

# HANDLE AND TOW PATCH REPAIR

What you will need (or may need....better to be over prepared!):

--Cleaner (toluene, or M.E.K. preferably and if you cannot find that buy Acetone or even paint thinner but the first two are preferred)

--Several clean rags/towels that you can throw away

--Small glass jar to mix the glue (it's a two part glue), you will throw this away so be sure it's not the babies china! You cannot use a plastic jar of any sort as the glue is so strong it will eat a hole in it. You can also cut a soda can in half.

--1" - 1 ½" cheap paint brush to throw away

--Newspaper

-- Toothpicks

-- Ink pen

--Box cutter

--Razor blade

--Cardboard (20 x20") at least

--Timer or watch that times

--Pliers

--Vice grips

--Corner wallpaper roller (very important). It looks like this:



You can buy all of this at any hardware store.

Repair the unit INFLATED for handles and tow patches and DEFLATED for cuts and holes!

## **Remove all old parts and glue:**

Get all of this together and then you will have to remove the old handles/tow patches or what is left of them. It is very important to remove everything that is not glued down. Cut away and pull loose the old webbing that is sewn in and glued down to the handle or tow patch. You may have to use the box cutter, razor, pliers or vice grip. BE CAREFUL TO ALWAYS CUT SIDEWAYS AND NOT TOWARD THE UNIT AS YOU CAN PUNCTURE THE UNIT AND IT WILL BE USELESS!!!!

It should look like this at the first stage:



Next using the box cutter CAREFULLY cut away the middle piece where it is not glued real good. It should look like this:



Once you are at this stage, you are ready to begin prepping for the repair. We lay out everything on cardboard and be careful when mixing and painting the glue as it is hard to get up off the floor:



### **Remove old glue and sand lightly:**

Now, with the rag, remove all of the old glue with the MEK or toluene (or whatever you were able to find), and sometimes this takes lots of elbow grease. The cleaner it is the better it will bond! Once ALL of the old glue and the other stuff you put on (if a prior repair was attempted that did not hold) is removed, then you are ready to lightly sand each side with fine sand paper. The idea here is LIGHTLY sand just to rough up both surfaces. Be careful and don't get too aggressive as you could put a hole in the unit. After sanding each the handle or tow patch and the unit where it will go, wipe it clean with the MEK or whatever you have to get all of the residue off from sanding. Then you will locate the handle or patch.

## **Locate the handle or tow patch location:**

Set the handle or tow patch down in advance directly on top of the old handle or patch. Before you apply the glue you will need to draw a circle where it is to be placed as you will only have ONE CHANCE to place it down with the glue. Once contact is made with the glue, you WILL NOT be able to relocate it so don't try! Be careful where you initially place it!

## **Mark where the handle or tow patch will go:**

With a ball point pen mark where you want it and it is helpful to place an "X" on the handle or tow patch and a corresponding "X" on the unit so you know where to match up the handle or patch so it fits properly. You will need to paint ½' outside of the pen mark with the glue on the unit to create a great bond on the edge (very important to prevent it from coming up). This will also allow a little "fudge factor" if you misplace the handle or patch with glue (which can easily happen). This will create a good bond.

## **Mix the glue:**

The glue is special and made by a chemist especially for this type of material. It is a two part glue so only mix what you think you will use for the repair. You do not need to mix 100% of the glue. For several handles try 1/3 of the glue and equal part of the amber activator in the little bottle (1/3). You can always mix more as it has good shelf life when the glue and the actuator are kept separate. Mix only what you think you will need. Mix thoroughly and cover with a towel in between painting it on the unit as the air will harden it.

## **Paint the glue:**

Paint each surface once (back of handle or tow patch and the place on the unit where it will go) and let them dry about 5-7 minutes (varies with humidity and temperature...the hotter and drier the quicker it will dry). Paint the mixed glue on both sides; the handle and the unit. Be sure to paint OUTSIDE the where the rim sits on the unit by 1/2 ". Paint with good coat, don't glob it on and resist the temptation to touch unless you have a little test area separate on the unit to touch. It should feel dry. Paint it again with glue let dry about 5-7 minutes make sure it is not wet as it will NOT BOND! PAY VERY CAREFUL ATTENTION TO THE TIME!!!! WE CANNOT EMPHASIZE THIS ENOUGH!!!! MANY REPAIRS HAVE FAILED AT THIS STAGE DUE TO THE REPAIRER BEING DISTRACTED. DO NOT LAY IT DOWN PREMATURELY OR TOO LATE AS TIMING IS EVERYTHING! This is tricky so it should feel dry and not wet, and thus instantly stick. Carefully place the handle or tow patch on the unit matching up the lines and the "X" where you have marked to begin. Rolling it on is a good technique. Then rub down with back of pliers, vice grips or wall paper roller for about 10 minutes to generate a little heat and pressure to create a good bond. Let it sit inflated and DO NOT USE FOR 24 HOURS OR MORE!!! VERY IMPORTANT AS THE GLUE MUST CURE!

SPORT CHUTES

15610 WRIGHT BROTHERS DR.

ADDISON, TX 75001 USA

972-661-1166

[www.sportchutes.com](http://www.sportchutes.com)

# REPAIR INTRUCTIONS

## BLACK SEATING AROUND VALVE

Call me when you set out to do the repair.....I will need to know exactly what is wrong. If you are repairing just the black thing around the valve these are the instructions:

You will need

toluene,

clean rags to throw away,

a small glass jar to mix the glue (it's a two part glue), you will throw this away so be sure it's not the babies china!

a 1" paint brush to throw away,

newspaper,

toothpicks,

pen,

cardboard (20 x20") at least

a timer or watch that times,

pliers

vice grips

It would be best if you get a small wallpaper roller for corners 1" wide or so (looks like a miniature rolling pin, you can get this at home depot with the toluene

May not need it all but at least you'll have it. This is the check list for all repairs.

Get all of this together and then you will have to remove all of the old glue lots of elbow grease. Once ALL of the old glue and the other stuff you put on it is removed, them prop it open with toothpicks or pieces of same and paint the mixed glue on both sides. Be sure to paint OUTSIDE the where the rim sits on the unit by 1/2 ". You may want to set it down in advance and draw a circle where it is located with the pen so you are sure you paint 1/2' outside of it. This will create a good bond. Paint once let dry about 7 minutes with good coat, don't glob it on and resist the temptation to touch unless you have a little test area separate on the unit to touch. It should be tacky. Paint it again with glue let dry about 5-7 minutes make sure it is not too wet as it will not bond. This is tricky so it should be tacky, not dry and not wet, and instantly stick. Then rub down with back of pliers, vice grips or wall paper roller for about 10 minutes to generate a little heat and then don't use for 24 hours.

See if that does it.