

# Technical support

Document name:

## Troubleshooting guide

Chapters:

**Artwork / Exposure / Washing out / Drying /  
Adhesive application / Blasting**

### Artwork

#### **Artwork is not printing dark enough.**

1. Check artwork has been produced as black and does not have any other colour in the image.
2. Check printer settings. Set on darkest print quality
3. Check printer toner level.

We recommend using only good quality Laser Printers at 600dpi or more or lithographic film.

### Exposure

#### **Light source is not giving an even exposure**

1. Check that your UV light tube is in good condition.
2. Check that your cover material is not dirty.
3. Check your timing is correct.
4. Check that the film has not be pre-exposed or subject to extended light source before or after exposure

### Washout

#### **Washout is taking a long time to wash out image**

1. Check that your film was not over exposed
2. Check that the film has not be pre-exposed or subject to extended light source before or after exposure
3. Check artwork has been produced as black and does not have any other colour in the image.
4. Check your timing is correct.
5. Check that the emulsion side of your film is the surface that is being sprayed.
6. Check that your water pressure is strong enough
7. Check that your water spray trigger is producing fine pressurized spray.
8. Check your exposure unit. Is it giving you a tight enough vacuum for the art and emulsion?

#### **Some areas go a pasty blue and won't washout.**

1. Your art image areas has been exposed.
2. Check artwork has been produced as black and does not have any other colour in the image.
3. Check your exposure unit. Is it giving you a tight enough vacuum for the art and emulsion?
4. Check that your exposure time is correct. Over exposure will cause light to get through the black areas or seep in under the edges of the black areas.

#### **The resist goes wrinkly and crazes after wash out.**

You have over washed the resist and saturated the film. Why did you need to over wash? Was it because the artwork was not opaque enough and the image area got some exposure making it hard to

washout? It may have been that your wash out nozzle is not giving out a fine enough and high enough pressure spray. A garden hose nozzle will not produce a consistent professional result.

**The image is being washed away and ruined in the washout process.**

1. Hold Spray 4-6 inches away and square to the image. Angled spraying will get under the exposed resist and ruin it.
2. Do not over wash. This will saturate the resist making it soggy and will distort or lift the image. Stop washing as soon as you are sure that the washout is clean.
3. A large wash out area and a fine line wash out area such as an open logo and text below it may cause over washing. The large open areas take long to wash out than the small areas so always start by washing over the large areas first and then the small areas. If you wash them out together the small area will get too much wash out and go soggy. You will find that the water run off from the large area over the small area will just about be enough to wash out the small area with just a quick spray.
4. Check your water is not too hot.
5. Check that your water spray trigger is producing fine pressurized spray. Low pressure makes the washout time slower requiring more water which in turn will saturate your mask. Garden hose fittings do not give high enough pressure and fine enough water spray to give fast results. They will cause saturation through high output and low pressure.

**The image won't wash out at all**

1. Your film has been completely developed.
2. This was probably caused by not laying the artwork and film correctly in the light source. Remember the light must travel through the artwork Vellum before it gets to the resist emulsion.
3. Check that the film has not been over exposed in the exposure unit.
4. Check the film has not been exposed to normal light for too long.

**Fine areas of artwork such as small font serifs won't wash out properly.**

1. Check your exposure unit. Is it giving you a tight enough vacuum for the art and emulsion?
2. Check artwork has been produced as black and does not have any other colour in the image.
3. Check that your exposure time is correct. Over exposure will cause light to seep in under the edges of the black areas.
4. Check that your water spray trigger is producing fine pressurized spray

## Drying

**The Resist is blotching with run marks.**

This should not cause any problems unless you have not blotted the excess water off the wet resist before drying. If this is the case the excess water may saturate the mask ruining it. Always blot off excess water.

## Adhesive application

**Some areas of the glue are taking much longer to dry to clear and tacky.**

The adhesive has been applied unevenly and should be removed and re-applied. Attempting to blast poorly applied adhesive may ruin your blasting item.

Use single even strokes from top to bottom. Apply Adhesive thinly avoiding excessive build up areas.

**Tiny bubbles occur under the resist that can't be burnished out.**

It doesn't matter if there are small bubbles under the resist as long as it's not on the edge of part of the mask image. If you have a persistent bubble right on the edge of the image to be blasted get rid of it by piercing it with a sharp blade. A tiny hole will release the air and by pushing the resist around it down you will close up the area and the hole will have no effect on the blasting image.

**The sponge brush is applying excess adhesive.**

Try squeezing the excess out of the sponge tip before applying. The best blasting results are achieved by thinly applied adhesive.

**The RZ-2 adhesive is crystallising and forming lumps on the applied surface.**

The Adhesive has been exposed to the air for too long. Throw out the adhesive and pour a fresh lot.

## Blasting

**The Abrasive flow keeps flowing even when my foot pedal is not on the foot pedal.**

1. Check that the foot pedal pressure is higher than the abrasive flow. On a pressure pot system the foot pedal should be regulated at 80psi whilst the abrasive flow pressure should be set at between 20 - 30psi.
2. Check that the regulator on your compressor is fully open so as not to restrict the air pressure on the regulators on your pressure pot system.
3. Check the diaphragm on your foot pedal valve. It may have worn a hole through the rubber and need replacing.

**Excess abrasive sprays when I blast.**

Check your flow valves are set correctly. The starting point for the setting of the abrasive valve and the airflow valve should be 50% open. A fine adjustment can be made on the airflow valve moving it open or closed by 1mm intervals to get the right consistency.

If you are getting too much sand flow you need more airflow to balance the mix. Adjust in 1mm increments until you get the desired effect.

Check to make sure the sand flow valve is not too far open.

**When I press the foot switch I get a burst of abrasive and I can blast but in about 30 seconds I seem to be getting nothing but air. I have to release it and step on it again.**

Your air valve setting is open too wide, your abrasive flow will begin shooting well but after a few seconds the air will over power the sand and you will loose consistency. Re-adjust your valve settings. Even if you haven't changed anything simply wear of the nozzle will effect the pressure settings and make slight adjustments necessary. Humidity may also effect the settings.

**I can't seem to get a consistent sand flow, I get plenty of air but I just can't get the sand to flow.**

You have probably got a blockage in the system. First check the nozzle is there anything stuck in it. Second check the hose, is it coiled up. The hose should always be laid out straight without coils so that the abrasive gets clear passage without delayed build-ups on the curves. This will also wear out the hose faster.

The blockage may also be in the sand flow valve. You will need to pull the valve section apart and check for any foreign particles causing the blockage. It is very important to sift the abrasive every time you pour it into the pressure pot. This will keep foreign particles out of your system. ProBlast sells a convenient sand-sifting ring that fits over the top of Rayzist pressure pots.

Other causes for sand not flowing correctly may be humidity in the air causing moisture in the sand making it stick. The only way to fix this problem is to dry the abrasive out.

**It seems to take a long time to blast a product.**

The blasting action should be almost instant. Your airflow is probably too lean making a softer blasting action. Increase your air mix.

**I get an uneven etched image when I blast.**

Don't spray in one place for prolonged times. Always keep moving slowly over the area. Start blasting at one side of the resist and work your way evenly across the area.

**Some areas are harder to blast than others and result in different depths of blasting.**

You have probably applied an uneven coating of adhesive. Where the adhesive has a build up it will take longer to blast than the thinner areas. You will get deep ridges along the built up adhesive areas where the thinner adhesive layer has been blasted away.

If the resist has been left on the blasting item for a long period of time the adhesive will take longer to blast off.

**When I blast the item the resist lifts off the surface ruining the item.**

The resist may not have been properly dried before adhering to your item surface. Moist resists will not adhere properly. Make sure the resist is completely dry.

The adhesive may not of been given enough time to dry. Make sure that the adhesive has gone clear and all the milking looking areas have disappeared before you apply the resist.

The resist may not have been burnished well enough. In general you don't have to burnish the resist very hard but you must make sure you burnish all areas.

You may be blasting at an angle to the surface of the blasting item. Make sure you are blasting at 90 degrees to the blasting surface.

You may be blasting too close to the surface. Stay about 4 - 6" away.

**Small areas of the resist blast away (such as the middles of an "a")**

Check to see if you have adhered the resist properly (see above).

You may be blasting too close or at an angle.

Check the quality of your wash out process.

Most people will have this problem when they first get started in blasting and with a little practice you will achieve consistently good results.

**When I take my foot off the pedal the Sand flow keeps going.**

Check that you have enough psi coming out of your compressor. A 100lb Pressure Pot will need at least 80psi-compressor output to operate the foot pedal properly.

Check the Diaphragm Gasket in the sand flow valve. It may have worn a hole in itself. You will need to replace it.

Check the foot pedal valve. It may be worn out and need replacing.

**When I pressurise the Pot I get sand flow straight away without even putting my foot on the foot pedal**

80psi-compressor output to operate the foot pedal properly.

Check the Diaphragm Gasket in the sand flow valve. It may have worn a hole in itself. You will need to replace it.

Check the foot pedal valve. It may be worn out and need replacing