”, or ultraviolet light.

- **BP** means **Bi-Pin**. This is the type of end that this lamp has. There are two types of ends used in low-pressure tanning lamps: Bi-Pin and Recessed Double Contact, or **RDC**.

- If your lamp does not designate on its etch whether it has a **Bi-Pin** or **RDC** base, look at the lamp end and make that determination yourself. As a rule of thumb, **F59, F71, and F79** lamps will have **Bi-Pin** bases. **F60, F72, F73, and F74** will have **RDC** bases.

- Lamp manufacturers also use different types of letters and numbers to designate the length and wattage of their lamps. Below is another example lamp etch.

### FR71-T12-HO/BP

- The **FR** refers to a reflector lamp. A lamp that has **R** or the term **RUVA** in the etc has a special reflective coating, or phosphor, inside the lamp.

• **HO** means high output, used for **80W, 100W, 105W, and 120W** lamps. You may also see the term **VHO**, which means very high output. The term **VHO** generally represents **140W, 160W, 170W, 180W, and 200W** lamps.

• There are many more terms, letters, and numbers used by lamp manufacturers to identify their lamps. Most lamp distributors have a cross-reference for identifying these terms, so please provide any and all information from your lamps when reordering.

### **What is UVB? What does “5.0” and “6.5” mean?**

• There are different two types of ultraviolet light involved in the tanning process: **UVA** and **UVB**.

• **UVB** (280-320nm) starts the tanning process. It causes the “reddening” effect, or erythema. UVB stimulates melanin to form beneath the surface of the skin.

• **UVA** (320nm-400nm) oxidizes the melanin, turning the skin brown.

• The more **UVB** present in a lamp, the faster reddening results will occur.

• Many manufacturers tell how much **UVB** is present in their lamps by a number: **2.6, 4.2, 5.0, 6.5, 6.9, 7.5, 7.9, 8.5, 8.9**, and so on.

• A lamp that is listed as a 5.0, for example, might have an etch that looks like this: **F73-T12/BL/HO/50**. In this instance, 50 represents 5.0, or 5% UVB.

• Many salon owners judge a lamp by the **UVB ratio** (or percentage). This can be very misleading.

• The **UVB ratio** cannot be used to compare between brands. For example, a 5.0 from Manufacturer A is not the same as a 5.0 from Manufacturer B. Remember, percentages are relative, not absolute.

• It is evident that even though both Lamp A and Lamp B have 5% UVB, Lamp B has a higher overall UV output. Therefore, the amount of **UVB**, not the percentage, in Lamp B is higher than that of Lamp A.

• When choosing replacement lamps of either the same **UVB ratio** or higher than your existing lamp, be sure to factor in the following:

### **Performance Longevity Results**

### **Cost Effectiveness Compatibility Quality**

### **What is compatibility?**

• **Compatibility** is set by the FDA guideline that states the following:

• The replacement lamp’s output must be within +/- 10% of the OEM (original) lamp.

• The replacement lamp cannot alter the exposure time of the tanning equipment.

- The replacement lamp must have the same melanogenic and erythemic effect as the original lamp.
- Most states are required by their state regulatory office or the FDA to use the original lamp that came in the unit from the factory, or a compatible replacement.
- There may be dozens of lamps that will fit and work in your equipment. They will light and they will tan. That does not mean that they are compatible. The lamp must meet the FDA compatibility requirements, and you must provide proof that they do.
- **Compatibility sheets** must list the original lamp as compatible to the replacement. The manufacturer or lamp distributor can provide you with these sheets if you do not receive one in the box of lamps.
- The numbers and letters on the sheet must be identical to those numbers and letters on your original lamp.
- If you are unsure about your lamp compatibility, contact the equipment manufacturer for information about the original lamp. Or, contact the company you purchased the lamps from for information about the replacements. If you are still in doubt, contact your state or FDA inspector.

### **Can I turn my 20-minute unit into a 10-minute unit (or other) by using a lamp with a higher UVB percentage?**

- A tanning unit is designed to operate with a particular type of lamp (or a compatible replacement) to achieve the session length it is labeled with. The following factors of equipment design play a role in the session length of the tanning unit:

#### **Lamp properties Ballasts Acrylics**

#### **Voltage Internal Cooling Distance from lamp and tanner**

- It takes more than a lamp to achieve the session length the tanning unit was designed for (and FDA certified for).
- Some states may allow you to re-certify your tanning equipment for a different session time. Contact your state inspector for more information.

### **How long should lamps last?**

- Most manufacturers have a **rated lifetime** for their lamps. This information should be given to you when purchasing. If not, contact the company you purchased the lamps from, or the lamp manufacturer.
- Keep in mind that the rated lifetime is based on laboratory tests. The lifetime figures are derived from tests under the most ideal of conditions. In a “real life” salon setting, there are variables such as voltage, room temperature, equipment maintenance, ventilation, etc. that will alter the actual useful hours of a tanning lamp.

- Do not rely on the manufacturer's rated lifetime. We recommend that lamps be changed at approximately 70% of whatever the manufacturer states. For example, Brand X has a rated lifetime of 1000 hours. Change them at approximately 700 hours.

- In conjunction with lamp hours, use a UV meter to determine when to change lamps. It will help measure degradation over time, and with proper record keeping, UV meters are a valuable salon tool.

### **How can I prolong the useful life of lamps?**

- Clean acrylics thoroughly and periodically. Change them when necessary, not just when they are broken. Refer to the Acrylic FAQs section for more information.

- Replace all fans as soon as possible after they fail. Keep the fans free of dust and debris to promote adequate air ventilation. Refer to Fan FAQs for more information.

- Clean reflectors behind the lamps during a lamp change.

- Be sure that your incoming voltage meets the equipment manufacturer's specifications. If your voltage is too high, this will raise the operating temperature of your tanning unit and therefore shorten lamp life. If the voltage is too low, the maximum tanning potential of your lamps will not be reached. Install a buck booster if necessary and where applicable. See Buck Booster FAQs for more information.

- Replace starters (where applicable) at least every other lamp change. (Exception: electronic starters.)

- Ensure that your salon has adequate air conditioning and ventilation. Contact the equipment manufacturer for their recommendations on AC requirements for each unit.

### **Do lamps "go bad" in storage?**

- No. Lamps can be stored indefinitely. If you receive lamps that have a relatively "old" date etched on them, there is no need to worry. The gases, phosphors, and other components used to manufacture lamps do not expire or deteriorate when not in use. The only way a lamp "goes bad" is by running it.

- Lamps that have been stored in either too hot or too cold of an environment may be difficult to light. Allow lamps to reach room temperature before installing.

- If stored lamps are dusty, clean them with a warm, damp cloth. You may also use alcohol or a common household glass cleaner.

**I just received my new lamps, and one (or more) will not come on.**

- During shipping, lamps may have been damaged. Sometimes, the cracks in the lamps are so small that they cannot be seen, although the gases inside the lamp will escape. Contact the company through which the lamps were purchased for their policy on freight damage.

- A certain percentage of lamps from any manufacturer simply will not work. This failure is not common, approximately less than 3%. This is referred to as a “no light”. Contact your lamp distributor for information on receiving replacements.

- Make sure that the lamp is properly seated in the lampholders. The lamp may be loose and not making a proper connection.

- Replace the starter, if applicable.

- Check the lampholders to see if any are black, melted, or have loose wiring. See our Lampholder FAQs section for more information.

- If all of the instructions above have been followed and the lamp will still not light, you more than likely have a failed ballast. Refer to the ballast FAQs section for more information.

**I installed the new lamps, but one (or more) is glowing on the ends (or “flickering”, “swirling”, etc.).**

- Lamp ends glowing: replace starters.

- Flickering: usually caused by failing starters; replace.

- Swirling: caused by impurities inside the lamps. Run the unit through 2 to 3 complete sessions and they should disappear.

- Orange or other colored “streaks”: caused by air leaks through cracks that occur during shipping. Replace the lamp.

- Dark ends: check lampholders. A certain amount of lamp end darkening occurs with any lamp. Normal darkening will occur within approximately an inch on each end of the lamp. This causes no effect on either the performance of the lamp or the tanning results.

- Holes in phosphor (coating): cosmetic defects that have no effect on the tanning ability of the lamp.

**I have had my new lamps installed for a few days, and my tanners do not feel they are getting any results.**

- When is the last time the acrylics were replaced? Check acrylic transmission with a UV meter (see Acrylic and UV Meter FAQ sections for more instructions and information). If there is a difference of 20% or more, replace the acrylics.

- Have an electrician check your actual incoming voltage. It may be too low, minimizing the lamp's tanning potential.

- Ensure that your unit is properly cooled. If the unit is running too hot, the lamp's output can be reduced to 70% of what it should be delivering. Check fans, clean unit thoroughly, and change filters.

- Your original lamps may have been a lot "hotter", which has a psychological impact on what the tanner perceives to be tanning performance. Tanners historically have mistaken "heat" for "tan". Have them continue to follow the recommended exposure times for their skin type, using a body sticker to monitor their results.

- If you have done all of these things, and are still receiving repeated complaints, collect your invoice number, the batch code off of the lamps, and contact the company you purchased the lamps from. Or, contact the lamp manufacturer. They may want to test a sample of your lamps.

**My sales representative promised me that my lamps would last for over 800 hours (or 1000, etc.). I only have 250 hours on my lamps, and three have burnt out already.**

- Make sure you have checked the starters, lampholders, ballasts, and voltage as described in the various FAQ sections.

- Contact the company you purchased the lamps from to make sure you received the correct replacement lamp.

- For example: if your tanning unit is a 160W or VHO system, and you are running 100W or HO lamps, the 160 watt ballast is causing the premature failure of your lamps. The ballast is too powerful for the lamp being used, and for whatever reason, whether it be miscommunication between you and the sales person at the time you placed the order, or a mistake during the packing process, you have the wrong lamp for your unit. Alert your sales rep as soon as possible if you think this may have happened.

- A certain percentage of lamps simply will not last for their rated or actual lifetime. Remember, if a company says 1000 hours, you should expect approximately 700 hours of actual life from that lamp. Even after this being said, a certain percentage will simply fail prematurely. Contact the lamp distributor for information about their lamp warranty, but be prepared to purchase replacements.

**The last time I ordered lamps, they were pink. This time they are blue. What is the difference?**

- Lamp manufacturers choose different colored phosphors to use in their lamps.

Phosphors are the specially blended coating inside the lamps that allow through UV light. They can be tinted with dye to change the color the lamp gives off when lighted.

- The color itself has little to no effect on the type of tan it gives. Whether a company chooses pink, blue, green, white, or any other color is purely cosmetic.

### **I want a bronzing lamp.**

- First, know what you are asking for. The term “bronzing lamp” is being used in the tanning industry widely, and many salon owners and tanners aren’t sure what it means. To some, the term “bronze” immediate, dark results. To most, the term “bronze” means a slower, more gradual tan that provides deep, dark results.

- Once you determine what result you would like to achieve, discuss your options with your lamp representative. If you are one of the many that would like a slower, more gradual tanning lamp, we recommend you opt for a replacement with a lower UVB percentage.

### **I have seen lamps advertised that are two (or three) different colors. What is the difference between these lamps and ordinary lamps?**

- There are lamps on the market that have two or even three different phosphors inside the same lamp. Some of the more common are those that are 1/3 pink and 2/3 blue.

- These lamps are designed for salon owners that have tanning equipment that did not originally come with a factory installed facial tanner. These lamps give salon owners’ the option of satisfying their tanners who have a more difficult time tanning their face and upper body.

- The upper portion of the lamp has a specially blended phosphor that allows through a stronger UVB percentage (usually 6.5%). The lower portion has a phosphor that allows through a lower UVB percentage (usually 5.0%). The color itself does not provide this effect, it only is used to see the difference in the two types of phosphors being used, and for marketing purposes.

- Ideally, this lamp should give an evenly balanced tan from head to toe.

- Consult the lamp manufacturer or supplier for compatibility listings before considering this option.

### **Should I rotate my lamps? What is “top dropping”?**

- Many salon owners rotate their lamps, also called “top dropping”. This is the practice of moving the lamps from the top to the bottom during the lamps’ lifetime.

- If you are considering doing this, please consult with the equipment manufacturer before doing so. This can be an effective method for some types of tanning equipment, but not all.

### **What does “RUVA” mean? What is a reflector lamp? Why would I need a reflector lamp?**

- RUVA, or the letter R, in a lamp etch, means that the lamp has a special reflective coating inside the lamp. They generally have a lower UVB percentage.

- Lamps with reflective phosphors direct most of the UV rays onto the tanner. The reflective properties intensify the tanning session.

- The most obvious reason why a salon owner would require a reflector lamp is if the OEM lamp was a reflector. The tanning unit was designed for use with the reflector lamp. Replacing a reflector lamp with a non-reflector lamp in this instance would alter the type of tan, the performance of the unit, and the length of the session.

- Many salon owners choose to replace their original non-reflector lamps with reflector lamps in order to provide a more intense tanning session for their customers. This may alter the original session length. Be certain that the replacement reflector lamp is compatible to the original non-reflector before your purchase.

#### **More helpful tips on lamps:**

- Replace all of your lamps at one time. This will help prevent “striping”, different colored lamps in the same unit, and promote more uniform performance.

Exceptions: tanning units that take two different wattages of lamps that are on different replacement schedules, or salons that are on a rotation schedule.

- Always order lamps in even cases. This helps minimize freight damage, and should give you spare lamps in the event of no lights, breakage, or premature failure.

- Order several spares for each type of lamp you order. This minimizes any down time you may encounter.

- Replace starters at least every other time you change your lamps. (Exception: electronic starters.) Keep a box on hand at all times in case of failure.

- Get as much information about the lamp you are ordering. If there is any literature, ask the company to mail, fax, or email you a copy. Make sure that you obtain compatibility sheets and keep them in a secure place.

- Keep records, either by hand or in your salon software, for each tanning unit. The information should include the make, model, year, serial number, lamps used, lamp replacement schedule, UV readings, replacement parts, etc. This will make reordering easier for both you and your sales representative.