ABS PLASTIC PAN REPAIR
For Spas

Before                                           After

This kit contains the necessary components and procedure to repair moderate cracks, skid damage, and tears to portable spa pans in applications such as delivery mishaps and service accessibility.

Kit Contents

- ABS Patch Resin (Black)
- ABS Patch Paste (Black)
- ABS Patch Resin & Paste Catalyst
- Quick Glaze ABS Repair Coating
- Reinforcement
- Mixing Cups
- Paint Chip Brushes
- Plastic Spreader
- Stir Sticks (Tongue Depressors)
- 100 Grit Sandpaper
- Nitrile Gloves
- Instructions

Recommended Products:

- Lacquer Thinner
- Cartridge Chemical Respirator NIOSH/MSHA TC-23C (for indoors or poorly ventilated areas)
- Hair Blow Dryer; Heat Gun or Paint stripper can be used but will melt the plastic with too much heat.
- Quality Masking Tape
- 3” Disc Grinder, Dremel Tool or course Sandpaper (80 or 100 Grit)
**Solvents and Safety:**

Surface repairs require personal contact with a variety of components, each having its own unique characteristics. When handling these materials, read and follow the safe handling procedures on the labels and the MSDS. During grinding, drilling, sanding, etc., eye and hand protection is required. Do not breathe vapors or mists. Individuals with a history of lung or breathing problems should not use or be exposed to this product. Keep away from heat, sparks and flame. Vapors may cause a flash fire. Close containers after each use. Dispose of properly.

Wear a chemical cartridge respirator (NIOSH/MSHA TC-23C) during the mixing and application process until all vapors are exhausted. Do not permit anyone without protection in the working area without adequate protection. Follow the respirator manufacturer’s directions for respirator use.

**Procedure:**

Prepare the damaged area, crack or break by manipulating the surface back to its original shaped form.

This can be achieved by grinding the cracks with a disc set-up on a drill, dremel tool or by cutting the ABS with a utility knife if necessary.

Clean both sides of the repair area with lacquer thinner and a cloth removing dirt, grease, silicone or any other residue. **Beware**, too much lacquer thinner can melt the surface. The goal is to achieve a smear look on the inside of the pan for resin adhesion.

Apply a heavy duty quality masking tape over the exposed cracks holding the form in place from the exposed finish sides of the pan. Be sure the tape closes the cracks or gaps from allowing the resin to saturate through the damaged area.

Using a chip brush, apply a liberal amount of catalyzed (mixed) ABS Patch Resin (see product preparation) onto the prepared area to accept the reinforcement.

Next, apply the prepared piece of dry reinforcement to the wet resin area.
Using the same chip brush, apply the catalyzed (mixed) ABS Patch Resin to the reinforcement to lay smooth, working out any air pockets and giving the reinforcement a wet look. Two layers of reinforcement is recommended. With each layer apply the next layer immediately over the first. Additional layers will add strength if necessary.

Apply moderate heat over and to the resin and reinforcement application (use a blow dryer). **WARNING:** Too much heat can distort the ABS! By itself, no heat applied, the resin and reinforcement should cure within 20 minutes at 75°F. With heat applied, the application will cure within 5-10 minutes. Once cured (hardened) remove the tape from the other side and wipe any tape residue with lacquer thinner and a cloth. Trim or grind any overlap or overage.

From the finished side of the pan, grind or sand any excess resin overage to except a smooth ABS Patch Paste application.

Apply the catalyzed (mixed) ABS Patch Paste using the plastic spreader bringing the surface level. Apply moderate heat to accelerate the cure between applications (5-7 minutes). This may take two applications to bring the surface level. Try to finish with a slight overfill to minimize grinding or sanding.

Sand or grind the filled area level and smooth with 80 or 100 grit. Remove grinding dust or residue with a dry rag or cloth.

Apply the ABS repair coating using a clean chip brush by dabbing and stippling the paint to recreate the texture look. The coating will dry in approximately one hour at 75°F. This can be accelerated by applying moderate heat. (The repair coating is ready to use and does not require a catalyst.)
**Product Preparation:**

**Reinforcement:** Prepare and presize the layers of reinforcement to size before the Patch Resin Application. Two layers are recommended. Additional layers will add more strength.

1. Cut with scissors any straight or curved areas where the reinforcement ends at the pans edges or access holes.
2. Tear by hand any edges that fade onto the ABS substrate.

**ABS Patch Resin and ABS Patch Paste:** Catalyze using ABS Patch Resin and Paste Catalyst or HTP-9 with the following volumes and ratios:

<table>
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<tr>
<th>Resin &amp; Paste</th>
<th>Catalyst</th>
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<tr>
<td>Each ounce</td>
<td>24 drops</td>
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<tr>
<td>½ Pint (8 oz)</td>
<td>3.8 cc (use medicine cup)</td>
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Add catalyst and stir. Mixed pot life at 75°F will be approximately 20 minutes. The product will set quicker with hotter temperatures, larger mass and applied heat.

**ABS Repair Coating**
Product is ready to apply by brush – no catalyst. Stir before applying.

**Clean-Up**
Wet resins and coating can be cleaned up using lacquer thinner and a cloth. Spot test the surface to avoid chemical damage.

**Order and Other Information**

While there is no implied warranty, these materials and techniques used were designed to yield a lasting repair for this application. To a large degree, success of the final repair results lies with the experience and skill of the individual repair technician.

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