655 Epoxy Adhesive General Use

Safety

- Avoid skin contact with resin, hardener or mixed adhesive. Wear liquid-proof gloves and adequate protective clothing to keep the epoxy off your skin.
- Avoid eye contact with resin, hardener or mixed adhesive. Wear protective glasses. In case of contact with eyes, flush with water for 15 minutes and consult a physician.
- Avoid inhalation of vapors. Provide adequate ventilation. Wear a dust mask when sanding epoxy, especially epoxy that has not fully cured.
- Read and follow safety information on resin and hardener containers.

Starting out

Puncture the seal in each tube with the point in the top of the cap. Enlarge the opening as necessary to improve flow.

Before mixing epoxy, gather all necessary application tools, clamps and equipment. Check all parts for proper fit and be sure all surfaces to be glued are properly prepared.

Mixing and curing

Dispense equal volumes of G/flex 655 Resin and Hardener onto a mixing pallet (1). Use the square end of a mixing stick to thoroughly blend the resin and hardener (2).


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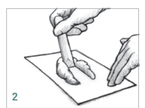
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After mixing the resin and hardener, you will have about 45 minutes, at 72°F (22°C), to apply the mixture before it begins to gel and up to 75 minutes to assemble and clamp parts after it is initially applied. At 72°F (22°C), the adhesive mixture will solidify in 3–4 hours and reach a workable cure in 7–10 hours. The adhesive may be sanded, clamps can be removed, and joints can be moderately loaded. Wait 24 hours before subjecting joints to high loads.

G/flex 655 Epoxy Adhesive cures faster in warmer temperatures and slower in cooler temperatures. When a quicker cure is desired, apply moderate heat to substantially reduce cure time. Cure time is reduced by half with each 18°F (10°C) increase in temperature.

G/flex 655 will cure in temperatures as low as 40°F (4°C), but cure very slowly. When using 655 at lower temperatures, it is a good idea to warm resin and hardener to room temperature for easier dispensing and mixing.

Curing epoxy generates heat. Thicker layers of 655 generally cure a little faster than thinner layers, as this heat is concentrated in thicker layers and dissipated in thinner layers.

Cleanup

Clean uncured epoxy from skin and clothes with alcohol, followed by washing with soap and water. Remove excess epoxy from work surfaces with the flat end of a mixing stick or with paper towels. Clean up residue with alcohol, citrus-based cleaner or a solvent such as lacquer thinner or acetone.

Basic surface preparation

G/flex 655 Epoxy will bond to many different materials. For best adhesion to most materials, bonding surfaces should be:

CLEAN—Remove loose, chalky or flaky coatings, and contaminants such as grease, oil, wax, and mold release. Clean contaminated surfaces with an appropriate solvent applied with plain white paper towels. Wipe the surface with a clean, dry paper towel before solvent dries. Do not use laundered rags to apply or remove solvents as they may contaminate the surface with fabric softener residue.

SANDED—Sand non-porous and smooth surfaces with 80-grit aluminum oxides and paper to provide good texture for the epoxy to "key" into. Brush away sanding dust. Refer to the chart (*right*) for recommendations.

DRY—Although G/flex 655 Epoxy can be used to bond damp and wet surfaces, maximum adhesion will be achieved when bonding to dry surfaces.

Additional surface preparation

Metals

Sand or grit-blast the surface to expose bright metal.

Clean the area with acetone or lacquer thinner using white paper towels. Allow the surface to dry completely.

Abrade through wet epoxy—Apply a thin coat of G/flex 655 Epoxy and immediately scrub metal surfaces through the wet epoxy coating with a fine wire brush or sandpaper.

Hardwoods, including tropical woods

Bonding to dry wood (between 6 and 12% moisture content) is best for achieving long-term reliable bonds. Sand mating surfaces with 80-grit parallel to the grain. Clean oily woods with a solvent such as isopropyl alcohol or acetone. Apply solvent with plain white paper towels. Wipe the surface with a clean, dry paper towel before solvent dries. Do not use laundered rags to apply or remove solvent.

The extent of wood failure in tensile adhesion tests indicate that tensile adhesion achieved using G/flex 655 Epoxy, with proper surface preparation, approached or exceeded the grain strength of the wood in all of the woods we tested.

Plastics

Clean plastics, except for polycarbonate, with isopropyl alcohol to remove contamination. Sand all plastics including polycarbonate with 80-grits and paper to provide texture for good adhesion. Flame treat ABS and PVC for additional benefit.

HDPE (high-density polyethylene) and LDPE (low-density polyethylene) must be flame treated for good adhesion.

FLAME TREATING is a method for improving adhesion to plastics by quickly passing the flame of a propane torch across the surface after it is cleaned and sanded. Allow the blue part of the flame to touch the surface. Keep it moving at the rate of 12 inches per second.

No obvious change takes place, but the flame oxidizes the surface and dramatically improves adhesion. Make multiple passes of the torch ¾" apart to treat wide areas. Be careful not to melt or burn the surface.

While flame treating will improve adhesion to most plastics, it appears to provide the greatest benefit to polyethylene (HDPE and LDPE). If you are unsure of the type of plastic, it doesn't hurt to flame treat. ■

Surface preparation for various dry materials

Material	Basic surface preparation	Additional surface preparation
Fiberglass laminate	As necessary, Remove soft and loose surface material Remove contamination with solvent wipe Sand with 80-grit sandpaper	
Aluminum		Abrade with 80-grit sandpaper
Steel		Wire brush through wet epoxy
Steel-galvanized		
Copper		
Bronze		
Lead		
Ipe	Sand with 80-grit sand-paper parallel to grain	Isopropyl Alcohol wipe
Teak		
White oak		
Walnut		
Purpleheart		
Greenheart		
ABS	Isopropyl Alcohol wipe Sand with 80-grit	Flame treat
PVC		
HDPE, LDPE plastic		Flame treat required
Polycarbonate (Lexan™)	Sand with 80-grit	

Bonding

Apply the epoxy mixture to all properly prepared mating surfaces. Apply enough epoxy to fill voids and bridge gaps on uneven mating surfaces.

Clamp the components in position before the epoxy begins to gel—about 75 minutes at 72°F (22°C). Use just enough clamping pressure to squeeze a small amount of epoxy out of the joint. Leaving some glue in the joint increases bonding strength. Allow the epoxy to cure thoroughly before stressing the joint.

Use a spreader or notched trowel to apply G/flex 655 to larger surfaces prior to clamping. Use a pipe cleaner or syringe to apply adhesiveto hard to reach areas such as cracks and fastener holes when bonding hardware.

Bonding to wet surfaces and surfaces underwater

While gluing to a dry and properly pre-pared surface is best for producing reliable long-term bonds, gluing to damp, wet and even underwater surfaces is possible.

Abrade bonding surfaces with 80-grit sandpaper.

Mix an appropriately sized batch of G/flex 655 Epoxy Adhesive. Forcefully apply the 655 onto the bonding surfaces with a plastic spreader or stiff brush to displace water in the scratches and pores at the bonding surface.

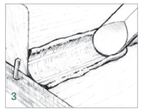
Bring the mating surfaces together and apply just enough clamping pressure to squeeze out excess adhesive and moisture.

If one bonding surface is dry, apply extra adhesive to it, so excess will displace water at the bonding surface. It is important that significant excess adhesive squeezes from the joint for proper bonds to form.

Allow to cure 7–10 hours before removing clamps and 24 hours before applying a load on the joint.

Making fillets

When parts are joined at or near right angles, fillets can be used to add considerable strength to the joint by increasing the surface area of the bond. Make fillets by applying a bead of G/flex 655 along the inside corner of the joint. Form the epoxy into a cove section using the round end of a mixing stick (3). Clean off the excess epoxy with the beveled end of the mixing stick before the epoxy gels (4).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Fiberglassing

Light weight fiberglass fabrics and tapes (4–9 oz/sq yd range) can be used with G/flex 655 Epoxy Adhesive when fiber re-inforcement is desired to add stiffness or abrasion resistance, or to patch a damaged area.

Cut the fabric to fit the area. If heavier reinforcing is desired, use multiple thin layers rather than a single thick layer. Properly prepare the surface before applying fabric.

Coat the substrate with 655. Lay the fabric in position on the wet adhesive. Spread mixed adhesive on to the fabric using a plastic spreader. When the fabric and sub- strate have been saturated, use the spreader to smooth and remove excess epoxy. Repeat the process with additional layers. ■

Gluing things to plastic boats

G/flex 655 is a toughened epoxy adhesive designed to bond to many different materials in addition to plastic. Joint strength—the ability to adequately transfer a load from one part, one material, to another—depends on the combined effects of three factors.

GLUE STRENGTH—Careful metering and thorough mixing will assure the epoxy adhesive mixture cures to full strength.

ADHESION—For the best adhesion, the joint's bonding surfaces must be properly prepared. Refer to the chart on the left for the proper surface preparation for the plastic and the material you are gluing to it.

JOINT AREA—The bonding area of the joint must be adequate for the load on the joint and materials being joined. Increased overlap, scarf joints, fillets and reinforcing fibers can be used to increase the joint bonding area.

G/flex 655—a West System® Epoxy

G/flex 655 Epoxy is the result of years of experimentation to develop a toughened epoxy that was simple to use, viscous enough not to drain out of a joint, and would adhere tenaciously to a variety of materials under difficult conditions.

G/flex 655 is all that, and more. It is a marine-grade glue that can be accurately mixed in small batches with a simple 1:1 mix ratio. It has the advantage of a long open working time and a relatively short cure time.

G/flex 655 is, first of all, a high-strength epoxy—designed for permanent, waterproof, structural bonding. Further more, G/flex has a modulus of elasticity of 150,000 psi, giving G/flex the toughness to make structural bonds that can absorb the stresses of expansion, contraction, shock, and vibration.

G/flex adheres tenaciously to difficult-to-glue hardwoods and even has the ability to glue damp woods.

G/flex is ideal for bonding a variety of other materials, including dissimilar ones—metals, plastics, glass, masonry, and fiber-glass. It can be used to wet out and bond fiberglass tapes and fabrics.

We encourage you to read these instruction and then experiment with G/flex. We think you will find many projects for which the particular properties of G/flex are ideally suited.

West System reliability

G/flex 655 Epoxy is the latest addition to the West System line of epoxy products. While G/flex offers physical properties and applications that are different than West System 105 Resin-based epoxies, they share the same high standards for performance and reliability.

West System is the worlds leading brand of marine epoxy, created by Gougeon Brothers—sailors, boatbuilders, and formulators who literally wrote the book on wood/epoxy boat building. We know the engineering and chemistry required to formulate epoxies for high-performance composite structures. It requires thorough research, rigorous test programs, skillful shop work and direct experience with today's high-performance boats and other engineered structures. This experience and dedication to performance has given West System another quality that sets it apart from other brands of epoxy.

For forty years, reliability has been the hallmark of West System. We adhere to the highest standards of quality assurance in our formulating and manufacturing practices, from raw material qualification to testing and certification of finished resins and hardeners.This means that every properly mixed batch of West System Resin and Hardener, including G/flex Resin and Hardener, will cure as it is supposed to, everytime. This commitment to quality has earned certification to the ISO9001:2008 standard. West System is your reliable solution.

Outstanding customer service

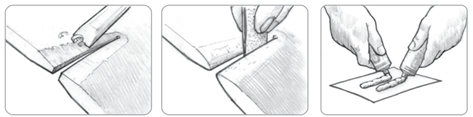
West System provides you with something else as reliable as our epoxy—knowledge. Whether your project is large or small, the West System Technical Staff and comprehensive instructional publications will help assure the success of your building and repair project. West System is renowned for its outstanding customer service.

The West System website provides basic product information, dealer locations and links, project articles and galleries, and safety information. Visit westsystem.com.

Further assistance can be obtained by contacting the friendly and knowledgeable Technical Staff. Send e-mail to **tech-support@westsystem.com** or call **866-937-8797** (toll free).

655-K

PLASTIC BOAT Repair Kit



Repair plastic boats

Step-by-step instructions show you how to use the materials in this kit to repair splits, cracks and small holes in plastic canoes, kayaks and other small boats.

Tools required

In addition to the materials in this kit, you will need a propane torch, a sabre saw or hack saw, scraper or chisel, clamps, 80-grit sandpaper, 2"-wide packaging tape, plastic spreader, paper towels, color matched plastic-compatible paint and lacquer thinner or acetone as necessary for clean up.

Repairs requiring additional materials

With the addition of 4–6 oz. fiberglass or Kevlar™ fabric and a plastic spreader, you can create abrasion resistant surfaces on worn stems and bottoms and repair larger holes. Instructions are included.

Repairs to inflatable boats

Patch air leaks, re-bond attachment points, repair delaminated transoms and damaged floors. Instructions are included.

Finishing

G/flex Epoxy is compatible with Krylon® Fusion™ or Rust-oleum® Universal All Surface™ paint to match existing finishes.

Kit contents

4.2 fl. oz. G/flex 655-A Resin, 4.2 fl. oz. G/flex 655-B Hardener (9 fl. oz. mixed epoxy), 2 reusable mixing sticks/applicators, 2 pair disposable neoprene gloves, mixing palettes and complete handling and repair instructions.

WARNING IRRITANT. POSSIBLE SKIN SENSITIZER. May cause irritation to eyes and skin. May cause allergic reaction. Avoid skin and eye contact. Do not ingest. Use with adequate ventilation. Use with liquid-proof gloves, eye protection and protective clothing.

FIRST AID: SKIN CONTACT—Immediately wash with soap and water. EYE CONTACT—Immediately flush with water for at least 15 minutes. Consult physician. INHALATION—Remove to fresh air. Consult physician if coughing or irritation develops. INGESTION—Do not induce vomiting. If conscious, give 2 glasses of water. Get immediate medical attention. KEEP OUT OF REACH OF CHILDREN

655-A RESIN CONTAINS: bisphenol-a epoxy resin, bisphenol-f epoxy resin, amorphous silica. 655-B HARDENER CONTAINS: ATBN polymer, aminoethe ylpiperazine, tris-2,4,6-(dimethylaminomethyl)phenol, triethylenetetramine, phenol 2,4,6-tris[(dimethylamino)methyl] reaction products with triethylenetetramine, phenalkamine curing agent, cashew nutshell liquid, 1,3-benzenedimethanamine, amorphous silica.

SCAN FOR VIDEO

Manufactured for West System by:
Gougeon Brothers, Inc. / Bay City, MI USA
866-937-8797 / westsystem.com

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Plastic Boat Repair

Plastic canoes and kayaks are most often made of thermoformed plastics like HDPE (high-density polyethylene), ABS, and occasionally PVC. G/flex Adhesive bonds to these materials and is used to repair damage to products made of these materials. Refer to the safety and general use information on the reverse side of this sheet.

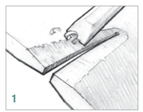
Repair splits and cracks in plastic boats

The repair procedure will differ depending on whether you will have access to the back side of the repair area. Repairing splits and cracks with this kit and the following items:

- ☐ Sabre saw or hack saw
- ☐ Chisel, knife or other sharp scraper
- ☐ 80-grit sandpaper
- ☐ 2"-wide packaging tape
- ☐ Propane torch
- ☐ Matching spray paint (optional)

Repair with access to both sides

1. Drill a 1/8"diameter hole at the ends of the crack. Open the crack or split with a saber saw or hack saw blade to create a slight gap in the break.



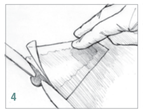
2. Bevel the edges of the crack with a sharp tool to create a 3/8" to 1/2" wide bevel on both sides of the gap and on both sides of the hull including the ends (1).

3. Sand the bevels with 80-grit sandpaper to round the edges and create a smooth taper (2).

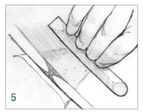
4. Flame treat the repair area to improve adhesion as described in *Additional Surface Preparation* on the reverse side of this sheet (3).

5. Mix an appropriately sized batch of G/flex 655 Adhesive. Refer to *Mixing and Curing* on the reverse side of this sheet.

6. Apply mixed G/flex to one side of the beveled joint, over filling it slightly.



7. Cover the adhesive-filled joint with 2" wide cellophane packaging tape while forcing excess (overfill) epoxy through to the other side of the joint (4). Avoid forcing too much epoxy from the taped side.



8. Fill the beveled area on the opposite side of the repair with more G/flex 655. Use the side of the mixing stick to feather the edges flush with the surrounding surface and scrape away excess epoxy (5).

9. Clean uncured epoxy residue with a paper towel and acetone or lacquer thinner. Allow G/flex to cure 7–10 hours before removing packing tape.

10. Remove high spots and smooth the surface with a scraper or sandpaper.

11. Wipe the area with water, dry thoroughly and paint with a plastic-compatible paint like Krylon® Fusion™ or Rust-oleum® Universal All Surface™ paint if desired.

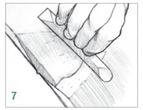
Repair with access to one side only

1. Drill a 1/8" diameter hole at the ends of the crack.

2. Bevel the edges of the crack with a sharp tool to create ¾" to 1" wide bevels on both edges of the crack and at each end (6).

3. Flame treat the repair area to improve adhesion as described in *Additional Surface Preparation* on the reverse of this sheet.

4. Mix an appropriately sized batch of G/flex 655 Adhesive. Refer to *Mixing and Curing* on the reverse side of this sheet.



5. Apply adhesive to the beveled joint, overfilling it slightly. Use the side of the mixing stick or plastic spreader to feather the edges flush with the surrounding surface and scrape away excess epoxy (7). Add more epoxy as needed to fill low areas. Allow to cure 7–10 hours.

6. Remove high spots and smooth the surface with a scraper or sandpaper.

7. Wipe the area with water, dry thoroughly. Sand with 180-grit sandpaper and paint with a plastic-compatible paint if desired. ■

Repair holes in plastic boats

Canoes and kayaks can be punctured as a result of impacts with rocks and other sharp objects. Repair holes with G/flex 655 Epoxy and the following items not included in this kit:

- ☐ 80-grit sandpaper
- ☐ 2"-wide packaging tape
- ☐ A propane torch
- ☐ Matching spray paint (optional)

Repair techniques can vary depending on hole diameter and accessability. The goal is to replace the missing material with G/flex 655 Epoxy and providing adequate bonding area.

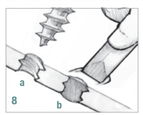
Repair holes up to ¼" diameter

1. Drill out the hole with the smallest diameter bit that bridges the hole.

2. Run a slightly larger sheet metal screw into and out of the hole to tap threads on the inside of the hole (8a).

3. Apply a piece of packaging tape or duct tape over the back of the hole to prevent epoxy from squeezing through the hole.

4. Mix an appropriately sized batch of G/flex 655 Adhesive. Refer to *Mixing and Curing* on the reverse side of this sheet.



5. Apply the adhesive to the void, overfilling it slightly (8b). Allow to cure 7–10 hours.

6. Remove excess cured epoxy and shape the surface to suit with a cabinet scraper or sandpaper.

7. Wipe the area with water, dry thoroughly. Sand with 180-grits and paper and paint with a plastic-compatible paint.

8. Wipe the area with water, sand for better adhesion and paint with a plastic-compatible paint if desired.

Repair holes over ¼" diameter

1. Sand the area to create a taper around the perimeter of the repair with 80-grit sandpaper (9).

2. Flame treat the repair area to improve adhesion as described in *Additional Surface Preparation* on the reverse side of this sheet.

3. Apply a piece of packaging tape over the back of the hole to prevent epoxy from squeezing through the hole. Tape a piece of cardboard or other stiff material to the back of the hole if necessary to maintain the shape of the hull.

4. Mix an appropriately sized batch of G/flex 655 Adhesive. Refer to *Mixing and Curing* on the reverse side of this sheet.

5. Apply the adhesive to the void, overfilling it slightly. Sculpt the uncured G/flex to match the curve of the hull (10). Allow to cure 7–10 hours.

6. Remove excess cured epoxy and shape the surface to suit with a cabinet scraper, or sandpaper.

7. Wipe the area with water, dry thoroughly. Sand with 180-grit sandpaper and paint with a plastic-compatible paint if desired. ■

Repair worn surfaces/create skid plates

Repair and extend the life of plastic canoes and kayaks by applying reinforcing fabric wear strips along the keel and stems to patch worn holes and provide abrasion resistance. Reinforce and patch worn areas with G/flex 655 Epoxy and the following items not included in this kit:

- ☐ 80-grit sandpaper
- ☐ A propane torch
- ☐ 4–6 oz. fiberglass or Kevlar™ fabric
- ☐ Matching spray paint (optional)
- ☐ Plastic spreader

1. Sand the ends of the canoe along the bottom and up the sides a few inches with 80-grit sandpaper (11). This area will define the size of the skid plate.

2. Flame treat the repair area to improve adhesion as described in *Additional Surface Preparation* on the reverse of this sheet.

3. Cut three or four layers of lightweight fiberglass or Kevlar fabric to cover the sanded areas. Cut the bottom piece of fabric to fit to the sanded/flame treated boundary. Trim each successive layer an inch or two narrower and shorter than the previous. This tapers the thickness of the fiberglass skid plate/patch toward the edges so it will easily deflect and cling to the hull as it flexes.

4. Place packaging tape or duct tape across the back of large holes if necessary, to support the repair during cure.

5. Mix an appropriately sized batch of G/flex 655 Adhesive. Refer to *Mixing and Curing* on the reverse side of this sheet.

6. Apply a coat of epoxy to the sanded/-flame treated area. Lay the largest piece of fabric onto the adhesive. Apply more adhesive to saturate the fabric. If necessary, warm the epoxy with a heat gun to lower the viscosity and improve wet out in cooler temperatures. Use the side of the mixing stick or a plastic spreader to smooth the fabric and remove excess epoxy.

7. Repeat the fabric application with the remaining piece(s). Center each smaller layer on the one before it. Wet out the fabric, and then use a spreader to smooth the fabric and remove excess epoxy (12).

8. Apply a coat of G/flex 655 to fill and smooth the edges of the fabric while the fiberglass application is still tacky (optional). Allow to cure 7–10 hours.

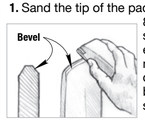
9. Remove excess cured epoxy and shape the surface to suit with a scraper, file, or sandpaper.

10. Wipe the area with water, sand for adhesion and paint with a plastic-compatible paint if desired. ■

Paddle tip reinforcement

The tips of wooden canoe and kayak paddles take lots of abuse from scraping bottom and pushing off rocks. Use G/flex 655 Epoxy Adhesive to create durable edges to protect tips from damage.

1. Sand the tip of the paddle with 80-grit sandpaper to expose fresh material and create a 45° bevel on both sides of the tip.



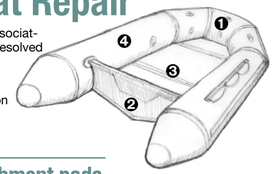
2. Apply a mixture of G/flex 655 across the paddle tip. Fill any voids and build up a thick layer that covers the beveled edges and extends the length of the tip. Allow the epoxy to cure.

3. Sand the cured epoxy to shape with 80-grit sandpaper. Apply varnish or paint as desired. ■

Inflatable Boat Repair

There are four common problems associated with inflatable boats that can be resolved with G/flex Epoxy:

1. Attach/re-attach accessories
2. Transom damage and de-lamination
3. Stripped fasteners
4. Small air leaks in tube chamber



Repair accessory attachment pads

Accessory attachments such as oar locks, tow rings and hand holds are mounted to larger flexible base pads which provide a generous bonding area to the inflated tubes. Rub strakes are glued directly to the tubes. They usually begin failure gradually, peeling from one edge and will detach completely if neglected. Accessory pads and rub strakes can be reattached and new ones attached with G/flex 655 Epoxy and the following items not included in this kit:

- ☐ 80-grit sandpaper
- ☐ Masking or packaging tape
- ☐ Acetone solvent

Inflatable tubes should be filled to the designed pressure. If that is not possible, lay the tube flat so no wrinkles exist.

1. Mark the location where the pad will be reattached (or attached) and mask off the area outside of the pad to protect adjacent surfaces.

3. Clean the contact areas on the pad and the tube with acetone to remove the previous adhesive.

4. Abrade contact surfaces with 80-grit sandpaper. Hand sand in all directions so surfaces are evenly abraded.

5. Mix an appropriately sized batch of G/flex 655 Adhesive. Refer to *Mixing and Curing* on the reverse side of this sheet.

6. Apply mixed adhesive to the detached pad (or new accessory pad) and the tube contact surfaces (13).

7. Cover pad with plastic (food wrap) film then place a soft cushion-like material such as a sponge over the pad then exert mild force with a weight or wraps of tape to insure full and even contact until epoxy cures. (7–10 hours). ■

Repair transom damage

Fixed plywood transoms on inflatable boats usually rest in a channel fitted to pads glued to the tubes. Forces exerted from out board motors often cause delamination of the plywood or degradation from rot especially around the motor mount locations. Repairs range from gluing delaminated plywood back together to replacing the transom with new plywood.

Repair delaminated plywood

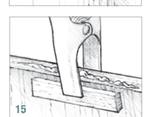
1. Open up delaminated plywood with wedges or chisels.

2. Dry the wood thoroughly.

3. Clean debris and loose wood from gaps that would prevent the veneers from closing tight.

4. Mix an appropriately sized batch of G/flex 655 Adhesive. Refer to *Mixing and Curing* on the reverse side of this sheet.

5. Force epoxy into the depth of the separations (14).



6. Remove wedges and clamp lightly (15). Clean up excess epoxy and allow to cure 7–10 hours before using. ■

Replace damaged plywood

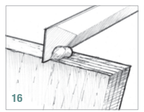
1. Remove the transom from retaining channel.

2. Clean this channel thoroughly.

3. Locate new plywood of the same type and thickness as used in the original transom.

4. Use the old transom as a pattern. If you can't get plywood thickenough, laminate multiple pieces of thinner plywood and bond together with the epoxy.

5. Mix an appropriately sized batch of G/flex 655 Adhesive. Refer to *Mixing and Curing* on the reverse side of this sheet.



6. Glue layers together and after shaping seal the edges of the plywood with 655 Adhesive to seal end grain (16).

7. Sand smooth, then bond new transom into the channel using G/flex 655. ■

Repair enlarged and stripped fastener holes

Folding floor boards often have issues with hinge fasteners separating from the boards. Usually, the fasteners are simply stripped.

Procedure enlarged fastener holes

1. Dry the screw holes.

2. Mix an appropriately sized batch of G/flex 655 Adhesive. Refer to *Mixing and Curing* on the reverse side of this sheet.

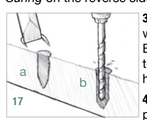
3. Fill the holes with G/flex 655 Epoxy.

4. Insert and lightly tighten the fastener. Clamp it if necessary to hold it in place. Allow to cure overnight before applying load.

Procedure for stripped fastener holes

1. Dry the stripped screw holes.

2. Mix an appropriately sized batch of G/flex 655 Adhesive. Refer to *Mixing and Curing* on the reverse side of this sheet.



3. Fill the holes with G/flex 655 Epoxy and allow to cure 7–10 hours (17a).

4. Drill a smaller pilot hole and screw the fastener into it (17b). ■

Repairing pinhole leaks

Pinhole leaks in tube chambers typically occur from punctures and abrasion. The repair is similar to reattaching a delaminated accessory pad using the following materials not included in this kit:

- ☐ 80-grit sandpaper
- ☐ Masking or packaging tape

1. Locate exact location while inflated. Apply 50/50 mix of water and liquid soap over the suspected area and observe for bubbles.

2. Mark the location with a pencil where bubbles are created.

3. Dry and clean surface with acetone.

4. Deflate the hull and lay area of the repair flat so no wrinkles exist.

5. Make or buy a patch of the same material as the inflatable tube is made of and of a similar thickness.

6. Cut a 4" diameter round patch. Avoid corners and sharp curves.

7. Trace the patch size with pencil on boat's tube.

8. Abrade tube around leak with 80-grit sandpaper, hand sanding in all directions. Do same to the under side of the patch material.

9. Mix an appropriately sized batch of G/flex 655 Adhesive. Refer to *Mixing and Curing* on the reverse side of this sheet.

10. Apply G/flex 655 to the tube and patch and place patch onto surface.

11. Cover the patch with plastic, then with ½" thick plywood to distribute weight. Place a 5–10 lb weight on top of the plywood (18).

12. Allow to cure 24 hours before inflating to the recommend pressure. ■