

# Replacing Your Volkswagen Golf I Cabriolet's Top

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## So you have decided to do a top install, are you

- [a.] Stupid?
- [b.] Cash poor?
- [c.] Have nothing better to do?
- [d.] All the above like me?

## Things that make it easier:

- o Hammer
- o Center Punch
- o 10mm offset ratcheting wrench (must have!)
- o Heavy-duty electric or air stapler and  $\frac{3}{8}$ " or  $\frac{1}{4}$ " galvanized staples
- o Good #2 Phillips screwdriver
- o Wide blade straight slot screwdriver
- o Wide blade jeweler's straight slot screwdriver
- o Razor knife with new blades
- o 3M Hi-Tack spray adhesive
- o Clear #2 silicone sealant
- o Roll of 1-inch wide by  $\frac{1}{4}$ -inch thick closed cell foam
- o 1 foot of small, flat brass link chain
- o 1 can of carburetor cleaner
- o Rags and paper towels
- o Old newspapers
- o Measuring tape
- o Plastic bags to hold parts for a bit (mark which parts go where for easier re-installation – taking pictures is also helpful)
- o Flat steel anvil -- about 1x2x3 inches (or a large flat punch)
- o Drill and an assortment of drill bits
- o 2 or 3 plastic spring clamps
- o 4 feet of broom stick and 2 large vise grips
- o Needle-nose pliers
- o Flat nosed pliers
- o Diagonal cutter
- o Mason's twine
- o Long hemostats
- o WD-40
- o Vasoline, KY, or white grease
- o Ice scraper

## Creating your side cables

Depending on if you bought side cables or decided like me to make your own:

- o 8-foot 1/16 stainless or galvanized steel cable
  - o 8-foot 1/16 ID vinyl hose
  - o 6, 1/16 cable swedges
1. Cut the steel cable in half.
  2. Cut the vinyl tube in half.
  3. Cut the vinyl tube 35 inches long.
  4. Insert the cable in to the vinyl tube.
  5. On one end of the cable insert the swedge.
  6. Loop the cable and force it into the swedge.
  7. Do not leave any bitter edge of the cable exposed.
  8. Now pull the long side to make a small loop.
  9. Tighten the swedge ( I used my ratcheting Amp Tool ).
  10. Pull the vinyl tube back to the swedge.
  11. Now the cable length with the 2 lengths of brass flat chain must be  $37 \frac{1}{4}$  inches long from the end of one loop to the other. Otherwise the total length of the cables is  $37 \frac{1}{4}$  inches long period.

12. Take the Brass Chain and cut off 2 links, then on the flat link insert a centering punch and using wood Hammer that punch into the chain to expand the hole. It has to fit over the steel stud on the front frame.
13. Slide the swedge onto the cable.
14. Insert the flat brass chain onto the cable on the other non-expanded side.
15. Insert the bitter end of the cable into the swedge.
16. Measure the length of the cable assembly to be no greater than 37 ¼ inches long.
17. Tighten the swedge.
18. Now repeat for the other side and place in your plastic bag for use later.

It is going to look like this:



### Top Removal

1. Open and close your top: look at the attachment points (do it a few times).
2. With the top closed, remove the 2 plastic corner caps (what the boot snaps to) and screws. Place them in your plastic bag.
3. Using a razor knife, cut the top off from the rear quarter glass seal (cut the vinyl only).
4. Cut the top to the upper corner down around and above the bead, all the way to the other rear quarter glass seal (you are cutting off the rear cable). Pull it over the headliner at the corner so you don't cut anything but the top.
5. Cut the vinyl 1 inch from the rear glass (you are cutting the top away from the window).
6. Pull the top back to the front of the car and cut the black vinyl ties on the sides; continue pulling it off the car towards the hood.
7. Cut or pull the top off of the front lip.

Your top will now look like this but with padding on:



8. Remove the rear glass upright seal by inserting a flat blade screwdriver between the seal and the seal tray in the middle of the tray (be careful not to tear or puncture the rubber):



9. Then prying back on the blade, the seal will lift out of the tray. Now, slowly get the front to come out by gently pulling on the seal at the middle so that your fingers can touch together front to back; then pull upwards on the seal to release it from the stop at the bottom. Now that the bottom is out, pull down to get the seal to come free of the top stop.



10. Remove the 4 Phillips screws holding the tray to the frame and place the screws in the bag, Insert your flat blade between the seal tray and the frame and pry it off the old, dead foam. Do it in easy steps the entire length or you will bend the tray.
11. You do not have to remove the B-pillar seal at all. So leave it alone.
12. Now remove the seal from the other side.
13. Lower the rear seatback and parcel shelf and look to see where the metal tabs are holding your headliner. Bend the metal tabs to 90 degrees and pull the headliner off the tabs (there are 6 or 7 of them).
14. Remove the headliner welting off the top frame cover (where the unlatching buttons are) -- this will remove the headliner from being attached (you will need the room).
15. Open the top fully.
16. Remove all the screws that hold the top frame keepers and gently pry off (should be about 10 of them).



17. Remove the 2 screws from the front seal lip.
18. Carefully pry out the front seal in the middle, and then pull about ¼-inch to the front to release it out of the holding clip. Then CAREFULLY work the front out (it is usually glued to the tray in the front, so I use a flat blade in the tray between the seal and tray).
19. Remove the 4 additional screws.
20. Pry the seal tray off the frame in the same manner as you did the rear.
21. Using an ice scraper, clean off all the dead foam on the frames and seal trays.



22. On the leading part of the front frame, you will need to carefully pry from the back the first two nylon keepers to remove them. Remove the dead vinyl from the front frame. Get as much off the tray as you can.
23. Using carb cleaner on a paper towel, wipe down the frames to get all the goo off. Clean is good.





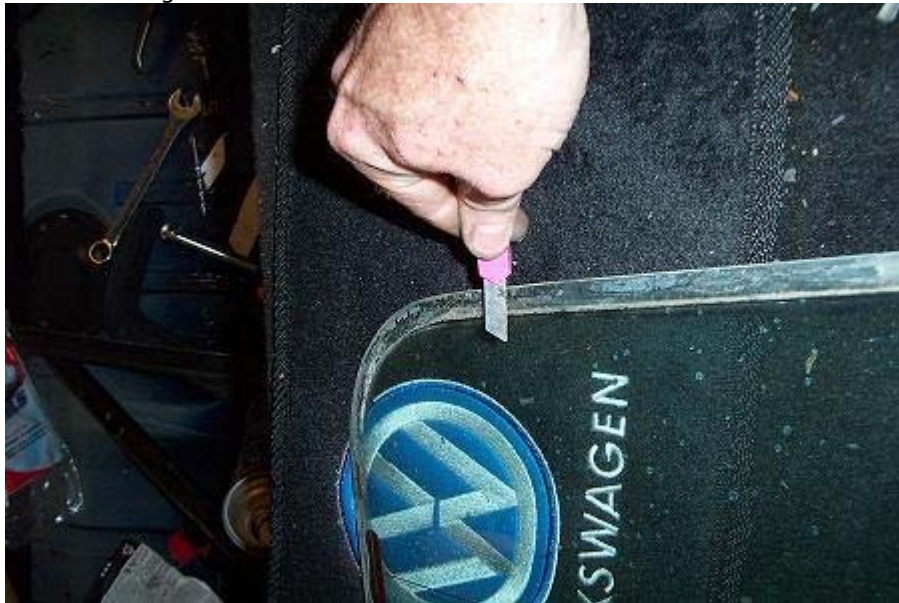
24. Pull the vinyl off the rear trays, the front frame and the leading windshield frame.
25. Clean all the goo with carb cleaner.
26. Drill out the rivets in the front frame and the rear frame.
27. Make sure that you test fit your trays back to the frame and adjust as necessary as you want them to lay flat.



28. Now open the top fully and latch it.
29. Remove the rear window defroster connectors and the plastic covers on them.
30. From the outside of the car, lift the outer edge of the seal insert up, using your flat blade between the window seal and the window frame at the rear, (start at the corner).
31. While you are gently prying up and out on the seal in a rocking motion, gently reach around the frame and un-do the seal from the inside lip.
32. Using a rocking motion with the screwdriver you will get the window out. Remember: unwind the defroster wires gently out of the gasket and remove the plastic covers off the wire ends. The window will pop right out; you may have to work your flat blade down and around a bit.
33. Remove the gasket from the window glass and clean the hell out of it; if there is plumber's goo, remove all traces of it.



34. Do not forget to clean the inside groove where the glass is -- cleanliness is a must.  
35. Scrape off the crud from the glass and then clean with carb cleaner to remove all traces of the crud.



36. Return the gasket to the glass (the holes for the defroster wires are on the bottom and the sides; if you work the gasket by holding 30 to 60 degrees off the gasket, it will slide right back on).





37. Set the rear window aside.
38. Using your flat jeweler's screwdriver (or staple removal tool), pry up every one of those 120 to 200 staples in the rear window frame. After they are up, remove them with your large flat pliers. After you remove 50 of them you can probably zip the remainder of the vinyl with the staples out.
39. Carefully inspect the frame for broken staple bits, and remove as needed.
40. Clean the tray of any and all rust. Sand smooth, spray with a rust destroyer/primer, let dry and paint if necessary. Remember to mask off all areas not to be painted to prevent overspray on your headliner, seats, etc.
41. Open the top halfway and use the broomstick and vice grips to lock it in that position.



42. Remove the top struts by removing the clips and the washers (place into cable tray), you will need the room.
    - a. Now is a good time to test your struts: With a Phillips screwdriver inserted into one of the holes, use it as a fulcrum and try to compress it against the floor; it should compress and then shoot back (if it doesn't compress or is really slow or bent, it is faulty).
  43. Now using your 10mm offset ratchet, remove the nut off the rear cable. You can get to it from the top; use your finger to gauge how many threads are out (you will need to tighten it back to that spot).
  44. Loosen the nut; after about 5 or 6 clicks it will spin freely off. Place the nut in the cable tray and with your hemostats or needle nose pliers remove the cable out of the tray on both sides (the nut turns down to loosen and up to tighten: lefty-loosey, righty-tighty).
  45. With the ends of the cable out, remove it from the cable tray with the beading.
- Wow all that just to remove the top... Remember: installation is the reverse or removal.

### Top Installation, Part 1

1. Unless you bought a new cable, you will need to remove the rear cable from the remainder of the top -- I usually can rip it out.
2. Remove the side cable bits from the front frame and bend the finger up and remove the spring off the rear frame. Bending it at about 90 degrees is a good thing.
3. Clean your rear cable and spray the hell out of it with WD-40.
4. Measure your rear window -- make sure that the bottom edges are the same length from the cable tray (if they are within an 1/8 of an inch that is okay; if they are more than that then you will need to adjust it).
5. Take the time now to lubricate all pivot points on your top frame. I start with WD-40 and then open and close the top a few times, then switch to regular motor oil, then continue to open and close it a few times.
6. Take your closed cell foam and place it on the bottom of the seal trays.
7. Look at your pigtail seals that the rear upright frame mates with when the top is up: if it is cut or split along the body you need to glue it back in place (cover the edge with silicone sealant, as that is part of the water tight seal).

Since I last left you your top needs to be in the half up position and locked with the broom safety:



8. Find the center of the cable tray and mark it with a Sharpie pen on the lip of the body (I measure between the corners of the trunk).



9. Find the center of the rear cable sheath and mark it with a Sharpie pen.





10. Loosen the safety you installed and close the top frame.
11. If you are installing the insulation padding you will need to drill out the rivets that hold it at the front and rear of the frame; then carefully remove it from the front lip of the frame front and remove all the staples that hold it at the back. Working from the rear, fold it over the windshield.



12. You will find the front secured by a steel rod with a few finger holders, carefully bend them up at 45°, then pry the bar out of the side holders and cut the padding strap on the bottom.



13. Now toss that sucker away.
14. To install the padding, fold it over the hood, shiny cloth-side down so that the steel rod is pointing with fingers-up.
15. Place the steel rod in to the keepers and bend the two middle fingers through the cloth back over it.
16. Spin the rod 90° and force the end of the rod into the slots and the rest of the rod back into the fingers.
17. Tighten all the remaining fingers by forcing the rod securely into the fingers and smacking them with a hammer.
18. Place the vinyl padding support in the notch in the front bar and around the bar in the back.
19. Now, work the padding strap back through the rod and overlap the cut ends and sew back together with a couple of wire ties (pointy edges down), or remove the covers of the nuts on the side frame and remove the bar and rerun the strap (my cable tie is easier).



20. Now lay the pad over the top frame and square it to the rear and center it left to right.



21. Unlatch the top and place newspapers on the seal and over the windshield, then close the top.

22. Spray Hi-Tack on the front steel lip and the back of the material and foam lip of the pad. Allow to dry for 15 minutes.





23. When dry, place the horse hair to the rear of the front bar and then glue the foam to the steel bar on the front, smoothly followed by the cloth (get it smooth and make sure it lays flat). Allow another 16 minutes to cure.



24. At the rear of the pad you will need to staple the pad to the frame. You can pop-rivet the strap or nylon wire-tie it into the hole, either works well; just make sure the sharp end of the wire-tie is on the inside.



25. Lock the top down.  
26. Stretch the cloth to the back and fold the bitter end under and staple in about ten places to the rear of the frame. Make sure that you seat the staples. You can do the same for the front rivet too. Your top pad is now installed and looks sharp.





### Top Installation, Part 2

1. Place your top on the car. Take the pocket and place it over the front lip and drape it into position.





2. Find the two boot tabs and cut them loose and put in your pocket so you will know where they are.
3. Find the center of the top: measure between the seams and divide in half and measure over, or if you have the notch for center then cool.



4. Place a small mark right above the bead.

5. Measure the distance between the outside edges of your boot hooks (mine was 22 inches).



6. Place one mark at 11 inches from center on both sides (this will ensure that your boot fits tight at the hooks).
7. Now, find where the cable exits the outside of the top and enters the inside, as you have to make a relief cut to the seam (*do not cut the seam*).



8. Starting from about 3 inches past the corners, you will need to trim all the excess material off the entire back of the top. You have to go past the corner by 3 to 4 inches. **DO NOT CUT THE STITCHES AND FOLD THE MATERIAL BACK SO YOU DON'T CUT THE OTHER SIDE OF THE TOP.**





a. From this:



b. To this:



9. Raise the frame half way and safety it with your broomstick.



10. Grab the side cables out of your bag and insert the chain over the front stud.



11. Tie the other end to the pull-string and pull from the rear of the string; if there isn't a pull-string as in the case of my CabrioWorld top, but my AABestCo top had it, you will have to make a fish line to pull the cable end back through.
12. Take the free end and feed it through the side frame, then attach that loop to the spring; cover with the vinyl tube. Now, pull on the bottom of the spring and hook onto the finger then bend the finger down.
13. Pick up your rear cable and measure it to find the total length; subtract the sheath and divide in half and that is what you should have on both sides of the sheath (use a little electrical tape to make sure that the cable doesn't slip while measuring).
14. You can install the ends of the cable in the tray and tighten the nut about 3 spins too. Be sure to take the boot tabs out of your pocket and place them through the cable prior to tightening the nuts; if you got one side fitted, then install them on the other end and slide the one tab over).
15. Take your grease and lubricate the inside of the rear cable tray all the way around -- a little goes a long way.
16. Take your grease and, from the rear bead, lay it on the top about a ¼ inch from the bead to the bead.
17. Line up your center marks and fold the rear cable into the top and pinch it and insert it into the cable tray -- it pops right in with no strain or pain. Easy isn't it?
18. Work from the center to the outer sides. Place the boot tabs, seam inside, into the marks and then, pulling on the bead with the palm of your hand, run it around the corner pulling it as you go and the boot tab you will find will pop in to place (you may have to pinch the bead into the tray a bit but if you work it, pulling the bead around the corner, it will just fold into place).
19. Then, where the cable goes from the outer top to the inside you have to fold up the material so that it passes the relief cut; the cable will bisect the cut and the top will lay flat.
20. Here is where the spring clamps work well to hold the corners in tight. You can use small vice grips but you have to pad the jaws using rags.



21. Place the hemostats on the cable bolt notch and clamp.
22. Pulling the hemostats to the front of the car, tighten the nut as far as you can with your fingers. Then move everything to the other side and repeat.
23. After all the basic tension is gone, place the hemostats on the notch and then, using the 10mm offset, tighten the nut about halfway to the measure that you took before loosening. Repeat on the other side.
24. As you are tightening it you may have to pinch the side together a bit. As it gets tighter, the lubing that you did will pull the material and the cable tighter. **DO NOT OVER-TIGHTEN OR YOU WILL SNAP THE CABLE.**
25. When you are happy with the way it looks and the measurement is about the same, you are done with the rear cable and it should only have taken you about 35-40 minutes.
26. Now, replace the top struts on the pivots: strut on the inside and the washer on the outside.
27. Take the flap on the rear window frame and fold it over and spray with Hi-Tack; then spray the rear window frame and allow to dry. Do both sides.
28. Now, press the side flap on the frame so that the edge of the top is next to the frame -- get it smooth and flat.
29. Find the holes for the nylon screw fasteners and punch the holes out with a Phillips screwdriver; then insert the nylon fastener and tap into place with a hammer.
30. Take the seal tray and position it and screw it into place (you did already install the foam when you were removing it, yes? if not put new foam on and cut to fit, making sure that the tray is at the outer most edge of the top -- this will ensure that the seal will completely center to the glass.)
31. Do the other side now.
32. Take your razor knife and run it along the inside frame to cut the excess material; peel it off, then spray carb cleaner on a rag and remove the excess glue.





33. Close the top and it should look like this:





34. Open the top and latch it open.

35. Work the vinyl into the front edge so that the seam will curl a bit; when the curl is at 50°, move the vinyl and find a screw hole and then mark the top. Use a nail to pierce the top in all 8 holes; insert one screw through the bar at a time, working from the middle to the ends alternately.



36. Cut notches out for the J-hooks.



37. Close the top and see if the seam lies flat; if not, open and reposition it to get the seam to lay flat on the seal. You don't have to remove all the screws to get the seam tight; you may need to loosen only one or two screws and pull the material one way or another.
38. Take the flap out from under the edge and spray Hi-Tack on the metal frame and the vinyl; allow to dry.
39. Force the flap onto the metal and get the edge seated even with the latch.
40. Now the little top piece needs to be glued with silicone.



41. Locate the holes for the nylon fasteners and punch with a Phillips screwdriver; you will need to trim out the front one as it is 2 layers thick, then insert the round nylon in the leading hole and the square one in the second hole.





42. Place the seal tray on the frame and make sure that it lays flat. Adjust as needed.



43. Locate the screw holes and insert the 4 screws (not tight, but loose).

44. Screw the front screw into the hole a few turns.

45. After all the screws are in a bit, move the seal tray to the outer-most edge that you can, then tighten the screws down (remove the leading, round, nylon screw).



46. After the seal tray is mounted you have to place a bit of silicone on the leading edge.



47. Spray the tray and the seal's bottom lip with a bit of WD-40.

48. To insert the seal, place the front edge towards you into the tray then slightly pinch it and force it in to the back of the tray and it should pop in.



49. Do about  $\frac{3}{4}$  of it then slide it to the rear of the tray; this should allow the front to pop in and the leading edge should be centered to the front hole; screw it down with the bigger screw.



50. Wipe off the oozing silicone.

51. Now insert the lower seal into the tray.





### Rear window installation

1. Mark the inner part of the frame.



2. Now make an X cut into the top within the rear window frame, but DO NOT GO TO THE EXTREME CORNERS.



3. Now, measure the bottom of the frame to the top bead, making sure that the frame is still square.
4. While pulling the material tight, shoot one or two staples into the corners and measure again. Get it right; you can remove the staples and either pull it tighter or looser -- the difference should only be  $\frac{1}{8}$  of an inch. Once you are happy, start stapling from the outside edges to the center.
5. To get the corner to lay flat you will need to make a relief cut or two.



6. I staple the sides next, then go back to pick up the corners.
7. When you are finished stapling, make sure that the staples are firmly seated and that if you run your finger along the tray it isn't a snagging motion, but a smooth one. If the staples aren't seated, smack them home with your anvil or punch (they have to be well-seated and smooth; if one or two bend over just smack them harder).



8. When you are done, you can trim off the excess to be even with the inner frame.



9. Lay a bead of silicone over the staples and into the lip of the frame. This will seal the holes for the staples and provide a water barrier for the rubber after the window is installed.



10. Take your mason's twine and wind it into the inner lip of the gasket on the window so that you have 2 wrappings.
11. Get a buddy.
12. Insert the glass and gasket into the lower bit of the frame with the strings on the inside and press it firmly in all the way around. With the flat of your hands, keep pressure on the glass and have your helper slowly unwind the string; it will pull the gasket in to the inside of the car and seat it firmly on the inside lip. Wipe off any excess silicone that may ooze either on the inside or the outside.
13. The glass should be square.





14. With the top latched, the front seal should seal flat to the top.



15. Now, from the inside of the car, place the defroster wires back into the holes in the gasket and then under the gasket and back out; connect them to the defroster terminals and place the plastic covers back on.
16. With a flashlight (if need be), reach into the trunk and pull the headliner onto the metal tabs. With needle-nose pliers, bend the metal tabs back into original position, then smack them with a hammer.
17. Replace the two side caps -- you may have to trim the tube a bit (I find that if I have 1/2-inch removed from the top, the plastic cover will lay flat); insert the rear screw (longer of the two) -- it has the snap for the top's boot -- then replace the front screw (shorter screw).
18. Replace the parcel shelf and raise the rear seatback. Then, clean your fingerprints and marks off the top with Whestley's Bleach White and a brush. Clean the rear window inside and out.
19. Pop a brew or two and you are done.



20. If you do a test drive and there is more noise than ever at speed you may need to adjust the J-hooks tighter.  
21. Enjoy