TT's NSX LED install

Need:

- 1. Boslla Bullet B1 LED bulbs (the red ones), USDM: 9006 for Low beam, 9005 for High beam. <u>www.boslla.com</u> or LED bulbs from your favorite vendor.
- 2. Replacement (longer) dust caps: free at <u>https://www.thingiverse.com/thing:5270491</u> If you can't print them yourself or access a service, PM me.
- 3. May need replacement headlight adjusters, if yours are seized. (Likely if pre-1997) Updated Honda part #: 33129SL0N11, which contains both adjusters in the package. One package does one headlight so you need 2 packages to do both sides. The corrosion-prone part has been updated from a metallic screw to a treated black one, presumably to reduce the seizing issues. (Canadians, go to amayama to save big!) The 3rd attachment point (rotation only) is not available as a separate part but it doesn't seem to corrode & seize like the other 2. 2024 update: It appears that 33129-SL0-A01 is similar but only includes 1 adjuster, so you may need 2 of them per headlight, if you use that part.
- 4. #2 Philips, small flathead screwdrivers, sockets, standard tools

DON'T use the owner's manual method for changing the bulbs. Unless you're an octopus, it's impossible to finagle new LED's in with your fingers through the thin access behind. You definitely won't be able to switch the dust covers. In fact, I would recommend the technique documented here to change regular incandescent bulbs as well.

1. Use the dash switch to lock the headlights up so you don't pinch your fingers. I recommend removing fuses #42 & #43. Front fuse panel "retra motor" L & R.



- 2. Pop out the two outboard retractable lid trim pieces on each headlight, using a small flathead screwdriver. Incredibly, these are still available from amayama. See diagram here: https://www.amayama.com/en/part/honda/90625sl0000za
- 3. There are 2 Phillips screws on either side to free up the plastic retractable lid. Put a towel on the bumper to protect it & rotate the retractable lid forward to access the bulb covers.



- 4. The retractable lid can be difficult to wiggle out but doesn't need to be removed I removed it for the photos. If desired, place lights in a mid position by doing the following: make sure you've removed the fuses in Step 1. Press the dash retractor button again to release it. Press a fuse against the contacts in the fuse box briefly to lower the retractor to the midpoint where the retractor lid will come off more easily. Push the dash button in and apply the fuse again to raise it back to the top.
- 5. (It's possible to skip this step, but it only takes a minute and it makes the rest of the job MUCH easier it's tough to get the metal clips off otherwise.) Disconnect the retractor electrical connector, remove the 4 bolts (10 mm) holding the headlight assembly, and remove the headlight assembly from the retractor frame.



- Remove both factory dust caps and by depressing slightly & rotating counterclockwise ~45°. <u>Save the gaskets.</u> Pic shows vented caps but unvented are the same.
- Disconnect the incandescent bulb electrical connectors. Remove the incandescent bulbs by removing the metal clips holding them. <u>Save the clips</u>. Note that the cable runs in and around a little retaining pin in the housing - unwind it from this to free up enough wire to reach to the LED connector later.

- 8. If your headlight adjusters don't need replacement, skip to step 17. Good idea to test them now as it's easy to see them moving as you turn the screws, or if they're seized. It can be difficult to see if they're moving properly when it's all assembled.
- 9. For each adjuster on each HL assembly, write down how many threads are protruding.
- 10. Remove the fixed position mount nut. Remove the 4 screws holding each adjuster assembly and remove the headlight. One of the screws will be blocked by the tube that a screwdriver goes through for adjusting. From the back, wedge this tube outwards a bit with a narrow flathead and it will slide out the top.



11. Tricky part! It initially seems confusing, but is actually easy when you know how to do it. In order to remove the adjusters from the metal frame, apply pliers at the OPPOSITE DIAGONAL corners of the rectangular connectors and they will split in half with *almost no force*. (Look at the interlocking plastic to see which way to apply the pliers.) Remove the headlight adjusters.



12. With the headlight adjusters out, examine the assembly for corrosion. I took this opportunity to remove the rust and repaint the metal assembly with a heavy duty rust coating, Por15.



- 13. Insert the adjusters from the back and then clip the connectors back together. If either new adjuster came pre-assembled, perform step 11 to split the clip first.
- 14. Affix both new adjusters with the 4 new screws each. Replace the fixed position mount nut.
- 15. Locate the adjuster that needs the round tube to line up with the cover and install the small round tube. It's the one that points up on the outboard side. See #10 pic.
- 16. Adjust the adjusters to match your measurements from step 8.
- 17. Warning: With the Boslla LED bulbs, they have the plastic tab for locking into the electrical connector on BOTH sides, which will break the Honda electrical connector if inserted, so remove one of the tabs with a side cutter +/- a utility knife. If broken, it can

be epoxied. Check the polarity, but I found that removing the plastic tab on the side with the visible "+ -" resulted in the correct polarity. (Most LED's require the correct polarity.)



18. On the Boslla bulbs, remove the white retaining ring from the bulbs. It's an o-ring friction fit. Place the white retaining ring in the headlight assembly and fix it in with the metal clips that held the original bulb.



19. Push the LED bulb back into the retaining ring and rotate clockwise until it locks, which will result in a vertical LED board inside the housing and the wiring pointing down.



- 20. Use the picture on Thingiverse to measure your bulbs and connector to see which replacement dust cap to print. Decide whether you want a vented cap or not. If you're using the Boslla, you want the 53 mm one and Boslla says you don't need venting. My 60-minute test didn't result in them getting very hot.
- 21. Connect the bulbs to the connectors, temporarily connect the retractor connector, and test each LED bulb function. If either is not working, the polarity may need to be switched.
- 22. Install the replacement dust caps using the gasket seals from the OEM dust caps. Part # 33103-SL0-A01 if replacement is required.
- 23. Reinstall the headlight assembly in the retractor mechanism, 4 bolts. See #4 pic.
- 24. Reinstall the retractor lid (4 screws) and trim caps. See #3 pic. If the plastic washers for these screws break, 1/2 x 9/32 x 1/32 Nylon washers from Lowe's work. (Thanks latzke!)
- 25. Carefully examine the headlight and mechanism to be sure that it is free and will not break anything when it moves. Check for leftover tools that could be caught.
- 26. Replace the fuse(s), re-enable headlight retraction with the dash switch, and verify operation. Check CAREFULLY that the covers are positioned in the correct position and do not rub on the hood or the fenders. It's a bit finicky to adjust them. Mine had to be rotated outward and down at the rear as much as possible.
- 27. Repeat for the other headlight.
- 28. Aim your headlights as outlined in the service manual to avoid blinding other drivers. Your headlights are now 2-3 times as bright as the OEM incandescent bulbs.
- 29. Take your NSX out for a spin and enjoy a spectacular improvement in your nighttime vision!