

These instructions describe the process for installing a Stebel Air Horn on a 2000 LC. This process eliminates the OEM horn. It assumes you know how to “skin” your LC. These instructions result in the horn being mounted on the frame rail by the shifter and the relay on the little metal tabs about 7 inches up on the frame rail, behind the oil cooler. It will take approximately 1 ½ -- 2 hours to make the materials and mount the horn.

**(Note: after mounting my horn and relay I received some good feedback that it would even be better to mount the relay under the left fake gas tank cover --- I added a comment on the diagram but did not change all of the text --- so you will have to think a little if you want to mount it under the fake gas tank --- two of the wires you will need to make need to be a little longer ---- I added reference to this on the diagram below)**

I wrote these instructions for someone like myself ---- someone with an “OK” amount of knowledge and experience, but certainly not an expert. The instructions are “step-by-step” and will be boring to an experienced technician.

#### **Materials needed:**

1. Four ¼ inch plug style connectors
2. Two battery terminal connectors (to fit battery bolt and frame rail bolt)
3. One 1X2X1/8 inch piece of metal stock (I used aluminum because I had it and it was easy to work with)
4. Approximately 33 – 36 inches of 14 gauge wire **(about 48 inches if you are mounting under the fake gas tank)**
5. 4 – 5 wire ties
6. Fuse holder and 20 amp fuse
7. Lock-tite
8. Various wrenches, screw drivers, wire cutters, crimping tools, drill/bit (approximately 8mm)
9. Patience

#### **Make the various wires and the mounting bracket:**

1. One 21 inch piece with a plug connector at each end (this piece can be a little longer, but not shorter). **(Make this about 28 – 30 inches if you are mounting under the gas tank)**
2. One 5 – 6 inch piece with a plug connector at one end and a terminal connector (big enough to fit the frame bolt) at the other.
3. Fuse holder piece ---- add about 5 inches of wire to one end of the fuse holder. Put a plug connector on this end (plug connector goes on the long end). Put a terminal connector on the other end (big enough to fit the battery bolt). **(Add about 12 inches if you are mounting under the gas tank)**
4. Make the mounting bracket ---- drill holes in each end of the 1 x 2 piece of stock (about 8mm), big enough for the frame rail bolt and the bolt that comes with the horn. The holes should be about 1/8 inch from each end.

## Approach:

1. Begin by disconnecting battery and skinning only the left fake gas tank. (There is no need to totally remove the instrument panel --- take out all of the screws though. You can lift the instrument panel enough to slide the left fake gas tank out.)
2. Remove the wires from the horn and disconnect the little connector that holds the wires near the horn. Taking out the little connector can be a little tricky --- take a small screw driver and pry out the connector, preferably without damaging the wires.
3. Snake the horn wires back out and toward the front of the bike. This takes a little patience, but they will snake their way back and come out in the front middle portion of the bike, pretty much near the oil cooler. You may need to loosen a wire tie or two to move the wires. Plug the wires into terminals number 85 and 86 on the relay.
4. Take the 21 inch wire that you made and plug it on terminal 87.
5. The relay will now have the OEM horn wires and the 21 inch wire attached. Attach the relay to the frame rail behind the oil cooler. I mounted the relay with the terminal connectors pointed up --- the hole pointed down and aligned nicely with the hole on the frame rail. You will see two metal tabs on the frame rail about 7 inches up from the bottom (one on each side). I attached the relay with a wire tie to the left one --- the side the horn will go on --- through the hole on the relay and one of the holes on the metal tabs. You can try to attach the relay with a nut/bolt --- I tired and gave up because the space was so small and I did not want to remove the oil cooler --- time will tell if the wire tie lasts. In addition to wire tying the relay to the hole in the frame, I wrapped a wire tie around the relay and the wire bundle running up the left side of the frame rail. This additional wire tie snugged the relay nicely against the wire bundle.
6. Now it's time to mount the horn --- this is also a little tricky due to the way the Stebel horn mounts to the 1X2 bracket and the length of the frame rail bolt. (At this point the horn is not connected to anything.)
7. First mount the 1X2X1/8 to the horn ---- take the bolt that came with the horn, put on a little lock tite, slide it through one of the holes in the bracket, and start the nut on the bolt. Put the bolt in place on the horn (in the little slot on the back side) with the 1X2 along the outside of the mounting area. The 1X2 should be pointing toward the left, looking at the front of the horn. Tighten the bolt snug, but not gorilla strength (you'll get to do that later). Tilt the 1X2 piece up a little (so it is not running parallel to the horn, but rising a little toward the front), this makes installing the frame rail bolt easier.
8. Take the 5 – 6 inch piece of wire you made and plug it into the ground terminal of the horn. The other end of the wire should be a terminal connector just waiting for a place to go.
9. Remove the upper bolt of the frame rail. Slide the bolt through the empty hole on the 1 X 2 mounting bracket. Put the terminal connector that is hanging from the ground end of the 5 – 6 inch wire on the bolt.

10. Connect the end of the 21 inch wire (coming down from the relay) to the positive terminal on the horn.
11. Put the frame rail bolt (along with the horn) in place. This step is a little tricky because the bolt is long and you can only turn it about  $\frac{1}{4}$  a turn at a time. As the frame rail bolt gets tight, adjust the 1X2 mounting bracket so it is level. When the frame rail bolt is snug, go back and finish tightening the bolt that holds the other end of the bracket to the horn (now it is time for the gorilla tightening of that bolt). Finish by tightening the frame rail bolt. (Note: Mounting the horn to the frame rail is probably the trickiest part of this entire process ---- if you tighten the mounting bracket too tight before you put the frame rail bolt in place you will not have enough slippage to allow for the minor adjustment needed to put the frame rail bolt in place. If you do not tighten it enough the horn will slip out during the process and you will have to start this step over again. This is the step that calls for the patience tool described in the "materials needed".)

(You are almost done now, just one last step -- before putting everything back together).

12. Take the fuse holder wire that you made and put it in place. The plug connector goes to the remaining terminal on the relay (number 30). The other end (with the terminal connector) goes to the battery. Make sure you put the fuse in the holder 😊.
13. Attach the positive wires to the battery. And then attach the ground wires. Take a second a put some wire ties on the various wires you made, especially those coming down from the relay to the horn. These wires tie nicely against the existing bundles running along the frame rail.
14. Turn the key, step back a little, and push the horn button. You'll be pretty surprised and happy. It's about 1,000,000 times better than the stock horn. Turn the key back off, heck we all know about the LC's electrical shortcomings.
15. Put your bike back together. Go for a ride, test your horn, and watch people's reactions.

#### **A Diagram:**

I don't know about you, but I have gotten old enough that it was a real challenge to read the instructions that came with the horn (they are printed like this in about font size 5). The diagram below shows the wiring for this set-up and includes a description of the different wires you need to make (remember, this process eliminates the OEM horn):

**Wiring schematic for installing Stebel Horn on a 2000 LC  
 --- eliminates the OEM horn ---**

