

Slip me some skin!

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"Oh those sheep skin covers on your car are so sweet! Wow they look so great... and really tie the car together. No really... where did you score those righteous sheeps? Damn that's trick!!"

(Note: This fantasy compliment is brought to you by the sympathetic side of reality. Now for the cruel side...)

Hey you were warned, but you are still reading this... so here it is...

Sheep skins, they don't look so good. Yeah they are great for that '85 Civic, but your DeLorean? And God forbid if you have cow print seat covers! For shame!!

Help me, to help you, loose the "sheeps" and bring back the glory of those gray (or black) leather cows! Are you with me? Okay then. First step to redemption, get some new DMC cows. Where? Most of our esteemed vendors have new skins for your DeLorean—give them a shout. If you want something a little spicier than the stock leathers, contact a local upholsterer. If you remove the old leathers off your seats, the upholster should be able to use them as a template for new ones.

After hitting the Yellow Pages and calling some local upholsterers, I discovered how much I would have been gouged to have my new skins professionally installed. The prices ranged wildly from \$120 to \$220 a seat. Yikes! That's a lot of cash to fork over for something that will only take you a couple of hours or less! I have moderate experience reupholstering automobiles, and it took me about 30 minutes per seat. That includes removing and reinstalling the seat into the DeLorean. So don't shy away from this, it's a lot easier than you would imagine, and you will feel good knowing you saved enough money to buy that ivory back scratcher you've always wanted.

It looks difficult, but the DeLorean seats are actually quite easy to work with by most comparisons. As you may have noticed from the new leathers, the seat is divided into two sections consisting of the lower butt sitting half, and the upper slouched back supporter.

Wondering how we are going to tackle that headrest? You didn't honestly think I would give away the secrets and spoil it now, did you?

Enough chit chat, let's dive into this. Ready?

Shopping List:

Hog Rings - Hog rings are little metal rings that hold the leather to the frame of the seat. These can be found at most fabric stores and upholsterers. You weren't thinking of reusing the old ones were you? Don't let those upholster clowns charge you more than \$0.04 a ring! I ran into plenty who thought I was foolish enough to pay \$10 for a box of 50 rings. Usually you can purchase hog rings anywhere between 1-4 cents each. If you can't find any in your local area, go on-line. I picked up some from a fabric shop for 3 cents a piece. I got 200 of them and had 24 spares after I was done with both seats. You will probably use about 70-80 rings per seat. I suggest getting at least 200 rings, and stick with the stainless steel rings.



Leather Cleaner & Conditioner - You will need this to prime the leather for a bit of stretching. It would not be a gather-round-the-campfire kumbayah moment if you ripped the leather while installing it because it was dry. Remember, some of these leathers, depending on where you got them, are

20+ years old, so they are bound to be dry and not very pliable.

For those of you who don't know, there is a significant difference between leather cleaner and leather conditioner. They are NOT always the same thing! You can't Pert Plus this stuff guys! Wash-and-go is a big no-no! Do what you will with your hair, but spend some time cleaning your new leathers, and THEN apply, liberally, a good conditioner to your leathers at least 24 hours BEFORE you install them. This will give them time to absorb the conditioner. Another tip, when you clean and condition your new cows, do it at room temperature (72° F or higher) to allow the pores to open up. I recommend Griot's interior cleaner followed up with Griot's leather care and/or rejuvenator. (www.GriotsGarage.com)

Needed Tools:

1. Regular Pliers or Vise Grips
2. Needle-Nose Pliers
3. Hog-Ring Pliers (can use regular pliers)
4. Phillips Screwdrivers
5. 7mm Allen wrench
6. 10mm Socket with Ratchet
7. Punch (or something to poke a small hole in fabric)
8. Razor blade or sharp knife
9. Zip ties
10. Washers
11. Vacuum Cleaner (oh yes... you will need this!)

Removal From Car:

The seat is secured to the fiberglass under body with four 10mm nuts. But before you remove the nuts, pull up the adjustment bar on the seat, and scoot it all the way forward. This will allow you to easily remove the seat from the car. Rotate the recline adjustment knob until the headrest is all the way forward. Remove the four nuts which are located underneath the car. Proceed to carefully remove the car seat from the car.

Find a clean place to set the seat down on its back. Grab that 7mm Allen wrench. The adjustment rack on the bottom of the seat is held on by four bolts. You will need to move the slide rails to get to all four bolts.



Pre-Removal Prep Work:

Once you have the adjustment rack off of the seat, flip the seat right side up and trade the Allen wrench for a Phillips screwdriver. Remove the two screws from the bottom of the back cover of the seat. To remove the back cover, pull down on it and give it a good wiggle. It should come loose, and you can easily pull it out.

Take a moment to get a good look at all the hog rings. Note the placement and how the leather is pulled around the frame from the top, sides, and

bottom. Since it will be hard for me to describe in print exactly how to wrap the covers around the frame, it will be important for you to see how it should be done. Don't worry about exact placement; I just want you to get an idea about how it should look.

To proceed, you will need a set of regular pliers and a pair of needle-nose pliers. Grab the hog ring with the pliers, clamp down and twist the hog ring off. If you don't have the Kung-Fu grip required to twist off the hog rings, use vise-grip pliers.



Don't go tearing into the seat just yet, there are a few more things you need to be aware of.

Look at the bottom of the seat... see those black plastic circles? No those aren't mold spots, those hold down a metal bar that is attached to the leather slip which hold the inside creases and curves of the leather taut with the foam cushion. We need to get those black plastic rings removed before digging into the hog rings. Take the pliers and grab the plastic tip that is in the center of the plastic ring. Push down to pop it out.



Get a small Phillips and pry up the plastic seat tilt lever on the side of the seat. Careful! Don't break that bugger.



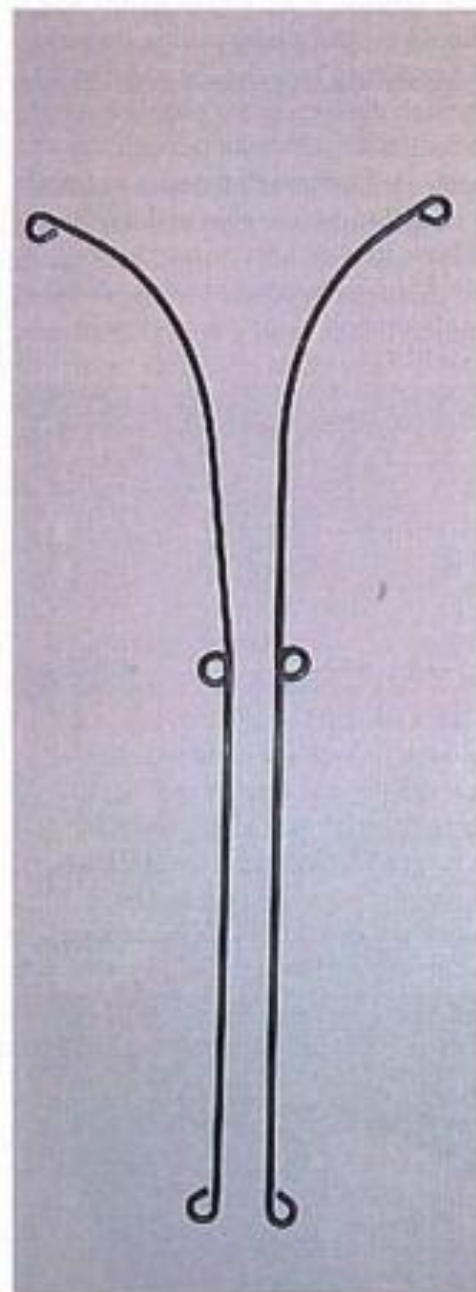
Then unscrew the plastic plate underneath the lever and remove it as well. Place these items in an area where you won't step on them as they are highly breakable.

Slip Cover Removal:

The hog rings may taunt you no longer... go ahead and dig into them starting with the bottom slip cover. Your first couple of attempts at removing those hog rings will try your patience, but keep at it and you will develop a rhythm.



Once you are finished with the bottom cover, go ahead and carefully remove the bottom slip cover by first un-tucking the ends of the leather from the back and sides. Then pull the cover forward. Don't forget to remove the two metal ribs from the slip before you toss it! You are going to need these later.



The top portion of the seat is a little more complicated than the bottom. If you look closely on the back of the seat, you will see some hog rings that are in the inside portion of the seat and not on the edge like the other rings. These rings are fastened to a metal bar inside the leather slip to pull the inside crease taut with the foam seat. These are not too hard to remove. Like the previous hog rings,

twist them off.



Uh oh! Here it is... the real pain-in-the-ass part of the project. Thank God I am already finished with my seats, so rest easy knowing that I will not suffer through this with you.

Just below the headrest, you should notice two creases. Are you seeing the pattern here? Every time there is a crease, chances are there is a little metal rib that sits inside the slip cover, and there are usually hog rings holding it to the frame, with the exception of the bottom slip. If you lift up the foam on the back of the headrest, you will see some quarter size holes in the metal. Just big



enough for you to reach in with the needle-nose pliers and pull out those hog rings. (Just a note: it's easier to just pull those rings straight out rather than twisting them out. Oh yes... the pain train has reached the station!)

It may be a bit easier to remove the rings in the headrest crease from the front by completely removing all hog rings from the lower portion of the slip cover, then pulling the slip up over the headrest exposing the bottom of the first crease. Now you have the hog rings front and center for removal. You will need to do one crease at a time. In case it's not easier to get to



the hog rings from the front, you will have to get at them from the back through the holes.

If you care about the old cow skins, carefully remove the headrest portion of the skin by pushing down on the foam while pulling the skin up and over the headrest as if you were going to turn it inside out. If you don't care about the old cow skins, well I don't need to tell you how to remove it... go crazy! Just don't rip or cut the foam during your tirade.

Take a step back, and look at the now naked seat. Chances are it is as dirty as mine was. This is where the vacuum cleaner comes in handy. I had to use a 5 hp Wet Vac to suck out all the black rotted foam particles which seem to emanate from the old skins, and was permeated into the seat foam. So have fun with that, and just don't leave it—seriously... that's gross.

Commercial Break?

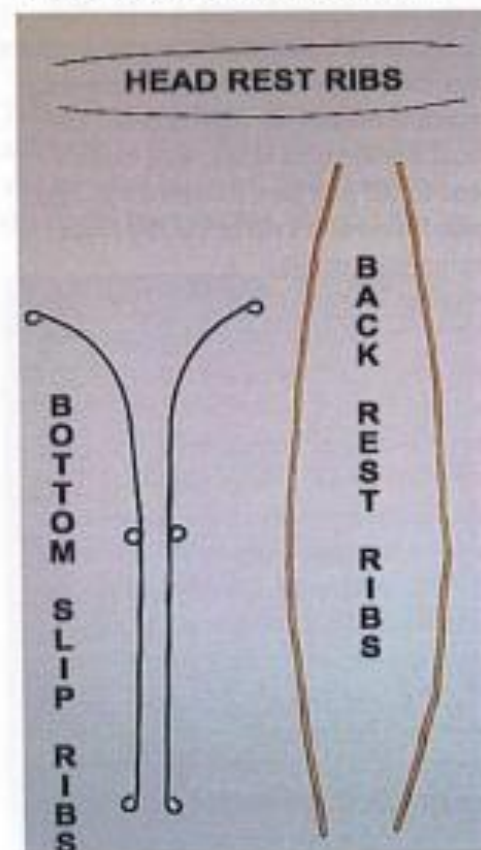
Another improvement you might want to consider, since you have your seats

completely disassembled, is heated seats. And I'm not talking about the 50¢ burrito-heated seat either. You can easily install heated seats into your D, but I should leave that for another article. Okay wait, hell no, I am not going to take those seats apart again. (Sorry Ron!!) So here is a quick run down. Go to www.heaterseats.com, and get their \$80 heated seat package. You will be able to cut the heater pad to fit the DeLorean seat. Then give Houston a call and get two of their blank rear defrost switches, one for the driver seat and the other for the passenger seat. Install the switches where the plastic blanks are next to your window switches. Viola! Heated seats baby!

(DMC Houston and Heaterseats.com, please send endorsement check by Friday.)

Pre-Installation Prep Work:

Getting back to the subject at hand, you should have collected six bars/ribs from the old top and bottom skins. Take a good look at them and make sure they are in good order. A few of them may have been bent through our skin removal procedure. Compare yours to a picture of mine. (below) If



you need to, straighten out the ribs, and then insert them into the new skins.

The bottom seat used, as you may recall, black plastic fasteners that hold the seams taut to the foam. I spent a considerable amount of time trying to track down those black fasteners, only to be told that they were possibly a unique item that will be hard to find. I was about to call Houston when it hit me, those plastic fasteners didn't seem to do that great of a job. They weren't even tight and had a lot of play between the seat cushion and the skin. I wasn't impressed, so I ended up replacing those plastic fasteners with stainless steel washers and zip ties. That's right! Zip ties! I know this hack may disqualify you as a "proper vendor", however, there are some benefits to ditching the old plastic fasteners. First, you can get zip ties and stainless steel washers just about anywhere, you can choose how tight you want the fit by adjusting the zip tie, it's easier to install, and lastly, it's a heck of a lot cheaper. Besides, no one is going to see your handy work since it will be under the seat, and you would make MacGyver proud!

Installation:

Pick up some 20 mm wide washers with an 8 mm hole. Also, get 4" long zip ties. These may seem too long, and they are, but the length makes them easier to install. Install the metal ribs into the bottom slip cover, and pull the cover over the seat cushion. Take a washer, run the flat end of the zip tie through the washer. The head of the zip tie should not pass through the hole of the washer.



There are holes where the old plastic fasteners were, stick the flat end of the zip tie up through that hole.



Roll the side of the slip over, and you should see the zip tie poking through the cushion. Take the flat end, put it through the loop in the metal rib, and then fish it back down through the hole. Pull it through the hole and put it back through the hole in the washer. (Please note that the picture below gives you an external view of what the configuration of the zip tie should look like.)



Fasten the zip tie together, but just enough to lock the ends together so that the flat end doesn't pull back through, don't pull all the slack out just yet. You will need the slack to install the other zip ties, and have room to move the slip cover around while you are installing it.



Once all the zip ties are in, tuck the back part of the skin underneath the back rest, and pull it through from the back. At the end of the skins you should notice that the vinyl portion of the skin wraps around a cord at the very end. These cords are what the hog rings wrap around to hold the skin to the frame. Similarly, you should notice that the frame has small bars that the hog rings wrap around to hold



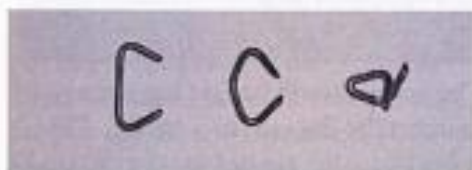
the skin to the frame. Pull the skin cord up to the metal frame bars all around the cushion to get it stretched a bit and ready for hog rings.

Fastening hog rings to the frame and skin is about as tricky as removing them. It will take you a couple of times to get the hang of it, but once you do, you should be able to develop a rhythm. Hog rings tend to vary a bit, but the installation is pretty much the same. Hog ring pliers are a completely different story. There are all sorts of hog ring pliers in different shapes, angles, etc.



I found plenty of hog ring pliers for around \$10, but really, unless you are going to be doing a lot of upholstery work in the future, I suggest that you use a regular pair of pliers. You can even put a notch on each jaw of the

pliers to help hold the hog rings if you really want to, but I didn't find it necessary. You have a few extra hog rings, so go ahead and practice on a few. The photos below show the different stages of crimping a hog ring.



Start with the front of the cushion by putting one hog ring smack dab in the middle. Pull the edge of the skin with the cord in it up to the metal bar on the frame, and hold it with one hand, then with the other hand, clamp the hog ring around the metal frame bar and skin cord. It should look something like this:



Try this again on the right and left corners.

Work your way around installing the hog rings with your spacing at least an inch apart. As you work your way around, check to make sure that everything is straight and you are not pulling too much to one side. One good way to do this is to switch side to side after every couple of hog rings installed.



As you get towards the back, you will notice two small vinyl flaps on either side. These slip between the metal frame and cushion.



You will need to use needle-nose pliers to carefully pull it between the metal and cushion from the bottom of the seat.



Once you are finished, and everything looks lined up and straight (see example below), pull out the slack in



the zip ties starting with the two top ties, and working your way down.



I was able to pull mine tight enough to have the rib hoop touching the metal washer. You probably won't need it that tight, in fact I would recommend that you leave a quarter inch of slack in case the leather tightens up in the future. Cut off the slack pulled through on the zip tie, and you will have a nice finish.

Back Rest Portion:

First thing to do is slip the remaining four ribs from the old skin in to the new skin. After you insert the two small ribs into the area just below the headrest, you will need to poke six holes, using a punch or whatever else you have, in the fabric sleeve holding the rib, just above each rib.



The holes should be just big enough to insert the flat side of a zip tie. The holes allow the zip ties to wrap around the rib that is inside the rib sleeve, and wrap around the metal frame of the seat, thus holding the slip firm to the frame. If you recall, from removing the slip cover, these ribs were held to the frame with hog rings. If you thought you had problems getting the hog rings on earlier, imagine trying to hog ring these ribs to the frame! Zip ties do the job just as good as the hog rings and are much easier to install. Of course you don't have to use the zip ties and can go with the hog rings. Roll the fuzzy dice and see where it takes you. Us zip-tie guys will be out enjoying our cars while you are still fussing with the hog rings.

Now we come to the headrest. Yeah, I know this looks like it's going to be tough, but really it should only take you about 10 seconds. We have two tricks at our disposal to get that headrest tackled... you can spray the foam with silicone, or use some leather conditioner to slick that sucker down. I used a quick spray of silicone (don't use a lot) all around the headrest, angled the top front of the foam headrest into the slip cover, and pulled the cover over.



I bet you thought that would be the hardest part right? Well lucky for you... the hardest part, in my opinion, has already come and gone. Well... that is, unless you have another seat to do. With the slip cover over the headrest, flip the bottom part of the



cover up over the headrest to expose the small ribs where you poked the holes for your zip ties. Starting with the top rib, insert your zip ties with the tie head facing up. If you look at the foam portion of the seat, you will see where the foam splits twice under the headrest.



Inside those splits are the metal bars which you pulled the hog rings off of. You will want to slip the flat end of the zip tie over the top of the top metal bar, and using needle-nose pliers, go under the metal bar and grab the end of the zip tie to pull it around.



(Please note that the picture you see here shows me installing the zip tie on the bottom metal bar. Make sure that

you keep the top rib with the top metal bar and so on.)

Once you pull the zip tie through, go ahead and insert the flat end of the zip tie into the zip tie head, but don't pull out the slack just yet Mr. Eager Beaver... we need to get ALL of the zip ties looped around the metal bar first. Once you have all the zip ties looped around and connected, pull out the slack and then cut off the tails.



Now get to work on the bottom one using the exact same steps.



Doesn't that look special?



We are at the final stretch, and I can't wait to get this article done so I can go have dinner, and so Ron can be happy with me for submitting an article two weeks late instead of my typical three weeks! (Ron, does that mean I am technically early this time?)

Let's see... how did I do this? Oh yes! Pull the cover down over the seat, and tuck the bottom of the slip between the backrest and buttrest. You should

notice a small flap sticking out.



This tucks back on the side between the metal frame and the cushion.



When you pull it through to the other end, go ahead and leave it and we will hog ring that piece later. There is another flap on the other side, tuck it between the frame and cushion as well.



Those long metal ribs are in the slip cover, right? Okay, just want to make sure before we continue... glad you have been paying attention.

Start with the top of the slip cover; make sure it's pulled down taut. Using your master upholsterer hog ring clamping techniques developed from putting on the bottom seat cover, clip the first hog ring. Put four hog rings just under the headrest portion and then work your way around.



Make sure as you work your way around the slip cover, you check to make sure everything is even in the front and there are no wrinkles. Also make sure that the crease lines match up with the bottom seat cover. It's good practice to work from side to side, so in other words, clamp on two hog rings on the left, then two on the right and so on. Don't worry about the seat retract lever just yet—go ahead and pull the cover over it, and leave it for now.



Remember those small flaps we tucked between the frame and cushion earlier?

Just before you hog ring the bottom portion of the sides of the slip cover, put that small flap of vinyl underneath it and hog ring them to the frame together.



Grab some pliers. You have to pull the bottom part of the backrest cover up to the metal frame bar. The cover should be pretty tight over the seat by now and this can get a little tough. You may need someone to help you with this, but if you are coordinated (and I know you are!) you should be able to, with hog ring prepped in pliers in one hand, and pulling up the cover to metal bar with pliers in the other hand, hog ring the bottom of the slip cover cord to the metal frame bar smack dab in the center. If this doesn't work, and you don't have anyone to hold the slip cover up for you, use the pliers to pull up on the slip cover (Gently! Don't rip it!), stretch it over the metal bar, hold it with your finger while you grab a hog ring with the pliers, and then hog ring the cover to the metal bar. Once you have one ring in, quickly get a couple more going before the tension does some damage to that one ring. Then work your way from the center out, installing from side to side until it's complete. Your spacing should be about an inch or two apart.

Now we can go back to the seat retract lever. Take a razor blade or sharp knife and cut along the front of the indent of the lever. Don't make the cut longer than the lever indent.

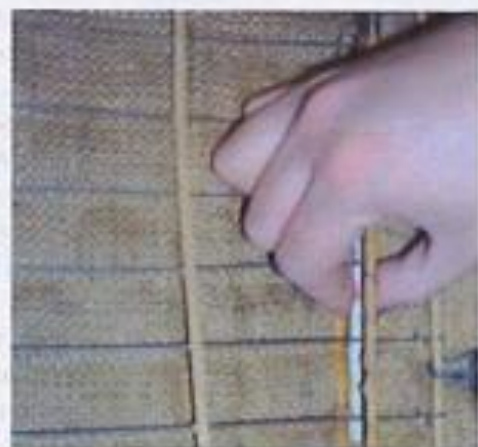


That's all for the lever for now, and we can go back to ignoring it again.

You might need someone to help you with this next portion of our adventure. If you look at the back of the seat, you will notice there are vertical slits in the foam cushion just to the left and right of center. You should also notice a metal mesh stretched across the back of the seat held on by springs. I call this the BBQ grill. The ribs in the slip cover come through those slits and are hog ringed onto the paper wrapped bar of the BBQ grill. You can probably zip tie these ribs to the BBQ grill (that would require you to have poked holes

into the fabric sleeves that the ribs are in, like with the headrest.) Hope you read through the entirety of this article first, but I found that it wasn't that hard to just hog ring them to the BBQ grill.

Pushing that rib through the slit with one hand, and hog-ring prepped pliers in the other hand, hog ring the center of the rib to the BBQ grill **FIRST!**



I hog ringed every other square outlined by the BBQ grill.



Move over to the other rib and do the same thing. This rib will be a little harder to push in than the last... obviously the first rib pulled out some of the slack.

Back to the seat retract lever—this is going to sound weird, but stay with me. Take the plastic frame that goes around the lever, and reinstall it. Once it's on, take your razor and cut out the vinyl on the **INSIDE** of the plastic frame. See! Perfect fit! Put the plastic lever arm back on, and you are done.

Now that you are done with the reupholstering portion of the job, sit back and take a good look at your work. Looks good doesn't it? Let's finish this up.

Flip the seat on its back, and poke some holes into where the top bolts go for the adjustment rack. Flip the seat upright again. The back panel tends to be more of a pain to reinstall than it was to simply rip off. Start with the top bracket, and position it just below where the slip cover is hog ringed to the metal frame. With the back cover pushed into the back of the seat, push the top 'L' bracket up underneath the metal frame. It may take a wiggle or two to get it all the way up. Once you have it up, bend the back panel a bit to wedge the side 'L' brackets underneath the metal frame on the sides. Once the back panel is firmly attached, take the small screws that fasten the bottom portion of the back panel to the frame, and insert the screws into their respective holes. You will have to feel around until you find the hole in the frame for the screw. Tighten the screw down on both sides.

Flip the seat on its back one more time, and reinstall the adjustment frame using the reverse removal instructions.

Reinstalling the seat into the car can be a challenge. Just keep the seat folded, and have the slides all the way back (seat forward position) and angle it back into your car. The seat belt arm always gets in the way, that's to be expected. That's why you want the seat forward. Secure the seat with the washers and 10 mm nuts. Don't tighten the nuts too hard, otherwise you will snap the bolt off. It's not hard to replace the bolt, but don't give yourself more work than you need.

You are going to need some time to recover from this project.

I was so anxious to get my seats back into my car that I forgot to take a picture of the finished product for you. So here is a picture of the finished product, inside the car. Oh—look so good! Those sheep ain't got nothing on these cows!



Some final thoughts... the skins may seem loose on your seat—don't worry, that's normal! Over time as the seats are exposed to the sun, oils from your skin, cleanings, etc., they will tighten up. That's why, as I mentioned earlier, you may want to leave some slack with the zip ties on the bottom slip cover.

Well, you did it! You saved yourself a good pile of money... money better spent on DeLorean parts and subscriptions to **GULLWING Magazine**. Was it worth it? Of course it was! Good job!

Of course, as always, if you have any questions, suggestions on how to do this better, hate mail, or want to let me know how this worked out for you, please feel free to shoot me or Ron and Cheryl an e-mail anytime.

It's time for me to go eat... until next time!

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