

The Line-X Experience

www.CarboniteCummins.com

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Part 1: Dent Removal

My Line-X experience started unexpectedly and under less than ideal circumstances, but turned out very well in the end. Basically, I ended up with a free Line-X when everything was said and done. It all started when I was dropping off a crate with a pair of cylinder heads at a local freight terminal for shipment. During this process, the intelligent person driving the forklift managed to collide with the top edge of my tailgate (tailgate was down and he ran into it.) This left a big nasty dent approximately $\frac{3}{4}$ inches wide, $4\frac{1}{2}$ inches long, and $\frac{1}{2}$ inch deep (perfect forklift size) in the top of my tailgate.



Now you know the worst part, from here on it gets way better. I filed a claim with their insurance company for the damage. I had to run around and get 3 estimates to knock the dent out and re-paint the tailgate. Fortunately, the insurance company didn't give me any problems and cut me a check for the repair cost. About a week later, I had a check for the repair and a big dent in my tailgate. It just so happens that the check was right on par with the cost of a Line-X bed liner. If you think about it, you can probably see where I'm going with this. Yup, screw having a body shop fix my tailgate, I'll knock out the dent myself and then have line-X put in the truck.

Here's where my plan starts. I can't have Line-X sprayed over this huge dent or it'll just be a big dent with Line-X sprayed over it. That's not my goal, so this dent has got to go.

Body work is a sensitive area and you must take your time and use great care to make it look right. The best advice I have ever received on working with sheet metal is: "You have to 'ask' the metal to move, not tell it." In other words, if you're striking the body panels hard enough to force it to move, you're doing more harm than good. When a dent is formed, the metal stretches. That's why it doesn't fully return to its original shape. You must convince the panel to return to its original shape without stretching it even more by striking it hard with a hammer.

You will need some special tools to perform body work. The best tool kit is a dedicated set of body hammers with bucking mauls. You can improvise with other tools but great care must be taken to not strike the metal with any corners. A block of wood is the best improvised body hammer because wood gives and can be filed down to match the contour of the metal with no hard corners. I have a cheap set of body hammers I got from harbor freight tools for just this occasion.

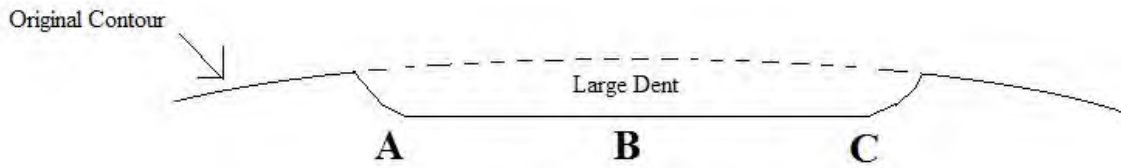


Start by gaining access to the back side of the dent. For me this involved removing the cover on the inside of the tailgate by removing the 8 torx bolts. Once inside, I had to remove the connecting rod that connected the tailgate handle to the latch on the left hand (driver's) side. The connector on the handle is threaded, so mark its current position with a permanent marker on the threads. This way you can simply put it back when you're done and won't have to readjust it. The clips are pretty easy to figure out.



To knock out the dent, you want to start from the side of the dent and work your way across, don't start in the middle. Think of wiping a bubble out from underneath a sticker. If you start in the center it'll just separate and make it worse, start from the side and gently work it towards the edge. Start with A, work your way through B, and end at C. DO NOT STRIKE IT HARD! If you see the metal moving when you hit it, you're hitting it too hard. Strike it repeatedly, very gently to try and not stretch the metal any worse than it already is.

Before

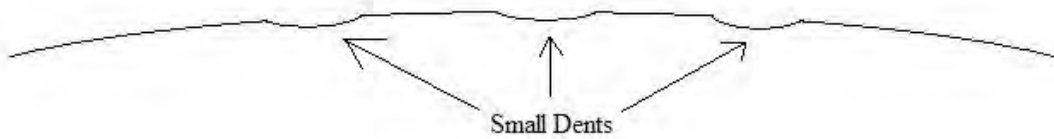


I found that I couldn't get into the location with an actual body hammer. So I ended up using a bucking maul to reach inside the tailgate and hit the dent. I also discovered that the raw cuts under the cover plate are sharp and will cut your hands. I solved this problem with a little piece of duct tape.



Remember the stretching effect I mentioned earlier, well you must find some way to “store” this extra metal that you now have. By working the dent from one side of the other, you almost “fold” the extra metal around the ends of the repair area. You probably won’t be able to fully remove the dent, but rather transform the large dent into a few small dents that can be filled with body filler (or Line-X). The pictures below show what I ended up with. You have to look real close at the tree line shadow to see what’s left of the dent. I think it looks pretty good. Now go read “Part 2” to see the process of getting Line-X sprayed in your truck.

After



Part 2: Line-X Install

So now that I've got my tailgate dent fixed (Part 1), I can move on to getting the Line-X applied to my truck. I got on the internet (www.line-x.com) and located my local Line-X franchise. I soon found myself in contact with Mr. John Swiney of Tri-County Line-X in North Charleston, SC. We discussed the details of getting Line-X applied to my truck and set up an appointment for Saturday morning. Mr. Swiney also agreed to let me document the process so I could write this article. If you're thinking about getting Line-X sprayed in your truck, I highly suggest you look these guys up. They have excellent work and great customer service. And tell them that I sent you; you might get special treatment.

In case you don't know what Line-X is, it is a polyurethane/polyurea elastomer liner sprayed into your truck. It forms a thick barrier that adheres to the surface of your truck bed to protect it from debris, chemicals, impacts, and corrosion. It contains no volatile organic compounds (VOCs) or chlorofluorocarbons (CFCs), therefore is environmentally friendly. It also has a lifetime warranty. You can find more details at www.line-x.com or from your local Line-X franchise.

The Line-X product is a two part substance. Both chemicals are heated to approximately 160-180 degrees and fed to a spray gun in separate hoses. The chemicals are mixed in the tip of the gun as they are sprayed out under high pressure. A chemical reaction takes place when the two substances react with each other causing the temperature to go up a little more. The actual temperature of the Line-X leaving the gun is approximately 200 degrees. The reason for mixing the two chemicals in the tip of the gun is due to their cure time. Line-X is dry to the touch in 3-5 seconds (that's right, I said seconds) after the two chemicals come in contact with each other.



I showed up for my appointment on Saturday morning at about 08:50. I recommend having the bed of your truck clean when you show up. If it's full of trash and dirt, it will have to be cleaned before the liner is applied. By 09:00 my truck was in the shop getting prepped for the Line-X. By 10:45 I was finished.

Step 1: The first step is to clean the truck bed. Since my truck is still fairly new and I clean it frequently, this step was easy.

Step 2: The next step is to remove the tailgate. The tailgate is separated from the truck to ensure that the area where the tailgate and bed meet can be sprayed well. The tailgate is set on a table off to the side so it can be disassembled. The cover plate is removed when the liner is sprayed that way you can remove it if you have to after the liner is on. If it was sprayed over, you'd have to cut the liner to remove it. The cover plate is set back on the tailgate on a set of magnets to hold it just off of the rest of the tailgate. Note: the tailgate was already sanded by the time I got to take a picture, these guys are quick.



Step 3: Now a special wire trim tape is installed. Basically it's masking tape with a wire in the center of it. This is what creates the smooth lines around where the liner is sprayed. You'll see the purpose of the wire later in the article.



Step 4: Once the bed and tailgate are marked with the wire trim tape, the entire bed and gate are sanded. If you're one of those people who can't stand to see your truck scratched then don't watch; it looks awful. The purpose of the sanding is to ensure a strong adhesion between the Line-X and the truck bed. By using this process, it's nearly impossible to remove the Line-X.



Step 5: Now that the truck is sanded and clean, it can be moved into the paint booth. The setup here is a neat one because only the truck bed is in the booth, the cab remains outside. A drop-cloth is placed down between the cab and bed to ensure that no overspray will come in contact with the cab. Then the rest of the bedsides are masked all the way to the ground and small platforms a little bit shorter than the tires are placed beside the truck on either side. This is so the technicians can spray the entire bed of the truck without entering and contaminating the surface. The tailgate is also placed in the paint booth on a dolly.



Step 6: Line-X is first applied to the tailgate. Approximately 8 coats of Line-X are applied. The process is very similar to painting with an air gun (or rattle can for you cheap people). The gun is held approximately 2 feet from the surface and quick even passes are made. The liner actually goes on fairly smooth and glossy, the texture is added later. I didn't get a picture of the guy painting because I couldn't be in the booth while they were spraying due to safety reasons and me not having a respirator.



Step 7: Once the tailgate is done, it's time to move on to the bed. The first thing to do is to put the Line-X logo on the inside of the bed sides. A short burst of Line-X is sprayed to the bedside and the plastic logo is quickly stuck onto it using the Line-X as glue. Remember the cure time; it gives a new meaning to the 3-5 second rule.



Step 8: The rest of the bed is done the same way as the tailgate. Fast passes with the spray gun and approximately 8 coats.

Step 9: After the bed and tailgate are covered, it's time to add the texture. The texture is added by "dusting" the Line-X over the previously applied layers. The technician moves back about 10-12 feet from the truck bed and tailgate and give quick bursts of liner over the top of the truck to allow the Line-X to settle down on the surface. This process is repeated until a good texture is achieved over the entire surface.

Step 10: Now that the spraying is done, it's time to unmask. Remember that wire trim tape strip that was installed earlier? That wire is grabbed and pulled all the way around the edge of the liner. This cuts a nice pretty line between the liner on the truck and the masking tape and paper.



Step 11: After the wire is pulled, the masking tape/paper is removed from the truck, revealing the new Line-X edge line. The liner is good to go as soon as the truck rolls out of the shop, but it will take approximately 24 hours for it to fully cure, so I suggest taking it easy on it until then.



Here are some finished pictures; the last one is of the dent from part 1. What do you think?

