## SOFT TOP, REAR DECK LATCH RESTORATION

- by Lucy Badenhoop

It surprised me when I recently overheard someone say the rear deck latches can't be repaired. Being ignorant, I had already repaired mine. There are a few tricks to it, which is the reason for this article.

The first trick is: don't break them. The most common cause of damage is latching the front latches first and then the rear. This is almost guaranteed to over stress the rivets and shear them off. The second most common cause of damage is neglect and/or weather exposure which damages the chrome and invites corrosion. The third type of damage is twisting or bending of the metal - usually from an accident or other traumatic event. Depending on the severity, this type damage may or may not be repairable. If it's fixable, it may involve welding and rechroming.

The second trick is: don't be lazy. Do it right the first time, because each time you drill out the steel rivets, you will probably make the holes slightly larger or out of round. After the second or third time, the rivets will be loose in the holes and the surrounding metal will be weakened and unable to withstand the necessary stress to do its job. Doing it right means complete disassembly and rerivet of all rivets. If one has been broken, the others are probably stressed and will break soon also.

Besides, depending on which one breaks, you may have to completely disassemble to fix it anyway. The latch is a series of four separte hinges, layered inside each other. The rivet gun won't have enough clearance to fix the inner rivets with the outer ones in place. You have to rivet from the innermost hinge to the outermost one.

The third trick is: don't be cheap. If it needs rechroming, don't put it off. The plating prices will just go higher, the corrosion will get worse and if you have to drill out the rivets a second time just to chrome, you've done unnecessary damage to the holes.

The last trick: put the first one together with aluminum rivets for practice. The aluminum is too soft to perform on the car, but it is easily drilled out with no damage to the holes or chrome finish. If you make a mistake with steel rivets, they're a pain to remove and you risk damaging the chrome and/or enlarging the holes.

Having shared all my secrets, here's nine easy steps to frustration. You will get frustrated. Parts will spin or slide when you want them still. You will break a bit and have to get another, and another, and another. The tiny parts won't stay in place while you insert the rivet. The parts are too small. Your fingers are too big. Four letter words are just right.

- 1. Collect the necessary equipment:
  center punch and needlenose pliers
  hand riveter for 1/8" diameter rivets
  steel and aluminum rivets with grip
  range of 1/8"
  steel backup placet (washer)
  1/8" ID x 3/8" OD x 1/8" thick
  drill with small grinder wheel and bits
  (1/16", 1/8")
  for minor corrosion rust remover, steel wool,
   chrome polish, etc.
  for bent parts vise, assorted hammers, pliers,
   metal shapes
  for rechroming steel pin 9/64" dia. x 9/16"
   shaft and matching drill bit
- 2. Study Figure 1. Notice there are four hinges. Assembly sequence is 1-2-3-4. Disassemble in reverse order. Hinge 1 is a special steel pin and should be removed only if you have to. Rechroming and welding require its removal. Hinges 2-3-4 are pairs of steel rivets.
- 3. Drill out the rivets. Start with a center punch to keep the bit from wandering off center. Use the 1/16" bit first to begin the hole, then enlarge it with the 1/8" bit. You may need the needlenose pliers to remove remnants of the rivets.
- 4. If you need to remove hinge 1, don't try to drill it out, you'll damage the hole because the pin is much harder metal than the latch metal. Grind off as much of the flat end of the pin as possible; use the center punch to tap the pin out. You will find the pin has a step down shoulder (no longer available) and is two short to be reused. (Figure 2). Also note that its mating holes in Part B are different sizes. The smaller hole will have to be enlarged very slightly to fit the replacement pin. Buy the new pin before you enlarge the small hole and match sizes as close as possible. The larger of the two holes will be slightly loose on the replacement pin.
- 5. Reshape any bent pieces. If possible, have an undamaged latch to use as a model for correct shaping. This is a trial and error process using whatever is at hand to achieve the desired shapes. Assemble with aluminum rivets to assure proper allignment, especially before chroming.

- 6. Weld any cracks or broken peices. The worse damage I have been able to repair was to Part A where it connects to Part B on the hinge pin. The pin had ripped off the tip edge of both holes in Part A during an accident (Figure 3). To repair the hole, I used 2 small nuts slipped between the two ripped holes, welded them in place, and ground them smooth. If you try this, clearances are tight, so the nuts have to be no larger than the arms they are welded to. Also, take care to line up the hole in same positions as the original (a large nail works well). Drill out the hole to match the replacement pin.
- 7. Clean, polish, buff and rechrome as necessary.
- 8. Install the replacement pin in Hinge 1. Be sure to put the head of the pin on the side of Part B that has the larger hole. Drill out the smaller hole so the pin barely goes through. Use the center punch to spread the edges of the pin. Grind lightly to remove burrs.
- 9. Rivet the remaining hinges (remember to practice with aluminum rivets). When you rivet Hinge 2, you will have two subassemblies: one is Parts A and B on Hinge 1; the other is Parts C and D on Hinge 2. Slide the two subassemblies together. They interlock like a Chinese puzzle, so it helps to have an assembled one to look at. The arms of Part D slide on each side of Part B. It's a snug fit, so push firmly. Rivet Hinges 3 and 4 and you're done. Go have a beer.

If the above sounds like it demands more patience and tweezer-size work than you can tolerate, send me your broken treasures. I charge \$25 per latch for cleaning, riveting and shipping. I estimate \$20 per latch for welding and another \$20 per latch for chroming. These are subcontracted out and you will be charged exact cost plus \$5 per trip for pickup and delivery. If you have any latches beyond repair that you would throw away, please send them to me for parts. I might be able to help someone else salvage theirs.

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Figure 2: Hinge Pin

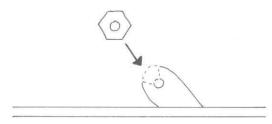


Figure 3: Hinge Pin Hole

Figure 1: Soft Top Latch (rear)

